REPSG
React Environmental
Professional Services Group, Inc.

SITE STATUS REPORT AND SUBSURFACE INVESTIGATION WORK PLAN

Calvert Citgo (Former Alger Country Store)
2815 Northeast Road
Town of North East
Cecil County, Maryland
MDE Case No. 92-2616-CE

REPSG Project Reference No. 005977.130.01

April 23, 2010

PREPARED FOR:

Country Stores, Inc.
2314 Market Street
Philadelphia, PA 19145
Attn: Mr. Chris Haab

PREPARED BY:

Suzanne Shourds
Environmental Risk Analyst

REVIEWED BY:

Brenda MacPhail Kellogg
Project Manager

P.O. Box 5377
6901 Kingsessing Avenue, Suite 201
Philadelphia, PA 19142-0377

215 729.3220
215 729.1557 (Fax)
www.repsg.com

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1.0 INTRODUCTION

React Environmental Professional Services Group, Inc. (REPSG, formerly "React Environmental Services Group, Inc." or "React") was retained by Country Stores, Inc. to complete a Site Status Report and Subsurface Investigation Workplan (SSR/SIW) at 2815 Northeast Road in the town of North East, Cecil County, Maryland (Site), known as Maryland Department of the Environment (MDE) Case No. 92-2616-CE. The Site is currently occupied by an active "Citgo" Gasoline Service Station. This SSR/SIW, which includes a preliminary Site Conceptual Model, has been prepared in general accordance with the *Maryland Environmental Assessment Technology for Leaking Underground Storage Tanks*, (MEAT LUST Guidance) produced by the Oil Control Program of the Waste Management Administration of the MDE (as revised February 2003). The specific scope of the investigation was designed to satisfy the conditions of a "Site Status Letter" prepared by MDE on October 22, 2009 and to complete the recommendations in the December 2008 Site Assessment Report (SAR). This scope is defined in REPSG Proposal No. 09-8538.

The Site Status letter, issued by MDE in response to the December 2008 Site Assessment Report (SAR) submitted by REPSG, requested that a *Subsurface Investigation Workplan* be submitted to address data gaps in the SAR's Site Conceptual Model (SCM). Specifically, the MDE requested assessment of contamination within the shallow groundwater zone (5 to 22 fbg) as a result of the on-Site monitoring wells being screened at 18 fbg, which is deeper than the average static water levels at the Site; installation of a monitoring well to provide additional assessment of historical light non-aqueous phase liquid (LPH) between the UST field and Northeast Road; and investigation of the source and transport mechanism for petroleum constituents measured in off-Site private residential potable wells at 2794 and 2802 Northeast Road.

In conjunction with the MDE's request, the objectives of this SIW/SCM are the following:

- To provide a summary of the Site setting, Site history, and findings of environmental investigation at the Site to date;
- To report Site investigation activities conducted since the time of submittal of the SAR; and
- To present a work plan of proposed Site investigation activities designed to address data gaps at the Site, including the MDE's identified gaps and soil delineation proposed by REPSG in the December 2008 SAR, to facilitate preparation of a completed SCM.

2.0 SITE DEVELOPER AND DEVELOPMENT PLAN

2.1 Current Owner Contact Information

Country Stores, Inc.

2314 Market Street

Philadelphia, PA 19145

Chris Haab, CEO of Country Stores, Inc: 215-563-0800

2.2 Proposed Future Use

Currently, the Site is operating as a retail petroleum station and convenience store. REPSG understands that no changes to Site usage are proposed.

2.3 Current Consultant Contact Information

React Environmental Professional Services Group, Inc. (REPSG)

6901 Kingsessing Avenue, Suite 201

Philadelphia, PA 19142

Charlene Drake, Director of Operations: 215-729-3220 x 315

Brenda MacPhail Kellogg, Project Manager: 215-729-3220 x 327

3.0 SITE BACKGROUND

3.1 Site Location and Description

The Site consists of an irregularly shaped parcel of land located at the street address: 2815 Northeast Road, in the Town of North East, Cecil County, Maryland. The Site measures approximately 1.05 acres in area; it is bounded by Northeast Road (MD Route 272) and residential development to the east, Quaker Lane (old MD Route 272) and agricultural land to the west, an access road and agricultural land to the south, and a mixture of residential and agricultural land to the north. An at-home day care facility (license No. 155668 for Cecil County, Region 11, and known as "Cammie Ginski") is located at 2802 Northeast Road. This day care facility is licensed for up to ten (10) children, and is located east of the Site. The day care facility is housed within one of the residence's currently included in REPSG's off-Site potable well monitoring program. See **Figure 2** in **Attachment 1**.

3.2 Site Features

Development at the Site consists of a single-story convenience store structure, located centrally at the Site, surrounded by landscaping, parking and drive areas typical of a service station. Gasoline and diesel pump islands are located east of the structure, parallel to Route 272. Gasoline is stored in one (1) 8,000-gallon underground storage tank (UST) and one (1) 12,000-gallon UST which are located in a single tank field to the north of the structure. A 12,000-gallon compartmentalized (two (2) 6,000-gallon compartments) diesel/kerosene fuel UST is situated beneath the diesel fuel pump island. A kerosene pump island is located adjacent to and directly north of the structure. An on-site potable well, labeled DW-001 for the purposes of this reporting, is located approximately 33 feet west of the existing structure. This potable well is actively used by the facility occupying the Site, and has an in-place carbon filtration system of its own. See **Figure 3** in **Attachment 1**. An on-Site septic tank is located to the southwest of the existing building. See **Figure 2** in **Attachment 1**.

3.3 Area Topography

According to USGS topographic mapping (7.5-minute series, *Bay View, Maryland* Quadrangle) the Site is located at an elevation of approximately 420 feet above mean sea level (MSL). Topography at the Site slopes very gently towards the east and southeast. See **Figure 1** in **Attachment 1**.

3.4 Physiographic Province & Regional Geology

Based on review of mapping prepared by the Maryland Geological Survey[1], the site lies within the Upland Section of the Piedmont Plateau Physiographic Province in Maryland.

[1] Physiographic Provinces and their Subdivisions in Maryland, MGS, 2001: http://www.mgs.md.gov/esic/brochures/mdgeology.html

The Piedmont Plateau province extends from the inner edge of the Coastal Plain westward to Catoctin Mountain, the eastern boundary of the Blue Ridge Province. The site is located in the eastern portion of the Piedmont Plateau, approximately 5 miles to the northwest of the boundary between the Piedmont and the Coastal Plain province.

The Piedmont Plateau has considerably more topographic relief than the Coastal Plain, with gently rolling uplands having as much as 500 ft. of local relief. Landforms within this province are generally underlain by extremely deformed and folded schist, gneiss and quartzite bedrock, with an overburden of unconsolidated material known as regolith. In several places these rocks have been intruded by granitic plutons and pegmatites. Differential erosion of these contrasting rock types has produced a distinctive topography in this part of the Piedmont.

Geologic mapping[2] indicates that the Site and its vicinity are underlain by the Pelitic Gneiss rock unit (formerly mapped as a section of the Wissahickon Formation) of metasedimentary rocks. The Pelitic Gneiss is described as *"lustrous, brown, medium to coarse-grained muscovite-biotite-quartz-plagioclase gneiss with… locally abundant red garnets." "Unit has a streaked appearance due to…layers, veins, and stringers.*" Locally, the unit has an apparent thickness of up to 15,000 feet.

Based on Soil Survey mapping[3] for the area, soil at the Site is mapped as Glenelg loam (GeB), with 3 to 8 percent slopes. This soil type occurs on hillslopes and is described as "loamy residuum weathered from schist and phyllite." The Glenelg loam is further described as well drained, with moderately high to high permeability, and with a seasonal high water table greater than 80 inches from the surface.

3.5 Site Geology

3.5.1 *Lithology*

Based on the observations reported from previous soil investigations at the Site, the shallow subsurface materials consist primarily of brown to yellow-brown silty to sandy clay, and brown sand and gravel from the surface to a depth of approximately 10 to 15 feet below grade (fbg). Beginning at the depth of 10 to 15 fbg, the boring logs indicate the presence of highly weathered, dense, clayey unconsolidated materials, with significant mica content, that retain the foliation and schistosity of underlying bedrock; these decomposed rock materials are known as saprolite. Saprolite was observed to approximately 37 fbg, the deepest extent investigated at the Site to date. No observations of the presence of competent bedrock, or reports of drilling refusal on rock, were reported in the logs, the prior reports, or off-Site potable well permits reviewed as part of this assessment.

[2] Geologic Map of Cecil County, Maryland Geological Survey, 1986
[3] Natural Resources Conservation Service, Web Soil Survey, http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

3.5.2 *Other Geologic Structures*

No specific geologic structures relevant to this SIW/SCM were noted during the subsurface soil and groundwater investigations conducted at the Site.

3.6 Hydrogeology

3.5.1 *Surface Water*

No surface water bodies are present at the Site. The nearest body of water in the vicinity of the Site is a small pond connected to North East Creek and located approximately 1,695 feet southwest of the Site. Surface water drainage follows the general direction of the slope at the Site (southeasterly). Storm drain collection basins are located on the roads to the east and west the Site. No stormwater collection basins were observed on the Site.

3.5.2 *Hydrology*

The Site is underlain by the Piedmont crystalline-rock aquifer systems; fractured igneous and metamorphic rock aquifers. This crystalline rock tends to possess low primary porosity; groundwater occurs and flows primarily through secondary porosity, i.e., rock joints and fractures. Aquifers below the water table are related to a complex pattern of joints, fractures, fault zones, and cleavage planes. Groundwater in the fractured rock aquifers may occur in either confined or unconfined conditions. Groundwater flow patterns are dependent on multiple fractures including regional topography, and various characteristics of rock fracturing, including orientation, density, and connectivity of the fractures. Based on monitoring well and potable well construction logs, hydrogeology cross sections of groundwater conditions at the Site have been included as **Figure 16** in **Attachment 1**.

In some areas of the region, there is a shallow water table (i.e., unconfined) aquifer in the overburden and weathered rock layers above the top of competent fractured rock. Subsurface investigations at the site indicated that groundwater table was generally first observed in weathered, semi-consolidated rock at the Site at depths of 20 to 24.5 fbg. Depths to water of 12.5 to 16.42 fbg were measured in the seven groundwater monitoring wells on the site during the most recent groundwater monitoring event, conducted in December 2009. More information regarding groundwater directional flow at the Site is provided in **Section 4.3.5**.

Based on review of water elevations in groundwater monitoring wells at the Site, as calculated from measurements obtained during the last three groundwater events (see **Figures 8, 10, and 12 in Attachment 1**), shallow groundwater at the Site is estimated to flow in a direction southeasterly to easterly varying from easterly to southerly. It is not known whether variations in groundwater flow directions may be attributable to pumping in nearby potable wells, seasonal variations, or other factors.

4.0 SITE REGULATORY AND OPERATION HISTORY

4.1 Operational History and Usage

As noted in React's Revised Workplan (dated May 26, 2004), a review of prior environmental reporting indicated that the Site operated as a retail petroleum station since the late 1950's and it continues to be operated in that capacity. Currently the Site contains a total of three (3) USTs: one (1) 8,000-gallon steel-constructed UST containing gasoline; one (1) 12,000-gallon steel-constructed UST containing gasoline; and one (1) 12,000-gallon, steel-constructed compartmentalized UST containing diesel fuel and kerosene. All three (3) USTs were installed at the Site in February 1997, following the removal and disposal of the previous gasoline/diesel tank system. Relevant Site features are depicted on **Figure 1** in **Attachment 1**.

4.2 Investigation History

In the capacity of the environmental consultant for the Site, as contracted by Country Stores, Inc., REPSG reviewed all available prior reporting and correspondence for the Site for this SSR/SIW. This reporting included a Preliminary Environmental Site Assessment Report conducted by Geomatrix, Inc. in August 1991; a Report of Observations completed by the MDE in August 2003; a Report of Direct Push Soil Sampling conducted by Advanced Environmental Concepts, Inc. (AEC) in October 2003; the Revised Work Plan for Environmental Investigation submitted by React in May 2004; Monitoring Well Gauging and Sampling Reports completed by AEC in 2008; the Site Assessment Report (SAR) submitted by REPSG in December 2008; and various correspondence from the MDE regarding the status of the Site. Copies of all prior reporting are provided in **Attachment 5**. Details of the reports and correspondence reviewed for the Site are provided in **Sections 4.2.1** through **4.2.7**, below.

4.2.1 *Preliminary Environmental Site Assessment (August 1991)*

In August 1991, Geomatrix completed a Preliminary Environmental Site Assessment in order to assess the Site for potential petroleum product contamination from the UST system at the Site (installed approximately 1979), to determine the extent of petroleum contamination, and to provide data for the determination of appropriate remedial measures. Geomatrix advanced ten (10) soil borings and submitted a total of thirteen (13) soil samples for laboratory analysis. Boring locations are depicted on **Figure 3**. Samples were analyzed for: total petroleum hydrocarbons (TPH) for gasoline range organics (GRO); benzene; ethylbenzene; methyl tertiary-butyl ether (MTBE); naphthalene; toluene; and total xylenes. No sample concentrations were above the applicable Non-Residential Cleanup Standards presented in Tables 1 and 2 of Maryland's Voluntary

Cleanup Program's (MDE VCP)[4] soil guidance.

Four (4) of Geomatrix's soil borings were completed with monitoring wells, and two (2) of the borings were completed with temporary well points (**Figure 4**). Groundwater samples were then collected and submitted for laboratory analysis of the same compounds. Each sample contained compound concentrations that were above the MDE VCP groundwater guidance[5] for one or more of all of the analyzed compounds.

The 1991 Geomatrix SAR also identified LPH during the soil investigation in the unsaturated zone and the capillary fringe. The specific location of this LPH was not identified within Geomatrix's reporting. However, based on the information provided within the report in regards to high photo-ionization detector (PID) readings and visual observations, soils at the Site most likely impacted by LPH were in the vicinity of soil borings: GM-B-004 (located immediately south of the UST field, with a high PID reading of 305 ppm at a depth of 15-20 fbg), GM-B-005 (located east of the structure at the Site and south east of the tank field, with a high PID reading of 400 ppm at a depth of 10-15 fbg), and GM-B-009 (situated in the location of monitoring well MW-003 east of the UST field, with a high PID reading of 500 ppm at a depth of 10-15 fbg). The locations of these high PID hits in relation to the tank field, indicate that the tank field may have been the source of contamination at the Site. No free product was found floating on the groundwater at this time. Correspondence from Geomatrix, dated August 3, 1992, refers to what is likely a second groundwater sampling event. However, no specific findings are presented in reviewed reporting, and no laboratory reports are included.

This reporting indicated that groundwater directional flow was in a southwesterly direction[6]. Soil boring locations are provided on **Figure 3** in **Attachment 1**. On-Site monitoring wells are depicted on **Figure 4** in **Attachment 1**.

4.2.2 *MDE Site Observations (October 1992)*

In October 1992, 0.75-inches of LPH was identified in MW-005 (located immediately south of the UST tank field) with subsequent gauging events revealing the continued presence of up to 6 inches of LPH in MW-005. Based on the presence of LPH, the MDE required the recovery of LPH through manual bailing.

4.2.3 *MDE Tank Removal/Abandonment (February 1997)*

On February 11, 1997, a tank removal and abandonment form was filed with the MDE for the Site. This documentation indicated that five (5) USTs were abandoned and removed from the Site. These five (5) USTs included four (4) 4,000-gallon gasoline

[4] Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Soil, Protection of Groundwater, Tables 1 and 2.

[5] Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Groundwater for Type I & II Aquifers, Tables 1 & 2.

[6] The direction of groundwater flow at the Site has since been identified by AEC as towards the southeast.

tanks, and one (1) 4,000-gallon diesel tank. All tanks were steel constructed, and were disposed of by "Edwards" disposal contractor for scrap metal. This reporting also indicated that contaminated soil from the UST tank field was removed and properly disposed of, and that disposal receipts had been sent to the Department. No documentation of these disposal receipts or of UST closure sampling was available with this document. REPSG conducted a file review in October 2008, and the case manager for the Site was contacted regarding the availability of this information, and no documentation was found.

Facility reporting provided by the MDE's online system (for facility ID No. 5678) indicated that in February 1997, a tank system was indicated to have been installed. This tank system included an 8,000-gallon gasoline UST and a 12,000-gallon gasoline UST installed in the location of the former gasoline UST field; and a 12,000-gallon compartmentalized diesel/kerosene UST installed in the location of the former diesel tank. These newly installed tanks represent the current tank system in use at the Site.

4.2.4 *MDE Report of Observations (August 2003)*

In August 2003, the MDE identified 0.5-inches of LPH within monitoring well MW-001 (located southeast of MW-005, and north of the gasoline fuel pump island) prompting the MDE to require the submittal of a Correction Action Plan (CAP) for the Site. In addition to the identified LPH, the MDE noted damage to well caps, inaccessible well caps, improper well caps, loose well caps, and unlocked well caps at the Site. The report required that: the total extent of subsurface petroleum contamination be defined; that all domestic wells within a quarter-mile radius be analyzed for: benzene, toluene, ethylbenzene, xylenes (BTEX); MTBE; tert-amyl methyl ether (TAME); and tert-butyl alcohol (TBA); and that all well caps be repaired or replaced with proper locking caps.

4.2.5 *Report of Direct Push Soil Sampling (October 2003)*

On October 8, 2003, AEC advanced a total of four (4) soil borings and submitted five (5) soil samples for laboratory analysis of TPH-GRO, TPH-DRO, BTEX, and MTBE. No groundwater sampling was included in AEC's assessment.

Laboratory results indicated the presence of TPH-DRO, benzene, ethylbenzene, MTBE, toluene, and total xylenes at concentrations above the applicable MDE VCP soil standards. Based on the laboratory results, and what AEC identified as LPH in soil boring B-2 (at a depth of 17 fbg); they concluded that subsurface soils were impacted across the site and potentially off-Site in the direction of North East Rd. (east of the Site). Soil boring locations are depicted on **Figure 3** in **Attachment 1**. The soil boring which was described as having LPH is labeled AE-B002 on Figure 3.

4.2.6 *Revised Work Plan for Environmental Investigation (May 2004)*

React submitted a Hydrogeological Investigation/Work Plan on March 5, 2004, and later

a Revised Work Plan for Environmental Investigation in May 2004. The workplans summarized information about the 1991, 2003, and 2004 investigations conducted at the Site and presented the findings of gauging of on-site monitoring wells performed by React on March 2, 2004. No measurable product was observed in any of the wells, but sheen was observed in MW-003. No groundwater sampling was conducted at this time.

The workplans recommended the following:

- the advancement of approximately 6-8 subsurface soil borings, and the collection of up to ten (10) samples, which would then be analyzed for TPH-DRO, TPH-GRO, and volatile organic compounds (VOCs) including MTBE and TBA;
- the replacement of the five (5) on-Site monitoring wells (which appeared to be improperly constructed, and that the MDE has requested be replaced);
- the completion of two (2) groundwater sampling events (to be conducted over a six-month time period to account for seasonal variation), to include the five (5) on-Site groundwater monitoring wells (analyzed for TPH-DRO, TPH-GRO, and VOCs including MTBE and TBA) and the one (1) on-Site potable well (analyzed for VOCs including MTBE and TBA); and
- the location and sampling of all potable wells within a half-mile radius (at the specific request of the Department.

These workplans were approved by the MDE on December 7, 2005. However, an NOV was later prepared by the MDE (on July 9, 2008) in reference to these Hydrogeological Investigation/Work Plans. Specifically, the MDE's NOV letter requested that a Site Conceptual Model (SCM) and Supplemental Work Plan (SWP) be completed in order to prepare a comprehensive Corrective Action Plan (CAP). A copy of the NOV is included as **Attachment 5** to this reporting.

4.2.7 *Monitoring Well Gauging and Sampling Reports (Various Dates)*

AEC has conducted multiple rounds of on-Site monitoring well gauging and sampling of the on-site monitoring wells and on-site potable well. The three most recent reports which REPSG was able to review documentation were dated March 12, 2008, August 14, 2008, and December 30, 2008. On these dates, sampling events included analysis of the on-Site potable well (DW-001) for the full suite of drinking water VOCs via EPA method 524.2, and the on-Site monitoring wells (MW-001 through MW-003, and MW-005 through MW-007[7]) for VOCs via EPA method 8260, and TPH-DRO and TPH-GRO via EPA method 8015B. Additionally, UST tank field monitoring leak detection wells MP-001 and MP-002 were included in the March 12, 2008 sampling event; these points are leak detection wells completed into the backfill of the existing gasoline UST field.

[7] Monitoring well MW-004, previously located north of the UST tank field, was lost/abandoned at an unknown point in the Site's history between 1992 and 2008. No documentation regarding the closure of this well was reviewed by REPSG.

Concentrations of MTBE above the applicable EPA drinking water standards (EPA DW standards)[8] were detected in DW-001 on August 14, 2008 and December 30, 2008. Additionally, several compound concentrations were detected above the applicable MDE VCP groundwater standards[9] during all three sampling events in monitoring wells MW-001, MW-002, MW-003, MW-005, and MW-007. These compounds included: TPH-GRO; benzene; ethylbenzene; isopropylbenzene; tetrachloroethylene (PCE); total xylenes; 1,2-dichloroethane; methyl chloride; toluene; naphthalene; and MTBE. Results of the leak detection point sampling in March 2008 indicated that benzene was in exceedence in both samples, and MTBE was in exceedence in MP-001.

The December 2008 reporting indicated that groundwater directional flow was in a southeasterly direction. Monitoring well and measuring point locations are shown in **Figure 4** of **Attachment 1**.

4.2.8 *Site Assessment Report (December 2008)*

A Site Assessment Report (SAR) was completed by REPSG in December 2008. This report summarized the results of Site soil and groundwater investigations conducted from November through December 2008, and presented in an initial Conceptual Site Model. The specific scope of the investigation was designed to satisfy the conditions of the NOV prepared by MDE on July 9, 2008; and to address specific requests made by the MDE at the time of mobilization.

The work completed for the December 2008 SAR included:

- the advancement of twelve borings at the Site on November 5, 2008 (B-002, B-004, B-005, and B-007 through B-009) and November 24, 2008 (B-001, B-003, B-006, B-010 through B-012);
- the advancement of four (4) temporary well points (TWP-001 through TWP-004) on November 5, 2008;
- the gauging and sampling of the six (6) on-Site monitoring wells (MW-001 through MW-003, and MW-005 through MW-007) and the two (2) on-Site leak detection points (MP-001 and MP-002) on November 17, 2008;
- the sampling of the one (1) on-Site potable well (DW-001); and
- the sampling of six (6) off-Site potable wells located at residences that corresponded to the addresses provided by the MDE in their July 9, 2008 NOV letter.

On-Site soil boring locations are depicted on **Figure 3** in **Attachment 1**. On-Site

[8] EPA National Primary Drinking Water Standards: Office OF Water. June 2003

[9] Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Groundwater for Type I & II Aquifers, Tables 1 and 2 (March 2008).

monitoring wells, measuring points, and potable wells are depicted on **Figure 4** in **Attachment 1**.

The twelve (12) soil samples were collected on November 5, 2008 and November 24, 2008 and analyzed for VOCs plus MTBE and TBA via EPA method 8260, TPH-DRO via EPA method 8015D, and TPH-GRO via EPA method 8015D. Analytical results indicated the presence of the following compounds of concern (COC) in Site soils above the applicable MDE VCP soil standards:

- 1,1-dichloroethane in sample B-001 (19.5 fbg);
- 1,2-dibromoethane, 1,2-dichloroethane, and benzene in sample B-005 (23.5 fbg)[10];
- 1,1,2-trichloroethane, 1,2-dibromoethane, 1,2-dichloroethane, and benzene in sample B-008 (12.5 fbg)[11]; and
- benzene in sample B-011 (20.5 fbg).

The December 2008 SAR concluded that the extent of these COCs in Site soils has been delineated horizontally within the Site boundary by borings completed for the SAR with the exception of 1,2-dichloroethane and benzene along the western boundary of the Site. Further horizontal delineation of 1,2-dichloroethane, and benzene in soil was recommended. A contaminant distribution map for the November 2008 soil sampling event showing compound concentrations above the applicable MDE VCP soil standards is presented in **Figure 5** of **Attachment 1**.

On November 5, 2008, REPSG installed and sampled four (4) temporary well points (TWP-001 through TWP-004). In addition, on November 17, 2008, REPSG mobilized to the Site to gauge and sample the six (6) on-Site monitoring wells (MW-001 through MW-003, and MW-005 through MW-007) and the two (2) on-Site leak detection points (MP-001 and MP-002). Although LPH was historically identified in both MW-001 and MW-005, no LPH was identified in any of the on-Site monitoring wells, temporary well points, or leak detection points during the November 2008 groundwater investigation. All groundwater samples collected were analyzed for VOCs plus MTBE and TBA via EPA method 8260, TPH-DRO via EPA method 8015D, and TPH-GRO via EPA method 8015D.

Prior reporting and groundwater sampling had determined that groundwater COCs at the Site included the following compounds: TPH-GRO; benzene; ethylbenzene; isopropylbenzene; tetrachloroethylene (PCE); total xylenes; 1,2-dichloroethane; methyl

[10] REPSG soil boring B-005 most closely correlates to AEC boring AE-B-002. LPH was identified in AE-B-002 at a depth of 17 fbg. No LPH was identified in B-005, however, petroleum odors were detected at the time of sampling.

[11] The applicable MDE VCP standards used for comparison for the December 2008 SAR soil data have since been updated. This change has resulted in a concentration of total xylenes in sample B-008 (12.5 fbg) above the applicable standards.

chloride; toluene; naphthalene; and MTBE

COC's identified in groundwater samples during the December 2008 SAR, included:

- TPH-DRO, TPH-GRO, benzene, toluene, ethylbenzene, MTBE, PCE, acetone, total xylenes, 1,2-dichloroethane, 1,2-dibromoethane, and MEK.

During the December 2008 SAR, monitoring well MW-005, situated at the southeast corner of the gasoline UST field, was identified as the source well at the Site based on its location nearest the tank field. For the December 2008 SAR investigation: MW-005 (historically a product recovery well) demonstrated the greatest concentration of TPH-GRO, ethylbenzene, and total xylenes at the Site; monitoring well MW-001 (historically known to exhibit LPH) exhibited the greatest concentration of TPH-DRO at the Site[12]; temporary well point TWP-001 exhibited the greatest concentrations of 1,2-dibromoethane, 1,2-dichloroethane and MEK at the Site; temporary well point TWP-002 exhibited the greatest concentrations of acetone, benzene, MTBE, and toluene at the Site; and the southernmost monitoring well, MW-006, exhibited the only concentrations of PCE above the applicable MDE VCP standards at the Site. These concentrations are similar in magnitude to the results of prior sampling conducted by AEC at the Site. The compounds which were not previously identified as COCs in groundwater at the Site (acetone, 1,2-dibromoethane, and MEK) were identified above the applicable MDE VCP standards in the November temporary well points only. Results of the 2008 groundwater sampling are presented in **Table 3**. Contaminant distribution maps for the groundwater sampling event showing compound concentrations above the applicable MDE VCP groundwater standards in groundwater at the Site are presented in **Figures 6 and 7** of **Attachment 1**.

During the December 2008 SAR, the on-Site potable well did not exhibit concentrations of any compounds above the EPA DW standards when sampled by REPSG in November 2008. However, AEC also sampled the on-Site potable well in December 2008, and an MTBE concentration (87.1 ppb) was identified above the EPA DW Standard (20 ppb).

Two of the six (6) off-Site potable wells located to the east of the Site were identified as having concentrations of compounds above EPA DW standards, including:

- 1,1-dichloroethane in sample DW-004; and
- MTBE in samples DW-004 and DW-005.

The location of DW-001 at the Site is depicted on **Figure 4** in **Attachment 1.** The residential potable well samples collected correspond to the addresses provided by the MDE in their July 9, 2008 NOV letter (see **Table 1**). The MDE requested that eight (8) residences be included in the off-Site potable well investigation. REPSG attempted to

[12] With the exception of leak measuring point MP-001, which exhibited higher concentrations of TPH-DRO than MW-001, however, for the purposes of this investigation, REPSG will focus on the representative well points and monitoring wells located at the Site.

contact all eight (8) residences: six (6) of these residences approved of the sampling, one (1) of these residences did not approve the sampling[13], and one (1) of these residences was found to be vacant[14]. The six (6) residences that approved of the sampling were included in the 2008 investigation. Five (5) of the residences that approved of the sampling completed a well information form at REPSG's request. Copies of these completed forms are included in **Attachment 5**. The locations of all off-Site residences requested by the MDE to be included in the off-Site potable well sampling program are shown on **Figure 17**.

Table 1 – Off-Site Potable Well Samples and Corresponding Addresses

Site ID	Residential Site Address	Well Permit No.
DW-002	64 Quaker Lane, North East, MD. 21901	Not Available
DW-003	2780 Northeast Road, North East, MD. 21901	CE950678
DW-004	2794 Northeast Road, North East, MD. 21901	CE951470
DW-005	2802 Northeast Road, North East, MD. 21901	CE951499
DW-006	2825 Northeast Road, North East, MD. 21901	Not Available
DW-007	64 Quaker Lane, North East, MD. 21901	Not Available

In the December 2008 SAR, REPSG recommended installing an additional downgradient well at the Site in order to fully delineate the groundwater contaminant plume, to be followed by the initiation of a comprehensive groundwater monitoring program which would be conducted in accordance with MDE regulations. This monitoring program would include, at a minimum, quarterly groundwater gauging and sampling events. Analysis parameters should include TPH-DRO, TPH-GRO, benzene, toluene, ethylbenzene, MTBE, total xylenes, 1,2-dichloroethane, 1,2-dibromoethane, and MEK. REPSG further recommended that a Site survey of the groundwater monitoring wells be conducted in order to confirm groundwater directional flow. The interpreted direction of groundwater flow at the Site is to the southeast[15]. REPSG requested the removal of PCE, and acetone from the sampling protocol.

In the December 2008 SAR, REPSG recommended that an MDE approved water filtration system be installed on the two potable wells located exhibiting petroleum impacts (DW-004 and DW-005) if they did not already have such a system in place. In the event that filtration systems were not currently in place at the residences, it was REPSG's recommendation that the owners of these two residences be provided with bottled water until such time as filtration systems can be installed. Upon installation of these filtration systems, REPSG recommended that a post-filtration sample be collected from both residences and analyzed for the full suite drinking water VOCs in order to

[13] The resident of 2826 North East Road did not permit sampling of potable well.

[14] The property located at Map 11, Grid 12, Parcel 263, Lot 4 (no assigned address) was found to be vacant.

[15] Groundwater Flow direction is assumed to be southeast based on MP Elevations provided in AEC's December 2008 Monitoring Well Gauging and Sampling report.

determine if any additional upgrades to the filtration system are needed. REPSG further recommended that the on-Site potable well (DW-001) and that the two off-Site potables exhibiting petroleum impacts (DW-004 and DW-005) be placed on a regular monitoring schedule in accordance with MDE regulations. This monitoring program would include, at a minimum, quarterly groundwater gauging and sampling events. Analysis parameters should include TPH-DRO, TPH-GRO, benzene, toluene, ethylbenzene, MTBE, total xylenes, 1,2-dichloroethane, 1,2-dibromoethane, and MEK.

More detailed information regarding the sampling conducted in November 2008 can be found in the December 2008 SAR, as submitted to the MDE.

4.3 Regulatory History

In 1992, following the completion of the August 1991 Preliminary Environmental Site Assessment and the subsequent observation of LPH in monitoring wells at the Site (as discussed in **Sections 4.2.1** and **4.2.1**), the MDE required the recovery of LPH through manual bailing. The former USTs at the Site (installed in 1979) were removed and replaced with a new tank system in 1997 (see **Section 4.2.3**). In 2003, MDE again identified LPH in on-Site monitoring wells, and a soil boring program was completed by AEC (see **Sections 4.2.4** and **4.2.5**).

In correspondence dated January 5, 2004, the MDE Oil Control Program indicated the following:

- a review of the preliminary environmental assessment report completed by Geomatrix in 1991 (discussed in **Section 4.2.1**) had been completed;
- LPH was identified on October 15, 1992 in Site monitoring well MW-005 (Figure 4); this free product had previously been required by the MDE to be manually bailed from the well;
- an inspector for the MDE had visited the Site on August 15, 2003 and identified LPH in Site monitoring well MW-001 (Figure 4), and that a copy of the inspector's report had been forward to Alger Oil Company on August 18, 2003;
- the MDE received confirmation of receipt of the inspector's report from Alger Oil Company on September 9, 2003, which stated that corrective action would be completed by September 14, 2003; however, no confirmation of scheduled or completed activities had yet been received by the Department; and
- LPH that was identified in soil boring AE-B-002 (17 fbg) (**Figure 3**) during AEC's subsurface investigation (discussed in **Section 4.2.4**) exceeded the Department's action levels.

In response to the aforementioned findings, the January 2004 MDE correspondence issued a Notice of Violation (NOV) for the Site, requiring that the following be

performed:

- a complete hydrogeological study to define the vertical and lateral extent of subsurface contamination;
- a risk assessment as outlined in the MDE's MEAT Guidance document; and
- repair or replace and make accessible well caps with locks on existing on-Site monitoring wells.

Following this correspondence, on March 5, 2004 (and revised on May 26, 2004) React submitted a Hydrogeological Investigation/Work Plan for the Site (discussed in **Section 4.2.5**). This document was approved by the Department on December 7, 2005. However, an NOV was later prepared by the MDE (on July 9, 2008) in reference to the Hydrogeological Investigation/Work Plan. Specifically, the MDE's NOV letter requested that a completed Site Conceptual Model (SCM) and Supplemental Work Plan (SWP) be completed in order to prepare a comprehensive Corrective Action Plan (CAP).

In response to this NOV, REPSG submitted a Site Assessment Report (SAR) on December 18, 2008. This SAR reviewed prior Site history and investigation activities, as well as discussed recent investigation activities conducted at the Site in order to address NOV concerns. This SAR assessed soil, groundwater, and drinking water at the Site, as well as drinking water at off-Site private residences located within the vicinity of the Site. Please see **Section 4.2.7** for a more detailed review of the contents of this reporting. The locations of all off-Site residences requested by the MDE to be included in the off-Site potable well sampling program are shown on **Figure 17**.

An MDE Site Status Letter dated October 22, 2009 addressed additional data omissions requiring investigation by the MDE. These omissions were associated with the following:

- the assessment of contamination within the shallow groundwater zone (5 to 22 fbg) as a result of the on-Site monitoring wells being screened at 18 fbg;
- the assessment of LPH between the UST field and Northeast Road requiring the installation of a monitoring well; and
- the assessment of how petroleum contamination migrated to off-Site private residences located at 2794 and 2802 Northeast Road.

A copy of the MDE's NOV and Site Status Letter is provided in **Attachment 5**.

5.0 CONTINUING HYDROGEOLOGIC INVESTIGATION

To further evaluate and improve upon the Conceptual Site Model presented in the December 2008 SAR, REPSG has conducted additional on-Site and off-Site sampling. These activities were performed to further characterize the hydrogeologic system at the Site and included the quarterly gauging and sampling of groundwater monitoring wells and the drinking water well located at the Site; as well as the sampling of drinking water wells at two (2) off-Site residences. Detailed information regarding these activities is provided below.

5.1 Monitoring Well Installation & Construction

No additional groundwater monitoring wells have been installed since the December 2008 SAR. Construction information for existing wells is provided in **Table 1**.

5.2 Groundwater Sampling Events

During 2009, REPSG mobilized to the Site three (3) times to gauge and sample the six (6) on-Site monitoring wells (MW-001 through MW-003, and MW-005 through MW-007). In addition to this, the two (2) on-Site leak detection wells constructed within the gasoline tank field (MP-001 and MP-002) were gauged and sampled one (1) time during 2009[16]. All groundwater samples collected were analyzed for VOCs plus MTBE and TBA via EPA method 8260, and TPH-DRO and TPH-GRO via EPA method 8015D. Samples were submitted, packed on ice and under chain of custody, to Analytical Laboratory services, Inc. of Middletown, PA All monitoring wells and measuring points were gauged and sampled via purge-method sampling, purged water was filtered through a carbon filter to remove impurities.

5.5.1 *Groundwater Gauging Information*

Depth to water information for each sampling event is presented in **Table 2**. Monitoring well and measuring point locations are shown in **Figure 4** of **Attachment 1**.

As indicated in **Table 3**, the existing on-Site monitoring wells are screened beginning at 18 fbg, which is deeper that the average static water levels at the Site and thus are ineffective at providing accurate LPH information. As such, REPSG has proposed corrective actions for the groundwater monitoring well network in **Section 7.0** of this report.

No LPH was encountered in the monitoring wells or measuring points at the time of groundwater sampling. REPSG's standard operating procedure for groundwater sampling is presented in **Attachment 3**.

[16] Sampling of the on-Site leak detection wells completed within the existing gasoline tank excavation (MP-001 and MW-002) could not take place on March 12, 2009 or July 21, 2009 as there was not enough water present to collect for analysis.

Table 2 – Well Construction and Sample Gauging Data

Date	Site ID	Construction Date	MP Elevation[17]	Depth to Top of Screen (fbg)	Groundwater Elevation (fbg)	Depth to Water (fbg)	Depth to Bottom of Well (fbg)
3/12/2009	MW-001	June 1991	415.0	19	397.8	17.20	28.85
	MW-002	June 1991	414.1	19	396.8	17.24	31.81
	MW-003	June 1991	414.8	19	397.0	17.80	25.01
	MW-005	NA*	415.5	NA	398.1	17.31	29.98
	MW-006	NA	415.1	NA	397.5	17.53	30.33
	MW-007	January 2008	416.3	20	399.3	17.09	28.71
7/21/2009	MW-001	June 1991	415.0	19	398.7	16.31	28.56
	MW-002	June 1991	414.1	19	398.7	15.35	23.49
	MW-003	June 1991	414.8	19	399.5	15.27	22.78
	MW-005	NA	415.5	NA	398.8	16.61	22.52
	MW-006	NA	415.1	NA	398.3	16.73	31.64
	MW-007	January 2008	416.3	20	399.8	16.51	28.65
12/11/2009	MW-001	June 1991	415.0	19	398.9	16.18	28.51
	MW-002	June 1991	414.1	19	398.3	15.81	29.78
	MW-003	June 1991	414.8	19	402.3	12.50	31.09
	MW-005	NA	415.5	NA	399.0	16.42	32.18
	MW-006	NA	415.1	NA	399.6	15.50	30.36
	MW-007	January 2008	416.3	20	402.7	13.67	28.69
	MP-001	NA	NA	NA	NA	4.42	15.15
	MP-002	NA	NA	NA	NA	4.93	12.15

*NA: Information not available at the time of this reporting. REPSG attempted to located this information via discussion with the Site owner, the MDE, and through file review.

5.5.2 *Groundwater Sampling Results*

Results of the groundwater investigation laboratory analyses were compared against the applicable MDE VCP groundwater standards (see **Attachment 2**).

Analysis results indicated the presence of TPH-DRO and TPH-GRO and VOC compound concentrations above the applicable MDE VCP groundwater standards in all samples analyzed for the compounds. Results of the 2009 groundwater sampling are presented in **Table 4**. Contaminant distribution maps for all three of the groundwater sampling events showing compound concentrations above the applicable MDE VCP groundwater standards in groundwater at the Site are presented in **Figures 9, 11,** and **12** of **Attachment 1**.

[17] Groundwater survey data obtained through reporting provided to REPSG by AEC. A survey of the elevations of existing wells and newly installed wells, for the purpose of accurately measuring water elevations and calculating groundwater flow characteristics, is specified as part of the workplan presented in this document.

Table 3 – Exceedences in Groundwater (2008-2009)

Compound		*1,2-Dibromoethane*	*1,2-Dichloroethane*	*Acetone*	*Benzene*	*Diesel Range Organics (DRO)*	*Ethylbenzene*	*Gasoline Range Organics (GRO)*	*Methyl ethyl ketone*	*Methyl tert-butyl ether*	*Tetrachloro-ethylene*	*Toluene*	*Xylene (total)*
Standard		0.05	5	550	5	47	700	47	700	20	5	1000	10000
Unit		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Sample ID	**Sample Date**												
TWP-001	11/5/2008	**265**	**913**	**1270**	**15300**	**5600**	**1060**	**39700**	**1320**	**949**	5	**20600**	5140
TWP-002	11/5/2008	**179**	**680**	**2110**	**43000**	**2300**	482	-	**1300**	**11900**	5	**50200**	2680
TWP-003	11/5/2008	**13.7**	**27.1**	50	**835**	**250**	16.9	**3440**	50	**28.1**	5	518	915
TWP-004	11/5/2008	**11.4**	**21.4**	10	**708**	**83**	12.8	**673**	8.8	**52**	1	750	57.4
MW-001	11/17/2008	**5**	**27.1**	50	**13800**	**12100**	**1340**	**16800**	50	5.4	5	764	3210
	3/12/2009	ND	ND	ND	**10500**	**7600**	**779**	**11300**	ND	ND	ND	468	1800
	7/21/2009	ND	19.5	ND	**14400**	**2300**	**1210**	**35700**	ND	8	ND	**1440**	3760
	12/11/2009	ND	ND	ND	**8120**	**1800**	**962**	**14700**	ND	4	ND	58.4	1930
MW-002	11/17/2008	**1**	1	10	**68.1**	**2900**	1.9	**96.1**	10	14.7	1	5.8	7.9
	3/12/2009	ND	ND	ND	**53.5**	**910**	1.3	**80.4**	ND	14.9	ND	7	10
	7/21/2009	ND	ND	ND	**68.7**	**450**	1.9	**208**	ND	19.2	ND	13	8.2
	12/11/2009	ND	ND	ND	**39.6**	**530**	0.26	**73**	ND	17.9	ND	ND	1.4
MW-003	11/17/2008	**5**	5	86.3	24.5	**5300**	1440	**31200**	50	5	5	**3170**	5740
	3/12/2009	ND	ND	123	3.6	**1900**	368	**12700**	ND	ND	ND	**1250**	2080
	7/21/2009	ND	ND	ND	**46.1**	**4100**	**1770**	**42000**	ND	ND	ND	**7800**	8950
	12/11/2009	ND	ND	ND	**88.7**	**5200**	**1790**	**47700**	ND	ND	ND	**8000**	8670
MW-005	11/17/2008	**5**	5	97.2	410	**7500**	2610	**148000**	76.8	5	5	**34500**	**13600**
	3/12/2009	ND	ND	ND	**288**	**5800**	**2400**	**94500**	ND	ND	ND	**31400**	**13100**
	7/21/2009	ND	ND	ND	**340**	**5900**	**2540**	**247000**	ND	10.3	ND	**33200**	**13800**
	12/11/2009	ND	ND	ND	**374**	**6300**	**1960**	**105000**	ND	ND	ND	**22700**	**10500**
MW-006	11/17/2008	**1**	1	10	17.1	**2900**	8.2	**341**	10	6.7	**15.1**	42.3	33.4
	3/12/2009	ND	ND	ND	2.3	**3300**	1.6	**156**	ND	4.2	**9.9**	10.6	8.8
	7/21/2009	ND	ND	ND	**5.2**	**200**	8.1	**259**	ND	4.3	**15.7**	58.6	46.2
	12/11/2009	ND	ND	ND	**11.7**	**240**	32.4	**1200**	ND	2	**10**	220	172
MW-007	11/17/2008	**5**	5	50	**961**	**2000**	**999**	**59300**	50	5	5	**24000**	6030
	3/12/2009	ND	ND	ND	**732**	**5000**	**977**	**60800**	ND	ND	ND	**29800**	8250

Compound		*1,2-Dibromoethane*	*1,2-Dichloroethane*	*Acetone*	*Benzene*	*Diesel Range Organics (DRO)*	*Ethylbenzene*	*Gasoline Range Organics (GRO)*	*Methyl ethyl ketone*	*Methyl tert-butyl ether*	*Tetrachloro-ethylene*	*Toluene*	*Xylene (total)*
Standard		0.05	5	550	5	47	700	47	700	20	5	1000	10000
Unit		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Sample ID	**Sample Date**												
	7/21/2009	ND	ND	ND	**760**	**3400**	**964**	**57300**	ND	19.6	ND	**22400**	5120
	12/11/2009	ND	ND	ND	**1060**	**3800**	**827**	**53800**	ND	2.3	ND	**10200**	4460
MP-001	11/17/2008	**5**	5	50	19.3	**97200**	5	**1180**	50	5	5	38.7	15.1
	12/11/2009	ND	ND	ND	**372**	**1100**	6.4	**2490**	ND	ND	ND	630	155
MP-002	11/17/2008	**1**	1	61.1	3.1	**1700**	1	**175**	65.4	0.67	1	9.8	2.4
	12/11/2009	ND	ND	ND	**135**	**150**	1.7	**907**	19.1	ND	ND	172	44.3

QUALIFIERS: ND = Constituent not detected above Method Detection Limit (MDL).

Exceedences of the regulatory standard are printed in **bold**.

Previously, during the December 2008 SAR, groundwater sampling had identified acetone, 1,2-dibromoethane, and MEK as COCs at the Site (as indicated in **Tables 1** and **2**), however these compounds (which were identified above the applicable MDE VCP standards during 2008 in temporary well points only) were not identified at concentrations above applicable MDE VCP standards during the 2009 sampling events. The COCs indentified in groundwater at the Site during the 2009 investigation correspond to the COCs identified in groundwater at the Site prior to the December 2008 SAR.

5.3 On-Site Potable Well Sampling

During 2009, REPSG mobilized to the Site four (4) times to gauge and sample the on-Site potable well (DW-001). This potable well is actively used by the facility occupying the Site, and has an in-place carbon filtration system of its own.

All purged water from DW-001 was filtered through a carbon filter to remove impurities before it was discarded. No liquid-phase product was encountered in the potable well at the time that the water sample was collected. The location of DW-001 at the Site is depicted in **Figure 4** of **Attachment 1**.

The potable well water samples collected for laboratory analysis were collected pre-filtration and packaged directly into 40-milliliter HCL preserved VOA vials and 1-liter amber jars, as required by EPA Methods 524.2 and 8015B. REPSG's standard operating procedure for potable well sampling is presented in **Attachment 3**.

All drinking water samples collected during the first three quarters of 2009 were analyzed for the full suite[18] of drinking water VOCs plus TBA and MTBE via EPA method 524.2. All drinking water samples collected during the last quarter of 2009 were analyzed for the full suite of drinking water VOCs plus TBA and MTBE via EPA method 524.2 as well as TPH-DRO and TPH-GRO via EPA method 8015B (as per MDE's October 2009 correspondence). The parameter list analyzed for drinking water includes all COCs that have been reported in Site groundwater. Samples were packed on ice and, under chain of custody, submitted to Analytical Laboratory services, Inc. of Middletown, PA.

The results of the potable well investigation laboratory analyses were compared to the applicable U.S Environmental Protection Agency (EPA) National Primary Drinking Water (DW) Standards[19], which are enforced in Maryland by the MDE's Safe Drinking Water Act Implementation Division.

Analysis results did not indicate the presence of any compounds with concentrations above the applicable EPA DW standards for all four (4) sampling events. Several compounds (including MTBE) were detected at levels above the laboratory reporting

[18] A complete list of all compounds analyzed for is included in the analytical lab reports provided in **Attachment 5**.
[19] EPA National Primary Drinking Water Standards (as published on the EPA website).

detection limits (RDL), but below the applicable EPA DW standards. All other analyzed constituents were not reported at concentrations above the laboratory detection limits. All RDLs were sufficiently below the standard to be considered valid regulatory data (see **Attachment 2**).

A complete table showing all tested parameters compared to the EPA DW standards is provided in **Attachment 2**.

5.4 Residential Potable Well Sampling

In accordance with MDE directives, potable water samples were collected from the following residential potable wells four (4) times throughout 2009:

- 2794 Northeast Rd, North East, MD (Permit No. CE951470; identified herein as DW-004)
- 2802 Northeast Rd., North East, MD (Permit No. CE951499; identified herein as DW-005)

Both residences have been outfitted with a granular activated carbon (GAC) filtration system, as required by the MDE in their December 19, 2008 correspondence, for their potable well water. These systems were installed on December 8, 2008. Information regarding the carbon filtration systems installed at both residences is provided in **Attachment 6** of this report. In addition, because the refrigerators dispense ice and drinking water at both residences, they are also outfitted with carbon filtration systems. Currently, both residences are being provided with bottled water for drinking purposes.

The potable well water samples collected for laboratory analysis (DW-004B through DW-004E and DW-005A through DW-005D) were collected pre-filtration, mid-filtration, post-filtration, and at the refrigerator drinking water dispenser. All samples were packaged directly into 40-milliliter HCL preserved VOA vials and 1-liter amber jars, as required by EPA Methods 524.2 and 8015B. REPSG's standard operating procedure for potable well sampling is presented in **Attachment 3**. The residential potable well samples collected correspond to the specific level of filtration as identified in **Table 5**, below. The location of DW-001 at the Site is depicted in **Figure 4** of **Attachment 1**.

Table 4 – Potable Well Sample Level of Filtration

Sample ID	Level
DW-004B (2794 Northeast Rd.)	Refrigerator*
DW-004C (2794 Northeast Rd.)	Pre-filtration
DW-004D (2794 Northeast Rd.)	Mid-filtration
DW-004E (2794 Northeast Rd.)	Post-filtration
DW-005A (2802 Northeast Rd.)	Pre-filtration
DW-005B (2802 Northeast Rd.)	Mid-filtration
DW-005C (2802 Northeast Rd.)	Post-filtration
DW-005D (2802 Northeast Rd.)	Refrigerator*

*Water from the refrigerator has undergone a second level of filtration.

All drinking water samples collected during the first three quarters of 2009 were analyzed for the full suite of drinking water VOCs plus TBA and MTBE via EPA method 524.2. All drinking water samples collected during the last quarter of 2009 were analyzed for the full suite of drinking water VOCs plus TBA and MTBE via EPA method 524.2 as well as TPH-DRO and TPH-GRO via EPA method 8015B (as per MDE's October 2009 correspondence). The parameter list analyzed for drinking water includes all COCs that have been reported in Site groundwater. Samples were submitted, packed on ice and under chain of custody, to Analytical Laboratory services, Inc. of Middletown, PA.

The results of the potable well investigation laboratory analyses were compared to the applicable U.S EPA National Primary DW Standards, which are enforced in Maryland by the MDE's Safe Drinking Water Act Implementation Division.

Analysis results indicated the presence of the following compounds in concentrations above the applicable EPA DW standards: 1,1-dichloroethane; MTBE[20]; and methylene chloride. These compounds are presented in **Table 6,** below.

Table 5 – Exceedences in off-Site Potable Wells (2008-2009)

		Compound	*1,2-Dichloroethane*	*Methyl tert-butyl ether*	*Methylene chloride*
		Unit	ug/l	ug/l	ug/l
		Standard	5	20	5
Sample Date	**Sample ID**	**Level of Filtration**			
11/24/2008	DW-004	Pre-filtration	**5.5**	**216**	ND
	DW-005	Pre-filtration	3.6	**277**	ND
1/26/2009	DW-004B	Refrigerator*	NT	NT	NT
	DW-004C	Pre-filtration	**5.3**	**234**	ND
	DW-005A	Pre-filtration	2.5	**220**	ND
	DW-005B	Mid-filtration	ND	ND	ND
3/4/2009	DW-004B	Refrigerator*	ND	**92**	ND
	DW-004C	Pre-filtration	4.4	**232**	**6.1**
	DW-005A	Pre-filtration	ND	**300**	**3.3**
	DW-005B	Mid-filtration	ND	ND	ND
6/29/2009	DW-004B	Refrigerator*	ND	ND	ND
	DW-004C	Pre-filtration	5.3	**214**	ND
	DW-005A	Pre-filtration	6.6	**514**	ND
	DW-005B	Mid-filtration	ND	**32.8**	ND
12/11/2009	DW-004B	Refrigerator*	ND	ND	ND
	DW-004C	Pre-filtration	**5.7**	**254**	ND
	DW-005A	Pre-filtration	1.2	**130**	ND
	DW-005B	Mid-filtration	1.1	**122**	ND

*Water from the refrigerator has undergone a second level of filtration (filters provided by REPSG).

Several compounds were detected at levels above the RDL, but below the applicable EPA DW standards. In addition, several compounds for which no applicable EPA DW

[20] Levels of MTBE above the applicable MDE VCP groundwater standards in on-Site potable well DW-001 have not been detected by REPSG during the course of the 2008-2009 investigation.

standard is available were detected at levels above the RDL. All laboratory detection limits were sufficiently below the standard to be considered valid regulatory data. A complete table showing all tested parameters compared to the EPA DW standards is provided in **Attachment 2**. The analytical laboratory report is provided in **Attachment 5.**

6.0 SITE CONCEPTUAL MODEL

6.1 Source and Extent of Site Contamination

Soil Characterization

As identified in the December 2008 SAR, the source of on-Site petroleum impacts is most likely the historical releases of petroleum products from the gasoline UST field located in the north central portion of the Site.

Based on a comparison of current and historical soil data against the applicable MDE VCP standards, the identified COCs in soil at the Site are 1,1,2-trichloroethane; 1,2-dibromoethane; 1,2-dichloroethane; benzene, ethylbenzene, toluene, MTBE, and total xylenes. As discussed in **Section 4.3.3**, soils from the original UST field (which were identified as contaminated on the tank closure form) were excavated and disposed during UST closure and replacement activities conducted in 1997.

The extent of these COCs at the Site has been delineated horizontally within the Site boundary to the north by sample B-003, to the south by samples B-006 and B-012, and to the east by B-009. Horizontal delineation within the Site boundary to the west has been established for 1,1,2-trichloroethane and 1,2-dibromoethane by sample B-011. However, horizontal delineation within the Site boundary to the west has not yet been established for 1,2-dichloroethane and benzene.

Vertical delineation of 1,1,2-trichloroethane in soils at the Site has not yet occurred within boring B-008 (collected at a depth of 12-12.5 fbg). No concentrations of this compound above the applicable MDE VCP standards were found in any other soil samples collected from the Site. This compound was not detected in soil sample B-005, collected at the six-inch interval above the soil-groundwater interface (a depth of 23-23.5 fbg). This compound was also not found in concentrations above the applicable MDE VCP standards within Site groundwater.

Vertical delineation of 1,2-dibromoethane, 1,2-dichloroethane, and benzene down to the soil-groundwater interface has not yet been achieved. The presence of these three compounds in concentrations above the applicable MDE VCP standards within Site groundwater has also been confirmed. More information about migration of COCs at the Site is discussed in **Section 6.5**.

Petroleum related groundwater COCs ethylbenzene and toluene have not been identified in Site soils at concentrations above the applicable MDE VCP standards since 2003. Petroleum related COC MTBE was not identified in Site soils at concentrations above the applicable MDE VCP standards in the December 2008 SAR.

The December 2008 SAR identified ethylbenzene, MTBE, and toluene in Site soils at concentrations below the applicable MDE VCP standards, but above the laboratory MDLs.

Data gaps which exist within this Site Conceptual Model will be addressed by the plan of work proposed in **Section 7.0** of this report.

Groundwater Characterization

Based on the recent groundwater characterizations that have been conducted at the Site, the following compounds continue to be compounds of concern (COCs) in Site groundwater:

- TPH-DRO, TPH-GRO, 1,2-dichloroethane, benzene, ethylbenzene, PCE, toluene, and total xylenes.

The December 2008 SAR had also identified acetone, 1,2-dibromoethane, and MEK as COCs at the Site; however, these compounds were not identified at concentrations above applicable MDE VCP standards during the 2009 sampling events, accordingly, these compounds are no longer considered to be COCs.

Monitoring well MW-005, situated at the southeast corner of the gasoline UST field has previously been identified as the source well at the Site. During 2009, MW-005 demonstrated the greatest concentration of TPH-GRO, ethylbenzene, toluene, and total xylenes at the Site, while the greatest concentration of 1,2-dichloroethane, benzene, and TPH-DRO at the Site was found in MW-001, located at the center of the Site. These wells have consistently maintained the highest concentrations of the respective compounds during the 2008 and 2009 Site investigations conducted by REPSG. No discernable decrease in compound concentrations has been noted during this time.

The solvent PCE, a non-petroleum related groundwater COC, is the only solvent detected in Site groundwater at concentrations above the applicable MDE VCP standards. Solvent trichloroethylene (TCE), a breakdown compound of PCE, has been detected in Site groundwater at concentrations below the applicable MDE VCP standards, but above the laboratory MDLs. No other solvents were detected in Site groundwater at concentrations above the applicable MDE VCP standards. No solvents have been identified in Site soils at concentrations above the laboratory MDLs. The southernmost well, MW-006, exhibited the only concentration of PCE above the applicable MDE VCP standards at the Site. Based on Site soil investigations (which have not indicated the presence of PCE above MDE VCP standards) it does not appear that PCE has migrated into groundwater from on-Site conditions, however. Additional investigation of the soils is required before a determination regarding the source of PCE can be made.

The source area of the petroleum related groundwater impacts at the Site appears to be the gasoline UST field located in the north- central portion of the Site, to the northwest of monitoring well MW-001. No on-Site sources for PCE in groundwater were identified. As discussed in **Section 5.5**, compounds with concentrations above the applicable EPA DW standards (1,1-dichloroethane, methylene chloride, and MTBE) are present at two of the off-Site potable wells (DW-004 and DW-005). The source of these impacts has not

yet been established.

No discernable trend in concentrations of compounds present in groundwater has yet been observed. Data gaps which exist within this Site Conceptual Model will be addressed by the plan of work proposed in **Section 7.0** of this report.

6.2 Liquid Phase Hydrocarbons

No liquid phase product (LPH) was detected in any of the monitoring wells, measuring points, or potable well samples analyzed for this SSR/SIW. The 1991 Geomatrix SAR identified LPH in the unsaturated zone and the capillary fringe. The specific location of this LPH occurrence at the Site was not noted within the reporting. No free product was found floating on the groundwater during Geomatrix's investigation. In October 1992, 0.75-inches of LPH was identified in MW-005, with subsequent gauging events revealing the continued presence of up to 6 inches of LPH in MW-005. Based on the presence of LPH, the MDE required the recovery of petroleum through manual bailing. In August 2003, the MDE identified 0.5-inches of LPH within MW-001. Supplemental investigations conducted in October 2003 revealed LPH in boring AE-B-002 at a depth of 17 fbg. To date, manual hand bailing of the monitoring well network at the Site has resulted in minimal recovery of LPH. No LPH has been identified within the on-Site monitoring well network during the 2008 and 2009 Site investigation activities.

6.3 Specific Sensitive Receptors

Based on findings to date, sensitive receptors include on-Site workers and off-Site residential homeowners relying on well water for drinking purposes, and a local day care facility located to the east of the Site. A further evaluation of REPSG's findings is presented below.

For the December 2008 SAR a well search was conducted by REPSG in conjunction with the MDE for a one-half mile radius in the vicinity surrounding the Site. This well search indicated that within a one-half mile radius of the Site there are: 38 drinking water wells (used for either public or home use); three (3) industrial, commercial state, or federal use wells; and one (1) farm use well (for livestock watering and agricultural irrigation). Three (3) of the 28 drinking water wells and one (1) of the industrial wells are located within 500 feet of the Site. Two (2) of the drinking water wells (located at 2794 and 2802 Northeast Rd.) and one (1) of the industrial wells are located within 1,000 feet of the Site. All other wells are located between 1,000 feet and a half mile radius of the Site. Well construction details and location documentation was provided in the December 2008 SAR. Both of the off-Site potable wells are currently being monitored by REPSG. Additionally, there is one (1) on-Site potable well (DW-0001) located to the west of the structure at the Site. Both of the off-Site potable wells are currently being monitored by REPSG. More information regarding the two (2) off-Site potable wells is provided in **Section 4.5** of this report.

The presence of potable wells at these residences provides an open pathway to Site groundwater contamination via ingestion. These residential properties represent potential sensitive receptors.

An at-home day care facility is (license No. 155668 for Cecil County, Region 11, and known as "Cammie Ginski") is located at 2802 Northeast Road. This day care facility is licensed for up to ten (10) children, and is located east of the Site. The day care facility is housed within one of the residence's currently included in REPSG's off-Site potable well monitoring program. Due to its proximity to the Site, and its inclusion in off-Site potable well monitoring, this day care facility presents a potential sensitive receptor for Site groundwater contamination.

6.4 Current and Future Use of Impacted Groundwater

On-Site and off-Site groundwater within a half-mile radius is used for public consumption via potable wells. As shown in the potable well results sections of this SSR/SIW (**Sections 5.4** and **5.5**), petroleum impacts to the groundwater at the Site are not currently present at the on-Site potable well. Based on currently available data, groundwater from the Site appears to flow towards the east; two (2) residential wells located approximately 258 feet to the east of the Site are known to be contaminated with petroleum hydrocarbons. Currently, residents of these two (2) locations are being provided with bottle water and both have had GAC filtration systems installed. REPSG has confirmed with the Cecil County Department of Public Works Water Division that no public water is available within the area.

In order to determine how Site hydrogeology (i.e. groundwater directional flow, soil strata distribution, and the presence of fractured bedrock) has impacted the contaminant plume at the Site (and thereby the off-Site potable well network), adjustments to the on-Site groundwater monitoring well network have been proposed in **Section 7.0**.

6.5 Migration of Contamination

6.5.1 *Contaminant Fate*

The contaminant fate characteristics of each COC in soil and groundwater are as follows:

1,1,2-Trichloroethane is a colorless, sweet-smelling liquid, used as a solvent that does not burn easily, can be dissolved in water, and evaporates easily.

Benzene is a colorless, aromatic, highly flammable liquid widely used in the United States in the production of other chemicals and materials and is a natural component of gasoline and crude oil. It can move from water and soil into air, however, due to reactions with other airborne chemicals, it breaks down within a few days. Benzene has low to moderate solubility in water. Benzene has high to very high mobility in soil.

Toluene is a clear, colorless, aromatic liquid often produced during the process of making

gasoline and other fuels from crude oil. It has low solubility in water, and high to very high mobility in soil.

Ethylbenzene is a colorless, flammable liquid, with an odor similar to gasoline, found in petroleum and coal tar. It has low solubility in water and moderate mobility in soil.

MTBE is a flammable liquid with a distinctive odor; it is often used as an additive in unleaded gasoline. It evaporates quickly from surface water, and so is commonly found as a vapor in the air.

PCE is a sweet-smelling, non-flammable manufactured liquid used for dry cleaning and metal degreasing that evaporates quickly from surface water into the air.

Xylenes are a colorless, sweet-smelling and flammable liquid, which are commonly used in paint, paint thinners, and in gasoline. They quickly evaporate from soil and surface water into the air, and will dissolve in water through soil, and enter into groundwater.

1,2-Dichloroethane is a manufactured, clear sweet-smelling and pleasant tasting liquid used in the production of vinyl chloride and as a leaded gasoline additive. 1,2-Dichloroethane breaks down slowly in water, and easily evaporates into the air.[21]

6.5.2 *Migration of Contaminants in Soil to Groundwater*

The COCs characteristically have high potential to migrate in soil or leach from soil into groundwater. Site-specific clayey silts soils are only moderately favorable for migration. However, the presence of 1,2-dichloroethane and benzene (two of the four soil COCs) in multiple monitoring wells at the Site, verifies that migration of contaminants from soil to groundwater has occurred. Due to the localized nature of 1,1,2-trichloroethane in soils (at B-008), and the absence of 1,1,2-trichloroethane in groundwater above laboratory MDLs, under existing geochemical conditions future migration of this compound from soil to groundwater is not likely.

6.5.3 *Migration of Contaminants in Groundwater*

COCs detected in groundwater above the MDE VCP groundwater standards were as follows:

- TPH-DRO, TPH-GRO, and benzene in all wells and measuring points;
- 1,2-Dichloroethane in MW-001;
- PCE in MW-006;
- ethylbenzene in MW-001, MW-003, MW-005, and MW-007;
- toluene in MW-003, MW-005, and MW-007; and

[21] Information on contaminant fate provided by the Agency for Toxic Substances and Disease Registry Division of Toxicology and Environmental Medicine's website: http://www.atsdr.cdc.gov/

- total xylenes in MW-001, MW-003, MW-005, and MW-007.

Currently available data indicates significant variation in COC concentration levels at the Site. The monitoring wells at the Site located most upgradient (MW-005 and MW-007), are also located within the immediate vicinity of the suspected source area (the gasoline UST field). These wells demonstrate overall higher levels of Site COCs than the most downgradient well (MW-002) located at the Site. The absence of COCs in the on-Site potable well (situated to the southwest of the tank field at the Site), and the presence of COCs impacts in off-Site residential potable wells located east of the Site, is likely due to groundwater directional flow at the Site. However, more data is needed in order to determine the migration and fate of the groundwater contaminate plume.

6.5.4 *Volatilization of Contaminants in Soil and Groundwater*

The soil vapor intrusion pathway was evaluated by screening volatile soil and groundwater compounds using the Johnson & Ettinger model (J & E model) as required within the MDE VCP Guidance Document (Revision Date: 3/17/2006). The screening indicated that the combined soil plus groundwater incremental risk of vapor intrusion presents a potential risk to indoor air for the following compounds: 112-trichloroethane, 12-dichloroethane, 12-dibromorethane, acetone, benzene, ethylbenzene, methyl ethyl ketone, MTBE, tetrachlorthylene, and toluene. Specific information regarding the Site-specific use of the J& E model is provided in **Section 6.5.5**.

6.5.5 *Quantification of Vapor Exposure Risk*

The quantification of exposure is expressed as the amount of a substance which is available to the receptor, known as the exposure point concentration. For this Site-specific risk assessment, the exposure point concentrations are the levels of the Site's vapor-phase compounds of concern that could migrate from subslab soils and groundwater into the indoor air space of the on-Site and off-Site buildings.

Indoor air models such as the Johnson & Ettinger[22] (J&E) model are valuable screening tools for estimating the human health risks for the migration of volatile compounds from soil and groundwater into an indoor air space.

The MDE VCP Guidance Document (Revision Date: 3/17/2006) recommends using the J&E model to evaluate the potential for vapor intrusion. This model incorporates convective and diffusive mechanisms to allow for the estimation of the transport of contaminant vapors emitting from subsurface soils and/or groundwater into indoor spaces. This model uses input values which are inherently conservative and that include parameters such as: soil type, depth to groundwater, depth from receptor, and chemical properties of the contaminants detected in the subsurface.

[22] EPA OSWER *Draft Guidance for Evaluation of the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance, November 29, 2002).*

For this report, indoor air exposure point concentrations and associated human health risks were calculated using the EPA's adaptation of the J&E vapor transport model. Specifically, the Excel soil model SL-SCREEN and groundwater model GW-SCREEN were used. It was assumed that construction was implemented with no vapor barrier. To consider the worst-case exposure scenario that was most representative of conditions for the on-Site and off-Site vapor intrusion-to indoor air pathway, the indoor air exposure concentration was modeled from the highest of the most recent (2008-2009) reported soil and groundwater concentration for the vapor compounds of concern at the Site.

REPSG entered Site-specific and default parameters detailed in **Attachment 8** to determine the cumulative human health risk associated with the volatization of soil and groundwater contaminants at the Site. The results of the models indicated that the following volatile compound concentrations present in soil and groundwater present a cumulative incremental risk of 2.43E-4, above the EPA-determined level of 1E-6 for carcinogens and a hazard quotient of 4.04, above the EPA-determined target hazard quotient of 1 for non-carcinogens. These compounds include: 112-trichloroethane, 12-dichloroethane, 12-dibromorethane, acetone, benzene, ethylbenzene, methyl ethyl ketone, MTBE, tetrachlorthylene, and toluene. The compounds primarily driving the human health risk at the Site in soil and groundwater are benzene and 12-dibromoethane.

Input and output screens from the SL-SCREEN and GW-SCREEN models are provided in **Attachment 8**.

Since the results of the screening process and modeling indicate a potential risk to human health, the model must be verified to ascertain whether an inhalation risk actually exists at a property. MDE recommends a systematic approach that may require soil gas sampling from beneath a building foundation and indoor air sampling to validate indoor air model results.

6.5.6 *Human Exposure*

Soil Contact Pathway

The Site is completely developed and is currently comprised of a convenience store and retail gasoline service station. Current land use is commercial and the Site is currently completely capped with either pavement or landscaping; there are no proposed changes to land use. The Site Assessment has determined that with the cap in place, the direct contact exposure routes from Site soils to potential receptors are incomplete.

Human receptors to on-Site soil contamination will occur only if construction or utility work is performed on-Site. A Site-Specific Health and Safety Plan and best management practices should be implemented during activities conducted in these areas to prevent exposure to Site contaminants by dermal sorption, ingestion or inhalation.

Groundwater Pathway

The direction of shallow groundwater flow at the Site appears to vary from easterly to southerly over time, based on water levels measured in wells at the site in three groundwater monitoring events in 2009.

Depth to groundwater at the Site was demonstrated to be is approximately 13.67 to 17.80 fbg during 2009. Exposure to human receptors to on-Site groundwater contamination will occur if construction or utility work is performed on-Site at depths greater than approximately 13 fbg. A Site-Specific Health and Safety Plan and best management practices should be implemented during activities conducted in these areas to prevent exposure to Site contaminants by dermal sorption, ingestion or inhalation. Additionally, an open pathway to groundwater via a potable well (DW-001) is present. During the course of this investigation, results from the on-Site potable well did not report any concentrations above the applicable EPA DW standards; however previously conducted investigations (most recently March and December 2008, as conducted by AEC) have shown impacts to this well. Potable water obtained at the Site from this well is purified through a carbon filtration system prior to consumption, closing the pathway to on-Site receptors via ingestion. However, a pathway to off-Site receptors via ingestion of this groundwater remains open.

Vapor Intrusion and Indoor Air Pathway
As previously discussed, the potential for volatilization of Site COCs from soil and groundwater impacts exists. Due to the presence of potable wells and unknown utilities, which can serve as preferential pathways, the vapor intrusion pathway to on-Site and off-Site structures within is potentially complete.

6.5.7 *Environmental Ecological Exposure*

No wetlands or surface water bodies are present on-Site. Currently available data do not indicate any wetlands or surface water bodies located within the identified contaminant plume extent. The additional groundwater monitoring activities proposed in **Section 7.0** of this report are intended to address this data gap.

6.5.8 *Impact to Utilities and Other Buried Services*

The majority of the electrical services to the on-Site structure are aboveground, with the exception of one electrical line that runs from the building and up a service pole at the rear of the structure. A private septic tank system is located off the southwest side of the convenience store structure at the Site for sewage disposal. No leech field is associated with this system. There is currently no public water service to the Site; the Site is supplied water by the on-Site potable well (DW-001). Piping associated with the USTs at the Site is situated underground towards the front of the store.

6.5.9 *Other Sensitive Receptors*

An at-home day care facility is located at 2802 Northeast Road, located east of the Site

and within one of the residence's currently included within REPSG off-Site potable well monitoring. No other sensitive receptors such as surface water, historic structures, or subways are located within the vicinity of the area. The nearest body of surface water is located 1,695 feet southwest of the Site.

7.0 SITE INVESTIGATION WORKPLAN

In conjunction with the MDE, REPSG has determined that additional investigation activities are required in order to fully characterize conditions at the Site, and to develop a fully refined Site Conceptual Model. The objectives of this proposed SIW are to address data gaps in the SCM, which include:

- the magnitude and extent of Site contaminants, including the potential presence of LPH, within the shallow groundwater zone (the existing on-Site monitoring wells are screened beginning at 18 fbg, which is deeper that the average static water levels at the Site and, thus, are ineffective);
- the presence, or lack thereof, of LPH, as has historically been reported in areas between the UST field and Northeast Road;
- the contaminant transport pathways to off-Site areas and specifically, the pathway of how petroleum constituents came to be present in drinking water wells located at off-Site private residences at 2794 and 2802 Northeast Road; and
- the magnitude and extent of Site contaminants, including the potential presence of residual phase and liquid phase contaminants within the shallow soil zone at the Site.

To address these data gaps, the following actions are required:

- identify potential on-Site sources of contamination;
- determine the presence or absence of LPH in groundwater at the Site;
- determine the extent of the LPH plume present at and within the vicinity of the Site by:
- determining how contaminants are migrating into the off-Site potable well water supply from on-Site sources; and
- evaluate the vertical and horizontal extent of petroleum contamination;
- evaluate the nature and extent of soil vapor intrusion impacts at the Site; and
- a prediction of the fate and transport of contaminants of concern.

Activities to meet these objectives are presented in the following sections.

7.1 Geophysical Survey

To assist in identifying potential continuing sources of contamination on the site, a geophysical survey utilizing a variety of techniques such as electromagnetic (EM) detection (EM), magnetometry (MAG), and ground-penetrating radar (GPR) will be conducted. This assessment will survey all accessible portions of the Site and will delineate: the location, size, orientation, and depth of metallic USTs; the location and

depth of utilities and on-site septic tank; and identify any subsurface debris.

7.2 Subsurface Soil Investigation

From 1991 through 2008, thirty (30) soil boring samples were collected over accessible areas of the Site. In order to fully characterize the extent of residual phase and liquid phase contaminants within the shallow zone at the Site, an additional eight (8) soil boring samples are proposed. Six (6) of these borings will be advanced on-Site within the vicinity of monitoring wells MW-001, MW-003, and MW-005. The remaining two (2) borings will be advanced at the off-Site residences with identified petroleum impacts to groundwater (one (1) boring will be advanced at 2802 Northeast Road and one (1) boring will be advanced at 2794 Northeast Road). The advancement of these two (2) off-Site borings is contingent upon being granted Right of Access by the homeowners.

A minimum of one (1) soil sample will be collected from each boring and submitted for analysis of VOCs plus tert-butyl alcohol (TBA) via EPA method 8260, TPH-DRO via EPA method 8015D, and TPH-GRO via EPA method 8015D. Samples will be submitted, packed on ice and under chain of custody, to Analytical Laboratory services, Inc. of Middletown, PA.

This work will confirm various conditions present to allow proper well construction when the new monitoring wells are installed.

As horizontal delineation to the north and west has not yet been established for 1,2-dichloroethane and benzene, REPSG recommends that an additional subsurface soil investigation be conducted. In order to fully characterize the extent of contamination, an additional five (5) soil boring samples are proposed. These borings will be advanced on-Site with at depths greater than 21 fbg. One (1) boring will be advanced in the location of B-001 and B-011 (for a total of two (2) soil borings); one (1) soil boring will be advanced to the west of B-001 (along Quaker Lane); one (1) soil boring will be advanced to the north of B-001 (along the Site boundary); and one (1) soil boring will be advanced to the west of B-011 (along Quaker Lane).

A minimum of one (1) soil sample will be collected from each boring and submitted for analysis of 1,1,2-trichloroethane; 1,2-dibromoethane; 1,2-dichloroethane; and benzene via EPA methods 8260 and 8270. Samples will be submitted, packed on ice and under chain of custody, to Analytical Laboratory services, Inc. of Middletown, PA.

All soil borings will be advanced using a track-mounted direct-push Geoprobe®, under the direction of a REPSG geologist, down to depths of approximately 30 fbg, evidence of contamination, the soil-groundwater interface, or refusal (whichever is encountered first).

Soils from these borings will be field-screened for the presence of petroleum or VOC contaminants in subsurface soils using visual and olfactory screening, and a portable photoionization detector (PID) equipped with a 10.2eV lamp, capable of detecting

organic vapors. PID readings will be measured at six inch intervals along the soil borings.

The approximate locations of proposed soil borings are shown on **Figure 11** of **Attachment 1**.

7.3 Deep Monitoring Well Installation

This task will investigate whether Site-related groundwater contaminants are present in the deeper aquifer zones in fractured bedrock at the Site, and whether flow in the bedrock aquifer is a likely route of contaminant transport to the potable wells at residences to the east. REPSG proposes to install one (1) pair of groundwater monitoring wells, consisting of one shallow (<35 foot) overburden well and one deep (<110) bedrock wells.

The deep monitoring well (MW-008D) and the shallow well (MW-008) will be installed at the Site using rotary drilling techniques. This nested pair of wells will be installed in the area between the UST field and Northeast Rd. The exact location may be selected in the field based on the locations of Site utilities and subsurface structures. The approximate locations of the proposed deep and shallow well are shown on **Figure 12** of **Attachment 1**.

The deep well will be drilled with using air rotary techniques. The well will installed by first drilling an approximately 12-inch diameter borehole to the depth of competent bedrock, estimated to be 50 to 80 feet below grade. The well will be set with an appropriate length of eight-inch diameter steel casing to allow for a competent seal between the bedrock and unconsolidated overburden, paying particular attention to providing a hydraulic seal between the overburden aquifer and the deeper water-bearing zones in bedrock. Once the steel casing is set and sealed, drilling will continue into bedrock, using a nominal 8-inch diameter drilling bit. The well will be drilled to the deeper of 110 feet or the first significant water bearing zone. The well will be completed as an 8-inch diameter open hole rock well. This construction will allow for a wide range of options for future downhole measurements that may be specified to investigate the location, orientation, and other characteristics of rock fractures and/or water-bearing zones. Potential measurement techniques include video, temperature, or caliper logging; and various downhole geophysical technologies.

The depth of the deep well is specified based on the depth to water-bearing zones reported on the Well Completion Reports for the potable wells constructed on the residences to the east (2794 and 2802 Northeast Road). The total depth may be adjusted, based on actual observations of fractured and/or water-bearing zones during well drilling. Copies of the off-Site well completion reports are included in **Attachment 7** of this report.

A Maryland-licensed driller will conduct the drilling and installation of the monitoring wells. An REPSG geologist will oversee drilling and well construction activities. During well installation, a portable PID will be used to screen cuttings, and if evidence of

petroleum-contaminated intervals is encountered, undisturbed soil samples will be collected for VOC analysis. The completed monitoring wells will be finished with locking well caps watertight flushmount manholes as required by the LUST guidance. Over-pumping via the air rotary rig will initially be utilized to develop the deep monitoring well.

7.4 Shallow Well Installation

REPSG proposes that three (3) of the shallow monitoring wells currently present at the Site (MW-001, MW-005, and MW-003) be reinstalled in order to ensure that proper screening intervals are present in the monitoring wells at the Site. This re-installation will directly address the MDE's concerns regarding data gaps in the shallow water zone and, specifically, the presence or absence of LPH at the Site. A geologic cross-section figure (**Figure 16**) illustrating soil conditions at the Site in comparison to a portion of the existing well network is provided in **Attachment 1** of this report.

During well installation, a portable PID will be used to screen cuttings, and if evidence of petroleum-contaminated intervals are encountered, undisturbed soil samples for VOC analysis will be collected.

The wells will be constructed in accordance with the specifications for Groundwater Monitoring Wells of the MDE-OCP, as detailed in Appendix C of the LUST guidance document. The approximate locations of the proposed replacement shallow wells are shown on **Figure 12** of **Attachment 1**.

7.5 Proposed Changes to Groundwater Monitoring Plan

Following a two-week equilibrium period, all newly installed wells will be added to the quarterly groundwater gauging and sampling program currently conducted at the Site. Groundwater sampling analytical parameters include VOCs plus TBA via EPA method 8260, TPH-DRO via EPA method 8015D, and TPH-GRO via EPA method 8015D.

REPSG also proposes that the two leak detection points (MP-001 and MP-002) be removed from the groundwater monitoring program at the Site.

7.6 Monitoring Well Survey

In order to accurately assess groundwater directional flow, a survey of all monitoring wells and measuring points at the Site will be completed following the completion of the proposed well network changes.

7.7 Continued Potable Well Monitoring Plan

REPSG will contain to monitor compound concentrations in both the on-Site potable well (DW-001) and both of the off-Site potable wells (DW-004 and DW-005). The on-Site potable well (DW-001) and the off-Site potable wells (DW-004 and DW-005) will continue to be sampled on a quarterly basis. Samples from the on-Site potable well will

be collected pre-filtration. Samples from the off-Site potable wells will be collected pre-filtration, mid-filtration, post-filtration, and at the refrigerator drinking water dispenser. All samples will be packaged directly into 40-milliliter HCL preserved VOA vials, and submitted for laboratory analysis for the full suite of drinking water VOCs plus TBA and MTBE via EPA method 524.2. The parameter list analyzed for drinking water will include all COCs that have been reported in Site groundwater.

The existence of volatile organic compounds for which no applicable EPA DW standard is available at concentrations above the laboratory MDL, indicates that the current GAC filtration systems in place at both off-Site residences are not mitigating all potable water impacts. REPSG has been approved to replace existing carbon in both systems. In addition, REPSG will install a Sentry I Open-Air volatilization system at both residences. This volatilization system is known to be highly effective and efficient at removing VOCs from water.

7.8 Soil Vapor Intrusion Investigation

The MDE recommends that the collection of soil gas samples at a Site follow the parameters set forth in the U.S. EPA Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway (Groundwater and Soils - 2002). In addition, the MDE recommends that analysis of sub-slab soil gas and indoor air samples be conducted following the parameters set forth by U.S. EPA Methods TO14, TO15, TO17 (or their equivalent). At a minimum, samples should be collected in accordance with the following requirements:

- Sample collection should occur between three and five feet in depth or from the layer of highest permeability;
- Samples locations should be biased towards areas beneath the building, and should be situated at least several feet from the edge of the building (an angled boring can be used if sub-slab sampling cannot be performed);
- In order to collect representative samples, the sampling periods should be greater than eight hours for commercial properties, and greater than twenty-four hours for residential properties. The frequency and period of the sampling should be sufficient enough in order to minimize the effects of ambient air breakthrough into the vapor sample and changes in barometric pressure and temperature;
- A minimum of one duplicate sample should be collected[23];
- All hole left within the slab from the sampling should be plugged with non-VOC pliable caulk or equivalent immediately following the start of sample collection; and

[23] 31 - MDE VCP Guidance Document Revision Date: 3/17/2006

- No other soil should not be disturbed during sample collection.

Results reported to MDE should include the following:

- A narrative summary that describes the area sampled, slab conditions, sample depth, methods used, soil type, and sampling period encountered;
- Photographs and figures that adequately document the location of the sample and condition of the slab;
- Results for all detected analytes in units of (ppb) µg/m3; and
- Copies of the laboratory analytical data sheets with minimum detection limits and practical quantitation limits.

A specific plan of work to address Site vapor intrusion is not proposed at this time.

7.9 Reporting

The results of the soil and groundwater investigations will be presented in a revised Site Conceptual Model (Revised SCM) Report. The Revised SCM Report will directly address MDE's concerns as outlined in this SIW/SCM, and will recommend any additional investigation that may be necessary for the purpose of preparing a Corrective Action Plan.

ATTACHMENT 1: FIGURES

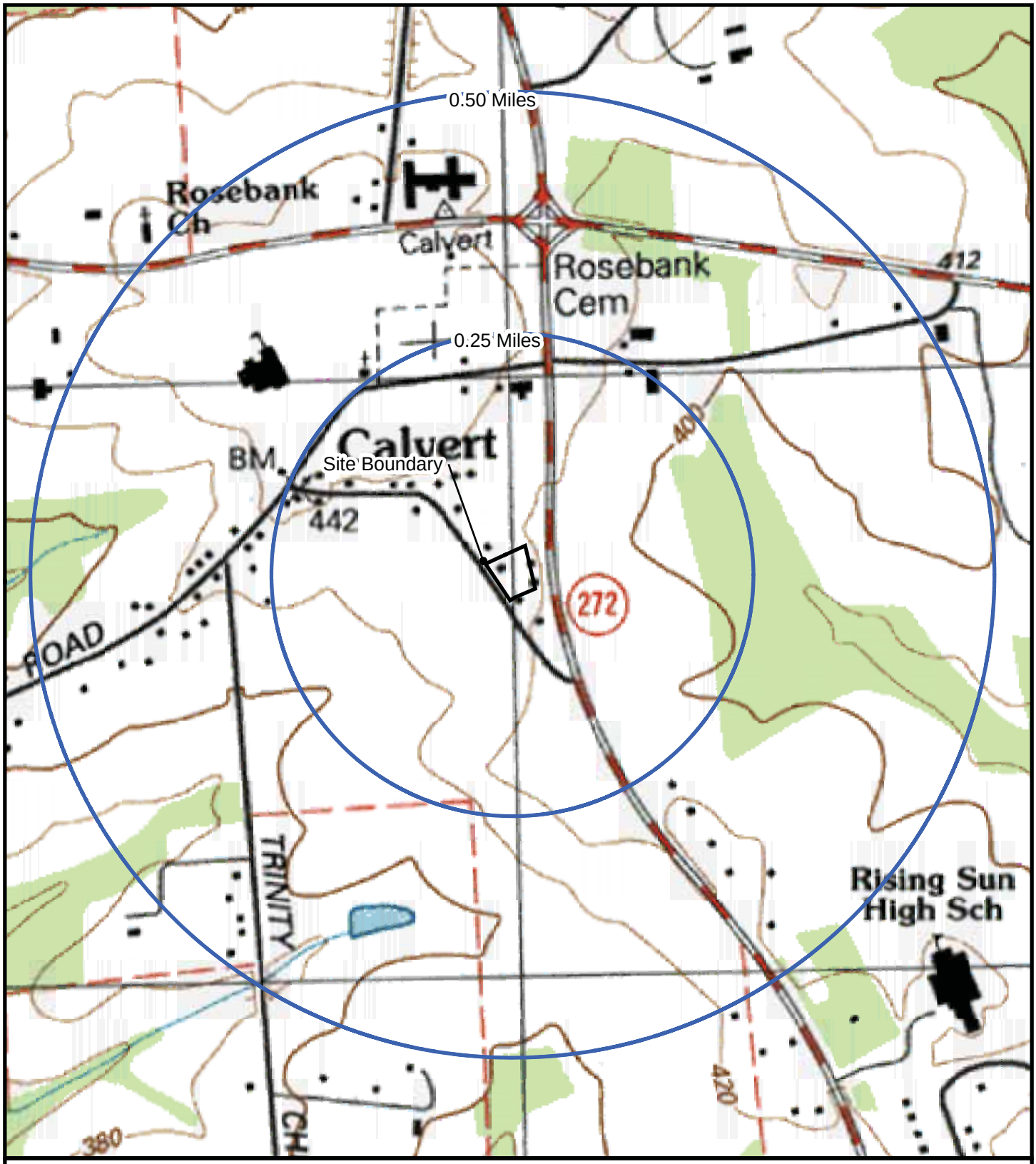

Figure 1: Site Location

REPSG
React Environmental Professional Services Group, Inc.

MAP SCALE: 1 inch = 750 feet

0 330 165 660 990 1,320 Feet

PROJECT NAME: ***CALVERT CITGO***
PROJECT ADDRESS: ***2815 NORTH EAST ROAD, NORTH EAST, MD***
PROJECT NUMBER: ***005977***
DATE: ***MARCH 2010***

N
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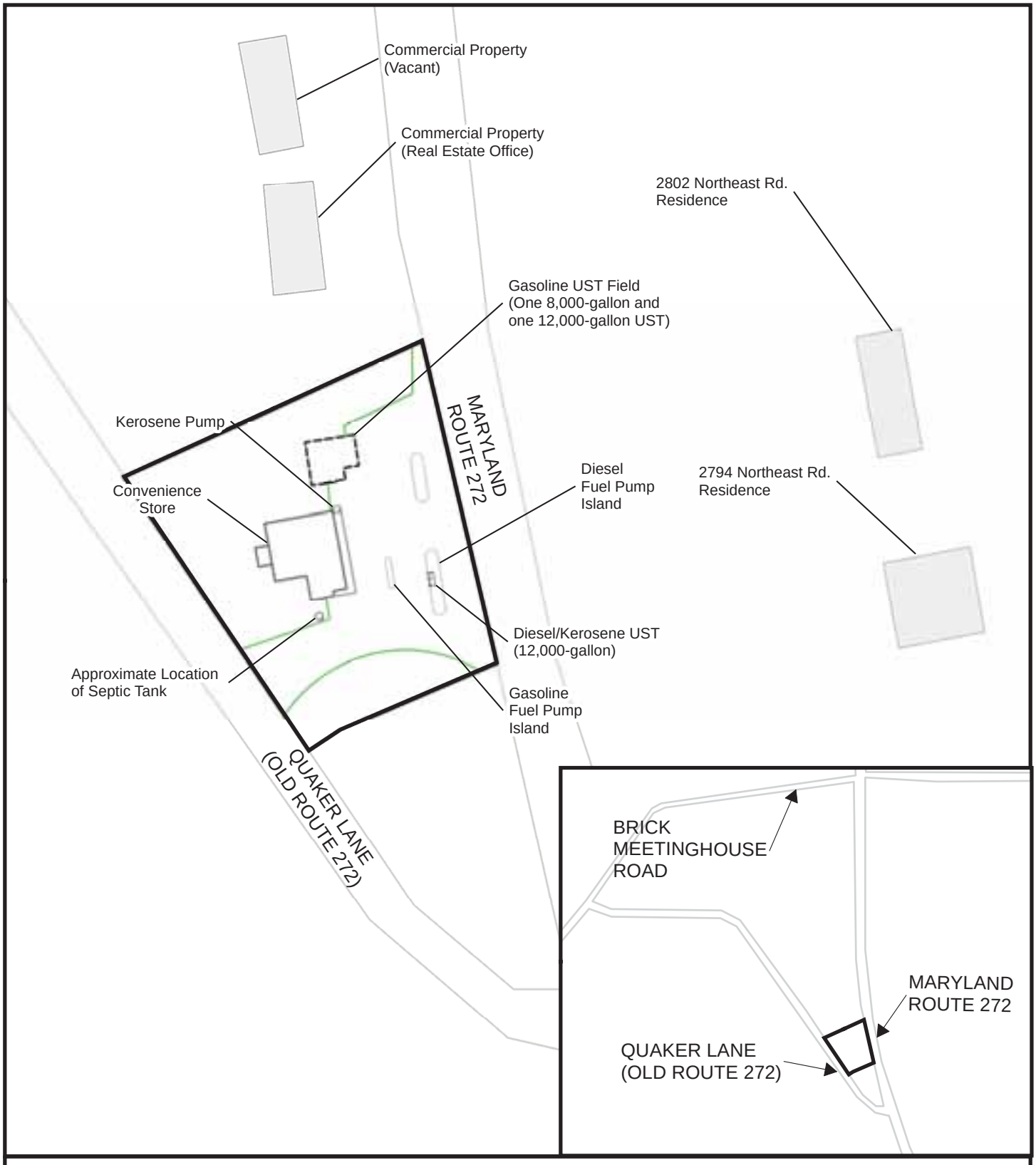

Figure 2: Site Diagram

Site Boundary

REPSG
React Environmental
Professional Services Group, Inc.

MAP SCALE: 1 inch = 100 feet
0 20 40 80 120 160
Feet

PROJECT NAME: ***CALVERT CITGO***
PROJECT ADDRESS: ***2815 NORTH EAST ROAD, NORTH EAST, MD***
PROJECT NUMBER: ***005977***
DATE: ***MARCH 2010***

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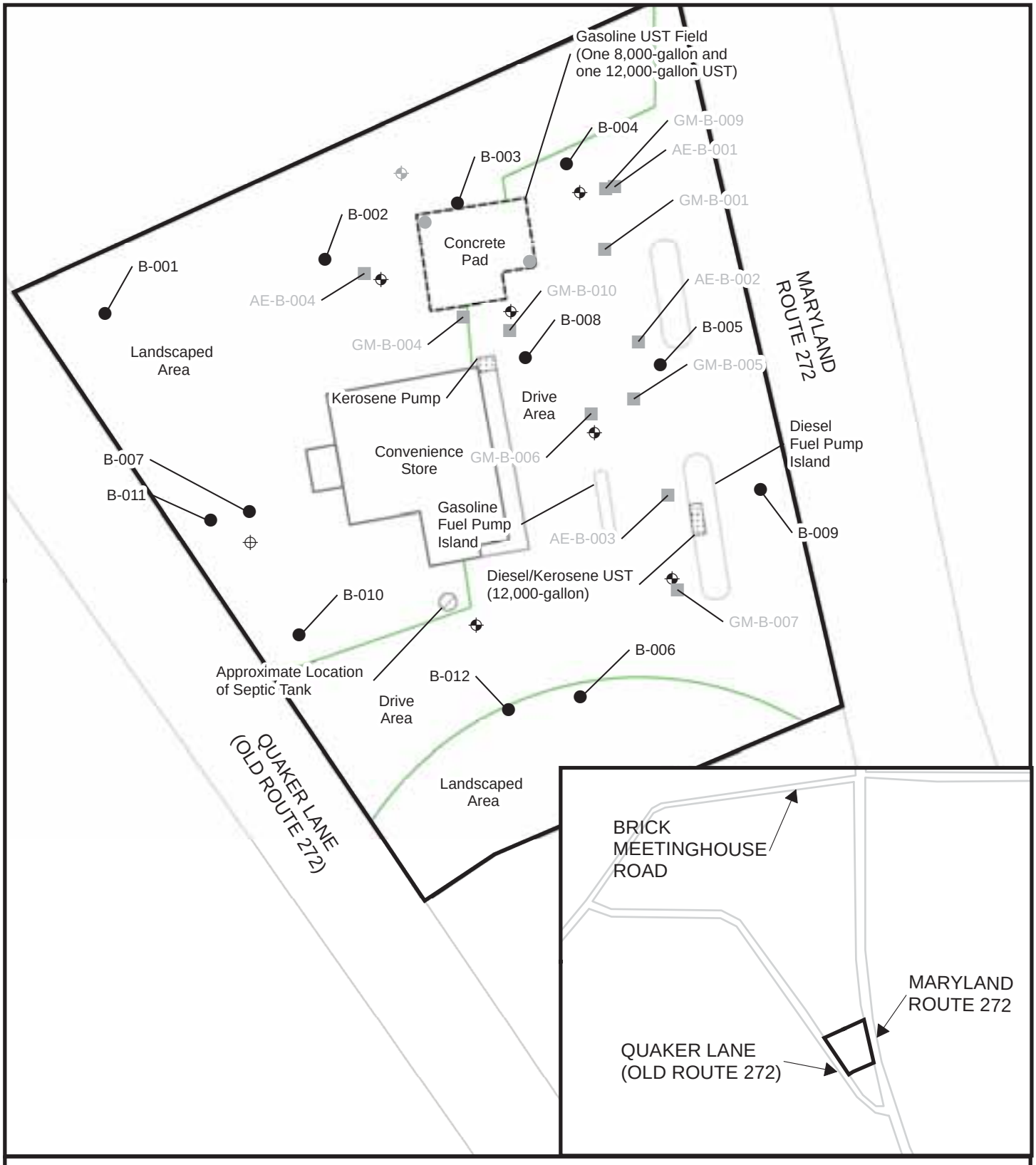

Figure 3: Soil Sample Locations

Leak Detection Wells | Historic Soil Boring | Potable Well | Site Boundary

Lost/Abandoned Monitoring Well | Soil Boring Locations | Monitoring Wells

REPSG
React Environmental
Professional Services Group, Inc.

MAP SCALE: 1 inch = 45 feet

0 10 20 40 60 80 Feet

PROJECT NAME: ***CALVERT CITGO***

PROJECT ADDRESS: ***2815 NORTH EAST ROAD, NORTH EAST, MD***

PROJECT NUMBER: ***005977***

DATE: ***MARCH 2010***

N

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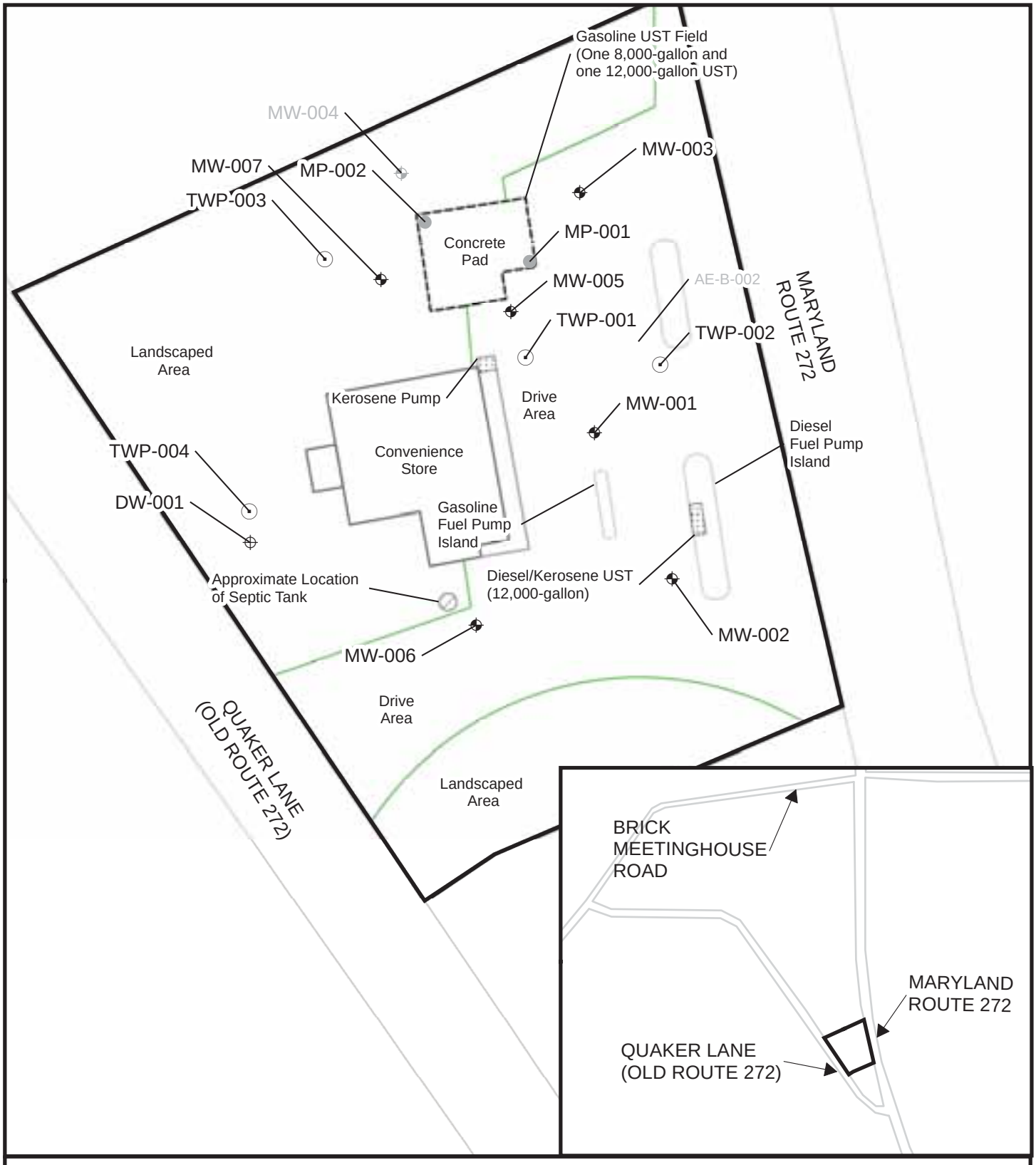


Figure 4: Groundwater Sample Locations

Leak Detection Wells | Potable Well | Lost/Abandoned Monitoring Well

Temporary Well Points | Monitoring Wells | Site Boundary

REPSG
React Environmental Professional Services Group, Inc.

MAP SCALE: 1 inch = 45 feet

0 10 20 40 60 80 Feet

PROJECT NAME: ***CALVERT CITGO***

PROJECT ADDRESS: ***2815 NORTH EAST ROAD, NORTH EAST, MD***

PROJECT NUMBER: ***005977***

DATE: ***MARCH 2010***

N

S

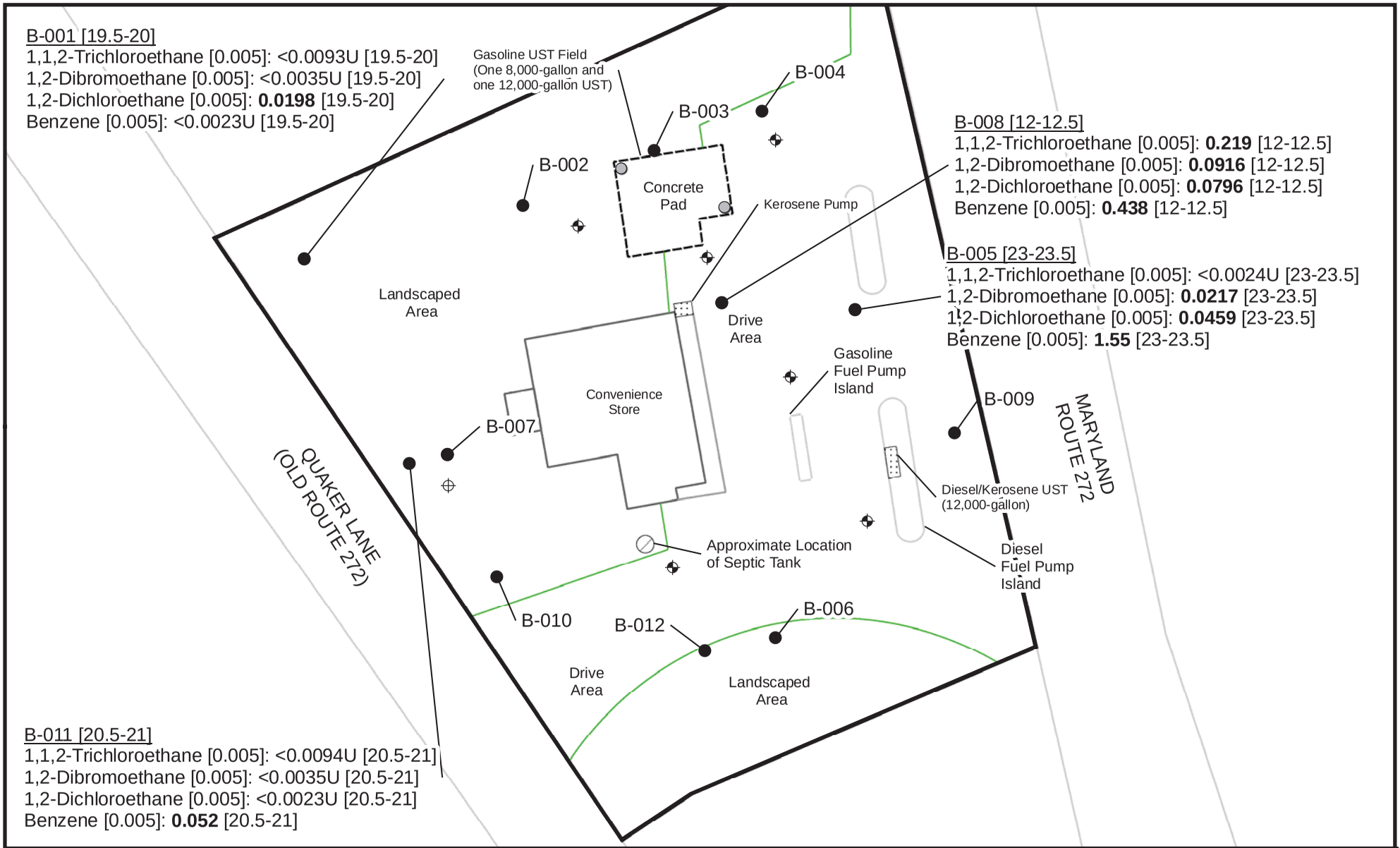


Figure 5: SOIL CONTAMINANT DISTRIBUTION MAP (November 2008)

Soil Boring Locations | Monitoring Wells | Site Boundary
Potable Well | Leak Detection Wells

LABEL LEGEND:
Concentration (mg/kg) — Sample Depth (fbg)
B-017
Benzo(a)pyrene (2.5) **2.7** [2] / ND [6] / ND [16]
Soil Cleanup Standard (mg/kg)

ND - Concentration Not Detected Above Laboratory Reporting Limits
Exceedences of the Regulatory Standard Printed in bold

N
S

REPSG
React Environmental Professional Services Group, Inc.

MAP SCALE: 1 inch = 45 feet
0 10 20 40 60 80 Feet

PROJECT NAME: ***CALVERT CITGO***
PROJECT ADDRESS: ***2815 NORTH EAST ROAD, NORTH EAST, MD***
PROJECT NUMBER: ***005977***
DATE: ***MARCH 2010***

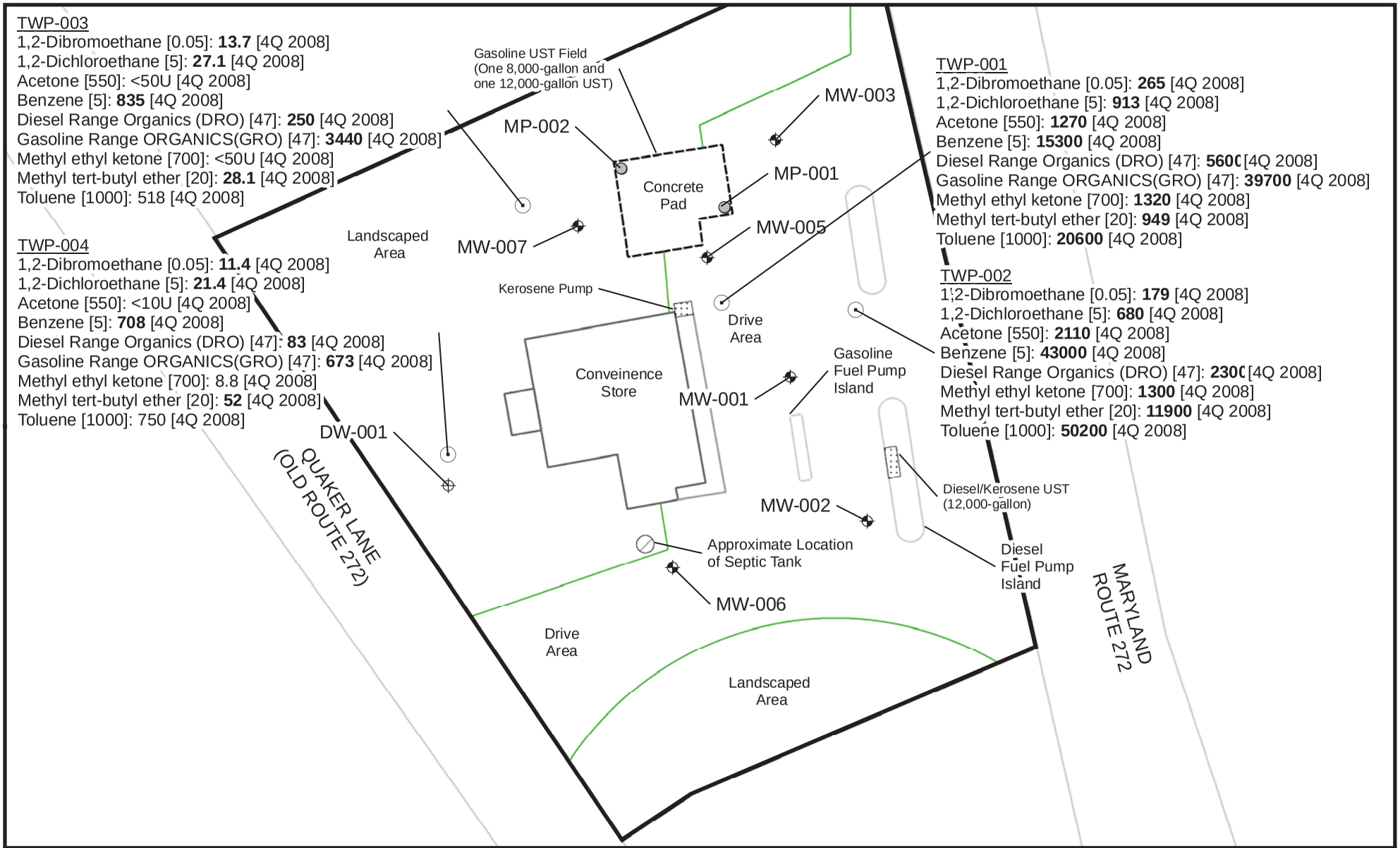


Figure 6: GROUNDWATER CONTAMINANT DISTRIBUTION MAP (November 5, 2008)

REPSG
React Environmental
Professional Services Group, Inc.

MAP SCALE: 1 inch = 45 feet

0 10 20 40 60 80 Feet

PROJECT NAME:	***CALVERT CITGO***
PROJECT ADDRESS:	***2815 NORTH EAST ROAD, NORTH EAST, MD***
PROJECT NUMBER:	***005977***
DATE:	***MARCH 2010***

LABEL LEGEND:

Concentration (ppb) — Sample Date

B-017
Toluene (100) : **270** [2Q 2004] / ND [3Q 2004]

Groundwater Cleanup Standard (ppb)

ND - Concentration Not Detected Above Laboratory Reporting Limits
Exceedences of the Regulatory Standard Printed in bold

N

S

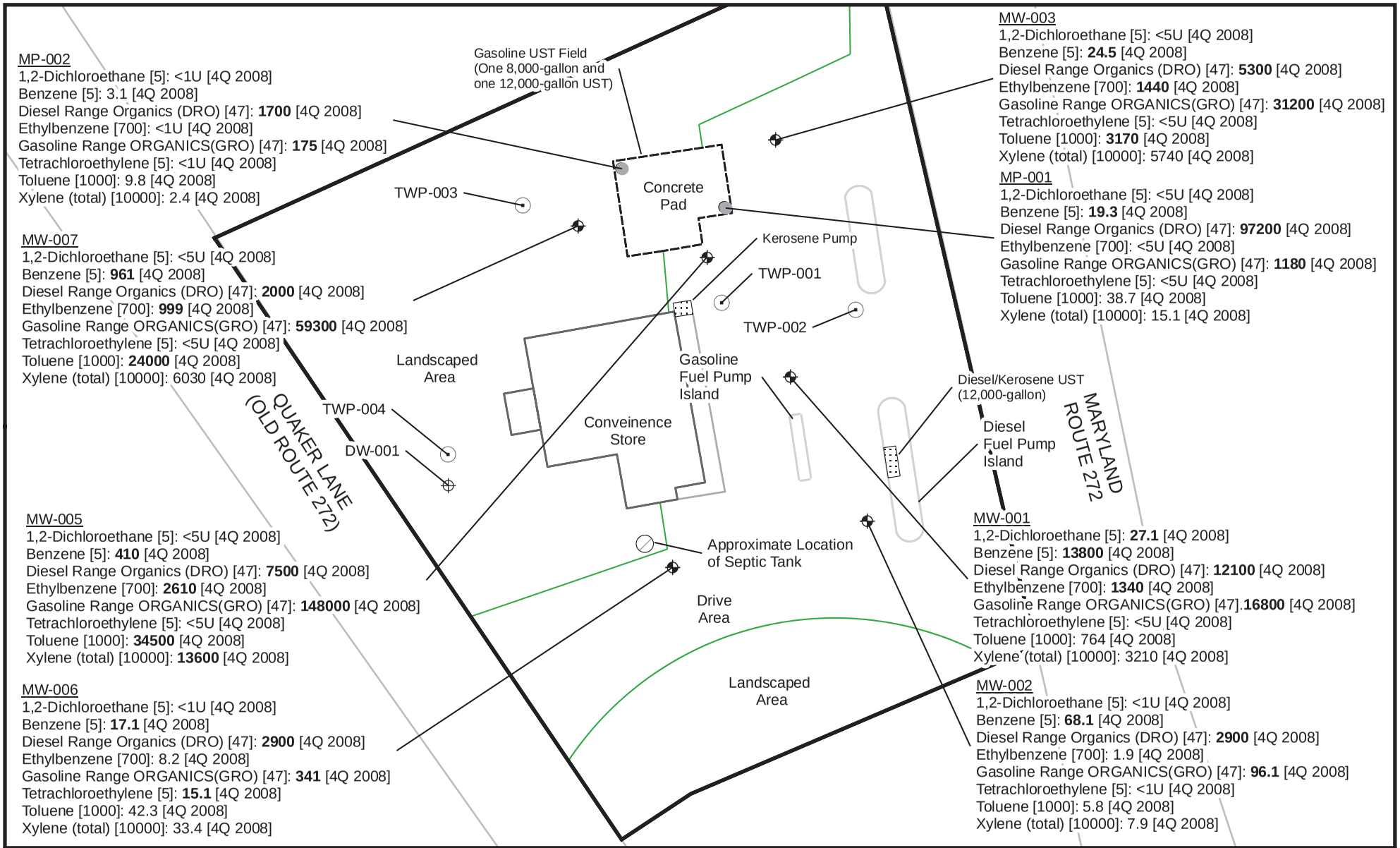


Figure 7: GROUNDWATER CONTAMINANT DISTRIBUTION MAP (November 17, 2008)

REPSG
React Environmental
Professional Services Group, Inc.

MAP SCALE: 1 inch = 45 feet

0 10 20 40 60 80 Feet

PROJECT NAME:	***CALVERT CITGO***
PROJECT ADDRESS:	***2815 NORTH EAST ROAD, NORTH EAST, MD***
PROJECT NUMBER:	***005977***
DATE:	***MARCH 2010***

LABEL LEGEND:

Concentration (ppb) — Sample Date

B-017
Toluene (100) : **270** [2Q 2004] / ND [3Q 2004]

Groundwater Cleanup Standard (ppb)

ND - Concentration Not Detected Above Laboratory Reporting Limits
Exceedences of the Regulatory Standard Printed in bold

N

S

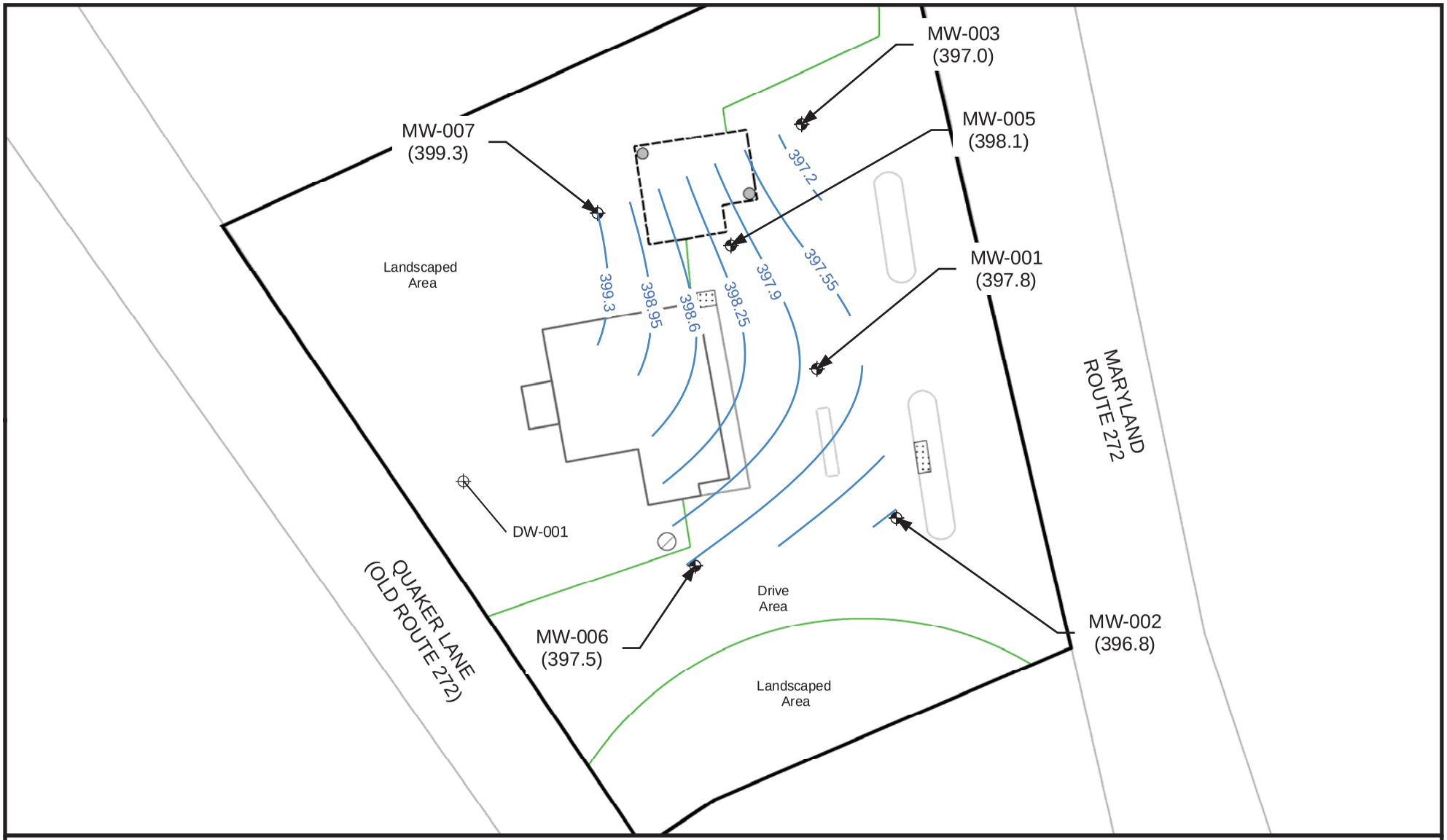


Figure 8: GROUNDWATER CONTOUR MAP (March 12, 2009)

MW-001 (176.01) Site ID / Groundwater Elevation (feet above datum)

Monitoring Well (Measured) | Monitoring Well (Not Measured) | Potable Well | UST | Leak Detection Wells | Septic Tank | Site Boundary

REPSG
React Environmental Professional Services Group, Inc.

MAP SCALE: 1 inch = 45 feet

0 10 20 40 60 80 Feet

PROJECT NAME: ***CALVERT CITGO***
PROJECT ADDRESS: ***2815 NORTH EAST ROAD, NORTH EAST, MD***
PROJECT NUMBER: ***005977***
DATE: ***MARCH 2010***

N
S

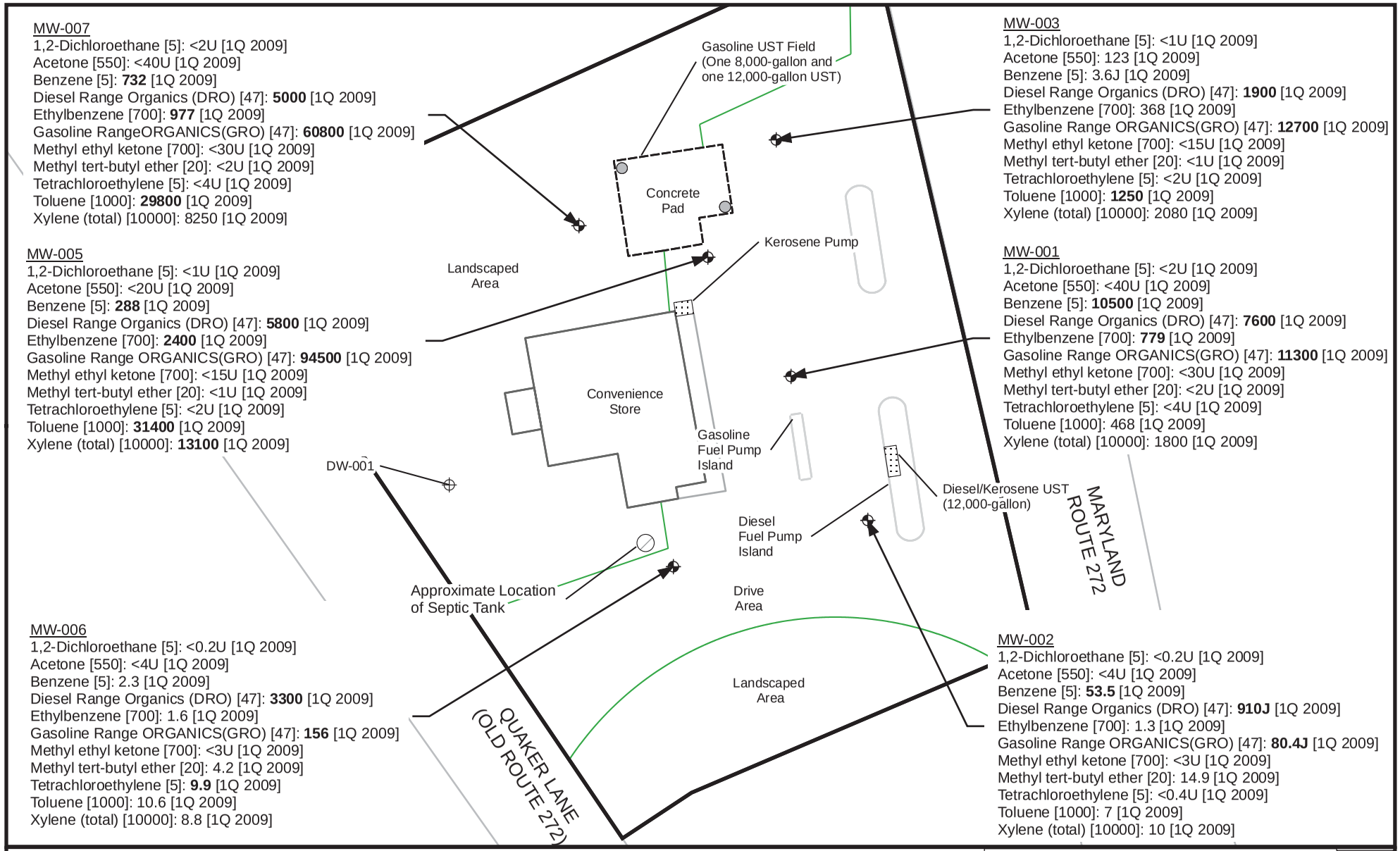


Figure 9: GROUNDWATER CONTAMINANT DISTRIBUTION MAP (March 12, 2009)

Potable Well | Monitoring Wells | Leak Detection Wells | Site Boundary

LABEL LEGEND:

Concentration (ppb) — Sample Date

B-017
Toluene (100) : **270** [2Q 2004] / ND [3Q 2004]

Groundwater Cleanup Standard (ppb)

ND - Concentration Not Detected Above Laboratory Reporting Limits
Exceedences of the Regulatory Standard Printed in bold

N

S

REPSG
React Environmental Professional Services Group, Inc.

MAP SCALE: 1 inch = 45 feet

0 10 20 40 60 80 Feet

PROJECT NAME:	***CALVERT CITGO***
PROJECT ADDRESS:	***2815 NORTH EAST ROAD, NORTH EAST, MD***
PROJECT NUMBER:	***005977***
DATE:	***MARCH 2010***

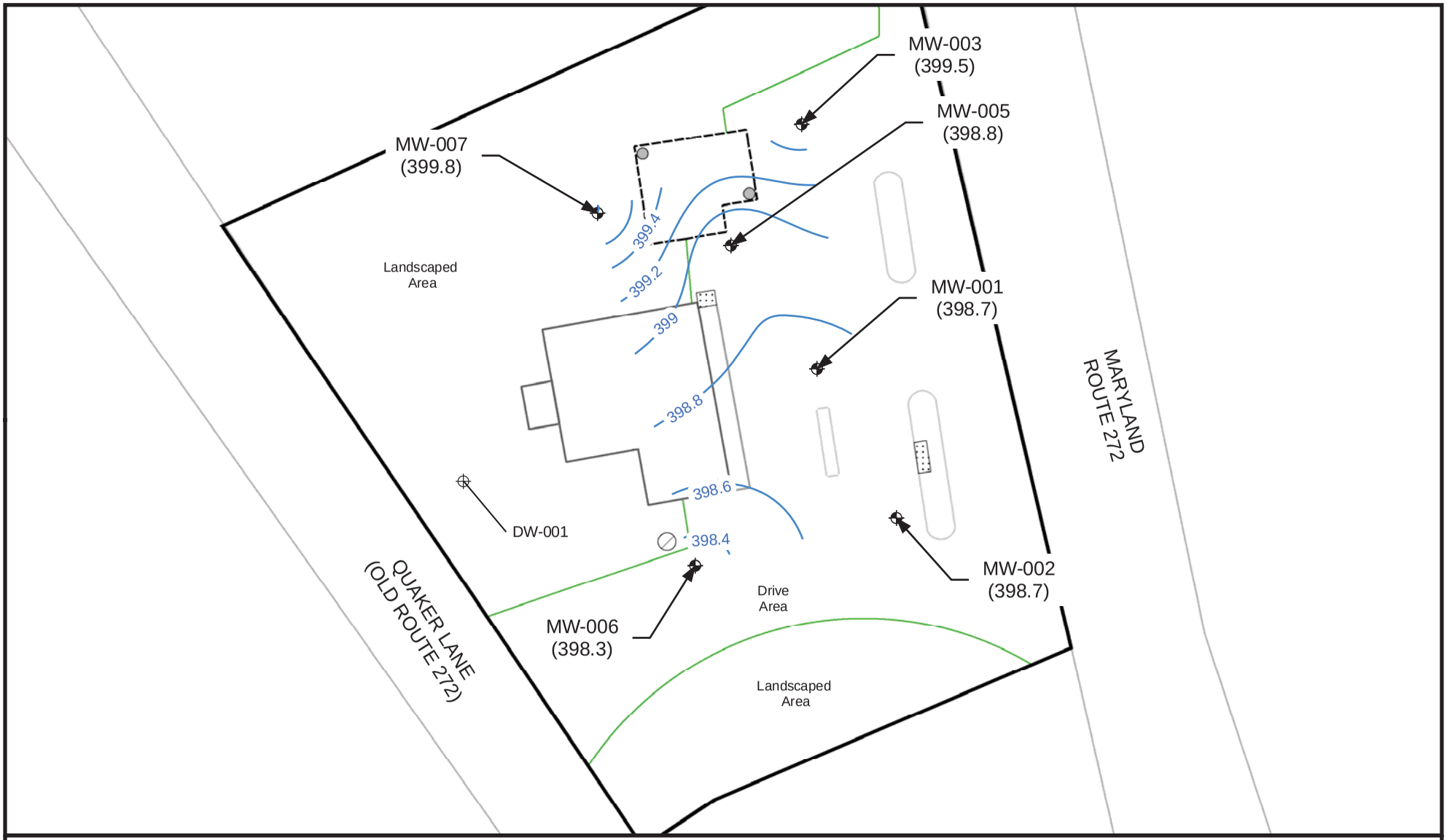


Figure 10: GROUNDWATER CONTOUR MAP (July 21, 2009)

MW-001 (176.01) Site ID
Groundwater Elevation (feet above datum)

Monitoring Well (Measured)
Monitoring Well (Not Measured)
Potable Well
UST
Leak Detection Wells
Septic Tank
Site Boundary

REPSG
React Environmental Professional Services Group, Inc.

MAP SCALE: 1 inch = 45 feet

0 10 20 40 60 80 Feet

PROJECT NAME: ***CALVERT CITGO***
PROJECT ADDRESS: ***2815 NORTH EAST ROAD, NORTH EAST, MD***
PROJECT NUMBER: ***005977***
DATE: ***MARCH 2010***

N
S

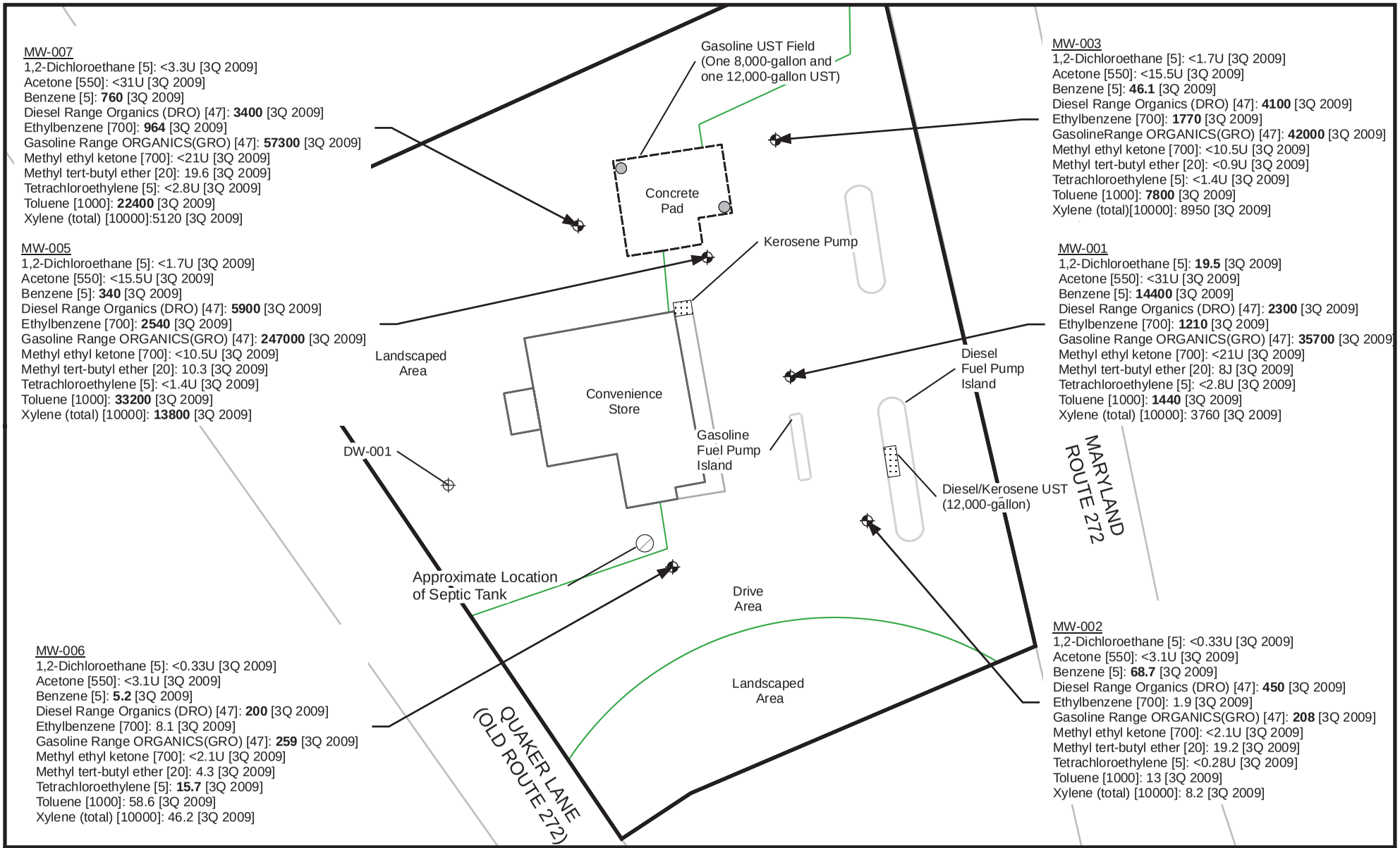


Figure 11: GROUNDWATER CONTAMINANT DISTRIBUTION MAP (July 21, 2009)

Potable Well | Monitoring Wells | Leak Detection Wells | Site Boundary

REPSG
React Environmental
Professional Services Group, Inc.

MAP SCALE: 1 inch = 45 feet

0 10 20 40 60 80 Feet

PROJECT NAME: ***CALVERT CITGO***
PROJECT ADDRESS: ***2815 NORTH EAST ROAD, NORTH EAST, MD***
PROJECT NUMBER: ***005977***
DATE: ***MARCH 2010***

LABEL LEGEND:

Concentration (ppb) — Sample Date

B-017
Toluene (100) : **270** [2Q 2004] / ND [3Q 2004]

Groundwater Cleanup Standard (ppb)

ND - Concentration Not Detected Above Laboratory Reporting Limits
Exceedences of the Regulatory Standard Printed in bold

N
S

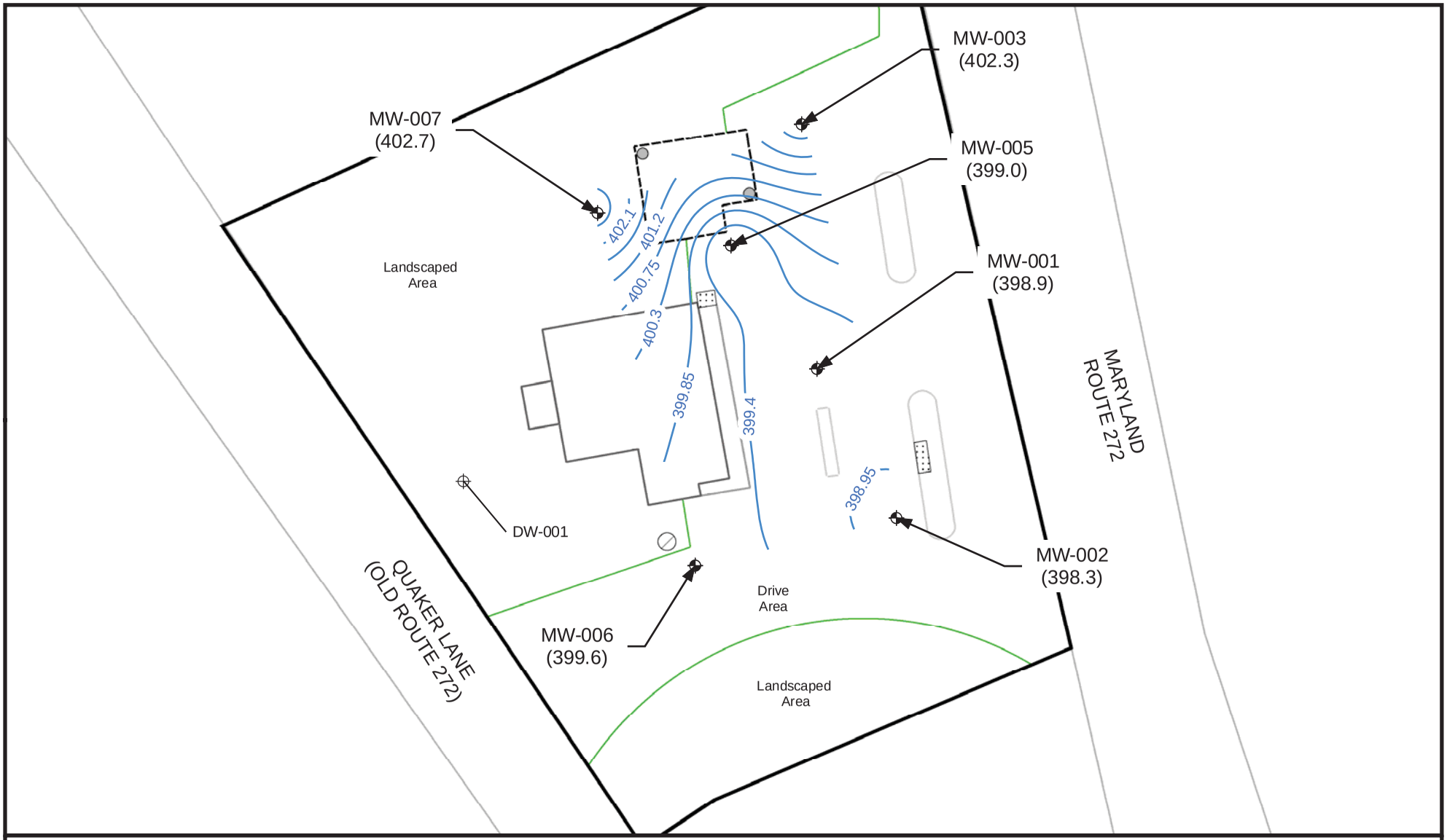


Figure 12: GROUNDWATER CONTOUR MAP (December 11, 2009)

MW-001 (176.01) Site ID
Groundwater Elevation (feet above datum)

Monitoring Well (Measured)
Monitoring Well (Not Measured)
Potable Well
UST
Leak Detection Wells
Septic Tank
Site Boundary

REPSG
React Environmental Professional Services Group, Inc.

MAP SCALE: 1 inch = 45 feet

0 10 20 40 60 80 Feet

PROJECT NAME: ***CALVERT CITGO***
PROJECT ADDRESS: ***2815 NORTH EAST ROAD, NORTH EAST, MD***
PROJECT NUMBER: ***005977***
DATE: ***MARCH 2010***

N
S

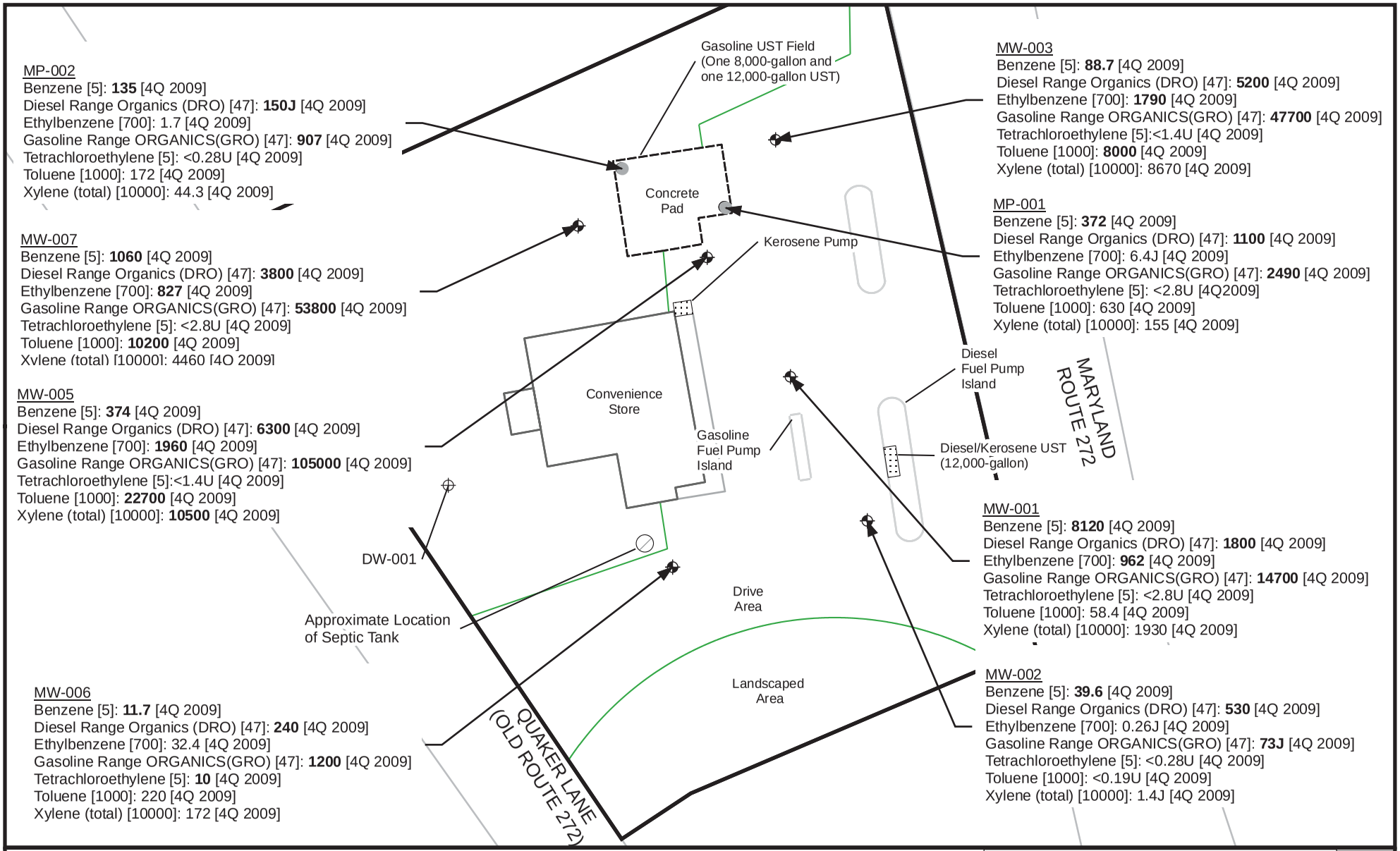


Figure 13: GROUNDWATER CONTAMINANT DISTRIBUTION MAP (December 11, 2009)

Potable Well | Monitoring Wells | Leak Detection Wells | Site Boundary

REPSG
React Environmental
Professional Services Group, Inc.

MAP SCALE: 1 inch = 45 feet

0 10 20 40 60 80 Feet

PROJECT NAME: ***CALVERT CITGO***
PROJECT ADDRESS: ***2815 NORTH EAST ROAD, NORTH EAST, MD***
PROJECT NUMBER: ***005977***
DATE: ***MARCH 2010***

LABEL LEGEND:

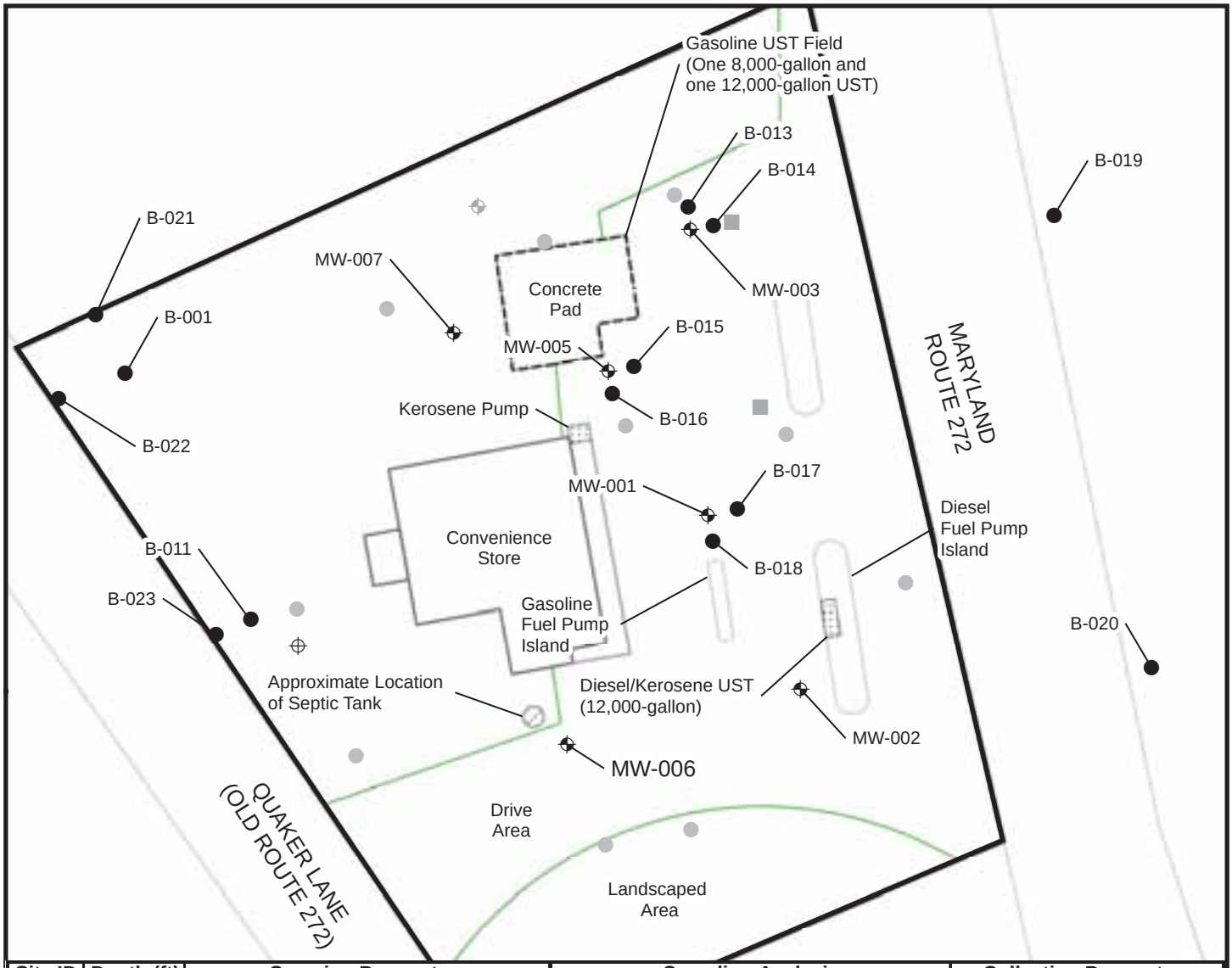
Concentration (ppb) — Sample Date

B-017
Toluene (100) : **270** [2Q 2004] / ND [3Q 2004]

Groundwater Cleanup Standard (ppb)

ND - Concentration Not Detected Above Laboratory Reporting Limits
Exceedences of the Regulatory Standard Printed in bold

N
S



Site ID	Depth (ft)	Samping Parameters	Sampling Analysis	Collection Parameters
B-001	21.5	Borings should be advanced to indicated depth.	1,1,2-trichloroethane; 1,2-dibromoethane; 1,2-dichloroethane; and benzene via EPA	One (1) 4-ounce jar and three (3) EnCores
B-011	21.5			
B-013	30	Borings should be advanced to a minimum of 30 fbg, the soil/GW interface, bedrock or refusal (whichever is encountered first). Bias samples towards area of highest PID reading, visual/olfactory evidence of contamiantion, 6-inches above the soil/GW interface, or refusal.	VOCs plus tert-butyl alcohol (TBA) via EPA method 8260, TPH-DRO via EPA method 8015D, and TPH-GRO via EPA method 8015D	One (1) 4-ounce jar and three (3) EnCores
B-014	30			
B-015	30			
B-016	30			
B-017	30			
B-018	30			
B-019	30			
B-020	30			
B-021	21.5	Borings should be advanced to indicated depth.	1,1,2-trichloroethane; 1,2-dibromoethane; 1,2-dichloroethane; and benzene via EPA methods 8260 and 8270	One (1) 4-ounce jar and three (3) EnCores
B-022	21.5			
B-023	21.5			
QA/QC				
Please collect one (1) soil duplicate for analysis.				

Figure 14: Proposed Soil Sample Locations

Proposed Soil Boring Location
Soil Boring Location (November 2008)
Site Boundary
Lost/Abandoned Monitoring Well
Potable Well
Historic Soil Boring
Monitoring Wells

REPSG
React Environmental Professional Services Group, Inc.

MAP SCALE: 1 inch = 45 feet
0 10 20 40 60 80 Feet

PROJECT NAME: ***CALVERT CITGO***
PROJECT ADDRESS: ***2815 NORTH EAST ROAD, NORTH EAST, MD***
PROJECT NUMBER: ***005977***
DATE: ***MARCH 2010***

N
S

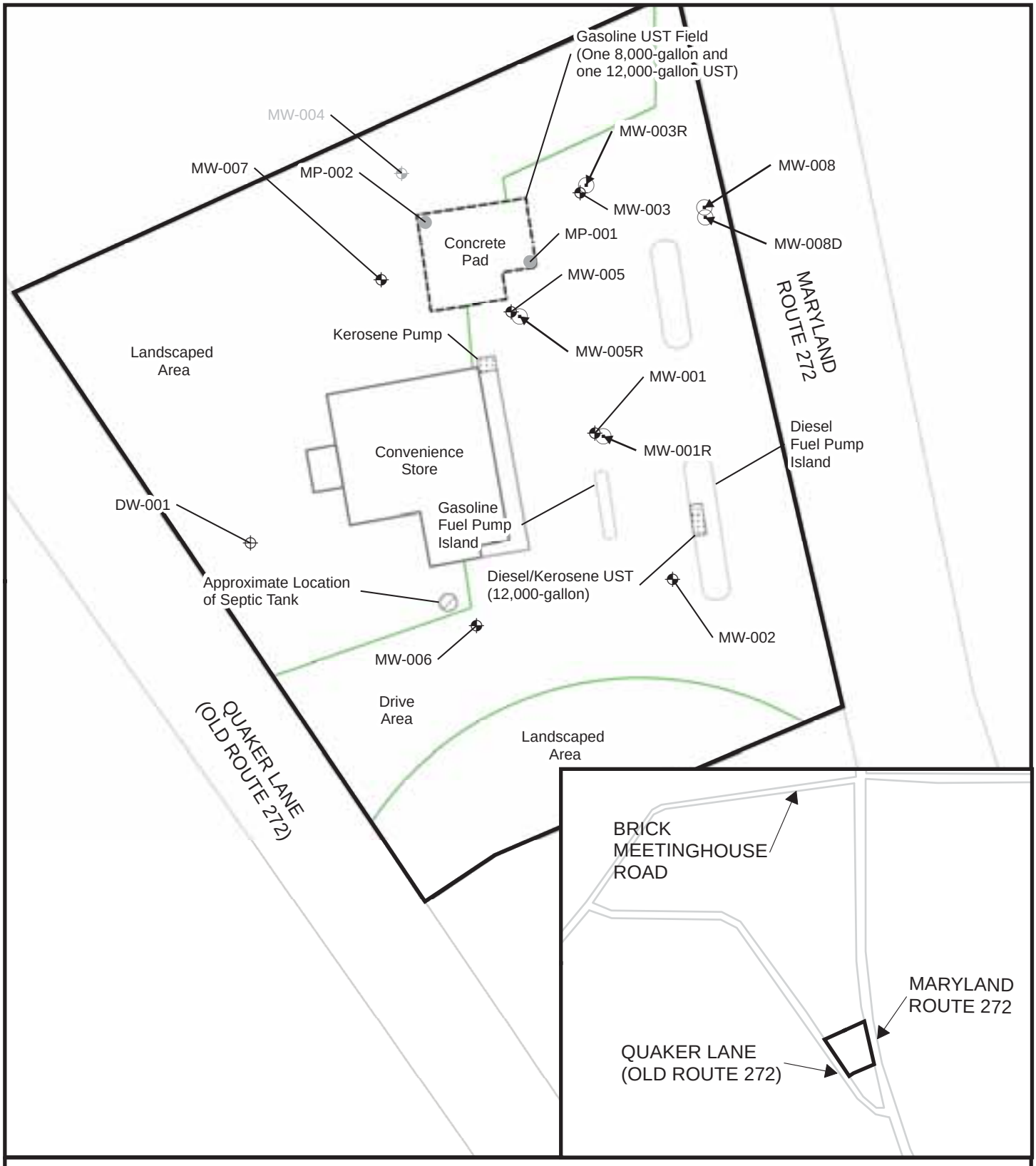


Figure 15: Proposed Groundwater Sample Locations

Proposed Well Location | Potable Well | Lost/Abandoned Monitoring Well

Leak Detection Wells | Monitoring Wells | Site Boundary

REPSG
React Environmental
Professional Services Group, Inc.

MAP SCALE: 1 inch = 45 feet

0 10 20 40 60 80 Feet

PROJECT NAME: ***CALVERT CITGO***

PROJECT ADDRESS: ***2815 NORTH EAST ROAD, NORTH EAST, MD***

PROJECT NUMBER: ***005977***

DATE: ***MARCH 2010***

N

S

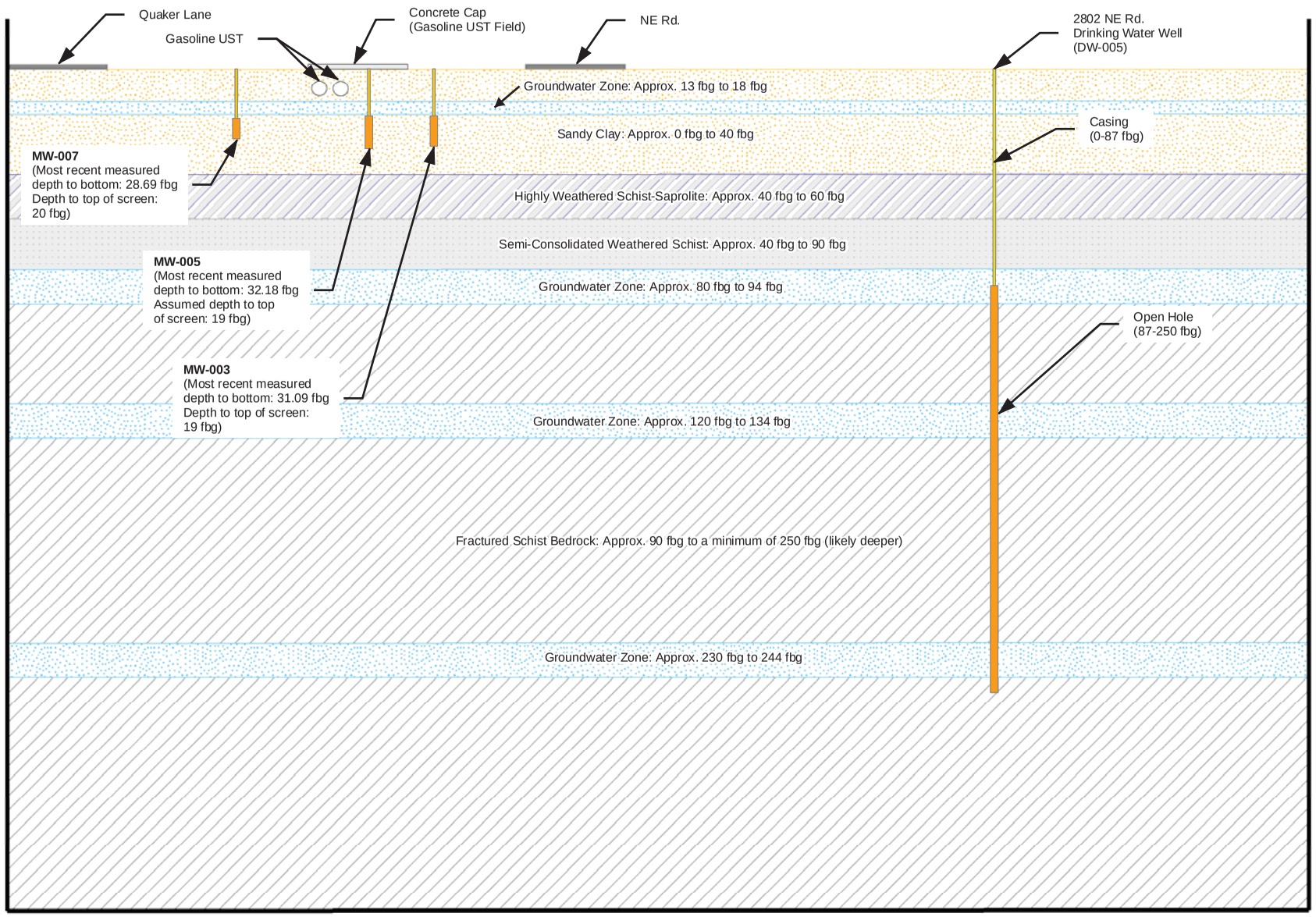


Figure 16: Soil and Groundwater Cross-Sectional Diagram

REPSG
React Environmental Professional Services Group, Inc.

MAP SCALE: 1 inch = 60 feet

0 12.5 25 50 75 100 Feet

PROJECT NAME: ***CALVERT CITGO***
PROJECT ADDRESS: ***2815 NORTH EAST ROAD, NORTH EAST, MD***
PROJECT NUMBER: ***005977***
DATE: ***MARCH 2010***

N
S

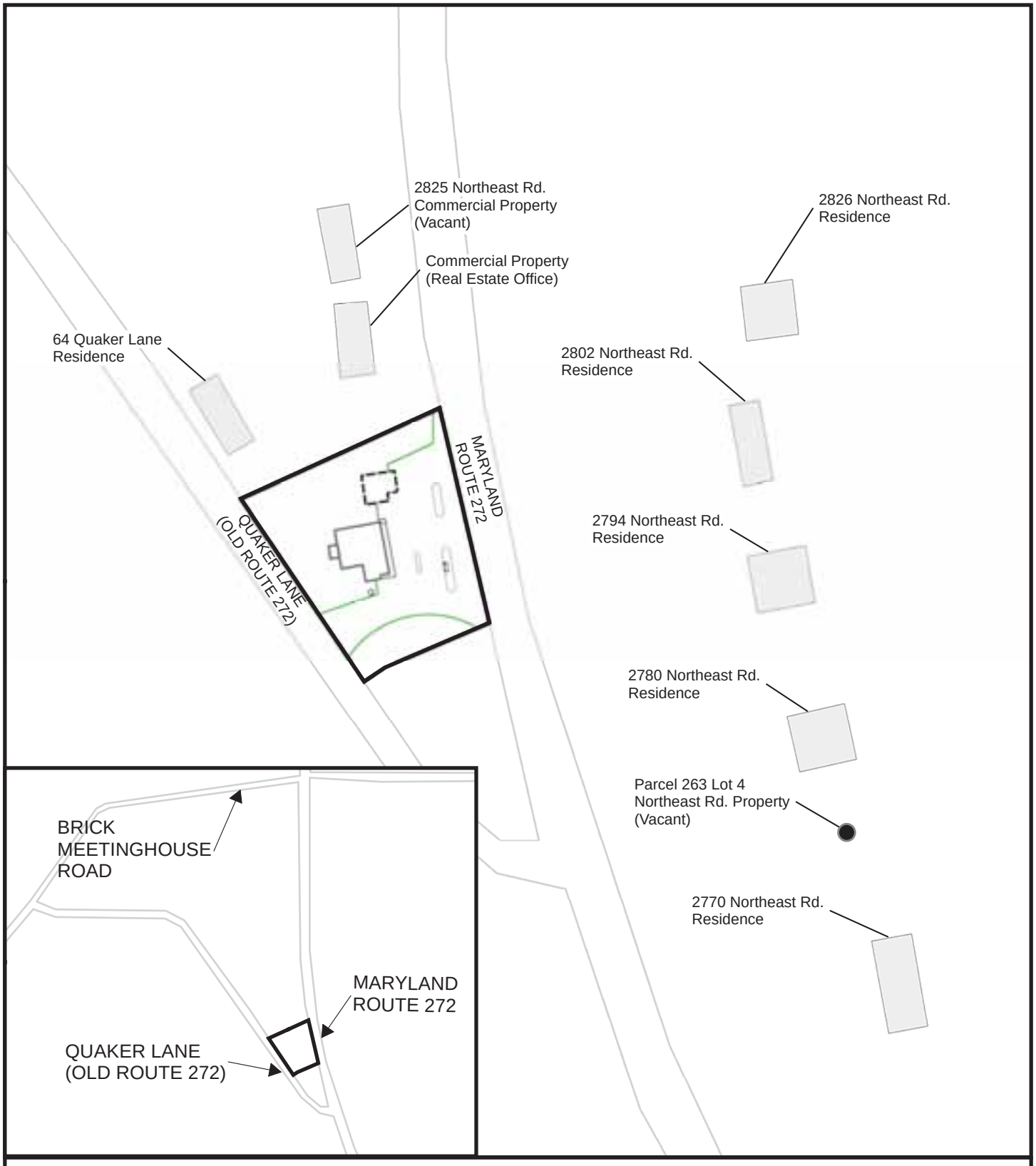


Figure 17: Off-Site Locations Identified by the MDE for Potable Well Sampling

Site Boundary

REPSG
React Environmental
Professional Services Group, Inc.

MAP SCALE: 1 inch = 150 feet
0 30 60 120 180 240 Feet

PROJECT NAME: ***CALVERT CITGO***
PROJECT ADDRESS: ***2815 NORTH EAST ROAD, NORTH EAST, MD***
PROJECT NUMBER: ***005977***
DATE: ***MARCH 2010***

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ATTACHMENT 2: TABLES

REPSG
React Environmental
Professional Services Group, Inc.

Analytical Chemistry Report — Matrix: Water

Calvert Citgo 2815 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 03/12/2009

Regulatory Standard*:

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Groundwater for Type I & II Aquifers, Tables 1 and 2 (March 2008).

Constituent	Unit	*Standard	Location:	MW-001	MW-002	MW-003	MW-005	MW-006	MW-007
			Date:	03/12/2009	03/12/2009	03/12/2009	03/12/2009	03/12/2009	03/12/2009
			Depth (ft):	0	0	0	0	0	0
Not Otherwise Specified									
DBCP	ug/l	0.2		<24U#	<2.4U#	<12U#	<12U#	<2.4U#	<24U#
Tert-Amyl Methyl Ether	ug/l	**		<8U	<0.8U	<4U	<4U	<0.8U	<8U
Petroleum Screening Parameters									
Diesel Range Organics (DRO)	ug/l	47		7600	910J	1900	5800	3300	5000
Gasoline Range ORGANICS(GRO)	ug/l	47		11300	80.4J	12700	94500	156	60800
Volatile Organic Compounds (VOCs)									
1,1,1-trichloroethane	ug/l	200		<2U	<0.2U	<1U	<1U	<0.2U	<2U
1,1,2,2-Tetrachloroethane	ug/l	0.053		<2U#	<0.2U#	<1U#	<1U#	<0.2U#	<2U#
1,1,2-Trichloroethane	ug/l	5		<2U	<0.2U	<1U	<1U	<0.2U	<2U
1,1-Dichloroethane	ug/l	90		<1U	<0.1U	<0.5U	<0.5U	<0.1U	<1U
1,1-Dichloroethylene	ug/l	7		<2U	<0.2U	<1U	<1U	<0.2U	<2U
1,2-Dibromoethane	ug/l	0.05		<3U#	<0.3U#	<1.5U#	<1.5U#	<0.3U#	<3U#
1,2-Dichloroethane	ug/l	5		<2U	<0.2U	<1U	<1U	<0.2U	<2U
1,2-Dichloropropane	ug/l	5		<2U	<0.2U	<1U	<1U	<0.2U	<2U
2-Hexanone	ug/l	**		<7U	<0.7U	<3.5U	36.7	<0.7U	<7U
Acetone	ug/l	550		<40U	<4U	123	<20U	<4U	<40U
Benzene	ug/l	5		10500	53.5	3.6J	288	2.3	732
Bromodichloromethane	ug/l	80		<2U	<0.2U	<1U	<1U	<0.2U	<2U
Bromoform	ug/l	80		<2U	<0.2U	<1U	<1U	<0.2U	<2U

** No Applicable Regulatory Standard

Exceedences of the regulatory standard are printed in bold. # = Reporting limit exceeds regulatory standard. NOC = Not of Concern.

QUALIFIERS: U = Constituent not detected above Method Detection Limit (MDL). J = Estimated Value. < = Indicates that the reported concentration is the Method Detection Limit (MDL). D = Compound identified at a secondary dilution factor. B = Analyte reported in associated field or trip blank. N = Tentatively Identified Compound (TIC). Y = Tentatively Identified Compound (TIC) also identified in Method Blank. E = Reported result is over instrument calibration range. This result is an estimate; the true result may be higher. C = Calibration verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.

REPSG
React Environmental
Professional Services Group, Inc.

Analytical Chemistry Report — Matrix: Water

Calvert Citgo 2815 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 03/12/2009

Regulatory Standard*:

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Groundwater for Type I & II Aquifers, Tables 1 and 2 (March 2008).

Constituent	Unit	*Standard	Location:	MW-001	MW-002	MW-003	MW-005	MW-006	MW-007
			Date:	03/12/2009	03/12/2009	03/12/2009	03/12/2009	03/12/2009	03/12/2009
			Depth (ft):	0	0	0	0	0	0
Carbon disulfide	ug/l	100		<1U	<0.1U	<0.5U	<0.5U	<0.1U	<1U
Carbon tetrachloride	ug/l	5		<2U	<0.2U	<1U	<1U	<0.2U	<2U
Chlorobenzene	ug/l	100		<2U	<0.2U	<1U	<1U	3.6	<2U
Chlorobromomethane	ug/l	**		<2U	<0.2U	<1U	<1U	<0.2U	<2U
Chloroethane	ug/l	3.6		<3U	<0.3U	<1.5U	<1.5U	<0.3U	<3U
Chloroform	ug/l	80		<2U	<0.2U	<1U	<1U	<0.2U	<2U
cis-1,2-Dichloroethylene	ug/l	70		<2U	<0.2U	<1U	<1U	<0.2U	<2U
cis-1,3-Dichloropropene	ug/l	0.44		<2U#	<0.2U	<1U#	<1U#	<0.2U	<2U#
Dibromochloromethane	ug/l	80		<2U	<0.2U	<1U	<1U	<0.2U	<2U
Ethyl tert-butyl ether	ug/l	**		<1U	<0.1U	<0.5U	<0.5U	<0.1U	<1U
Ethylbenzene	ug/l	700		779	1.3	368	2400	1.6	977
Isopropyl Ether	ug/l	**		20	<0.1U	<0.5U	<0.5U	<0.1U	<1U
m/p-xylene	ug/l	**		1690	6.2	1470	9590	6.4	5550
Methyl bromide	ug/l	0.85		<2U#	<0.2U	<1U#	<1U#	<0.2U	<2U#
Methyl chloride	ug/l	19		<2U	<0.2U	<1U	<1U	<0.2U	<2U
Methyl ethyl ketone	ug/l	700		<30U	<3U	<15U	<15U	<3U	<30U
Methyl isobutylketone (MIBK)	ug/l	630		<13U	<1.3U	<6.5U	<6.5U	<1.3U	<13U
Methyl tert-butyl ether	ug/l	20		<2U	14.9	<1U	<1U	4.2	<2U
Methylene chloride	ug/l	5		<1U	<0.1U	<0.5U	<0.5U	<0.1U	<1U
o-Xylene	ug/l	**		107	3.7	614	3490	2.4	2700
Styrene	ug/l	100		<2U	<0.2U	1.7J	18.5	<0.2U	14

** No Applicable Regulatory Standard

Exceedences of the regulatory standard are printed in bold. # = Reporting limit exceeds regulatory standard. NOC = Not of Concern.

QUALIFIERS: U = Constituent not detected above Method Detection Limit (MDL). J = Estimated Value. < = Indicates that the reported concentration is the Method Detection Limit (MDL). D = Compound identified at a secondary dilution factor. B = Analyte reported in associated field or trip blank. N = Tentatively Identified Compound (TIC). Y = Tentatively Identified Compound (TIC) also identified in Method Blank. E = Reported result is over instrument calibration range. This result is an estimate; the true result may be higher. C = Calibration verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.

REPSG
React Environmental
Professional Services Group, Inc.

Analytical Chemistry Report — Matrix: Water

Calvert Citgo 2815 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 03/12/2009

Regulatory Standard*:

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Groundwater for Type I & II Aquifers, Tables 1 and 2 (March 2008).

Constituent	Unit	*Standard	Location:	MW-001	MW-002	MW-003	MW-005	MW-006	MW-007
			Date:	03/12/2009	03/12/2009	03/12/2009	03/12/2009	03/12/2009	03/12/2009
			Depth (ft):	0	0	0	0	0	0
Tert-Amyl alcohol	ug/l	**		4590	<0.5U	<2.5U	1000	<0.5U	400
Tert-Amyl Ethyl Ether	ug/l	**		<2U	<0.2U	<1U	<1U	<0.2U	<2U
tert-Butylalcohol	ug/l	**		485	27.4	<15U	<15U	<3U	<30U
Tetrachloroethylene	ug/l	5		<4U	<0.4U	<2U	<2U	9.9	<4U
Toluene	ug/l	1000		468	7	1250	31400	10.6	29800
trans-1,2-Di-chloroethylene	ug/l	100		<2U	<0.2U	<1U	<1U	<0.2U	<2U
trans-1,3-Dichloropropene	ug/l	0.44		<2U#	<0.2U	<1U#	<1U#	<0.2U	<2U#
Trichloroethylene	ug/l	5		<2U	2	<1U	<1U	<0.2U	<2U
Vinyl chloride	ug/l	2		<2U	<0.2U	<1U	<1U	<0.2U	<2U
Xylene (total)	ug/l	10000		1800	10	2080	13100	8.8	8250

** No Applicable Regulatory Standard

Exceedences of the regulatory standard are printed in bold. # = Reporting limit exceeds regulatory standard. NOC = Not of Concern.

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REPSG
React Environmental
Professional Services Group, Inc.

Analytical Chemistry Report **Matrix: Water**

Calvert Citgo 2815 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 07/21/2009**

Regulatory Standard*:

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Groundwater for Type I & II Aquifers, Tables 1 and 2 (March 2008).

Constituent	Unit	*Standard	Location:	MW-001	MW-002	MW-003	MW-005	MW-006	MW-007
			Date:	07/21/2009	07/21/2009	07/21/2009	07/21/2009	07/21/2009	07/21/2009
			Depth (ft):	0	0	0	0	0	0
Not Otherwise Specified									
DBCP	ug/l	0.2		<9.6U#	<0.96U#	<4.8U#	<4.8U#	<0.96U#	<9.6U#
Tert-Amyl Methyl Ether	ug/l	**		<1.7U	<0.17U	<0.85U	<0.85U	1.8J	<1.7U
Petroleum Screening Parameters									
Diesel Range Organics (DRO)	ug/l	47		**2300**	**450**	**4100**	**5900**	**200**	**3400**
Gasoline Range ORGANICS(GRO)	ug/l	47		**35700**	**208**	**42000**	**247000**	**259**	**57300**
Volatile Organic Compounds (VOCs)									
1,1,1-trichloroethane	ug/l	200		<2.9U	<0.29U	<1.5U	<1.5U	<0.29U	<2.9U
1,1,2,2-Tetrachloroethane	ug/l	0.053		<2.2U#	<0.22U#	<1.1U#	<1.1U#	<0.22U#	<2.2U#
1,1,2-Trichloroethane	ug/l	5		<2.9U	<0.29U	<1.5U	<1.5U	<0.29U	<2.9U
1,1-Dichloroethane	ug/l	90		<1.5U	<0.15U	<0.75U	<0.75U	<0.15U	<1.5U
1,1-Dichloroethylene	ug/l	7		<1.7U	<0.17U	<0.85U	<0.85U	<0.17U	<1.7U
1,2-Dibromoethane	ug/l	0.05		<3U#	<0.3U#	<1.5U#	<1.5U#	<0.3U#	<3U#
1,2-Dichloroethane	ug/l	5		**19.5**	<0.33U	<1.7U	<1.7U	<0.33U	<3.3U
1,2-Dichloropropane	ug/l	5		<2.3U	<0.23U	<1.2U	<1.2U	<0.23U	<2.3U
2-Hexanone	ug/l	**		<7.8U	<0.78U	6.2J	15.7J	<0.78U	<7.8U
Acetone	ug/l	550		<31U	<3.1U	<15.5U	<15.5U	<3.1U	<31U
Benzene	ug/l	5		**14400**	**68.7**	**46.1**	**340**	**5.2**	**760**
Bromodichloromethane	ug/l	80		<2.3U	<0.23U	<1.2U	<1.2U	<0.23U	<2.3U
Bromoform	ug/l	80		<2.8U	<0.28U	<1.4U	<1.4U	<0.28U	<2.8U

** No Applicable Regulatory Standard

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REPSG
React Environmental
Professional Services Group, Inc.

Analytical Chemistry Report **Matrix: Water**

Calvert Citgo 2815 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 07/21/2009**

Regulatory Standard*:

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Groundwater for Type I & II Aquifers, Tables 1 and 2 (March 2008).

Constituent	Unit	*Standard	Location:	MW-001	MW-002	MW-003	MW-005	MW-006	MW-007
			Date:	07/21/2009	07/21/2009	07/21/2009	07/21/2009	07/21/2009	07/21/2009
			Depth (ft):	0	0	0	0	0	0
Carbon disulfide	ug/l	100		<1.2U	<0.12U	<0.6U	<0.6U	<0.12U	<1.2U
Carbon tetrachloride	ug/l	5		<2.5U	<0.25U	<1.3U	<1.3U	<0.25U	<2.5U
Chlorobenzene	ug/l	100		<1.6U	<0.16U	<0.8U	<0.8U	1.8	<1.6U
Chlorobromomethane	ug/l	**		<3.3U	<0.33U	<1.7U	<1.7U	<0.33U	<3.3U
Chloroethane	ug/l	3.6		<1.9U	<0.19U	<0.95U	<0.95U	<0.19U	<1.9U
Chloroform	ug/l	80		<2.3U	0.31J	1.4J	<1.2U	<0.23U	3.9J
cis-1,2-Dichloroethylene	ug/l	70		<1.7U	0.19J	<0.85U	<0.85U	<0.17U	<1.7U
cis-1,3-Dichloropropene	ug/l	0.44		<1.8U#	<0.18U	<0.9U#	<0.9U#	<0.18U	<1.8U#
Dibromochloromethane	ug/l	80		<2.6U	<0.26U	<1.3U	<1.3U	<0.26U	<2.6U
Ethyl tert-butyl ether	ug/l	**		<1U	<0.1U	<0.5U	<0.5U	<0.1U	<1U
Ethylbenzene	ug/l	700		**1210**	1.9	**1770**	**2540**	8.1	**964**
Isopropyl Ether	ug/l	**		25	<0.18U	<0.9U	<0.9U	<0.18U	<1.8U
m/p-xylene	ug/l	**		3510	3.5	5730	8990	31.7	3030
Methyl bromide	ug/l	0.85		<2.4U#	<0.24U	<1.2U#	<1.2U#	<0.24U	<2.4U#
Methyl chloride	ug/l	19		<1.6U	<0.16U	1.2J	<0.8U	<0.16U	<1.6U
Methyl ethyl ketone	ug/l	700		<21U	<2.1U	<10.5U	<10.5U	<2.1U	<21U
Methyl isobutylketone (MIBK)	ug/l	630		<4.1U	<0.41U	148	84.6	<0.41U	<4.1U
Methyl tert-butyl ether	ug/l	20		8J	19.2	<0.9U	10.3	4.3	19.6
Methylene chloride	ug/l	5		<3.2U	<0.32U	<1.6U	<1.6U	<0.32U	<3.2U
o-Xylene	ug/l	**		248	4.7	3220	4770	14.5	2090
Styrene	ug/l	100		<1U	<0.1U	4.3J	<0.5U	<0.1U	<1U

** No Applicable Regulatory Standard

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REPSG
React Environmental
Professional Services Group, Inc.

Analytical Chemistry Report **Matrix: Water**

Calvert Citgo 2815 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 07/21/2009**

Regulatory Standard*:

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Groundwater for Type I & II Aquifers, Tables 1 and 2 (March 2008).

Constituent	Unit	*Standard	Location:	MW-001	MW-002	MW-003	MW-005	MW-006	MW-007
			Date:	07/21/2009	07/21/2009	07/21/2009	07/21/2009	07/21/2009	07/21/2009
			Depth (ft):	0	0	0	0	0	0
Tert-Amyl alcohol	ug/l	**		7050	<3.1U	<15.6U	<15.6U	<3.1U	<31.1U
Tert-Amyl Ethyl Ether	ug/l	**		<1.4U	<0.14U	<0.7U	<0.7U	<0.14U	<1.4U
tert-Butylalcohol	ug/l	**		586	38.7	<23U	46.3J	<4.6U	<46U
Tetrachloroethylene	ug/l	5		<2.8U	<0.28U	<1.4U	<1.4U	**15.7**	<2.8U
Toluene	ug/l	1000		**1440**	13	**7800**	**33200**	58.6	**22400**
trans-1,2-Di-chloroethylene	ug/l	100		<2U	<0.2U	<1U	<1U	<0.2U	<2U
trans-1,3-Dichloropropene	ug/l	0.44		<1.4U#	<0.14U	<0.7U#	<0.7U#	<0.14U	<1.4U#
Trichloroethylene	ug/l	5		<3.3U	2.2	<1.7U	<1.7U	<0.33U	<3.3U
Vinyl chloride	ug/l	2		<1.6U	<0.16U	<0.8U	<0.8U	<0.16U	<1.6U
Xylene (total)	ug/l	10000		3760	8.2	8950	**13800**	46.2	5120

** No Applicable Regulatory Standard

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REPSG
React Environmental
Professional Services Group, Inc.

Analytical Chemistry Report **Matrix: Water**

Calvert Citgo 2815 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 12/11/2009**

Regulatory Standard*:

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Groundwater for Type I & II Aquifers, Tables 1 and 2 (March 2008).

Constituent	Unit	*Standard	Location:	MP-001	MP-002	MW-001	MW-002	MW-003	MW-005
			Date:	12/11/2009	12/11/2009	12/11/2009	12/11/2009	12/11/2009	12/11/2009
			Depth (ft):	0	0	0	0	0	0
Not Otherwise Specified									
DBCP	ug/l	0.2		<9.6U#	<0.96U#	<9.6U#	<0.96U#	<4.8U#	<4.8U#
Tert-Amyl Methyl Ether	ug/l	**		<1.7U	<0.17U	<1.7U	<0.17U	<0.85U	<0.85U
Petroleum Screening Parameters									
Diesel Range Organics (DRO)	ug/l	47		**1100**	**150J**	**1800**	**530**	**5200**	**6300**
Gasoline Range ORGANICS(GRO)	ug/l	47		**2490**	**907**	**14700**	**73J**	**47700**	**105000**
Volatile Organic Compounds (VOCs)									
1,1,1-trichloroethane	ug/l	200		<2.9U	<0.29U	<2.9U	<0.29U	<1.5U	<1.5U
1,1,2,2-Tetrachloroethane	ug/l	0.053		<2.2U#	<0.22U#	<2.2U#	<0.22U#	<1.1U#	<1.1U#
1,1,2-Trichloroethane	ug/l	5		<2.9U	<0.29U	<2.9U	<0.29U	<1.5U	<1.5U
1,1-Dichloroethane	ug/l	90		<1.5U	<0.15U	<1.5U	<0.15U	<0.75U	<0.75U
1,1-Dichloroethylene	ug/l	7		<1.7U	<0.17U	<1.7U	<0.17U	<0.85U	<0.85U
1,2-Dibromoethane	ug/l	0.05		<3U#	<0.3U#	<3U#	<0.3U#	<1.5U#	<1.5U#
1,2-Dichloroethane	ug/l	5		<3.3U	<0.33U	<3.3U	<0.33U	<1.7U	<1.7U
1,2-Dichloropropane	ug/l	5		<2.3U	<0.23U	<2.3U	<0.23U	<1.2U	<1.2U
2-Hexanone	ug/l	**		<7.8U	<0.78U	<7.8U	<0.78U	<3.9U	85.6
Acetone	ug/l	550		<31U	<3.1U	<31U	<3.1U	<15.5U	<15.5U
Benzene	ug/l	5		**372**	**135**	**8120**	**39.6**	**88.7**	**374**
Bromodichloromethane	ug/l	80		<2.3U	<0.23U	<2.3U	<0.23U	<1.2U	<1.2U
Bromoform	ug/l	80		<2.8U	<0.28U	<2.8U	<0.28U	<1.4U	<1.4U

** No Applicable Regulatory Standard

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REPSG
React Environmental
Professional Services Group, Inc.

Analytical Chemistry Report **Matrix: Water**

Calvert Citgo 2815 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 12/11/2009**

Regulatory Standard*:

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Groundwater for Type I & II Aquifers, Tables 1 and 2 (March 2008).

Constituent	Unit	*Standard	Location:	MP-001	MP-002	MW-001	MW-002	MW-003	MW-005
			Date:	12/11/2009	12/11/2009	12/11/2009	12/11/2009	12/11/2009	12/11/2009
			Depth (ft):	0	0	0	0	0	0
Carbon disulfide	ug/l	100		<1.2U	<0.12U	<1.2U	<0.12U	<0.6U	<0.6U
Carbon tetrachloride	ug/l	5		<2.5U	<0.25U	<2.5U	<0.25U	<1.3U	<1.3U
Chlorobenzene	ug/l	100		<1.6U	<0.16U	<1.6U	<0.16U	<0.8U	<0.8U
Chlorobromomethane	ug/l	**		<3.3U	<0.33U	<3.3U	<0.33U	<1.7U	<1.7U
Chloroethane	ug/l	3.6		<1.9U	<0.19U	<1.9U	<0.19U	<0.95U	<0.95U
Chloroform	ug/l	80		2.4J	<0.23U	<2.3U	<0.23U	<1.2U	<1.2U
cis-1,2-Dichloroethylene	ug/l	70		<1.7U	<0.17U	<1.7U	<0.17U	<0.85U	<0.85U
cis-1,3-Dichloropropene	ug/l	0.44		<1.8U#	<0.18U	<1.8U#	<0.18U	<0.9U#	<0.9U#
Dibromochloromethane	ug/l	80		<2.6U	<0.26U	<2.6U	<0.26U	<1.3U	<1.3U
Ethyl tert-butyl ether	ug/l	**		<1U	<0.1U	<1U	<0.1U	<0.5U	<0.5U
Ethylbenzene	ug/l	700		6.4J	1.7	**962**	0.26J	**1790**	**1960**
Isopropyl Ether	ug/l	**		<1.8U	<0.18U	13.7	<0.18U	8.5	<0.9U
m/p-xylene	ug/l	**		93	18.7	1910	0.69J	6280	7800
Methyl bromide	ug/l	0.85		<2.4U#	<0.24U	<2.4U#	<0.24U	<1.2U#	<1.2U#
Methyl chloride	ug/l	19		<1.6U	<0.16U	<1.6U	<0.16U	<0.8U	<0.8U
Methyl ethyl ketone	ug/l	700		<21U	19.1	<21U	<2.1U	<10.5U	<10.5U
Methyl isobutylketone (MIBK)	ug/l	630		<4.1U	<0.41U	<4.1U	<0.41U	123	226
Methyl tert-butyl ether	ug/l	20		<1.8U	<0.18U	4J	17.9	<0.9U	<0.9U
Methylene chloride	ug/l	5		<3.2U	<0.32U	<3.2U	<0.32U	<1.6U	<1.6U
o-Xylene	ug/l	**		62.2	25.6	19	0.73J	2390	2720
Styrene	ug/l	100		<1U	<0.1U	<1U	<0.1U	11.4	15.1

** No Applicable Regulatory Standard

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REPSG
React Environmental
Professional Services Group, Inc.

Analytical Chemistry Report **Matrix: Water**

Calvert Citgo 2815 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 12/11/2009**

Regulatory Standard*:

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Groundwater for Type I & II Aquifers, Tables 1 and 2 (March 2008).

Constituent	Unit	*Standard	Location:	MP-001	MP-002	MW-001	MW-002	MW-003	MW-005
			Date:	12/11/2009	12/11/2009	12/11/2009	12/11/2009	12/11/2009	12/11/2009
			Depth (ft):	0	0	0	0	0	0
Tert-Amyl alcohol	ug/l	**		<31.1U	<3.1U	2320	<3.1U	<15.6U	<15.6U
Tert-Amyl Ethyl Ether	ug/l	**		<1.4U	<0.14U	<1.4U	<0.14U	<0.7U	<0.7U
tert-Butylalcohol	ug/l	**		248	380	291	47.1	97.6	1160
Tetrachloroethylene	ug/l	5		<2.8U	<0.28U	<2.8U	<0.28U	<1.4U	<1.4U
Toluene	ug/l	1000		630	172	58.4	<0.19U	**8000**	**22700**
trans-1,2-Di-chloroethylene	ug/l	100		<2U	<0.2U	<2U	<0.2U	<1U	<1U
trans-1,3-Dichloropropene	ug/l	0.44		<1.4U#	<0.14U	<1.4U#	<0.14U	<0.7U#	<0.7U#
Trichloroethylene	ug/l	5		<3.3U	<0.33U	<3.3U	1.4	<1.7U	<1.7U
Vinyl chloride	ug/l	2		<1.6U	<0.16U	<1.6U	<0.16U	<0.8U	<0.8U
Xylene (total)	ug/l	10000		155	44.3	1930	1.4J	8670	**10500**

Constituent	Unit	*Standard	Location:	MW-006	MW-007
			Date:	12/11/2009	12/11/2009
			Depth (ft):	0	0
Not Otherwise Specified					
DBCP	ug/l	0.2		<0.96U#	<9.6U#
Tert-Amyl Methyl Ether	ug/l	**		<0.17U	<1.7U
Petroleum Screening Parameters					
Diesel Range Organics (DRO)	ug/l	47		**240**	**3800**
Gasoline Range ORGANICS(GRO)	ug/l	47		**1200**	**53800**

Print Date: 12/28/2009

** No Applicable Regulatory Standard

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REPSG
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Analytical Chemistry Report **Matrix: Water**

Calvert Citgo 2815 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 12/11/2009**

Regulatory Standard*:

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Groundwater for Type I & II Aquifers, Tables 1 and 2 (March 2008).

Volatile Organic Compounds (VOCs)				
1,1,1-trichloroethane	ug/l	200	<0.29U	<2.9U
1,1,2,2-Tetrachloroethane	ug/l	0.053	<0.22U#	<2.2U#
1,1,2-Trichloroethane	ug/l	5	<0.29U	<2.9U
1,1-Dichloroethane	ug/l	90	<0.15U	<1.5U
1,1-Dichloroethylene	ug/l	7	<0.17U	<1.7U
1,2-Dibromoethane	ug/l	0.05	<0.3U#	<3U#
1,2-Dichloroethane	ug/l	5	<0.33U	<3.3U
1,2-Dichloropropane	ug/l	5	<0.23U	<2.3U
2-Hexanone	ug/l	**	<0.78U	49.6J
Acetone	ug/l	550	<3.1U	<31U
Benzene	ug/l	5	**11.7**	**1060**
Bromodichloromethane	ug/l	80	<0.23U	<2.3U
Bromoform	ug/l	80	<0.28U	<2.8U
Carbon disulfide	ug/l	100	<0.12U	<1.2U
Carbon tetrachloride	ug/l	5	<0.25U	<2.5U
Chlorobenzene	ug/l	100	2.9	<1.6U
Chlorobromomethane	ug/l	**	<0.33U	<3.3U
Chloroethane	ug/l	3.6	<0.19U	<1.9U
Chloroform	ug/l	80	<0.23U	<2.3U
cis-1,2-Dichloroethylene	ug/l	70	<0.17U	<1.7U
cis-1,3-Dichloropropene	ug/l	0.44	<0.18U	<1.8U#
Dibromochloromethane	ug/l	80	<0.26U	<2.6U
Ethyl tert-butyl ether	ug/l	**	<0.1U	<1U

** No Applicable Regulatory Standard

Exceedences of the regulatory standard are printed in bold. # = Reporting limit exceeds regulatory standard. NOC = Not of Concern.

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REPSG
React Environmental
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Analytical Chemistry Report **Matrix: Water**

Calvert Citgo 2815 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 12/11/2009**

Regulatory Standard*:

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Groundwater for Type I & II Aquifers, Tables 1 and 2 (March 2008).

Constituent	Unit	*Standard	Location:	MW-006	MW-007
			Date:	12/11/2009	12/11/2009
			Depth (ft):	0	0
Ethylbenzene	ug/l	700		32.4	**827**
Isopropyl Ether	ug/l	**		<0.18U	<1.8U
m/p-xylene	ug/l	**		118	2940
Methyl bromide	ug/l	0.85		<0.24U	<2.4U#
Methyl chloride	ug/l	19		<0.16U	<1.6U
Methyl ethyl ketone	ug/l	700		<2.1U	<21U
Methyl isobutylketone (MIBK)	ug/l	630		<0.41U	<4.1U
Methyl tert-butyl ether	ug/l	20		2	2.3J
Methylene chloride	ug/l	5		<0.32U	<3.2U
o-Xylene	ug/l	**		54.6	1520
Styrene	ug/l	100		0.2J	7.2J
Tert-Amyl alcohol	ug/l	**		<3.1U	<31.1U
Tert-Amyl Ethyl Ether	ug/l	**		<0.14U	<1.4U
tert-Butylalcohol	ug/l	**		<4.6U	<46U
Tetrachloroethylene	ug/l	5		**10**	<2.8U
Toluene	ug/l	1000		220	**10200**
trans-1,2-Di-chloroethylene	ug/l	100		<0.2U	<2U
trans-1,3-Dichloropropene	ug/l	0.44		<0.14U	<1.4U#
Trichloroethylene	ug/l	5		<0.33U	<3.3U
Vinyl chloride	ug/l	2		<0.16U	<1.6U
Xylene (total)	ug/l	10000		172	4460

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Analytical Chemistry Report — Matrix: Water

Calvert Citgo 2815 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 03/12/2009

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-001
			Date:	03/12/2009
			Depth (ft):	0
Not Otherwise Specified				
1,1,-dichloropropanone	ug/l	**		<1.6U
2-Nitropropane	ug/l	**		<1.4U
Acrylonitrile	ug/l	**		<0.4U
Allyl chloride	ug/l	**		<0.3U
Chloroacetonitrile	ug/l	**		<1U
Chlorobutane, 1-	ug/l	**		<0.5U
DBCP	ug/l	0.2		<0.2U
Dichlorofluoromethane	ug/l	**		<0.2U
Ethyl cyanide	ug/l	**		<0.6U
Ethyl methacrylate	ug/l	**		<0.1U
Isopropanol	ug/l	**		<11U
Methacrylonitrile	ug/l	**		<0.3U
Methyl acrylate	ug/l	**		<0.3U
Methyl iodide	ug/l	**		<0.3U
Methyl methacrylate	ug/l	**		<0.2U
n-Hexane	ug/l	**		<0.2U
Pentachloroethane	ug/l	**		<0.2U
Tert-Amyl Methyl Ether	ug/l	**		<0.2U
trans-1,4-Dichloro-2-butene	ug/l	**		<0.4U
Vinyl Acetate	ug/l	**		<0.2U

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Analytical Chemistry Report — Matrix: Water

Calvert Citgo 2815 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 03/12/2009

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Semi-Volatile Organic Compounds (SVOCs)			
Hexachloroethane	ug/l	**	<1.4U
Nitrobenzene	ug/l	**	<2U
Volatile Organic Compounds (VOCs)			
1,1,1,2-Tetrachloroethane	ug/l	**	<0.2U
1,1,1-trichloroethane	ug/l	200	<0.2U
1,1,2,2-Tetrachloroethane	ug/l	**	<0.1U
1,1,2-Trichloroethane	ug/l	5	<0.1U
1,1-Dichloroethane	ug/l	**	<0.2U
1,1-Dichloroethylene	ug/l	7	<0.2U
1,1-Dichloropropene	ug/l	**	<0.2U
1,2,3-Trichlorobenzene	ug/l	**	<0.2U
1,2,3-Trichloropropane	ug/l	**	<0.2U
1,2-Dibromoethane	ug/l	**	<0.2U
1,2-Dichloroethane	ug/l	5	<0.2U
1,2-Dichloropropane	ug/l	**	<0.2U
1,3-Dichloropropane	ug/l	**	<0.1U
1,3-Dichloropropene	ug/l	**	<0.3U
1,4-Dioxane	ug/l	**	<1.6U
2-Hexanone	ug/l	**	<0.3U
Acetone	ug/l	**	<2.3U
Benzene	ug/l	5	<0.1U
Benzene, 1,2,4-trimethyl	ug/l	**	<0.1U

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Analytical Chemistry Report — Matrix: Water

Calvert Citgo 2815 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 03/12/2009

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-001
			Date:	03/12/2009
			Depth (ft):	0
Benzene, 1,3,5-trimethyl-	ug/l	**		<0.1U
Bromobenzene	ug/l	**		<0.2U
Bromodichloromethane	ug/l	**		<0.2U
Bromoform	ug/l	**		<0.1U
Carbon disulfide	ug/l	**		<0.2U
Carbon tetrachloride	ug/l	5		<0.2U
Chlorobenzene	ug/l	100		<0.1U
Chlorobromomethane	ug/l	**		<0.2U
Chloroethane	ug/l	**		<0.1U
Chloroform	ug/l	**		0.13J
cis-1,2-Dichloroethylene	ug/l	70		<0.3U
cis-1,3-Dichloropropene	ug/l	**		<0.1U
Cymene	ug/l	**		<0.1U
Dibromochloromethane	ug/l	**		<0.2U
Dichlorodifluoromethane	ug/l	**		<0.2U
Diethyl ether	ug/l	**		<0.2U
Ethyl tert-butyl ether	ug/l	**		<0.1U
Ethylbenzene	ug/l	700		<0.1U
Isopropyl benzene	ug/l	**		<0.1U
Isopropyl Ether	ug/l	**		1.6
m/p-xylene	ug/l	**		<0.2U

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Analytical Chemistry Report — Matrix: Water

Calvert Citgo 2815 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 03/12/2009

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-001
			Date:	03/12/2009
			Depth (ft):	0
Methyl bromide	ug/l	**		<0.3U
Methyl chloride	ug/l	**		<0.1U
Methyl ethyl ketone	ug/l	**		<1U
Methyl isobutylketone (MIBK)	ug/l	**		<0.5U
Methyl tert-butyl ether	ug/l	20		12.2
Methylene bromide	ug/l	**		<0.3U
Methylene chloride	ug/l	5		<0.3U
n-Butylbenzene	ug/l	**		<0.1U
n-Propylbenzene	ug/l	**		<0.1U
o-Chlorotoluene	ug/l	**		<0.2U
o-Xylene	ug/l	**		<0.1U
p-Chlorotoluene	ug/l	**		<0.2U
sec-Butylbenzene	ug/l	**		<0.1U
sec-Dichloropropane	ug/l	**		<0.2U
Styrene	ug/l	100		<0.2U
Tert-Amyl alcohol	ug/l	**		<2U
Tert-Amyl Ethyl Ether	ug/l	**		<0.2U
tert-Butylalcohol	ug/l	**		<1.7U
tert-Butylbenzene	ug/l	**		<0.2U
Tetrachloroethylene	ug/l	5		<0.2U
Tetrahydrofuran	ug/l	**		<1.3U

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Analytical Chemistry Report — Matrix: Water

Calvert Citgo 2815 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 03/12/2009

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-001
			Date:	03/12/2009
			Depth (ft):	0
Toluene	ug/l	1000		<0.1U
trans-1,2-Di-chloroethylene	ug/l	100		<0.2U
trans-1,3-Dichloropropene	ug/l	**		<0.2U
Trichloroethylene	ug/l	5		<0.1U
Trichlorofluoromethane	ug/l	**		<0.1U
Vinyl chloride	ug/l	2		<0.2U
Xylene (total)	ug/l	10000		<0.3U
Volatile/Semi-Volatile Organic Compounds (V/SVOCs)				
1,2,4-Trichlorobenzene	ug/l	70		<0.2U
Hexachlorobutadiene	ug/l	**		<0.2U
m-Dichlorobenzene	ug/l	**		<0.2U
Naphthalene	ug/l	**		<0.2U
o-Dichlorobenzene	ug/l	600		<0.2U
p-Dichlorobenzene	ug/l	75		<0.2U

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Analytical Chemistry Report **Matrix: Water**

Calvert Citgo 2815 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 07/21/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	**Unit**	***Standard**	**Location:**	DW-001
			Date:	07/21/2009
			Depth (ft):	0
Not Otherwise Specified				
1,1,-dichloropropanone	ug/l	**		<1.6U
2-Nitropropane	ug/l	**		<1.4U
Acrylonitrile	ug/l	**		<0.4U
Allyl chloride	ug/l	**		<0.3U
Chloroacetonitrile	ug/l	**		<1U
Chlorobutane, 1-	ug/l	**		<0.5U
DBCP	ug/l	0.2		<0.2U
Dichlorofluoromethane	ug/l	**		<0.2U
Ethyl cyanide	ug/l	**		<0.6U
Ethyl methacrylate	ug/l	**		<0.1U
Isopropanol	ug/l	**		<11U
Methacrylonitrile	ug/l	**		<0.3U
Methyl acrylate	ug/l	**		<0.3U
Methyl iodide	ug/l	**		<0.3U
Methyl methacrylate	ug/l	**		<0.2U
n-Hexane	ug/l	**		<0.2U
Pentachloroethane	ug/l	**		<0.2U
Tert-Amyl Methyl Ether	ug/l	**		<0.2U
trans-1,4-Dichloro-2-butene	ug/l	**		<0.4U
Vinyl Acetate	ug/l	**		<0.2U

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Analytical Chemistry Report **Matrix: Water**

Calvert Citgo 2815 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 07/21/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Semi-Volatile Organic Compounds (SVOCs)			
Hexachloroethane	ug/l	**	<1.4U
Nitrobenzene	ug/l	**	<2U
Volatile Organic Compounds (VOCs)			
1,1,1,2-Tetrachloroethane	ug/l	**	<0.2U
1,1,1-trichloroethane	ug/l	200	<0.2U
1,1,2,2-Tetrachloroethane	ug/l	**	<0.1U
1,1,2-Trichloroethane	ug/l	5	<0.1U
1,1-Dichloroethane	ug/l	**	<0.2U
1,1-Dichloroethylene	ug/l	7	<0.2U
1,1-Dichloropropene	ug/l	**	<0.2U
1,2,3-Trichlorobenzene	ug/l	**	<0.2U
1,2,3-Trichloropropane	ug/l	**	<0.2U
1,2-Dibromoethane	ug/l	**	<0.2U
1,2-Dichloroethane	ug/l	5	<0.2U
1,2-Dichloropropane	ug/l	**	<0.2U
1,3-Dichloropropane	ug/l	**	<0.1U
1,3-Dichloropropene	ug/l	**	<0.3U
1,4-Dioxane	ug/l	**	<1.6U
2-Hexanone	ug/l	**	<0.3U
Acetone	ug/l	**	<2.3U
Benzene	ug/l	5	<0.1U
Benzene, 1,2,4-trimethyl	ug/l	**	<0.1U

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Analytical Chemistry Report **Matrix: Water**

Calvert Citgo 2815 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 07/21/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-001
			Date:	07/21/2009
			Depth (ft):	0
Benzene, 1,3,5-trimethyl-	ug/l	**		<0.1U
Bromobenzene	ug/l	**		<0.2U
Bromodichloromethane	ug/l	**		<0.2U
Bromoform	ug/l	**		<0.1U
Carbon disulfide	ug/l	**		<0.2U
Carbon tetrachloride	ug/l	5		<0.2U
Chlorobenzene	ug/l	100		<0.1U
Chlorobromomethane	ug/l	**		<0.2U
Chloroethane	ug/l	**		<0.1U
Chloroform	ug/l	**		<0.1U
cis-1,2-Dichloroethylene	ug/l	70		<0.3U
cis-1,3-Dichloropropene	ug/l	**		<0.1U
Cymene	ug/l	**		<0.1U
Dibromochloromethane	ug/l	**		<0.2U
Dichlorodifluoromethane	ug/l	**		<0.2U
Diethyl ether	ug/l	**		<0.2U
Ethyl tert-butyl ether	ug/l	**		<0.1U
Ethylbenzene	ug/l	700		<0.1U
Isopropyl benzene	ug/l	**		<0.1U
Isopropyl Ether	ug/l	**		2.1
m/p-xylene	ug/l	**		<0.2U

** No Applicable Regulatory Standard

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Analytical Chemistry Report **Matrix: Water**

Calvert Citgo 2815 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 07/21/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-001
			Date:	07/21/2009
			Depth (ft):	0
Methyl bromide	ug/l	**		<0.3U
Methyl chloride	ug/l	**		<0.1U
Methyl ethyl ketone	ug/l	**		2.5
Methyl isobutylketone (MIBK)	ug/l	**		<0.5U
Methyl tert-butyl ether	ug/l	20		18.8
Methylene bromide	ug/l	**		<0.3U
Methylene chloride	ug/l	5		<0.3U
n-Butylbenzene	ug/l	**		<0.1U
n-Propylbenzene	ug/l	**		<0.1U
o-Chlorotoluene	ug/l	**		<0.2U
o-Xylene	ug/l	**		<0.1U
p-Chlorotoluene	ug/l	**		<0.2U
sec-Butylbenzene	ug/l	**		<0.1U
sec-Dichloropropane	ug/l	**		<0.2U
Styrene	ug/l	100		<0.2U
Tert-Amyl alcohol	ug/l	**		<2U
Tert-Amyl Ethyl Ether	ug/l	**		<0.2U
tert-Butylalcohol	ug/l	**		<1.7U
tert-Butylbenzene	ug/l	**		<0.2U
Tetrachloroethylene	ug/l	5		<0.2U
Tetrahydrofuran	ug/l	**		<1.3U

** No Applicable Regulatory Standard

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REPSG
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Analytical Chemistry Report **Matrix: Water**

Calvert Citgo 2815 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 07/21/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-001
			Date:	07/21/2009
			Depth (ft):	0
Toluene	ug/l	1000		0.14J
trans-1,2-Di-chloroethylene	ug/l	100		<0.2U
trans-1,3-Dichloropropene	ug/l	**		<0.2U
Trichloroethylene	ug/l	5		<0.1U
Trichlorofluoromethane	ug/l	**		<0.1U
Vinyl chloride	ug/l	2		<0.2U
Xylene (total)	ug/l	10000		<0.3U
Volatile/Semi-Volatile Organic Compounds (V/SVOCs)				
1,2,4-Trichlorobenzene	ug/l	70		<0.2U
Hexachlorobutadiene	ug/l	**		<0.2U
m-Dichlorobenzene	ug/l	**		<0.2U
Naphthalene	ug/l	**		<0.2U
o-Dichlorobenzene	ug/l	600		<0.2U
p-Dichlorobenzene	ug/l	75		<0.2U

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REPSG
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Analytical Chemistry Report **Matrix: Water**

Calvert Citgo 2815 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 12/11/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	**Unit**	***Standard**	**Location:**	DW-001
			Date:	12/11/2009
			Depth (ft):	0
Not Otherwise Specified				
1,1,-dichloropropanone	ug/l	**		<1.6U
2-Nitropropane	ug/l	**		<1.4U
Acrylonitrile	ug/l	**		<0.4U
Allyl chloride	ug/l	**		<0.3U
Chloroacetonitrile	ug/l	**		<1U
Chlorobutane, 1-	ug/l	**		<0.5U
DBCP	ug/l	0.2		<0.2U
Dichlorofluoromethane	ug/l	**		<0.2U
Ethyl cyanide	ug/l	**		<0.6U
Ethyl methacrylate	ug/l	**		<0.1U
Isopropanol	ug/l	**		<11U
Methacrylonitrile	ug/l	**		<0.3U
Methyl acrylate	ug/l	**		<0.3U
Methyl iodide	ug/l	**		<0.3U
Methyl methacrylate	ug/l	**		<0.2U
n-Hexane	ug/l	**		<0.2U
Pentachloroethane	ug/l	**		<0.2U
Tert-Amyl Methyl Ether	ug/l	**		<0.2U
trans-1,4-Dichloro-2-butene	ug/l	**		<0.4U
Vinyl Acetate	ug/l	**		<0.2U

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REPSG
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Analytical Chemistry Report **Matrix: Water**

Calvert Citgo 2815 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 12/11/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Petroleum Screening Parameters			
Diesel Range Organics (DRO)	ug/l	**	100J
Gasoline Range ORGANICS(GRO)	ug/l	**	32.3J
Semi-Volatile Organic Compounds (SVOCs)			
Hexachloroethane	ug/l	**	<1.4U
Nitrobenzene	ug/l	**	<2U
Volatile Organic Compounds (VOCs)			
1,1,1,2-Tetrachloroethane	ug/l	**	<0.2U
1,1,1-trichloroethane	ug/l	200	<0.2U
1,1,2,2-Tetrachloroethane	ug/l	**	<0.1U
1,1,2-Trichloroethane	ug/l	5	<0.1U
1,1-Dichloroethane	ug/l	**	<0.2U
1,1-Dichloroethylene	ug/l	7	<0.2U
1,1-Dichloropropene	ug/l	**	<0.2U
1,2,3-Trichlorobenzene	ug/l	**	<0.2U
1,2,3-Trichloropropane	ug/l	**	<0.2U
1,2-Dibromoethane	ug/l	**	<0.2U
1,2-Dichloroethane	ug/l	5	<0.2U
1,2-Dichloropropane	ug/l	**	<0.2U
1,3-Dichloropropane	ug/l	**	<0.1U
1,3-Dichloropropene	ug/l	**	<0.3U
1,4-Dioxane	ug/l	**	<1.6U
2-Hexanone	ug/l	**	<0.3U

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Analytical Chemistry Report **Matrix: Water**

Calvert Citgo 2815 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 12/11/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-001
			Date:	12/11/2009
			Depth (ft):	0
Acetone	ug/l	**		<2.3U
Benzene	ug/l	5		<0.1U
Benzene, 1,2,4-trimethyl	ug/l	**		<0.1U
Benzene, 1,3,5-trimethyl-	ug/l	**		<0.1U
Bromobenzene	ug/l	**		<0.2U
Bromodichloromethane	ug/l	**		<0.2U
Bromoform	ug/l	**		<0.1U
Carbon disulfide	ug/l	**		<0.2U
Carbon tetrachloride	ug/l	5		<0.2U
Chlorobenzene	ug/l	100		<0.1U
Chlorobromomethane	ug/l	**		<0.2U
Chloroethane	ug/l	**		<0.1U
Chloroform	ug/l	**		<0.1U
cis-1,2-Dichloroethylene	ug/l	70		<0.3U
cis-1,3-Dichloropropene	ug/l	**		<0.1U
Cymene	ug/l	**		<0.1U
Dibromochloromethane	ug/l	**		<0.2U
Dichlorodifluoromethane	ug/l	**		<0.2U
Diethyl ether	ug/l	**		<0.2U
Ethyl tert-butyl ether	ug/l	**		<0.1U
Ethylbenzene	ug/l	700		<0.1U

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Analytical Chemistry Report **Matrix: Water**

Calvert Citgo 2815 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 12/11/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-001
			Date:	12/11/2009
			Depth (ft):	0
Isopropyl benzene	ug/l	**		<0.1U
Isopropyl Ether	ug/l	**		0.91
m/p-xylene	ug/l	**		<0.2U
Methyl bromide	ug/l	**		<0.3U
Methyl chloride	ug/l	**		<0.1U
Methyl ethyl ketone	ug/l	**		<1U
Methyl isobutylketone (MIBK)	ug/l	**		<0.5U
Methyl tert-butyl ether	ug/l	20		2.7
Methylene bromide	ug/l	**		<0.3U
Methylene chloride	ug/l	5		<0.3U
n-Butylbenzene	ug/l	**		<0.1U
n-Propylbenzene	ug/l	**		<0.1U
o-Chlorotoluene	ug/l	**		<0.2U
o-Xylene	ug/l	**		<0.1U
p-Chlorotoluene	ug/l	**		<0.2U
sec-Butylbenzene	ug/l	**		<0.1U
sec-Dichloropropane	ug/l	**		<0.2U
Styrene	ug/l	100		<0.2U
Tert-Amyl alcohol	ug/l	**		<2U
Tert-Amyl Ethyl Ether	ug/l	**		<0.2U
tert-Butylalcohol	ug/l	**		<1.7U

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Analytical Chemistry Report **Matrix: Water**

Calvert Citgo 2815 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 12/11/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-001
			Date:	12/11/2009
			Depth (ft):	0
tert-Butylbenzene	ug/l	**		<0.2U
Tetrachloroethylene	ug/l	5		<0.2U
Tetrahydrofuran	ug/l	**		<1.3U
Toluene	ug/l	1000		0.11J
trans-1,2-Di-chloroethylene	ug/l	100		<0.2U
trans-1,3-Dichloropropene	ug/l	**		<0.2U
Trichloroethylene	ug/l	5		<0.1U
Trichlorofluoromethane	ug/l	**		<0.1U
Vinyl chloride	ug/l	2		<0.2U
Xylene (total)	ug/l	10000		<0.3U
Volatile/Semi-Volatile Organic Compounds (V/SVOCs)				
1,2,4-Trichlorobenzene	ug/l	70		<0.2U
Hexachlorobutadiene	ug/l	**		<0.2U
m-Dichlorobenzene	ug/l	**		<0.2U
Naphthalene	ug/l	**		<0.2U
o-Dichlorobenzene	ug/l	600		<0.2U
p-Dichlorobenzene	ug/l	75		<0.2U

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REPSG
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Professional Services Group, Inc.

Analytical Chemistry Report — Matrix: Water

2794 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 03/04/2009

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-004B	DW-004C	DW-004D	DW-004E
			Date:	03/04/2009	03/04/2009	03/04/2009	03/04/2009
			Depth (ft):	0	0	0	0
Not Otherwise Specified							
1,1,-dichloropropanone	ug/l	**		<1.6U	<8U	<1.6U	<1.6U
2-Nitropropane	ug/l	**		<1.4U	<7U	<1.4U	<1.4U
Acrylonitrile	ug/l	**		<0.4U	<2U	<0.4U	<0.4U
Allyl chloride	ug/l	**		<0.3U	<1.5U	<0.3U	<0.3U
Chloroacetonitrile	ug/l	**		<1U	<5U	<1U	<1U
Chlorobutane, 1-	ug/l	**		<0.5U	<2.5U	<0.5U	<0.5U
DBCP	ug/l	0.2		<0.2U	<1U#	<0.2U	<0.2U
Dichlorofluoromethane	ug/l	**		<0.2U	<1U	<0.2U	<0.2U
Ethyl cyanide	ug/l	**		<0.6U	<3U	<0.6U	<0.6U
Ethyl methacrylate	ug/l	**		<0.1U	<0.5U	<0.1U	<0.1U
Isopropanol	ug/l	**		<11U	<55U	<11U	<11U
Methacrylonitrile	ug/l	**		<0.3U	<1.5U	<0.3U	<0.3U
Methyl acrylate	ug/l	**		<0.3U	<1.5U	<0.3U	<0.3U
Methyl iodide	ug/l	**		<0.3U	<1.5U	<0.3U	<0.3U
Methyl methacrylate	ug/l	**		<0.2U	<1U	<0.2U	<0.2U
n-Hexane	ug/l	**		<0.2U	<1U	<0.2U	<0.2U
Pentachloroethane	ug/l	**		<0.2U	<1U	<0.2U	<0.2U
TERT-AMYL METHYL ETHER	ug/l	**		<0.2U	<1U	<0.2U	<0.2U
trans-1,4-Dichloro-2-butene	ug/l	**		<0.4U	<2U	<0.4U	<0.4U
Vinyl Acetate	ug/l	**		<0.2U	<1U	<0.2U	<0.2U

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REPSG
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Analytical Chemistry Report
2794 Northeast Rd North East, Maryland REPSG Project No.: 005977

Matrix: Water
Sample Date: 03/04/2009

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Semi-Volatile Organic Compounds (SVOCs)						
Hexachloroethane	ug/l	**	<1.4U	<7U	<1.4U	<1.4U
Nitrobenzene	ug/l	**	<2U	<10U	<2U	<2U
Volatile Organic Compounds (VOCs)						
1,1,1,2-Tetrachloroethane	ug/l	**	<0.2U	<1U	<0.2U	<0.2U
1,1,1-trichloroethane	ug/l	200	<0.2U	<1U	<0.2U	<0.2U
1,1,2,2-Tetrachloroethane	ug/l	**	<0.1U	<0.5U	<0.1U	<0.1U
1,1,2-Trichloroethane	ug/l	5	<0.1U	<0.5U	<0.1U	<0.1U
1,1-Dichloroethane	ug/l	**	<0.2U	<1U	<0.2U	<0.2U
1,1-Dichloroethylene	ug/l	7	<0.2U	<1U	<0.2U	<0.2U
1,1-Dichloropropene	ug/l	**	<0.2U	<1U	<0.2U	<0.2U
1,2,3-Trichlorobenzene	ug/l	**	<0.2U	<1U	<0.2U	<0.2U
1,2,3-Trichloropropane	ug/l	**	<0.2U	<1U	<0.2U	<0.2U
1,2-Dibromoethane	ug/l	**	<0.2U	<1U	<0.2U	<0.2U
1,2-Dichloroethane	ug/l	5	0.74	4.4	<0.2U	<0.2U
1,2-Dichloropropane	ug/l	**	<0.2U	<1U	<0.2U	<0.2U
1,3-Dichloropropane	ug/l	**	<0.1U	<0.5U	<0.1U	<0.1U
1,3-Dichloropropene	ug/l	**	<0.3U	<1.5U	<0.3U	<0.3U
1,4-Dioxane	ug/l	**	<1.6U	<8U	<1.6U	<1.6U
2-Hexanone	ug/l	**	<0.3U	<1.5U	<0.3U	<0.3U
Acetone	ug/l	**	<2.3U	<11.5U	<2.3U	<2.3U
Benzene	ug/l	5	<0.1U	<0.5U	<0.1U	<0.1U
Benzene, 1,2,4-trimethyl	ug/l	**	0.31J	<0.5U	<0.1U	<0.1U

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REPSG
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Analytical Chemistry Report
2794 Northeast Rd North East, Maryland REPSG Project No.: 005977

Matrix: Water
Sample Date: 03/04/2009

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-004B	DW-004C	DW-004D	DW-004E
			Date:	03/04/2009	03/04/2009	03/04/2009	03/04/2009
			Depth (ft):	0	0	0	0
Benzene, 1,3,5-trimethyl-	ug/l	**		<0.1U	<0.5U	<0.1U	<0.1U
Bromobenzene	ug/l	**		<0.2U	<1U	<0.2U	<0.2U
Bromodichloromethane	ug/l	**		<0.2U	<1U	<0.2U	<0.2U
Bromoform	ug/l	**		<0.1U	<0.5U	<0.1U	<0.1U
Carbon disulfide	ug/l	**		<0.2U	<1U	<0.2U	<0.2U
Carbon tetrachloride	ug/l	5		<0.2U	<1U	<0.2U	<0.2U
Chlorobenzene	ug/l	100		<0.1U	<0.5U	<0.1U	<0.1U
Chlorobromomethane	ug/l	**		<0.2U	<1U	<0.2U	<0.2U
Chloroethane	ug/l	**		<0.1U	<0.5U	<0.1U	<0.1U
Chloroform	ug/l	**		<0.1U	<0.5U	<0.1U	<0.1U
cis-1,2-Dichloroethylene	ug/l	70		<0.3U	<1.5U	<0.3U	<0.3U
cis-1,3-Dichloropropene	ug/l	**		<0.1U	<0.5U	<0.1U	<0.1U
Cymene	ug/l	**		<0.1U	<0.5U	<0.1U	<0.1U
Dibromochloromethane	ug/l	**		<0.2U	<1U	<0.2U	<0.2U
Dichlorodifluoromethane	ug/l	**		<0.2U	<1U	<0.2U	<0.2U
Diethyl ether	ug/l	**		<0.2U	<1U	<0.2U	<0.2U
Ethyl tert-butyl ether	ug/l	**		<0.1U	<0.5U	<0.1U	<0.1U
Ethylbenzene	ug/l	700		<0.1U	<0.5U	<0.1U	<0.1U
Isopropyl benzene	ug/l	**		0.14J	0.7J	0.14J	0.13J
Isopropyl Ether	ug/l	**		0.38J	3.9	<0.1U	<0.1U
m/p-xylene	ug/l	**		<0.2U	<1U	<0.2U	<0.2U

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Analytical Chemistry Report
2794 Northeast Rd North East, Maryland REPSG Project No.: 005977

Matrix: Water
Sample Date: 03/04/2009

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-004B	DW-004C	DW-004D	DW-004E
			Date:	03/04/2009	03/04/2009	03/04/2009	03/04/2009
			Depth (ft):	0	0	0	0
Methyl bromide	ug/l	**		<0.3U	<1.5U	<0.3U	<0.3U
Methyl chloride	ug/l	**		<0.1U	<0.5U	<0.1U	<0.1U
Methyl ethyl ketone	ug/l	**		<1U	<5U	<1U	<1U
Methyl isobutylketone (MIBK)	ug/l	**		<0.5U	<2.5U	<0.5U	<0.5U
Methyl tert-butyl ether	ug/l	20		92	232	<0.2U	<0.2U
Methylene bromide	ug/l	**		<0.3U	<1.5U	<0.3U	<0.3U
Methylene chloride	ug/l	5		<0.3U	6.1	<0.3U	<0.3U
n-Butylbenzene	ug/l	**		<0.1U	<0.5U	<0.1U	<0.1U
n-Propylbenzene	ug/l	**		<0.1U	<0.5U	<0.1U	<0.1U
o-Chlorotoluene	ug/l	**		<0.2U	<1U	<0.2U	<0.2U
o-Xylene	ug/l	**		<0.1U	<0.5U	<0.1U	<0.1U
p-Chlorotoluene	ug/l	**		<0.2U	<1U	<0.2U	<0.2U
sec-Butylbenzene	ug/l	**		<0.1U	<0.5U	<0.1U	<0.1U
sec-Dichloropropane	ug/l	**		<0.2U	<1U	<0.2U	<0.2U
Styrene	ug/l	100		<0.2U	<1U	<0.2U	<0.2U
Tert-Amyl alcohol	ug/l	**		28.8	<10U	<2U	<2U
TERT-AMYL ETHYL ETHER	ug/l	**		<0.2U	<1U	<0.2U	<0.2U
tert-Butylalcohol	ug/l	**		1850	1800	901	11.3
tert-Butylbenzene	ug/l	**		<0.2U	<1U	<0.2U	<0.2U
Tetrachloroethylene	ug/l	5		<0.2U	<1U	<0.2U	<0.2U
Tetrahydrofuran	ug/l	**		8.3	7.6J	5.7	6.4

** No Applicable Regulatory Standard

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REPSG
React Environmental
Professional Services Group, Inc.

Analytical Chemistry Report
2794 Northeast Rd North East, Maryland REPSG Project No.: 005977

Matrix: Water
Sample Date: 03/04/2009

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-004B	DW-004C	DW-004D	DW-004E
			Date:	03/04/2009	03/04/2009	03/04/2009	03/04/2009
			Depth (ft):	0	0	0	0
Toluene	ug/l	1000		<0.1U	<0.5U	<0.1U	<0.1U
trans-1,2-Di-chloroethylene	ug/l	100		<0.2U	<1U	<0.2U	<0.2U
trans-1,3-Dichloropropene	ug/l	**		<0.2U	<1U	<0.2U	<0.2U
Trichloroethylene	ug/l	5		<0.1U	<0.5U	<0.1U	<0.1U
Trichlorofluoromethane	ug/l	**		<0.1U	<0.5U	<0.1U	<0.1U
Vinyl chloride	ug/l	2		<0.2U	<1U	<0.2U	<0.2U
Xylene (total)	ug/l	10000		<0.3U	<1.5U	<0.3U	<0.3U
Volatile/Semi-Volatile Organic Compounds (V/SVOCs)							
1,2,4-Trichlorobenzene	ug/l	70		<0.2U	<1U	<0.2U	<0.2U
Hexachlorobutadiene	ug/l	**		<0.2U	1.7J	<0.2U	<0.2U
m-Dichlorobenzene	ug/l	**		<0.2U	<1U	<0.2U	<0.2U
Naphthalene	ug/l	**		<0.2U	<1U	<0.2U	<0.2U
o-Dichlorobenzene	ug/l	600		<0.2U	<1U	<0.2U	<0.2U
p-Dichlorobenzene	ug/l	75		<0.2U	<1U	<0.2U	<0.2U

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REPSG
React Environmental
Professional Services Group, Inc.

Analytical Chemistry Report — Matrix: Water

2802 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 03/04/2009

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-005A	DW-005B	DW-005C	DW-005D
			Date:	03/04/2009	03/04/2009	03/04/2009	03/04/2009
			Depth (ft):	0	0	0	0
Not Otherwise Specified							
1,1,-dichloropropanone	ug/l	**		<8U	<1.6U	<1.6U	<1.6U
2-Nitropropane	ug/l	**		<7U	<1.4U	<1.4U	<1.4U
Acrylonitrile	ug/l	**		<2U	<0.4U	<0.4U	<0.4U
Allyl chloride	ug/l	**		<1.5U	<0.3U	<0.3U	<0.3U
Chloroacetonitrile	ug/l	**		<5U	<1U	<1U	<1U
Chlorobutane, 1-	ug/l	**		<2.5U	<0.5U	<0.5U	<0.5U
DBCP	ug/l	0.2		<1U#	<0.2U	<0.2U	<0.2U
Dichlorofluoromethane	ug/l	**		<1U	<0.2U	<0.2U	<0.2U
Ethyl cyanide	ug/l	**		<3U	<0.6U	<0.6U	<0.6U
Ethyl methacrylate	ug/l	**		<0.5U	<0.1U	<0.1U	<0.1U
Isopropanol	ug/l	**		<55U	<11U	<11U	<11U
Methacrylonitrile	ug/l	**		<1.5U	<0.3U	<0.3U	<0.3U
Methyl acrylate	ug/l	**		<1.5U	<0.3U	<0.3U	<0.3U
Methyl iodide	ug/l	**		<1.5U	<0.3U	<0.3U	<0.3U
Methyl methacrylate	ug/l	**		<1U	<0.2U	<0.2U	<0.2U
n-Hexane	ug/l	**		<1U	<0.2U	<0.2U	<0.2U
Pentachloroethane	ug/l	**		<1U	<0.2U	<0.2U	<0.2U
TERT-AMYL METHYL ETHER	ug/l	**		2.6	<0.2U	<0.2U	<0.2U
trans-1,4-Dichloro-2-butene	ug/l	**		<2U	<0.4U	<0.4U	<0.4U
Vinyl Acetate	ug/l	**		<1U	<0.2U	<0.2U	<0.2U

Print Date: 03/17/2009

** No Applicable Regulatory Standard

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REPSG
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Professional Services Group, Inc.

Analytical Chemistry Report
2802 Northeast Rd North East, Maryland REPSG Project No.: 005977

Matrix: Water
Sample Date: 03/04/2009

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Semi-Volatile Organic Compounds (SVOCs)						
Hexachloroethane	ug/l	**	<7U	<1.4U	<1.4U	<1.4U
Nitrobenzene	ug/l	**	<10U	<2U	<2U	<2U
Volatile Organic Compounds (VOCs)						
1,1,1,2-Tetrachloroethane	ug/l	**	<1U	<0.2U	<0.2U	<0.2U
1,1,1-trichloroethane	ug/l	200	<1U	<0.2U	<0.2U	<0.2U
1,1,2,2-Tetrachloroethane	ug/l	**	<0.5U	<0.1U	<0.1U	<0.1U
1,1,2-Trichloroethane	ug/l	5	<0.5U	<0.1U	<0.1U	<0.1U
1,1-Dichloroethane	ug/l	**	<1U	<0.2U	<0.2U	<0.2U
1,1-Dichloroethylene	ug/l	7	<1U	<0.2U	<0.2U	<0.2U
1,1-Dichloropropene	ug/l	**	<1U	<0.2U	<0.2U	<0.2U
1,2,3-Trichlorobenzene	ug/l	**	<1U	<0.2U	<0.2U	<0.2U
1,2,3-Trichloropropane	ug/l	**	<1U	<0.2U	<0.2U	<0.2U
1,2-Dibromoethane	ug/l	**	<1U	<0.2U	<0.2U	<0.2U
1,2-Dichloroethane	ug/l	5	<1U	<0.2U	<0.2U	<0.2U
1,2-Dichloropropane	ug/l	**	<1U	<0.2U	<0.2U	<0.2U
1,3-Dichloropropane	ug/l	**	<0.5U	<0.1U	<0.1U	<0.1U
1,3-Dichloropropene	ug/l	**	<1.5U	<0.3U	<0.3U	<0.3U
1,4-Dioxane	ug/l	**	<8U	<1.6U	<1.6U	<1.6U
2-Hexanone	ug/l	**	<1.5U	<0.3U	<0.3U	<0.3U
Acetone	ug/l	**	<11.5U	<2.3U	<2.3U	<2.3U
Benzene	ug/l	5	<0.5U	<0.1U	<0.1U	<0.1U
Benzene, 1,2,4-trimethyl	ug/l	**	<0.5U	<0.1U	<0.1U	<0.1U

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REPSG
React Environmental
Professional Services Group, Inc.

Analytical Chemistry Report
2802 Northeast Rd North East, Maryland REPSG Project No.: 005977

Matrix: Water
Sample Date: 03/04/2009

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-005A	DW-005B	DW-005C	DW-005D
			Date:	03/04/2009	03/04/2009	03/04/2009	03/04/2009
			Depth (ft):	0	0	0	0
Benzene, 1,3,5-trimethyl-	ug/l	**		<0.5U	<0.1U	<0.1U	<0.1U
Bromobenzene	ug/l	**		<1U	<0.2U	<0.2U	<0.2U
Bromodichloromethane	ug/l	**		<1U	<0.2U	<0.2U	<0.2U
Bromoform	ug/l	**		<0.5U	<0.1U	<0.1U	<0.1U
Carbon disulfide	ug/l	**		<1U	<0.2U	<0.2U	<0.2U
Carbon tetrachloride	ug/l	5		<1U	<0.2U	<0.2U	<0.2U
Chlorobenzene	ug/l	100		<0.5U	<0.1U	<0.1U	<0.1U
Chlorobromomethane	ug/l	**		<1U	<0.2U	<0.2U	<0.2U
Chloroethane	ug/l	**		<0.5U	<0.1U	<0.1U	<0.1U
Chloroform	ug/l	**		<0.5U	<0.1U	<0.1U	<0.1U
cis-1,2-Dichloroethylene	ug/l	70		<1.5U	<0.3U	<0.3U	<0.3U
cis-1,3-Dichloropropene	ug/l	**		<0.5U	<0.1U	<0.1U	<0.1U
Cymene	ug/l	**		<0.5U	<0.1U	<0.1U	<0.1U
Dibromochloromethane	ug/l	**		<1U	<0.2U	<0.2U	<0.2U
Dichlorodifluoromethane	ug/l	**		<1U	<0.2U	<0.2U	<0.2U
Diethyl ether	ug/l	**		<1U	<0.2U	<0.2U	<0.2U
Ethyl tert-butyl ether	ug/l	**		<0.5U	<0.1U	<0.1U	<0.1U
Ethylbenzene	ug/l	700		<0.5U	<0.1U	<0.1U	<0.1U
Isopropyl benzene	ug/l	**		0.85J	0.14J	0.15J	0.13J
Isopropyl Ether	ug/l	**		3.2	<0.1U	<0.1U	<0.1U
m/p-xylene	ug/l	**		<1U	<0.2U	<0.2U	<0.2U

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REPSG
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Professional Services Group, Inc.

Analytical Chemistry Report
2802 Northeast Rd North East, Maryland REPSG Project No.: 005977

Matrix: Water
Sample Date: 03/04/2009

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-005A	DW-005B	DW-005C	DW-005D
			Date:	03/04/2009	03/04/2009	03/04/2009	03/04/2009
			Depth (ft):	0	0	0	0
Methyl bromide	ug/l	**		<1.5U	<0.3U	<0.3U	<0.3U
Methyl chloride	ug/l	**		<0.5U	<0.1U	<0.1U	<0.1U
Methyl ethyl ketone	ug/l	**		<5U	<1U	<1U	<1U
Methyl isobutylketone (MIBK)	ug/l	**		<2.5U	<0.5U	<0.5U	<0.5U
Methyl tert-butyl ether	ug/l	20		300	<0.2U	<0.2U	1.3
Methylene bromide	ug/l	**		<1.5U	<0.3U	<0.3U	<0.3U
Methylene chloride	ug/l	5		3.3	<0.3U	<0.3U	<0.3U
n-Butylbenzene	ug/l	**		<0.5U	<0.1U	<0.1U	<0.1U
n-Propylbenzene	ug/l	**		<0.5U	<0.1U	<0.1U	<0.1U
o-Chlorotoluene	ug/l	**		<1U	<0.2U	<0.2U	<0.2U
o-Xylene	ug/l	**		<0.5U	<0.1U	<0.1U	<0.1U
p-Chlorotoluene	ug/l	**		<1U	<0.2U	<0.2U	<0.2U
sec-Butylbenzene	ug/l	**		<0.5U	<0.1U	<0.1U	<0.1U
sec-Dichloropropane	ug/l	**		<1U	<0.2U	<0.2U	<0.2U
Styrene	ug/l	100		<1U	<0.2U	<0.2U	<0.2U
Tert-Amyl alcohol	ug/l	**		<10U	<2U	<2U	<2U
TERT-AMYL ETHYL ETHER	ug/l	**		<1U	<0.2U	<0.2U	<0.2U
tert-Butylalcohol	ug/l	**		575	171	<1.7U	3.8J
tert-Butylbenzene	ug/l	**		<1U	<0.2U	<0.2U	<0.2U
Tetrachloroethylene	ug/l	5		<1U	<0.2U	<0.2U	<0.2U
Tetrahydrofuran	ug/l	**		<6.5U	14.4	19.5	<1.3U

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REPSG
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Professional Services Group, Inc.

Analytical Chemistry Report
2802 Northeast Rd North East, Maryland REPSG Project No.: 005977

Matrix: Water
Sample Date: 03/04/2009

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-005A	DW-005B	DW-005C	DW-005D
			Date:	03/04/2009	03/04/2009	03/04/2009	03/04/2009
			Depth (ft):	0	0	0	0
Toluene	ug/l	1000		<0.5U	<0.1U	<0.1U	<0.1U
trans-1,2-Di-chloroethylene	ug/l	100		<1U	<0.2U	<0.2U	<0.2U
trans-1,3-Dichloropropene	ug/l	**		<1U	<0.2U	<0.2U	<0.2U
Trichloroethylene	ug/l	5		<0.5U	<0.1U	<0.1U	<0.1U
Trichlorofluoromethane	ug/l	**		<0.5U	<0.1U	<0.1U	<0.1U
Vinyl chloride	ug/l	2		<1U	<0.2U	<0.2U	<0.2U
Xylene (total)	ug/l	10000		<1.5U	<0.3U	<0.3U	<0.3U
Volatile/Semi-Volatile Organic Compounds (V/SVOCs)							
1,2,4-Trichlorobenzene	ug/l	70		<1U	<0.2U	<0.2U	<0.2U
Hexachlorobutadiene	ug/l	**		<1U	<0.2U	<0.2U	<0.2U
m-Dichlorobenzene	ug/l	**		<1U	<0.2U	<0.2U	<0.2U
Naphthalene	ug/l	**		<1U	<0.2U	<0.2U	<0.2U
o-Dichlorobenzene	ug/l	600		<1U	<0.2U	<0.2U	<0.2U
p-Dichlorobenzene	ug/l	75		<1U	<0.2U	<0.2U	<0.2U

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REPSG
React Environmental
Professional Services Group, Inc.

Analytical Chemistry Report **Matrix: Water**

2794 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 06/29/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-004B	DW-004C	DW-004D	DW-004E
			Date:	06/29/2009	06/29/2009	06/29/2009	06/29/2009
			Depth (ft):	0	0	0	0
Not Otherwise Specified							
1,1,-dichloropropanone	ug/l	**		<1.6U	<1.6U	<1.6U	<1.6U
2-Nitropropane	ug/l	**		<1.4U	<1.4U	<1.4U	<1.4U
Acrylonitrile	ug/l	**		<0.4U	<0.4U	<0.4U	<0.4U
Allyl chloride	ug/l	**		<0.3U	<0.3U	<0.3U	<0.3U
Chloroacetonitrile	ug/l	**		<1U	<1U	<1U	<1U
Chlorobutane, 1-	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U
DBCP	ug/l	0.2		<0.2U	<0.2U	<0.2U	<0.2U
Dichlorofluoromethane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Ethyl cyanide	ug/l	**		<0.6U	<0.6U	<0.6U	<0.6U
Ethyl methacrylate	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Isopropanol	ug/l	**		<11U	<11U	<11U	<11U
Methacrylonitrile	ug/l	**		<0.3U	<0.3U	<0.3U	<0.3U
Methyl acrylate	ug/l	**		<0.3U	<0.3U	<0.3U	<0.3U
Methyl iodide	ug/l	**		<0.3U	<0.3U	<0.3U	<0.3U
Methyl methacrylate	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
n-Hexane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Pentachloroethane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Tert-Amyl Methyl Ether	ug/l	**		<0.2U	1.2	<0.2U	<0.2U
trans-1,4-Dichloro-2-butene	ug/l	**		<0.4U	<0.4U	<0.4U	<0.4U
Vinyl Acetate	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U

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REPSG
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Professional Services Group, Inc.

Analytical Chemistry Report **Matrix: Water**

2794 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 06/29/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Semi-Volatile Organic Compounds (SVOCs)						
Hexachloroethane	ug/l	**	<1.4U	<1.4U	<1.4U	<1.4U
Nitrobenzene	ug/l	**	<2U	<2U	<2U	<2U
Volatile Organic Compounds (VOCs)						
1,1,1,2-Tetrachloroethane	ug/l	**	<0.2U	<0.2U	<0.2U	<0.2U
1,1,1-trichloroethane	ug/l	200	<0.2U	<0.2U	<0.2U	<0.2U
1,1,2,2-Tetrachloroethane	ug/l	**	<0.1U	<0.1U	<0.1U	<0.1U
1,1,2-Trichloroethane	ug/l	5	<0.1U	<0.1U	<0.1U	<0.1U
1,1-Dichloroethane	ug/l	**	<0.2U	<0.2U	<0.2U	<0.2U
1,1-Dichloroethylene	ug/l	7	<0.2U	<0.2U	<0.2U	<0.2U
1,1-Dichloropropene	ug/l	**	<0.2U	<0.2U	<0.2U	<0.2U
1,2,3-Trichlorobenzene	ug/l	**	<0.2U	<0.2U	<0.2U	<0.2U
1,2,3-Trichloropropane	ug/l	**	<0.2U	<0.2U	<0.2U	<0.2U
1,2-Dibromoethane	ug/l	**	<0.2U	<0.2U	<0.2U	<0.2U
1,2-Dichloroethane	ug/l	5	<0.2U	**5.3**	<0.2U	<0.2U
1,2-Dichloropropane	ug/l	**	<0.2U	<0.2U	<0.2U	<0.2U
1,3-Dichloropropane	ug/l	**	<0.1U	<0.1U	<0.1U	<0.1U
1,3-Dichloropropene	ug/l	**	<0.3U	<0.3U	<0.3U	<0.3U
1,4-Dioxane	ug/l	**	<1.6U	<1.6U	<1.6U	<1.6U
2-Hexanone	ug/l	**	<0.3U	<0.3U	<0.3U	<0.3U
Acetone	ug/l	**	<2.3U	<2.3U	7.3	12
Benzene	ug/l	5	<0.1U	<0.1U	<0.1U	<0.1U
Benzene, 1,2,4-trimethyl	ug/l	**	<0.1U	<0.1U	<0.1U	<0.1U

** No Applicable Regulatory Standard

Exceedences of the regulatory standard are printed in bold. # = Reporting limit exceeds regulatory standard. NOC = Not of Concern.

QUALIFIERS: U = Constituent not detected above Method Detection Limit (MDL). J = Estimated Value. < = Indicates that the reported concentration is the Method Detection Limit (MDL). D = Compound identified at a secondary dilution factor. B = Analyte reported in associated field or trip blank. N = Tentatively Identified Compound (TIC). Y = Tentatively Identified Compound (TIC) also identified in Method Blank. E = Reported result is over instrument calibration range. This result is an estimate; the true result may be higher. C = Calibration verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.

REPSG
React Environmental
Professional Services Group, Inc.

Analytical Chemistry Report **Matrix: Water**

2794 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 06/29/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-004B	DW-004C	DW-004D	DW-004E
			Date:	06/29/2009	06/29/2009	06/29/2009	06/29/2009
			Depth (ft):	0	0	0	0
Benzene, 1,3,5-trimethyl-	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Bromobenzene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Bromodichloromethane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Bromoform	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Carbon disulfide	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Carbon tetrachloride	ug/l	5		<0.2U	<0.2U	<0.2U	<0.2U
Chlorobenzene	ug/l	100		<0.1U	<0.1U	<0.1U	<0.1U
Chlorobromomethane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Chloroethane	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Chloroform	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
cis-1,2-Dichloroethylene	ug/l	70		<0.3U	<0.3U	<0.3U	<0.3U
cis-1,3-Dichloropropene	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Cymene	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Dibromochloromethane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Dichlorodifluoromethane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Diethyl ether	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Ethyl tert-butyl ether	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Ethylbenzene	ug/l	700		<0.1U	<0.1U	<0.1U	<0.1U
Isopropyl benzene	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Isopropyl Ether	ug/l	**		<0.1U	4.6	<0.1U	<0.1U
m/p-xylene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U

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Analytical Chemistry Report **Matrix: Water**

2794 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 06/29/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-004B	DW-004C	DW-004D	DW-004E
			Date:	06/29/2009	06/29/2009	06/29/2009	06/29/2009
			Depth (ft):	0	0	0	0
Methyl bromide	ug/l	**		<0.3U	<0.3U	<0.3U	<0.3U
Methyl chloride	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Methyl ethyl ketone	ug/l	**		2.6	2.4J	2.6	<1U
Methyl isobutylketone (MIBK)	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U
Methyl tert-butyl ether	ug/l	20		<0.2U	**214**	0.88J	<0.2U
Methylene bromide	ug/l	**		<0.3U	<0.3U	<0.3U	<0.3U
Methylene chloride	ug/l	5		<0.3U	<0.3U	<0.3U	<0.3U
n-Butylbenzene	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
n-Propylbenzene	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
o-Chlorotoluene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
o-Xylene	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
p-Chlorotoluene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
sec-Butylbenzene	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
sec-Dichloropropane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Styrene	ug/l	100		<0.2U	<0.2U	<0.2U	<0.2U
Tert-Amyl alcohol	ug/l	**		<2U	82.9	<2U	<2U
Tert-Amyl Ethyl Ether	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
tert-Butylalcohol	ug/l	**		<1.7U	1960	2280	2100
tert-Butylbenzene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Tetrachloroethylene	ug/l	5		<0.2U	<0.2U	<0.2U	<0.2U
Tetrahydrofuran	ug/l	**		10.7	<1.3U	<1.3U	<1.3U

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Analytical Chemistry Report **Matrix: Water**

2794 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 06/29/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	**Unit**	***Standard**	**Location:**	DW-004B	DW-004C	DW-004D	DW-004E
			Date:	06/29/2009	06/29/2009	06/29/2009	06/29/2009
			Depth (ft):	0	0	0	0
Toluene	ug/l	1000		<0.1U	<0.1U	<0.1U	<0.1U
trans-1,2-Di-chloroethylene	ug/l	100		<0.2U	<0.2U	<0.2U	<0.2U
trans-1,3-Dichloropropene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Trichloroethylene	ug/l	5		<0.1U	<0.1U	<0.1U	<0.1U
Trichlorofluoromethane	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Vinyl chloride	ug/l	2		<0.2U	<0.2U	<0.2U	<0.2U
Xylene (total)	ug/l	10000		<0.3U	<0.3U	<0.3U	<0.3U
Volatile/Semi-Volatile Organic Compounds (V/SVOCs)							
1,2,4-Trichlorobenzene	ug/l	70		<0.2U	<0.2U	<0.2U	<0.2U
Hexachlorobutadiene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
m-Dichlorobenzene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Naphthalene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
o-Dichlorobenzene	ug/l	600		<0.2U	<0.2U	<0.2U	<0.2U
p-Dichlorobenzene	ug/l	75		<0.2U	<0.2U	<0.2U	<0.2U

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REPSG
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Analytical Chemistry Report **Matrix: Water**

2802 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 06/29/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-005A	DW-005B	DW-005C	DW-005D
			Date:	06/29/2009	06/29/2009	06/29/2009	06/29/2009
			Depth (ft):	0	0	0	0
Not Otherwise Specified							
1,1,-dichloropropanone	ug/l	**		<1.6U	<1.6U	<1.6U	<1.6U
2-Nitropropane	ug/l	**		<1.4U	<1.4U	<1.4U	<1.4U
Acrylonitrile	ug/l	**		<0.4U	<0.4U	<0.4U	<0.4U
Allyl chloride	ug/l	**		<0.3U	<0.3U	<0.3U	<0.3U
Chloroacetonitrile	ug/l	**		<1U	<1U	<1U	<1U
Chlorobutane, 1-	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U
DBCP	ug/l	0.2		<0.2U	<0.2U	<0.2U	<0.2U
Dichlorofluoromethane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Ethyl cyanide	ug/l	**		<0.6U	<0.6U	<0.6U	<0.6U
Ethyl methacrylate	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Isopropanol	ug/l	**		<11U	<11U	<11U	<11U
Methacrylonitrile	ug/l	**		<0.3U	<0.3U	<0.3U	<0.3U
Methyl acrylate	ug/l	**		<0.3U	<0.3U	<0.3U	<0.3U
Methyl iodide	ug/l	**		<0.3U	<0.3U	<0.3U	<0.3U
Methyl methacrylate	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
n-Hexane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Pentachloroethane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Tert-Amyl Methyl Ether	ug/l	**		3.8	<0.2U	<0.2U	<0.2U
trans-1,4-Dichloro-2-butene	ug/l	**		<0.4U	<0.4U	<0.4U	<0.4U
Vinyl Acetate	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U

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Analytical Chemistry Report **Matrix: Water**

2802 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 06/29/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Semi-Volatile Organic Compounds (SVOCs)						
Hexachloroethane	ug/l	**	<1.4U	<1.4U	<1.4U	<1.4U
Nitrobenzene	ug/l	**	<2U	<2U	<2U	<2U
Volatile Organic Compounds (VOCs)						
1,1,1,2-Tetrachloroethane	ug/l	**	<0.2U	<0.2U	<0.2U	<0.2U
1,1,1-trichloroethane	ug/l	200	<0.2U	<0.2U	<0.2U	<0.2U
1,1,2,2-Tetrachloroethane	ug/l	**	<0.1U	<0.1U	<0.1U	<0.1U
1,1,2-Trichloroethane	ug/l	5	<0.1U	<0.1U	<0.1U	<0.1U
1,1-Dichloroethane	ug/l	**	<0.2U	<0.2U	<0.2U	<0.2U
1,1-Dichloroethylene	ug/l	7	<0.2U	<0.2U	<0.2U	<0.2U
1,1-Dichloropropene	ug/l	**	<0.2U	<0.2U	<0.2U	<0.2U
1,2,3-Trichlorobenzene	ug/l	**	<0.2U	<0.2U	<0.2U	<0.2U
1,2,3-Trichloropropane	ug/l	**	<0.2U	<0.2U	<0.2U	<0.2U
1,2-Dibromoethane	ug/l	**	<0.2U	<0.2U	<0.2U	<0.2U
1,2-Dichloroethane	ug/l	5	**6.6**	<0.2U	<0.2U	<0.2U
1,2-Dichloropropane	ug/l	**	<0.2U	<0.2U	<0.2U	<0.2U
1,3-Dichloropropane	ug/l	**	<0.1U	<0.1U	<0.1U	<0.1U
1,3-Dichloropropene	ug/l	**	<0.3U	<0.3U	<0.3U	<0.3U
1,4-Dioxane	ug/l	**	<1.6U	<1.6U	<1.6U	<1.6U
2-Hexanone	ug/l	**	<0.3U	<0.3U	<0.3U	<0.3U
Acetone	ug/l	**	<2.3U	<2.3U	<2.3U	<2.3U
Benzene	ug/l	5	<0.1U	<0.1U	<0.1U	<0.1U
Benzene, 1,2,4-trimethyl	ug/l	**	<0.1U	<0.1U	<0.1U	<0.1U

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REPSG
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Analytical Chemistry Report **Matrix: Water**

2802 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 06/29/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-005A	DW-005B	DW-005C	DW-005D
			Date:	06/29/2009	06/29/2009	06/29/2009	06/29/2009
			Depth (ft):	0	0	0	0
Benzene, 1,3,5-trimethyl-	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Bromobenzene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Bromodichloromethane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Bromoform	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Carbon disulfide	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Carbon tetrachloride	ug/l	5		<0.2U	<0.2U	<0.2U	<0.2U
Chlorobenzene	ug/l	100		<0.1U	<0.1U	<0.1U	<0.1U
Chlorobromomethane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Chloroethane	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Chloroform	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
cis-1,2-Dichloroethylene	ug/l	70		<0.3U	<0.3U	<0.3U	<0.3U
cis-1,3-Dichloropropene	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Cymene	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Dibromochloromethane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Dichlorodifluoromethane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Diethyl ether	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Ethyl tert-butyl ether	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Ethylbenzene	ug/l	700		<0.1U	<0.1U	<0.1U	<0.1U
Isopropyl benzene	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Isopropyl Ether	ug/l	**		6.4	<0.1U	<0.1U	<0.1U
m/p-xylene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U

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Analytical Chemistry Report **Matrix: Water**

2802 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 06/29/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-005A	DW-005B	DW-005C	DW-005D
			Date:	06/29/2009	06/29/2009	06/29/2009	06/29/2009
			Depth (ft):	0	0	0	0
Methyl bromide	ug/l	**		<0.3U	<0.3U	<0.3U	<0.3U
Methyl chloride	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Methyl ethyl ketone	ug/l	**		2.9	3.1	3.5	<1U
Methyl isobutylketone (MIBK)	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U
Methyl tert-butyl ether	ug/l	20		**514**	**32.8**	<0.2U	3.2
Methylene bromide	ug/l	**		<0.3U	<0.3U	<0.3U	<0.3U
Methylene chloride	ug/l	5		<0.3U	<0.3U	<0.3U	<0.3U
n-Butylbenzene	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
n-Propylbenzene	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
o-Chlorotoluene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
o-Xylene	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
p-Chlorotoluene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
sec-Butylbenzene	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
sec-Dichloropropane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Styrene	ug/l	100		<0.2U	<0.2U	<0.2U	<0.2U
Tert-Amyl alcohol	ug/l	**		102	18.1	<2U	<2U
Tert-Amyl Ethyl Ether	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
tert-Butylalcohol	ug/l	**		1310	1140	838	908
tert-Butylbenzene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Tetrachloroethylene	ug/l	5		<0.2U	<0.2U	<0.2U	<0.2U
Tetrahydrofuran	ug/l	**		<1.3U	13.2	11.1	9.8

** No Applicable Regulatory Standard

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REPSG
React Environmental
Professional Services Group, Inc.

Analytical Chemistry Report **Matrix: Water**

2802 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 06/29/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	**Unit**	***Standard**	**Location:**	DW-005A	DW-005B	DW-005C	DW-005D
			Date:	06/29/2009	06/29/2009	06/29/2009	06/29/2009
			Depth (ft):	0	0	0	0
Toluene	ug/l	1000		<0.1U	<0.1U	<0.1U	<0.1U
trans-1,2-Di-chloroethylene	ug/l	100		<0.2U	<0.2U	<0.2U	<0.2U
trans-1,3-Dichloropropene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Trichloroethylene	ug/l	5		<0.1U	<0.1U	<0.1U	<0.1U
Trichlorofluoromethane	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Vinyl chloride	ug/l	2		<0.2U	<0.2U	<0.2U	<0.2U
Xylene (total)	ug/l	10000		<0.3U	<0.3U	<0.3U	<0.3U
Volatile/Semi-Volatile Organic Compounds (V/SVOCs)							
1,2,4-Trichlorobenzene	ug/l	70		<0.2U	<0.2U	<0.2U	<0.2U
Hexachlorobutadiene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
m-Dichlorobenzene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Naphthalene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
o-Dichlorobenzene	ug/l	600		<0.2U	<0.2U	<0.2U	<0.2U
p-Dichlorobenzene	ug/l	75		<0.2U	<0.2U	<0.2U	<0.2U

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Analytical Chemistry Report **Matrix: Water**

2794 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 12/11/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-004 B	DW-004 C	DW-004 D	DW-004 E
			Date:	12/11/2009	12/11/2009	12/11/2009	12/11/2009
			Depth (ft):	0	0	0	0
Not Otherwise Specified							
1,1,-dichloropropanone	ug/l	**		<1.6U	<1.6U	<1.6U	<1.6U
2-Nitropropane	ug/l	**		<1.4U	<1.4U	<1.4U	<1.4U
Acrylonitrile	ug/l	**		<0.4U	<0.4U	<0.4U	<0.4U
Allyl chloride	ug/l	**		<0.3U	<0.3U	<0.3U	<0.3U
Chloroacetonitrile	ug/l	**		<1U	<1U	<1U	<1U
Chlorobutane, 1-	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U
DBCP	ug/l	0.2		<0.2U	<0.2U	<0.2U	<0.2U
Dichlorofluoromethane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Ethyl cyanide	ug/l	**		<0.6U	<0.6U	<0.6U	<0.6U
Ethyl methacrylate	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Isopropanol	ug/l	**		<11U	<11U	<11U	<11U
Methacrylonitrile	ug/l	**		<0.3U	<0.3U	<0.3U	<0.3U
Methyl acrylate	ug/l	**		<0.3U	<0.3U	<0.3U	<0.3U
Methyl iodide	ug/l	**		<0.3U	<0.3U	<0.3U	<0.3U
Methyl methacrylate	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
n-Hexane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Pentachloroethane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Tert-Amyl Methyl Ether	ug/l	**		<0.2U	1.9	<0.2U	<0.2U
trans-1,4-Dichloro-2-butene	ug/l	**		<0.4U	<0.4U	<0.4U	<0.4U
Vinyl Acetate	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U

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Analytical Chemistry Report **Matrix: Water**

2794 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 12/11/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Petroleum Screening Parameters						
Diesel Range Organics (DRO)	ug/l	**	88J	90J	71J	90J
Gasoline Range ORGANICS(GRO)	ug/l	**	29J	92.7J	31.3J	27.5J
Semi-Volatile Organic Compounds (SVOCs)						
Hexachloroethane	ug/l	**	<1.4U	<1.4U	<1.4U	<1.4U
Nitrobenzene	ug/l	**	<2U	<2U	<2U	<2U
Volatile Organic Compounds (VOCs)						
1,1,1,2-Tetrachloroethane	ug/l	**	<0.2U	<0.2U	<0.2U	<0.2U
1,1,1-trichloroethane	ug/l	200	<0.2U	<0.2U	<0.2U	<0.2U
1,1,2,2-Tetrachloroethane	ug/l	**	<0.1U	<0.1U	<0.1U	<0.1U
1,1,2-Trichloroethane	ug/l	5	<0.1U	<0.1U	<0.1U	<0.1U
1,1-Dichloroethane	ug/l	**	<0.2U	<0.2U	<0.2U	<0.2U
1,1-Dichloroethylene	ug/l	7	<0.2U	<0.2U	<0.2U	<0.2U
1,1-Dichloropropene	ug/l	**	<0.2U	<0.2U	<0.2U	<0.2U
1,2,3-Trichlorobenzene	ug/l	**	<0.2U	<0.2U	<0.2U	<0.2U
1,2,3-Trichloropropane	ug/l	**	<0.2U	<0.2U	<0.2U	<0.2U
1,2-Dibromoethane	ug/l	**	<0.2U	<0.2U	<0.2U	<0.2U
1,2-Dichloroethane	ug/l	5	<0.2U	**5.7**	<0.2U	<0.2U
1,2-Dichloropropane	ug/l	**	<0.2U	<0.2U	<0.2U	<0.2U
1,3-Dichloropropane	ug/l	**	<0.1U	<0.1U	<0.1U	<0.1U
1,3-Dichloropropene	ug/l	**	<0.3U	<0.3U	<0.3U	<0.3U
1,4-Dioxane	ug/l	**	<1.6U	<1.6U	<1.6U	<1.6U
2-Hexanone	ug/l	**	<0.3U	<0.3U	<0.3U	<0.3U

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Analytical Chemistry Report **Matrix: Water**

2794 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 12/11/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-004 B	DW-004 C	DW-004 D	DW-004 E
			Date:	12/11/2009	12/11/2009	12/11/2009	12/11/2009
			Depth (ft):	0	0	0	0
Acetone	ug/l	**		<2.3U	<2.3U	<2.3U	<2.3U
Benzene	ug/l	5		<0.1U	<0.1U	<0.1U	<0.1U
Benzene, 1,2,4-trimethyl	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Benzene, 1,3,5-trimethyl-	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Bromobenzene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Bromodichloromethane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Bromoform	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Carbon disulfide	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Carbon tetrachloride	ug/l	5		<0.2U	<0.2U	<0.2U	<0.2U
Chlorobenzene	ug/l	100		<0.1U	0.31J	<0.1U	<0.1U
Chlorobromomethane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Chloroethane	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Chloroform	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
cis-1,2-Dichloroethylene	ug/l	70		<0.3U	<0.3U	<0.3U	<0.3U
cis-1,3-Dichloropropene	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Cymene	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Dibromochloromethane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Dichlorodifluoromethane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Diethyl ether	ug/l	**		<0.2U	0.21J	<0.2U	<0.2U
Ethyl tert-butyl ether	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Ethylbenzene	ug/l	700		<0.1U	<0.1U	<0.1U	<0.1U

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Analytical Chemistry Report **Matrix: Water**

2794 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 12/11/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-004 B	DW-004 C	DW-004 D	DW-004 E
			Date:	12/11/2009	12/11/2009	12/11/2009	12/11/2009
			Depth (ft):	0	0	0	0
Isopropyl benzene	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Isopropyl Ether	ug/l	**		<0.1U	4.4	<0.1U	<0.1U
m/p-xylene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Methyl bromide	ug/l	**		<0.3U	<0.3U	<0.3U	<0.3U
Methyl chloride	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Methyl ethyl ketone	ug/l	**		6.8	<1U	<1U	<1U
Methyl isobutylketone (MIBK)	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U
Methyl tert-butyl ether	ug/l	20		<0.2U	**254**	12.6	<0.2U
Methylene bromide	ug/l	**		<0.3U	<0.3U	<0.3U	<0.3U
Methylene chloride	ug/l	5		<0.3U	<0.3U	<0.3U	<0.3U
n-Butylbenzene	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
n-Propylbenzene	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
o-Chlorotoluene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
o-Xylene	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
p-Chlorotoluene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
sec-Butylbenzene	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
sec-Dichloropropane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Styrene	ug/l	100		<0.2U	<0.2U	<0.2U	<0.2U
Tert-Amyl alcohol	ug/l	**		<2U	101	21.7	<2U
Tert-Amyl Ethyl Ether	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
tert-Butylalcohol	ug/l	**		112	2440	2370	2330

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Analytical Chemistry Report **Matrix: Water**

2794 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 12/11/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-004 B	DW-004 C	DW-004 D	DW-004 E
			Date:	12/11/2009	12/11/2009	12/11/2009	12/11/2009
			Depth (ft):	0	0	0	0
tert-Butylbenzene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Tetrachloroethylene	ug/l	5		<0.2U	<0.2U	<0.2U	<0.2U
Tetrahydrofuran	ug/l	**		29.3	5.9	32.6	4.3
Toluene	ug/l	1000		<0.1U	0.12J	<0.1U	<0.1U
trans-1,2-Di-chloroethylene	ug/l	100		<0.2U	<0.2U	<0.2U	<0.2U
trans-1,3-Dichloropropene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Trichloroethylene	ug/l	5		<0.1U	<0.1U	<0.1U	<0.1U
Trichlorofluoromethane	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Vinyl chloride	ug/l	2		<0.2U	<0.2U	<0.2U	<0.2U
Xylene (total)	ug/l	10000		<0.3U	<0.3U	<0.3U	<0.3U
Volatile/Semi-Volatile Organic Compounds (V/SVOCs)							
1,2,4-Trichlorobenzene	ug/l	70		<0.2U	<0.2U	<0.2U	<0.2U
Hexachlorobutadiene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
m-Dichlorobenzene	ug/l	**		<0.2U	0.3J	<0.2U	<0.2U
Naphthalene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
o-Dichlorobenzene	ug/l	600		<0.2U	<0.2U	<0.2U	<0.2U
p-Dichlorobenzene	ug/l	75		<0.2U	0.7	<0.2U	<0.2U

** No Applicable Regulatory Standard

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REPSG
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Analytical Chemistry Report **Matrix: Water**

2802 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 12/11/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-005 A	DW-005 B	DW-005 C	DW-005 D
			Date:	12/11/2009	12/11/2009	12/11/2009	12/11/2009
			Depth (ft):	0	0	0	0
Not Otherwise Specified							
1,1,-dichloropropanone	ug/l	**		<1.6U	<1.6U	<1.6U	<1.6U
2-Nitropropane	ug/l	**		<1.4U	<1.4U	<1.4U	<1.4U
Acrylonitrile	ug/l	**		<0.4U	<0.4U	<0.4U	<0.4U
Allyl chloride	ug/l	**		<0.3U	<0.3U	<0.3U	<0.3U
Chloroacetonitrile	ug/l	**		<1U	<1U	<1U	<1U
Chlorobutane, 1-	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U
DBCP	ug/l	0.2		<0.2U	<0.2U	<0.2U	<0.2U
Dichlorofluoromethane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Ethyl cyanide	ug/l	**		<0.6U	<0.6U	<0.6U	<0.6U
Ethyl methacrylate	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Isopropanol	ug/l	**		<11U	<11U	<11U	<11U
Methacrylonitrile	ug/l	**		<0.3U	<0.3U	<0.3U	<0.3U
Methyl acrylate	ug/l	**		<0.3U	<0.3U	<0.3U	<0.3U
Methyl iodide	ug/l	**		<0.3U	<0.3U	<0.3U	<0.3U
Methyl methacrylate	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
n-Hexane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Pentachloroethane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Tert-Amyl Methyl Ether	ug/l	**		1.4	1.3	<0.2U	<0.2U
trans-1,4-Dichloro-2-butene	ug/l	**		<0.4U	<0.4U	<0.4U	<0.4U
Vinyl Acetate	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U

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REPSG
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Analytical Chemistry Report **Matrix: Water**

2802 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 12/11/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Petroleum Screening Parameters						
Diesel Range Organics (DRO)	ug/l	**	75J	140J	150J	170J
Gasoline Range ORGANICS(GRO)	ug/l	**	33.3J	35.1J	27.1J	25.3J
Semi-Volatile Organic Compounds (SVOCs)						
Hexachloroethane	ug/l	**	<1.4U	<1.4U	<1.4U	<1.4U
Nitrobenzene	ug/l	**	<2U	<2U	<2U	<2U
Volatile Organic Compounds (VOCs)						
1,1,1,2-Tetrachloroethane	ug/l	**	<0.2U	<0.2U	<0.2U	<0.2U
1,1,1-trichloroethane	ug/l	200	<0.2U	<0.2U	<0.2U	<0.2U
1,1,2,2-Tetrachloroethane	ug/l	**	<0.1U	<0.1U	<0.1U	<0.1U
1,1,2-Trichloroethane	ug/l	5	<0.1U	<0.1U	<0.1U	<0.1U
1,1-Dichloroethane	ug/l	**	<0.2U	<0.2U	<0.2U	<0.2U
1,1-Dichloroethylene	ug/l	7	<0.2U	<0.2U	<0.2U	<0.2U
1,1-Dichloropropene	ug/l	**	<0.2U	<0.2U	<0.2U	<0.2U
1,2,3-Trichlorobenzene	ug/l	**	<0.2U	<0.2U	<0.2U	<0.2U
1,2,3-Trichloropropane	ug/l	**	<0.2U	<0.2U	<0.2U	<0.2U
1,2-Dibromoethane	ug/l	**	<0.2U	<0.2U	<0.2U	<0.2U
1,2-Dichloroethane	ug/l	5	1.2	1.1	<0.2U	<0.2U
1,2-Dichloropropane	ug/l	**	<0.2U	<0.2U	<0.2U	<0.2U
1,3-Dichloropropane	ug/l	**	<0.1U	<0.1U	<0.1U	<0.1U
1,3-Dichloropropene	ug/l	**	<0.3U	<0.3U	<0.3U	<0.3U
1,4-Dioxane	ug/l	**	<1.6U	<1.6U	<1.6U	<1.6U
2-Hexanone	ug/l	**	<0.3U	<0.3U	<0.3U	<0.3U

** No Applicable Regulatory Standard

Exceedences of the regulatory standard are printed in bold. # = Reporting limit exceeds regulatory standard. NOC = Not of Concern.

QUALIFIERS: U = Constituent not detected above Method Detection Limit (MDL). J = Estimated Value. < = Indicates that the reported concentration is the Method Detection Limit (MDL). D = Compound identified at a secondary dilution factor. B = Analyte reported in associated field or trip blank. N = Tentatively Identified Compound (TIC). Y = Tentatively Identified Compound (TIC) also identified in Method Blank. E = Reported result is over instrument calibration range. This result is an estimate; the true result may be higher. C = Calibration verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.

REPSG
React Environmental
Professional Services Group, Inc.

Analytical Chemistry Report **Matrix: Water**

2802 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 12/11/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-005 A	DW-005 B	DW-005 C	DW-005 D
			Date:	12/11/2009	12/11/2009	12/11/2009	12/11/2009
			Depth (ft):	0	0	0	0
Acetone	ug/l	**		<2.3U	<2.3U	<2.3U	<2.3U
Benzene	ug/l	5		<0.1U	<0.1U	<0.1U	<0.1U
Benzene, 1,2,4-trimethyl	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Benzene, 1,3,5-trimethyl-	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Bromobenzene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Bromodichloromethane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Bromoform	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Carbon disulfide	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Carbon tetrachloride	ug/l	5		<0.2U	<0.2U	<0.2U	<0.2U
Chlorobenzene	ug/l	100		<0.1U	<0.1U	<0.1U	<0.1U
Chlorobromomethane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Chloroethane	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Chloroform	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
cis-1,2-Dichloroethylene	ug/l	70		<0.3U	<0.3U	<0.3U	<0.3U
cis-1,3-Dichloropropene	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Cymene	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Dibromochloromethane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Dichlorodifluoromethane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Diethyl ether	ug/l	**		0.33J	0.31J	<0.2U	<0.2U
Ethyl tert-butyl ether	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Ethylbenzene	ug/l	700		<0.1U	<0.1U	<0.1U	<0.1U

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Analytical Chemistry Report **Matrix: Water**

2802 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 12/11/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-005 A	DW-005 B	DW-005 C	DW-005 D
			Date:	12/11/2009	12/11/2009	12/11/2009	12/11/2009
			Depth (ft):	0	0	0	0
Isopropyl benzene	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Isopropyl Ether	ug/l	**		1.3	1.1	<0.1U	<0.1U
m/p-xylene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Methyl bromide	ug/l	**		<0.3U	<0.3U	<0.3U	<0.3U
Methyl chloride	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Methyl ethyl ketone	ug/l	**		<1U	<1U	<1U	<1U
Methyl isobutylketone (MIBK)	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U
Methyl tert-butyl ether	ug/l	20		**130**	**122**	0.47J	0.36J
Methylene bromide	ug/l	**		<0.3U	<0.3U	<0.3U	<0.3U
Methylene chloride	ug/l	5		<0.3U	<0.3U	<0.3U	<0.3U
n-Butylbenzene	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
n-Propylbenzene	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
o-Chlorotoluene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
o-Xylene	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
p-Chlorotoluene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
sec-Butylbenzene	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
sec-Dichloropropane	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Styrene	ug/l	100		<0.2U	<0.2U	<0.2U	<0.2U
Tert-Amyl alcohol	ug/l	**		10.9	10.7	<2U	<2U
Tert-Amyl Ethyl Ether	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
tert-Butylalcohol	ug/l	**		139	119	518	243

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Analytical Chemistry Report **Matrix: Water**

2802 Northeast Rd North East, Maryland **REPSG Project No.: 005977** **Sample Date: 12/11/2009**

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-005 A	DW-005 B	DW-005 C	DW-005 D
			Date:	12/11/2009	12/11/2009	12/11/2009	12/11/2009
			Depth (ft):	0	0	0	0
tert-Butylbenzene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Tetrachloroethylene	ug/l	5		<0.2U	<0.2U	<0.2U	<0.2U
Tetrahydrofuran	ug/l	**		2.3J	<1.3U	8.1	9.4
Toluene	ug/l	1000		<0.1U	0.16J	<0.1U	<0.1U
trans-1,2-Di-chloroethylene	ug/l	100		<0.2U	<0.2U	<0.2U	<0.2U
trans-1,3-Dichloropropene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Trichloroethylene	ug/l	5		<0.1U	<0.1U	<0.1U	<0.1U
Trichlorofluoromethane	ug/l	**		<0.1U	<0.1U	<0.1U	<0.1U
Vinyl chloride	ug/l	2		<0.2U	<0.2U	<0.2U	<0.2U
Xylene (total)	ug/l	10000		<0.3U	<0.3U	<0.3U	<0.3U
Volatile/Semi-Volatile Organic Compounds (V/SVOCs)							
1,2,4-Trichlorobenzene	ug/l	70		<0.2U	<0.2U	<0.2U	<0.2U
Hexachlorobutadiene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
m-Dichlorobenzene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
Naphthalene	ug/l	**		<0.2U	<0.2U	<0.2U	<0.2U
o-Dichlorobenzene	ug/l	600		<0.2U	<0.2U	<0.2U	<0.2U
p-Dichlorobenzene	ug/l	75		0.28J	0.31J	<0.2U	<0.2U

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ATTACHMENT 3: REPSG STANDARD OPERATING PROCEDURES

Equipment Requirements:

- Decontamination supplies
- Sample bottles
- Preservation supplies
- Shipping containers
- Field documentation material

Procedures:

1. Decontamination Procedures

Non-aqueous matrix field sampling equipment cleaning and decontamination procedures are as follows:

1. Laboratory grade glassware detergent and tap water scrub to remove visual contamination.
2. Generous tap water rinse.
3. Distilled and de-ionized water rinse.

All sampling equipment is decontaminated prior to use, and field decontaminated between each separate sampling event.

2. Soil Sampling

1. Bucket Auger (to be used for: BNS, TPH, TOC, Acid Extractables)

a) Remove unnecessary non-soil material from the sampling point.
b) Attach the bucket and handle to an extension rod.
c) Continue boring until the desired depth is attained.
d) Use a second decontaminated auger to collect the sample.
e) Wearing new surgical gloves, transfer the sample using a decontaminated hand trowel, into an appropriate, labeled container.
f) When collecting samples at depths greater than 12 inches, it is advisable to discard 1/2 inch of material on the top of the auger due to cave in.

2. Soil Corer (to be used for Volatile Organics)

a) Insert collection tube into the sampler
b) Remove unnecessary non-soil material from the sampling point.
c) Attach the corer and handle to an extension rod.
d) Continue boring until the desired depth is attained.
e) Wearing new surgical gloves, remove the collection tube and transfer to a sample container.

3. Hand Trowel

a) Clear surface debris
b) Collect sample from 0-24 inches using a decontaminated hand trowel
c) Wearing new surgical gloves, transfer the sample to the container

4. Backhoe Sampling

a) Begin with a steam cleaned backhoe
b) Operate the backhoe in a deliberate fashion removing <6 inches of soil per scoop
c) Once selected depth is attained, steam clean backhoe bucket
d) Excavate sample into bucket
e) Wearing new surgical gloves, remove a sample, using a decontaminated hand trowel. The sample is obtained from the front of the bucket, in an area not in contact with the machinery surface.
f) Place the sample into a decontaminated stainless steel bucket, and mix the sample to homogenize
g) Place the homogenized sample into an appropriate, labeled sampling container.

5. Split Spoon Sampling

a) Begin with decontaminated stainless steel split spoon sampler
b) Advance Split Spoon to desired depth
c) Wearing new surgical gloves, retrieve the sampler
d) Split the sampler and retrieve the soil core
e) Place the undisturbed soil core into an appropriate, labeled sampling container.

6. Manual Geoprobe

a) Insert collection tube into the sampler
b) Attach the corer and handle to an extension rod
c) Insert coring point and primary extension rod
d) Attach extension coupling, reverse- thread stopper, and anvil to the corer
e) Hammer corer to desired depth and release the reverse-thread stopper
f) Continue to hammer corer to collect soil matrix from desired depth
g) Wearing new surgical gloves, remove the collection tube and transfer to a sample container
h) Repeat decontamination procedures prior to re-use

7. EnCore™ Samplers

a) Using T-handle, push sampler into soil until coring body is completely full
b) Remove sampler form soil and wipe excess soil from coring body exterior
c) Cap coring body while it is still on T-handle. Push and twist cap over bottom until grooves on locking arms seat over ridge on coring body. Cap must be seated to seal sampler.

d) Remove the capped sampler from T-handle and lock plunger by rotating plunger rod counter clockwise until wings rest firmly against tab
e) Attach completed label to cap on coring body and return encore to zipper bag
f) Seal bag and put on ice

3. Sample Preservation and Transport

1. Samples will be transferred from sampling devices to appropriately preserved and labeled sampling containers.

2. After they are packaged, samples will be placed into a cooler and maintained at 4^0C immediately.

3. Samples will be delivered, within allowable holding times, with an appropriate chain of custody, to a state certified laboratory for analysis.[1]

[1] Sampling Protocol based on ASTM Standard D4700, Description and Sampling of Contaminated Soils: A Field Pocket Guide (EPA/625/12-91/002)

REPSG
React Environmental
Professional Services Group, Inc.

GROUNDWATER SAMPLING PROTOCOL

The following is the standard sampling procedure used by React Environmental Professional Services Group, Inc. for the purpose of sampling ground water from monitoring wells[1].

Purging

All equipment entering each of the wells is dedicated solely to that well. All equipment was decontaminated and handled with new surgical gloves throughout the sampling procedure.
Immediately prior to sampling, the technician records field measurements of indicator parameters such as: temperature, pH, specific conductance and dissolved oxygen. These parameters are measured in the purge water during purging until they stabilize. This is done to allow a representative sample of the aquifer to flow into the well.

Sample Collection

All equipment and entering the well, and all sampling containers are safely stored away from potential sources of contamination during transportation. Surgical gloves are changed between each sample location.

Ground Water Sampling

After evacuation of the required volume of water from the well, a representative ground water sample is developed. A decontaminated Teflon Bottom-Fill Check Valve Bailer is lowered in the well by using a new length of PTFE cord. The bailer is retrieved and the sample is transferred to the appropriate containers. Samples analyzed for volatile organic compounds are collected utilizing VOA samplers.

VOA samplers are inserted into the bottom of the bailer, allowing samples to be collected without induced volatilization through top of bailer sample collection techniques. Vials are filled, leaving no headspace or air bubbles, and sealed. All sample containers are labeled on-site and stored for transport to the lab.

[1] Sampling protocol developed in accordance with ASTM Standard D 4448.

P.O. Box 5377
6901 Kingsessing Avenue, Suite 201
Philadelphia, PA 19142-0377

215 729.3220
215 729.1557 (Fax)
www.repsg.com

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React Environmental
Professional Services Group, Inc.

WELL WATER SAMPLING PROTOCOL

The following is the standard sampling procedure used by React Environmental Professional Services Group, Inc. for the purpose of sampling ground water from drinking wells.

Purging

Immediately prior to sampling, the technician must purge, or evacuate, three to five times the well volume. This is done to remove stagnant water and allow a representative sample of the aquifer to flow into the well. Evacuation is done by allowing a tap to run for 15 minutes or longer.

Sample Collection

Sampling should be collected from the tap closest to the pump well. If the samples are collected after a treatment unit, the size, and purpose of the unit should be noted on sample sheets and in the field logbook. All screens, if they exist, should be removed prior to sampling for bacteria, or for volatile organics.

All sampling containers are safely stored away from potential sources of contamination during transportation. Surgical gloves are changed between each sample location.

Ground Water Sampling

Water is transferred to the appropriate containers directly from the tap. Vials are filled, leaving no headspace or air bubbles, and sealed. All sample containers are labeled on-site and stored for transport to the lab.

P.O. Box 5377
6901 Kingsessing Avenue, Suite 201
Philadelphia, PA 19142-0377

215 729.3220
215 729.1557 (Fax)
www.repsg.com

ATTACHMENT 4: ANALYTICAL LABORATORY REPORTS

ANALYTICAL LABORATORY SERVICES, INC.
www.analyticallab.com
NELAP Accredited
PA 22-293 NJ PA010
ACCREDITED IN ACCORDANCE WITH nelac
34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

Certificate of Analysis

Project Name:	**MD SITE - SOILS - MDE -REV**	Workorder:	**9780014**
Purchase Order:	**2975**	Workorder ID:	**Groundwater (03/12/09)**

Mr. Mark Kuczynski
REPSG
6901 Kingsessing Ave., Ste 201
PO Box 5377
Philadelphia, PA 19142

March 23, 2009

Dear Mr. Kuczynski,

Enclosed are the analytical results for samples received by the laboratory on Friday, March 13, 2009

ALSI is a National Environmental Laboratory Accreditation Conference (NELAC) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAC.

If you have any questions regarding this certificate of analysis, please contact Anna Milliken (Project Coordinator) or Anna G Milliken (Laboratory Manager) at (717) 944-5541.

Please visit us at www.analyticallab.com for a listing of ALSI's NELAC accreditations and Scope of Work, as well as other links to Water Quality documentation on the internet.

This laboratory report may not be reproduced, except in full, without the written approval of ALSI.

NOTE: ALSI has changed the report generation tool and while we have tried to retain the existing format, you will notice some changes in the laboratory report. Please feel free to contact ALSI in case you have any questions.

Analytical Laboratory Services, Inc.

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Anna G Milliken
Laboratory Manager

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SAMPLE SUMMARY

Workorder: 9780014 Groundwater (03/12/09) Discard Date: 04/06/2009

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
9780014001	MW-001_20090312_N	Ground Water	3/12/09 11:45	3/13/09 20:08	Laura Hasick
9780014002	MW-002_20090312_N	Ground Water	3/12/09 12:50	3/13/09 20:08	Laura Hasick
9780014003	MW-003_20090312_N	Ground Water	3/12/09 10:25	3/13/09 20:08	Laura Hasick
9780014004	MW-005_20090312_N	Ground Water	3/12/09 11:10	3/13/09 20:08	Laura Hasick
9780014005	MW-006_20090312_N	Ground Water	3/12/09 13:40	3/13/09 20:08	Laura Hasick
9780014006	MW-007_20090312_N	Ground Water	3/12/09 09:50	3/13/09 20:08	Laura Hasick
9780014007	Duplicate-001_20090312_FD	Ground Water	3/12/09 00:00	3/13/09 20:08	Laura Hasick
9780014008	Field Blank_20090312_FB	Ground Water	3/12/09 12:05	3/13/09 20:08	Laura Hasick
9780014009	Trip Blank_20090312_TB	Ground Water	3/12/09 20:08	3/13/09 20:08	Laura Hasick

Workorder Comments:

Notes

-- Samples collected by ALSI personnel are done so in accordance with the procedures set forth in the ALSI Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

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ANALYTICAL RESULTS

Workorder: 9780014 Groundwater (03/12/09)

Lab ID: **9780014001** Date Collected: 3/12/2009 11:45 Matrix: Ground Water

Sample ID: **MW-001_20090312_N** Date Received: 3/13/2009 20:08

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	7.6	mg/L		4.0	0.50	SW846 8015D	3/17/09	DJB	3/20/09 12:53	KJH	A1
Gasoline Range Organics	11300	ug/L		500	145	SW846 8015D			3/16/09 13:02	TEH	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	81.5	%		40-117		SW846 8015D	3/17/09	DJB	3/20/09 12:53	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	128	%		90-129		SW846 8015D			3/16/09 13:02	TEH	E
VOLATILE ORGANICS											
Acetone	ND	ug/L		100	40.0	SW846 8260B			3/17/09 01:17	DD	C
tert-Amyl methyl ether	ND	ug/L		20.0	8.0	SW846 8260B			3/17/09 01:17	DD	C
tert-Amyl Alcohol	4590	ug/L		50.0	5.0	SW846 8260B			3/17/09 01:17	DD	C
tert-Amyl Ethylether	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 01:17	DD	C
Benzene	10500	ug/L		200	80.0	SW846 8260B			3/19/09 00:33	DD	D
Bromochloromethane	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 01:17	DD	C
Bromodichloromethane	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 01:17	DD	C
Bromoform	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 01:17	DD	C
Bromomethane	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 01:17	DD	C
2-Butanone	ND	ug/L		100	30.0	SW846 8260B			3/17/09 01:17	DD	C
tert.- Butyl Alcohol	485	ug/L		100	30.0	SW846 8260B			3/17/09 01:17	DD	C
Carbon Disulfide	ND	ug/L		10.0	1.0	SW846 8260B			3/17/09 01:17	DD	C
Carbon Tetrachloride	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 01:17	DD	C
Chlorobenzene	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 01:17	DD	C
Chlorodibromomethane	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 01:17	DD	C
Chloroethane	ND	ug/L		10.0	3.0	SW846 8260B			3/17/09 01:17	DD	C
Chloroform	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 01:17	DD	C
Chloromethane	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 01:17	DD	C
1,2-Dibromo-3-chloropropane	ND	ug/L		70.0	24.0	SW846 8260B			3/17/09 01:17	DD	C
1,2-Dibromoethane	ND	ug/L		10.0	3.0	SW846 8260B			3/17/09 01:17	DD	C
1,1-Dichloroethane	ND	ug/L		10.0	1.0	SW846 8260B			3/17/09 01:17	DD	C
1,2-Dichloroethane	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 01:17	DD	C
1,1-Dichloroethene	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 01:17	DD	C
cis-1,2-Dichloroethene	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 01:17	DD	C
trans-1,2-Dichloroethene	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 01:17	DD	C
1,2-Dichloropropane	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 01:17	DD	C
cis-1,3-Dichloropropene	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 01:17	DD	C
trans-1,3-Dichloropropene	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 01:17	DD	C
Diisopropyl ether	20.0	ug/L		10.0	1.0	SW846 8260B			3/17/09 01:17	DD	C
Ethyl tert-butyl ether	ND	ug/L		10.0	1.0	SW846 8260B			3/17/09 01:17	DD	C
Ethylbenzene	779	ug/L		10.0	3.0	SW846 8260B			3/17/09 01:17	DD	C
2-Hexanone	ND	ug/L		50.0	7.0	SW846 8260B			3/17/09 01:17	DD	C
Methyl t-Butyl Ether	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 01:17	DD	C
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		50.0	13.0	SW846 8260B			3/17/09 01:17	DD	C

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ANALYTICAL RESULTS

Workorder: 9780014 Groundwater (03/12/09)

Lab ID: **9780014001** Date Collected: 3/12/2009 11:45 Matrix: Ground Water

Sample ID: **MW-001_20090312_N** Date Received: 3/13/2009 20:08

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	ND	ug/L		10.0	1.0	SW846 8260B			3/17/09 01:17	DD	C
Styrene	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 01:17	DD	C
1,1,2,2-Tetrachloroethane	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 01:17	DD	C
Tetrachloroethene	ND	ug/L		10.0	4.0	SW846 8260B			3/17/09 01:17	DD	C
Toluene	468	ug/L		10.0	2.0	SW846 8260B			3/17/09 01:17	DD	C
Total Xylenes	1800	ug/L		30.0	4.0	SW846 8260B			3/17/09 01:17	DD	C
1,1,1-Trichloroethane	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 01:17	DD	C
1,1,2-Trichloroethane	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 01:17	DD	C
Trichloroethene	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 01:17	DD	C
Vinyl Chloride	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 01:17	DD	C
o-Xylene	107	ug/L		10.0	2.0	SW846 8260B			3/17/09 01:17	DD	C
mp-Xylene	1690	ug/L		20.0	3.0	SW846 8260B			3/17/09 01:17	DD	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	97.6	%		62-133		SW846 8260B			3/17/09 01:17	DD	C
Dibromofluoromethane (S)	100	%		78-116		SW846 8260B			3/17/09 01:17	DD	C
4-Bromofluorobenzene (S)	106	%		79-114		SW846 8260B			3/17/09 01:17	DD	C
Toluene-d8 (S)	101	%		76-127		SW846 8260B			3/17/09 01:17	DD	C
1,2-Dichloroethane-d4 (S)	96.8	%		62-133		SW846 8260B			3/19/09 00:33	DD	D
4-Bromofluorobenzene (S)	79.1	%		79-114		SW846 8260B			3/19/09 00:33	DD	D
Toluene-d8 (S)	103	%		76-127		SW846 8260B			3/19/09 00:33	DD	D
Dibromofluoromethane (S)	83.2	%		78-116		SW846 8260B			3/19/09 00:33	DD	D

Sample Comments:

The gasoline range organics analysis for this sample was diluted due to the amount of analyte present. The detection limit was raised accordingly.

The GCMS volatiles analysis was performed at a dilution due to the level of target compounds.

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected. Reporting limits were adjusted accordingly.

This laboratory report was reprinted due to a modification to one or more sample reports in this workorder. The necessity for this is due to the consecutive numbering of samples in a given workorder.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9780014 Groundwater (03/12/09)

Lab ID: **9780014002** Date Collected: 3/12/2009 12:50 Matrix: Ground Water

Sample ID: **MW-002_20090312_N** Date Received: 3/13/2009 20:08

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	0.91J	mg/L		1.6	0.20	SW846 8015D	3/17/09	DJB	3/20/09 18:06	KJH	A1
Gasoline Range Organics	80.4J	ug/L		100	29.1	SW846 8015D			3/16/09 10:39	TEH	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	86.1	%		40-117		SW846 8015D	3/17/09	DJB	3/20/09 18:06	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	111	%		90-129		SW846 8015D			3/16/09 10:39	TEH	E
VOLATILE ORGANICS											
Acetone	ND	ug/L		10.0	4.0	SW846 8260B			3/16/09 23:37	DD	C
tert-Amyl methyl ether	ND	ug/L		2.0	0.80	SW846 8260B			3/16/09 23:37	DD	C
tert-Amyl Alcohol	ND	ug/L		5.0	0.50	SW846 8260B			3/16/09 23:37	DD	C
tert-Amyl Ethylether	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:37	DD	C
Benzene	53.5	ug/L		1.0	0.40	SW846 8260B			3/16/09 23:37	DD	C
Bromochloromethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:37	DD	C
Bromodichloromethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:37	DD	C
Bromoform	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:37	DD	C
Bromomethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:37	DD	C
2-Butanone	ND	ug/L		10.0	3.0	SW846 8260B			3/16/09 23:37	DD	C
tert.- Butyl Alcohol	27.4	ug/L		10.0	3.0	SW846 8260B			3/16/09 23:37	DD	C
Carbon Disulfide	ND	ug/L		1.0	0.10	SW846 8260B			3/16/09 23:37	DD	C
Carbon Tetrachloride	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:37	DD	C
Chlorobenzene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:37	DD	C
Chlorodibromomethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:37	DD	C
Chloroethane	ND	ug/L		1.0	0.30	SW846 8260B			3/16/09 23:37	DD	C
Chloroform	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:37	DD	C
Chloromethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:37	DD	C
1,2-Dibromo-3-chloropropane	ND	ug/L		7.0	2.4	SW846 8260B			3/16/09 23:37	DD	C
1,2-Dibromoethane	ND	ug/L		1.0	0.30	SW846 8260B			3/16/09 23:37	DD	C
1,1-Dichloroethane	ND	ug/L		1.0	0.10	SW846 8260B			3/16/09 23:37	DD	C
1,2-Dichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:37	DD	C
1,1-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:37	DD	C
cis-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:37	DD	C
trans-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:37	DD	C
1,2-Dichloropropane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:37	DD	C
cis-1,3-Dichloropropene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:37	DD	C
trans-1,3-Dichloropropene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:37	DD	C
Diisopropyl ether	ND	ug/L		1.0	0.10	SW846 8260B			3/16/09 23:37	DD	C
Ethyl tert-butyl ether	ND	ug/L		1.0	0.10	SW846 8260B			3/16/09 23:37	DD	C
Ethylbenzene	1.3	ug/L		1.0	0.30	SW846 8260B			3/16/09 23:37	DD	C
2-Hexanone	ND	ug/L		5.0	0.70	SW846 8260B			3/16/09 23:37	DD	C
Methyl t-Butyl Ether	14.9	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:37	DD	C
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		5.0	1.3	SW846 8260B			3/16/09 23:37	DD	C

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ANALYTICAL RESULTS

Workorder: 9780014 Groundwater (03/12/09)

Lab ID: **9780014002** Date Collected: 3/12/2009 12:50 Matrix: Ground Water

Sample ID: **MW-002_20090312_N** Date Received: 3/13/2009 20:08

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	ND	ug/L		1.0	0.10	SW846 8260B			3/16/09 23:37	DD	C
Styrene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:37	DD	C
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:37	DD	C
Tetrachloroethene	ND	ug/L		1.0	0.40	SW846 8260B			3/16/09 23:37	DD	C
Toluene	7.0	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:37	DD	C
Total Xylenes	10	ug/L		3.0	0.40	SW846 8260B			3/16/09 23:37	DD	C
1,1,1-Trichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:37	DD	C
1,1,2-Trichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:37	DD	C
Trichloroethene	2.0	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:37	DD	C
Vinyl Chloride	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:37	DD	C
o-Xylene	3.7	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:37	DD	C
mp-Xylene	6.2	ug/L		2.0	0.30	SW846 8260B			3/16/09 23:37	DD	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	95.1	%		62-133		SW846 8260B			3/16/09 23:37	DD	C
4-Bromofluorobenzene (S)	107	%		79-114		SW846 8260B			3/16/09 23:37	DD	C
Dibromofluoromethane (S)	101	%		78-116		SW846 8260B			3/16/09 23:37	DD	C
Toluene-d8 (S)	102	%		76-127		SW846 8260B			3/16/09 23:37	DD	C

Sample Comments:

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected in the sample. Reporting limits were adjusted accordingly.

This laboratory report was reprinted due to a modification to one or more sample reports in this workorder. The necessity for this is due to the consecutive numbering of samples in a given workorder.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9780014 Groundwater (03/12/09)

Lab ID: **9780014003** Date Collected: 3/12/2009 10:25 Matrix: Ground Water

Sample ID: **MW-003_20090312_N** Date Received: 3/13/2009 20:08

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	1.9	mg/L		1.6	0.20	SW846 8015D	3/17/09	DJB	3/20/09 18:50	KJH	A1
Gasoline Range Organics	12700	ug/L		500	145	SW846 8015D			3/16/09 11:52	TEH	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	89.5	%		40-117		SW846 8015D	3/17/09	DJB	3/20/09 18:50	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	113	%		90-129		SW846 8015D			3/16/09 11:52	TEH	E
VOLATILE ORGANICS											
Acetone	123	ug/L		50.0	20.0	SW846 8260B			3/17/09 00:11	DD	C
tert-Amyl methyl ether	ND	ug/L		10.0	4.0	SW846 8260B			3/17/09 00:11	DD	C
tert-Amyl Alcohol	ND	ug/L		25.0	2.5	SW846 8260B			3/17/09 00:11	DD	C
tert-Amyl Ethylether	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:11	DD	C
Benzene	3.6J	ug/L		5.0	2.0	SW846 8260B			3/17/09 00:11	DD	C
Bromochloromethane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:11	DD	C
Bromodichloromethane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:11	DD	C
Bromoform	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:11	DD	C
Bromomethane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:11	DD	C
2-Butanone	ND	ug/L		50.0	15.0	SW846 8260B			3/17/09 00:11	DD	C
tert.- Butyl Alcohol	ND	ug/L		50.0	15.0	SW846 8260B			3/17/09 00:11	DD	C
Carbon Disulfide	ND	ug/L		5.0	0.50	SW846 8260B			3/17/09 00:11	DD	C
Carbon Tetrachloride	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:11	DD	C
Chlorobenzene	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:11	DD	C
Chlorodibromomethane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:11	DD	C
Chloroethane	ND	ug/L		5.0	1.5	SW846 8260B			3/17/09 00:11	DD	C
Chloroform	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:11	DD	C
Chloromethane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:11	DD	C
1,2-Dibromo-3-chloropropane	ND	ug/L		35.0	12.0	SW846 8260B			3/17/09 00:11	DD	C
1,2-Dibromoethane	ND	ug/L		5.0	1.5	SW846 8260B			3/17/09 00:11	DD	C
1,1-Dichloroethane	ND	ug/L		5.0	0.50	SW846 8260B			3/17/09 00:11	DD	C
1,2-Dichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:11	DD	C
1,1-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:11	DD	C
cis-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:11	DD	C
trans-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:11	DD	C
1,2-Dichloropropane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:11	DD	C
cis-1,3-Dichloropropene	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:11	DD	C
trans-1,3-Dichloropropene	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:11	DD	C
Diisopropyl ether	ND	ug/L		5.0	0.50	SW846 8260B			3/17/09 00:11	DD	C
Ethyl tert-butyl ether	ND	ug/L		5.0	0.50	SW846 8260B			3/17/09 00:11	DD	C
Ethylbenzene	368	ug/L		5.0	1.5	SW846 8260B			3/17/09 00:11	DD	C
2-Hexanone	ND	ug/L		25.0	3.5	SW846 8260B			3/17/09 00:11	DD	C
Methyl t-Butyl Ether	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:11	DD	C
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		25.0	6.5	SW846 8260B			3/17/09 00:11	DD	C

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ANALYTICAL RESULTS

Workorder: 9780014 Groundwater (03/12/09)

Lab ID: **9780014003** Date Collected: 3/12/2009 10:25 Matrix: Ground Water

Sample ID: **MW-003_20090312_N** Date Received: 3/13/2009 20:08

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	ND	ug/L		5.0	0.50	SW846 8260B			3/17/09 00:11	DD	C
Styrene	1.7J	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:11	DD	C
1,1,2,2-Tetrachloroethane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:11	DD	C
Tetrachloroethene	ND	ug/L		5.0	2.0	SW846 8260B			3/17/09 00:11	DD	C
Toluene	1250	ug/L		25.0	5.0	SW846 8260B			3/18/09 23:58	DD	D
Total Xylenes	2080	ug/L		15.0	2.0	SW846 8260B			3/17/09 00:11	DD	C
1,1,1-Trichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:11	DD	C
1,1,2-Trichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:11	DD	C
Trichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:11	DD	C
Vinyl Chloride	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:11	DD	C
o-Xylene	614	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:11	DD	C
mp-Xylene	1470	ug/L		10.0	1.5	SW846 8260B			3/17/09 00:11	DD	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	99.1	%		62-133		SW846 8260B			3/17/09 00:11	DD	C
Dibromofluoromethane (S)	101	%		78-116		SW846 8260B			3/17/09 00:11	DD	C
Toluene-d8 (S)	102	%		76-127		SW846 8260B			3/17/09 00:11	DD	C
4-Bromofluorobenzene (S)	108	%		79-114		SW846 8260B			3/17/09 00:11	DD	C
1,2-Dichloroethane-d4 (S)	99.5	%		62-133		SW846 8260B			3/18/09 23:58	DD	D
Toluene-d8 (S)	104	%		76-127		SW846 8260B			3/18/09 23:58	DD	D
Dibromofluoromethane (S)	86.4	%		78-116		SW846 8260B			3/18/09 23:58	DD	D
4-Bromofluorobenzene (S)	79.4	%		79-114		SW846 8260B			3/18/09 23:58	DD	D

Sample Comments:

The gasoline range organics analysis for this sample was diluted due to the amount of analyte present. The detection limit was raised accordingly.

The GCMS volatiles analysis was performed at a dilution due to the level of target compounds.

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected in the sample. Reporting limits were adjusted accordingly.

This laboratory report was reprinted due to a modification to one or more sample reports in this workorder. The necessity for this is due to the consecutive numbering of samples in a given workorder.

Anna G Milliken
Laboratory Manager

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34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9780014 Groundwater (03/12/09)

Lab ID: **9780014004** Date Collected: 3/12/2009 11:10 Matrix: Ground Water

Sample ID: **MW-005_20090312_N** Date Received: 3/13/2009 20:08

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	5.8	mg/L		1.6	0.20	SW846 8015D	3/17/09	DJB	3/21/09 02:15	KJH	A1
Gasoline Range Organics	94500	ug/L		5000	1450	SW846 8015D			3/16/09 16:31	TEH	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	107	%		40-117		SW846 8015D	3/17/09	DJB	3/21/09 02:15	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	113	%		90-129		SW846 8015D			3/16/09 16:31	TEH	E
VOLATILE ORGANICS											
Acetone	ND	ug/L		50.0	20.0	SW846 8260B			3/17/09 01:50	DD	C
tert-Amyl methyl ether	ND	ug/L		10.0	4.0	SW846 8260B			3/17/09 01:50	DD	C
tert-Amyl Alcohol	1000	ug/L		25.0	2.5	SW846 8260B			3/17/09 01:50	DD	C
tert-Amyl Ethylether	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 01:50	DD	C
Benzene	288	ug/L		5.0	2.0	SW846 8260B			3/17/09 01:50	DD	C
Bromochloromethane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 01:50	DD	C
Bromodichloromethane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 01:50	DD	C
Bromoform	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 01:50	DD	C
Bromomethane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 01:50	DD	C
2-Butanone	ND	ug/L		50.0	15.0	SW846 8260B			3/17/09 01:50	DD	C
tert.- Butyl Alcohol	ND	ug/L		50.0	15.0	SW846 8260B			3/17/09 01:50	DD	C
Carbon Disulfide	ND	ug/L		5.0	0.50	SW846 8260B			3/17/09 01:50	DD	C
Carbon Tetrachloride	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 01:50	DD	C
Chlorobenzene	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 01:50	DD	C
Chlorodibromomethane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 01:50	DD	C
Chloroethane	ND	ug/L		5.0	1.5	SW846 8260B			3/17/09 01:50	DD	C
Chloroform	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 01:50	DD	C
Chloromethane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 01:50	DD	C
1,2-Dibromo-3-chloropropane	ND	ug/L		35.0	12.0	SW846 8260B			3/17/09 01:50	DD	C
1,2-Dibromoethane	ND	ug/L		5.0	1.5	SW846 8260B			3/17/09 01:50	DD	C
1,1-Dichloroethane	ND	ug/L		5.0	0.50	SW846 8260B			3/17/09 01:50	DD	C
1,2-Dichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 01:50	DD	C
1,1-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 01:50	DD	C
cis-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 01:50	DD	C
trans-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 01:50	DD	C
1,2-Dichloropropane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 01:50	DD	C
cis-1,3-Dichloropropene	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 01:50	DD	C
trans-1,3-Dichloropropene	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 01:50	DD	C
Diisopropyl ether	ND	ug/L		5.0	0.50	SW846 8260B			3/17/09 01:50	DD	C
Ethyl tert-butyl ether	ND	ug/L		5.0	0.50	SW846 8260B			3/17/09 01:50	DD	C
Ethylbenzene	2400	ug/L		250	75.0	SW846 8260B			3/19/09 01:09	DD	D
2-Hexanone	36.7	ug/L		25.0	3.5	SW846 8260B			3/17/09 01:50	DD	C
Methyl t-Butyl Ether	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 01:50	DD	C
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		25.0	6.5	SW846 8260B			3/17/09 01:50	DD	C

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ANALYTICAL RESULTS

Workorder: 9780014 Groundwater (03/12/09)

Lab ID: **9780014004** Date Collected: 3/12/2009 11:10 Matrix: Ground Water

Sample ID: **MW-005_20090312_N** Date Received: 3/13/2009 20:08

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	ND	ug/L		5.0	0.50	SW846 8260B			3/17/09 01:50	DD	C
Styrene	18.5	ug/L		5.0	1.0	SW846 8260B			3/17/09 01:50	DD	C
1,1,2,2-Tetrachloroethane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 01:50	DD	C
Tetrachloroethene	ND	ug/L		5.0	2.0	SW846 8260B			3/17/09 01:50	DD	C
Toluene	31400	ug/L		250	50.0	SW846 8260B			3/19/09 01:09	DD	D
Total Xylenes	13100	ug/L		750	100	SW846 8260B			3/19/09 01:09	DD	D
1,1,1-Trichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 01:50	DD	C
1,1,2-Trichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 01:50	DD	C
Trichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 01:50	DD	C
Vinyl Chloride	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 01:50	DD	C
o-Xylene	3490	ug/L		250	50.0	SW846 8260B			3/19/09 01:09	DD	D
mp-Xylene	9590	ug/L		500	75.0	SW846 8260B			3/19/09 01:09	DD	D
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	97.6	%		62-133		SW846 8260B			3/17/09 01:50	DD	C
Dibromofluoromethane (S)	99.5	%		78-116		SW846 8260B			3/17/09 01:50	DD	C
4-Bromofluorobenzene (S)	106	%		79-114		SW846 8260B			3/17/09 01:50	DD	C
Toluene-d8 (S)	103	%		76-127		SW846 8260B			3/17/09 01:50	DD	C
1,2-Dichloroethane-d4 (S)	100	%		62-133		SW846 8260B			3/19/09 01:09	DD	D
4-Bromofluorobenzene (S)	79	%		79-114		SW846 8260B			3/19/09 01:09	DD	D
Toluene-d8 (S)	103	%		76-127		SW846 8260B			3/19/09 01:09	DD	D
Dibromofluoromethane (S)	83.6	%		78-116		SW846 8260B			3/19/09 01:09	DD	D

Sample Comments:

The gasoline range organics analysis for this sample was diluted due to the amount of analyte present. The detection limit was raised accordingly.

The GCMS volatiles analysis was performed at a dilution due to the level of target compounds.

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected. Reporting limits were adjusted accordingly.

This laboratory report was reprinted due to a modification to one or more sample reports in this workorder. The necessity for this is due to the consecutive numbering of samples in a given workorder.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9780014 Groundwater (03/12/09)

Lab ID: **9780014005** Date Collected: 3/12/2009 13:40 Matrix: Ground Water

Sample ID: **MW-006_20090312_N** Date Received: 3/13/2009 20:08

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	3.3	mg/L		0.80	0.10	SW846 8015D	3/17/09	DJB	3/21/09 03:19	KJH	A1
Gasoline Range Organics	156	ug/L		100	29.1	SW846 8015D			3/16/09 11:17	TEH	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	113	%		40-117		SW846 8015D	3/17/09	DJB	3/21/09 03:19	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	120	%		90-129		SW846 8015D			3/16/09 11:17	TEH	E
VOLATILE ORGANICS											
Acetone	ND	ug/L		10.0	4.0	SW846 8260B			3/16/09 23:03	DD	C
tert-Amyl methyl ether	ND	ug/L		2.0	0.80	SW846 8260B			3/16/09 23:03	DD	C
tert-Amyl Alcohol	ND	ug/L		5.0	0.50	SW846 8260B			3/16/09 23:03	DD	C
tert-Amyl Ethylether	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:03	DD	C
Benzene	2.3	ug/L		1.0	0.40	SW846 8260B			3/16/09 23:03	DD	C
Bromochloromethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:03	DD	C
Bromodichloromethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:03	DD	C
Bromoform	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:03	DD	C
Bromomethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:03	DD	C
2-Butanone	ND	ug/L		10.0	3.0	SW846 8260B			3/16/09 23:03	DD	C
tert.- Butyl Alcohol	ND	ug/L		10.0	3.0	SW846 8260B			3/16/09 23:03	DD	C
Carbon Disulfide	ND	ug/L		1.0	0.10	SW846 8260B			3/16/09 23:03	DD	C
Carbon Tetrachloride	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:03	DD	C
Chlorobenzene	3.6	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:03	DD	C
Chlorodibromomethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:03	DD	C
Chloroethane	ND	ug/L		1.0	0.30	SW846 8260B			3/16/09 23:03	DD	C
Chloroform	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:03	DD	C
Chloromethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:03	DD	C
1,2-Dibromo-3-chloropropane	ND	ug/L		7.0	2.4	SW846 8260B			3/16/09 23:03	DD	C
1,2-Dibromoethane	ND	ug/L		1.0	0.30	SW846 8260B			3/16/09 23:03	DD	C
1,1-Dichloroethane	ND	ug/L		1.0	0.10	SW846 8260B			3/16/09 23:03	DD	C
1,2-Dichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:03	DD	C
1,1-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:03	DD	C
cis-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:03	DD	C
trans-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:03	DD	C
1,2-Dichloropropane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:03	DD	C
cis-1,3-Dichloropropene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:03	DD	C
trans-1,3-Dichloropropene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:03	DD	C
Diisopropyl ether	ND	ug/L		1.0	0.10	SW846 8260B			3/16/09 23:03	DD	C
Ethyl tert-butyl ether	ND	ug/L		1.0	0.10	SW846 8260B			3/16/09 23:03	DD	C
Ethylbenzene	1.6	ug/L		1.0	0.30	SW846 8260B			3/16/09 23:03	DD	C
2-Hexanone	ND	ug/L		5.0	0.70	SW846 8260B			3/16/09 23:03	DD	C
Methyl t-Butyl Ether	4.2	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:03	DD	C
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		5.0	1.3	SW846 8260B			3/16/09 23:03	DD	C

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ANALYTICAL RESULTS

Workorder: 9780014 Groundwater (03/12/09)

Lab ID: **9780014005** Date Collected: 3/12/2009 13:40 Matrix: Ground Water

Sample ID: **MW-006_20090312_N** Date Received: 3/13/2009 20:08

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	ND	ug/L		1.0	0.10	SW846 8260B			3/16/09 23:03	DD	C
Styrene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:03	DD	C
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:03	DD	C
Tetrachloroethene	9.9	ug/L		1.0	0.40	SW846 8260B			3/16/09 23:03	DD	C
Toluene	10.6	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:03	DD	C
Total Xylenes	8.8	ug/L		3.0	0.40	SW846 8260B			3/16/09 23:03	DD	C
1,1,1-Trichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:03	DD	C
1,1,2-Trichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:03	DD	C
Trichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:03	DD	C
Vinyl Chloride	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:03	DD	C
o-Xylene	2.4	ug/L		1.0	0.20	SW846 8260B			3/16/09 23:03	DD	C
mp-Xylene	6.4	ug/L		2.0	0.30	SW846 8260B			3/16/09 23:03	DD	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	95	%		62-133		SW846 8260B			3/16/09 23:03	DD	C
4-Bromofluorobenzene (S)	107	%		79-114		SW846 8260B			3/16/09 23:03	DD	C
Dibromofluoromethane (S)	95.6	%		78-116		SW846 8260B			3/16/09 23:03	DD	C
Toluene-d8 (S)	103	%		76-127		SW846 8260B			3/16/09 23:03	DD	C

Sample Comments:

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected. Reporting limits were adjusted accordingly.

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Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9780014 Groundwater (03/12/09)

Lab ID: **9780014006** Date Collected: 3/12/2009 09:50 Matrix: Ground Water

Sample ID: **MW-007_20090312_N** Date Received: 3/13/2009 20:08

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	5.0	mg/L		1.5	0.19	SW846 8015D	3/17/09	DJB	3/21/09 05:26	KJH	A1
Gasoline Range Organics	60800	ug/L		5000	1450	SW846 8015D			3/16/09 17:06	TEH	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	86.2	%		40-117		SW846 8015D	3/17/09	DJB	3/21/09 05:26	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	111	%		90-129		SW846 8015D			3/16/09 17:06	TEH	E
VOLATILE ORGANICS											
Acetone	ND	ug/L		100	40.0	SW846 8260B			3/17/09 02:23	DD	C
tert-Amyl methyl ether	ND	ug/L		20.0	8.0	SW846 8260B			3/17/09 02:23	DD	C
tert-Amyl Alcohol	400	ug/L		50.0	5.0	SW846 8260B			3/17/09 02:23	DD	C
tert-Amyl Ethylether	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 02:23	DD	C
Benzene	732	ug/L		10.0	4.0	SW846 8260B			3/17/09 02:23	DD	C
Bromochloromethane	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 02:23	DD	C
Bromodichloromethane	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 02:23	DD	C
Bromoform	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 02:23	DD	C
Bromomethane	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 02:23	DD	C
2-Butanone	ND	ug/L		100	30.0	SW846 8260B			3/17/09 02:23	DD	C
tert.- Butyl Alcohol	ND	ug/L		100	30.0	SW846 8260B			3/17/09 02:23	DD	C
Carbon Disulfide	ND	ug/L		10.0	1.0	SW846 8260B			3/17/09 02:23	DD	C
Carbon Tetrachloride	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 02:23	DD	C
Chlorobenzene	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 02:23	DD	C
Chlorodibromomethane	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 02:23	DD	C
Chloroethane	ND	ug/L		10.0	3.0	SW846 8260B			3/17/09 02:23	DD	C
Chloroform	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 02:23	DD	C
Chloromethane	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 02:23	DD	C
1,2-Dibromo-3-chloropropane	ND	ug/L		70.0	24.0	SW846 8260B			3/17/09 02:23	DD	C
1,2-Dibromoethane	ND	ug/L		10.0	3.0	SW846 8260B			3/17/09 02:23	DD	C
1,1-Dichloroethane	ND	ug/L		10.0	1.0	SW846 8260B			3/17/09 02:23	DD	C
1,2-Dichloroethane	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 02:23	DD	C
1,1-Dichloroethene	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 02:23	DD	C
cis-1,2-Dichloroethene	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 02:23	DD	C
trans-1,2-Dichloroethene	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 02:23	DD	C
1,2-Dichloropropane	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 02:23	DD	C
cis-1,3-Dichloropropene	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 02:23	DD	C
trans-1,3-Dichloropropene	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 02:23	DD	C
Diisopropyl ether	ND	ug/L		10.0	1.0	SW846 8260B			3/17/09 02:23	DD	C
Ethyl tert-butyl ether	ND	ug/L		10.0	1.0	SW846 8260B			3/17/09 02:23	DD	C
Ethylbenzene	977	ug/L		10.0	3.0	SW846 8260B			3/17/09 02:23	DD	C
2-Hexanone	ND	ug/L		50.0	7.0	SW846 8260B			3/17/09 02:23	DD	C
Methyl t-Butyl Ether	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 02:23	DD	C
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		50.0	13.0	SW846 8260B			3/17/09 02:23	DD	C

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ANALYTICAL RESULTS

Workorder: 9780014 Groundwater (03/12/09)

Lab ID: **9780014006** Date Collected: 3/12/2009 09:50 Matrix: Ground Water

Sample ID: **MW-007_20090312_N** Date Received: 3/13/2009 20:08

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	ND	ug/L		10.0	1.0	SW846 8260B			3/17/09 02:23	DD	C
Styrene	14.0	ug/L		10.0	2.0	SW846 8260B			3/17/09 02:23	DD	C
1,1,2,2-Tetrachloroethane	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 02:23	DD	C
Tetrachloroethene	ND	ug/L		10.0	4.0	SW846 8260B			3/17/09 02:23	DD	C
Toluene	29800	ug/L		250	50.0	SW846 8260B			3/19/09 01:44	DD	D
Total Xylenes	8250	ug/L		750	100	SW846 8260B			3/19/09 01:44	DD	D
1,1,1-Trichloroethane	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 02:23	DD	C
1,1,2-Trichloroethane	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 02:23	DD	C
Trichloroethene	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 02:23	DD	C
Vinyl Chloride	ND	ug/L		10.0	2.0	SW846 8260B			3/17/09 02:23	DD	C
o-Xylene	2700	ug/L		250	50.0	SW846 8260B			3/19/09 01:44	DD	D
mp-Xylene	5550	ug/L		500	75.0	SW846 8260B			3/19/09 01:44	DD	D
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	89.4	%		62-133		SW846 8260B			3/17/09 02:23	DD	C
4-Bromofluorobenzene (S)	107	%		79-114		SW846 8260B			3/17/09 02:23	DD	C
Dibromofluoromethane (S)	100	%		78-116		SW846 8260B			3/17/09 02:23	DD	C
Toluene-d8 (S)	104	%		76-127		SW846 8260B			3/17/09 02:23	DD	C
1,2-Dichloroethane-d4 (S)	101	%		62-133		SW846 8260B			3/19/09 01:44	DD	D
Dibromofluoromethane (S)	85.3	%		78-116		SW846 8260B			3/19/09 01:44	DD	D
Toluene-d8 (S)	102	%		76-127		SW846 8260B			3/19/09 01:44	DD	D
4-Bromofluorobenzene (S)	82.4	%		79-114		SW846 8260B			3/19/09 01:44	DD	D

Sample Comments:

The gasoline range organics analysis for this sample was diluted due to the amount of analyte present. The detection limit was raised accordingly.

The GCMS volatiles analysis was performed at a dilution due to the level of target compounds.

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected. Reporting limits were adjusted accordingly.

This laboratory report was reprinted due to a modification to one or more sample reports in this workorder. The necessity for this is due to the consecutive numbering of samples in a given workorder.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9780014 Groundwater (03/12/09)

Lab ID: **9780014007** Date Collected: 3/12/2009 00:00 Matrix: Ground Water

Sample ID: **Duplicate-001_20090312_FD** Date Received: 3/13/2009 20:08

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	2.5	mg/L		1.6	0.20	SW846 8015D	3/17/09	DJB	3/21/09 00:07	KJH	A1
Gasoline Range Organics	12600	ug/L		500	145	SW846 8015D			3/16/09 13:37	TEH	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	111	%		40-117		SW846 8015D	3/17/09	DJB	3/21/09 00:07	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	110	%		90-129		SW846 8015D			3/16/09 13:37	TEH	E
VOLATILE ORGANICS											
Acetone	167	ug/L		50.0	20.0	SW846 8260B			3/17/09 00:44	DD	C
tert-Amyl methyl ether	ND	ug/L		10.0	4.0	SW846 8260B			3/17/09 00:44	DD	C
tert-Amyl Alcohol	ND	ug/L		25.0	2.5	SW846 8260B			3/17/09 00:44	DD	C
tert-Amyl Ethylether	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:44	DD	C
Benzene	3.7J	ug/L		5.0	2.0	SW846 8260B			3/17/09 00:44	DD	C
Bromochloromethane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:44	DD	C
Bromodichloromethane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:44	DD	C
Bromoform	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:44	DD	C
Bromomethane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:44	DD	C
2-Butanone	ND	ug/L		50.0	15.0	SW846 8260B			3/17/09 00:44	DD	C
tert.- Butyl Alcohol	ND	ug/L		50.0	15.0	SW846 8260B			3/17/09 00:44	DD	C
Carbon Disulfide	ND	ug/L		5.0	0.50	SW846 8260B			3/17/09 00:44	DD	C
Carbon Tetrachloride	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:44	DD	C
Chlorobenzene	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:44	DD	C
Chlorodibromomethane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:44	DD	C
Chloroethane	ND	ug/L		5.0	1.5	SW846 8260B			3/17/09 00:44	DD	C
Chloroform	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:44	DD	C
Chloromethane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:44	DD	C
1,2-Dibromo-3-chloropropane	ND	ug/L		35.0	12.0	SW846 8260B			3/17/09 00:44	DD	C
1,2-Dibromoethane	ND	ug/L		5.0	1.5	SW846 8260B			3/17/09 00:44	DD	C
1,1-Dichloroethane	ND	ug/L		5.0	0.50	SW846 8260B			3/17/09 00:44	DD	C
1,2-Dichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:44	DD	C
1,1-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:44	DD	C
cis-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:44	DD	C
trans-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:44	DD	C
1,2-Dichloropropane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:44	DD	C
cis-1,3-Dichloropropene	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:44	DD	C
trans-1,3-Dichloropropene	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:44	DD	C
Diisopropyl ether	ND	ug/L		5.0	0.50	SW846 8260B			3/17/09 00:44	DD	C
Ethyl tert-butyl ether	ND	ug/L		5.0	0.50	SW846 8260B			3/17/09 00:44	DD	C
Ethylbenzene	381	ug/L		5.0	1.5	SW846 8260B			3/17/09 00:44	DD	C
2-Hexanone	ND	ug/L		25.0	3.5	SW846 8260B			3/17/09 00:44	DD	C
Methyl t-Butyl Ether	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:44	DD	C
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		25.0	6.5	SW846 8260B			3/17/09 00:44	DD	C

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ANALYTICAL RESULTS

Workorder: 9780014 Groundwater (03/12/09)

Lab ID: **9780014007** Date Collected: 3/12/2009 00:00 Matrix: Ground Water

Sample ID: **Duplicate-001_20090312_FD** Date Received: 3/13/2009 20:08

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	ND	ug/L		5.0	0.50	SW846 8260B			3/17/09 00:44	DD	C
Styrene	2.1J	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:44	DD	C
1,1,2,2-Tetrachloroethane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:44	DD	C
Tetrachloroethene	ND	ug/L		5.0	2.0	SW846 8260B			3/17/09 00:44	DD	C
Toluene	975	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:44	DD	C
Total Xylenes	2070	ug/L		15.0	2.0	SW846 8260B			3/17/09 00:44	DD	C
1,1,1-Trichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:44	DD	C
1,1,2-Trichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:44	DD	C
Trichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:44	DD	C
Vinyl Chloride	ND	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:44	DD	C
o-Xylene	589	ug/L		5.0	1.0	SW846 8260B			3/17/09 00:44	DD	C
mp-Xylene	1480	ug/L		10.0	1.5	SW846 8260B			3/17/09 00:44	DD	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	95	%		62-133		SW846 8260B			3/17/09 00:44	DD	C
4-Bromofluorobenzene (S)	109	%		79-114		SW846 8260B			3/17/09 00:44	DD	C
Dibromofluoromethane (S)	97.8	%		78-116		SW846 8260B			3/17/09 00:44	DD	C
Toluene-d8 (S)	101	%		76-127		SW846 8260B			3/17/09 00:44	DD	C

Sample Comments:

The gasoline range organics analysis for this sample was diluted due to the amount of analyte present. The detection limit was raised accordingly.

The GCMS volatiles analysis was performed at a dilution due to the level of target compounds.

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected. Reporting limits were adjusted accordingly.

This report was modified to include the TPH-Diesel Range Organics analysis as per the chain of custody. SJB 03/23/09

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9780014 Groundwater (03/12/09)

Lab ID: **9780014008** Date Collected: 3/12/2009 12:05 Matrix: Ground Water

Sample ID: **Field Blank_20090312_FB** Date Received: 3/13/2009 20:08

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	0.021J	mg/L		0.16	0.020	SW846 8015D	3/17/09	DJB	3/21/09 01:10	KJH	A1
Gasoline Range Organics	ND	ug/L		100	29.1	SW846 8015D			3/16/09 10:03	TEH	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	97.7	%		40-117		SW846 8015D	3/17/09	DJB	3/21/09 01:10	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	113	%		90-129		SW846 8015D			3/16/09 10:03	TEH	E
VOLATILE ORGANICS											
Acetone	ND	ug/L		10.0	4.0	SW846 8260B			3/16/09 19:43	DD	C
tert-Amyl methyl ether	ND	ug/L		2.0	0.80	SW846 8260B			3/16/09 19:43	DD	C
tert-Amyl Alcohol	ND	ug/L		5.0	0.50	SW846 8260B			3/16/09 19:43	DD	C
tert-Amyl Ethylether	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:43	DD	C
Benzene	ND	ug/L		1.0	0.40	SW846 8260B			3/16/09 19:43	DD	C
Bromochloromethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:43	DD	C
Bromodichloromethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:43	DD	C
Bromoform	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:43	DD	C
Bromomethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:43	DD	C
2-Butanone	ND	ug/L		10.0	3.0	SW846 8260B			3/16/09 19:43	DD	C
tert.- Butyl Alcohol	ND	ug/L		10.0	3.0	SW846 8260B			3/16/09 19:43	DD	C
Carbon Disulfide	ND	ug/L		1.0	0.10	SW846 8260B			3/16/09 19:43	DD	C
Carbon Tetrachloride	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:43	DD	C
Chlorobenzene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:43	DD	C
Chlorodibromomethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:43	DD	C
Chloroethane	ND	ug/L		1.0	0.30	SW846 8260B			3/16/09 19:43	DD	C
Chloroform	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:43	DD	C
Chloromethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:43	DD	C
1,2-Dibromo-3-chloropropane	ND	ug/L		7.0	2.4	SW846 8260B			3/16/09 19:43	DD	C
1,2-Dibromoethane	ND	ug/L		1.0	0.30	SW846 8260B			3/16/09 19:43	DD	C
1,1-Dichloroethane	ND	ug/L		1.0	0.10	SW846 8260B			3/16/09 19:43	DD	C
1,2-Dichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:43	DD	C
1,1-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:43	DD	C
cis-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:43	DD	C
trans-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:43	DD	C
1,2-Dichloropropane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:43	DD	C
cis-1,3-Dichloropropene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:43	DD	C
trans-1,3-Dichloropropene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:43	DD	C
Diisopropyl ether	ND	ug/L		1.0	0.10	SW846 8260B			3/16/09 19:43	DD	C
Ethyl tert-butyl ether	ND	ug/L		1.0	0.10	SW846 8260B			3/16/09 19:43	DD	C
Ethylbenzene	ND	ug/L		1.0	0.30	SW846 8260B			3/16/09 19:43	DD	C
2-Hexanone	ND	ug/L		5.0	0.70	SW846 8260B			3/16/09 19:43	DD	C
Methyl t-Butyl Ether	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:43	DD	C
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		5.0	1.3	SW846 8260B			3/16/09 19:43	DD	C

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ANALYTICAL RESULTS

Workorder: 9780014 Groundwater (03/12/09)

Lab ID: **9780014008** Date Collected: 3/12/2009 12:05 Matrix: Ground Water

Sample ID: **Field Blank_20090312_FB** Date Received: 3/13/2009 20:08

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	ND	ug/L		1.0	0.10	SW846 8260B			3/16/09 19:43	DD	C
Styrene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:43	DD	C
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:43	DD	C
Tetrachloroethene	ND	ug/L		1.0	0.40	SW846 8260B			3/16/09 19:43	DD	C
Toluene	0.75J	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:43	DD	C
Total Xylenes	ND	ug/L		3.0	0.40	SW846 8260B			3/16/09 19:43	DD	C
1,1,1-Trichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:43	DD	C
1,1,2-Trichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:43	DD	C
Trichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:43	DD	C
Vinyl Chloride	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:43	DD	C
o-Xylene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:43	DD	C
mp-Xylene	ND	ug/L		2.0	0.30	SW846 8260B			3/16/09 19:43	DD	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	97.4	%		62-133		SW846 8260B			3/16/09 19:43	DD	C
4-Bromofluorobenzene (S)	107	%		79-114		SW846 8260B			3/16/09 19:43	DD	C
Dibromofluoromethane (S)	100	%		78-116		SW846 8260B			3/16/09 19:43	DD	C
Toluene-d8 (S)	102	%		76-127		SW846 8260B			3/16/09 19:43	DD	C

Sample Comments:

This laboratory report was reprinted due to a modification to one or more sample reports in this workorder. The necessity for this is due to the consecutive numbering of samples in a given workorder.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9780014 Groundwater (03/12/09)

Lab ID: **9780014009** Date Collected: 3/12/2009 20:08 Matrix: Ground Water

Sample ID: **Trip Blank_20090312_TB** Date Received: 3/13/2009 20:08

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		10.0	4.0	SW846 8260B			3/16/09 19:09	DD	A
tert-Amyl methyl ether	ND	ug/L		2.0	0.80	SW846 8260B			3/16/09 19:09	DD	A
tert-Amyl Alcohol	ND	ug/L		5.0	0.50	SW846 8260B			3/16/09 19:09	DD	A
tert-Amyl Ethylether	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:09	DD	A
Benzene	ND	ug/L		1.0	0.40	SW846 8260B			3/16/09 19:09	DD	A
Bromochloromethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:09	DD	A
Bromodichloromethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:09	DD	A
Bromoform	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:09	DD	A
Bromomethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:09	DD	A
2-Butanone	ND	ug/L		10.0	3.0	SW846 8260B			3/16/09 19:09	DD	A
tert.- Butyl Alcohol	ND	ug/L		10.0	3.0	SW846 8260B			3/16/09 19:09	DD	A
Carbon Disulfide	ND	ug/L		1.0	0.10	SW846 8260B			3/16/09 19:09	DD	A
Carbon Tetrachloride	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:09	DD	A
Chlorobenzene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:09	DD	A
Chlorodibromomethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:09	DD	A
Chloroethane	ND	ug/L		1.0	0.30	SW846 8260B			3/16/09 19:09	DD	A
Chloroform	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:09	DD	A
Chloromethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:09	DD	A
1,2-Dibromo-3-chloropropane	ND	ug/L		7.0	2.4	SW846 8260B			3/16/09 19:09	DD	A
1,2-Dibromoethane	ND	ug/L		1.0	0.30	SW846 8260B			3/16/09 19:09	DD	A
1,1-Dichloroethane	ND	ug/L		1.0	0.10	SW846 8260B			3/16/09 19:09	DD	A
1,2-Dichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:09	DD	A
1,1-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:09	DD	A
cis-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:09	DD	A
trans-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:09	DD	A
1,2-Dichloropropane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:09	DD	A
cis-1,3-Dichloropropene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:09	DD	A
trans-1,3-Dichloropropene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:09	DD	A
Diisopropyl ether	ND	ug/L		1.0	0.10	SW846 8260B			3/16/09 19:09	DD	A
Ethyl tert-butyl ether	ND	ug/L		1.0	0.10	SW846 8260B			3/16/09 19:09	DD	A
Ethylbenzene	ND	ug/L		1.0	0.30	SW846 8260B			3/16/09 19:09	DD	A
2-Hexanone	ND	ug/L		5.0	0.70	SW846 8260B			3/16/09 19:09	DD	A
Methyl t-Butyl Ether	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:09	DD	A
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		5.0	1.3	SW846 8260B			3/16/09 19:09	DD	A
Methylene Chloride	ND	ug/L		1.0	0.10	SW846 8260B			3/16/09 19:09	DD	A
Styrene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:09	DD	A
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:09	DD	A
Tetrachloroethene	ND	ug/L		1.0	0.40	SW846 8260B			3/16/09 19:09	DD	A
Toluene	0.79J	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:09	DD	A
Total Xylenes	ND	ug/L		3.0	0.40	SW846 8260B			3/16/09 19:09	DD	A
1,1,1-Trichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:09	DD	A
1,1,2-Trichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:09	DD	A
Trichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:09	DD	A
Vinyl Chloride	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:09	DD	A

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ANALYTICAL RESULTS

Workorder: 9780014 Groundwater (03/12/09)

Lab ID: **9780014009** Date Collected: 3/12/2009 20:08 Matrix: Ground Water

Sample ID: **Trip Blank_20090312_TB** Date Received: 3/13/2009 20:08

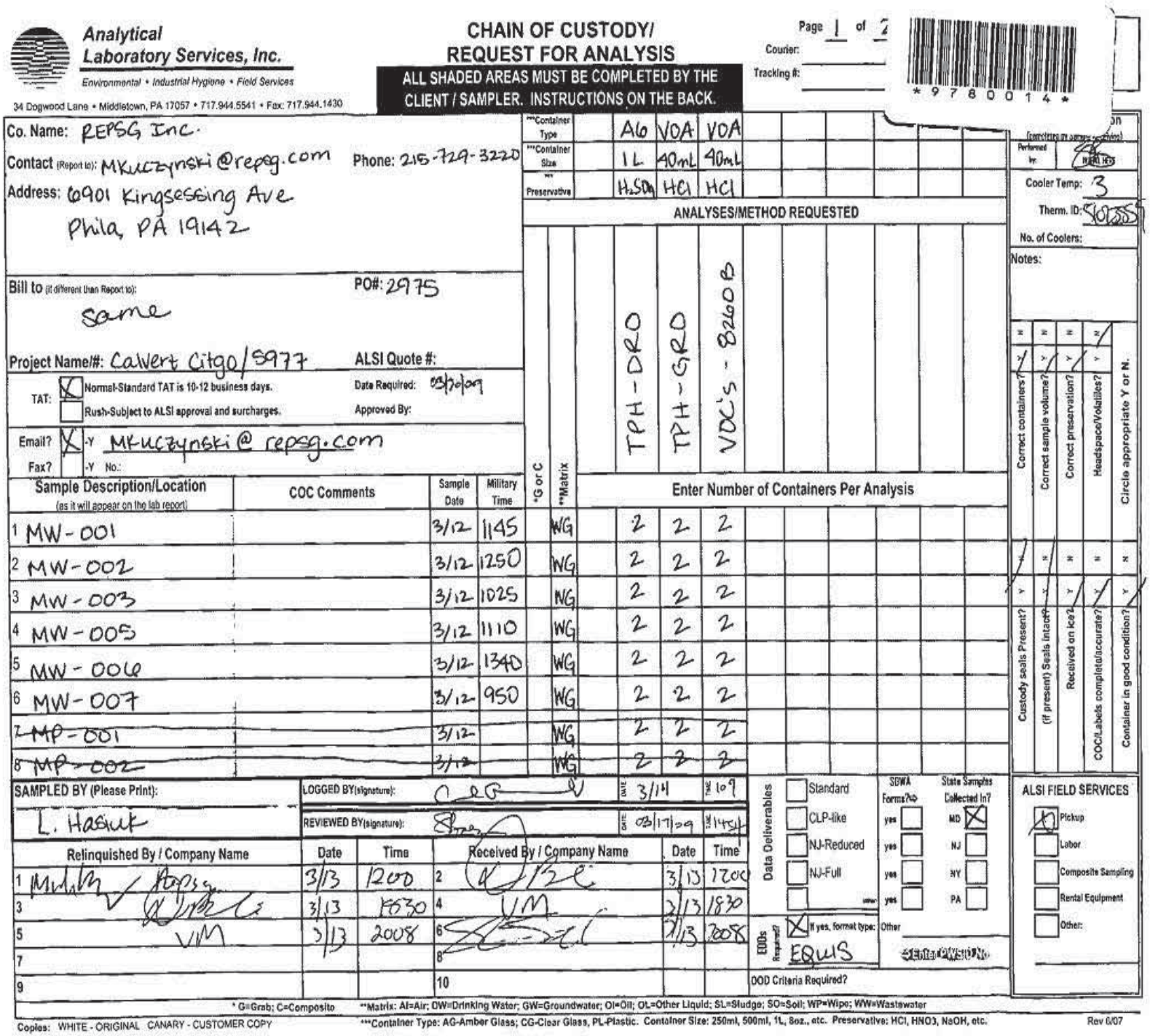
Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
o-Xylene	ND	ug/L		1.0	0.20	SW846 8260B			3/16/09 19:09	DD	A
mp-Xylene	ND	ug/L		2.0	0.30	SW846 8260B			3/16/09 19:09	DD	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	96.1	%		62-133		SW846 8260B			3/16/09 19:09	DD	A
4-Bromofluorobenzene (S)	107	%		79-114		SW846 8260B			3/16/09 19:09	DD	A
Dibromofluoromethane (S)	99.5	%		78-116		SW846 8260B			3/16/09 19:09	DD	A
Toluene-d8 (S)	103	%		76-127		SW846 8260B			3/16/09 19:09	DD	A

Sample Comments:

This laboratory report was reprinted due to a modification to one or more sample reports in this workorder. The necessity for this is due to the consecutive numbering of samples in a given workorder.

Anna G Milliken
Laboratory Manager

Report ID: 9780014



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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Page 1 of 2

Courier:

Tracking #:

9780014

Co. Name: REPSG Inc.

Contact (Report to): MKuczynski@repsg.com Phone: 215-729-3220

Address: 6901 Kingsessing Ave
Phila, PA 19142

Bill to (if different than Report to): same

PO#: 2975

Project Name/#: Calvert Citgo/5977

ALSI Quote #:

TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALSI approval and surcharges.

Data Required: 03/20/09

Approved By:

Email? [X] -Y MKuczynski@repsg.com

Fax? [ ] -Y No.:

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	***Container Type	***Container Size	** Preservative	TPH-DRO	TPH-GRO	VOC's - 8260B
						A6	VOA	VOA			
						1L	40mL	40mL			
						H_2SO_4	HCl	HCl			
1 MW-001		3/12	1145		WG				2	2	2
2 MW-002		3/12	1250		WG				2	2	2
3 MW-003		3/12	1025		WG				2	2	2
4 MW-005		3/12	1110		WG				2	2	2
5 MW-006		3/12	1340		WG				2	2	2
6 MW-007		3/12	950		WG				2	2	2
7 ~~MP-001~~		3/12			WG				2	2	2
8 ~~MP-002~~		3/12			WG				2	2	2

ANALYSES/METHOD REQUESTED

Enter Number of Containers Per Analysis

Notes:

Cooler Temp: 3

Therm. ID: 560355

No. of Coolers:

Circle appropriate Y or N.	Container in good condition?	COC/Labels complete/accurate?	Received on ice?	(if present) Seals intact?	Custody seals Present?	Correct containers?	Correct sample volume?	Correct preservation?	Headspace/Volatiles?
	Y	Y	Y	Y	Y	Y	Y	Y	N
	N	N	N	N	N	N	N	N	N

SAMPLED BY (Please Print): L. Hasuk

LOGGED BY (signature): [signature] DATE 3/14 TIME 109

REVIEWED BY (signature): [signature] DATE 03/17/09 TIME 1454

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 [signature] / Repsg	3/13	1200	2 [signature]	3/13	1200
3 [signature]	3/13	1630	4 VM	3/13	1830
5 VM	3/13	2008	6 [signature]	3/13	2008
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] www

EDDs Required? [X] If yes, format type: EQUIS

SDWA Forms? yes [ ] yes [ ] yes [ ] yes [ ]

State Samples Collected In? MD [X] NJ [ ] NY [ ] PA [ ]

Other

Client PWSID No.

OOD Criteria Required?

ALSI FIELD SERVICES
[X] Pickup
[ ] Labor
[ ] Composite Sampling
[ ] Rental Equipment
[ ] Other:

* G=Grab; C=Composite

**Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY

***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO_3, NaOH, etc.

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Courier:

Tracking #:

9780014

Co. Name: REPSG Inc.

Contact (Report to): MKuczynski Phone: 215-729-8220

Address: 6901 Kingsessing Ave
Phila PA 19142

Bill to (if different than Report to): same PO#: 2975

Project Name/#: Calvert Citgo/5477 ALSI Quote #:

TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALSI approval and surcharges. Date Required: Approved By:

Email? [X] -Y MKuczynski@repsg.com

Fax? [ ] -Y No.:

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	***Container Type	***Container Size	*** Preservative	TPH-DRO	TPH-GRO	VOCs-8260B								
						AG	VOA	VOA											
						1L	40mL	40mL											
							H_2SO_4	HCl	HCl										
						ANALYSES/METHOD REQUESTED													
						Enter Number of Containers Per Analysis													
7 † Duplicate-001		3/12	—		WG				2	2	2								
8 ‡ Field Blank		3/12	1205		DI				2	2	2								
9 § Trip Blank		3/12	—		DI						2								
4																			
5																			
6																			
7																			
8																			

Receipt Information (completed by Sample Receiver)
Performed by:
Cooler Temp: 3
Therm. ID: 9223557
No. of Coolers:
Notes:

	Correct containers?	Correct sample volume?	Correct preservation?	Headspace/Volatiles?	Circle appropriate Y or N.
	Y	Y	Y	N	
7	Y	Y	Y	N	
8	N	N	N	N	N
9	Y	Y	Y	Y	Y

	Custody seals Present?	(if present) Seals intact?	Received on ice?	COC/Labels complete/accurate?	Container in good condition?
	Y	Y	Y	Y	Y

SAMPLED BY (Please Print): L Hasiuk

LOGGED BY(signature): DATE: TIME:

REVIEWED BY(signature): DATE: 03/17/09 TIME: 1517

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1	3/13	0008	2	3/13	1200
3	3/13	1530	4	3/13	1830
5	3/13	2008	6	3/13	2200
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ]

EDDs Required? [X] If yes, format type: EQuIS

DOD Criteria Required?

SDWA Forms? yes [ ] yes [ ] yes [ ] yes [ ]

State Samples Collected In? MD [X] NJ [ ] NY [ ] PA [ ] Other

Enter PWSID No.

ALSI FIELD SERVICES
[ ] Pickup
[ ] Labor
[ ] Composite Sampling
[ ] Rental Equipment
[ ] Other:

* G=Grab; C=Composite

** Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

*** Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY

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Certificate of Analysis

Project Name:	**MD SITE - SOILS - MDE -REV**	Workorder:	**9800558**
Purchase Order:	**3451**	Workorder ID:	**Groundwater (07/21/09)**

Mr. Mark Kuczynski
REPSG
6901 Kingsessing Ave., Ste 201
PO Box 5377
Philadelphia, PA 19142

July 29, 2009

Dear Mr. Kuczynski,

Enclosed are the analytical results for samples received by the laboratory on Wednesday, July 22, 2009

ALSI is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Anna Milliken (Project Coordinator) or Anna G Milliken (Laboratory Manager) at (717) 944-5541.

Please visit us at www.analyticallab.com for a listing of ALSI's NELAP accreditations and Scope of Work, as well as other links to Water Quality documentation on the internet.

This laboratory report may not be reproduced, except in full, without the written approval of ALSI.

NOTE: ALSI has changed the report generation tool and while we have tried to retain the existing format, you will notice some changes in the laboratory report. Please feel free to contact ALSI in case you have any questions.

Analytical Laboratory Services, Inc.

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Anna G Milliken
Laboratory Manager

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SAMPLE SUMMARY

Workorder: 9800558 Groundwater (07/21/09) Discard Date: 08/12/2009

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
9800558001	MW-001_20090721_N	Ground Water	7/21/09 12:15	7/22/09 20:15	Adam Chorney
9800558002	MW-002_20090721_N	Ground Water	7/21/09 13:15	7/22/09 20:15	Adam Chorney
9800558003	MW-003_20090721_N	Ground Water	7/21/09 10:55	7/22/09 20:15	Adam Chorney
9800558004	MW-005_20090721_N	Ground Water	7/21/09 11:30	7/22/09 20:15	Adam Chorney
9800558005	MW-006_20090721_N	Ground Water	7/21/09 14:00	7/22/09 20:15	Adam Chorney
9800558006	MW-007_20090721_N	Ground Water	7/21/09 10:15	7/22/09 20:15	Adam Chorney
9800558007	DUP-001_20090721_FD	Ground Water	7/21/09 00:00	7/22/09 20:15	Adam Chorney
9800558008	Field Blank_20090721_FB	Ground Water	7/21/09 12:00	7/22/09 20:15	Adam Chorney
9800558009	Trip Blank_20090721_TB	Ground Water	7/22/09 20:15	7/22/09 20:15	Adam Chorney

Workorder Comments:

Notes

-- Samples collected by ALSI personnel are done so in accordance with the procedures set forth in the ALSI Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

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ANALYTICAL RESULTS

Workorder: 9800558 Groundwater (07/21/09)

Lab ID: **9800558001** Date Collected: 7/21/2009 12:15 Matrix: Ground Water

Sample ID: **MW-001_20090721_N** Date Received: 7/22/2009 20:15

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	2.3	mg/L		1.6	0.20	SW846 8015D	7/23/09	RSS	7/24/09 20:52	KJH	A1
Gasoline Range Organics	35700	ug/L		5000	210	SW846 8015D			7/24/09 18:14	TEH	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	108	%		40-117		SW846 8015D	7/23/09	RSS	7/24/09 20:52	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	112	%		90-129		SW846 8015D			7/24/09 18:14	TEH	E
VOLATILE ORGANICS											
Acetone	ND	ug/L		100	31.0	SW846 8260B			7/27/09 16:16	JAH	C
tert-Amyl methyl ether	ND	ug/L		20.0	1.7	SW846 8260B			7/27/09 16:16	JAH	C
tert-Amyl Alcohol	7050	ug/L		50.0	31.1	SW846 8260B			7/27/09 16:16	JAH	C
tert-Amyl Ethylether	ND	ug/L		10.0	1.4	SW846 8260B			7/27/09 16:16	JAH	C
Benzene	14400	ug/L		500	80.0	SW846 8260B			7/28/09 16:31	TEH	D
Bromochloromethane	ND	ug/L		10.0	3.3	SW846 8260B			7/27/09 16:16	JAH	C
Bromodichloromethane	ND	ug/L		10.0	2.3	SW846 8260B			7/27/09 16:16	JAH	C
Bromoform	ND	ug/L		10.0	2.8	SW846 8260B			7/27/09 16:16	JAH	C
Bromomethane	ND	ug/L		10.0	2.4	SW846 8260B			7/27/09 16:16	JAH	C
2-Butanone	ND	ug/L		100	21.0	SW846 8260B			7/27/09 16:16	JAH	C
tert.- Butyl Alcohol	586	ug/L		100	46.0	SW846 8260B			7/27/09 16:16	JAH	C
Carbon Disulfide	ND	ug/L		10.0	1.2	SW846 8260B			7/27/09 16:16	JAH	C
Carbon Tetrachloride	ND	ug/L		10.0	2.5	SW846 8260B			7/27/09 16:16	JAH	C
Chlorobenzene	ND	ug/L		10.0	1.6	SW846 8260B			7/27/09 16:16	JAH	C
Chlorodibromomethane	ND	ug/L		10.0	2.6	SW846 8260B			7/27/09 16:16	JAH	C
Chloroethane	ND	ug/L		10.0	1.9	SW846 8260B			7/27/09 16:16	JAH	C
Chloroform	ND	ug/L		10.0	2.3	SW846 8260B			7/27/09 16:16	JAH	C
Chloromethane	ND	ug/L		10.0	1.6	SW846 8260B			7/27/09 16:16	JAH	C
1,2-Dibromo-3-chloropropane	ND	ug/L		70.0	9.6	SW846 8260B			7/27/09 16:16	JAH	C
1,2-Dibromoethane	ND	ug/L		10.0	3.0	SW846 8260B			7/27/09 16:16	JAH	C
1,1-Dichloroethane	ND	ug/L		10.0	1.5	SW846 8260B			7/27/09 16:16	JAH	C
1,2-Dichloroethane	19.5	ug/L		10.0	3.3	SW846 8260B			7/27/09 16:16	JAH	C
1,1-Dichloroethene	ND	ug/L		10.0	1.7	SW846 8260B			7/27/09 16:16	JAH	C
cis-1,2-Dichloroethene	ND	ug/L		10.0	1.7	SW846 8260B			7/27/09 16:16	JAH	C
trans-1,2-Dichloroethene	ND	ug/L		10.0	2.0	SW846 8260B			7/27/09 16:16	JAH	C
1,2-Dichloropropane	ND	ug/L		10.0	2.3	SW846 8260B			7/27/09 16:16	JAH	C
cis-1,3-Dichloropropene	ND	ug/L		10.0	1.8	SW846 8260B			7/27/09 16:16	JAH	C
trans-1,3-Dichloropropene	ND	ug/L		10.0	1.4	SW846 8260B			7/27/09 16:16	JAH	C
Diisopropyl ether	25.0	ug/L		10.0	1.8	SW846 8260B			7/27/09 16:16	JAH	C
Ethyl tert-butyl ether	ND	ug/L		10.0	1.0	SW846 8260B			7/27/09 16:16	JAH	C
Ethylbenzene	1210	ug/L		10.0	2.3	SW846 8260B			7/27/09 16:16	JAH	C
2-Hexanone	ND	ug/L		50.0	7.8	SW846 8260B			7/27/09 16:16	JAH	C
Methyl t-Butyl Ether	8.0J	ug/L		10.0	1.8	SW846 8260B			7/27/09 16:16	JAH	C
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		50.0	4.1	SW846 8260B			7/27/09 16:16	JAH	C

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ANALYTICAL RESULTS

Workorder: 9800558 Groundwater (07/21/09)

Lab ID: **9800558001** Date Collected: 7/21/2009 12:15 Matrix: Ground Water

Sample ID: **MW-001_20090721_N** Date Received: 7/22/2009 20:15

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	ND	ug/L		10.0	3.2	SW846 8260B			7/27/09 16:16	JAH	C
Styrene	ND	ug/L		10.0	1.0	SW846 8260B			7/27/09 16:16	JAH	C
1,1,2,2-Tetrachloroethane	ND	ug/L		10.0	2.2	SW846 8260B			7/27/09 16:16	JAH	C
Tetrachloroethene	ND	ug/L		10.0	2.8	SW846 8260B			7/27/09 16:16	JAH	C
Toluene	1440	ug/L		10.0	1.9	SW846 8260B			7/27/09 16:16	JAH	C
Total Xylenes	3760	ug/L		30.0	6.1	SW846 8260B			7/27/09 16:16	JAH	C
1,1,1-Trichloroethane	ND	ug/L		10.0	2.9	SW846 8260B			7/27/09 16:16	JAH	C
1,1,2-Trichloroethane	ND	ug/L		10.0	2.9	SW846 8260B			7/27/09 16:16	JAH	C
Trichloroethene	ND	ug/L		10.0	3.3	SW846 8260B			7/27/09 16:16	JAH	C
Vinyl Chloride	ND	ug/L		10.0	1.6	SW846 8260B			7/27/09 16:16	JAH	C
o-Xylene	248	ug/L		10.0	2.4	SW846 8260B			7/27/09 16:16	JAH	C
mp-Xylene	3510	ug/L		20.0	5.1	SW846 8260B			7/27/09 16:16	JAH	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	121	%		62-133		SW846 8260B			7/27/09 16:16	JAH	C
4-Bromofluorobenzene (S)	86.6	%		79-114		SW846 8260B			7/27/09 16:16	JAH	C
Dibromofluoromethane (S)	89.4	%		78-116		SW846 8260B			7/27/09 16:16	JAH	C
Toluene-d8 (S)	96.8	%		76-127		SW846 8260B			7/27/09 16:16	JAH	C
1,2-Dichloroethane-d4 (S)	99.7	%		62-133		SW846 8260B			7/28/09 16:31	TEH	D
4-Bromofluorobenzene (S)	108	%		79-114		SW846 8260B			7/28/09 16:31	TEH	D
Toluene-d8 (S)	108	%		76-127		SW846 8260B			7/28/09 16:31	TEH	D
Dibromofluoromethane (S)	94.2	%		78-116		SW846 8260B			7/28/09 16:31	TEH	D

Sample Comments:

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected. Reporting limits were adjusted accordingly.

The gasoline range organics analysis for this sample was diluted due to the amount of analyte present. The detection limit was raised accordingly.

The GCMS volatiles analysis was performed at a dilution due to the level of target compounds.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9800558 Groundwater (07/21/09)

Lab ID: **9800558002** Date Collected: 7/21/2009 13:15 Matrix: Ground Water

Sample ID: **MW-002_20090721_N** Date Received: 7/22/2009 20:15

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	0.45	mg/L		0.16	0.020	SW846 8015D	7/23/09	RSS	7/24/09 21:42	KJH	A1
Gasoline Range Organics	208	ug/L		100	4.2	SW846 8015D			7/24/09 12:31	TEH	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	85.5	%		40-117		SW846 8015D	7/23/09	RSS	7/24/09 21:42	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	112	%		90-129		SW846 8015D			7/24/09 12:31	TEH	E
VOLATILE ORGANICS											
Acetone	ND	ug/L		10.0	3.1	SW846 8260B			7/28/09 13:34	TEH	D
tert-Amyl methyl ether	ND	ug/L		2.0	0.17	SW846 8260B			7/28/09 13:34	TEH	D
tert-Amyl Alcohol	ND	ug/L		5.0	3.1	SW846 8260B			7/28/09 13:34	TEH	D
tert-Amyl Ethylether	ND	ug/L		1.0	0.14	SW846 8260B			7/28/09 13:34	TEH	D
Benzene	68.7	ug/L		1.0	0.16	SW846 8260B			7/28/09 13:34	TEH	D
Bromochloromethane	ND	ug/L		1.0	0.33	SW846 8260B			7/28/09 13:34	TEH	D
Bromodichloromethane	ND	ug/L		1.0	0.23	SW846 8260B			7/28/09 13:34	TEH	D
Bromoform	ND	ug/L		1.0	0.28	SW846 8260B			7/28/09 13:34	TEH	D
Bromomethane	ND	ug/L		1.0	0.24	SW846 8260B			7/28/09 13:34	TEH	D
2-Butanone	ND	ug/L		10.0	2.1	SW846 8260B			7/28/09 13:34	TEH	D
tert.- Butyl Alcohol	38.7	ug/L		10.0	4.6	SW846 8260B			7/28/09 13:34	TEH	D
Carbon Disulfide	ND	ug/L		1.0	0.12	SW846 8260B			7/28/09 13:34	TEH	D
Carbon Tetrachloride	ND	ug/L		1.0	0.25	SW846 8260B			7/28/09 13:34	TEH	D
Chlorobenzene	ND	ug/L		1.0	0.16	SW846 8260B			7/28/09 13:34	TEH	D
Chlorodibromomethane	ND	ug/L		1.0	0.26	SW846 8260B			7/28/09 13:34	TEH	D
Chloroethane	ND	ug/L		1.0	0.19	SW846 8260B			7/28/09 13:34	TEH	D
Chloroform	0.31J	ug/L		1.0	0.23	SW846 8260B			7/28/09 13:34	TEH	D
Chloromethane	ND	ug/L		1.0	0.16	SW846 8260B			7/28/09 13:34	TEH	D
1,2-Dibromo-3-chloropropane	ND	ug/L		7.0	0.96	SW846 8260B			7/28/09 13:34	TEH	D
1,2-Dibromoethane	ND	ug/L		1.0	0.30	SW846 8260B			7/28/09 13:34	TEH	D
1,1-Dichloroethane	ND	ug/L		1.0	0.15	SW846 8260B			7/28/09 13:34	TEH	D
1,2-Dichloroethane	ND	ug/L		1.0	0.33	SW846 8260B			7/28/09 13:34	TEH	D
1,1-Dichloroethene	ND	ug/L		1.0	0.17	SW846 8260B			7/28/09 13:34	TEH	D
cis-1,2-Dichloroethene	0.19J	ug/L		1.0	0.17	SW846 8260B			7/28/09 13:34	TEH	D
trans-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			7/28/09 13:34	TEH	D
1,2-Dichloropropane	ND	ug/L		1.0	0.23	SW846 8260B			7/28/09 13:34	TEH	D
cis-1,3-Dichloropropene	ND	ug/L		1.0	0.18	SW846 8260B			7/28/09 13:34	TEH	D
trans-1,3-Dichloropropene	ND	ug/L		1.0	0.14	SW846 8260B			7/28/09 13:34	TEH	D
Diisopropyl ether	ND	ug/L		1.0	0.18	SW846 8260B			7/28/09 13:34	TEH	D
Ethyl tert-butyl ether	ND	ug/L		1.0	0.10	SW846 8260B			7/28/09 13:34	TEH	D
Ethylbenzene	1.9	ug/L		1.0	0.23	SW846 8260B			7/28/09 13:34	TEH	D
2-Hexanone	ND	ug/L		5.0	0.78	SW846 8260B			7/28/09 13:34	TEH	D
Methyl t-Butyl Ether	19.2	ug/L		1.0	0.18	SW846 8260B			7/28/09 13:34	TEH	D
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		5.0	0.41	SW846 8260B			7/28/09 13:34	TEH	D

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ANALYTICAL RESULTS

Workorder: 9800558 Groundwater (07/21/09)

Lab ID: **9800558002** Date Collected: 7/21/2009 13:15 Matrix: Ground Water

Sample ID: **MW-002_20090721_N** Date Received: 7/22/2009 20:15

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	ND	ug/L		1.0	0.32	SW846 8260B			7/28/09 13:34	TEH	D
Styrene	ND	ug/L		1.0	0.10	SW846 8260B			7/28/09 13:34	TEH	D
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0	0.22	SW846 8260B			7/28/09 13:34	TEH	D
Tetrachloroethene	ND	ug/L		1.0	0.28	SW846 8260B			7/28/09 13:34	TEH	D
Toluene	13.0	ug/L		1.0	0.19	SW846 8260B			7/28/09 13:34	TEH	D
Total Xylenes	8.2	ug/L		3.0	0.61	SW846 8260B			7/28/09 13:34	TEH	D
1,1,1-Trichloroethane	ND	ug/L		1.0	0.29	SW846 8260B			7/28/09 13:34	TEH	D
1,1,2-Trichloroethane	ND	ug/L		1.0	0.29	SW846 8260B			7/28/09 13:34	TEH	D
Trichloroethene	2.2	ug/L		1.0	0.33	SW846 8260B			7/28/09 13:34	TEH	D
Vinyl Chloride	ND	ug/L		1.0	0.16	SW846 8260B			7/28/09 13:34	TEH	D
o-Xylene	4.7	ug/L		1.0	0.24	SW846 8260B			7/28/09 13:34	TEH	D
mp-Xylene	3.5	ug/L		2.0	0.51	SW846 8260B			7/28/09 13:34	TEH	D
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	100	%		62-133		SW846 8260B			7/28/09 13:34	TEH	D
4-Bromofluorobenzene (S)	112	%		79-114		SW846 8260B			7/28/09 13:34	TEH	D
Dibromofluoromethane (S)	95.9	%		78-116		SW846 8260B			7/28/09 13:34	TEH	D
Toluene-d8 (S)	104	%		76-127		SW846 8260B			7/28/09 13:34	TEH	D

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9800558 Groundwater (07/21/09)

Lab ID: **9800558003** Date Collected: 7/21/2009 10:55 Matrix: Ground Water

Sample ID: **MW-003_20090721_N** Date Received: 7/22/2009 20:15

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	4.1	mg/L		1.6	0.20	SW846 8015D	7/23/09	RSS	7/24/09 23:52	KJH	A1
Gasoline Range Organics	42000	ug/L		1000	42.0	SW846 8015D			7/24/09 15:24	TEH	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	83.3	%		40-117		SW846 8015D	7/23/09	RSS	7/24/09 23:52	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	114	%		90-129		SW846 8015D			7/24/09 15:24	TEH	E
VOLATILE ORGANICS											
Acetone	ND	ug/L		50.0	15.5	SW846 8260B			7/27/09 15:10	JAH	C
tert-Amyl methyl ether	ND	ug/L		10.0	0.85	SW846 8260B			7/27/09 15:10	JAH	C
tert-Amyl Alcohol	ND	ug/L		25.0	15.6	SW846 8260B			7/27/09 15:10	JAH	C
tert-Amyl Ethylether	ND	ug/L		5.0	0.70	SW846 8260B			7/27/09 15:10	JAH	C
Benzene	46.1	ug/L		5.0	0.80	SW846 8260B			7/27/09 15:10	JAH	C
Bromochloromethane	ND	ug/L		5.0	1.7	SW846 8260B			7/27/09 15:10	JAH	C
Bromodichloromethane	ND	ug/L		5.0	1.2	SW846 8260B			7/27/09 15:10	JAH	C
Bromoform	ND	ug/L		5.0	1.4	SW846 8260B			7/27/09 15:10	JAH	C
Bromomethane	ND	ug/L		5.0	1.2	SW846 8260B			7/27/09 15:10	JAH	C
2-Butanone	ND	ug/L		50.0	10.5	SW846 8260B			7/27/09 15:10	JAH	C
tert.- Butyl Alcohol	ND	ug/L		50.0	23.0	SW846 8260B			7/27/09 15:10	JAH	C
Carbon Disulfide	ND	ug/L		5.0	0.60	SW846 8260B			7/27/09 15:10	JAH	C
Carbon Tetrachloride	ND	ug/L		5.0	1.3	SW846 8260B			7/27/09 15:10	JAH	C
Chlorobenzene	ND	ug/L		5.0	0.80	SW846 8260B			7/27/09 15:10	JAH	C
Chlorodibromomethane	ND	ug/L		5.0	1.3	SW846 8260B			7/27/09 15:10	JAH	C
Chloroethane	ND	ug/L		5.0	0.95	SW846 8260B			7/27/09 15:10	JAH	C
Chloroform	1.4J	ug/L		5.0	1.2	SW846 8260B			7/27/09 15:10	JAH	C
Chloromethane	1.2J	ug/L		5.0	0.80	SW846 8260B			7/27/09 15:10	JAH	C
1,2-Dibromo-3-chloropropane	ND	ug/L		35.0	4.8	SW846 8260B			7/27/09 15:10	JAH	C
1,2-Dibromoethane	ND	ug/L		5.0	1.5	SW846 8260B			7/27/09 15:10	JAH	C
1,1-Dichloroethane	ND	ug/L		5.0	0.75	SW846 8260B			7/27/09 15:10	JAH	C
1,2-Dichloroethane	ND	ug/L		5.0	1.7	SW846 8260B			7/27/09 15:10	JAH	C
1,1-Dichloroethene	ND	ug/L		5.0	0.85	SW846 8260B			7/27/09 15:10	JAH	C
cis-1,2-Dichloroethene	ND	ug/L		5.0	0.85	SW846 8260B			7/27/09 15:10	JAH	C
trans-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			7/27/09 15:10	JAH	C
1,2-Dichloropropane	ND	ug/L		5.0	1.2	SW846 8260B			7/27/09 15:10	JAH	C
cis-1,3-Dichloropropene	ND	ug/L		5.0	0.90	SW846 8260B			7/27/09 15:10	JAH	C
trans-1,3-Dichloropropene	ND	ug/L		5.0	0.70	SW846 8260B			7/27/09 15:10	JAH	C
Diisopropyl ether	ND	ug/L		5.0	0.90	SW846 8260B			7/27/09 15:10	JAH	C
Ethyl tert-butyl ether	ND	ug/L		5.0	0.50	SW846 8260B			7/27/09 15:10	JAH	C
Ethylbenzene	1770	ug/L		100	23.0	SW846 8260B			7/28/09 14:09	TEH	D
2-Hexanone	6.2J	ug/L		25.0	3.9	SW846 8260B			7/27/09 15:10	JAH	C
Methyl t-Butyl Ether	ND	ug/L		5.0	0.90	SW846 8260B			7/27/09 15:10	JAH	C
4-Methyl-2-Pentanone(MIBK)	148	ug/L		25.0	2.1	SW846 8260B			7/27/09 15:10	JAH	C

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ANALYTICAL RESULTS

Workorder: 9800558 Groundwater (07/21/09)

Lab ID: **9800558003** Date Collected: 7/21/2009 10:55 Matrix: Ground Water

Sample ID: **MW-003_20090721_N** Date Received: 7/22/2009 20:15

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	ND	ug/L		5.0	1.6	SW846 8260B			7/27/09 15:10	JAH	C
Styrene	4.3J	ug/L		5.0	0.50	SW846 8260B			7/27/09 15:10	JAH	C
1,1,2,2-Tetrachloroethane	ND	ug/L		5.0	1.1	SW846 8260B			7/27/09 15:10	JAH	C
Tetrachloroethene	ND	ug/L		5.0	1.4	SW846 8260B			7/27/09 15:10	JAH	C
Toluene	7800	ug/L		100	19.0	SW846 8260B			7/28/09 14:09	TEH	D
Total Xylenes	8950	ug/L		300	61.0	SW846 8260B			7/28/09 14:09	TEH	D
1,1,1-Trichloroethane	ND	ug/L		5.0	1.5	SW846 8260B			7/27/09 15:10	JAH	C
1,1,2-Trichloroethane	ND	ug/L		5.0	1.5	SW846 8260B			7/27/09 15:10	JAH	C
Trichloroethene	ND	ug/L		5.0	1.7	SW846 8260B			7/27/09 15:10	JAH	C
Vinyl Chloride	ND	ug/L		5.0	0.80	SW846 8260B			7/27/09 15:10	JAH	C
o-Xylene	3220	ug/L		100	24.0	SW846 8260B			7/28/09 14:09	TEH	D
mp-Xylene	5730	ug/L		200	51.0	SW846 8260B			7/28/09 14:09	TEH	D
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	105	%		62-133		SW846 8260B			7/27/09 15:10	JAH	C
4-Bromofluorobenzene (S)	104	%		79-114		SW846 8260B			7/27/09 15:10	JAH	C
Dibromofluoromethane (S)	97.3	%		78-116		SW846 8260B			7/27/09 15:10	JAH	C
Toluene-d8 (S)	107	%		76-127		SW846 8260B			7/27/09 15:10	JAH	C
1,2-Dichloroethane-d4 (S)	104	%		62-133		SW846 8260B			7/28/09 14:09	TEH	D
Dibromofluoromethane (S)	99	%		78-116		SW846 8260B			7/28/09 14:09	TEH	D
Toluene-d8 (S)	103	%		76-127		SW846 8260B			7/28/09 14:09	TEH	D
4-Bromofluorobenzene (S)	108	%		79-114		SW846 8260B			7/28/09 14:09	TEH	D

Sample Comments:

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected. Reporting limits were adjusted accordingly. Surrogate recovery could not be evaluated as a result of the dilution.

The gasoline range organics analysis for this sample was diluted due to the amount of analyte present. The detection limit was raised accordingly.

The GCMS volatiles analysis was performed at a dilution due to the level of target compounds.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9800558 Groundwater (07/21/09)

Lab ID: **9800558004** Date Collected: 7/21/2009 11:30 Matrix: Ground Water

Sample ID: **MW-005_20090721_N** Date Received: 7/22/2009 20:15

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		50.0	15.5	SW846 8260B			7/27/09 16:56	JAH	C
tert-Amyl methyl ether	ND	ug/L		10.0	0.85	SW846 8260B			7/27/09 16:56	JAH	C
tert-Amyl Alcohol	ND	ug/L		25.0	15.6	SW846 8260B			7/27/09 16:56	JAH	C
tert-Amyl Ethylether	ND	ug/L		5.0	0.70	SW846 8260B			7/27/09 16:56	JAH	C
Benzene	340	ug/L		5.0	0.80	SW846 8260B			7/27/09 16:56	JAH	C
Bromochloromethane	ND	ug/L		5.0	1.7	SW846 8260B			7/27/09 16:56	JAH	C
Bromodichloromethane	ND	ug/L		5.0	1.2	SW846 8260B			7/27/09 16:56	JAH	C
Bromoform	ND	ug/L		5.0	1.4	SW846 8260B			7/27/09 16:56	JAH	C
Bromomethane	ND	ug/L		5.0	1.2	SW846 8260B			7/27/09 16:56	JAH	C
2-Butanone	ND	ug/L		50.0	10.5	SW846 8260B			7/27/09 16:56	JAH	C
tert.- Butyl Alcohol	46.3J	ug/L		50.0	23.0	SW846 8260B			7/27/09 16:56	JAH	C
Carbon Disulfide	ND	ug/L		5.0	0.60	SW846 8260B			7/27/09 16:56	JAH	C
Carbon Tetrachloride	ND	ug/L		5.0	1.3	SW846 8260B			7/27/09 16:56	JAH	C
Chlorobenzene	ND	ug/L		5.0	0.80	SW846 8260B			7/27/09 16:56	JAH	C
Chlorodibromomethane	ND	ug/L		5.0	1.3	SW846 8260B			7/27/09 16:56	JAH	C
Chloroethane	ND	ug/L		5.0	0.95	SW846 8260B			7/27/09 16:56	JAH	C
Chloroform	ND	ug/L		5.0	1.2	SW846 8260B			7/27/09 16:56	JAH	C
Chloromethane	ND	ug/L		5.0	0.80	SW846 8260B			7/27/09 16:56	JAH	C
1,2-Dibromo-3-chloropropane	ND	ug/L		35.0	4.8	SW846 8260B			7/27/09 16:56	JAH	C
1,2-Dibromoethane	ND	ug/L		5.0	1.5	SW846 8260B			7/27/09 16:56	JAH	C
1,1-Dichloroethane	ND	ug/L		5.0	0.75	SW846 8260B			7/27/09 16:56	JAH	C
1,2-Dichloroethane	ND	ug/L		5.0	1.7	SW846 8260B			7/27/09 16:56	JAH	C
1,1-Dichloroethene	ND	ug/L		5.0	0.85	SW846 8260B			7/27/09 16:56	JAH	C
cis-1,2-Dichloroethene	ND	ug/L		5.0	0.85	SW846 8260B			7/27/09 16:56	JAH	C
trans-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			7/27/09 16:56	JAH	C
1,2-Dichloropropane	ND	ug/L		5.0	1.2	SW846 8260B			7/27/09 16:56	JAH	C
cis-1,3-Dichloropropene	ND	ug/L		5.0	0.90	SW846 8260B			7/27/09 16:56	JAH	C
trans-1,3-Dichloropropene	ND	ug/L		5.0	0.70	SW846 8260B			7/27/09 16:56	JAH	C
Diisopropyl ether	ND	ug/L		5.0	0.90	SW846 8260B			7/27/09 16:56	JAH	C
Ethyl tert-butyl ether	ND	ug/L		5.0	0.50	SW846 8260B			7/27/09 16:56	JAH	C
Ethylbenzene	2540	ug/L		250	57.5	SW846 8260B			7/28/09 15:56	TEH	D
2-Hexanone	15.7J	ug/L		25.0	3.9	SW846 8260B			7/27/09 16:56	JAH	C
Methyl t-Butyl Ether	10.3	ug/L	1	5.0	0.90	SW846 8260B			7/27/09 16:56	JAH	C
4-Methyl-2-Pentanone(MIBK)	84.6	ug/L		25.0	2.1	SW846 8260B			7/27/09 16:56	JAH	C
Methylene Chloride	ND	ug/L		5.0	1.6	SW846 8260B			7/27/09 16:56	JAH	C
Styrene	ND	ug/L		5.0	0.50	SW846 8260B			7/27/09 16:56	JAH	C
1,1,2,2-Tetrachloroethane	ND	ug/L		5.0	1.1	SW846 8260B			7/27/09 16:56	JAH	C
Tetrachloroethene	ND	ug/L		5.0	1.4	SW846 8260B			7/27/09 16:56	JAH	C
Toluene	33200	ug/L		250	47.5	SW846 8260B			7/28/09 15:56	TEH	D
Total Xylenes	13800	ug/L		750	153	SW846 8260B			7/28/09 15:56	TEH	D
1,1,1-Trichloroethane	ND	ug/L		5.0	1.5	SW846 8260B			7/27/09 16:56	JAH	C
1,1,2-Trichloroethane	ND	ug/L		5.0	1.5	SW846 8260B			7/27/09 16:56	JAH	C
Trichloroethene	ND	ug/L		5.0	1.7	SW846 8260B			7/27/09 16:56	JAH	C
Vinyl Chloride	ND	ug/L		5.0	0.80	SW846 8260B			7/27/09 16:56	JAH	C

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ANALYTICAL RESULTS

Workorder: 9800558 Groundwater (07/21/09)

Lab ID: **9800558004** Date Collected: 7/21/2009 11:30 Matrix: Ground Water

Sample ID: **MW-005_20090721_N** Date Received: 7/22/2009 20:15

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
o-Xylene	4770	ug/L		250	60.0	SW846 8260B			7/28/09 15:56	TEH	D
mp-Xylene	8990	ug/L		500	128	SW846 8260B			7/28/09 15:56	TEH	D
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	91	%		62-133		SW846 8260B			7/27/09 16:56	JAH	C
Dibromofluoromethane (S)	97.8	%		78-116		SW846 8260B			7/27/09 16:56	JAH	C
Toluene-d8 (S)	108	%		76-127		SW846 8260B			7/27/09 16:56	JAH	C
4-Bromofluorobenzene (S)	105	%		79-114		SW846 8260B			7/27/09 16:56	JAH	C
1,2-Dichloroethane-d4 (S)	100	%		62-133		SW846 8260B			7/28/09 15:56	TEH	D
Toluene-d8 (S)	104	%		76-127		SW846 8260B			7/28/09 15:56	TEH	D
4-Bromofluorobenzene (S)	108	%		79-114		SW846 8260B			7/28/09 15:56	TEH	D
Dibromofluoromethane (S)	96.9	%		78-116		SW846 8260B			7/28/09 15:56	TEH	D
PETROLEUM HC's											
Diesel Range Organics C10-C28	5.9	mg/L		3.2	0.40	SW846 8015D	7/23/09	RSS	7/24/09 18:11	KJH	A1
Gasoline Range Organics	247000	ug/L		10000	420	SW846 8015D			7/27/09 11:40	TEH	F
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	112	%		90-129		SW846 8015D			7/27/09 11:40	TEH	F

Sample Comments:

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected. Reporting limits were adjusted accordingly. Surrogate recovery could not be evaluated as a result of the dilution.

The gasoline range organics analysis for this sample was diluted due to the amount of analyte present. The detection limit was raised accordingly.

The GCMS volatiles analysis was performed at a dilution due to the level of target compounds.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9800558 Groundwater (07/21/09)

Lab ID: **9800558005** Date Collected: 7/21/2009 14:00 Matrix: Ground Water

Sample ID: **MW-006_20090721_N** Date Received: 7/22/2009 20:15

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	0.20	mg/L		0.16	0.020	SW846 8015D	7/23/09	RSS	7/25/09 00:46	KJH	A1
Gasoline Range Organics	259	ug/L		100	4.2	SW846 8015D			7/24/09 13:06	TEH	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	89.8	%		40-117		SW846 8015D	7/23/09	RSS	7/25/09 00:46	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	107	%		90-129		SW846 8015D			7/24/09 13:06	TEH	E
VOLATILE ORGANICS											
Acetone	ND	ug/L		10.0	3.1	SW846 8260B			7/27/09 10:28	JAH	C
tert-Amyl methyl ether	1.8J	ug/L		2.0	0.17	SW846 8260B			7/27/09 10:28	JAH	C
tert-Amyl Alcohol	ND	ug/L		5.0	3.1	SW846 8260B			7/27/09 10:28	JAH	C
tert-Amyl Ethylether	ND	ug/L		1.0	0.14	SW846 8260B			7/27/09 10:28	JAH	C
Benzene	5.2	ug/L		1.0	0.16	SW846 8260B			7/27/09 10:28	JAH	C
Bromochloromethane	ND	ug/L		1.0	0.33	SW846 8260B			7/27/09 10:28	JAH	C
Bromodichloromethane	ND	ug/L		1.0	0.23	SW846 8260B			7/27/09 10:28	JAH	C
Bromoform	ND	ug/L		1.0	0.28	SW846 8260B			7/27/09 10:28	JAH	C
Bromomethane	ND	ug/L		1.0	0.24	SW846 8260B			7/27/09 10:28	JAH	C
2-Butanone	ND	ug/L		10.0	2.1	SW846 8260B			7/27/09 10:28	JAH	C
tert.- Butyl Alcohol	ND	ug/L		10.0	4.6	SW846 8260B			7/27/09 10:28	JAH	C
Carbon Disulfide	ND	ug/L		1.0	0.12	SW846 8260B			7/27/09 10:28	JAH	C
Carbon Tetrachloride	ND	ug/L		1.0	0.25	SW846 8260B			7/27/09 10:28	JAH	C
Chlorobenzene	1.8	ug/L		1.0	0.16	SW846 8260B			7/27/09 10:28	JAH	C
Chlorodibromomethane	ND	ug/L		1.0	0.26	SW846 8260B			7/27/09 10:28	JAH	C
Chloroethane	ND	ug/L		1.0	0.19	SW846 8260B			7/27/09 10:28	JAH	C
Chloroform	ND	ug/L		1.0	0.23	SW846 8260B			7/27/09 10:28	JAH	C
Chloromethane	ND	ug/L		1.0	0.16	SW846 8260B			7/27/09 10:28	JAH	C
1,2-Dibromo-3-chloropropane	ND	ug/L		7.0	0.96	SW846 8260B			7/27/09 10:28	JAH	C
1,2-Dibromoethane	ND	ug/L		1.0	0.30	SW846 8260B			7/27/09 10:28	JAH	C
1,1-Dichloroethane	ND	ug/L		1.0	0.15	SW846 8260B			7/27/09 10:28	JAH	C
1,2-Dichloroethane	ND	ug/L		1.0	0.33	SW846 8260B			7/27/09 10:28	JAH	C
1,1-Dichloroethene	ND	ug/L		1.0	0.17	SW846 8260B			7/27/09 10:28	JAH	C
cis-1,2-Dichloroethene	ND	ug/L		1.0	0.17	SW846 8260B			7/27/09 10:28	JAH	C
trans-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			7/27/09 10:28	JAH	C
1,2-Dichloropropane	ND	ug/L		1.0	0.23	SW846 8260B			7/27/09 10:28	JAH	C
cis-1,3-Dichloropropene	ND	ug/L		1.0	0.18	SW846 8260B			7/27/09 10:28	JAH	C
trans-1,3-Dichloropropene	ND	ug/L		1.0	0.14	SW846 8260B			7/27/09 10:28	JAH	C
Diisopropyl ether	ND	ug/L		1.0	0.18	SW846 8260B			7/27/09 10:28	JAH	C
Ethyl tert-butyl ether	ND	ug/L		1.0	0.10	SW846 8260B			7/27/09 10:28	JAH	C
Ethylbenzene	8.1	ug/L		1.0	0.23	SW846 8260B			7/27/09 10:28	JAH	C
2-Hexanone	ND	ug/L		5.0	0.78	SW846 8260B			7/27/09 10:28	JAH	C
Methyl t-Butyl Ether	4.3	ug/L	1	1.0	0.18	SW846 8260B			7/27/09 10:28	JAH	C
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		5.0	0.41	SW846 8260B			7/27/09 10:28	JAH	C

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ANALYTICAL RESULTS

Workorder: 9800558 Groundwater (07/21/09)

Lab ID: **9800558005** Date Collected: 7/21/2009 14:00 Matrix: Ground Water

Sample ID: **MW-006_20090721_N** Date Received: 7/22/2009 20:15

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	ND	ug/L		1.0	0.32	SW846 8260B			7/27/09 10:28	JAH	C
Styrene	ND	ug/L		1.0	0.10	SW846 8260B			7/27/09 10:28	JAH	C
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0	0.22	SW846 8260B			7/27/09 10:28	JAH	C
Tetrachloroethene	15.7	ug/L		1.0	0.28	SW846 8260B			7/27/09 10:28	JAH	C
Toluene	58.6	ug/L		1.0	0.19	SW846 8260B			7/27/09 10:28	JAH	C
Total Xylenes	46.2	ug/L		3.0	0.61	SW846 8260B			7/27/09 10:28	JAH	C
1,1,1-Trichloroethane	ND	ug/L		1.0	0.29	SW846 8260B			7/27/09 10:28	JAH	C
1,1,2-Trichloroethane	ND	ug/L		1.0	0.29	SW846 8260B			7/27/09 10:28	JAH	C
Trichloroethene	ND	ug/L		1.0	0.33	SW846 8260B			7/27/09 10:28	JAH	C
Vinyl Chloride	ND	ug/L		1.0	0.16	SW846 8260B			7/27/09 10:28	JAH	C
o-Xylene	14.5	ug/L		1.0	0.24	SW846 8260B			7/27/09 10:28	JAH	C
mp-Xylene	31.7	ug/L		2.0	0.51	SW846 8260B			7/27/09 10:28	JAH	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	105	%		62-133		SW846 8260B			7/27/09 10:28	JAH	C
4-Bromofluorobenzene (S)	107	%		79-114		SW846 8260B			7/27/09 10:28	JAH	C
Dibromofluoromethane (S)	99	%		78-116		SW846 8260B			7/27/09 10:28	JAH	C
Toluene-d8 (S)	103	%		76-127		SW846 8260B			7/27/09 10:28	JAH	C

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9800558 Groundwater (07/21/09)

Lab ID: **9800558006** Date Collected: 7/21/2009 10:15 Matrix: Ground Water

Sample ID: **MW-007_20090721_N** Date Received: 7/22/2009 20:15

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	3.4	mg/L		0.81	0.10	SW846 8015D	7/23/09	RSS	7/25/09 01:45	KJH	A1
Gasoline Range Organics	57300	ug/L		5000	210	SW846 8015D			7/24/09 17:39	TEH	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	79.9	%		40-117		SW846 8015D	7/23/09	RSS	7/25/09 01:45	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	112	%		90-129		SW846 8015D			7/24/09 17:39	TEH	E
VOLATILE ORGANICS											
Acetone	ND	ug/L		100	31.0	SW846 8260B			7/27/09 16:21	JAH	C
tert-Amyl methyl ether	ND	ug/L		20.0	1.7	SW846 8260B			7/27/09 16:21	JAH	C
tert-Amyl Alcohol	ND	ug/L		50.0	31.1	SW846 8260B			7/27/09 16:21	JAH	C
tert-Amyl Ethylether	ND	ug/L		10.0	1.4	SW846 8260B			7/27/09 16:21	JAH	C
Benzene	760	ug/L		10.0	1.6	SW846 8260B			7/27/09 16:21	JAH	C
Bromochloromethane	ND	ug/L		10.0	3.3	SW846 8260B			7/27/09 16:21	JAH	C
Bromodichloromethane	ND	ug/L		10.0	2.3	SW846 8260B			7/27/09 16:21	JAH	C
Bromoform	ND	ug/L		10.0	2.8	SW846 8260B			7/27/09 16:21	JAH	C
Bromomethane	ND	ug/L		10.0	2.4	SW846 8260B			7/27/09 16:21	JAH	C
2-Butanone	ND	ug/L		100	21.0	SW846 8260B			7/27/09 16:21	JAH	C
tert.- Butyl Alcohol	ND	ug/L		100	46.0	SW846 8260B			7/27/09 16:21	JAH	C
Carbon Disulfide	ND	ug/L		10.0	1.2	SW846 8260B			7/27/09 16:21	JAH	C
Carbon Tetrachloride	ND	ug/L		10.0	2.5	SW846 8260B			7/27/09 16:21	JAH	C
Chlorobenzene	ND	ug/L		10.0	1.6	SW846 8260B			7/27/09 16:21	JAH	C
Chlorodibromomethane	ND	ug/L		10.0	2.6	SW846 8260B			7/27/09 16:21	JAH	C
Chloroethane	ND	ug/L		10.0	1.9	SW846 8260B			7/27/09 16:21	JAH	C
Chloroform	3.9J	ug/L		10.0	2.3	SW846 8260B			7/27/09 16:21	JAH	C
Chloromethane	ND	ug/L		10.0	1.6	SW846 8260B			7/27/09 16:21	JAH	C
1,2-Dibromo-3-chloropropane	ND	ug/L		70.0	9.6	SW846 8260B			7/27/09 16:21	JAH	C
1,2-Dibromoethane	ND	ug/L		10.0	3.0	SW846 8260B			7/27/09 16:21	JAH	C
1,1-Dichloroethane	ND	ug/L		10.0	1.5	SW846 8260B			7/27/09 16:21	JAH	C
1,2-Dichloroethane	ND	ug/L		10.0	3.3	SW846 8260B			7/27/09 16:21	JAH	C
1,1-Dichloroethene	ND	ug/L		10.0	1.7	SW846 8260B			7/27/09 16:21	JAH	C
cis-1,2-Dichloroethene	ND	ug/L		10.0	1.7	SW846 8260B			7/27/09 16:21	JAH	C
trans-1,2-Dichloroethene	ND	ug/L		10.0	2.0	SW846 8260B			7/27/09 16:21	JAH	C
1,2-Dichloropropane	ND	ug/L		10.0	2.3	SW846 8260B			7/27/09 16:21	JAH	C
cis-1,3-Dichloropropene	ND	ug/L		10.0	1.8	SW846 8260B			7/27/09 16:21	JAH	C
trans-1,3-Dichloropropene	ND	ug/L		10.0	1.4	SW846 8260B			7/27/09 16:21	JAH	C
Diisopropyl ether	ND	ug/L		10.0	1.8	SW846 8260B			7/27/09 16:21	JAH	C
Ethyl tert-butyl ether	ND	ug/L		10.0	1.0	SW846 8260B			7/27/09 16:21	JAH	C
Ethylbenzene	964	ug/L		10.0	2.3	SW846 8260B			7/27/09 16:21	JAH	C
2-Hexanone	ND	ug/L		50.0	7.8	SW846 8260B			7/27/09 16:21	JAH	C
Methyl t-Butyl Ether	19.6	ug/L	1	10.0	1.8	SW846 8260B			7/27/09 16:21	JAH	C
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		50.0	4.1	SW846 8260B			7/27/09 16:21	JAH	C

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ANALYTICAL RESULTS

Workorder: 9800558 Groundwater (07/21/09)

Lab ID: **9800558006** Date Collected: 7/21/2009 10:15 Matrix: Ground Water

Sample ID: **MW-007_20090721_N** Date Received: 7/22/2009 20:15

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	ND	ug/L		10.0	3.2	SW846 8260B			7/27/09 16:21	JAH	C
Styrene	ND	ug/L		10.0	1.0	SW846 8260B			7/27/09 16:21	JAH	C
1,1,2,2-Tetrachloroethane	ND	ug/L		10.0	2.2	SW846 8260B			7/27/09 16:21	JAH	C
Tetrachloroethene	ND	ug/L		10.0	2.8	SW846 8260B			7/27/09 16:21	JAH	C
Toluene	22400	ug/L		200	38.0	SW846 8260B			7/28/09 15:20	TEH	D
Total Xylenes	5120	ug/L		600	122	SW846 8260B			7/28/09 15:20	TEH	D
1,1,1-Trichloroethane	ND	ug/L		10.0	2.9	SW846 8260B			7/27/09 16:21	JAH	C
1,1,2-Trichloroethane	ND	ug/L		10.0	2.9	SW846 8260B			7/27/09 16:21	JAH	C
Trichloroethene	ND	ug/L		10.0	3.3	SW846 8260B			7/27/09 16:21	JAH	C
Vinyl Chloride	ND	ug/L		10.0	1.6	SW846 8260B			7/27/09 16:21	JAH	C
o-Xylene	2090	ug/L		200	48.0	SW846 8260B			7/28/09 15:20	TEH	D
mp-Xylene	3030	ug/L		400	102	SW846 8260B			7/28/09 15:20	TEH	D
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	92.1	%		62-133		SW846 8260B			7/27/09 16:21	JAH	C
4-Bromofluorobenzene (S)	113	%		79-114		SW846 8260B			7/27/09 16:21	JAH	C
Dibromofluoromethane (S)	96.4	%		78-116		SW846 8260B			7/27/09 16:21	JAH	C
Toluene-d8 (S)	108	%		76-127		SW846 8260B			7/27/09 16:21	JAH	C
1,2-Dichloroethane-d4 (S)	101	%		62-133		SW846 8260B			7/28/09 15:20	TEH	D
Dibromofluoromethane (S)	94.8	%		78-116		SW846 8260B			7/28/09 15:20	TEH	D
Toluene-d8 (S)	107	%		76-127		SW846 8260B			7/28/09 15:20	TEH	D
4-Bromofluorobenzene (S)	106	%		79-114		SW846 8260B			7/28/09 15:20	TEH	D

Sample Comments:

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected. Reporting limits were adjusted accordingly.

The gasoline range organics analysis for this sample was diluted due to the amount of analyte present. The detection limit was raised accordingly.

The GCMS volatiles analysis was performed at a dilution due to the level of target compounds.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9800558 Groundwater (07/21/09)

Lab ID: **9800558007** Date Collected: 7/21/2009 00:00 Matrix: Ground Water

Sample ID: **DUP-001_20090721_FD** Date Received: 7/22/2009 20:15

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	5.6	mg/L		1.6	0.20	SW846 8015D	7/23/09	RSS	7/25/09 02:44	KJH	A1
Gasoline Range Organics	47600	ug/L		5000	210	SW846 8015D			7/24/09 18:48	TEH	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	89.9	%		40-117		SW846 8015D	7/23/09	RSS	7/25/09 02:44	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	114	%		90-129		SW846 8015D			7/24/09 18:48	TEH	E
VOLATILE ORGANICS											
Acetone	ND	ug/L		50.0	15.5	SW846 8260B			7/27/09 15:45	JAH	C
tert-Amyl methyl ether	ND	ug/L		10.0	0.85	SW846 8260B			7/27/09 15:45	JAH	C
tert-Amyl Alcohol	ND	ug/L		25.0	15.6	SW846 8260B			7/27/09 15:45	JAH	C
tert-Amyl Ethylether	ND	ug/L		5.0	0.70	SW846 8260B			7/27/09 15:45	JAH	C
Benzene	44.0	ug/L		5.0	0.80	SW846 8260B			7/27/09 15:45	JAH	C
Bromochloromethane	ND	ug/L		5.0	1.7	SW846 8260B			7/27/09 15:45	JAH	C
Bromodichloromethane	ND	ug/L		5.0	1.2	SW846 8260B			7/27/09 15:45	JAH	C
Bromoform	ND	ug/L		5.0	1.4	SW846 8260B			7/27/09 15:45	JAH	C
Bromomethane	ND	ug/L		5.0	1.2	SW846 8260B			7/27/09 15:45	JAH	C
2-Butanone	ND	ug/L		50.0	10.5	SW846 8260B			7/27/09 15:45	JAH	C
tert.- Butyl Alcohol	ND	ug/L		50.0	23.0	SW846 8260B			7/27/09 15:45	JAH	C
Carbon Disulfide	ND	ug/L		5.0	0.60	SW846 8260B			7/27/09 15:45	JAH	C
Carbon Tetrachloride	ND	ug/L		5.0	1.3	SW846 8260B			7/27/09 15:45	JAH	C
Chlorobenzene	ND	ug/L		5.0	0.80	SW846 8260B			7/27/09 15:45	JAH	C
Chlorodibromomethane	ND	ug/L		5.0	1.3	SW846 8260B			7/27/09 15:45	JAH	C
Chloroethane	ND	ug/L		5.0	0.95	SW846 8260B			7/27/09 15:45	JAH	C
Chloroform	ND	ug/L		5.0	1.2	SW846 8260B			7/27/09 15:45	JAH	C
Chloromethane	ND	ug/L		5.0	0.80	SW846 8260B			7/27/09 15:45	JAH	C
1,2-Dibromo-3-chloropropane	ND	ug/L		35.0	4.8	SW846 8260B			7/27/09 15:45	JAH	C
1,2-Dibromoethane	ND	ug/L		5.0	1.5	SW846 8260B			7/27/09 15:45	JAH	C
1,1-Dichloroethane	ND	ug/L		5.0	0.75	SW846 8260B			7/27/09 15:45	JAH	C
1,2-Dichloroethane	ND	ug/L		5.0	1.7	SW846 8260B			7/27/09 15:45	JAH	C
1,1-Dichloroethene	ND	ug/L		5.0	0.85	SW846 8260B			7/27/09 15:45	JAH	C
cis-1,2-Dichloroethene	ND	ug/L		5.0	0.85	SW846 8260B			7/27/09 15:45	JAH	C
trans-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			7/27/09 15:45	JAH	C
1,2-Dichloropropane	ND	ug/L		5.0	1.2	SW846 8260B			7/27/09 15:45	JAH	C
cis-1,3-Dichloropropene	ND	ug/L		5.0	0.90	SW846 8260B			7/27/09 15:45	JAH	C
trans-1,3-Dichloropropene	ND	ug/L		5.0	0.70	SW846 8260B			7/27/09 15:45	JAH	C
Diisopropyl ether	ND	ug/L		5.0	0.90	SW846 8260B			7/27/09 15:45	JAH	C
Ethyl tert-butyl ether	ND	ug/L		5.0	0.50	SW846 8260B			7/27/09 15:45	JAH	C
Ethylbenzene	1900	ug/L		100	23.0	SW846 8260B			7/28/09 14:45	TEH	D
2-Hexanone	ND	ug/L		25.0	3.9	SW846 8260B			7/27/09 15:45	JAH	C
Methyl t-Butyl Ether	ND	ug/L		5.0	0.90	SW846 8260B			7/27/09 15:45	JAH	C
4-Methyl-2-Pentanone(MIBK)	132	ug/L		25.0	2.1	SW846 8260B			7/27/09 15:45	JAH	C

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ANALYTICAL RESULTS

Workorder: 9800558 Groundwater (07/21/09)

Lab ID: **9800558007** Date Collected: 7/21/2009 00:00 Matrix: Ground Water

Sample ID: **DUP-001_20090721_FD** Date Received: 7/22/2009 20:15

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	ND	ug/L		5.0	1.6	SW846 8260B			7/27/09 15:45	JAH	C
Styrene	4.1J	ug/L		5.0	0.50	SW846 8260B			7/27/09 15:45	JAH	C
1,1,2,2-Tetrachloroethane	ND	ug/L		5.0	1.1	SW846 8260B			7/27/09 15:45	JAH	C
Tetrachloroethene	ND	ug/L		5.0	1.4	SW846 8260B			7/27/09 15:45	JAH	C
Toluene	8660	ug/L		100	19.0	SW846 8260B			7/28/09 14:45	TEH	D
Total Xylenes	9500	ug/L		300	61.0	SW846 8260B			7/28/09 14:45	TEH	D
1,1,1-Trichloroethane	ND	ug/L		5.0	1.5	SW846 8260B			7/27/09 15:45	JAH	C
1,1,2-Trichloroethane	ND	ug/L		5.0	1.5	SW846 8260B			7/27/09 15:45	JAH	C
Trichloroethene	ND	ug/L		5.0	1.7	SW846 8260B			7/27/09 15:45	JAH	C
Vinyl Chloride	ND	ug/L		5.0	0.80	SW846 8260B			7/27/09 15:45	JAH	C
o-Xylene	3410	ug/L		100	24.0	SW846 8260B			7/28/09 14:45	TEH	D
mp-Xylene	6090	ug/L		200	51.0	SW846 8260B			7/28/09 14:45	TEH	D
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	95.5	%		62-133		SW846 8260B			7/27/09 15:45	JAH	C
Dibromofluoromethane (S)	97.8	%		78-116		SW846 8260B			7/27/09 15:45	JAH	C
Toluene-d8 (S)	107	%		76-127		SW846 8260B			7/27/09 15:45	JAH	C
4-Bromofluorobenzene (S)	112	%		79-114		SW846 8260B			7/27/09 15:45	JAH	C
1,2-Dichloroethane-d4 (S)	99.2	%		62-133		SW846 8260B			7/28/09 14:45	TEH	D
4-Bromofluorobenzene (S)	110	%		79-114		SW846 8260B			7/28/09 14:45	TEH	D
Toluene-d8 (S)	105	%		76-127		SW846 8260B			7/28/09 14:45	TEH	D
Dibromofluoromethane (S)	95.1	%		78-116		SW846 8260B			7/28/09 14:45	TEH	D

Sample Comments:

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected. Reporting limits were adjusted accordingly.

The gasoline range organics analysis for this sample was diluted due to the amount of analyte present. The detection limit was raised accordingly.

The GCMS volatiles analysis was performed at a dilution due to the level of target compounds.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9800558 Groundwater (07/21/09)

Lab ID: **9800558008** Date Collected: 7/21/2009 12:00 Matrix: Ground Water

Sample ID: **Field Blank_20090721_FB** Date Received: 7/22/2009 20:15

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	0.075J	mg/L		0.16	0.020	SW846 8015D	7/23/09	RSS	7/24/09 14:37	KJH	A1
Gasoline Range Organics	ND	ug/L		100	4.2	SW846 8015D			7/24/09 11:57	TEH	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	94.9	%		40-117		SW846 8015D	7/23/09	RSS	7/24/09 14:37	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	111	%		90-129		SW846 8015D			7/24/09 11:57	TEH	E
VOLATILE ORGANICS											
Acetone	ND	ug/L		10.0	3.1	SW846 8260B			7/27/09 20:11	DJB	C
tert-Amyl methyl ether	ND	ug/L		2.0	0.17	SW846 8260B			7/27/09 20:11	DJB	C
tert-Amyl Alcohol	ND	ug/L		5.0	3.1	SW846 8260B			7/27/09 20:11	DJB	C
tert-Amyl Ethylether	ND	ug/L		1.0	0.14	SW846 8260B			7/27/09 20:11	DJB	C
Benzene	ND	ug/L		1.0	0.16	SW846 8260B			7/27/09 20:11	DJB	C
Bromochloromethane	ND	ug/L		1.0	0.33	SW846 8260B			7/27/09 20:11	DJB	C
Bromodichloromethane	ND	ug/L		1.0	0.23	SW846 8260B			7/27/09 20:11	DJB	C
Bromoform	ND	ug/L		1.0	0.28	SW846 8260B			7/27/09 20:11	DJB	C
Bromomethane	ND	ug/L		1.0	0.24	SW846 8260B			7/27/09 20:11	DJB	C
2-Butanone	ND	ug/L		10.0	2.1	SW846 8260B			7/27/09 20:11	DJB	C
tert.- Butyl Alcohol	ND	ug/L		10.0	4.6	SW846 8260B			7/27/09 20:11	DJB	C
Carbon Disulfide	ND	ug/L		1.0	0.12	SW846 8260B			7/27/09 20:11	DJB	C
Carbon Tetrachloride	ND	ug/L		1.0	0.25	SW846 8260B			7/27/09 20:11	DJB	C
Chlorobenzene	ND	ug/L		1.0	0.16	SW846 8260B			7/27/09 20:11	DJB	C
Chlorodibromomethane	ND	ug/L		1.0	0.26	SW846 8260B			7/27/09 20:11	DJB	C
Chloroethane	ND	ug/L		1.0	0.19	SW846 8260B			7/27/09 20:11	DJB	C
Chloroform	ND	ug/L		1.0	0.23	SW846 8260B			7/27/09 20:11	DJB	C
Chloromethane	ND	ug/L		1.0	0.16	SW846 8260B			7/27/09 20:11	DJB	C
1,2-Dibromo-3-chloropropane	ND	ug/L		7.0	0.96	SW846 8260B			7/27/09 20:11	DJB	C
1,2-Dibromoethane	ND	ug/L		1.0	0.30	SW846 8260B			7/27/09 20:11	DJB	C
1,1-Dichloroethane	ND	ug/L		1.0	0.15	SW846 8260B			7/27/09 20:11	DJB	C
1,2-Dichloroethane	ND	ug/L		1.0	0.33	SW846 8260B			7/27/09 20:11	DJB	C
1,1-Dichloroethene	ND	ug/L		1.0	0.17	SW846 8260B			7/27/09 20:11	DJB	C
cis-1,2-Dichloroethene	ND	ug/L		1.0	0.17	SW846 8260B			7/27/09 20:11	DJB	C
trans-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			7/27/09 20:11	DJB	C
1,2-Dichloropropane	ND	ug/L		1.0	0.23	SW846 8260B			7/27/09 20:11	DJB	C
cis-1,3-Dichloropropene	ND	ug/L		1.0	0.18	SW846 8260B			7/27/09 20:11	DJB	C
trans-1,3-Dichloropropene	ND	ug/L		1.0	0.14	SW846 8260B			7/27/09 20:11	DJB	C
Diisopropyl ether	ND	ug/L		1.0	0.18	SW846 8260B			7/27/09 20:11	DJB	C
Ethyl tert-butyl ether	ND	ug/L		1.0	0.10	SW846 8260B			7/27/09 20:11	DJB	C
Ethylbenzene	ND	ug/L		1.0	0.23	SW846 8260B			7/27/09 20:11	DJB	C
2-Hexanone	ND	ug/L		5.0	0.78	SW846 8260B			7/27/09 20:11	DJB	C
Methyl t-Butyl Ether	ND	ug/L		1.0	0.18	SW846 8260B			7/27/09 20:11	DJB	C
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		5.0	0.41	SW846 8260B			7/27/09 20:11	DJB	C

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ANALYTICAL RESULTS

Workorder: 9800558 Groundwater (07/21/09)

Lab ID: **9800558008** Date Collected: 7/21/2009 12:00 Matrix: Ground Water

Sample ID: **Field Blank_20090721_FB** Date Received: 7/22/2009 20:15

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	ND	ug/L		1.0	0.32	SW846 8260B			7/27/09 20:11	DJB	C
Styrene	ND	ug/L		1.0	0.10	SW846 8260B			7/27/09 20:11	DJB	C
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0	0.22	SW846 8260B			7/27/09 20:11	DJB	C
Tetrachloroethene	ND	ug/L		1.0	0.28	SW846 8260B			7/27/09 20:11	DJB	C
Toluene	ND	ug/L		1.0	0.19	SW846 8260B			7/27/09 20:11	DJB	C
Total Xylenes	ND	ug/L		3.0	0.61	SW846 8260B			7/27/09 20:11	DJB	C
1,1,1-Trichloroethane	ND	ug/L		1.0	0.29	SW846 8260B			7/27/09 20:11	DJB	C
1,1,2-Trichloroethane	ND	ug/L		1.0	0.29	SW846 8260B			7/27/09 20:11	DJB	C
Trichloroethene	ND	ug/L		1.0	0.33	SW846 8260B			7/27/09 20:11	DJB	C
Vinyl Chloride	ND	ug/L		1.0	0.16	SW846 8260B			7/27/09 20:11	DJB	C
o-Xylene	ND	ug/L		1.0	0.24	SW846 8260B			7/27/09 20:11	DJB	C
mp-Xylene	ND	ug/L		2.0	0.51	SW846 8260B			7/27/09 20:11	DJB	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	96.1	%		62-133		SW846 8260B			7/27/09 20:11	DJB	C
4-Bromofluorobenzene (S)	97	%		79-114		SW846 8260B			7/27/09 20:11	DJB	C
Dibromofluoromethane (S)	96.8	%		78-116		SW846 8260B			7/27/09 20:11	DJB	C
Toluene-d8 (S)	103	%		76-127		SW846 8260B			7/27/09 20:11	DJB	C

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9800558 Groundwater (07/21/09)

Lab ID: **9800558009** Date Collected: 7/22/2009 20:15 Matrix: Ground Water

Sample ID: **Trip Blank_20090721_TB** Date Received: 7/22/2009 20:15

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		10.0	3.1	SW846 8260B			7/27/09 19:38	DJB	A
tert-Amyl methyl ether	ND	ug/L		2.0	0.17	SW846 8260B			7/27/09 19:38	DJB	A
tert-Amyl Alcohol	ND	ug/L		5.0	3.1	SW846 8260B			7/27/09 19:38	DJB	A
tert-Amyl Ethylether	ND	ug/L		1.0	0.14	SW846 8260B			7/27/09 19:38	DJB	A
Benzene	ND	ug/L		1.0	0.16	SW846 8260B			7/27/09 19:38	DJB	A
Bromochloromethane	ND	ug/L		1.0	0.33	SW846 8260B			7/27/09 19:38	DJB	A
Bromodichloromethane	ND	ug/L		1.0	0.23	SW846 8260B			7/27/09 19:38	DJB	A
Bromoform	ND	ug/L		1.0	0.28	SW846 8260B			7/27/09 19:38	DJB	A
Bromomethane	ND	ug/L		1.0	0.24	SW846 8260B			7/27/09 19:38	DJB	A
2-Butanone	ND	ug/L		10.0	2.1	SW846 8260B			7/27/09 19:38	DJB	A
tert.- Butyl Alcohol	ND	ug/L		10.0	4.6	SW846 8260B			7/27/09 19:38	DJB	A
Carbon Disulfide	ND	ug/L		1.0	0.12	SW846 8260B			7/27/09 19:38	DJB	A
Carbon Tetrachloride	ND	ug/L		1.0	0.25	SW846 8260B			7/27/09 19:38	DJB	A
Chlorobenzene	ND	ug/L		1.0	0.16	SW846 8260B			7/27/09 19:38	DJB	A
Chlorodibromomethane	ND	ug/L		1.0	0.26	SW846 8260B			7/27/09 19:38	DJB	A
Chloroethane	ND	ug/L		1.0	0.19	SW846 8260B			7/27/09 19:38	DJB	A
Chloroform	ND	ug/L		1.0	0.23	SW846 8260B			7/27/09 19:38	DJB	A
Chloromethane	0.24J	ug/L		1.0	0.16	SW846 8260B			7/27/09 19:38	DJB	A
1,2-Dibromo-3-chloropropane	ND	ug/L		7.0	0.96	SW846 8260B			7/27/09 19:38	DJB	A
1,2-Dibromoethane	ND	ug/L		1.0	0.30	SW846 8260B			7/27/09 19:38	DJB	A
1,1-Dichloroethane	ND	ug/L		1.0	0.15	SW846 8260B			7/27/09 19:38	DJB	A
1,2-Dichloroethane	ND	ug/L		1.0	0.33	SW846 8260B			7/27/09 19:38	DJB	A
1,1-Dichloroethene	ND	ug/L		1.0	0.17	SW846 8260B			7/27/09 19:38	DJB	A
cis-1,2-Dichloroethene	ND	ug/L		1.0	0.17	SW846 8260B			7/27/09 19:38	DJB	A
trans-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			7/27/09 19:38	DJB	A
1,2-Dichloropropane	ND	ug/L		1.0	0.23	SW846 8260B			7/27/09 19:38	DJB	A
cis-1,3-Dichloropropene	ND	ug/L		1.0	0.18	SW846 8260B			7/27/09 19:38	DJB	A
trans-1,3-Dichloropropene	ND	ug/L		1.0	0.14	SW846 8260B			7/27/09 19:38	DJB	A
Diisopropyl ether	ND	ug/L		1.0	0.18	SW846 8260B			7/27/09 19:38	DJB	A
Ethyl tert-butyl ether	ND	ug/L		1.0	0.10	SW846 8260B			7/27/09 19:38	DJB	A
Ethylbenzene	ND	ug/L		1.0	0.23	SW846 8260B			7/27/09 19:38	DJB	A
2-Hexanone	ND	ug/L		5.0	0.78	SW846 8260B			7/27/09 19:38	DJB	A
Methyl t-Butyl Ether	ND	ug/L		1.0	0.18	SW846 8260B			7/27/09 19:38	DJB	A
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		5.0	0.41	SW846 8260B			7/27/09 19:38	DJB	A
Methylene Chloride	ND	ug/L		1.0	0.32	SW846 8260B			7/27/09 19:38	DJB	A
Styrene	ND	ug/L		1.0	0.10	SW846 8260B			7/27/09 19:38	DJB	A
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0	0.22	SW846 8260B			7/27/09 19:38	DJB	A
Tetrachloroethene	ND	ug/L		1.0	0.28	SW846 8260B			7/27/09 19:38	DJB	A
Toluene	ND	ug/L		1.0	0.19	SW846 8260B			7/27/09 19:38	DJB	A
Total Xylenes	ND	ug/L		3.0	0.61	SW846 8260B			7/27/09 19:38	DJB	A
1,1,1-Trichloroethane	ND	ug/L		1.0	0.29	SW846 8260B			7/27/09 19:38	DJB	A
1,1,2-Trichloroethane	ND	ug/L		1.0	0.29	SW846 8260B			7/27/09 19:38	DJB	A
Trichloroethene	ND	ug/L		1.0	0.33	SW846 8260B			7/27/09 19:38	DJB	A
Vinyl Chloride	ND	ug/L		1.0	0.16	SW846 8260B			7/27/09 19:38	DJB	A

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ANALYTICAL RESULTS

Workorder: 9800558 Groundwater (07/21/09)

Lab ID: **9800558009** Date Collected: 7/22/2009 20:15 Matrix: Ground Water

Sample ID: **Trip Blank_20090721_TB** Date Received: 7/22/2009 20:15

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
o-Xylene	ND	ug/L		1.0	0.24	SW846 8260B			7/27/09 19:38	DJB	A
mp-Xylene	ND	ug/L		2.0	0.51	SW846 8260B			7/27/09 19:38	DJB	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	95.2	%		62-133		SW846 8260B			7/27/09 19:38	DJB	A
4-Bromofluorobenzene (S)	96.9	%		79-114		SW846 8260B			7/27/09 19:38	DJB	A
Dibromofluoromethane (S)	97.6	%		78-116		SW846 8260B			7/27/09 19:38	DJB	A
Toluene-d8 (S)	102	%		76-127		SW846 8260B			7/27/09 19:38	DJB	A

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS QUALIFIERS\FLAGS

Workorder: 9800558 Groundwater (07/21/09)

PARAMETER QUALIFIERS\FLAGS

[1] The QC sample type LCS for method SW846 8260B was outside the control limits for the analyte Methyl t-Butyl Ether. The % Recovery was reported as 120 and the control limits were 69 to 115.

Report ID: 9800558

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT/SAMPLER. INSTRUCTIONS ON THE BACK.

Page 1 of 2

Courier:

Tracking #:

9800558

Co. Name: Repsg Inc

Contact (Report to): MKluczynski

Phone: 215 709 3220

Address: 6901 Kingsessing Ave Phila PA 19142

Bill to (if different than Report to): same

PO#: 3451

Project Name/#: Calvert city 10/5977 ALSI Quote #:

TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALSI approval and surcharges.

Date Required:

Approved By:

Email? [X] Y MKluczynski@repsg

Fax? [ ] Y No.:

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	***Container Type	***Container Size	*** Preservative	TPH-DRO	TPH-GRO	VOCs-8260B
						AG	VOA	VOA			
						1L	40ml	40ml			
						H2SO4	HCl	HCl			
1 MW-001		7-21	12.15		W				2	2	2
2 MW-002		7-21	13.15		W				2	2	2
3 MW-003		7-21	10:55		W				2	2	2
4 MW-005		7-21	11:30		W				2	2	2
5 MW-006		7-21	1400		W				2	2	2
6 MW-007		7-21	10:55		W				2	2	2
7 Dup-001		7-21	-		W				2	2	2
8 Field Blank		7-21	12:00		W				2	2	2

Enter Number of Containers Per Analysis

ANALYSES/METHOD REQUESTED

(completed by Sample Receiving) Performed by: [ ] Check HERE

Cooler Temp: 1

Therm. ID#: 273859

No. of Coolers:

Notes:

	Correct containers?	Correct sample volume?	Correct preservation?	Headspace/Volatiles?	Circle appropriate Y or N.
N	N	N	N	Y	
Y	Y	Y	Y		

	Custody seals Present?	(if present) Seals intact?	Received on ice?	COC/Labels complete/accurate?	Container in good condition?
	Y	Y	Y	Y	Y

SAMPLED BY (Please Print): A Chorney

LOGGED BY(signature): DATE 7/23 TIME 0730

REVIEWED BY(signature): DATE 07/28/09 TIME 1530

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1	7/22	1050	2 Ron Hoover	7.22	1050
3 Ron Hoover	7.22	1800	4	7/22	1800
5	7/23	0815	6	7/23	0815
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] other

EDDs Required? [X] If yes, format type: EQUIS

SDWA Forms? ⇒ yes [ ] Other

State Samples Collected In? MD [X] NJ [ ] NY [ ] PA [ ]

SEND TO PWSID#:

DOD Criteria Required?

ALSI FIELD SERVICES
[✓] Pickup
[ ] Labor
[ ] Composite Sampling
[ ] Rental Equipment
[ ] Other:

* G=Grab; C=Composite

**Matrix: Ai=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY

***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

Rev 6/07

Report ID: 9800558

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Courier:

Tracking #:

9800558

Co. Name: Repsg Inc

Contact (Report to): m Huczynski

Phone:

Address: 6901 Kingsessing Ave
Philly PA 19142

Bill to (if different than Report to): Same

PO#: 3457

Project Name/#: Calvert itg01/5977 ALSI Quote #:

TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALSI approval and surcharges

Date Required:

Approved By:

Email? [X] Y mhuczynski@repsg.com

Fax? [ ] Y No

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	VOCs 8260B	# of Bottles										
***Container Type						VOA											
***Container Size						40ml											
*** Preservative						HCl											
1 Trip Blank		7-21	-	G	WG	X	4										
2																	
3																	
4																	
5																	
6																	
7																	
8																	

ANALYSES/METHOD REQUESTED

Enter Number of Containers Per Analysis

Receipt Information (completed by Sample Receipt)

Performed by: ANITA/JEFF

Cooler Temp: 1

Therm. ID: 070357

No. of Coolers:

Notes:

	Correct containers?	Correct sample volume?	Correct preservation?	Headspace/Volatiles?	Circle appropriate Y or N.
	Y	Y	Y	Y	
	N	N	N	N	

	Custody seals Present?	(if present) Seals intact?	Received on Ice?	COC/Labels complete/accurate?	Container in good condition?
	Y	Y	Y	Y	
	N	N	N	N	

SAMPLED BY (Please Print): A. Chorney

LOGGED BY(signature): [signature] DATE: 7/23 TIME: 0800

REVIEWED BY(signature): [signature] DATE: 07/28/09 TIME: 1521

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 [signature]	7/22	1050	2 Ron Hess	7-22	1050
3 Ron Hess [signature]	7.22	1800	4 [signature]	7/22	1800
5 [signature]	7/22/9	2015	6 [signature]	7/23	2015
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] other

SDWA Forms? yes [ ]

State Samples Collected in? MD [X] NJ [ ] NY [ ] PA [ ]

EDDs Required? [X] If yes, format type: EQuIS

Other

DOD Criteria Required?

ALSI FIELD SERVICES

[ ] Pickup
[ ] Labor
[ ] Composite Sampling
[ ] Rental Equipment
[ ] Other:

* G=Grab; C=Composite

**Matrix: Al=Air; DW=Drinking Water; GW=Groundwater; Ol=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY

***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

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Certificate of Analysis

Project Name:	**MD SITE - CALVERT CITGO - REV**	Workorder:	**9822956**
Purchase Order:	**3903**	Workorder ID:	**Groundwater (12/11/09)**

Mr. Mark Kuczynski
REPSG
6901 Kingsessing Ave., Ste 201
PO Box 5377
Philadelphia, PA 19142

December 24, 2009

Dear Mr. Kuczynski,

Enclosed are the analytical results for samples received by the laboratory on Monday, December 14, 2009

ALSI is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Susan Baer (Project Coordinator) or Anna G Milliken (Laboratory Manager) at (717) 944-5541.

Please visit us at www.analyticallab.com for a listing of ALSI's NELAP accreditations and Scope of Work, as well as other links to Water Quality documentation on the internet.

This laboratory report may not be reproduced, except in full, without the written approval of ALSI.

NOTE: ALSI has changed the report generation tool and while we have tried to retain the existing format, you will notice some changes in the laboratory report. Please feel free to contact ALSI in case you have any questions.

Analytical Laboratory Services, Inc.

CC: Ms. Brenda MacPhail Kellogg

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Anna G Milliken
Laboratory Manager

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SAMPLE SUMMARY

Workorder: 9822956 Groundwater (12/11/09) Discard Date: 01/07/2010

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
9822956001	MW-001_20091211_N	Ground Water	12/11/09 08:45	12/14/09 20:12	Joe Crooks
9822956002	MW-002_20091211_N	Ground Water	12/11/09 09:40	12/14/09 20:12	Joe Crooks
9822956003	MW-003_20091211_N	Ground Water	12/11/09 14:15	12/14/09 20:12	Joe Crooks
9822956004	MW-005_20091211_N	Ground Water	12/11/09 10:30	12/14/09 20:12	Joe Crooks
9822956005	MW-006_20091211_N	Ground Water	12/11/09 17:45	12/14/09 20:12	Joe Crooks
9822956006	MW-007_20091211_N	Ground Water	12/11/09 16:45	12/14/09 20:12	Joe Crooks
9822956007	MP-001_20091211_N	Ground Water	12/11/09 13:45	12/14/09 20:12	Joe Crooks
9822956008	MP-002_20091211_N	Ground Water	12/11/09 15:00	12/14/09 20:12	Joe Crooks
9822956009	TRIP BLANK_20091211_TB	Ground Water	12/14/09 20:12	12/14/09 20:12	Joe Crooks
9822956010	FIELD BLANK_20091211_FB	Ground Water	12/11/09 12:00	12/14/09 20:12	Joe Crooks
9822956011	DUP-001_20091211_FD	Ground Water	12/11/09 00:00	12/14/09 20:12	Joe Crooks

Workorder Comments:

Notes

-- Samples collected by ALSI personnel are done so in accordance with the procedures set forth in the ALSI Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

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ANALYTICAL RESULTS

Workorder: 9822956 Groundwater (12/11/09)

Lab ID: **9822956001** Date Collected: 12/11/2009 08:45 Matrix: Ground Water

Sample ID: **MW-001_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		100	31.0	SW846 8260B			12/20/09 19:27	TMP	E
tert-Amyl methyl ether	ND	ug/L		20.0	1.7	SW846 8260B			12/20/09 19:27	TMP	E
tert-Amyl Alcohol	2320	ug/L		50.0	31.1	SW846 8260B			12/20/09 19:27	TMP	E
tert-Amyl Ethylether	ND	ug/L		10.0	1.4	SW846 8260B			12/20/09 19:27	TMP	E
Benzene	8120	ug/L		500	80.0	SW846 8260B			12/20/09 19:00	TMP	E
Bromochloromethane	ND	ug/L		10.0	3.3	SW846 8260B			12/20/09 19:27	TMP	E
Bromodichloromethane	ND	ug/L		10.0	2.3	SW846 8260B			12/20/09 19:27	TMP	E
Bromoform	ND	ug/L		10.0	2.8	SW846 8260B			12/20/09 19:27	TMP	E
Bromomethane	ND	ug/L		10.0	2.4	SW846 8260B			12/20/09 19:27	TMP	E
2-Butanone	ND	ug/L		100	21.0	SW846 8260B			12/20/09 19:27	TMP	E
tert.- Butyl Alcohol	291	ug/L		100	46.0	SW846 8260B			12/20/09 19:27	TMP	E
Carbon Disulfide	ND	ug/L		10.0	1.2	SW846 8260B			12/20/09 19:27	TMP	E
Carbon Tetrachloride	ND	ug/L		10.0	2.5	SW846 8260B			12/20/09 19:27	TMP	E
Chlorobenzene	ND	ug/L		10.0	1.6	SW846 8260B			12/20/09 19:27	TMP	E
Chlorodibromomethane	ND	ug/L		10.0	2.6	SW846 8260B			12/20/09 19:27	TMP	E
Chloroethane	ND	ug/L		10.0	1.9	SW846 8260B			12/20/09 19:27	TMP	E
Chloroform	ND	ug/L		10.0	2.3	SW846 8260B			12/20/09 19:27	TMP	E
Chloromethane	ND	ug/L		10.0	1.6	SW846 8260B			12/20/09 19:27	TMP	E
1,2-Dibromo-3-chloropropane	ND	ug/L		70.0	9.6	SW846 8260B			12/20/09 19:27	TMP	E
1,2-Dibromoethane	ND	ug/L		10.0	3.0	SW846 8260B			12/20/09 19:27	TMP	E
1,1-Dichloroethane	ND	ug/L		10.0	1.5	SW846 8260B			12/20/09 19:27	TMP	E
1,2-Dichloroethane	ND	ug/L		10.0	3.3	SW846 8260B			12/20/09 19:27	TMP	E
1,1-Dichloroethene	ND	ug/L		10.0	1.7	SW846 8260B			12/20/09 19:27	TMP	E
cis-1,2-Dichloroethene	ND	ug/L		10.0	1.7	SW846 8260B			12/20/09 19:27	TMP	E
trans-1,2-Dichloroethene	ND	ug/L		10.0	2.0	SW846 8260B			12/20/09 19:27	TMP	E
1,2-Dichloropropane	ND	ug/L		10.0	2.3	SW846 8260B			12/20/09 19:27	TMP	E
cis-1,3-Dichloropropene	ND	ug/L		10.0	1.8	SW846 8260B			12/20/09 19:27	TMP	E
trans-1,3-Dichloropropene	ND	ug/L		10.0	1.4	SW846 8260B			12/20/09 19:27	TMP	E
Diisopropyl ether	13.7	ug/L		10.0	1.8	SW846 8260B			12/20/09 19:27	TMP	E
Ethyl tert-butyl ether	ND	ug/L		10.0	1.0	SW846 8260B			12/20/09 19:27	TMP	E
Ethylbenzene	962	ug/L		10.0	2.3	SW846 8260B			12/20/09 19:27	TMP	E
2-Hexanone	ND	ug/L		50.0	7.8	SW846 8260B			12/20/09 19:27	TMP	E
Methyl t-Butyl Ether	4.0J	ug/L		10.0	1.8	SW846 8260B			12/20/09 19:27	TMP	E
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		50.0	4.1	SW846 8260B			12/20/09 19:27	TMP	E
Methylene Chloride	ND	ug/L	1	10.0	3.2	SW846 8260B			12/20/09 19:27	TMP	E
Styrene	ND	ug/L		10.0	1.0	SW846 8260B			12/20/09 19:27	TMP	E
1,1,2,2-Tetrachloroethane	ND	ug/L		10.0	2.2	SW846 8260B			12/20/09 19:27	TMP	E
Tetrachloroethene	ND	ug/L		10.0	2.8	SW846 8260B			12/20/09 19:27	TMP	E
Toluene	58.4	ug/L		10.0	1.9	SW846 8260B			12/20/09 19:27	TMP	E
Total Xylenes	1930	ug/L		30.0	6.1	SW846 8260B			12/20/09 19:27	TMP	E
1,1,1-Trichloroethane	ND	ug/L		10.0	2.9	SW846 8260B			12/20/09 19:27	TMP	E
1,1,2-Trichloroethane	ND	ug/L		10.0	2.9	SW846 8260B			12/20/09 19:27	TMP	E
Trichloroethene	ND	ug/L		10.0	3.3	SW846 8260B			12/20/09 19:27	TMP	E
Vinyl Chloride	ND	ug/L		10.0	1.6	SW846 8260B			12/20/09 19:27	TMP	E

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ANALYTICAL RESULTS

Workorder: 9822956 Groundwater (12/11/09)

Lab ID: **9822956001** Date Collected: 12/11/2009 08:45 Matrix: Ground Water

Sample ID: **MW-001_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
o-Xylene	19.0	ug/L		10.0	2.4	SW846 8260B			12/20/09 19:27	TMP	E
mp-Xylene	1910	ug/L		20.0	5.1	SW846 8260B			12/20/09 19:27	TMP	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	102	%		62-133		SW846 8260B			12/20/09 19:00	TMP	E
4-Bromofluorobenzene (S)	88.9	%		79-114		SW846 8260B			12/20/09 19:00	TMP	E
Toluene-d8 (S)	86.8	%		76-127		SW846 8260B			12/20/09 19:00	TMP	E
Dibromofluoromethane (S)	103	%		78-116		SW846 8260B			12/20/09 19:00	TMP	E
1,2-Dichloroethane-d4 (S)	96.5	%		62-133		SW846 8260B			12/20/09 19:27	TMP	E
Toluene-d8 (S)	88.1	%		76-127		SW846 8260B			12/20/09 19:27	TMP	E
Dibromofluoromethane (S)	101	%		78-116		SW846 8260B			12/20/09 19:27	TMP	E
4-Bromofluorobenzene (S)	91	%		79-114		SW846 8260B			12/20/09 19:27	TMP	E
PETROLEUM HC's											
Diesel Range Organics C10-C28	1.8	mg/L		0.17	0.021	SW846 8015D	12/18/09	KAK	12/18/09 21:32	JJH	A1
Gasoline Range Organics	14700	ug/L		5000	210	SW846 8015D			12/18/09 16:43	ECR	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	110	%		48-123		SW846 8015D	12/18/09	KAK	12/18/09 21:32	JJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	95.1	%		90-129		SW846 8015D			12/18/09 16:43	ECR	C

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9822956 Groundwater (12/11/09)

Lab ID: **9822956002** Date Collected: 12/11/2009 09:40 Matrix: Ground Water

Sample ID: **MW-002_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		10.0	3.1	SW846 8260B			12/19/09 19:13	DD	E
tert-Amyl methyl ether	ND	ug/L		2.0	0.17	SW846 8260B			12/19/09 19:13	DD	E
tert-Amyl Alcohol	ND	ug/L		5.0	3.1	SW846 8260B			12/19/09 19:13	DD	E
tert-Amyl Ethylether	ND	ug/L		1.0	0.14	SW846 8260B			12/19/09 19:13	DD	E
Benzene	39.6	ug/L		1.0	0.16	SW846 8260B			12/19/09 19:13	DD	E
Bromochloromethane	ND	ug/L		1.0	0.33	SW846 8260B			12/19/09 19:13	DD	E
Bromodichloromethane	ND	ug/L		1.0	0.23	SW846 8260B			12/19/09 19:13	DD	E
Bromoform	ND	ug/L		1.0	0.28	SW846 8260B			12/19/09 19:13	DD	E
Bromomethane	ND	ug/L		1.0	0.24	SW846 8260B			12/19/09 19:13	DD	E
2-Butanone	ND	ug/L		10.0	2.1	SW846 8260B			12/19/09 19:13	DD	E
tert.- Butyl Alcohol	47.1	ug/L		10.0	4.6	SW846 8260B			12/19/09 19:13	DD	E
Carbon Disulfide	ND	ug/L		1.0	0.12	SW846 8260B			12/19/09 19:13	DD	E
Carbon Tetrachloride	ND	ug/L		1.0	0.25	SW846 8260B			12/19/09 19:13	DD	E
Chlorobenzene	ND	ug/L		1.0	0.16	SW846 8260B			12/19/09 19:13	DD	E
Chlorodibromomethane	ND	ug/L		1.0	0.26	SW846 8260B			12/19/09 19:13	DD	E
Chloroethane	ND	ug/L		1.0	0.19	SW846 8260B			12/19/09 19:13	DD	E
Chloroform	ND	ug/L		1.0	0.23	SW846 8260B			12/19/09 19:13	DD	E
Chloromethane	ND	ug/L		1.0	0.16	SW846 8260B			12/19/09 19:13	DD	E
1,2-Dibromo-3-chloropropane	ND	ug/L		7.0	0.96	SW846 8260B			12/19/09 19:13	DD	E
1,2-Dibromoethane	ND	ug/L		1.0	0.30	SW846 8260B			12/19/09 19:13	DD	E
1,1-Dichloroethane	ND	ug/L		1.0	0.15	SW846 8260B			12/19/09 19:13	DD	E
1,2-Dichloroethane	ND	ug/L		1.0	0.33	SW846 8260B			12/19/09 19:13	DD	E
1,1-Dichloroethene	ND	ug/L		1.0	0.17	SW846 8260B			12/19/09 19:13	DD	E
cis-1,2-Dichloroethene	ND	ug/L		1.0	0.17	SW846 8260B			12/19/09 19:13	DD	E
trans-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			12/19/09 19:13	DD	E
1,2-Dichloropropane	ND	ug/L		1.0	0.23	SW846 8260B			12/19/09 19:13	DD	E
cis-1,3-Dichloropropene	ND	ug/L		1.0	0.18	SW846 8260B			12/19/09 19:13	DD	E
trans-1,3-Dichloropropene	ND	ug/L		1.0	0.14	SW846 8260B			12/19/09 19:13	DD	E
Diisopropyl ether	ND	ug/L		1.0	0.18	SW846 8260B			12/19/09 19:13	DD	E
Ethyl tert-butyl ether	ND	ug/L		1.0	0.10	SW846 8260B			12/19/09 19:13	DD	E
Ethylbenzene	0.26J	ug/L		1.0	0.23	SW846 8260B			12/19/09 19:13	DD	E
2-Hexanone	ND	ug/L		5.0	0.78	SW846 8260B			12/19/09 19:13	DD	E
Methyl t-Butyl Ether	17.9	ug/L		1.0	0.18	SW846 8260B			12/19/09 19:13	DD	E
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		5.0	0.41	SW846 8260B			12/19/09 19:13	DD	E
Methylene Chloride	ND	ug/L		1.0	0.32	SW846 8260B			12/19/09 19:13	DD	E
Styrene	ND	ug/L		1.0	0.10	SW846 8260B			12/19/09 19:13	DD	E
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0	0.22	SW846 8260B			12/19/09 19:13	DD	E
Tetrachloroethene	ND	ug/L		1.0	0.28	SW846 8260B			12/19/09 19:13	DD	E
Toluene	ND	ug/L		1.0	0.19	SW846 8260B			12/19/09 19:13	DD	E
Total Xylenes	1.4J	ug/L		3.0	0.61	SW846 8260B			12/19/09 19:13	DD	E
1,1,1-Trichloroethane	ND	ug/L		1.0	0.29	SW846 8260B			12/19/09 19:13	DD	E
1,1,2-Trichloroethane	ND	ug/L		1.0	0.29	SW846 8260B			12/19/09 19:13	DD	E
Trichloroethene	1.4	ug/L		1.0	0.33	SW846 8260B			12/19/09 19:13	DD	E
Vinyl Chloride	ND	ug/L		1.0	0.16	SW846 8260B			12/19/09 19:13	DD	E

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ANALYTICAL RESULTS

Workorder: 9822956 Groundwater (12/11/09)

Lab ID: **9822956002** Date Collected: 12/11/2009 09:40 Matrix: Ground Water

Sample ID: **MW-002_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
o-Xylene	0.73J	ug/L		1.0	0.24	SW846 8260B			12/19/09 19:13	DD	E
mp-Xylene	0.69J	ug/L		2.0	0.51	SW846 8260B			12/19/09 19:13	DD	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	114	%		62-133		SW846 8260B			12/19/09 19:13	DD	E
Dibromofluoromethane (S)	106	%		78-116		SW846 8260B			12/19/09 19:13	DD	E
Toluene-d8 (S)	113	%		76-127		SW846 8260B			12/19/09 19:13	DD	E
4-Bromofluorobenzene (S)	91.5	%		79-114		SW846 8260B			12/19/09 19:13	DD	E
PETROLEUM HC's											
Diesel Range Organics C10-C28	0.53	mg/L		0.16	0.020	SW846 8015D	12/18/09	KAK	12/21/09 10:22	JJH	A1
Gasoline Range Organics	73.0J	ug/L	2	100	4.2	SW846 8015D			12/18/09 15:00	ECR	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	104	%		48-123		SW846 8015D	12/18/09	KAK	12/21/09 10:22	JJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	94	%		90-129		SW846 8015D			12/18/09 15:00	ECR	C

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9822956 Groundwater (12/11/09)

Lab ID: **9822956003** Date Collected: 12/11/2009 14:15 Matrix: Ground Water

Sample ID: **MW-003_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		50.0	15.5	SW846 8260B			12/20/09 19:45	DD	E
tert-Amyl methyl ether	ND	ug/L		10.0	0.85	SW846 8260B			12/20/09 19:45	DD	E
tert-Amyl Alcohol	ND	ug/L		25.0	15.6	SW846 8260B			12/20/09 19:45	DD	E
tert-Amyl Ethylether	ND	ug/L		5.0	0.70	SW846 8260B			12/20/09 19:45	DD	E
Benzene	88.7	ug/L		5.0	0.80	SW846 8260B			12/20/09 19:45	DD	E
Bromochloromethane	ND	ug/L		5.0	1.7	SW846 8260B			12/20/09 19:45	DD	E
Bromodichloromethane	ND	ug/L		5.0	1.2	SW846 8260B			12/20/09 19:45	DD	E
Bromoform	ND	ug/L		5.0	1.4	SW846 8260B			12/20/09 19:45	DD	E
Bromomethane	ND	ug/L		5.0	1.2	SW846 8260B			12/20/09 19:45	DD	E
2-Butanone	ND	ug/L		50.0	10.5	SW846 8260B			12/20/09 19:45	DD	E
tert.- Butyl Alcohol	97.6	ug/L		50.0	23.0	SW846 8260B			12/20/09 19:45	DD	E
Carbon Disulfide	ND	ug/L		5.0	0.60	SW846 8260B			12/20/09 19:45	DD	E
Carbon Tetrachloride	ND	ug/L		5.0	1.3	SW846 8260B			12/20/09 19:45	DD	E
Chlorobenzene	ND	ug/L		5.0	0.80	SW846 8260B			12/20/09 19:45	DD	E
Chlorodibromomethane	ND	ug/L		5.0	1.3	SW846 8260B			12/20/09 19:45	DD	E
Chloroethane	ND	ug/L		5.0	0.95	SW846 8260B			12/20/09 19:45	DD	E
Chloroform	ND	ug/L		5.0	1.2	SW846 8260B			12/20/09 19:45	DD	E
Chloromethane	ND	ug/L		5.0	0.80	SW846 8260B			12/20/09 19:45	DD	E
1,2-Dibromo-3-chloropropane	ND	ug/L		35.0	4.8	SW846 8260B			12/20/09 19:45	DD	E
1,2-Dibromoethane	ND	ug/L		5.0	1.5	SW846 8260B			12/20/09 19:45	DD	E
1,1-Dichloroethane	ND	ug/L		5.0	0.75	SW846 8260B			12/20/09 19:45	DD	E
1,2-Dichloroethane	ND	ug/L		5.0	1.7	SW846 8260B			12/20/09 19:45	DD	E
1,1-Dichloroethene	ND	ug/L		5.0	0.85	SW846 8260B			12/20/09 19:45	DD	E
cis-1,2-Dichloroethene	ND	ug/L		5.0	0.85	SW846 8260B			12/20/09 19:45	DD	E
trans-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			12/20/09 19:45	DD	E
1,2-Dichloropropane	ND	ug/L		5.0	1.2	SW846 8260B			12/20/09 19:45	DD	E
cis-1,3-Dichloropropene	ND	ug/L		5.0	0.90	SW846 8260B			12/20/09 19:45	DD	E
trans-1,3-Dichloropropene	ND	ug/L		5.0	0.70	SW846 8260B			12/20/09 19:45	DD	E
Diisopropyl ether	8.5	ug/L		5.0	0.90	SW846 8260B			12/20/09 19:45	DD	E
Ethyl tert-butyl ether	ND	ug/L		5.0	0.50	SW846 8260B			12/20/09 19:45	DD	E
Ethylbenzene	1790	ug/L		100	23.0	SW846 8260B			12/20/09 16:45	DD	E
2-Hexanone	ND	ug/L		25.0	3.9	SW846 8260B			12/20/09 19:45	DD	E
Methyl t-Butyl Ether	ND	ug/L		5.0	0.90	SW846 8260B			12/20/09 19:45	DD	E
4-Methyl-2-Pentanone(MIBK)	123	ug/L		25.0	2.1	SW846 8260B			12/20/09 19:45	DD	E
Methylene Chloride	ND	ug/L		5.0	1.6	SW846 8260B			12/20/09 19:45	DD	E
Styrene	11.4	ug/L		5.0	0.50	SW846 8260B			12/20/09 19:45	DD	E
1,1,2,2-Tetrachloroethane	ND	ug/L		5.0	1.1	SW846 8260B			12/20/09 19:45	DD	E
Tetrachloroethene	ND	ug/L		5.0	1.4	SW846 8260B			12/20/09 19:45	DD	E
Toluene	8000	ug/L		100	19.0	SW846 8260B			12/20/09 16:45	DD	E
Total Xylenes	8670	ug/L		300	61.0	SW846 8260B			12/20/09 16:45	DD	E
1,1,1-Trichloroethane	ND	ug/L		5.0	1.5	SW846 8260B			12/20/09 19:45	DD	E
1,1,2-Trichloroethane	ND	ug/L		5.0	1.5	SW846 8260B			12/20/09 19:45	DD	E
Trichloroethene	ND	ug/L		5.0	1.7	SW846 8260B			12/20/09 19:45	DD	E
Vinyl Chloride	ND	ug/L		5.0	0.80	SW846 8260B			12/20/09 19:45	DD	E

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ANALYTICAL RESULTS

Workorder: 9822956 Groundwater (12/11/09)

Lab ID: **9822956003** Date Collected: 12/11/2009 14:15 Matrix: Ground Water

Sample ID: **MW-003_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
o-Xylene	2390	ug/L		100	24.0	SW846 8260B			12/20/09 16:45	DD	E
mp-Xylene	6280	ug/L		200	51.0	SW846 8260B			12/20/09 16:45	DD	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	117	%		62-133		SW846 8260B			12/20/09 16:45	DD	E
Dibromofluoromethane (S)	109	%		78-116		SW846 8260B			12/20/09 16:45	DD	E
Toluene-d8 (S)	115	%		76-127		SW846 8260B			12/20/09 16:45	DD	E
4-Bromofluorobenzene (S)	90	%		79-114		SW846 8260B			12/20/09 16:45	DD	E
1,2-Dichloroethane-d4 (S)	112	%		62-133		SW846 8260B			12/20/09 19:45	DD	E
Toluene-d8 (S)	110	%		76-127		SW846 8260B			12/20/09 19:45	DD	E
Dibromofluoromethane (S)	104	%		78-116		SW846 8260B			12/20/09 19:45	DD	E
4-Bromofluorobenzene (S)	104	%		79-114		SW846 8260B			12/20/09 19:45	DD	E
PETROLEUM HC's											
Diesel Range Organics C10-C28	5.2	mg/L		0.83	0.10	SW846 8015D	12/18/09	KAK	12/21/09 11:00	JJH	A1
Gasoline Range Organics	47700	ug/L		1000	42.0	SW846 8015D			12/18/09 18:26	ECR	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	51.5	%		48-123		SW846 8015D	12/18/09	KAK	12/21/09 11:00	JJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	95.7	%		90-129		SW846 8015D			12/18/09 18:26	ECR	C

Sample Comments:

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected. Reporting limits were adjusted accordingly.

The GCMS volatiles analysis was performed at a dilution due to the level of target compounds.

Anna G Milliken
Laboratory Manager

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34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9822956 Groundwater (12/11/09)

Lab ID: **9822956004** Date Collected: 12/11/2009 10:30 Matrix: Ground Water

Sample ID: **MW-005_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		50.0	15.5	SW846 8260B			12/20/09 19:08	DD	E
tert-Amyl methyl ether	ND	ug/L		10.0	0.85	SW846 8260B			12/20/09 19:08	DD	E
tert-Amyl Alcohol	ND	ug/L		25.0	15.6	SW846 8260B			12/20/09 19:08	DD	E
tert-Amyl Ethylether	ND	ug/L		5.0	0.70	SW846 8260B			12/20/09 19:08	DD	E
Benzene	374	ug/L		5.0	0.80	SW846 8260B			12/20/09 19:08	DD	E
Bromochloromethane	ND	ug/L		5.0	1.7	SW846 8260B			12/20/09 19:08	DD	E
Bromodichloromethane	ND	ug/L		5.0	1.2	SW846 8260B			12/20/09 19:08	DD	E
Bromoform	ND	ug/L		5.0	1.4	SW846 8260B			12/20/09 19:08	DD	E
Bromomethane	ND	ug/L		5.0	1.2	SW846 8260B			12/20/09 19:08	DD	E
2-Butanone	ND	ug/L		50.0	10.5	SW846 8260B			12/20/09 19:08	DD	E
tert.- Butyl Alcohol	1160	ug/L		50.0	23.0	SW846 8260B			12/20/09 19:08	DD	E
Carbon Disulfide	ND	ug/L		5.0	0.60	SW846 8260B			12/20/09 19:08	DD	E
Carbon Tetrachloride	ND	ug/L		5.0	1.3	SW846 8260B			12/20/09 19:08	DD	E
Chlorobenzene	ND	ug/L		5.0	0.80	SW846 8260B			12/20/09 19:08	DD	E
Chlorodibromomethane	ND	ug/L		5.0	1.3	SW846 8260B			12/20/09 19:08	DD	E
Chloroethane	ND	ug/L		5.0	0.95	SW846 8260B			12/20/09 19:08	DD	E
Chloroform	ND	ug/L		5.0	1.2	SW846 8260B			12/20/09 19:08	DD	E
Chloromethane	ND	ug/L		5.0	0.80	SW846 8260B			12/20/09 19:08	DD	E
1,2-Dibromo-3-chloropropane	ND	ug/L		35.0	4.8	SW846 8260B			12/20/09 19:08	DD	E
1,2-Dibromoethane	ND	ug/L		5.0	1.5	SW846 8260B			12/20/09 19:08	DD	E
1,1-Dichloroethane	ND	ug/L		5.0	0.75	SW846 8260B			12/20/09 19:08	DD	E
1,2-Dichloroethane	ND	ug/L		5.0	1.7	SW846 8260B			12/20/09 19:08	DD	E
1,1-Dichloroethene	ND	ug/L		5.0	0.85	SW846 8260B			12/20/09 19:08	DD	E
cis-1,2-Dichloroethene	ND	ug/L		5.0	0.85	SW846 8260B			12/20/09 19:08	DD	E
trans-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			12/20/09 19:08	DD	E
1,2-Dichloropropane	ND	ug/L		5.0	1.2	SW846 8260B			12/20/09 19:08	DD	E
cis-1,3-Dichloropropene	ND	ug/L		5.0	0.90	SW846 8260B			12/20/09 19:08	DD	E
trans-1,3-Dichloropropene	ND	ug/L		5.0	0.70	SW846 8260B			12/20/09 19:08	DD	E
Diisopropyl ether	ND	ug/L		5.0	0.90	SW846 8260B			12/20/09 19:08	DD	E
Ethyl tert-butyl ether	ND	ug/L		5.0	0.50	SW846 8260B			12/20/09 19:08	DD	E
Ethylbenzene	1960	ug/L		250	57.5	SW846 8260B			12/20/09 16:08	DD	E
2-Hexanone	85.6	ug/L		25.0	3.9	SW846 8260B			12/20/09 19:08	DD	E
Methyl t-Butyl Ether	ND	ug/L		5.0	0.90	SW846 8260B			12/20/09 19:08	DD	E
4-Methyl-2-Pentanone(MIBK)	226	ug/L		25.0	2.1	SW846 8260B			12/20/09 19:08	DD	E
Methylene Chloride	ND	ug/L		5.0	1.6	SW846 8260B			12/20/09 19:08	DD	E
Styrene	15.1	ug/L		5.0	0.50	SW846 8260B			12/20/09 19:08	DD	E
1,1,2,2-Tetrachloroethane	ND	ug/L		5.0	1.1	SW846 8260B			12/20/09 19:08	DD	E
Tetrachloroethene	ND	ug/L		5.0	1.4	SW846 8260B			12/20/09 19:08	DD	E
Toluene	22700	ug/L		250	47.5	SW846 8260B			12/20/09 16:08	DD	E
Total Xylenes	10500	ug/L		750	153	SW846 8260B			12/20/09 16:08	DD	E
1,1,1-Trichloroethane	ND	ug/L		5.0	1.5	SW846 8260B			12/20/09 19:08	DD	E
1,1,2-Trichloroethane	ND	ug/L		5.0	1.5	SW846 8260B			12/20/09 19:08	DD	E
Trichloroethene	ND	ug/L		5.0	1.7	SW846 8260B			12/20/09 19:08	DD	E
Vinyl Chloride	ND	ug/L		5.0	0.80	SW846 8260B			12/20/09 19:08	DD	E

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ANALYTICAL RESULTS

Workorder: 9822956 Groundwater (12/11/09)

Lab ID: **9822956004** Date Collected: 12/11/2009 10:30 Matrix: Ground Water

Sample ID: **MW-005_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
o-Xylene	2720	ug/L		250	60.0	SW846 8260B			12/20/09 16:08	DD	E
mp-Xylene	7800	ug/L		500	128	SW846 8260B			12/20/09 16:08	DD	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	118	%		62-133		SW846 8260B			12/20/09 16:08	DD	E
Toluene-d8 (S)	113	%		76-127		SW846 8260B			12/20/09 16:08	DD	E
4-Bromofluorobenzene (S)	92	%		79-114		SW846 8260B			12/20/09 16:08	DD	E
Dibromofluoromethane (S)	107	%		78-116		SW846 8260B			12/20/09 16:08	DD	E
1,2-Dichloroethane-d4 (S)	121	%		62-133		SW846 8260B			12/20/09 19:08	DD	E
Toluene-d8 (S)	108	%		76-127		SW846 8260B			12/20/09 19:08	DD	E
Dibromofluoromethane (S)	100	%		78-116		SW846 8260B			12/20/09 19:08	DD	E
4-Bromofluorobenzene (S)	108	%		79-114		SW846 8260B			12/20/09 19:08	DD	E
PETROLEUM HC's											
Diesel Range Organics C10-C28	6.3	mg/L		0.80	0.10	SW846 8015D	12/18/09	KAK	12/21/09 11:31	JJH	A1
Gasoline Range Organics	105000	ug/L		10000	420	SW846 8015D			12/18/09 16:09	ECR	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	63.8	%		48-123		SW846 8015D	12/18/09	KAK	12/21/09 11:31	JJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	92.3	%		90-129		SW846 8015D			12/18/09 16:09	ECR	C

Sample Comments:

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected. Reporting limits were adjusted accordingly.

The GCMS volatiles analysis was performed at a dilution due to the level of target compounds.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9822956 Groundwater (12/11/09)

Lab ID: **9822956005** Date Collected: 12/11/2009 17:45 Matrix: Ground Water

Sample ID: **MW-006_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		10.0	3.1	SW846 8260B			12/19/09 19:35	DJB	E
tert-Amyl methyl ether	ND	ug/L		2.0	0.17	SW846 8260B			12/19/09 19:35	DJB	E
tert-Amyl Alcohol	ND	ug/L	3	5.0	3.1	SW846 8260B			12/19/09 19:35	DJB	E
tert-Amyl Ethylether	ND	ug/L		1.0	0.14	SW846 8260B			12/19/09 19:35	DJB	E
Benzene	11.7	ug/L		1.0	0.16	SW846 8260B			12/19/09 19:35	DJB	E
Bromochloromethane	ND	ug/L		1.0	0.33	SW846 8260B			12/19/09 19:35	DJB	E
Bromodichloromethane	ND	ug/L		1.0	0.23	SW846 8260B			12/19/09 19:35	DJB	E
Bromoform	ND	ug/L		1.0	0.28	SW846 8260B			12/19/09 19:35	DJB	E
Bromomethane	ND	ug/L		1.0	0.24	SW846 8260B			12/19/09 19:35	DJB	E
2-Butanone	ND	ug/L		10.0	2.1	SW846 8260B			12/19/09 19:35	DJB	E
tert.- Butyl Alcohol	ND	ug/L		10.0	4.6	SW846 8260B			12/19/09 19:35	DJB	E
Carbon Disulfide	ND	ug/L		1.0	0.12	SW846 8260B			12/19/09 19:35	DJB	E
Carbon Tetrachloride	ND	ug/L		1.0	0.25	SW846 8260B			12/19/09 19:35	DJB	E
Chlorobenzene	2.9	ug/L		1.0	0.16	SW846 8260B			12/19/09 19:35	DJB	E
Chlorodibromomethane	ND	ug/L		1.0	0.26	SW846 8260B			12/19/09 19:35	DJB	E
Chloroethane	ND	ug/L		1.0	0.19	SW846 8260B			12/19/09 19:35	DJB	E
Chloroform	ND	ug/L		1.0	0.23	SW846 8260B			12/19/09 19:35	DJB	E
Chloromethane	ND	ug/L		1.0	0.16	SW846 8260B			12/19/09 19:35	DJB	E
1,2-Dibromo-3-chloropropane	ND	ug/L		7.0	0.96	SW846 8260B			12/19/09 19:35	DJB	E
1,2-Dibromoethane	ND	ug/L		1.0	0.30	SW846 8260B			12/19/09 19:35	DJB	E
1,1-Dichloroethane	ND	ug/L		1.0	0.15	SW846 8260B			12/19/09 19:35	DJB	E
1,2-Dichloroethane	ND	ug/L		1.0	0.33	SW846 8260B			12/19/09 19:35	DJB	E
1,1-Dichloroethene	ND	ug/L		1.0	0.17	SW846 8260B			12/19/09 19:35	DJB	E
cis-1,2-Dichloroethene	ND	ug/L		1.0	0.17	SW846 8260B			12/19/09 19:35	DJB	E
trans-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			12/19/09 19:35	DJB	E
1,2-Dichloropropane	ND	ug/L		1.0	0.23	SW846 8260B			12/19/09 19:35	DJB	E
cis-1,3-Dichloropropene	ND	ug/L		1.0	0.18	SW846 8260B			12/19/09 19:35	DJB	E
trans-1,3-Dichloropropene	ND	ug/L		1.0	0.14	SW846 8260B			12/19/09 19:35	DJB	E
Diisopropyl ether	ND	ug/L		1.0	0.18	SW846 8260B			12/19/09 19:35	DJB	E
Ethyl tert-butyl ether	ND	ug/L		1.0	0.10	SW846 8260B			12/19/09 19:35	DJB	E
Ethylbenzene	32.4	ug/L		1.0	0.23	SW846 8260B			12/19/09 19:35	DJB	E
2-Hexanone	ND	ug/L		5.0	0.78	SW846 8260B			12/19/09 19:35	DJB	E
Methyl t-Butyl Ether	2.0	ug/L		1.0	0.18	SW846 8260B			12/19/09 19:35	DJB	E
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		5.0	0.41	SW846 8260B			12/19/09 19:35	DJB	E
Methylene Chloride	ND	ug/L		1.0	0.32	SW846 8260B			12/19/09 19:35	DJB	E
Styrene	0.20J	ug/L		1.0	0.10	SW846 8260B			12/19/09 19:35	DJB	E
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0	0.22	SW846 8260B			12/19/09 19:35	DJB	E
Tetrachloroethene	10.0	ug/L		1.0	0.28	SW846 8260B			12/19/09 19:35	DJB	E
Toluene	220	ug/L		10.0	1.9	SW846 8260B			12/21/09 19:17	DJB	F
Total Xylenes	172	ug/L		3.0	0.61	SW846 8260B			12/19/09 19:35	DJB	E
1,1,1-Trichloroethane	ND	ug/L		1.0	0.29	SW846 8260B			12/19/09 19:35	DJB	E
1,1,2-Trichloroethane	ND	ug/L		1.0	0.29	SW846 8260B			12/19/09 19:35	DJB	E
Trichloroethene	ND	ug/L		1.0	0.33	SW846 8260B			12/19/09 19:35	DJB	E
Vinyl Chloride	ND	ug/L		1.0	0.16	SW846 8260B			12/19/09 19:35	DJB	E

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ANALYTICAL RESULTS

Workorder: 9822956 Groundwater (12/11/09)

Lab ID: **9822956005** Date Collected: 12/11/2009 17:45 Matrix: Ground Water

Sample ID: **MW-006_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
o-Xylene	54.6	ug/L		1.0	0.24	SW846 8260B			12/19/09 19:35	DJB	E
mp-Xylene	118	ug/L		2.0	0.51	SW846 8260B			12/19/09 19:35	DJB	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	137	%	5	62-133		SW846 8260B			12/19/09 19:35	DJB	E
Dibromofluoromethane (S)	101	%		78-116		SW846 8260B			12/19/09 19:35	DJB	E
Toluene-d8 (S)	102	%		76-127		SW846 8260B			12/19/09 19:35	DJB	E
4-Bromofluorobenzene (S)	97.6	%		79-114		SW846 8260B			12/19/09 19:35	DJB	E
1,2-Dichloroethane-d4 (S)	91.7	%		62-133		SW846 8260B			12/21/09 19:17	DJB	F
4-Bromofluorobenzene (S)	81.1	%		79-114		SW846 8260B			12/21/09 19:17	DJB	F
Toluene-d8 (S)	91.5	%		76-127		SW846 8260B			12/21/09 19:17	DJB	F
Dibromofluoromethane (S)	86.6	%		78-116		SW846 8260B			12/21/09 19:17	DJB	F
PETROLEUM HC's											
Diesel Range Organics C10-C28	0.24	mg/L		0.17	0.021	SW846 8015D	12/18/09	KAK	12/19/09 03:21	JJH	A1
Gasoline Range Organics	1200	ug/L		100	4.2	SW846 8015D			12/18/09 15:35	ECR	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	73.6	%		48-123		SW846 8015D	12/18/09	KAK	12/19/09 03:21	JJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	93	%		90-129		SW846 8015D			12/18/09 15:35	ECR	C

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9822956 Groundwater (12/11/09)

Lab ID: **9822956006** Date Collected: 12/11/2009 16:45 Matrix: Ground Water

Sample ID: **MW-007_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		100	31.0	SW846 8260B			12/19/09 21:08	DJB	E
tert-Amyl methyl ether	ND	ug/L		20.0	1.7	SW846 8260B			12/19/09 21:08	DJB	E
tert-Amyl Alcohol	ND	ug/L	3	50.0	31.1	SW846 8260B			12/19/09 21:08	DJB	E
tert-Amyl Ethylether	ND	ug/L		10.0	1.4	SW846 8260B			12/19/09 21:08	DJB	E
Benzene	1060	ug/L		10.0	1.6	SW846 8260B			12/19/09 21:08	DJB	E
Bromochloromethane	ND	ug/L		10.0	3.3	SW846 8260B			12/19/09 21:08	DJB	E
Bromodichloromethane	ND	ug/L		10.0	2.3	SW846 8260B			12/19/09 21:08	DJB	E
Bromoform	ND	ug/L		10.0	2.8	SW846 8260B			12/19/09 21:08	DJB	E
Bromomethane	ND	ug/L		10.0	2.4	SW846 8260B			12/19/09 21:08	DJB	E
2-Butanone	ND	ug/L		100	21.0	SW846 8260B			12/19/09 21:08	DJB	E
tert.- Butyl Alcohol	ND	ug/L		100	46.0	SW846 8260B			12/19/09 21:08	DJB	E
Carbon Disulfide	ND	ug/L		10.0	1.2	SW846 8260B			12/19/09 21:08	DJB	E
Carbon Tetrachloride	ND	ug/L		10.0	2.5	SW846 8260B			12/19/09 21:08	DJB	E
Chlorobenzene	ND	ug/L		10.0	1.6	SW846 8260B			12/19/09 21:08	DJB	E
Chlorodibromomethane	ND	ug/L		10.0	2.6	SW846 8260B			12/19/09 21:08	DJB	E
Chloroethane	ND	ug/L		10.0	1.9	SW846 8260B			12/19/09 21:08	DJB	E
Chloroform	ND	ug/L		10.0	2.3	SW846 8260B			12/19/09 21:08	DJB	E
Chloromethane	ND	ug/L		10.0	1.6	SW846 8260B			12/19/09 21:08	DJB	E
1,2-Dibromo-3-chloropropane	ND	ug/L		70.0	9.6	SW846 8260B			12/19/09 21:08	DJB	E
1,2-Dibromoethane	ND	ug/L		10.0	3.0	SW846 8260B			12/19/09 21:08	DJB	E
1,1-Dichloroethane	ND	ug/L		10.0	1.5	SW846 8260B			12/19/09 21:08	DJB	E
1,2-Dichloroethane	ND	ug/L		10.0	3.3	SW846 8260B			12/19/09 21:08	DJB	E
1,1-Dichloroethene	ND	ug/L		10.0	1.7	SW846 8260B			12/19/09 21:08	DJB	E
cis-1,2-Dichloroethene	ND	ug/L		10.0	1.7	SW846 8260B			12/19/09 21:08	DJB	E
trans-1,2-Dichloroethene	ND	ug/L		10.0	2.0	SW846 8260B			12/19/09 21:08	DJB	E
1,2-Dichloropropane	ND	ug/L		10.0	2.3	SW846 8260B			12/19/09 21:08	DJB	E
cis-1,3-Dichloropropene	ND	ug/L		10.0	1.8	SW846 8260B			12/19/09 21:08	DJB	E
trans-1,3-Dichloropropene	ND	ug/L		10.0	1.4	SW846 8260B			12/19/09 21:08	DJB	E
Diisopropyl ether	ND	ug/L		10.0	1.8	SW846 8260B			12/19/09 21:08	DJB	E
Ethyl tert-butyl ether	ND	ug/L		10.0	1.0	SW846 8260B			12/19/09 21:08	DJB	E
Ethylbenzene	827	ug/L		10.0	2.3	SW846 8260B			12/19/09 21:08	DJB	E
2-Hexanone	49.6J	ug/L		50.0	7.8	SW846 8260B			12/19/09 21:08	DJB	E
Methyl t-Butyl Ether	2.3J	ug/L		10.0	1.8	SW846 8260B			12/19/09 21:08	DJB	E
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		50.0	4.1	SW846 8260B			12/19/09 21:08	DJB	E
Methylene Chloride	ND	ug/L		10.0	3.2	SW846 8260B			12/19/09 21:08	DJB	E
Styrene	7.2J	ug/L		10.0	1.0	SW846 8260B			12/19/09 21:08	DJB	E
1,1,2,2-Tetrachloroethane	ND	ug/L		10.0	2.2	SW846 8260B			12/19/09 21:08	DJB	E
Tetrachloroethene	ND	ug/L		10.0	2.8	SW846 8260B			12/19/09 21:08	DJB	E
Toluene	10200	ug/L		100	19.0	SW846 8260B			12/21/09 21:31	DJB	F
Total Xylenes	4460	ug/L		30.0	6.1	SW846 8260B			12/19/09 21:08	DJB	E
1,1,1-Trichloroethane	ND	ug/L		10.0	2.9	SW846 8260B			12/19/09 21:08	DJB	E
1,1,2-Trichloroethane	ND	ug/L		10.0	2.9	SW846 8260B			12/19/09 21:08	DJB	E
Trichloroethene	ND	ug/L		10.0	3.3	SW846 8260B			12/19/09 21:08	DJB	E
Vinyl Chloride	ND	ug/L		10.0	1.6	SW846 8260B			12/19/09 21:08	DJB	E

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ANALYTICAL RESULTS

Workorder: 9822956 Groundwater (12/11/09)

Lab ID: **9822956006** Date Collected: 12/11/2009 16:45 Matrix: Ground Water

Sample ID: **MW-007_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
o-Xylene	1520	ug/L		10.0	2.4	SW846 8260B			12/19/09 21:08	DJB	E
mp-Xylene	2940	ug/L		20.0	5.1	SW846 8260B			12/19/09 21:08	DJB	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	12.2	%	7	62-133		SW846 8260B			12/19/09 21:08	DJB	E
4-Bromofluorobenzene (S)	9.9	%	9	79-114		SW846 8260B			12/19/09 21:08	DJB	E
Dibromofluoromethane (S)	10.1	%	6	78-116		SW846 8260B			12/19/09 21:08	DJB	E
Toluene-d8 (S)	23.6	%	8	76-127		SW846 8260B			12/19/09 21:08	DJB	E
1,2-Dichloroethane-d4 (S)	93.8	%		62-133		SW846 8260B			12/21/09 21:31	DJB	F
4-Bromofluorobenzene (S)	79.6	%		79-114		SW846 8260B			12/21/09 21:31	DJB	F
Dibromofluoromethane (S)	87.7	%		78-116		SW846 8260B			12/21/09 21:31	DJB	F
Toluene-d8 (S)	91	%		76-127		SW846 8260B			12/21/09 21:31	DJB	F
PETROLEUM HC's											
Diesel Range Organics C10-C28	3.8	mg/L		0.82	0.10	SW846 8015D	12/18/09	KAK	12/21/09 12:03	JJH	A1
Gasoline Range Organics	53800	ug/L		5000	210	SW846 8015D			12/18/09 17:18	ECR	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	51	%		48-123		SW846 8015D	12/18/09	KAK	12/21/09 12:03	JJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	93.9	%		90-129		SW846 8015D			12/18/09 17:18	ECR	C

Sample Comments:

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected. Reporting limits were adjusted accordingly.

The GCMS volatiles analysis was performed at a dilution due to the level of target compounds.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9822956 Groundwater (12/11/09)

Lab ID: **9822956007** Date Collected: 12/11/2009 13:45 Matrix: Ground Water

Sample ID: **MP-001_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		100	31.0	SW846 8260B			12/19/09 21:39	DJB	E
tert-Amyl methyl ether	ND	ug/L		20.0	1.7	SW846 8260B			12/19/09 21:39	DJB	E
tert-Amyl Alcohol	ND	ug/L	3	50.0	31.1	SW846 8260B			12/19/09 21:39	DJB	E
tert-Amyl Ethylether	ND	ug/L		10.0	1.4	SW846 8260B			12/19/09 21:39	DJB	E
Benzene	372	ug/L		10.0	1.6	SW846 8260B			12/19/09 21:39	DJB	E
Bromochloromethane	ND	ug/L		10.0	3.3	SW846 8260B			12/19/09 21:39	DJB	E
Bromodichloromethane	ND	ug/L		10.0	2.3	SW846 8260B			12/19/09 21:39	DJB	E
Bromoform	ND	ug/L		10.0	2.8	SW846 8260B			12/19/09 21:39	DJB	E
Bromomethane	ND	ug/L		10.0	2.4	SW846 8260B			12/19/09 21:39	DJB	E
2-Butanone	ND	ug/L		100	21.0	SW846 8260B			12/19/09 21:39	DJB	E
tert.- Butyl Alcohol	248	ug/L		100	46.0	SW846 8260B			12/19/09 21:39	DJB	E
Carbon Disulfide	ND	ug/L		10.0	1.2	SW846 8260B			12/19/09 21:39	DJB	E
Carbon Tetrachloride	ND	ug/L		10.0	2.5	SW846 8260B			12/19/09 21:39	DJB	E
Chlorobenzene	ND	ug/L		10.0	1.6	SW846 8260B			12/19/09 21:39	DJB	E
Chlorodibromomethane	ND	ug/L		10.0	2.6	SW846 8260B			12/19/09 21:39	DJB	E
Chloroethane	ND	ug/L		10.0	1.9	SW846 8260B			12/19/09 21:39	DJB	E
Chloroform	2.4J	ug/L		10.0	2.3	SW846 8260B			12/19/09 21:39	DJB	E
Chloromethane	ND	ug/L		10.0	1.6	SW846 8260B			12/19/09 21:39	DJB	E
1,2-Dibromo-3-chloropropane	ND	ug/L		70.0	9.6	SW846 8260B			12/19/09 21:39	DJB	E
1,2-Dibromoethane	ND	ug/L		10.0	3.0	SW846 8260B			12/19/09 21:39	DJB	E
1,1-Dichloroethane	ND	ug/L		10.0	1.5	SW846 8260B			12/19/09 21:39	DJB	E
1,2-Dichloroethane	ND	ug/L		10.0	3.3	SW846 8260B			12/19/09 21:39	DJB	E
1,1-Dichloroethene	ND	ug/L		10.0	1.7	SW846 8260B			12/19/09 21:39	DJB	E
cis-1,2-Dichloroethene	ND	ug/L		10.0	1.7	SW846 8260B			12/19/09 21:39	DJB	E
trans-1,2-Dichloroethene	ND	ug/L		10.0	2.0	SW846 8260B			12/19/09 21:39	DJB	E
1,2-Dichloropropane	ND	ug/L		10.0	2.3	SW846 8260B			12/19/09 21:39	DJB	E
cis-1,3-Dichloropropene	ND	ug/L		10.0	1.8	SW846 8260B			12/19/09 21:39	DJB	E
trans-1,3-Dichloropropene	ND	ug/L		10.0	1.4	SW846 8260B			12/19/09 21:39	DJB	E
Diisopropyl ether	ND	ug/L		10.0	1.8	SW846 8260B			12/19/09 21:39	DJB	E
Ethyl tert-butyl ether	ND	ug/L		10.0	1.0	SW846 8260B			12/19/09 21:39	DJB	E
Ethylbenzene	6.4J	ug/L		10.0	2.3	SW846 8260B			12/19/09 21:39	DJB	E
2-Hexanone	ND	ug/L		50.0	7.8	SW846 8260B			12/19/09 21:39	DJB	E
Methyl t-Butyl Ether	ND	ug/L		10.0	1.8	SW846 8260B			12/19/09 21:39	DJB	E
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		50.0	4.1	SW846 8260B			12/19/09 21:39	DJB	E
Methylene Chloride	ND	ug/L		10.0	3.2	SW846 8260B			12/19/09 21:39	DJB	E
Styrene	ND	ug/L		10.0	1.0	SW846 8260B			12/19/09 21:39	DJB	E
1,1,2,2-Tetrachloroethane	ND	ug/L		10.0	2.2	SW846 8260B			12/19/09 21:39	DJB	E
Tetrachloroethene	ND	ug/L		10.0	2.8	SW846 8260B			12/19/09 21:39	DJB	E
Toluene	630	ug/L		10.0	1.9	SW846 8260B			12/19/09 21:39	DJB	E
Total Xylenes	155	ug/L		30.0	6.1	SW846 8260B			12/19/09 21:39	DJB	E
1,1,1-Trichloroethane	ND	ug/L		10.0	2.9	SW846 8260B			12/19/09 21:39	DJB	E
1,1,2-Trichloroethane	ND	ug/L		10.0	2.9	SW846 8260B			12/19/09 21:39	DJB	E
Trichloroethene	ND	ug/L		10.0	3.3	SW846 8260B			12/19/09 21:39	DJB	E
Vinyl Chloride	ND	ug/L		10.0	1.6	SW846 8260B			12/19/09 21:39	DJB	E

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ANALYTICAL RESULTS

Workorder: 9822956 Groundwater (12/11/09)

Lab ID: **9822956007** Date Collected: 12/11/2009 13:45 Matrix: Ground Water

Sample ID: **MP-001_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
o-Xylene	62.2	ug/L		10.0	2.4	SW846 8260B			12/19/09 21:39	DJB	E
mp-Xylene	93.0	ug/L		20.0	5.1	SW846 8260B			12/19/09 21:39	DJB	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	11.7	%	11	62-133		SW846 8260B			12/19/09 21:39	DJB	E
Dibromofluoromethane (S)	9.8	%	10	78-116		SW846 8260B			12/19/09 21:39	DJB	E
Toluene-d8 (S)	11	%	12	76-127		SW846 8260B			12/19/09 21:39	DJB	E
4-Bromofluorobenzene (S)	10	%	13	79-114		SW846 8260B			12/19/09 21:39	DJB	E
PETROLEUM HC's											
Diesel Range Organics C10-C28	1.1	mg/L		0.17	0.021	SW846 8015D	12/18/09	KAK	12/19/09 06:19	JJH	A1
Gasoline Range Organics	2490	ug/L		100	4.2	SW846 8015D			12/18/09 20:40	ECR	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	72.7	%		48-123		SW846 8015D	12/18/09	KAK	12/19/09 06:19	JJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	102	%		90-129		SW846 8015D			12/18/09 20:40	ECR	C

Sample Comments:

The GCMS volatiles analysis was performed at a dilution due to the level of target compounds.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9822956 Groundwater (12/11/09)

Lab ID: **9822956008** Date Collected: 12/11/2009 15:00 Matrix: Ground Water

Sample ID: **MP-002_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		10.0	3.1	SW846 8260B			12/19/09 20:06	DJB	E
tert-Amyl methyl ether	ND	ug/L		2.0	0.17	SW846 8260B			12/19/09 20:06	DJB	E
tert-Amyl Alcohol	ND	ug/L	3	5.0	3.1	SW846 8260B			12/19/09 20:06	DJB	E
tert-Amyl Ethylether	ND	ug/L		1.0	0.14	SW846 8260B			12/19/09 20:06	DJB	E
Benzene	135	ug/L		1.0	0.16	SW846 8260B			12/19/09 20:06	DJB	E
Bromochloromethane	ND	ug/L		1.0	0.33	SW846 8260B			12/19/09 20:06	DJB	E
Bromodichloromethane	ND	ug/L		1.0	0.23	SW846 8260B			12/19/09 20:06	DJB	E
Bromoform	ND	ug/L		1.0	0.28	SW846 8260B			12/19/09 20:06	DJB	E
Bromomethane	ND	ug/L		1.0	0.24	SW846 8260B			12/19/09 20:06	DJB	E
2-Butanone	19.1	ug/L		10.0	2.1	SW846 8260B			12/19/09 20:06	DJB	E
tert.- Butyl Alcohol	380	ug/L		10.0	4.6	SW846 8260B			12/19/09 20:06	DJB	E
Carbon Disulfide	ND	ug/L		1.0	0.12	SW846 8260B			12/19/09 20:06	DJB	E
Carbon Tetrachloride	ND	ug/L		1.0	0.25	SW846 8260B			12/19/09 20:06	DJB	E
Chlorobenzene	ND	ug/L		1.0	0.16	SW846 8260B			12/19/09 20:06	DJB	E
Chlorodibromomethane	ND	ug/L		1.0	0.26	SW846 8260B			12/19/09 20:06	DJB	E
Chloroethane	ND	ug/L		1.0	0.19	SW846 8260B			12/19/09 20:06	DJB	E
Chloroform	ND	ug/L		1.0	0.23	SW846 8260B			12/19/09 20:06	DJB	E
Chloromethane	ND	ug/L		1.0	0.16	SW846 8260B			12/19/09 20:06	DJB	E
1,2-Dibromo-3-chloropropane	ND	ug/L		7.0	0.96	SW846 8260B			12/19/09 20:06	DJB	E
1,2-Dibromoethane	ND	ug/L		1.0	0.30	SW846 8260B			12/19/09 20:06	DJB	E
1,1-Dichloroethane	ND	ug/L		1.0	0.15	SW846 8260B			12/19/09 20:06	DJB	E
1,2-Dichloroethane	ND	ug/L		1.0	0.33	SW846 8260B			12/19/09 20:06	DJB	E
1,1-Dichloroethene	ND	ug/L		1.0	0.17	SW846 8260B			12/19/09 20:06	DJB	E
cis-1,2-Dichloroethene	ND	ug/L		1.0	0.17	SW846 8260B			12/19/09 20:06	DJB	E
trans-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			12/19/09 20:06	DJB	E
1,2-Dichloropropane	ND	ug/L		1.0	0.23	SW846 8260B			12/19/09 20:06	DJB	E
cis-1,3-Dichloropropene	ND	ug/L		1.0	0.18	SW846 8260B			12/19/09 20:06	DJB	E
trans-1,3-Dichloropropene	ND	ug/L		1.0	0.14	SW846 8260B			12/19/09 20:06	DJB	E
Diisopropyl ether	ND	ug/L		1.0	0.18	SW846 8260B			12/19/09 20:06	DJB	E
Ethyl tert-butyl ether	ND	ug/L		1.0	0.10	SW846 8260B			12/19/09 20:06	DJB	E
Ethylbenzene	1.7	ug/L		1.0	0.23	SW846 8260B			12/19/09 20:06	DJB	E
2-Hexanone	ND	ug/L		5.0	0.78	SW846 8260B			12/19/09 20:06	DJB	E
Methyl t-Butyl Ether	ND	ug/L		1.0	0.18	SW846 8260B			12/19/09 20:06	DJB	E
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		5.0	0.41	SW846 8260B			12/19/09 20:06	DJB	E
Methylene Chloride	ND	ug/L		1.0	0.32	SW846 8260B			12/19/09 20:06	DJB	E
Styrene	ND	ug/L		1.0	0.10	SW846 8260B			12/19/09 20:06	DJB	E
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0	0.22	SW846 8260B			12/19/09 20:06	DJB	E
Tetrachloroethene	ND	ug/L		1.0	0.28	SW846 8260B			12/19/09 20:06	DJB	E
Toluene	172	ug/L		10.0	1.9	SW846 8260B			12/21/09 18:44	DJB	F
Total Xylenes	44.3	ug/L		3.0	0.61	SW846 8260B			12/19/09 20:06	DJB	E
1,1,1-Trichloroethane	ND	ug/L		1.0	0.29	SW846 8260B			12/19/09 20:06	DJB	E
1,1,2-Trichloroethane	ND	ug/L		1.0	0.29	SW846 8260B			12/19/09 20:06	DJB	E
Trichloroethene	ND	ug/L		1.0	0.33	SW846 8260B			12/19/09 20:06	DJB	E
Vinyl Chloride	ND	ug/L		1.0	0.16	SW846 8260B			12/19/09 20:06	DJB	E

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ANALYTICAL RESULTS

Workorder: 9822956 Groundwater (12/11/09)

Lab ID: **9822956008** Date Collected: 12/11/2009 15:00 Matrix: Ground Water

Sample ID: **MP-002_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
o-Xylene	25.6	ug/L		1.0	0.24	SW846 8260B			12/19/09 20:06	DJB	E
mp-Xylene	18.7	ug/L		2.0	0.51	SW846 8260B			12/19/09 20:06	DJB	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	136	%	14	62-133		SW846 8260B			12/19/09 20:06	DJB	E
Toluene-d8 (S)	104	%		76-127		SW846 8260B			12/19/09 20:06	DJB	E
4-Bromofluorobenzene (S)	98.7	%		79-114		SW846 8260B			12/19/09 20:06	DJB	E
Dibromofluoromethane (S)	100	%		78-116		SW846 8260B			12/19/09 20:06	DJB	E
1,2-Dichloroethane-d4 (S)	89.5	%		62-133		SW846 8260B			12/21/09 18:44	DJB	F
Toluene-d8 (S)	87.1	%		76-127		SW846 8260B			12/21/09 18:44	DJB	F
Dibromofluoromethane (S)	87.4	%		78-116		SW846 8260B			12/21/09 18:44	DJB	F
4-Bromofluorobenzene (S)	86.1	%		79-114		SW846 8260B			12/21/09 18:44	DJB	F
PETROLEUM HC's											
Diesel Range Organics C10-C28	0.15J	mg/L		0.17	0.021	SW846 8015D	12/18/09	KAK	12/19/09 07:18	JJH	A1
Gasoline Range Organics	907	ug/L		100	4.2	SW846 8015D			12/18/09 21:14	ECR	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	93.1	%		48-123		SW846 8015D	12/18/09	KAK	12/19/09 07:18	JJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	96.2	%		90-129		SW846 8015D			12/18/09 21:14	ECR	C

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9822956 Groundwater (12/11/09)

Lab ID: **9822956009** Date Collected: 12/14/2009 20:12 Matrix: Ground Water

Sample ID: **TRIP BLANK_20091211_TB** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Gasoline Range Organics	32.7J	ug/L		100	4.2	SW846 8015D			12/18/09 13:51	ECR	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	96.6	%		90-129		SW846 8015D			12/18/09 13:51	ECR	C
VOLATILE ORGANICS											
Acetone	ND	ug/L		10.0	3.1	SW846 8260B			12/19/09 14:59	DJB	E
tert-Amyl methyl ether	ND	ug/L		2.0	0.17	SW846 8260B			12/19/09 14:59	DJB	E
tert-Amyl Alcohol	ND	ug/L	3	5.0	3.1	SW846 8260B			12/19/09 14:59	DJB	E
tert-Amyl Ethylether	ND	ug/L		1.0	0.14	SW846 8260B			12/19/09 14:59	DJB	E
Benzene	ND	ug/L		1.0	0.16	SW846 8260B			12/19/09 14:59	DJB	E
Bromochloromethane	ND	ug/L		1.0	0.33	SW846 8260B			12/19/09 14:59	DJB	E
Bromodichloromethane	ND	ug/L		1.0	0.23	SW846 8260B			12/19/09 14:59	DJB	E
Bromoform	ND	ug/L		1.0	0.28	SW846 8260B			12/19/09 14:59	DJB	E
Bromomethane	ND	ug/L		1.0	0.24	SW846 8260B			12/19/09 14:59	DJB	E
2-Butanone	ND	ug/L		10.0	2.1	SW846 8260B			12/19/09 14:59	DJB	E
tert.- Butyl Alcohol	ND	ug/L		10.0	4.6	SW846 8260B			12/19/09 14:59	DJB	E
Carbon Disulfide	ND	ug/L		1.0	0.12	SW846 8260B			12/19/09 14:59	DJB	E
Carbon Tetrachloride	ND	ug/L		1.0	0.25	SW846 8260B			12/19/09 14:59	DJB	E
Chlorobenzene	ND	ug/L		1.0	0.16	SW846 8260B			12/19/09 14:59	DJB	E
Chlorodibromomethane	ND	ug/L		1.0	0.26	SW846 8260B			12/19/09 14:59	DJB	E
Chloroethane	ND	ug/L		1.0	0.19	SW846 8260B			12/19/09 14:59	DJB	E
Chloroform	ND	ug/L		1.0	0.23	SW846 8260B			12/19/09 14:59	DJB	E
Chloromethane	ND	ug/L		1.0	0.16	SW846 8260B			12/19/09 14:59	DJB	E
1,2-Dibromo-3-chloropropane	ND	ug/L		7.0	0.96	SW846 8260B			12/19/09 14:59	DJB	E
1,2-Dibromoethane	ND	ug/L		1.0	0.30	SW846 8260B			12/19/09 14:59	DJB	E
1,1-Dichloroethane	ND	ug/L		1.0	0.15	SW846 8260B			12/19/09 14:59	DJB	E
1,2-Dichloroethane	ND	ug/L		1.0	0.33	SW846 8260B			12/19/09 14:59	DJB	E
1,1-Dichloroethene	ND	ug/L		1.0	0.17	SW846 8260B			12/19/09 14:59	DJB	E
cis-1,2-Dichloroethene	ND	ug/L		1.0	0.17	SW846 8260B			12/19/09 14:59	DJB	E
trans-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			12/19/09 14:59	DJB	E
1,2-Dichloropropane	ND	ug/L		1.0	0.23	SW846 8260B			12/19/09 14:59	DJB	E
cis-1,3-Dichloropropene	ND	ug/L		1.0	0.18	SW846 8260B			12/19/09 14:59	DJB	E
trans-1,3-Dichloropropene	ND	ug/L		1.0	0.14	SW846 8260B			12/19/09 14:59	DJB	E
Diisopropyl ether	ND	ug/L		1.0	0.18	SW846 8260B			12/19/09 14:59	DJB	E
Ethyl tert-butyl ether	ND	ug/L		1.0	0.10	SW846 8260B			12/19/09 14:59	DJB	E
Ethylbenzene	ND	ug/L		1.0	0.23	SW846 8260B			12/19/09 14:59	DJB	E
2-Hexanone	ND	ug/L		5.0	0.78	SW846 8260B			12/19/09 14:59	DJB	E
Methyl t-Butyl Ether	ND	ug/L		1.0	0.18	SW846 8260B			12/19/09 14:59	DJB	E
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		5.0	0.41	SW846 8260B			12/19/09 14:59	DJB	E
Methylene Chloride	ND	ug/L		1.0	0.32	SW846 8260B			12/19/09 14:59	DJB	E
Styrene	ND	ug/L		1.0	0.10	SW846 8260B			12/19/09 14:59	DJB	E
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0	0.22	SW846 8260B			12/19/09 14:59	DJB	E
Tetrachloroethene	ND	ug/L		1.0	0.28	SW846 8260B			12/19/09 14:59	DJB	E

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ANALYTICAL RESULTS

Workorder: 9822956 Groundwater (12/11/09)

Lab ID: **9822956009** Date Collected: 12/14/2009 20:12 Matrix: Ground Water

Sample ID: **TRIP BLANK_20091211_TB** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Toluene	0.20J	ug/L		1.0	0.19	SW846 8260B			12/19/09 14:59	DJB	E
Total Xylenes	ND	ug/L		3.0	0.61	SW846 8260B			12/19/09 14:59	DJB	E
1,1,1-Trichloroethane	ND	ug/L		1.0	0.29	SW846 8260B			12/19/09 14:59	DJB	E
1,1,2-Trichloroethane	ND	ug/L		1.0	0.29	SW846 8260B			12/19/09 14:59	DJB	E
Trichloroethene	ND	ug/L		1.0	0.33	SW846 8260B			12/19/09 14:59	DJB	E
Vinyl Chloride	ND	ug/L		1.0	0.16	SW846 8260B			12/19/09 14:59	DJB	E
o-Xylene	ND	ug/L		1.0	0.24	SW846 8260B			12/19/09 14:59	DJB	E
mp-Xylene	ND	ug/L		2.0	0.51	SW846 8260B			12/19/09 14:59	DJB	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	119	%		62-133		SW846 8260B			12/19/09 14:59	DJB	E
4-Bromofluorobenzene (S)	100	%		79-114		SW846 8260B			12/19/09 14:59	DJB	E
Dibromofluoromethane (S)	98.4	%		78-116		SW846 8260B			12/19/09 14:59	DJB	E
Toluene-d8 (S)	114	%		76-127		SW846 8260B			12/19/09 14:59	DJB	E

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9822956 Groundwater (12/11/09)

Lab ID: **9822956010** Date Collected: 12/11/2009 12:00 Matrix: Ground Water

Sample ID: **FIELD BLANK_20091211_FB** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		10.0	3.1	SW846 8260B			12/19/09 15:30	DJB	E
tert-Amyl methyl ether	ND	ug/L		2.0	0.17	SW846 8260B			12/19/09 15:30	DJB	E
tert-Amyl Alcohol	ND	ug/L	3	5.0	3.1	SW846 8260B			12/19/09 15:30	DJB	E
tert-Amyl Ethylether	ND	ug/L		1.0	0.14	SW846 8260B			12/19/09 15:30	DJB	E
Benzene	ND	ug/L		1.0	0.16	SW846 8260B			12/19/09 15:30	DJB	E
Bromochloromethane	ND	ug/L		1.0	0.33	SW846 8260B			12/19/09 15:30	DJB	E
Bromodichloromethane	ND	ug/L		1.0	0.23	SW846 8260B			12/19/09 15:30	DJB	E
Bromoform	ND	ug/L		1.0	0.28	SW846 8260B			12/19/09 15:30	DJB	E
Bromomethane	ND	ug/L		1.0	0.24	SW846 8260B			12/19/09 15:30	DJB	E
2-Butanone	ND	ug/L		10.0	2.1	SW846 8260B			12/19/09 15:30	DJB	E
tert.- Butyl Alcohol	ND	ug/L		10.0	4.6	SW846 8260B			12/19/09 15:30	DJB	E
Carbon Disulfide	ND	ug/L		1.0	0.12	SW846 8260B			12/19/09 15:30	DJB	E
Carbon Tetrachloride	ND	ug/L		1.0	0.25	SW846 8260B			12/19/09 15:30	DJB	E
Chlorobenzene	ND	ug/L		1.0	0.16	SW846 8260B			12/19/09 15:30	DJB	E
Chlorodibromomethane	ND	ug/L		1.0	0.26	SW846 8260B			12/19/09 15:30	DJB	E
Chloroethane	ND	ug/L		1.0	0.19	SW846 8260B			12/19/09 15:30	DJB	E
Chloroform	ND	ug/L		1.0	0.23	SW846 8260B			12/19/09 15:30	DJB	E
Chloromethane	ND	ug/L		1.0	0.16	SW846 8260B			12/19/09 15:30	DJB	E
1,2-Dibromo-3-chloropropane	ND	ug/L		7.0	0.96	SW846 8260B			12/19/09 15:30	DJB	E
1,2-Dibromoethane	ND	ug/L		1.0	0.30	SW846 8260B			12/19/09 15:30	DJB	E
1,1-Dichloroethane	ND	ug/L		1.0	0.15	SW846 8260B			12/19/09 15:30	DJB	E
1,2-Dichloroethane	ND	ug/L		1.0	0.33	SW846 8260B			12/19/09 15:30	DJB	E
1,1-Dichloroethene	ND	ug/L		1.0	0.17	SW846 8260B			12/19/09 15:30	DJB	E
cis-1,2-Dichloroethene	ND	ug/L		1.0	0.17	SW846 8260B			12/19/09 15:30	DJB	E
trans-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			12/19/09 15:30	DJB	E
1,2-Dichloropropane	ND	ug/L		1.0	0.23	SW846 8260B			12/19/09 15:30	DJB	E
cis-1,3-Dichloropropene	ND	ug/L		1.0	0.18	SW846 8260B			12/19/09 15:30	DJB	E
trans-1,3-Dichloropropene	ND	ug/L		1.0	0.14	SW846 8260B			12/19/09 15:30	DJB	E
Diisopropyl ether	ND	ug/L		1.0	0.18	SW846 8260B			12/19/09 15:30	DJB	E
Ethyl tert-butyl ether	ND	ug/L		1.0	0.10	SW846 8260B			12/19/09 15:30	DJB	E
Ethylbenzene	ND	ug/L		1.0	0.23	SW846 8260B			12/19/09 15:30	DJB	E
2-Hexanone	ND	ug/L		5.0	0.78	SW846 8260B			12/19/09 15:30	DJB	E
Methyl t-Butyl Ether	ND	ug/L		1.0	0.18	SW846 8260B			12/19/09 15:30	DJB	E
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		5.0	0.41	SW846 8260B			12/19/09 15:30	DJB	E
Methylene Chloride	ND	ug/L		1.0	0.32	SW846 8260B			12/19/09 15:30	DJB	E
Styrene	ND	ug/L		1.0	0.10	SW846 8260B			12/19/09 15:30	DJB	E
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0	0.22	SW846 8260B			12/19/09 15:30	DJB	E
Tetrachloroethene	ND	ug/L		1.0	0.28	SW846 8260B			12/19/09 15:30	DJB	E
Toluene	0.23J	ug/L		1.0	0.19	SW846 8260B			12/19/09 15:30	DJB	E
Total Xylenes	ND	ug/L		3.0	0.61	SW846 8260B			12/19/09 15:30	DJB	E
1,1,1-Trichloroethane	ND	ug/L		1.0	0.29	SW846 8260B			12/19/09 15:30	DJB	E
1,1,2-Trichloroethane	ND	ug/L		1.0	0.29	SW846 8260B			12/19/09 15:30	DJB	E
Trichloroethene	ND	ug/L		1.0	0.33	SW846 8260B			12/19/09 15:30	DJB	E
Vinyl Chloride	ND	ug/L		1.0	0.16	SW846 8260B			12/19/09 15:30	DJB	E

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ANALYTICAL RESULTS

Workorder: 9822956 Groundwater (12/11/09)

Lab ID: **9822956010** Date Collected: 12/11/2009 12:00 Matrix: Ground Water

Sample ID: **FIELD BLANK_20091211_FB** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
o-Xylene	ND	ug/L		1.0	0.24	SW846 8260B			12/19/09 15:30	DJB	E
mp-Xylene	ND	ug/L		2.0	0.51	SW846 8260B			12/19/09 15:30	DJB	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	124	%		62-133		SW846 8260B			12/19/09 15:30	DJB	E
4-Bromofluorobenzene (S)	103	%		79-114		SW846 8260B			12/19/09 15:30	DJB	E
Toluene-d8 (S)	113	%		76-127		SW846 8260B			12/19/09 15:30	DJB	E
Dibromofluoromethane (S)	100	%		78-116		SW846 8260B			12/19/09 15:30	DJB	E
PETROLEUM HC's											
Diesel Range Organics C10-C28	0.061J	mg/L		0.17	0.021	SW846 8015D	12/18/09	KAK	12/19/09 08:16	JJH	A1
Gasoline Range Organics	30.3J	ug/L		100	4.2	SW846 8015D			12/18/09 14:26	ECR	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	95.3	%		48-123		SW846 8015D	12/18/09	KAK	12/19/09 08:16	JJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	96.7	%		90-129		SW846 8015D			12/18/09 14:26	ECR	C

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9822956 Groundwater (12/11/09)

Lab ID: **9822956011** Date Collected: 12/11/2009 00:00 Matrix: Ground Water

Sample ID: **DUP-001_20091211_FD** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		50.0	15.5	SW846 8260B			12/19/09 20:37	DJB	E
tert-Amyl methyl ether	ND	ug/L		10.0	0.85	SW846 8260B			12/19/09 20:37	DJB	E
tert-Amyl Alcohol	ND	ug/L	3	25.0	15.6	SW846 8260B			12/19/09 20:37	DJB	E
tert-Amyl Ethylether	ND	ug/L		5.0	0.70	SW846 8260B			12/19/09 20:37	DJB	E
Benzene	6800	ug/L		50.0	8.0	SW846 8260B			12/21/09 20:23	DJB	F
Bromochloromethane	ND	ug/L		5.0	1.7	SW846 8260B			12/19/09 20:37	DJB	E
Bromodichloromethane	ND	ug/L		5.0	1.2	SW846 8260B			12/19/09 20:37	DJB	E
Bromoform	ND	ug/L		5.0	1.4	SW846 8260B			12/19/09 20:37	DJB	E
Bromomethane	ND	ug/L		5.0	1.2	SW846 8260B			12/19/09 20:37	DJB	E
2-Butanone	ND	ug/L		50.0	10.5	SW846 8260B			12/19/09 20:37	DJB	E
tert.- Butyl Alcohol	515	ug/L		50.0	23.0	SW846 8260B			12/19/09 20:37	DJB	E
Carbon Disulfide	ND	ug/L		5.0	0.60	SW846 8260B			12/19/09 20:37	DJB	E
Carbon Tetrachloride	ND	ug/L		5.0	1.3	SW846 8260B			12/19/09 20:37	DJB	E
Chlorobenzene	ND	ug/L		5.0	0.80	SW846 8260B			12/19/09 20:37	DJB	E
Chlorodibromomethane	ND	ug/L		5.0	1.3	SW846 8260B			12/19/09 20:37	DJB	E
Chloroethane	ND	ug/L		5.0	0.95	SW846 8260B			12/19/09 20:37	DJB	E
Chloroform	ND	ug/L		5.0	1.2	SW846 8260B			12/19/09 20:37	DJB	E
Chloromethane	ND	ug/L		5.0	0.80	SW846 8260B			12/19/09 20:37	DJB	E
1,2-Dibromo-3-chloropropane	ND	ug/L		35.0	4.8	SW846 8260B			12/19/09 20:37	DJB	E
1,2-Dibromoethane	ND	ug/L		5.0	1.5	SW846 8260B			12/19/09 20:37	DJB	E
1,1-Dichloroethane	ND	ug/L		5.0	0.75	SW846 8260B			12/19/09 20:37	DJB	E
1,2-Dichloroethane	12.0	ug/L		5.0	1.7	SW846 8260B			12/19/09 20:37	DJB	E
1,1-Dichloroethene	ND	ug/L		5.0	0.85	SW846 8260B			12/19/09 20:37	DJB	E
cis-1,2-Dichloroethene	ND	ug/L		5.0	0.85	SW846 8260B			12/19/09 20:37	DJB	E
trans-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			12/19/09 20:37	DJB	E
1,2-Dichloropropane	ND	ug/L		5.0	1.2	SW846 8260B			12/19/09 20:37	DJB	E
cis-1,3-Dichloropropene	ND	ug/L		5.0	0.90	SW846 8260B			12/19/09 20:37	DJB	E
trans-1,3-Dichloropropene	ND	ug/L		5.0	0.70	SW846 8260B			12/19/09 20:37	DJB	E
Diisopropyl ether	12.8	ug/L		5.0	0.90	SW846 8260B			12/19/09 20:37	DJB	E
Ethyl tert-butyl ether	ND	ug/L		5.0	0.50	SW846 8260B			12/19/09 20:37	DJB	E
Ethylbenzene	966	ug/L		5.0	1.2	SW846 8260B			12/19/09 20:37	DJB	E
2-Hexanone	ND	ug/L		25.0	3.9	SW846 8260B			12/19/09 20:37	DJB	E
Methyl t-Butyl Ether	2.2J	ug/L		5.0	0.90	SW846 8260B			12/19/09 20:37	DJB	E
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		25.0	2.1	SW846 8260B			12/19/09 20:37	DJB	E
Methylene Chloride	ND	ug/L		5.0	1.6	SW846 8260B			12/19/09 20:37	DJB	E
Styrene	ND	ug/L		5.0	0.50	SW846 8260B			12/19/09 20:37	DJB	E
1,1,2,2-Tetrachloroethane	ND	ug/L		5.0	1.1	SW846 8260B			12/19/09 20:37	DJB	E
Tetrachloroethene	ND	ug/L		5.0	1.4	SW846 8260B			12/19/09 20:37	DJB	E
Toluene	66.7	ug/L		5.0	0.95	SW846 8260B			12/19/09 20:37	DJB	E
Total Xylenes	1860	ug/L		150	30.5	SW846 8260B			12/21/09 20:23	DJB	F
1,1,1-Trichloroethane	ND	ug/L		5.0	1.5	SW846 8260B			12/19/09 20:37	DJB	E
1,1,2-Trichloroethane	ND	ug/L		5.0	1.5	SW846 8260B			12/19/09 20:37	DJB	E
Trichloroethene	ND	ug/L		5.0	1.7	SW846 8260B			12/19/09 20:37	DJB	E
Vinyl Chloride	ND	ug/L		5.0	0.80	SW846 8260B			12/19/09 20:37	DJB	E

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ANALYTICAL RESULTS

Workorder: 9822956 Groundwater (12/11/09)

Lab ID: **9822956011** Date Collected: 12/11/2009 00:00 Matrix: Ground Water

Sample ID: **DUP-001_20091211_FD** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
o-Xylene	16.4J	ug/L		50.0	12.0	SW846 8260B			12/21/09 20:23	DJB	F
mp-Xylene	1840	ug/L		100	25.5	SW846 8260B			12/21/09 20:23	DJB	F
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	65.6	%		62-133		SW846 8260B			12/19/09 20:37	DJB	E
Dibromofluoromethane (S)	19.5	%	15	78-116		SW846 8260B			12/19/09 20:37	DJB	E
Toluene-d8 (S)	20.4	%	16	76-127		SW846 8260B			12/19/09 20:37	DJB	E
4-Bromofluorobenzene (S)	19.2	%	17	79-114		SW846 8260B			12/19/09 20:37	DJB	E
1,2-Dichloroethane-d4 (S)	90.9	%		62-133		SW846 8260B			12/21/09 20:23	DJB	F
4-Bromofluorobenzene (S)	81.2	%		79-114		SW846 8260B			12/21/09 20:23	DJB	F
Dibromofluoromethane (S)	87.5	%		78-116		SW846 8260B			12/21/09 20:23	DJB	F
Toluene-d8 (S)	85.9	%		76-127		SW846 8260B			12/21/09 20:23	DJB	F
PETROLEUM HC's											
Diesel Range Organics C10-C28	1.9	mg/L		0.16	0.020	SW846 8015D	12/18/09	KAK	12/19/09 09:14	JJH	A1
Gasoline Range Organics	15300	ug/L		5000	210	SW846 8015D			12/18/09 17:52	ECR	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	117	%		48-123		SW846 8015D	12/18/09	KAK	12/19/09 09:14	JJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	91.3	%		90-129		SW846 8015D			12/18/09 17:52	ECR	C

Sample Comments:

The GCMS volatiles analysis was performed at a dilution due to the level of target compounds.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS QUALIFIERS\FLAGS

Workorder: 9822956 Groundwater (12/11/09)

PARAMETER QUALIFIERS\FLAGS

[1] The QC sample type LCS for method SW846 8260B was outside the control limits for the analyte Methylene Chloride. The % Recovery was reported as 52.3 and the control limits were 76 to 121.

[2] The QC sample type MSD for method SW846 8015D was outside the control limits for the analyte Gasoline Range Organics. The RPD was reported as 34.5 and the upper control limit is 10.

[3] The QC sample type LCS for method SW846 8260B was outside the control limits for the analyte tert-Amyl Alcohol. The % Recovery was reported as 18 and the control limits were 70 to 130.

[5] The surrogate 1,2-Dichloroethane-d4 for method SW846 8260B was outside of control limits. The % Recovery was reported as 137 and the control limits were 62 to 133. This result was reported at a dilution of 1.

[6] The surrogate Dibromofluoromethane for method SW846 8260B was outside of control limits. The % Recovery was reported as 10.1 and the control limits were 78 to 116. This result was reported at a dilution of 10.

[7] The surrogate 1,2-Dichloroethane-d4 for method SW846 8260B was outside of control limits. The % Recovery was reported as 12.2 and the control limits were 62 to 133. This result was reported at a dilution of 10.

[8] The surrogate Toluene-d8 for method SW846 8260B was outside of control limits. The % Recovery was reported as 23.6 and the control limits were 76 to 127. This result was reported at a dilution of 10.

[9] The surrogate 4-Bromofluorobenzene for method SW846 8260B was outside of control limits. The % Recovery was reported as 9.9 and the control limits were 79 to 114. This result was reported at a dilution of 10.

[10] The surrogate Dibromofluoromethane for method SW846 8260B was outside of control limits. The % Recovery was reported as 9.8 and the control limits were 78 to 116. This result was reported at a dilution of 10.

[11] The surrogate 1,2-Dichloroethane-d4 for method SW846 8260B was outside of control limits. The % Recovery was reported as 11.7 and the control limits were 62 to 133. This result was reported at a dilution of 10.

[12] The surrogate Toluene-d8 for method SW846 8260B was outside of control limits. The % Recovery was reported as 11 and the control limits were 76 to 127. This result was reported at a dilution of 10.

[13] The surrogate 4-Bromofluorobenzene for method SW846 8260B was outside of control limits. The % Recovery was reported as 10 and the control limits were 79 to 114. This result was reported at a dilution of 10.

[14] The surrogate 1,2-Dichloroethane-d4 for method SW846 8260B was outside of control limits. The % Recovery was reported as 136 and the control limits were 62 to 133. This result was reported at a dilution of 1.

[15] The surrogate Dibromofluoromethane for method SW846 8260B was outside of control limits. The % Recovery was reported as 19.5 and the control limits were 78 to 116. This result was reported at a dilution of 5.

[16] The surrogate Toluene-d8 for method SW846 8260B was outside of control limits. The % Recovery was reported as 20.4 and the control limits were 76 to 127. This result was reported at a dilution of 5.

[17] The surrogate 4-Bromofluorobenzene for method SW846 8260B was outside of control limits. The % Recovery was reported as 19.2 and the control limits were 79 to 114. This result was reported at a dilution of 5.

Report ID: 9822956

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34 Dogwood Lane • Middletown, PA 17057 • 717.944.5541 • Fax: 717.944.1430

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Courier:
Tracking #:

98229565

Co. Name: REPSG, Inc
Contact (Report to): Mark K + Bendak Phone: 215-729 3220
Address: REPSG, Inc.
6901 Kingsessing Ave
Phila Pa. 19142

Bill to (if different than Report to): Same PO#: 3903

Project Name/#: Calvert Citgo #5977 ALSI Quote #:

TAT: [✓] Normal-Standard TAT is 10-12 business days. Date Required:
[ ] Rush-Subject to ALSI approval and surcharges. Approved By:

Email? [✓] Y mkuczynski@repsg + bmacpaul@repsg.com
Fax? [ ] Y No.

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	TPH - DRO	TPH - GRO	VOC's + fuel oxygenates 8260B							
						Enter Number of Containers Per Analysis									
1 MW-001		12/11/09	8:45	G	GW	2	2	2							
2 MW-002		12/11/09	9:40	G	GW	2	2	2							
3 MW-003		12/11/09	14:15	G	GW	2	2	2							
4 MW-005		12/11/09	10:30	G	GW	2	2	2							
5 MW-006		12/11/09	17:45	G	GW	2	2	2							
6 MW-007		12/11/09	16:45	G	GW	2	2	2							
7 MP-001		12/11/09	13:45	G	GW	2	2	2							
8 MP-002		12/11/09	15:00	G	GW	2	2	2							

***Container Type: AG AG VOA VOA
***Container Size: 1L 40ml 40ml
***Preservative: H2SO4 HCl HCl

ANALYSES/METHOD REQUESTED

Preserved In: Receiving
Cooler Temp:
Therm. ID: 5162351
No. of Coolers:
Notes:

	Correct containers?	Correct sample volume?	Correct preservation?	Headspace/Volatiles?	Circle appropriate Y or N.
	Y N	Y N	Y N	Y N	

	Custody seals Present?	(if present) Seals intact?	Received on ice?	COC/Labels complete/accurate?	Container in good condition?
	Y N	Y N	Y N	Y N	Y N

SAMPLED BY (Please Print): J. Crooks
LOGGED BY (signature): DATE 12/15/09 TIME 0101
REVIEWED BY (signature): DATE 12/16/09 TIME 1024

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1	12/14/09	1055	2	12-14/09	1055
3	12-14	1830	4 VM	12/14	1830
5 VM	12/14	2012	6	12/14/09	2012
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] other
EDDs Required? Y If yes, format type: EQUIS
SDWA Forms? yes yes yes yes
State Samples Collected in? MD [✓] NJ [ ] NY [ ] PA [ ] Other
**Enter PWSID No.
DOD Criteria Required?

ALSI FIELD SERVICES
[✓] Pickup
[ ] Labor
[ ] Composite Sampling
[ ] Rental Equipment
[ ] Other:

* G=Grab; C=Composite
** Matrix: Al=Air; DW=Drinking Water; GW=Groundwater; Oil=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
*** Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY

Rev 6/07

Report ID: 9822956

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Page 2 of 2

Courier:

Tracking #:

COC# 9822956

Co. Name: REPSG, Inc
Contact (Report to): Mark K & Brenda K
Phone: 215-729-3220
Address: REPSG, Inc

Bill to (if different than Report to): Same
PO#: 3903

Project Name/#: Calvert Citgo #5977
ALSI Quote #:

TAT: [✓] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALSI approval and surcharges.
Date Required:
Approved By:

Email? [✓] Y
Fax? [ ] Y No.

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	***Container Type	***Container Size	** Preservative	VOC's including fuel oxygenates	TPH-DRO	TPH-GRO	
						VOA	40mL	HCl				
						AG	1L	H_2SO_4				
						VOA	40mL	HCl				
1 TRIP Blank		12/1/09	—	G	DI	2					2	12/14/09
2 Field Blank		12/1/09	12:00	G	DI	2			2	2	2	
3 Dup-001		12/1/09	—	G	GW	2			2	2	2	
4												
5												
6												
7												
8												

Enter Number of Containers Per Analysis

ANALYSES/METHOD REQUESTED

Receipt Information (completed by Sample Receiver)
Performed by: [illegible]
Cooler Temp: 1
Therm. ID: S107356
No. of Coolers:
Notes:

	Custody seals Present?	(if present) Seals intact?	Received on ice?	COC/Labels complete/accurate?	Container in good condition?	Correct containers?	Correct sample volume?	Correct preservation?	Headspace/Volatiles?	Circle appropriate Y or N.
	N	N	N	N	N	Y	Y	N	N	
	N	N	N	N	N	Y	Y	N	N	

SAMPLED BY (Please Print): T. Crooks
LOGGED BY(signature): [signature] DATE: 12/15/09 TIME: 0105
REVIEWED BY(signature): [signature] DATE: 12/16/09 TIME: 1220

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1	[signature]	12/14/09	1055	2	Ron Hovey	12/14	1105
3	Ron Hovey	12/14	1830	4	JM	12/14	1830
5	JM	12/14	2012	6	[signature]	12/14/09	2012
7				8			
9				10			

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] other
EDDs Required? [✓] If yes, format type: EQUIS
DOD Criteria Required?

SDWA Forms? yes [ ] yes [ ] yes [ ] yes [ ]
State Samples Collected In? MD [✓] NJ [ ] NY [ ] PA [ ] Other
Enter PWSID No.

ALSI FIELD SERVICES
[✓] Pickup
[ ] Labor
[ ] Composite Sampling
[ ] Rental Equipment
[ ] Other:

* G=Grab; C=Composite
**Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

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Certificate of Analysis

Project Name:	**MD SITE - SOILS - MDE -REV**	Workorder:	**9780216**
Purchase Order:	**2975**	Workorder ID:	**DW-001 (03/12/09)**

Mr. Mark Kuczynski
REPSG
6901 Kingsessing Ave., Ste 201
PO Box 5377
Philadelphia, PA 19142

March 23, 2009

Dear Mr. Kuczynski,

Enclosed are the analytical results for samples received by the laboratory on Friday, March 13, 2009

ALSI is a National Environmental Laboratory Accreditation Conference (NELAC) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAC.

If you have any questions regarding this certificate of analysis, please contact Anna Milliken (Project Coordinator) or Anna G Milliken (Laboratory Manager) at (717) 944-5541.

Please visit us at www.analyticallab.com for a listing of ALSI's NELAC accreditations and Scope of Work, as well as other links to Water Quality documentation on the internet.

This laboratory report may not be reproduced, except in full, without the written approval of ALSI.

NOTE: ALSI has changed the report generation tool and while we have tried to retain the existing format, you will notice some changes in the laboratory report. Please feel free to contact ALSI in case you have any questions.

Analytical Laboratory Services, Inc.

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Anna G Milliken
Laboratory Manager

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SAMPLE SUMMARY

Workorder: 9780216 DW-001 (03/12/09) Discard Date: 04/03/2009

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
9780014010	DW-001_20090312_N	Water	3/12/09 14:10	3/13/09 20:08	Laura Hasick

Workorder Comments:

Notes

-- Samples collected by ALSI personnel are done so in accordance with the procedures set forth in the ALSI Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

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ANALYTICAL RESULTS

Workorder: 9780216 DW-001 (03/12/09)

Lab ID: **9780014010** Date Collected: 3/12/2009 14:10 Matrix: Water

Sample ID: **DW-001_20090312_N** Date Received: 3/13/2009 20:08

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			3/19/09 11:57	MES	B
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			3/19/09 11:57	MES	B
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
tert-Amyl Alcohol	ND	ug/L		4.0	2.0	EPA 524.2			3/19/09 11:57	MES	B
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			3/19/09 11:57	MES	B
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			3/19/09 11:57	MES	B
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			3/19/09 11:57	MES	B
2-Butanone	ND	ug/L		2.5	1.0	EPA 524.2			3/19/09 11:57	MES	B
tert.- Butyl Alcohol	ND	ug/L		4.0	1.7	EPA 524.2			3/19/09 11:57	MES	B
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/19/09 11:57	MES	B
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/19/09 11:57	MES	B
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			3/19/09 11:57	MES	B
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/19/09 11:57	MES	B
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			3/19/09 11:57	MES	B
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			3/19/09 11:57	MES	B
Chloroform	0.13J	ug/L		0.50	0.10	EPA 524.2			3/19/09 11:57	MES	B
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			3/19/09 11:57	MES	B
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			3/19/09 11:57	MES	B
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			3/19/09 11:57	MES	B
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			3/19/09 11:57	MES	B
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			3/19/09 11:57	MES	B
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			3/19/09 11:57	MES	B
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			3/19/09 11:57	MES	B
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B

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ANALYTICAL RESULTS

Workorder: 9780216 DW-001 (03/12/09)

Lab ID: **9780014010** Date Collected: 3/12/2009 14:10 Matrix: Water

Sample ID: **DW-001_20090312_N** Date Received: 3/13/2009 20:08

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			3/19/09 11:57	MES	B
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			3/19/09 11:57	MES	B
Diisopropyl ether	1.6	ug/L		0.50	0.10	EPA 524.2			3/19/09 11:57	MES	B
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			3/19/09 11:57	MES	B
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			3/19/09 11:57	MES	B
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			3/19/09 11:57	MES	B
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/19/09 11:57	MES	B
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			3/19/09 11:57	MES	B
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			3/19/09 11:57	MES	B
Iodomethane	ND	ug/L		0.50	0.30	EPA 524.2			3/19/09 11:57	MES	B
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			3/19/09 11:57	MES	B
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/19/09 11:57	MES	B
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			3/19/09 11:57	MES	B
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			3/19/09 11:57	MES	B
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			3/19/09 11:57	MES	B
Methyl t-Butyl Ether	12.2	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			3/19/09 11:57	MES	B
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			3/19/09 11:57	MES	B
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			3/19/09 11:57	MES	B
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			3/19/09 11:57	MES	B
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			3/19/09 11:57	MES	B
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/19/09 11:57	MES	B
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			3/19/09 11:57	MES	B
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
Tetrahydrofuran	ND	ug/L		3.0	1.3	EPA 524.2			3/19/09 11:57	MES	B
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			3/19/09 11:57	MES	B
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			3/19/09 11:57	MES	B
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			3/19/09 11:57	MES	B
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			3/19/09 11:57	MES	B
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			3/19/09 11:57	MES	B
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/19/09 11:57	MES	B

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ANALYTICAL RESULTS

Workorder: 9780216 DW-001 (03/12/09)

Lab ID: **9780014010** Date Collected: 3/12/2009 14:10 Matrix: Water

Sample ID: **DW-001_20090312_N** Date Received: 3/13/2009 20:08

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/19/09 11:57	MES	B
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			3/19/09 11:57	MES	B
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			3/19/09 11:57	MES	B
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			3/19/09 11:57	MES	B
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	89.9	%		70-130		EPA 524.2			3/19/09 11:57	MES	B
4-Bromofluorobenzene (S)	108	%		70-130		EPA 524.2			3/19/09 11:57	MES	B

Sample Comments:

Anna G Milliken
Laboratory Manager

Report ID: 9780216

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT/ SAMPLER. INSTRUCTIONS ON THE BACK.

Page 1 of 1

Courier:

Tracking #:

9780216

Co. Name: REPSG, Inc.

Contact (Report to): R Feingold Phone: 215-729-3220

Address: 6901 Kingsessing Ave
Phila PA 19142

Bill to (if different than Report to): Same PO#: 2975

Project Name/#: Calvert Citgo/ 5977 ALSI Quote #:

TAT: [ ] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALSI approval and surcharges. Date Required: 03/20/09 Approved By:

Email? [X] -Y RFeingold@repsg.com Fax? [ ] -Y No.

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	(Full suite drinking water VOC's by method 524.2, MTBE, TBA)	total # bottles
1 DW-001		3/12	1910	G	WG	X	2
2							
3							
4							
5							
6							
7							
8							

***Container Type: VOA
***Container Size: 40mL
***Preservative: ASC/HCl

ANALYSES/METHOD REQUESTED

Enter Number of Containers Per Analysis

(completed by Sample Receipt)
Performed by: DIGITAL KEY
Cooler Temp: 3
Therm. ID: 9823557
No. of Coolers:
Notes:

	Correct containers?	Correct sample volume?	Correct preservation?	Headspace/Volatiles?	Circle appropriate Y or N.
	N	N	N	Y	
	Y	Y	Y	Y	Y
	N	N	N	N	N
	Y	Y	Y	Y	Y

	Custody seals Present?	(if present) Seals Intact?	Received on Ice?	COC/Labels complete/accurate?	Container in good condition?

SAMPLED BY (Please Print): L Hasiuk

LOGGED BY(signature): DATE: TIME:

REVIEWED BY(signature): DATE: 03/17/09 TIME: 1620

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1	3/13	1200	2	3/13	1200
3	3/13	1630	4	3/13	1830
5 VM	3/13	2008	6	3/13	2008
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] other

EDDs Required? [X] If yes, format type: EQuIS

SDWA Forms? ⇒ yes [ ] yes [ ] yes [ ]

State Samples Collected In? MD [X] NJ [ ] NY [ ] PA [ ] Other

DOD Criteria Required?

ALSI FIELD SERVICES
[ ] Pickup [ ] Labor [ ] Composite Sampling [ ] Rental Equipment [ ] Other:

* G=Grab; C=Composite
**Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY

Rev 6/07

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Certificate of Analysis

Project Name:	**MD SITE - SOILS - MDE -REV**	Workorder:	**9800564**
Purchase Order:	**3461**	Workorder ID:	**DW-001 (07/21/09)**

Mr. Mark Kuczynski
REPSG
6901 Kingsessing Ave., Ste 201
PO Box 5377
Philadelphia, PA 19142

July 29, 2009

Dear Mr. Kuczynski,

Enclosed are the analytical results for samples received by the laboratory on Wednesday, July 22, 2009

ALSI is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Anna Milliken (Project Coordinator) or Anna G Milliken (Laboratory Manager) at (717) 944-5541.

Please visit us at www.analyticallab.com for a listing of ALSI's NELAP accreditations and Scope of Work, as well as other links to Water Quality documentation on the internet.

This laboratory report may not be reproduced, except in full, without the written approval of ALSI.

NOTE: ALSI has changed the report generation tool and while we have tried to retain the existing format, you will notice some changes in the laboratory report. Please feel free to contact ALSI in case you have any questions.

Analytical Laboratory Services, Inc.

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Anna G Milliken
Laboratory Manager

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SAMPLE SUMMARY

Workorder: 9800564 DW-001 (07/21/09) Discard Date: 08/11/2009

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
9800564001	DW-001_20090721_N	Water	7/21/09 14:15	7/22/09 20:15	Adam Chorney

Workorder Comments:

Notes

-- Samples collected by ALSI personnel are done so in accordance with the procedures set forth in the ALSI Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

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ANALYTICAL RESULTS

Workorder: 9800564 DW-001 (07/21/09)

Lab ID: **9800564001** Date Collected: 7/21/2009 14:15 Matrix: Water

Sample ID: **DW-001_20090721_N** Date Received: 7/22/2009 20:15

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			7/23/09 17:54	TEH	A
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			7/23/09 17:54	TEH	A
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
tert-Amyl Alcohol	ND	ug/L		4.0	2.0	EPA 524.2			7/23/09 17:54	TEH	A
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			7/23/09 17:54	TEH	A
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			7/23/09 17:54	TEH	A
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			7/23/09 17:54	TEH	A
2-Butanone	2.5	ug/L		2.5	1.0	EPA 524.2			7/23/09 17:54	TEH	A
tert.- Butyl Alcohol	ND	ug/L		4.0	1.7	EPA 524.2			7/23/09 17:54	TEH	A
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/23/09 17:54	TEH	A
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/23/09 17:54	TEH	A
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			7/23/09 17:54	TEH	A
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/23/09 17:54	TEH	A
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			7/23/09 17:54	TEH	A
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			7/23/09 17:54	TEH	A
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			7/23/09 17:54	TEH	A
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			7/23/09 17:54	TEH	A
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			7/23/09 17:54	TEH	A
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			7/23/09 17:54	TEH	A
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			7/23/09 17:54	TEH	A
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			7/23/09 17:54	TEH	A
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			7/23/09 17:54	TEH	A
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			7/23/09 17:54	TEH	A
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A

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ANALYTICAL RESULTS

Workorder: 9800564 DW-001 (07/21/09)

Lab ID: **9800564001** Date Collected: 7/21/2009 14:15 Matrix: Water

Sample ID: **DW-001_20090721_N** Date Received: 7/22/2009 20:15

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			7/23/09 17:54	TEH	A
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			7/23/09 17:54	TEH	A
Diisopropyl ether	2.1	ug/L		0.50	0.10	EPA 524.2			7/23/09 17:54	TEH	A
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			7/23/09 17:54	TEH	A
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			7/23/09 17:54	TEH	A
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			7/23/09 17:54	TEH	A
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/23/09 17:54	TEH	A
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			7/23/09 17:54	TEH	A
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			7/23/09 17:54	TEH	A
Iodomethane	ND	ug/L		0.50	0.30	EPA 524.2			7/23/09 17:54	TEH	A
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			7/23/09 17:54	TEH	A
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/23/09 17:54	TEH	A
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			7/23/09 17:54	TEH	A
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			7/23/09 17:54	TEH	A
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			7/23/09 17:54	TEH	A
Methyl t-Butyl Ether	18.8	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			7/23/09 17:54	TEH	A
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			7/23/09 17:54	TEH	A
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			7/23/09 17:54	TEH	A
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			7/23/09 17:54	TEH	A
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			7/23/09 17:54	TEH	A
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/23/09 17:54	TEH	A
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			7/23/09 17:54	TEH	A
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
Tetrahydrofuran	ND	ug/L		3.0	1.3	EPA 524.2			7/23/09 17:54	TEH	A
Toluene	0.14J	ug/L		0.50	0.10	EPA 524.2			7/23/09 17:54	TEH	A
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			7/23/09 17:54	TEH	A
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			7/23/09 17:54	TEH	A
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			7/23/09 17:54	TEH	A
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			7/23/09 17:54	TEH	A
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/23/09 17:54	TEH	A

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ANALYTICAL RESULTS

Workorder: 9800564 DW-001 (07/21/09)

Lab ID: **9800564001** Date Collected: 7/21/2009 14:15 Matrix: Water

Sample ID: **DW-001_20090721_N** Date Received: 7/22/2009 20:15

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/23/09 17:54	TEH	A
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			7/23/09 17:54	TEH	A
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			7/23/09 17:54	TEH	A
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			7/23/09 17:54	TEH	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	70.9	%		70-130		EPA 524.2			7/23/09 17:54	TEH	A
4-Bromofluorobenzene (S)	78.7	%		70-130		EPA 524.2			7/23/09 17:54	TEH	A

Sample Comments:

Anna G Milliken
Laboratory Manager

Report ID: 9800564

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT/ SAMPLER. INSTRUCTIONS ON THE BACK.

Page 1 of 1

Courier:

Tracking #:

9800564

Co. Name: REPSG INC

Contact (Report to): MPluczynski

Phone: 215 729 3220

Address: 6901 Tinicum Ave Philly PA 19142

Bill to (if different than Report to): Same

PO#: 3461

Project Name/#: Calvert Citgo/5977

ALSI Quote #:

TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALSI approval and surcharges.

Date Required:

Approved By:

Email? [X] Y MPluczynski@repsg.com

Fax? [ ] Y No.:

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	Full suite Drinking Water Volatiles by method 524.2 MTBE, TBA	total # of Bottles
1 DW-001		7.21	14:15	G	WW	2	2
2							
3							
4							
5							
6							
7							
8							

***Container Type: VOA
***Container Size: 40ml
***Preservative: ASC/HCl

ANALYSES/METHOD REQUESTED

Enter Number of Containers Per Analysis

Receipt Information (completed by Sample Receipt)

Performed by: [X]

Cooler Temp: 1

Therm. ID: 223569

No. of Coolers:

Notes:

	Correct containers?	Correct sample volume?	Correct preservation?	Headspace/Volatiles?	Circle appropriate Y or N.
	N	N	N	Y	
1	Y	Y	Y	Y	
2	N	N	N	N	
3	Y	Y	Y	Y	
4	Y	Y	Y	Y	
5	Y	Y	Y	Y	
6	Y	Y	Y	Y	
7	Y	Y	Y	Y	
8	Y	Y	Y	Y	

	Custody seals Present?	(if present) Seals intact?	Received on ice?	COC/Labels complete/accurate?	Container in good condition?
	N	N	N	N	N
1	Y	Y	Y	Y	Y
2	Y	Y	Y	Y	Y
3	Y	Y	Y	Y	Y
4	Y	Y	Y	Y	Y
5	Y	Y	Y	Y	Y
6	Y	Y	Y	Y	Y
7	Y	Y	Y	Y	Y
8	Y	Y	Y	Y	Y

SAMPLED BY (Please Print): A Chorney

LOGGED BY(signature): [signature] DATE 7/22 0209

REVIEWED BY(signature): [signature] DATE 07/28/09 TIME 1525

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 [signature]	7/22	1050	2 Rob Hickey	7-22	1052
3 Rob Hickey	7.22	1800	4 [signature]	7/22/09	1800
5 [signature]	7/22/09	2015	6 [signature]	7/22	2015
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] other

EDDs Required? [X] If yes, format type: EQuIS

SDWA Forms? ⇨ yes [ ] yes [ ] yes [ ] yes [ ]

State Samples Collected In? MD [X] NJ [ ] NY [ ] PA [ ] Other

DOD Criteria Required?

ALSI FIELD SERVICES

[X] Pickup [ ] Labor [ ] Composite Sampling [ ] Rental Equipment [ ] Other:

* G=Grab; C=Composite

** Matrix: Al=Air; DW=Drinking Water; GW=Groundwater; Ol=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

*** Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY

Rev 6/07

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Certificate of Analysis

Project Name:	**MD SITE - CALVERT CITGO - REV**	Workorder:	**9823089**
Purchase Order:	**3902**	Workorder ID:	**DW-001 (12/11/09)**

Mr. Mark Kuczynski
REPSG
6901 Kingsessing Ave., Ste 201
PO Box 5377
Philadelphia, PA 19142

December 23, 2009

Dear Mr. Kuczynski,

Enclosed are the analytical results for samples received by the laboratory on Monday, December 14, 2009

ALSI is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Susan Baer (Project Coordinator) or Anna G Milliken (Laboratory Manager) at (717) 944-5541.

Please visit us at www.analyticallab.com for a listing of ALSI's NELAP accreditations and Scope of Work, as well as other links to Water Quality documentation on the internet.

This laboratory report may not be reproduced, except in full, without the written approval of ALSI.

NOTE: ALSI has changed the report generation tool and while we have tried to retain the existing format, you will notice some changes in the laboratory report. Please feel free to contact ALSI in case you have any questions.

Analytical Laboratory Services, Inc.

CC: Ms. Brenda MacPhail Kellogg

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Anna G Milliken
Laboratory Manager

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SAMPLE SUMMARY

Workorder: 9823089 DW-001 (12/11/09) Discard Date: 01/06/2010

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
9823089001	DW-001_20091211_N	Water	12/11/09 16:30	12/14/09 20:12	Joe Crooks

Workorder Comments:

Notes

-- Samples collected by ALSI personnel are done so in accordance with the procedures set forth in the ALSI Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

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ANALYTICAL RESULTS

Workorder: 9823089 DW-001 (12/11/09)

Lab ID: **9823089001** Date Collected: 12/11/2009 16:30 Matrix: Water

Sample ID: **DW-001_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			12/21/09 05:09	DD	C
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			12/21/09 05:09	DD	C
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
tert-Amyl Alcohol	ND	ug/L		4.0	2.0	EPA 524.2			12/21/09 05:09	DD	C
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:09	DD	C
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:09	DD	C
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 05:09	DD	C
2-Butanone	ND	ug/L		2.5	1.0	EPA 524.2			12/21/09 05:09	DD	C
tert.- Butyl Alcohol	ND	ug/L		4.0	1.7	EPA 524.2			12/21/09 05:09	DD	C
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:09	DD	C
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:09	DD	C
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			12/21/09 05:09	DD	C
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:09	DD	C
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			12/21/09 05:09	DD	C
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:09	DD	C
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:09	DD	C
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:09	DD	C
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 05:09	DD	C
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 05:09	DD	C
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			12/21/09 05:09	DD	C
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			12/21/09 05:09	DD	C
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 05:09	DD	C
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:09	DD	C
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C

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ANALYTICAL RESULTS

Workorder: 9823089 DW-001 (12/11/09)

Lab ID: **9823089001** Date Collected: 12/11/2009 16:30 Matrix: Water

Sample ID: **DW-001_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:09	DD	C
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			12/21/09 05:09	DD	C
Diisopropyl ether	0.91	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:09	DD	C
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			12/21/09 05:09	DD	C
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:09	DD	C
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:09	DD	C
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:09	DD	C
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			12/21/09 05:09	DD	C
Hexane	ND	ug/L	1	0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			12/21/09 05:09	DD	C
Iodomethane	ND	ug/L	2,3	0.50	0.30	EPA 524.2			12/21/09 05:09	DD	C
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			12/21/09 05:09	DD	C
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:09	DD	C
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:09	DD	C
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			12/21/09 05:09	DD	C
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			12/21/09 05:09	DD	C
Methyl t-Butyl Ether	2.7	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			12/21/09 05:09	DD	C
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 05:09	DD	C
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			12/21/09 05:09	DD	C
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			12/21/09 05:09	DD	C
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			12/21/09 05:09	DD	C
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:09	DD	C
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:09	DD	C
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
Tetrahydrofuran	ND	ug/L		3.0	1.3	EPA 524.2			12/21/09 05:09	DD	C
Toluene	0.11J	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:09	DD	C
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			12/21/09 05:09	DD	C
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:09	DD	C
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:09	DD	C
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:09	DD	C
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:09	DD	C

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ANALYTICAL RESULTS

Workorder: 9823089 DW-001 (12/11/09)

Lab ID: **9823089001** Date Collected: 12/11/2009 16:30 Matrix: Water

Sample ID: **DW-001_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:09	DD	C
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:09	DD	C
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:09	DD	C
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			12/21/09 05:09	DD	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	95.6	%		70-130		EPA 524.2			12/21/09 05:09	DD	C
4-Bromofluorobenzene (S)	88.5	%		70-130		EPA 524.2			12/21/09 05:09	DD	C
PETROLEUM HC's											
Diesel Range Organics C10-C28	0.10J	mg/L		0.16	0.020	SW846 8015D	12/18/09	KAK	12/19/09 18:56	JJH	A1
Gasoline Range Organics	32.3J	ug/L		100	4.2	SW846 8015D			12/19/09 14:10	ECR	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	104	%		48-123		SW846 8015D	12/18/09	KAK	12/19/09 18:56	JJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	94.1	%		90-129		SW846 8015D			12/19/09 14:10	ECR	C

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS QUALIFIERS\FLAGS

Workorder: 9823089 DW-001 (12/11/09)

PARAMETER QUALIFIERS\FLAGS

[1] The QC sample type MS for method EPA 524.2 was outside the control limits for the analyte Hexane. The % Recovery was reported as 132 and the control limits were 70 to 130.

[2] The QC sample type MS for method EPA 524.2 was outside the control limits for the analyte Iodomethane. The % Recovery was reported as 53.3 and the control limits were 70 to 130.

[3] The QC sample type MSD for method EPA 524.2 was outside the control limits for the analyte Iodomethane. The % Recovery was reported as 52.7 and the control limits were 70 to 130.

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Page 1 of 1
Courier:
Tracking #:
* 9 8 2 3 0 8 9 *

Co. Name: REPSG, Inc
Contact (Report to): Mark K / Brenda K
Phone: 215-729-3220
Address: 6901 Kingsessing Ave 2nd Fl. Phila, Pa. 19142

Bill to (if different than Report to): Same
PO#: 3902

Project Name/#:
ALSI Quote #:
TAT: [✓] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALSI approval and surcharges.
Date Required:
Approved By:
Email? ✓
Fax? -Y No.

***Container Type	VOA		AG	VOA
***Container Size	40mL		1L	40mL
Preservative	Asc/HCL		H_2SO_4	HCL
ANALYSES/METHOD REQUESTED	Full Suite DW VOCs by 524.2	MTBE + TBA	TPH-DRO 8015B	TPH-GRO 8015B

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	Full Suite DW VOCs by 524.2	MTBE + TBA	TPH-DRO 8015B	TPH-GRO 8015B
1 DW-001	1 vial labeled DW 005C matched by time RBW 12/14/09	12/11/09	16:30	G	DW	2		2	2
2	↳ Notified B. MacPhail and								
3	M. Kuczynski 12/14/09								
4	by email.								
5									
6									
7									
8									

Enter Number of Containers Per Analysis

(completed by Sample Receiving)
Performed by: [signature]
Cooler Temp:
Therm. ID: 5(02355
No. of Coolers:
Notes:

Circle appropriate Y or N.

	Y	N
Correct containers?	✓	N
Correct sample volume?	✓	N
Correct preservation?	✓	N
Headspace/Volatiles?	✓	N
Custody seals Present?	✓	N
(if present) Seals intact?	✓	N
Received on ice?	✓	N
COC/Labels complete/accurate?	✓	N
Container in good condition?	✓	N

SAMPLED BY (Please Print): J. Crooks
LOGGED BY (signature): [signature] DATE 12/14 TIME 1850
REVIEWED BY (signature): [signature] DATE 12-14-09 TIME 1231

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1	[signature]	12/14/09	1035	2	Ron Horn	12-14	1105
3	Ron Hornum	12-14	1830	4	VM	12/14	1830
5	VM	12/14	2012	6	[signature]	12/14/09	2012
7				8			
9				10			

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] Other
EDDs Required? [✓] If yes, format type: EQUIS
SDWA Forms?: yes [ ] yes [ ] yes [ ] yes [ ] Other
State Samples Collected In?: MD [✓] NJ [ ] NY [ ] PA [ ]
Enter PWSID No.
DOD Criteria Required?

ALSI FIELD SERVICES
[✓] Pickup
[ ] Labor
[ ] Composite Sampling
[ ] Rental Equipment
[ ] Other:

* G=Grab; C=Composite
**Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
***Container Type: AG=Amber Glass; CG=Clear Glass, PL=Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

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Rev 6/07

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Certificate of Analysis

Project Name:	**MDE STANDARDS - WATER**	Workorder:	**9772831**
Purchase Order:	**2840**	Workorder ID:	**Calvert Citgo/5977**

Mr. Mark Kuczynski
REPSG
6901 Kingsessing Ave., Ste 201
PO Box 5377
Philadelphia, PA 19142

February 2, 2009

Dear Mr. Kuczynski,

Enclosed are the analytical results for samples received by the laboratory on Monday, January 26, 2009

ALSI is a National Environmental Laboratory Accreditation Conference (NELAC) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAC.

If you have any questions regarding this certificate of analysis, please contact Anna Milliken (Project Coordinator) or Anna G Milliken (Laboratory Manager) at (717) 944-5541.

Please visit us at www.analyticallab.com for a listing of ALSI's NELAC accreditations and Scope of Work, as well as other links to Water Quality documentation on the internet.

This laboratory report may not be reproduced, except in full, without the written approval of ALSI.

NOTE: ALSI has changed the report generation tool and while we have tried to retain the existing format, you will notice some changes in the laboratory report. Please feel free to contact ALSI in case you have any questions.

Analytical Laboratory Services, Inc.

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Anna G Milliken
Laboratory Manager

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SAMPLE SUMMARY

Workorder: 9772831 Calvert Citgo/5977 Discard Date: 02/16/2009

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
9772831001	DW-004C_20090126_N	Water	1/26/09 09:15	1/26/09 18:11	Adam Chorney
9772831002	DW-004D_20090126_N	Water	1/26/09 09:20	1/26/09 18:11	Adam Chorney
9772831003	DW-004E_20090126_N	Water	1/26/09 09:30	1/26/09 18:11	Adam Chorney
9772831004	DW-005A_20090126_N	Water	1/26/09 09:40	1/26/09 18:11	Adam Chorney
9772831005	DW-005B_20090126_N	Water	1/26/09 09:55	1/26/09 18:11	Adam Chorney
9772831006	DW-005C_20090126_N	Water	1/26/09 10:10	1/26/09 18:11	Adam Chorney

Workorder Comments:

Notes

-- Samples collected by ALSI personnel are done so in accordance with the procedures set forth in the ALSI Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

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ANALYTICAL RESULTS

Workorder: 9772831 Calvert Citgo/5977

Lab ID: **9772831001** Date Collected: 1/26/2009 09:15 Matrix: Water

Sample ID: **DW-004C_20090126_N** Date Received: 1/26/2009 18:11

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			1/28/09 10:40	MES	A
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			1/28/09 10:40	MES	A
tert-Amyl methyl ether	0.90	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
tert-Amyl Alcohol	83.1	ug/L		4.0	2.0	EPA 524.2			1/28/09 10:40	MES	A
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 10:40	MES	A
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 10:40	MES	A
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			1/28/09 10:40	MES	A
2-Butanone	ND	ug/L		2.5	1.0	EPA 524.2			1/28/09 10:40	MES	A
tert.- Butyl Alcohol	2230	ug/L		200	85.0	EPA 524.2			1/29/09 16:35	ECR	B
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 10:40	MES	A
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 10:40	MES	A
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			1/28/09 10:40	MES	A
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 10:40	MES	A
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			1/28/09 10:40	MES	A
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 10:40	MES	A
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 10:40	MES	A
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 10:40	MES	A
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			1/28/09 10:40	MES	A
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			1/28/09 10:40	MES	A
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			1/28/09 10:40	MES	A
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			1/28/09 10:40	MES	A
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
1,3-Dichlorobenzene	0.30J	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
1,2-Dichloroethane	5.3	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			1/28/09 10:40	MES	A
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 10:40	MES	A
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A

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ANALYTICAL RESULTS

Workorder: 9772831 Calvert Citgo/5977

Lab ID: **9772831001** Date Collected: 1/26/2009 09:15 Matrix: Water

Sample ID: **DW-004C_20090126_N** Date Received: 1/26/2009 18:11

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 10:40	MES	A
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			1/28/09 10:40	MES	A
Diisopropyl ether	3.9	ug/L		0.50	0.10	EPA 524.2			1/28/09 10:40	MES	A
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			1/28/09 10:40	MES	A
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 10:40	MES	A
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 10:40	MES	A
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 10:40	MES	A
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			1/28/09 10:40	MES	A
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			1/28/09 10:40	MES	A
Iodomethane	ND	ug/L		0.50	0.30	EPA 524.2			1/28/09 10:40	MES	A
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			1/28/09 10:40	MES	A
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 10:40	MES	A
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 10:40	MES	A
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			1/28/09 10:40	MES	A
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			1/28/09 10:40	MES	A
Methyl t-Butyl Ether	234	ug/L		25.0	10.0	EPA 524.2			1/29/09 16:35	ECR	B
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			1/28/09 10:40	MES	A
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			1/28/09 10:40	MES	A
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			1/28/09 10:40	MES	A
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			1/28/09 10:40	MES	A
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			1/28/09 10:40	MES	A
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 10:40	MES	A
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 10:40	MES	A
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
Tetrahydrofuran	ND	ug/L		3.0	1.3	EPA 524.2			1/28/09 10:40	MES	A
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 10:40	MES	A
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			1/28/09 10:40	MES	A
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 10:40	MES	A
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 10:40	MES	A
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 10:40	MES	A
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 10:40	MES	A

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ANALYTICAL RESULTS

Workorder: 9772831 Calvert Citgo/5977

Lab ID: **9772831001** Date Collected: 1/26/2009 09:15 Matrix: Water

Sample ID: **DW-004C_20090126_N** Date Received: 1/26/2009 18:11

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 10:40	MES	A
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 10:40	MES	A
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 10:40	MES	A
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			1/28/09 10:40	MES	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	80.1	%		70-130		EPA 524.2			1/28/09 10:40	MES	A
4-Bromofluorobenzene (S)	73.3	%		70-130		EPA 524.2			1/28/09 10:40	MES	A
1,2-Dichlorobenzene-d4 (S)	79	%		70-130		EPA 524.2			1/29/09 16:35	ECR	B
4-Bromofluorobenzene (S)	72.6	%		70-130		EPA 524.2			1/29/09 16:35	ECR	B

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9772831 Calvert Citgo/5977

Lab ID: **9772831002** Date Collected: 1/26/2009 09:20 Matrix: Water

Sample ID: **DW-004D_20090126_N** Date Received: 1/26/2009 18:11

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			1/29/09 15:43	ECR	B
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			1/29/09 15:43	ECR	B
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
tert-Amyl Alcohol	ND	ug/L		4.0	2.0	EPA 524.2			1/29/09 15:43	ECR	B
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 15:43	ECR	B
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 15:43	ECR	B
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			1/29/09 15:43	ECR	B
2-Butanone	2.9	ug/L		2.5	1.0	EPA 524.2			1/29/09 15:43	ECR	B
tert.- Butyl Alcohol	62.1	ug/L		4.0	1.7	EPA 524.2			1/29/09 15:43	ECR	B
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 15:43	ECR	B
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 15:43	ECR	B
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			1/29/09 15:43	ECR	B
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 15:43	ECR	B
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			1/29/09 15:43	ECR	B
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 15:43	ECR	B
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 15:43	ECR	B
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 15:43	ECR	B
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			1/29/09 15:43	ECR	B
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			1/29/09 15:43	ECR	B
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			1/29/09 15:43	ECR	B
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			1/29/09 15:43	ECR	B
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			1/29/09 15:43	ECR	B
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 15:43	ECR	B
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B

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ANALYTICAL RESULTS

Workorder: 9772831 Calvert Citgo/5977

Lab ID: **9772831002** Date Collected: 1/26/2009 09:20 Matrix: Water

Sample ID: **DW-004D_20090126_N** Date Received: 1/26/2009 18:11

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 15:43	ECR	B
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			1/29/09 15:43	ECR	B
Diisopropyl ether	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 15:43	ECR	B
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			1/29/09 15:43	ECR	B
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 15:43	ECR	B
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 15:43	ECR	B
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 15:43	ECR	B
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			1/29/09 15:43	ECR	B
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			1/29/09 15:43	ECR	B
Iodomethane	ND	ug/L		0.50	0.30	EPA 524.2			1/29/09 15:43	ECR	B
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			1/29/09 15:43	ECR	B
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 15:43	ECR	B
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 15:43	ECR	B
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			1/29/09 15:43	ECR	B
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			1/29/09 15:43	ECR	B
Methyl t-Butyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			1/29/09 15:43	ECR	B
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			1/29/09 15:43	ECR	B
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			1/29/09 15:43	ECR	B
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			1/29/09 15:43	ECR	B
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			1/29/09 15:43	ECR	B
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 15:43	ECR	B
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 15:43	ECR	B
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
Tetrahydrofuran	ND	ug/L		3.0	1.3	EPA 524.2			1/29/09 15:43	ECR	B
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 15:43	ECR	B
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			1/29/09 15:43	ECR	B
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 15:43	ECR	B
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 15:43	ECR	B
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 15:43	ECR	B
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 15:43	ECR	B

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34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9772831 Calvert Citgo/5977

Lab ID: **9772831002** Date Collected: 1/26/2009 09:20 Matrix: Water

Sample ID: **DW-004D_20090126_N** Date Received: 1/26/2009 18:11

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 15:43	ECR	B
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 15:43	ECR	B
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 15:43	ECR	B
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			1/29/09 15:43	ECR	B
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	81	%		70-130		EPA 524.2			1/29/09 15:43	ECR	B
4-Bromofluorobenzene (S)	71.4	%		70-130		EPA 524.2			1/29/09 15:43	ECR	B

Sample Comments:

Anna G Milliken
Laboratory Manager

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34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9772831 Calvert Citgo/5977

Lab ID: **9772831003** Date Collected: 1/26/2009 09:30 Matrix: Water

Sample ID: **DW-004E_20090126_N** Date Received: 1/26/2009 18:11

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			1/28/09 11:31	MES	A
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			1/28/09 11:31	MES	A
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
tert-Amyl Alcohol	ND	ug/L		4.0	2.0	EPA 524.2			1/28/09 11:31	MES	A
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:31	MES	A
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:31	MES	A
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			1/28/09 11:31	MES	A
2-Butanone	16.2	ug/L		2.5	1.0	EPA 524.2			1/28/09 11:31	MES	A
tert.- Butyl Alcohol	ND	ug/L		4.0	1.7	EPA 524.2			1/28/09 11:31	MES	A
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:31	MES	A
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:31	MES	A
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			1/28/09 11:31	MES	A
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:31	MES	A
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			1/28/09 11:31	MES	A
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:31	MES	A
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:31	MES	A
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:31	MES	A
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			1/28/09 11:31	MES	A
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			1/28/09 11:31	MES	A
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			1/28/09 11:31	MES	A
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			1/28/09 11:31	MES	A
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			1/28/09 11:31	MES	A
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:31	MES	A
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A

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ANALYTICAL RESULTS

Workorder: 9772831 Calvert Citgo/5977

Lab ID: **9772831003** Date Collected: 1/26/2009 09:30 Matrix: Water

Sample ID: **DW-004E_20090126_N** Date Received: 1/26/2009 18:11

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:31	MES	A
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			1/28/09 11:31	MES	A
Diisopropyl ether	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:31	MES	A
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			1/28/09 11:31	MES	A
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:31	MES	A
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:31	MES	A
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:31	MES	A
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			1/28/09 11:31	MES	A
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			1/28/09 11:31	MES	A
Iodomethane	ND	ug/L		0.50	0.30	EPA 524.2			1/28/09 11:31	MES	A
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			1/28/09 11:31	MES	A
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:31	MES	A
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:31	MES	A
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			1/28/09 11:31	MES	A
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			1/28/09 11:31	MES	A
Methyl t-Butyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			1/28/09 11:31	MES	A
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			1/28/09 11:31	MES	A
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			1/28/09 11:31	MES	A
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			1/28/09 11:31	MES	A
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			1/28/09 11:31	MES	A
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:31	MES	A
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:31	MES	A
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
Tetrahydrofuran	7.2	ug/L		3.0	1.3	EPA 524.2			1/28/09 11:31	MES	A
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:31	MES	A
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			1/28/09 11:31	MES	A
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:31	MES	A
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:31	MES	A
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:31	MES	A
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:31	MES	A

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ANALYTICAL RESULTS

Workorder: 9772831 Calvert Citgo/5977

Lab ID: **9772831003** Date Collected: 1/26/2009 09:30 Matrix: Water

Sample ID: **DW-004E_20090126_N** Date Received: 1/26/2009 18:11

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:31	MES	A
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:31	MES	A
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:31	MES	A
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			1/28/09 11:31	MES	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	82.1	%		70-130		EPA 524.2			1/28/09 11:31	MES	A
4-Bromofluorobenzene (S)	72.3	%		70-130		EPA 524.2			1/28/09 11:31	MES	A

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9772831 Calvert Citgo/5977

Lab ID: **9772831004** Date Collected: 1/26/2009 09:40 Matrix: Water

Sample ID: **DW-005A_20090126_N** Date Received: 1/26/2009 18:11

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			1/28/09 11:57	MES	A
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			1/28/09 11:57	MES	A
tert-Amyl methyl ether	1.8	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
tert-Amyl Alcohol	27.5	ug/L		4.0	2.0	EPA 524.2			1/28/09 11:57	MES	A
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:57	MES	A
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:57	MES	A
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			1/28/09 11:57	MES	A
2-Butanone	ND	ug/L		2.5	1.0	EPA 524.2			1/28/09 11:57	MES	A
tert.- Butyl Alcohol	326	ug/L		4.0	1.7	EPA 524.2			1/28/09 11:57	MES	A
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:57	MES	A
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:57	MES	A
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			1/28/09 11:57	MES	A
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:57	MES	A
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			1/28/09 11:57	MES	A
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:57	MES	A
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:57	MES	A
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:57	MES	A
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			1/28/09 11:57	MES	A
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			1/28/09 11:57	MES	A
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			1/28/09 11:57	MES	A
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			1/28/09 11:57	MES	A
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
1,2-Dichloroethane	2.5	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			1/28/09 11:57	MES	A
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:57	MES	A
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A

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ANALYTICAL RESULTS

Workorder: 9772831 Calvert Citgo/5977

Lab ID: **9772831004** Date Collected: 1/26/2009 09:40 Matrix: Water

Sample ID: **DW-005A_20090126_N** Date Received: 1/26/2009 18:11

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:57	MES	A
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			1/28/09 11:57	MES	A
Diisopropyl ether	2.7	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:57	MES	A
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			1/28/09 11:57	MES	A
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:57	MES	A
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:57	MES	A
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:57	MES	A
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			1/28/09 11:57	MES	A
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			1/28/09 11:57	MES	A
Iodomethane	ND	ug/L		0.50	0.30	EPA 524.2			1/28/09 11:57	MES	A
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			1/28/09 11:57	MES	A
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:57	MES	A
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:57	MES	A
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			1/28/09 11:57	MES	A
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			1/28/09 11:57	MES	A
Methyl t-Butyl Ether	220	ug/L		25.0	10.0	EPA 524.2			1/29/09 17:01	ECR	B
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			1/28/09 11:57	MES	A
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			1/28/09 11:57	MES	A
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			1/28/09 11:57	MES	A
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			1/28/09 11:57	MES	A
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			1/28/09 11:57	MES	A
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:57	MES	A
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:57	MES	A
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
Tetrahydrofuran	ND	ug/L		3.0	1.3	EPA 524.2			1/28/09 11:57	MES	A
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:57	MES	A
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			1/28/09 11:57	MES	A
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:57	MES	A
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:57	MES	A
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:57	MES	A
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:57	MES	A

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ANALYTICAL RESULTS

Workorder: 9772831 Calvert Citgo/5977

Lab ID: **9772831004** Date Collected: 1/26/2009 09:40 Matrix: Water

Sample ID: **DW-005A_20090126_N** Date Received: 1/26/2009 18:11

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:57	MES	A
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 11:57	MES	A
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 11:57	MES	A
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			1/28/09 11:57	MES	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	77.7	%		70-130		EPA 524.2			1/28/09 11:57	MES	A
4-Bromofluorobenzene (S)	76.4	%		70-130		EPA 524.2			1/28/09 11:57	MES	A
1,2-Dichlorobenzene-d4 (S)	78.9	%		70-130		EPA 524.2			1/29/09 17:01	ECR	B
4-Bromofluorobenzene (S)	72.6	%		70-130		EPA 524.2			1/29/09 17:01	ECR	B

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9772831 Calvert Citgo/5977

Lab ID: **9772831005** Date Collected: 1/26/2009 09:55 Matrix: Water

Sample ID: **DW-005B_20090126_N** Date Received: 1/26/2009 18:11

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			1/29/09 16:09	ECR	B
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			1/29/09 16:09	ECR	B
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
tert-Amyl Alcohol	ND	ug/L		4.0	2.0	EPA 524.2			1/29/09 16:09	ECR	B
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 16:09	ECR	B
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 16:09	ECR	B
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			1/29/09 16:09	ECR	B
2-Butanone	ND	ug/L		2.5	1.0	EPA 524.2			1/29/09 16:09	ECR	B
tert.- Butyl Alcohol	17.2	ug/L		4.0	1.7	EPA 524.2			1/29/09 16:09	ECR	B
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 16:09	ECR	B
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 16:09	ECR	B
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			1/29/09 16:09	ECR	B
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 16:09	ECR	B
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			1/29/09 16:09	ECR	B
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 16:09	ECR	B
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 16:09	ECR	B
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 16:09	ECR	B
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			1/29/09 16:09	ECR	B
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			1/29/09 16:09	ECR	B
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			1/29/09 16:09	ECR	B
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			1/29/09 16:09	ECR	B
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			1/29/09 16:09	ECR	B
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 16:09	ECR	B
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B

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ANALYTICAL RESULTS

Workorder: 9772831 Calvert Citgo/5977

Lab ID: **9772831005** Date Collected: 1/26/2009 09:55 Matrix: Water

Sample ID: **DW-005B_20090126_N** Date Received: 1/26/2009 18:11

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 16:09	ECR	B
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			1/29/09 16:09	ECR	B
Diisopropyl ether	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 16:09	ECR	B
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			1/29/09 16:09	ECR	B
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 16:09	ECR	B
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 16:09	ECR	B
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 16:09	ECR	B
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			1/29/09 16:09	ECR	B
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			1/29/09 16:09	ECR	B
Iodomethane	ND	ug/L		0.50	0.30	EPA 524.2			1/29/09 16:09	ECR	B
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			1/29/09 16:09	ECR	B
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 16:09	ECR	B
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 16:09	ECR	B
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			1/29/09 16:09	ECR	B
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			1/29/09 16:09	ECR	B
Methyl t-Butyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			1/29/09 16:09	ECR	B
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			1/29/09 16:09	ECR	B
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			1/29/09 16:09	ECR	B
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			1/29/09 16:09	ECR	B
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			1/29/09 16:09	ECR	B
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 16:09	ECR	B
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 16:09	ECR	B
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
Tetrahydrofuran	3.2	ug/L		3.0	1.3	EPA 524.2			1/29/09 16:09	ECR	B
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 16:09	ECR	B
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			1/29/09 16:09	ECR	B
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 16:09	ECR	B
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 16:09	ECR	B
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 16:09	ECR	B
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 16:09	ECR	B

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ANALYTICAL RESULTS

Workorder: 9772831 Calvert Citgo/5977

Lab ID: **9772831005** Date Collected: 1/26/2009 09:55 Matrix: Water

Sample ID: **DW-005B_20090126_N** Date Received: 1/26/2009 18:11

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 16:09	ECR	B
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			1/29/09 16:09	ECR	B
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			1/29/09 16:09	ECR	B
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			1/29/09 16:09	ECR	B
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	81.1	%		70-130		EPA 524.2			1/29/09 16:09	ECR	B
4-Bromofluorobenzene (S)	75.3	%		70-130		EPA 524.2			1/29/09 16:09	ECR	B

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9772831 Calvert Citgo/5977

Lab ID: **9772831006** Date Collected: 1/26/2009 10:10 Matrix: Water

Sample ID: **DW-005C_20090126_N** Date Received: 1/26/2009 18:11

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			1/28/09 12:49	MES	A
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			1/28/09 12:49	MES	A
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
tert-Amyl Alcohol	ND	ug/L		4.0	2.0	EPA 524.2			1/28/09 12:49	MES	A
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 12:49	MES	A
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 12:49	MES	A
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			1/28/09 12:49	MES	A
2-Butanone	6.3	ug/L		2.5	1.0	EPA 524.2			1/28/09 12:49	MES	A
tert.- Butyl Alcohol	ND	ug/L		4.0	1.7	EPA 524.2			1/28/09 12:49	MES	A
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 12:49	MES	A
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 12:49	MES	A
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			1/28/09 12:49	MES	A
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 12:49	MES	A
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			1/28/09 12:49	MES	A
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 12:49	MES	A
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 12:49	MES	A
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 12:49	MES	A
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			1/28/09 12:49	MES	A
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			1/28/09 12:49	MES	A
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			1/28/09 12:49	MES	A
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			1/28/09 12:49	MES	A
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			1/28/09 12:49	MES	A
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 12:49	MES	A
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A

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ANALYTICAL RESULTS

Workorder: 9772831 Calvert Citgo/5977

Lab ID: **9772831006** Date Collected: 1/26/2009 10:10 Matrix: Water

Sample ID: **DW-005C_20090126_N** Date Received: 1/26/2009 18:11

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 12:49	MES	A
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			1/28/09 12:49	MES	A
Diisopropyl ether	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 12:49	MES	A
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			1/28/09 12:49	MES	A
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 12:49	MES	A
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 12:49	MES	A
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 12:49	MES	A
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			1/28/09 12:49	MES	A
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			1/28/09 12:49	MES	A
Iodomethane	ND	ug/L		0.50	0.30	EPA 524.2			1/28/09 12:49	MES	A
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			1/28/09 12:49	MES	A
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 12:49	MES	A
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 12:49	MES	A
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			1/28/09 12:49	MES	A
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			1/28/09 12:49	MES	A
Methyl t-Butyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			1/28/09 12:49	MES	A
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			1/28/09 12:49	MES	A
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			1/28/09 12:49	MES	A
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			1/28/09 12:49	MES	A
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			1/28/09 12:49	MES	A
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 12:49	MES	A
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 12:49	MES	A
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
Tetrahydrofuran	12.0	ug/L		3.0	1.3	EPA 524.2			1/28/09 12:49	MES	A
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 12:49	MES	A
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			1/28/09 12:49	MES	A
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 12:49	MES	A
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 12:49	MES	A
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 12:49	MES	A
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 12:49	MES	A

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ANALYTICAL RESULTS

Workorder: 9772831 Calvert Citgo/5977

Lab ID: **9772831006** Date Collected: 1/26/2009 10:10 Matrix: Water

Sample ID: **DW-005C_20090126_N** Date Received: 1/26/2009 18:11

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 12:49	MES	A
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			1/28/09 12:49	MES	A
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			1/28/09 12:49	MES	A
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			1/28/09 12:49	MES	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	79.1	%		70-130		EPA 524.2			1/28/09 12:49	MES	A
4-Bromofluorobenzene (S)	78.9	%		70-130		EPA 524.2			1/28/09 12:49	MES	A

Sample Comments:

Anna G Milliken
Laboratory Manager

Report ID: 9772831

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Page 1 of 1

Courier:

Tracking #:

9772831

Co. Name: KEPSG INC

Contact (Report to): MKruczynski@kepsg.com Phone: 215-729 3220

Address: 6901 Kingsessing Ave Philly PA 19142 2nd Floor

Bill to (if different than Report to): Same PO#: 2840

Project Name/#: 5977/Calvert citgo ALSI Quote #:

TAT: [X] Normal-Standard TAT is 10-12 business days. Date Required:
[ ] Rush-Subject to ALSI approval and surcharges. Approved By:

Email? [X] Y RFeingold@KEPSG.com

Fax? [ ] Y No.:

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	Full Suite Drinking Water VOCs by Method 524.2, MTBE, TBA	# of Bottles
1 DW-004C		1-26	9:15	G	WG	X	2
2 DW-004D		1-26	9:20	G	WG	X	2
3 DW-004E		1-26	9:30	G	WG	X	2
4 DW-005A		1-26	9:40	G	WG	X	2
5 DW-005B		1-26	9:55	G	WG	X	2
6 DW-005C		1-26	10:10	G	WG	X	2
7							
8							

***Container Type: Vial's
***Container Size: 40ml
*** Preservative: Ascorbic Acid/ HCL

ANALYSES/METHOD REQUESTED

Enter Number of Containers Per Analysis

Receipt Information (completed by Sample Receipt)
Performed by:
Cooler Temp: 2
Therm. ID: 302359
No. of Coolers:
Notes:

	Correct containers?	Correct sample volume?	Correct preservation?	Headspace/Volatiles?	Circle appropriate Y or N.
	N/A	N	N	N	N
	N/A	N	N	N	N
	N/A	N	N	N	N
	N/A	N	N	N	N
	N/A	N	N	N	N
	N/A	N	N	N	N

	Custody seals Present?	(if present) Seals intact?	Received on ice?	COC/Labels complete/accurate?	Container in good condition?
	Y	Y	Y	Y	Y

SAMPLED BY (Please Print): Adam Chorney

LOGGED BY(signature): CG DATE: 1/26 TIME: 2039

REVIEWED BY(signature): DATE: 01/30/09 TIME: 0809

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 KEPSG	1/26	13:00	2 Rob Hoover	1-26	1300
3 Rob Hoover	1-26	1630	4 VM	1/26	1630
5 VM	1/26	1811	6	1/26/09	1811
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] other

EDDs Required? [X] If yes, format type: Equis

DOD Criteria Required?

SDWA Forms? yes [ ] yes [ ] yes [ ] yes [ ]

State Samples Collected In? MD [X] NJ [ ] NY [ ] PA [ ] Other

ALSI FIELD SERVICES
[✓] Pickup
[ ] Labor
[ ] Composite Sampling
[ ] Rental Equipment
[ ] Other:

* G=Grab; C=Composite

**Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY

***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

Rev 6/07

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Certificate of Analysis

Project Name:	**MDE STANDARDS - WATER**	Workorder:	**9778396**
Purchase Order:	**2958**	Workorder ID:	**Calvert Citgo/5977**

Mr. Mark Kuczynski
REPSG
6901 Kingsessing Ave., Ste 201
PO Box 5377
Philadelphia, PA 19142

March 12, 2009

Dear Mr. Kuczynski,

Enclosed are the analytical results for samples received by the laboratory on Wednesday, March 04, 2009

ALSI is a National Environmental Laboratory Accreditation Conference (NELAC) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAC.

If you have any questions regarding this certificate of analysis, please contact Anna Milliken (Project Coordinator) or Anna G Milliken (Laboratory Manager) at (717) 944-5541.

Please visit us at www.analyticallab.com for a listing of ALSI's NELAC accreditations and Scope of Work, as well as other links to Water Quality documentation on the internet.

NOTE: ALSI has changed the report generation tool and while we have tried to retain the existing format, you will notice some changes in the laboratory report. Please feel free to contact ALSI in case you have any questions.

Analytical Laboratory Services, Inc.

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Anna G Milliken
Laboratory Manager

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SAMPLE SUMMARY

Workorder: 9778396 Calvert Citgo/5977 Discard Date: 03/25/2009

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
9778396001	DW-004B	Water	3/4/09 11:30	3/4/09 20:44	Adam Chorney
9778396002	DW-004C	Water	3/4/09 11:05	3/4/09 20:44	Adam Chorney
9778396003	DW-004D	Water	3/4/09 11:10	3/4/09 20:44	Adam Chorney
9778396004	DW-004E	Water	3/4/09 11:15	3/4/09 20:44	Adam Chorney
9778396005	DW-005A	Water	3/4/09 11:50	3/4/09 20:44	Adam Chorney
9778396006	DW-005B	Water	3/4/09 12:00	3/4/09 20:44	Adam Chorney
9778396007	DW-005C	Water	3/4/09 12:10	3/4/09 20:44	Adam Chorney
9778396008	DW-005D	Water	3/4/09 12:30	3/4/09 20:44	Adam Chorney

Workorder Comments:

Notes

-- Samples collected by ALSI personnel are done so in accordance with the procedures set forth in the ALSI Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

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ANALYTICAL RESULTS

Workorder: 9778396 Calvert Citgo/5977

Lab ID: **9778396001** Date Collected: 3/4/2009 11:30 Matrix: Water

Sample ID: **DW-004B** Date Received: 3/4/2009 20:44

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			3/9/09 17:03	ECR	A
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			3/9/09 17:03	ECR	A
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 17:03	ECR	A
tert-Amyl Alcohol	ND	ug/L		4.0	2.0	EPA 524.2			3/9/09 17:03	ECR	A
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 17:03	ECR	A
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 17:03	ECR	A
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 17:03	ECR	A
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 17:03	ECR	A
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 17:03	ECR	A
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 17:03	ECR	A
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 17:03	ECR	A
2-Butanone	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 17:03	ECR	A
tert.- Butyl Alcohol	ND	ug/L		4.0	1.7	EPA 524.2			3/9/09 17:03	ECR	A
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 17:03	ECR	A
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 17:03	ECR	A
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 17:03	ECR	A
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 17:03	ECR	A
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 17:03	ECR	A
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 17:03	ECR	A
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 17:03	ECR	A
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			3/9/09 17:03	ECR	A
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 17:03	ECR	A
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 17:03	ECR	A
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 17:03	ECR	A
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 17:03	ECR	A
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 17:03	ECR	A
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 17:03	ECR	A
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 17:03	ECR	A
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 17:03	ECR	A
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 17:03	ECR	A
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 17:03	ECR	A
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			3/9/09 17:03	ECR	A
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			3/9/09 17:03	ECR	A
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 17:03	ECR	A
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 17:03	ECR	A
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 17:03	ECR	A
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 17:03	ECR	A
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 17:03	ECR	A
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 17:03	ECR	A
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 17:03	ECR	A
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 17:03	ECR	A
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 17:03	ECR	A
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 17:03	ECR	A
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 17:03	ECR	A
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 17:03	ECR	A

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ANALYTICAL RESULTS

Workorder: 9778396 Calvert Citgo/5977

Lab ID: **9778396001** Date Collected: 3/4/2009 11:30 Matrix: Water

Sample ID: **DW-004B** Date Received: 3/4/2009 20:44

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2		3/9/09 17:03	ECR	A
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2		3/9/09 17:03	ECR	A
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2		3/9/09 17:03	ECR	A
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2		3/9/09 17:03	ECR	A
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2		3/9/09 17:03	ECR	A
Diisopropyl ether	ND	ug/L		0.50	0.10	EPA 524.2		3/9/09 17:03	ECR	A
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2		3/9/09 17:03	ECR	A
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2		3/9/09 17:03	ECR	A
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2		3/9/09 17:03	ECR	A
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2		3/9/09 17:03	ECR	A
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2		3/9/09 17:03	ECR	A
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2		3/9/09 17:03	ECR	A
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2		3/9/09 17:03	ECR	A
Hexane	ND	ug/L		0.50	0.20	EPA 524.2		3/9/09 17:03	ECR	A
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2		3/9/09 17:03	ECR	A
Iodomethane	ND	ug/L		0.50	0.30	EPA 524.2		3/9/09 17:03	ECR	A
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2		3/9/09 17:03	ECR	A
Isopropylbenzene	0.14J	ug/L		0.50	0.10	EPA 524.2		3/9/09 17:03	ECR	A
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2		3/9/09 17:03	ECR	A
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2		3/9/09 17:03	ECR	A
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2		3/9/09 17:03	ECR	A
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2		3/9/09 17:03	ECR	A
Methyl t-Butyl Ether	3.8	ug/L		0.50	0.20	EPA 524.2		3/9/09 17:03	ECR	A
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2		3/9/09 17:03	ECR	A
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2		3/9/09 17:03	ECR	A
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2		3/9/09 17:03	ECR	A
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2		3/9/09 17:03	ECR	A
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2		3/9/09 17:03	ECR	A
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2		3/9/09 17:03	ECR	A
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2		3/9/09 17:03	ECR	A
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2		3/9/09 17:03	ECR	A
Styrene	ND	ug/L		0.50	0.20	EPA 524.2		3/9/09 17:03	ECR	A
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2		3/9/09 17:03	ECR	A
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2		3/9/09 17:03	ECR	A
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2		3/9/09 17:03	ECR	A
Tetrahydrofuran	8.3	ug/L		3.0	1.3	EPA 524.2		3/9/09 17:03	ECR	A
Toluene	ND	ug/L		0.50	0.10	EPA 524.2		3/9/09 17:03	ECR	A
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2		3/9/09 17:03	ECR	A
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2		3/9/09 17:03	ECR	A
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2		3/9/09 17:03	ECR	A
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2		3/9/09 17:03	ECR	A
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2		3/9/09 17:03	ECR	A
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2		3/9/09 17:03	ECR	A
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2		3/9/09 17:03	ECR	A
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2		3/9/09 17:03	ECR	A
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2		3/9/09 17:03	ECR	A

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ANALYTICAL RESULTS

Workorder: 9778396 Calvert Citgo/5977

Lab ID: **9778396001** Date Collected: 3/4/2009 11:30 Matrix: Water

Sample ID: **DW-004B** Date Received: 3/4/2009 20:44

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 17:03	ECR	A
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 17:03	ECR	A
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 17:03	ECR	A
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 17:03	ECR	A
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			3/9/09 17:03	ECR	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	95.3	%		70-130		EPA 524.2			3/9/09 17:03	ECR	A
4-Bromofluorobenzene (S)	89.8	%		70-130		EPA 524.2			3/9/09 17:03	ECR	A

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9778396 Calvert Citgo/5977

Lab ID: **9778396002** Date Collected: 3/4/2009 11:05 Matrix: Water

Sample ID: **DW-004C** Date Received: 3/4/2009 20:44

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		25.0	11.5	EPA 524.2			3/9/09 16:11	ECR	A
Acrylonitrile	ND	ug/L		12.5	2.0	EPA 524.2			3/9/09 16:11	ECR	A
tert-Amyl methyl ether	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
tert-Amyl Alcohol	ND	ug/L		20.0	10.0	EPA 524.2			3/9/09 16:11	ECR	A
tert-Amyl Ethylether	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
Benzene	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:11	ECR	A
Bromobenzene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
Bromochloromethane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
Bromodichloromethane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
Bromoform	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:11	ECR	A
Bromomethane	ND	ug/L		2.5	1.5	EPA 524.2			3/9/09 16:11	ECR	A
2-Butanone	ND	ug/L		12.5	5.0	EPA 524.2			3/9/09 16:11	ECR	A
tert.- Butyl Alcohol	1800	ug/L		200	85.0	EPA 524.2			3/10/09 07:29	MES	A
n-Butylbenzene	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:11	ECR	A
tert-Butylbenzene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
sec-Butylbenzene	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:11	ECR	A
Carbon Disulfide	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
Carbon Tetrachloride	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
Chloroacetonitrile	ND	ug/L		12.5	5.0	EPA 524.2			3/9/09 16:11	ECR	A
Chlorobenzene	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:11	ECR	A
1-Chlorobutane	ND	ug/L		5.0	2.5	EPA 524.2			3/9/09 16:11	ECR	A
Chlorodibromomethane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
Chloroethane	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:11	ECR	A
Chloroform	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:11	ECR	A
Chloromethane	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:11	ECR	A
3-Chloro-1-propene	ND	ug/L		2.5	1.5	EPA 524.2			3/9/09 16:11	ECR	A
o-Chlorotoluene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
p-Chlorotoluene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
1,2-Dibromo-3-chloropropane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
1,2-Dibromoethane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
Dibromomethane	ND	ug/L		2.5	1.5	EPA 524.2			3/9/09 16:11	ECR	A
trans-1,4-Dichloro-2-butene	ND	ug/L		5.0	2.0	EPA 524.2			3/9/09 16:11	ECR	A
1,1-Dichloro-2-Propanone	ND	ug/L		20.0	8.0	EPA 524.2			3/9/09 16:11	ECR	A
1,2-Dichlorobenzene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
1,3-Dichlorobenzene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
1,4-Dichlorobenzene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
Dichlorodifluoromethane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
1,1-Dichloroethane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
1,2-Dichloroethane	4.4	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
1,1-Dichloroethene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
cis-1,2-Dichloroethene	ND	ug/L		2.5	1.5	EPA 524.2			3/9/09 16:11	ECR	A
trans-1,2-Dichloroethene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
Dichlorofluoromethane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
1,3-Dichloropropane	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:11	ECR	A
2,2-Dichloropropane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A

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ANALYTICAL RESULTS

Workorder: 9778396 Calvert Citgo/5977

Lab ID: **9778396002** Date Collected: 3/4/2009 11:05 Matrix: Water

Sample ID: **DW-004C** Date Received: 3/4/2009 20:44

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
1,1-Dichloropropene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
cis-1,3-Dichloropropene	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:11	ECR	A
trans-1,3-Dichloropropene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
1,3-Dichloropropene, Total	ND	ug/L		5.0	1.5	EPA 524.2			3/9/09 16:11	ECR	A
Diisopropyl ether	3.9	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:11	ECR	A
1,4-Dioxane	ND	ug/L		20.0	8.0	EPA 524.2			3/9/09 16:11	ECR	A
Ethyl Ether	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
Ethyl Methacrylate	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:11	ECR	A
Ethyl tert-butyl ether	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:11	ECR	A
Ethylbenzene	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:11	ECR	A
Hexachlorobutadiene	1.7J	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
Hexachloroethane	ND	ug/L		15.0	7.0	EPA 524.2			3/9/09 16:11	ECR	A
Hexane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
2-Hexanone	ND	ug/L		12.5	1.5	EPA 524.2			3/9/09 16:11	ECR	A
Iodomethane	ND	ug/L		2.5	1.5	EPA 524.2			3/9/09 16:11	ECR	A
Isopropyl Alcohol	ND	ug/L		125	55.0	EPA 524.2			3/9/09 16:11	ECR	A
Isopropylbenzene	0.70J	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:11	ECR	A
p-Isopropyltoluene	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:11	ECR	A
Methacrylonitrile	ND	ug/L		5.0	1.5	EPA 524.2			3/9/09 16:11	ECR	A
Methyl methacrylate	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
Methyl acrylate	ND	ug/L		5.0	1.5	EPA 524.2			3/9/09 16:11	ECR	A
Methyl t-Butyl Ether	232	ug/L		25.0	10.0	EPA 524.2			3/10/09 07:29	MES	A
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		12.5	2.5	EPA 524.2			3/9/09 16:11	ECR	A
Methylene Chloride	6.1	ug/L		2.5	1.5	EPA 524.2			3/9/09 16:11	ECR	A
Naphthalene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
Nitrobenzene	ND	ug/L		25.0	10.0	EPA 524.2			3/9/09 16:11	ECR	A
2-Nitropropane	ND	ug/L		15.0	7.0	EPA 524.2			3/9/09 16:11	ECR	A
Pentachloroethane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
Propionitrile	ND	ug/L		12.5	3.0	EPA 524.2			3/9/09 16:11	ECR	A
n-Propylbenzene	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:11	ECR	A
Styrene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
1,1,1,2-Tetrachloroethane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
1,1,2,2-Tetrachloroethane	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:11	ECR	A
Tetrachloroethene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
Tetrahydrofuran	7.6J	ug/L		15.0	6.5	EPA 524.2			3/9/09 16:11	ECR	A
Toluene	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:11	ECR	A
Total Xylenes	ND	ug/L		7.5	1.5	EPA 524.2			3/9/09 16:11	ECR	A
1,2,3-Trichlorobenzene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
1,2,4-Trichlorobenzene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
1,1,1-Trichloroethane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
1,1,2-Trichloroethane	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:11	ECR	A
Trichloroethene	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:11	ECR	A
Trichlorofluoromethane	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:11	ECR	A
1,2,3-Trichloropropane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
1,2,4-Trimethylbenzene	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:11	ECR	A

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ANALYTICAL RESULTS

Workorder: 9778396 Calvert Citgo/5977

Lab ID: **9778396002** Date Collected: 3/4/2009 11:05 Matrix: Water

Sample ID: **DW-004C** Date Received: 3/4/2009 20:44

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:11	ECR	A
Vinyl Acetate	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
Vinyl Chloride	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:11	ECR	A
o-Xylene	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:11	ECR	A
mp-Xylene	ND	ug/L		5.0	1.0	EPA 524.2			3/9/09 16:11	ECR	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	105	%		70-130		EPA 524.2			3/9/09 16:11	ECR	A
4-Bromofluorobenzene (S)	104	%		70-130		EPA 524.2			3/9/09 16:11	ECR	A
1,2-Dichlorobenzene-d4 (S)	104	%		70-130		EPA 524.2			3/10/09 07:29	MES	A
4-Bromofluorobenzene (S)	104	%		70-130		EPA 524.2			3/10/09 07:29	MES	A

Sample Comments:

The GCMS volatiles analysis was performed at a dilution due to the level of target compounds.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9778396 Calvert Citgo/5977

Lab ID: **9778396003** Date Collected: 3/4/2009 11:10 Matrix: Water

Sample ID: **DW-004D** Date Received: 3/4/2009 20:44

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			3/9/09 15:19	ECR	A
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			3/9/09 15:19	ECR	A
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
tert-Amyl Alcohol	ND	ug/L		4.0	2.0	EPA 524.2			3/9/09 15:19	ECR	A
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:19	ECR	A
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:19	ECR	A
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 15:19	ECR	A
2-Butanone	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 15:19	ECR	A
tert.- Butyl Alcohol	901	ug/L		100	42.5	EPA 524.2			3/10/09 07:55	MES	A
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:19	ECR	A
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:19	ECR	A
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 15:19	ECR	A
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:19	ECR	A
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			3/9/09 15:19	ECR	A
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:19	ECR	A
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:19	ECR	A
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:19	ECR	A
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 15:19	ECR	A
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 15:19	ECR	A
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			3/9/09 15:19	ECR	A
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			3/9/09 15:19	ECR	A
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 15:19	ECR	A
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:19	ECR	A
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A

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ANALYTICAL RESULTS

Workorder: 9778396 Calvert Citgo/5977

Lab ID: **9778396003** Date Collected: 3/4/2009 11:10 Matrix: Water

Sample ID: **DW-004D** Date Received: 3/4/2009 20:44

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:19	ECR	A
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			3/9/09 15:19	ECR	A
Diisopropyl ether	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:19	ECR	A
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			3/9/09 15:19	ECR	A
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:19	ECR	A
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:19	ECR	A
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:19	ECR	A
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			3/9/09 15:19	ECR	A
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			3/9/09 15:19	ECR	A
Iodomethane	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 15:19	ECR	A
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			3/9/09 15:19	ECR	A
Isopropylbenzene	0.14J	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:19	ECR	A
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:19	ECR	A
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			3/9/09 15:19	ECR	A
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			3/9/09 15:19	ECR	A
Methyl t-Butyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 15:19	ECR	A
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 15:19	ECR	A
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			3/9/09 15:19	ECR	A
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			3/9/09 15:19	ECR	A
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			3/9/09 15:19	ECR	A
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:19	ECR	A
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:19	ECR	A
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
Tetrahydrofuran	5.7	ug/L		3.0	1.3	EPA 524.2			3/9/09 15:19	ECR	A
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:19	ECR	A
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			3/9/09 15:19	ECR	A
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:19	ECR	A
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:19	ECR	A
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:19	ECR	A
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:19	ECR	A

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ANALYTICAL RESULTS

Workorder: 9778396 Calvert Citgo/5977

Lab ID: **9778396003** Date Collected: 3/4/2009 11:10 Matrix: Water

Sample ID: **DW-004D** Date Received: 3/4/2009 20:44

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:19	ECR	A
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:19	ECR	A
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:19	ECR	A
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			3/9/09 15:19	ECR	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	102	%		70-130		EPA 524.2			3/9/09 15:19	ECR	A
4-Bromofluorobenzene (S)	103	%		70-130		EPA 524.2			3/9/09 15:19	ECR	A
1,2-Dichlorobenzene-d4 (S)	96.7	%		70-130		EPA 524.2			3/10/09 07:55	MES	A
4-Bromofluorobenzene (S)	94.7	%		70-130		EPA 524.2			3/10/09 07:55	MES	A

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9778396 Calvert Citgo/5977

Lab ID: **9778396004** Date Collected: 3/4/2009 11:15 Matrix: Water

Sample ID: **DW-004E** Date Received: 3/4/2009 20:44

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			3/9/09 14:53	ECR	A
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			3/9/09 14:53	ECR	A
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
tert-Amyl Alcohol	ND	ug/L		4.0	2.0	EPA 524.2			3/9/09 14:53	ECR	A
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:53	ECR	A
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:53	ECR	A
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 14:53	ECR	A
2-Butanone	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 14:53	ECR	A
tert.- Butyl Alcohol	11.3	ug/L		4.0	1.7	EPA 524.2			3/9/09 14:53	ECR	A
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:53	ECR	A
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:53	ECR	A
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 14:53	ECR	A
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:53	ECR	A
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			3/9/09 14:53	ECR	A
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:53	ECR	A
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:53	ECR	A
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:53	ECR	A
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 14:53	ECR	A
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 14:53	ECR	A
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			3/9/09 14:53	ECR	A
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			3/9/09 14:53	ECR	A
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 14:53	ECR	A
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:53	ECR	A
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A

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ANALYTICAL RESULTS

Workorder: 9778396 Calvert Citgo/5977

Lab ID: **9778396004** Date Collected: 3/4/2009 11:15 Matrix: Water

Sample ID: **DW-004E** Date Received: 3/4/2009 20:44

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:53	ECR	A
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			3/9/09 14:53	ECR	A
Diisopropyl ether	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:53	ECR	A
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			3/9/09 14:53	ECR	A
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:53	ECR	A
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:53	ECR	A
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:53	ECR	A
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			3/9/09 14:53	ECR	A
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			3/9/09 14:53	ECR	A
Iodomethane	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 14:53	ECR	A
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			3/9/09 14:53	ECR	A
Isopropylbenzene	0.13J	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:53	ECR	A
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:53	ECR	A
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			3/9/09 14:53	ECR	A
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			3/9/09 14:53	ECR	A
Methyl t-Butyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 14:53	ECR	A
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 14:53	ECR	A
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			3/9/09 14:53	ECR	A
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			3/9/09 14:53	ECR	A
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			3/9/09 14:53	ECR	A
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:53	ECR	A
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:53	ECR	A
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
Tetrahydrofuran	6.4	ug/L		3.0	1.3	EPA 524.2			3/9/09 14:53	ECR	A
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:53	ECR	A
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			3/9/09 14:53	ECR	A
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:53	ECR	A
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:53	ECR	A
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:53	ECR	A
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:53	ECR	A

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ANALYTICAL RESULTS

Workorder: 9778396 Calvert Citgo/5977

Lab ID: **9778396004** Date Collected: 3/4/2009 11:15 Matrix: Water

Sample ID: **DW-004E** Date Received: 3/4/2009 20:44

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:53	ECR	A
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:53	ECR	A
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:53	ECR	A
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			3/9/09 14:53	ECR	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	99.6	%		70-130		EPA 524.2			3/9/09 14:53	ECR	A
4-Bromofluorobenzene (S)	96.6	%		70-130		EPA 524.2			3/9/09 14:53	ECR	A

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9778396 Calvert Citgo/5977

Lab ID: **9778396005** Date Collected: 3/4/2009 11:50 Matrix: Water

Sample ID: **DW-005A** Date Received: 3/4/2009 20:44

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		25.0	11.5	EPA 524.2			3/9/09 16:37	ECR	A
Acrylonitrile	ND	ug/L		12.5	2.0	EPA 524.2			3/9/09 16:37	ECR	A
tert-Amyl methyl ether	2.6	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
tert-Amyl Alcohol	ND	ug/L		20.0	10.0	EPA 524.2			3/9/09 16:37	ECR	A
tert-Amyl Ethylether	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
Benzene	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:37	ECR	A
Bromobenzene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
Bromochloromethane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
Bromodichloromethane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
Bromoform	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:37	ECR	A
Bromomethane	ND	ug/L		2.5	1.5	EPA 524.2			3/9/09 16:37	ECR	A
2-Butanone	ND	ug/L		12.5	5.0	EPA 524.2			3/9/09 16:37	ECR	A
tert.- Butyl Alcohol	575	ug/L		100	42.5	EPA 524.2			3/10/09 08:21	MES	A
n-Butylbenzene	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:37	ECR	A
tert-Butylbenzene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
sec-Butylbenzene	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:37	ECR	A
Carbon Disulfide	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
Carbon Tetrachloride	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
Chloroacetonitrile	ND	ug/L		12.5	5.0	EPA 524.2			3/9/09 16:37	ECR	A
Chlorobenzene	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:37	ECR	A
1-Chlorobutane	ND	ug/L		5.0	2.5	EPA 524.2			3/9/09 16:37	ECR	A
Chlorodibromomethane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
Chloroethane	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:37	ECR	A
Chloroform	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:37	ECR	A
Chloromethane	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:37	ECR	A
3-Chloro-1-propene	ND	ug/L		2.5	1.5	EPA 524.2			3/9/09 16:37	ECR	A
o-Chlorotoluene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
p-Chlorotoluene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
1,2-Dibromo-3-chloropropane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
1,2-Dibromoethane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
Dibromomethane	ND	ug/L		2.5	1.5	EPA 524.2			3/9/09 16:37	ECR	A
trans-1,4-Dichloro-2-butene	ND	ug/L		5.0	2.0	EPA 524.2			3/9/09 16:37	ECR	A
1,1-Dichloro-2-Propanone	ND	ug/L		20.0	8.0	EPA 524.2			3/9/09 16:37	ECR	A
1,2-Dichlorobenzene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
1,3-Dichlorobenzene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
1,4-Dichlorobenzene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
Dichlorodifluoromethane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
1,1-Dichloroethane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
1,2-Dichloroethane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
1,1-Dichloroethene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
cis-1,2-Dichloroethene	ND	ug/L		2.5	1.5	EPA 524.2			3/9/09 16:37	ECR	A
trans-1,2-Dichloroethene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
Dichlorofluoromethane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
1,3-Dichloropropane	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:37	ECR	A
2,2-Dichloropropane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A

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ANALYTICAL RESULTS

Workorder: 9778396 Calvert Citgo/5977

Lab ID: **9778396005** Date Collected: 3/4/2009 11:50 Matrix: Water

Sample ID: **DW-005A** Date Received: 3/4/2009 20:44

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
1,1-Dichloropropene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
cis-1,3-Dichloropropene	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:37	ECR	A
trans-1,3-Dichloropropene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
1,3-Dichloropropene, Total	ND	ug/L		5.0	1.5	EPA 524.2			3/9/09 16:37	ECR	A
Diisopropyl ether	3.2	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:37	ECR	A
1,4-Dioxane	ND	ug/L		20.0	8.0	EPA 524.2			3/9/09 16:37	ECR	A
Ethyl Ether	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
Ethyl Methacrylate	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:37	ECR	A
Ethyl tert-butyl ether	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:37	ECR	A
Ethylbenzene	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:37	ECR	A
Hexachlorobutadiene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
Hexachloroethane	ND	ug/L		15.0	7.0	EPA 524.2			3/9/09 16:37	ECR	A
Hexane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
2-Hexanone	ND	ug/L		12.5	1.5	EPA 524.2			3/9/09 16:37	ECR	A
Iodomethane	ND	ug/L		2.5	1.5	EPA 524.2			3/9/09 16:37	ECR	A
Isopropyl Alcohol	ND	ug/L		125	55.0	EPA 524.2			3/9/09 16:37	ECR	A
Isopropylbenzene	0.85J	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:37	ECR	A
p-Isopropyltoluene	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:37	ECR	A
Methacrylonitrile	ND	ug/L		5.0	1.5	EPA 524.2			3/9/09 16:37	ECR	A
Methyl methacrylate	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
Methyl acrylate	ND	ug/L		5.0	1.5	EPA 524.2			3/9/09 16:37	ECR	A
Methyl t-Butyl Ether	300	ug/L		12.5	5.0	EPA 524.2			3/10/09 08:21	MES	A
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		12.5	2.5	EPA 524.2			3/9/09 16:37	ECR	A
Methylene Chloride	3.3	ug/L		2.5	1.5	EPA 524.2			3/9/09 16:37	ECR	A
Naphthalene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
Nitrobenzene	ND	ug/L		25.0	10.0	EPA 524.2			3/9/09 16:37	ECR	A
2-Nitropropane	ND	ug/L		15.0	7.0	EPA 524.2			3/9/09 16:37	ECR	A
Pentachloroethane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
Propionitrile	ND	ug/L		12.5	3.0	EPA 524.2			3/9/09 16:37	ECR	A
n-Propylbenzene	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:37	ECR	A
Styrene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
1,1,1,2-Tetrachloroethane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
1,1,2,2-Tetrachloroethane	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:37	ECR	A
Tetrachloroethene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
Tetrahydrofuran	ND	ug/L		15.0	6.5	EPA 524.2			3/9/09 16:37	ECR	A
Toluene	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:37	ECR	A
Total Xylenes	ND	ug/L		7.5	1.5	EPA 524.2			3/9/09 16:37	ECR	A
1,2,3-Trichlorobenzene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
1,2,4-Trichlorobenzene	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
1,1,1-Trichloroethane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
1,1,2-Trichloroethane	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:37	ECR	A
Trichloroethene	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:37	ECR	A
Trichlorofluoromethane	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:37	ECR	A
1,2,3-Trichloropropane	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
1,2,4-Trimethylbenzene	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:37	ECR	A

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ANALYTICAL RESULTS

Workorder: 9778396 Calvert Citgo/5977

Lab ID: **9778396005** Date Collected: 3/4/2009 11:50 Matrix: Water

Sample ID: **DW-005A** Date Received: 3/4/2009 20:44

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:37	ECR	A
Vinyl Acetate	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
Vinyl Chloride	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 16:37	ECR	A
o-Xylene	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 16:37	ECR	A
mp-Xylene	ND	ug/L		5.0	1.0	EPA 524.2			3/9/09 16:37	ECR	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	109	%		70-130		EPA 524.2			3/9/09 16:37	ECR	A
4-Bromofluorobenzene (S)	103	%		70-130		EPA 524.2			3/9/09 16:37	ECR	A
1,2-Dichlorobenzene-d4 (S)	108	%		70-130		EPA 524.2			3/10/09 08:21	MES	A
4-Bromofluorobenzene (S)	108	%		70-130		EPA 524.2			3/10/09 08:21	MES	A

Sample Comments:

The GCMS volatiles analysis was performed at a dilution due to the level of target compounds.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9778396 Calvert Citgo/5977

Lab ID: **9778396006** Date Collected: 3/4/2009 12:00 Matrix: Water

Sample ID: **DW-005B** Date Received: 3/4/2009 20:44

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			3/9/09 14:27	ECR	A
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			3/9/09 14:27	ECR	A
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
tert-Amyl Alcohol	ND	ug/L		4.0	2.0	EPA 524.2			3/9/09 14:27	ECR	A
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:27	ECR	A
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:27	ECR	A
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 14:27	ECR	A
2-Butanone	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 14:27	ECR	A
tert.- Butyl Alcohol	171	ug/L		20.0	8.5	EPA 524.2			3/10/09 08:47	MES	A
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:27	ECR	A
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:27	ECR	A
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 14:27	ECR	A
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:27	ECR	A
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			3/9/09 14:27	ECR	A
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:27	ECR	A
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:27	ECR	A
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:27	ECR	A
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 14:27	ECR	A
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 14:27	ECR	A
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			3/9/09 14:27	ECR	A
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			3/9/09 14:27	ECR	A
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 14:27	ECR	A
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:27	ECR	A
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A

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ANALYTICAL RESULTS

Workorder: 9778396 Calvert Citgo/5977

Lab ID: **9778396006** Date Collected: 3/4/2009 12:00 Matrix: Water

Sample ID: **DW-005B** Date Received: 3/4/2009 20:44

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:27	ECR	A
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			3/9/09 14:27	ECR	A
Diisopropyl ether	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:27	ECR	A
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			3/9/09 14:27	ECR	A
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:27	ECR	A
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:27	ECR	A
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:27	ECR	A
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			3/9/09 14:27	ECR	A
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			3/9/09 14:27	ECR	A
Iodomethane	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 14:27	ECR	A
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			3/9/09 14:27	ECR	A
Isopropylbenzene	0.14J	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:27	ECR	A
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:27	ECR	A
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			3/9/09 14:27	ECR	A
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			3/9/09 14:27	ECR	A
Methyl t-Butyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 14:27	ECR	A
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 14:27	ECR	A
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			3/9/09 14:27	ECR	A
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			3/9/09 14:27	ECR	A
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			3/9/09 14:27	ECR	A
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:27	ECR	A
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:27	ECR	A
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
Tetrahydrofuran	14.4	ug/L		3.0	1.3	EPA 524.2			3/9/09 14:27	ECR	A
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:27	ECR	A
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			3/9/09 14:27	ECR	A
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:27	ECR	A
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:27	ECR	A
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:27	ECR	A
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:27	ECR	A

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ANALYTICAL RESULTS

Workorder: 9778396 Calvert Citgo/5977

Lab ID: **9778396006** Date Collected: 3/4/2009 12:00 Matrix: Water

Sample ID: **DW-005B** Date Received: 3/4/2009 20:44

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:27	ECR	A
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:27	ECR	A
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:27	ECR	A
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			3/9/09 14:27	ECR	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	105	%		70-130		EPA 524.2			3/9/09 14:27	ECR	A
4-Bromofluorobenzene (S)	95.5	%		70-130		EPA 524.2			3/9/09 14:27	ECR	A
1,2-Dichlorobenzene-d4 (S)	95.6	%		70-130		EPA 524.2			3/10/09 08:47	MES	A
4-Bromofluorobenzene (S)	95	%		70-130		EPA 524.2			3/10/09 08:47	MES	A

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9778396 Calvert Citgo/5977

Lab ID: **9778396007** Date Collected: 3/4/2009 12:10 Matrix: Water

Sample ID: **DW-005C** Date Received: 3/4/2009 20:44

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			3/9/09 14:01	ECR	A
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			3/9/09 14:01	ECR	A
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
tert-Amyl Alcohol	ND	ug/L		4.0	2.0	EPA 524.2			3/9/09 14:01	ECR	A
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:01	ECR	A
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:01	ECR	A
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 14:01	ECR	A
2-Butanone	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 14:01	ECR	A
tert.- Butyl Alcohol	ND	ug/L		4.0	1.7	EPA 524.2			3/9/09 14:01	ECR	A
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:01	ECR	A
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:01	ECR	A
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 14:01	ECR	A
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:01	ECR	A
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			3/9/09 14:01	ECR	A
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:01	ECR	A
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:01	ECR	A
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:01	ECR	A
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 14:01	ECR	A
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 14:01	ECR	A
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			3/9/09 14:01	ECR	A
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			3/9/09 14:01	ECR	A
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 14:01	ECR	A
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:01	ECR	A
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A

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ANALYTICAL RESULTS

Workorder: 9778396 Calvert Citgo/5977

Lab ID: **9778396007** Date Collected: 3/4/2009 12:10 Matrix: Water

Sample ID: **DW-005C** Date Received: 3/4/2009 20:44

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:01	ECR	A
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			3/9/09 14:01	ECR	A
Diisopropyl ether	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:01	ECR	A
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			3/9/09 14:01	ECR	A
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:01	ECR	A
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:01	ECR	A
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:01	ECR	A
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			3/9/09 14:01	ECR	A
Hexane	ND	ug/L	1	0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			3/9/09 14:01	ECR	A
Iodomethane	ND	ug/L	2	0.50	0.30	EPA 524.2			3/9/09 14:01	ECR	A
Isopropyl Alcohol	ND	ug/L	3	25.0	11.0	EPA 524.2			3/9/09 14:01	ECR	A
Isopropylbenzene	0.15J	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:01	ECR	A
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:01	ECR	A
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			3/9/09 14:01	ECR	A
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			3/9/09 14:01	ECR	A
Methyl t-Butyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 14:01	ECR	A
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 14:01	ECR	A
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
Nitrobenzene	ND	ug/L	1	5.0	2.0	EPA 524.2			3/9/09 14:01	ECR	A
2-Nitropropane	ND	ug/L	4	3.0	1.4	EPA 524.2			3/9/09 14:01	ECR	A
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			3/9/09 14:01	ECR	A
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:01	ECR	A
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:01	ECR	A
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
Tetrahydrofuran	19.5	ug/L		3.0	1.3	EPA 524.2			3/9/09 14:01	ECR	A
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:01	ECR	A
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			3/9/09 14:01	ECR	A
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:01	ECR	A
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:01	ECR	A
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:01	ECR	A
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:01	ECR	A

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ANALYTICAL RESULTS

Workorder: 9778396 Calvert Citgo/5977

Lab ID: **9778396007** Date Collected: 3/4/2009 12:10 Matrix: Water

Sample ID: **DW-005C** Date Received: 3/4/2009 20:44

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:01	ECR	A
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 14:01	ECR	A
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 14:01	ECR	A
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			3/9/09 14:01	ECR	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	104	%		70-130		EPA 524.2			3/9/09 14:01	ECR	A
4-Bromofluorobenzene (S)	106	%		70-130		EPA 524.2			3/9/09 14:01	ECR	A

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9778396 Calvert Citgo/5977

Lab ID: **9778396008** Date Collected: 3/4/2009 12:30 Matrix: Water

Sample ID: **DW-005D** Date Received: 3/4/2009 20:44

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			3/9/09 15:45	ECR	A
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			3/9/09 15:45	ECR	A
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
tert-Amyl Alcohol	ND	ug/L		4.0	2.0	EPA 524.2			3/9/09 15:45	ECR	A
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:45	ECR	A
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:45	ECR	A
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 15:45	ECR	A
2-Butanone	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 15:45	ECR	A
tert.- Butyl Alcohol	3.8J	ug/L		4.0	1.7	EPA 524.2			3/9/09 15:45	ECR	A
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:45	ECR	A
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:45	ECR	A
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			3/9/09 15:45	ECR	A
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:45	ECR	A
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			3/9/09 15:45	ECR	A
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:45	ECR	A
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:45	ECR	A
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:45	ECR	A
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 15:45	ECR	A
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 15:45	ECR	A
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			3/9/09 15:45	ECR	A
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			3/9/09 15:45	ECR	A
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 15:45	ECR	A
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:45	ECR	A
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A

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ANALYTICAL RESULTS

Workorder: 9778396 Calvert Citgo/5977

Lab ID: **9778396008** Date Collected: 3/4/2009 12:30 Matrix: Water

Sample ID: **DW-005D** Date Received: 3/4/2009 20:44

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:45	ECR	A
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			3/9/09 15:45	ECR	A
Diisopropyl ether	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:45	ECR	A
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			3/9/09 15:45	ECR	A
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:45	ECR	A
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:45	ECR	A
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:45	ECR	A
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			3/9/09 15:45	ECR	A
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			3/9/09 15:45	ECR	A
Iodomethane	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 15:45	ECR	A
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			3/9/09 15:45	ECR	A
Isopropylbenzene	0.13J	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:45	ECR	A
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:45	ECR	A
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			3/9/09 15:45	ECR	A
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			3/9/09 15:45	ECR	A
Methyl t-Butyl Ether	1.3	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			3/9/09 15:45	ECR	A
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			3/9/09 15:45	ECR	A
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			3/9/09 15:45	ECR	A
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			3/9/09 15:45	ECR	A
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			3/9/09 15:45	ECR	A
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:45	ECR	A
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:45	ECR	A
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
Tetrahydrofuran	ND	ug/L		3.0	1.3	EPA 524.2			3/9/09 15:45	ECR	A
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:45	ECR	A
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			3/9/09 15:45	ECR	A
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:45	ECR	A
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:45	ECR	A
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:45	ECR	A
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:45	ECR	A

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ANALYTICAL RESULTS

Workorder: 9778396 Calvert Citgo/5977

Lab ID: **9778396008** Date Collected: 3/4/2009 12:30 Matrix: Water

Sample ID: **DW-005D** Date Received: 3/4/2009 20:44

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:45	ECR	A
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			3/9/09 15:45	ECR	A
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			3/9/09 15:45	ECR	A
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			3/9/09 15:45	ECR	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	99.9	%		70-130		EPA 524.2			3/9/09 15:45	ECR	A
4-Bromofluorobenzene (S)	95.4	%		70-130		EPA 524.2			3/9/09 15:45	ECR	A

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS QUALIFIERS\FLAGS

Workorder: 9778396 Calvert Citgo/5977

PARAMETER QUALIFIERS\FLAGS

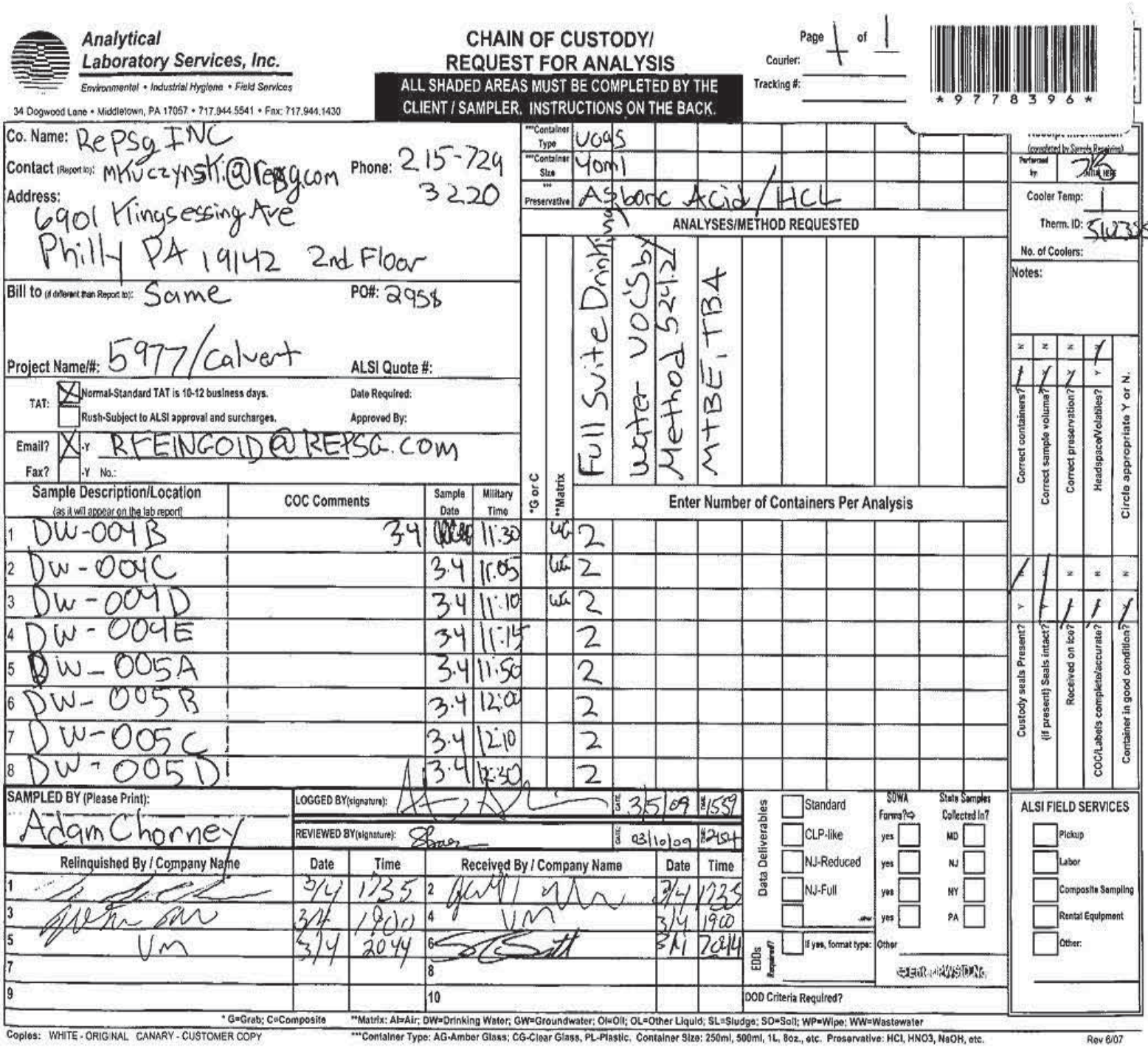
[1] This compound was recovered above quality control criteria in the matrix spike of this sample. The LCS had acceptable recoveries, satisfying method criteria.

[2] This compound was recovered above quality control criteria in the matrix spike and matrix spike duplicate of this sample. The LCS had acceptable recoveries, satisfying method criteria.

[3] This compound was recovered above quality control criteria in the matrix spike duplicate of this sample. The LCS had acceptable recoveries, satisfying method criteria.

[4] This compound was recovered above quality control criteria in the QC associated with this sample. There were no detections found in the sample, so data is not impacted.

Report ID: 9778396



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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Page 1 of 1
Courier:
Tracking #:
9778396

Co. Name: REPSG INC
Contact (Report to): MKuczynski@repsg.com Phone: 215-729-3220
Address: 6901 Kingsessing Ave Philly PA 19142 2nd Floor
Bill to (if different than Report to): Same PO#: 2958
Project Name/#: 5977/Calvert ALSI Quote #:
TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALSI approval and surcharges. Date Required: Approved By:
Email? [X] -Y RFEINGOLD@REPSG.COM
Fax? [ ] -Y No.:

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	***Container Type	***Container Size	*** Preservative	Full Suite Drinking Water VOCs by Method 524.2 MTBE, TBA	Enter Number of Containers Per Analysis
						VOAs	40ml	Ascorbic Acid / HCL	ANALYSES/METHOD REQUESTED	
1 DW-004B	34	[illegible]	11:30	G	WA					2
2 DW-004C		3.4	11:05	G	WA					2
3 DW-004D		3.4	11:10	G	WA					2
4 DW-004E		3.4	11:15	G						2
5 DW-005A		3.4	11:50	G						2
6 DW-005B		3.4	12:00	G						2
7 DW-005C		3.4	12:10	G						2
8 DW-005D		3.4	12:30	G						2

Receipt Information (completed by Sample Receipt)
Performed by: [illegible] INITIAL HERE
Cooler Temp: 1
Therm. ID: 51023855
No. of Coolers:
Notes:

	Circle appropriate Y or N.
Correct containers?	N
Correct sample volume?	N
Correct preservation?	N
Headspace/Volatiles?	Y
Custody seals Present?	Y
(If present) Seals intact?	Y
Received on Ice?	N
COC/Labels complete/accurate?	Y
Container in good condition?	Y

SAMPLED BY (Please Print): Adam Chorney
LOGGED BY(signature): [signature] DATE: 3/5/09 TIME: 1559
REVIEWED BY(signature): [signature] DATE: 03/10/09 TIME: 2454

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 [signature]	3/4	1735	2 [signature]	3/4	1735
3 [signature]	3/4	1900	4 VM	3/4	1900
5 VM	3/4	2044	6 [signature]	3/4	2044
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] other
EDDs (Required?): [ ] If yes, format type:
SDWA Forms? yes [ ] NJ yes [ ] NY yes [ ] PA
State Samples Collected In? MD [ ] NJ [ ] NY [ ] PA [ ]
Other
DOD Criteria Required?

ALSI FIELD SERVICES
[ ] Pickup [ ] Labor [ ] Composite Sampling [ ] Rental Equipment [ ] Other:

* G=Grab; C=Composite
**Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY
***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.
Rev 6/07

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Certificate of Analysis

Project Name:	**MD SITE - SOILS - MDE -REV**	Workorder:	**9796903**
Purchase Order:	**3402**	Workorder ID:	**Drinking Waters (06/29/09)**

Mr. Mark Kuczynski
REPSG
6901 Kingsessing Ave., Ste 201
PO Box 5377
Philadelphia, PA 19142

July 9, 2009

Dear Mr. Kuczynski,

Enclosed are the analytical results for samples received by the laboratory on Tuesday, June 30, 2009

ALSI is a National Environmental Laboratory Accreditation Conference (NELAC) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAC.

If you have any questions regarding this certificate of analysis, please contact Anna Milliken (Project Coordinator) or Anna G Milliken (Laboratory Manager) at (717) 944-5541.

Please visit us at www.analyticallab.com for a listing of ALSI's NELAC accreditations and Scope of Work, as well as other links to Water Quality documentation on the internet.

This laboratory report may not be reproduced, except in full, without the written approval of ALSI.

NOTE: ALSI has changed the report generation tool and while we have tried to retain the existing format, you will notice some changes in the laboratory report. Please feel free to contact ALSI in case you have any questions.

Analytical Laboratory Services, Inc.

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Anna G Milliken
Laboratory Manager

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SAMPLE SUMMARY

Workorder: 9796903 Drinking Waters (06/29/09) Discard Date: 07/22/2009

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
9796903001	DW-004B_20090629_N	Water	6/29/09 10:55	6/30/09 20:07	Adam Chorney
9796903002	DW-004C_20090629_N	Water	6/29/09 11:00	6/30/09 20:07	Adam Chorney
9796903003	DW-004D_20090629_N	Water	6/29/09 11:05	6/30/09 20:07	Adam Chorney
9796903004	DW-004E_20090629_N	Water	6/29/09 11:10	6/30/09 20:07	Adam Chorney
9796903005	DW-005A_20090629_N	Water	6/29/09 11:20	6/30/09 20:07	Adam Chorney
9796903006	DW-005B_20090629_N	Water	6/29/09 11:25	6/30/09 20:07	Adam Chorney
9796903007	DW-005C_20090629_N	Water	6/29/09 11:30	6/30/09 20:07	Adam Chorney
9796903008	DW-005D_20090629_N	Water	6/29/09 11:35	6/30/09 20:07	Adam Chorney

Workorder Comments:

Notes

-- Samples collected by ALSI personnel are done so in accordance with the procedures set forth in the ALSI Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

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ANALYTICAL RESULTS

Workorder: 9796903 Drinking Waters (06/29/09)

Lab ID: **9796903001** Date Collected: 6/29/2009 10:55 Matrix: Water

Sample ID: **DW-004B_20090629_N** Date Received: 6/30/2009 20:07

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			7/6/09 13:25	MES	A
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			7/6/09 13:25	MES	A
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
tert-Amyl Alcohol	ND	ug/L		4.0	2.0	EPA 524.2			7/6/09 13:25	MES	A
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:25	MES	A
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:25	MES	A
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 13:25	MES	A
2-Butanone	2.6	ug/L		2.5	1.0	EPA 524.2			7/6/09 13:25	MES	A
tert.- Butyl Alcohol	ND	ug/L		4.0	1.7	EPA 524.2			7/6/09 13:25	MES	A
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:25	MES	A
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:25	MES	A
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			7/6/09 13:25	MES	A
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:25	MES	A
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			7/6/09 13:25	MES	A
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:25	MES	A
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:25	MES	A
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:25	MES	A
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 13:25	MES	A
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 13:25	MES	A
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			7/6/09 13:25	MES	A
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			7/6/09 13:25	MES	A
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 13:25	MES	A
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:25	MES	A
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A

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ANALYTICAL RESULTS

Workorder: 9796903 Drinking Waters (06/29/09)

Lab ID: **9796903001** Date Collected: 6/29/2009 10:55 Matrix: Water

Sample ID: **DW-004B_20090629_N** Date Received: 6/30/2009 20:07

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:25	MES	A
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			7/6/09 13:25	MES	A
Diisopropyl ether	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:25	MES	A
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			7/6/09 13:25	MES	A
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:25	MES	A
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:25	MES	A
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:25	MES	A
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			7/6/09 13:25	MES	A
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			7/6/09 13:25	MES	A
Iodomethane	ND	ug/L	1	0.50	0.30	EPA 524.2			7/6/09 13:25	MES	A
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			7/6/09 13:25	MES	A
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:25	MES	A
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:25	MES	A
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			7/6/09 13:25	MES	A
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			7/6/09 13:25	MES	A
Methyl t-Butyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			7/6/09 13:25	MES	A
Methylene Chloride	ND	ug/L	1	0.50	0.30	EPA 524.2			7/6/09 13:25	MES	A
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			7/6/09 13:25	MES	A
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			7/6/09 13:25	MES	A
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			7/6/09 13:25	MES	A
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:25	MES	A
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:25	MES	A
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
Tetrahydrofuran	10.7	ug/L		3.0	1.3	EPA 524.2			7/6/09 13:25	MES	A
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:25	MES	A
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			7/6/09 13:25	MES	A
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:25	MES	A
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:25	MES	A
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:25	MES	A
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:25	MES	A

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ANALYTICAL RESULTS

Workorder: 9796903 Drinking Waters (06/29/09)

Lab ID: **9796903001** Date Collected: 6/29/2009 10:55 Matrix: Water

Sample ID: **DW-004B_20090629_N** Date Received: 6/30/2009 20:07

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:25	MES	A
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:25	MES	A
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:25	MES	A
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			7/6/09 13:25	MES	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	76.1	%		70-130		EPA 524.2			7/6/09 13:25	MES	A
4-Bromofluorobenzene (S)	85.5	%		70-130		EPA 524.2			7/6/09 13:25	MES	A

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9796903 Drinking Waters (06/29/09)

Lab ID: **9796903002** Date Collected: 6/29/2009 11:00 Matrix: Water

Sample ID: **DW-004C_20090629_N** Date Received: 6/30/2009 20:07

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			7/6/09 13:52	MES	A
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			7/6/09 13:52	MES	A
tert-Amyl methyl ether	1.2	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
tert-Amyl Alcohol	82.9	ug/L		4.0	2.0	EPA 524.2			7/6/09 13:52	MES	A
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:52	MES	A
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:52	MES	A
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 13:52	MES	A
2-Butanone	2.4J	ug/L		2.5	1.0	EPA 524.2			7/6/09 13:52	MES	A
tert.- Butyl Alcohol	1960	ug/L		200	85.0	EPA 524.2			7/7/09 22:26	ECR	B
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:52	MES	A
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:52	MES	A
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			7/6/09 13:52	MES	A
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:52	MES	A
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			7/6/09 13:52	MES	A
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:52	MES	A
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:52	MES	A
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:52	MES	A
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 13:52	MES	A
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 13:52	MES	A
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			7/6/09 13:52	MES	A
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			7/6/09 13:52	MES	A
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
1,2-Dichloroethane	5.3	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 13:52	MES	A
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:52	MES	A
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A

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ANALYTICAL RESULTS

Workorder: 9796903 Drinking Waters (06/29/09)

Lab ID: **9796903002** Date Collected: 6/29/2009 11:00 Matrix: Water

Sample ID: **DW-004C_20090629_N** Date Received: 6/30/2009 20:07

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:52	MES	A
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			7/6/09 13:52	MES	A
Diisopropyl ether	4.6	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:52	MES	A
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			7/6/09 13:52	MES	A
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:52	MES	A
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:52	MES	A
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:52	MES	A
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			7/6/09 13:52	MES	A
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			7/6/09 13:52	MES	A
Iodomethane	ND	ug/L	1	0.50	0.30	EPA 524.2			7/6/09 13:52	MES	A
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			7/6/09 13:52	MES	A
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:52	MES	A
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:52	MES	A
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			7/6/09 13:52	MES	A
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			7/6/09 13:52	MES	A
Methyl t-Butyl Ether	214	ug/L		25.0	10.0	EPA 524.2			7/7/09 22:26	ECR	B
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			7/6/09 13:52	MES	A
Methylene Chloride	ND	ug/L	1	0.50	0.30	EPA 524.2			7/6/09 13:52	MES	A
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			7/6/09 13:52	MES	A
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			7/6/09 13:52	MES	A
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			7/6/09 13:52	MES	A
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:52	MES	A
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:52	MES	A
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
Tetrahydrofuran	ND	ug/L		3.0	1.3	EPA 524.2			7/6/09 13:52	MES	A
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:52	MES	A
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			7/6/09 13:52	MES	A
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:52	MES	A
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:52	MES	A
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:52	MES	A
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:52	MES	A

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ANALYTICAL RESULTS

Workorder: 9796903 Drinking Waters (06/29/09)

Lab ID: **9796903002** Date Collected: 6/29/2009 11:00 Matrix: Water

Sample ID: **DW-004C_20090629_N** Date Received: 6/30/2009 20:07

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:52	MES	A
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 13:52	MES	A
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 13:52	MES	A
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			7/6/09 13:52	MES	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	76.5	%		70-130		EPA 524.2			7/6/09 13:52	MES	A
4-Bromofluorobenzene (S)	80.1	%		70-130		EPA 524.2			7/6/09 13:52	MES	A
1,2-Dichlorobenzene-d4 (S)	80.2	%		70-130		EPA 524.2			7/7/09 22:26	ECR	B
4-Bromofluorobenzene (S)	81.9	%		70-130		EPA 524.2			7/7/09 22:26	ECR	B

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9796903 Drinking Waters (06/29/09)

Lab ID: **9796903003** Date Collected: 6/29/2009 11:05 Matrix: Water

Sample ID: **DW-004D_20090629_N** Date Received: 6/30/2009 20:07

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	7.3	ug/L		5.0	2.3	EPA 524.2			7/6/09 14:18	MES	A
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			7/6/09 14:18	MES	A
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
tert-Amyl Alcohol	ND	ug/L		4.0	2.0	EPA 524.2			7/6/09 14:18	MES	A
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:18	MES	A
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:18	MES	A
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 14:18	MES	A
2-Butanone	2.6	ug/L		2.5	1.0	EPA 524.2			7/6/09 14:18	MES	A
tert.- Butyl Alcohol	2280	ug/L		200	85.0	EPA 524.2			7/7/09 22:52	ECR	B
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:18	MES	A
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:18	MES	A
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			7/6/09 14:18	MES	A
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:18	MES	A
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			7/6/09 14:18	MES	A
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:18	MES	A
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:18	MES	A
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:18	MES	A
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 14:18	MES	A
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 14:18	MES	A
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			7/6/09 14:18	MES	A
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			7/6/09 14:18	MES	A
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 14:18	MES	A
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:18	MES	A
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A

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ANALYTICAL RESULTS

Workorder: 9796903 Drinking Waters (06/29/09)

Lab ID: **9796903003** Date Collected: 6/29/2009 11:05 Matrix: Water

Sample ID: **DW-004D_20090629_N** Date Received: 6/30/2009 20:07

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:18	MES	A
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			7/6/09 14:18	MES	A
Diisopropyl ether	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:18	MES	A
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			7/6/09 14:18	MES	A
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:18	MES	A
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:18	MES	A
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:18	MES	A
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			7/6/09 14:18	MES	A
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			7/6/09 14:18	MES	A
Iodomethane	ND	ug/L	1	0.50	0.30	EPA 524.2			7/6/09 14:18	MES	A
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			7/6/09 14:18	MES	A
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:18	MES	A
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:18	MES	A
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			7/6/09 14:18	MES	A
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			7/6/09 14:18	MES	A
Methyl t-Butyl Ether	0.88J	ug/L	2	1.0	0.20	EPA 524.2			7/6/09 14:18	MES	A
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			7/6/09 14:18	MES	A
Methylene Chloride	ND	ug/L	1	0.50	0.30	EPA 524.2			7/6/09 14:18	MES	A
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			7/6/09 14:18	MES	A
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			7/6/09 14:18	MES	A
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			7/6/09 14:18	MES	A
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:18	MES	A
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:18	MES	A
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
Tetrahydrofuran	ND	ug/L		3.0	1.3	EPA 524.2			7/6/09 14:18	MES	A
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:18	MES	A
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			7/6/09 14:18	MES	A
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:18	MES	A
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:18	MES	A
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:18	MES	A
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:18	MES	A

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ANALYTICAL RESULTS

Workorder: 9796903 Drinking Waters (06/29/09)

Lab ID: **9796903003** Date Collected: 6/29/2009 11:05 Matrix: Water

Sample ID: **DW-004D_20090629_N** Date Received: 6/30/2009 20:07

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:18	MES	A
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:18	MES	A
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:18	MES	A
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			7/6/09 14:18	MES	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	72.5	%		70-130		EPA 524.2			7/6/09 14:18	MES	A
4-Bromofluorobenzene (S)	87.2	%		70-130		EPA 524.2			7/6/09 14:18	MES	A
1,2-Dichlorobenzene-d4 (S)	87.7	%		70-130		EPA 524.2			7/7/09 22:52	ECR	B
4-Bromofluorobenzene (S)	88.3	%		70-130		EPA 524.2			7/7/09 22:52	ECR	B

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9796903 Drinking Waters (06/29/09)

Lab ID: **9796903004** Date Collected: 6/29/2009 11:10 Matrix: Water

Sample ID: **DW-004E_20090629_N** Date Received: 6/30/2009 20:07

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	12.0	ug/L		5.0	2.3	EPA 524.2			7/6/09 14:44	MES	A
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			7/6/09 14:44	MES	A
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
tert-Amyl Alcohol	ND	ug/L		4.0	2.0	EPA 524.2			7/6/09 14:44	MES	A
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:44	MES	A
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:44	MES	A
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 14:44	MES	A
2-Butanone	ND	ug/L		2.5	1.0	EPA 524.2			7/6/09 14:44	MES	A
tert.- Butyl Alcohol	2100	ug/L		200	85.0	EPA 524.2			7/7/09 23:18	ECR	B
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:44	MES	A
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:44	MES	A
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			7/6/09 14:44	MES	A
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:44	MES	A
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			7/6/09 14:44	MES	A
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:44	MES	A
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:44	MES	A
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:44	MES	A
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 14:44	MES	A
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 14:44	MES	A
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			7/6/09 14:44	MES	A
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			7/6/09 14:44	MES	A
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 14:44	MES	A
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:44	MES	A
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A

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ANALYTICAL RESULTS

Workorder: 9796903 Drinking Waters (06/29/09)

Lab ID: **9796903004** Date Collected: 6/29/2009 11:10 Matrix: Water

Sample ID: **DW-004E_20090629_N** Date Received: 6/30/2009 20:07

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:44	MES	A
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			7/6/09 14:44	MES	A
Diisopropyl ether	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:44	MES	A
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			7/6/09 14:44	MES	A
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:44	MES	A
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:44	MES	A
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:44	MES	A
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			7/6/09 14:44	MES	A
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			7/6/09 14:44	MES	A
Iodomethane	ND	ug/L	1	0.50	0.30	EPA 524.2			7/6/09 14:44	MES	A
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			7/6/09 14:44	MES	A
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:44	MES	A
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:44	MES	A
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			7/6/09 14:44	MES	A
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			7/6/09 14:44	MES	A
Methyl t-Butyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			7/6/09 14:44	MES	A
Methylene Chloride	ND	ug/L	1	0.50	0.30	EPA 524.2			7/6/09 14:44	MES	A
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			7/6/09 14:44	MES	A
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			7/6/09 14:44	MES	A
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			7/6/09 14:44	MES	A
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:44	MES	A
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:44	MES	A
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
Tetrahydrofuran	ND	ug/L		3.0	1.3	EPA 524.2			7/6/09 14:44	MES	A
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:44	MES	A
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			7/6/09 14:44	MES	A
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:44	MES	A
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:44	MES	A
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:44	MES	A
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:44	MES	A

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ANALYTICAL RESULTS

Workorder: 9796903 Drinking Waters (06/29/09)

Lab ID: **9796903004** Date Collected: 6/29/2009 11:10 Matrix: Water

Sample ID: **DW-004E_20090629_N** Date Received: 6/30/2009 20:07

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:44	MES	A
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 14:44	MES	A
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 14:44	MES	A
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			7/6/09 14:44	MES	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	75.2	%		70-130		EPA 524.2			7/6/09 14:44	MES	A
4-Bromofluorobenzene (S)	81.4	%		70-130		EPA 524.2			7/6/09 14:44	MES	A
1,2-Dichlorobenzene-d4 (S)	84.9	%		70-130		EPA 524.2			7/7/09 23:18	ECR	B
4-Bromofluorobenzene (S)	89.3	%		70-130		EPA 524.2			7/7/09 23:18	ECR	B

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9796903 Drinking Waters (06/29/09)

Lab ID: **9796903005** Date Collected: 6/29/2009 11:20 Matrix: Water

Sample ID: **DW-005A_20090629_N** Date Received: 6/30/2009 20:07

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			7/6/09 15:10	MES	A
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			7/6/09 15:10	MES	A
tert-Amyl methyl ether	3.8	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
tert-Amyl Alcohol	102	ug/L		4.0	2.0	EPA 524.2			7/6/09 15:10	MES	A
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:10	MES	A
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:10	MES	A
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 15:10	MES	A
2-Butanone	2.9	ug/L		2.5	1.0	EPA 524.2			7/6/09 15:10	MES	A
tert.- Butyl Alcohol	1310	ug/L		200	85.0	EPA 524.2			7/7/09 23:44	ECR	B
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:10	MES	A
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:10	MES	A
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			7/6/09 15:10	MES	A
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:10	MES	A
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			7/6/09 15:10	MES	A
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:10	MES	A
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:10	MES	A
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:10	MES	A
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 15:10	MES	A
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 15:10	MES	A
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			7/6/09 15:10	MES	A
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			7/6/09 15:10	MES	A
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
1,2-Dichloroethane	6.6	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 15:10	MES	A
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:10	MES	A
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A

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ANALYTICAL RESULTS

Workorder: 9796903 Drinking Waters (06/29/09)

Lab ID: **9796903005** Date Collected: 6/29/2009 11:20 Matrix: Water

Sample ID: **DW-005A_20090629_N** Date Received: 6/30/2009 20:07

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:10	MES	A
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			7/6/09 15:10	MES	A
Diisopropyl ether	6.4	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:10	MES	A
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			7/6/09 15:10	MES	A
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:10	MES	A
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:10	MES	A
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:10	MES	A
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			7/6/09 15:10	MES	A
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			7/6/09 15:10	MES	A
Iodomethane	ND	ug/L	1	0.50	0.30	EPA 524.2			7/6/09 15:10	MES	A
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			7/6/09 15:10	MES	A
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:10	MES	A
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:10	MES	A
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			7/6/09 15:10	MES	A
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			7/6/09 15:10	MES	A
Methyl t-Butyl Ether	514	ug/L		25.0	10.0	EPA 524.2			7/7/09 23:44	ECR	B
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			7/6/09 15:10	MES	A
Methylene Chloride	ND	ug/L	1	0.50	0.30	EPA 524.2			7/6/09 15:10	MES	A
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			7/6/09 15:10	MES	A
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			7/6/09 15:10	MES	A
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			7/6/09 15:10	MES	A
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:10	MES	A
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:10	MES	A
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
Tetrahydrofuran	ND	ug/L		3.0	1.3	EPA 524.2			7/6/09 15:10	MES	A
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:10	MES	A
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			7/6/09 15:10	MES	A
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:10	MES	A
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:10	MES	A
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:10	MES	A
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:10	MES	A

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ANALYTICAL RESULTS

Workorder: 9796903 Drinking Waters (06/29/09)

Lab ID: **9796903005** Date Collected: 6/29/2009 11:20 Matrix: Water

Sample ID: **DW-005A_20090629_N** Date Received: 6/30/2009 20:07

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:10	MES	A
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:10	MES	A
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:10	MES	A
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			7/6/09 15:10	MES	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	73.2	%		70-130		EPA 524.2			7/6/09 15:10	MES	A
4-Bromofluorobenzene (S)	84.9	%		70-130		EPA 524.2			7/6/09 15:10	MES	A
1,2-Dichlorobenzene-d4 (S)	80.5	%		70-130		EPA 524.2			7/7/09 23:44	ECR	B
4-Bromofluorobenzene (S)	84	%		70-130		EPA 524.2			7/7/09 23:44	ECR	B

Sample Comments:

Anna G Milliken
Laboratory Manager

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PA 22-293 NJ PA010
34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9796903 Drinking Waters (06/29/09)

Lab ID: **9796903006** Date Collected: 6/29/2009 11:25 Matrix: Water

Sample ID: **DW-005B_20090629_N** Date Received: 6/30/2009 20:07

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			7/6/09 15:36	MES	A
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			7/6/09 15:36	MES	A
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
tert-Amyl Alcohol	18.1	ug/L		4.0	2.0	EPA 524.2			7/6/09 15:36	MES	A
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:36	MES	A
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:36	MES	A
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 15:36	MES	A
2-Butanone	3.1	ug/L		2.5	1.0	EPA 524.2			7/6/09 15:36	MES	A
tert.- Butyl Alcohol	1140	ug/L		80.0	34.0	EPA 524.2			7/8/09 00:10	ECR	B
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:36	MES	A
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:36	MES	A
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			7/6/09 15:36	MES	A
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:36	MES	A
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			7/6/09 15:36	MES	A
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:36	MES	A
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:36	MES	A
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:36	MES	A
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 15:36	MES	A
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 15:36	MES	A
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			7/6/09 15:36	MES	A
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			7/6/09 15:36	MES	A
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 15:36	MES	A
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:36	MES	A
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A

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ANALYTICAL RESULTS

Workorder: 9796903 Drinking Waters (06/29/09)

Lab ID: **9796903006** Date Collected: 6/29/2009 11:25 Matrix: Water

Sample ID: **DW-005B_20090629_N** Date Received: 6/30/2009 20:07

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:36	MES	A
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			7/6/09 15:36	MES	A
Diisopropyl ether	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:36	MES	A
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			7/6/09 15:36	MES	A
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:36	MES	A
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:36	MES	A
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:36	MES	A
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			7/6/09 15:36	MES	A
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			7/6/09 15:36	MES	A
Iodomethane	ND	ug/L	1	0.50	0.30	EPA 524.2			7/6/09 15:36	MES	A
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			7/6/09 15:36	MES	A
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:36	MES	A
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:36	MES	A
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			7/6/09 15:36	MES	A
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			7/6/09 15:36	MES	A
Methyl t-Butyl Ether	32.8	ug/L		10.0	4.0	EPA 524.2			7/8/09 00:10	ECR	B
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			7/6/09 15:36	MES	A
Methylene Chloride	ND	ug/L	1	0.50	0.30	EPA 524.2			7/6/09 15:36	MES	A
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			7/6/09 15:36	MES	A
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			7/6/09 15:36	MES	A
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			7/6/09 15:36	MES	A
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:36	MES	A
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:36	MES	A
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
Tetrahydrofuran	13.2	ug/L		3.0	1.3	EPA 524.2			7/6/09 15:36	MES	A
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:36	MES	A
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			7/6/09 15:36	MES	A
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:36	MES	A
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:36	MES	A
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:36	MES	A
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:36	MES	A

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ACCREDITED IN ACCORDANCE WITH nelac
34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9796903 Drinking Waters (06/29/09)

Lab ID: **9796903006** Date Collected: 6/29/2009 11:25 Matrix: Water

Sample ID: **DW-005B_20090629_N** Date Received: 6/30/2009 20:07

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:36	MES	A
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 15:36	MES	A
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 15:36	MES	A
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			7/6/09 15:36	MES	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	78.9	%		70-130		EPA 524.2			7/6/09 15:36	MES	A
4-Bromofluorobenzene (S)	76.7	%		70-130		EPA 524.2			7/6/09 15:36	MES	A
1,2-Dichlorobenzene-d4 (S)	85.2	%		70-130		EPA 524.2			7/8/09 00:10	ECR	B
4-Bromofluorobenzene (S)	83.4	%		70-130		EPA 524.2			7/8/09 00:10	ECR	B

Sample Comments:

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ANALYTICAL RESULTS

Workorder: 9796903 Drinking Waters (06/29/09)

Lab ID: **9796903007** Date Collected: 6/29/2009 11:30 Matrix: Water

Sample ID: **DW-005C_20090629_N** Date Received: 6/30/2009 20:07

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			7/6/09 16:02	MES	A
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			7/6/09 16:02	MES	A
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
tert-Amyl Alcohol	ND	ug/L		4.0	2.0	EPA 524.2			7/6/09 16:02	MES	A
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:02	MES	A
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:02	MES	A
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 16:02	MES	A
2-Butanone	3.5	ug/L		2.5	1.0	EPA 524.2			7/6/09 16:02	MES	A
tert.- Butyl Alcohol	838	ug/L		80.0	34.0	EPA 524.2			7/8/09 00:35	ECR	B
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:02	MES	A
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:02	MES	A
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			7/6/09 16:02	MES	A
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:02	MES	A
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			7/6/09 16:02	MES	A
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:02	MES	A
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:02	MES	A
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:02	MES	A
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 16:02	MES	A
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 16:02	MES	A
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			7/6/09 16:02	MES	A
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			7/6/09 16:02	MES	A
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 16:02	MES	A
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:02	MES	A
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A

ANALYTICAL RESULTS

Workorder: 9796903 Drinking Waters (06/29/09)

Lab ID: **9796903007** Date Collected: 6/29/2009 11:30 Matrix: Water

Sample ID: **DW-005C_20090629_N** Date Received: 6/30/2009 20:07

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:02	MES	A
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			7/6/09 16:02	MES	A
Diisopropyl ether	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:02	MES	A
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			7/6/09 16:02	MES	A
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:02	MES	A
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:02	MES	A
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:02	MES	A
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			7/6/09 16:02	MES	A
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			7/6/09 16:02	MES	A
Iodomethane	ND	ug/L	1	0.50	0.30	EPA 524.2			7/6/09 16:02	MES	A
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			7/6/09 16:02	MES	A
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:02	MES	A
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:02	MES	A
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			7/6/09 16:02	MES	A
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			7/6/09 16:02	MES	A
Methyl t-Butyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			7/6/09 16:02	MES	A
Methylene Chloride	ND	ug/L	1	0.50	0.30	EPA 524.2			7/6/09 16:02	MES	A
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			7/6/09 16:02	MES	A
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			7/6/09 16:02	MES	A
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			7/6/09 16:02	MES	A
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:02	MES	A
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:02	MES	A
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
Tetrahydrofuran	11.1	ug/L		3.0	1.3	EPA 524.2			7/6/09 16:02	MES	A
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:02	MES	A
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			7/6/09 16:02	MES	A
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:02	MES	A
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:02	MES	A
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:02	MES	A
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:02	MES	A

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ANALYTICAL RESULTS

Workorder: 9796903 Drinking Waters (06/29/09)

Lab ID: **9796903007** Date Collected: 6/29/2009 11:30 Matrix: Water

Sample ID: **DW-005C_20090629_N** Date Received: 6/30/2009 20:07

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:02	MES	A
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:02	MES	A
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:02	MES	A
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			7/6/09 16:02	MES	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	78	%		70-130		EPA 524.2			7/6/09 16:02	MES	A
4-Bromofluorobenzene (S)	88.4	%		70-130		EPA 524.2			7/6/09 16:02	MES	A
1,2-Dichlorobenzene-d4 (S)	83.2	%		70-130		EPA 524.2			7/8/09 00:35	ECR	B
4-Bromofluorobenzene (S)	85.4	%		70-130		EPA 524.2			7/8/09 00:35	ECR	B

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9796903 Drinking Waters (06/29/09)

Lab ID: **9796903008** Date Collected: 6/29/2009 11:35 Matrix: Water

Sample ID: **DW-005D_20090629_N** Date Received: 6/30/2009 20:07

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			7/6/09 16:28	MES	A
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			7/6/09 16:28	MES	A
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
tert-Amyl Alcohol	ND	ug/L		4.0	2.0	EPA 524.2			7/6/09 16:28	MES	A
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:28	MES	A
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:28	MES	A
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 16:28	MES	A
2-Butanone	ND	ug/L		2.5	1.0	EPA 524.2			7/6/09 16:28	MES	A
tert.- Butyl Alcohol	908	ug/L		80.0	34.0	EPA 524.2			7/8/09 01:02	ECR	B
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:28	MES	A
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:28	MES	A
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			7/6/09 16:28	MES	A
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:28	MES	A
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			7/6/09 16:28	MES	A
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:28	MES	A
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:28	MES	A
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:28	MES	A
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 16:28	MES	A
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 16:28	MES	A
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			7/6/09 16:28	MES	A
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			7/6/09 16:28	MES	A
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			7/6/09 16:28	MES	A
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:28	MES	A
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A

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ANALYTICAL RESULTS

Workorder: 9796903 Drinking Waters (06/29/09)

Lab ID: **9796903008** Date Collected: 6/29/2009 11:35 Matrix: Water

Sample ID: **DW-005D_20090629_N** Date Received: 6/30/2009 20:07

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:28	MES	A
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			7/6/09 16:28	MES	A
Diisopropyl ether	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:28	MES	A
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			7/6/09 16:28	MES	A
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:28	MES	A
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:28	MES	A
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:28	MES	A
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			7/6/09 16:28	MES	A
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			7/6/09 16:28	MES	A
Iodomethane	ND	ug/L	1	0.50	0.30	EPA 524.2			7/6/09 16:28	MES	A
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			7/6/09 16:28	MES	A
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:28	MES	A
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:28	MES	A
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			7/6/09 16:28	MES	A
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			7/6/09 16:28	MES	A
Methyl t-Butyl Ether	3.2	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			7/6/09 16:28	MES	A
Methylene Chloride	ND	ug/L	1	0.50	0.30	EPA 524.2			7/6/09 16:28	MES	A
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			7/6/09 16:28	MES	A
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			7/6/09 16:28	MES	A
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			7/6/09 16:28	MES	A
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:28	MES	A
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:28	MES	A
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
Tetrahydrofuran	9.8	ug/L		3.0	1.3	EPA 524.2			7/6/09 16:28	MES	A
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:28	MES	A
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			7/6/09 16:28	MES	A
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:28	MES	A
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:28	MES	A
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:28	MES	A
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:28	MES	A

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ANALYTICAL RESULTS

Workorder: 9796903 Drinking Waters (06/29/09)

Lab ID: **9796903008** Date Collected: 6/29/2009 11:35 Matrix: Water

Sample ID: **DW-005D_20090629_N** Date Received: 6/30/2009 20:07

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:28	MES	A
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			7/6/09 16:28	MES	A
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			7/6/09 16:28	MES	A
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			7/6/09 16:28	MES	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	78.7	%		70-130		EPA 524.2			7/6/09 16:28	MES	A
4-Bromofluorobenzene (S)	82	%		70-130		EPA 524.2			7/6/09 16:28	MES	A
1,2-Dichlorobenzene-d4 (S)	93.1	%		70-130		EPA 524.2			7/8/09 01:02	ECR	B
4-Bromofluorobenzene (S)	87	%		70-130		EPA 524.2			7/8/09 01:02	ECR	B

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS QUALIFIERS\FLAGS

Workorder: 9796903 Drinking Waters (06/29/09)

PARAMETER QUALIFIERS\FLAGS

[1] This compound was recovered below quality control criteria in the LCS associated with this sample. The data user is cautioned that results may be biased low.

[2] The reporting limit for this compound was raised to 1 ug/L due to contamination present due from a previously analyzed sample.

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT/ SAMPLER. INSTRUCTIONS ON THE BACK.

Page 1 of 1

Courier:

Tracking #:

9796903

Co. Name: REPSG.

Contact (Report to): MTruczinski@repsg.com Phone: 215-729-3220

Address: 6401 Kingsessing Ave Philly PA 19142 2nd Floor

Bill to (if different than Report to): Grimm PO#: 3402

Project Name/#: 5477/Culvert ALSI Quote #:

TAT: [X] Normal-Standard TAT is 10-12 business days. Date Required: 5-day
[ ] Rush-Subject to ALSI approval and surcharges. Approved By:

Email? [X] Y MTruczinski@repsg.com
Fax? [ ] Y No.:

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	***Container Type	***Container Size	*** Preservative	ANALYSES/METHOD REQUESTED: Full Suite	Drinking water	VOCs by Method 624	MTBE/TBA	Enter Number of Containers Per Analysis
1 DW-004B		6/29	1035		DW				2				
2 DW-004C		6/29	1100						2				
3 DW-004D		6/29	1015						2				
4 DW-004E		6/29	1110						2				
5 DW-005A		6/29	1120						2				
6 DW-005B		6/29	1125						2				
7 DW-005C		6/29	1130						2				
8 DW-005D		6/29	1135		V				2				

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 Repsg	6/30/09	1030	2 Ron Hosey	6/30	1030
3 Ron Hosey	6-30	1830	4 VM	6/30	1830
5 VM	6/30	2007	6	6/30/09	2007
7			8		
9			10		

SAMPLED BY (Please Print): Alan Charney

LOGGED BY(signature): DATE 6/1 TIME 0944

REVIEWED BY(signature): DATE 07/01/09 TIME 1209

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] other

EDDs Required? [X] If yes, format type: EQuIS

SDWA Forms? yes [ ] Other

State Samples Collected In? MD [X] NJ [ ] NY [ ] PA [ ]

DOD Criteria Required?

Receipt Information (completed by Sample Receiver) Performed by:

Cooler Temp:

Therm. ID: 7623559

No. of Coolers:

Notes:

	Correct containers?	Correct sample volume?	Correct preservation?	Headspace/Volatiles?	Circle appropriate Y or N.
Y	Y	Y	Y	Y	
N	N	N	N	N	N

	Custody seals Present?	(if present) Seals intact?	Received on ice?	COC/Labels complete/accurate?	Container in good condition?
Y	Y	Y	Y	Y	Y
N	N	N	N	N	N

ALSI FIELD SERVICES
[✓] Pickup
[ ] Labor
[ ] Composite Sampling
[ ] Rental Equipment
[ ] Other:

* G=Grab; C=Composite
** Matrix: Al=Air; DW=Drinking Water; GW=Groundwater; Ol=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
*** Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY

Rev 6/07

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Certificate of Analysis

Project Name:	**MD SITE - CALVERT CITGO - REV**	Workorder:	**9822957**
Purchase Order:	**3904**	Workorder ID:	**Drinking Water (12/11/09)**

Ms. Brenda MacPhail Kellogg
REPSG
6901 Kingsessing Blvd.
Philadelphia, PA 19142

December 28, 2009

Dear Ms. Kellogg,

Enclosed are the analytical results for samples received by the laboratory on Monday, December 14, 2009

ALSI is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Susan Baer (Project Coordinator) or Anna G Milliken (Laboratory Manager) at (717) 944-5541.

Please visit us at www.analyticallab.com for a listing of ALSI's NELAP accreditations and Scope of Work, as well as other links to Water Quality documentation on the internet.

This laboratory report may not be reproduced, except in full, without the written approval of ALSI.

NOTE: ALSI has changed the report generation tool and while we have tried to retain the existing format, you will notice some changes in the laboratory report. Please feel free to contact ALSI in case you have any questions.

Analytical Laboratory Services, Inc.

CC: Mr. Mark Kuczynski

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Anna G Milliken
Laboratory Manager

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SAMPLE SUMMARY

Workorder: 9822957 Drinking Water (12/11/09) Discard Date: 01/10/2010

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
9822957001	DW-004 B_20091211_N	Water	12/11/09 11:45	12/14/09 20:12	Joe Crooks
9822957002	DW-004 C_20091211_N	Water	12/11/09 11:40	12/14/09 20:12	Joe Crooks
9822957003	DW-004 D_20091211_N	Water	12/11/09 11:35	12/14/09 20:12	Joe Crooks
9822957004	DW-004 E_20091211_N	Water	12/11/09 11:30	12/14/09 20:12	Joe Crooks
9822957005	DW-005 A_20091211_N	Water	12/11/09 11:10	12/14/09 20:12	Joe Crooks
9822957006	DW-005 B_20091211_N	Water	12/11/09 11:05	12/14/09 20:12	Joe Crooks
9822957007	DW-005 C_20091211_N	Water	12/11/09 11:00	12/14/09 20:12	Joe Crooks
9822957008	DW-005 D_20091211_N	Water	12/11/09 11:15	12/14/09 20:12	Joe Crooks

Workorder Comments:

Notes

-- Samples collected by ALSI personnel are done so in accordance with the procedures set forth in the ALSI Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

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ANALYTICAL RESULTS

Workorder: 9822957 Drinking Water (12/11/09)

Lab ID: **9822957001** Date Collected: 12/11/2009 11:45 Matrix: Water

Sample ID: **DW-004 B_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			12/21/09 05:35	DD	C
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			12/21/09 05:35	DD	C
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
tert-Amyl Alcohol	ND	ug/L		4.0	2.0	EPA 524.2			12/21/09 05:35	DD	C
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:35	DD	C
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:35	DD	C
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 05:35	DD	C
2-Butanone	6.8	ug/L		2.5	1.0	EPA 524.2			12/21/09 05:35	DD	C
tert.- Butyl Alcohol	112	ug/L		4.0	1.7	EPA 524.2			12/21/09 05:35	DD	C
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:35	DD	C
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:35	DD	C
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			12/21/09 05:35	DD	C
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:35	DD	C
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			12/21/09 05:35	DD	C
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:35	DD	C
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:35	DD	C
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:35	DD	C
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 05:35	DD	C
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 05:35	DD	C
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			12/21/09 05:35	DD	C
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			12/21/09 05:35	DD	C
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 05:35	DD	C
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:35	DD	C
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C

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ANALYTICAL RESULTS

Workorder: 9822957 Drinking Water (12/11/09)

Lab ID: **9822957001** Date Collected: 12/11/2009 11:45 Matrix: Water

Sample ID: **DW-004 B_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:35	DD	C
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			12/21/09 05:35	DD	C
Diisopropyl ether	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:35	DD	C
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			12/21/09 05:35	DD	C
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:35	DD	C
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:35	DD	C
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:35	DD	C
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			12/21/09 05:35	DD	C
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			12/21/09 05:35	DD	C
Iodomethane	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 05:35	DD	C
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			12/21/09 05:35	DD	C
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:35	DD	C
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:35	DD	C
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			12/21/09 05:35	DD	C
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			12/21/09 05:35	DD	C
Methyl t-Butyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			12/21/09 05:35	DD	C
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 05:35	DD	C
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			12/21/09 05:35	DD	C
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			12/21/09 05:35	DD	C
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			12/21/09 05:35	DD	C
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:35	DD	C
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:35	DD	C
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
Tetrahydrofuran	29.3	ug/L		3.0	1.3	EPA 524.2			12/21/09 05:35	DD	C
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:35	DD	C
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			12/21/09 05:35	DD	C
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:35	DD	C
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:35	DD	C
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:35	DD	C
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:35	DD	C

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ANALYTICAL RESULTS

Workorder: 9822957 Drinking Water (12/11/09)

Lab ID: **9822957001** Date Collected: 12/11/2009 11:45 Matrix: Water

Sample ID: **DW-004 B_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:35	DD	C
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 05:35	DD	C
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 05:35	DD	C
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			12/21/09 05:35	DD	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	102	%		70-130		EPA 524.2			12/21/09 05:35	DD	C
4-Bromofluorobenzene (S)	90.2	%		70-130		EPA 524.2			12/21/09 05:35	DD	C
PETROLEUM HC's											
Diesel Range Organics C10-C28	0.088J	mg/L		0.17	0.021	SW846 8015D	12/18/09	KAK	12/19/09 10:12	JJH	A1
Gasoline Range Organics	29.0J	ug/L		100	4.2	SW846 8015D			12/19/09 09:39	ECR	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	82.9	%		48-123		SW846 8015D	12/18/09	KAK	12/19/09 10:12	JJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	92.3	%		90-129		SW846 8015D			12/19/09 09:39	ECR	C

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9822957 Drinking Water (12/11/09)

Lab ID: **9822957002** Date Collected: 12/11/2009 11:40 Matrix: Water

Sample ID: **DW-004 C_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			12/21/09 11:15	DD	C
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			12/21/09 11:15	DD	C
tert-Amyl methyl ether	1.9	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
tert-Amyl Alcohol	101	ug/L		4.0	2.0	EPA 524.2			12/21/09 11:15	DD	C
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:15	DD	C
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:15	DD	C
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 11:15	DD	C
2-Butanone	ND	ug/L		2.5	1.0	EPA 524.2			12/21/09 11:15	DD	C
tert.- Butyl Alcohol	2440	ug/L		80.0	34.0	EPA 524.2			12/23/09 03:58	DD	D
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:15	DD	C
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:15	DD	C
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			12/21/09 11:15	DD	C
Chlorobenzene	0.31J	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:15	DD	C
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			12/21/09 11:15	DD	C
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:15	DD	C
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:15	DD	C
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:15	DD	C
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 11:15	DD	C
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 11:15	DD	C
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			12/21/09 11:15	DD	C
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			12/21/09 11:15	DD	C
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
1,3-Dichlorobenzene	0.30J	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
1,4-Dichlorobenzene	0.70	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
1,2-Dichloroethane	5.7	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 11:15	DD	C
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:15	DD	C
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C

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ANALYTICAL RESULTS

Workorder: 9822957 Drinking Water (12/11/09)

Lab ID: **9822957002** Date Collected: 12/11/2009 11:40 Matrix: Water

Sample ID: **DW-004 C_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:15	DD	C
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			12/21/09 11:15	DD	C
Diisopropyl ether	4.4	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:15	DD	C
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			12/21/09 11:15	DD	C
Ethyl Ether	0.21J	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:15	DD	C
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:15	DD	C
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:15	DD	C
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			12/21/09 11:15	DD	C
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			12/21/09 11:15	DD	C
Iodomethane	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 11:15	DD	C
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			12/21/09 11:15	DD	C
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:15	DD	C
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:15	DD	C
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			12/21/09 11:15	DD	C
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			12/21/09 11:15	DD	C
Methyl t-Butyl Ether	254	ug/L		10.0	4.0	EPA 524.2			12/23/09 03:58	DD	D
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			12/21/09 11:15	DD	C
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 11:15	DD	C
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			12/21/09 11:15	DD	C
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			12/21/09 11:15	DD	C
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			12/21/09 11:15	DD	C
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:15	DD	C
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:15	DD	C
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
Tetrahydrofuran	5.9	ug/L		3.0	1.3	EPA 524.2			12/21/09 11:15	DD	C
Toluene	0.12J	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:15	DD	C
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			12/21/09 11:15	DD	C
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:15	DD	C
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:15	DD	C
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:15	DD	C
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:15	DD	C

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ANALYTICAL RESULTS

Workorder: 9822957 Drinking Water (12/11/09)

Lab ID: **9822957002** Date Collected: 12/11/2009 11:40 Matrix: Water

Sample ID: **DW-004 C_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:15	DD	C
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:15	DD	C
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:15	DD	C
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			12/21/09 11:15	DD	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	94.2	%		70-130		EPA 524.2			12/21/09 11:15	DD	C
4-Bromofluorobenzene (S)	83	%		70-130		EPA 524.2			12/21/09 11:15	DD	C
1,2-Dichlorobenzene-d4 (S)	99.7	%		70-130		EPA 524.2			12/23/09 03:58	DD	D
4-Bromofluorobenzene (S)	84.1	%		70-130		EPA 524.2			12/23/09 03:58	DD	D
PETROLEUM HC's											
Diesel Range Organics C10-C28	0.090J	mg/L		0.17	0.021	SW846 8015D	12/18/09	KAK	12/19/09 11:11	JJH	A1
Gasoline Range Organics	92.7J	ug/L		100	4.2	SW846 8015D			12/19/09 10:13	ECR	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	81.2	%		48-123		SW846 8015D	12/18/09	KAK	12/19/09 11:11	JJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	95.2	%		90-129		SW846 8015D			12/19/09 10:13	ECR	C

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9822957 Drinking Water (12/11/09)

Lab ID: **9822957003** Date Collected: 12/11/2009 11:35 Matrix: Water

Sample ID: **DW-004 D_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			12/21/09 11:41	DD	C
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			12/21/09 11:41	DD	C
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
tert-Amyl Alcohol	21.7	ug/L		4.0	2.0	EPA 524.2			12/21/09 11:41	DD	C
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:41	DD	C
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:41	DD	C
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 11:41	DD	C
2-Butanone	ND	ug/L		2.5	1.0	EPA 524.2			12/21/09 11:41	DD	C
tert.- Butyl Alcohol	2370	ug/L		80.0	34.0	EPA 524.2			12/23/09 04:24	DD	D
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:41	DD	C
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:41	DD	C
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			12/21/09 11:41	DD	C
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:41	DD	C
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			12/21/09 11:41	DD	C
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:41	DD	C
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:41	DD	C
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:41	DD	C
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 11:41	DD	C
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 11:41	DD	C
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			12/21/09 11:41	DD	C
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			12/21/09 11:41	DD	C
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 11:41	DD	C
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:41	DD	C
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C

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ANALYTICAL RESULTS

Workorder: 9822957 Drinking Water (12/11/09)

Lab ID: **9822957003** Date Collected: 12/11/2009 11:35 Matrix: Water

Sample ID: **DW-004 D_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:41	DD	C
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			12/21/09 11:41	DD	C
Diisopropyl ether	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:41	DD	C
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			12/21/09 11:41	DD	C
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:41	DD	C
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:41	DD	C
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:41	DD	C
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			12/21/09 11:41	DD	C
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			12/21/09 11:41	DD	C
Iodomethane	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 11:41	DD	C
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			12/21/09 11:41	DD	C
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:41	DD	C
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:41	DD	C
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			12/21/09 11:41	DD	C
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			12/21/09 11:41	DD	C
Methyl t-Butyl Ether	12.6	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			12/21/09 11:41	DD	C
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 11:41	DD	C
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			12/21/09 11:41	DD	C
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			12/21/09 11:41	DD	C
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			12/21/09 11:41	DD	C
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:41	DD	C
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:41	DD	C
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
Tetrahydrofuran	32.6	ug/L		3.0	1.3	EPA 524.2			12/21/09 11:41	DD	C
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:41	DD	C
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			12/21/09 11:41	DD	C
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:41	DD	C
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:41	DD	C
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:41	DD	C
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:41	DD	C

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ANALYTICAL RESULTS

Workorder: 9822957 Drinking Water (12/11/09)

Lab ID: **9822957003** Date Collected: 12/11/2009 11:35 Matrix: Water

Sample ID: **DW-004 D_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:41	DD	C
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 11:41	DD	C
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 11:41	DD	C
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			12/21/09 11:41	DD	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	101	%		70-130		EPA 524.2			12/21/09 11:41	DD	C
4-Bromofluorobenzene (S)	87.7	%		70-130		EPA 524.2			12/21/09 11:41	DD	C
1,2-Dichlorobenzene-d4 (S)	98.4	%		70-130		EPA 524.2			12/23/09 04:24	DD	D
4-Bromofluorobenzene (S)	81.4	%		70-130		EPA 524.2			12/23/09 04:24	DD	D
PETROLEUM HC's											
Diesel Range Organics C10-C28	0.071J	mg/L		0.17	0.021	SW846 8015D	12/18/09	KAK	12/19/09 12:09	JJH	A1
Gasoline Range Organics	31.3J	ug/L		100	4.2	SW846 8015D			12/19/09 10:47	ECR	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	105	%		48-123		SW846 8015D	12/18/09	KAK	12/19/09 12:09	JJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	93.7	%		90-129		SW846 8015D			12/19/09 10:47	ECR	C

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9822957 Drinking Water (12/11/09)

Lab ID: **9822957004** Date Collected: 12/11/2009 11:30 Matrix: Water

Sample ID: **DW-004 E_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			12/21/09 12:07	DD	C
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			12/21/09 12:07	DD	C
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
tert-Amyl Alcohol	ND	ug/L		4.0	2.0	EPA 524.2			12/21/09 12:07	DD	C
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:07	DD	C
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:07	DD	C
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 12:07	DD	C
2-Butanone	ND	ug/L		2.5	1.0	EPA 524.2			12/21/09 12:07	DD	C
tert.- Butyl Alcohol	2330	ug/L		80.0	34.0	EPA 524.2			12/23/09 04:50	DD	D
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:07	DD	C
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:07	DD	C
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			12/21/09 12:07	DD	C
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:07	DD	C
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			12/21/09 12:07	DD	C
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:07	DD	C
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:07	DD	C
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:07	DD	C
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 12:07	DD	C
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 12:07	DD	C
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			12/21/09 12:07	DD	C
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			12/21/09 12:07	DD	C
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 12:07	DD	C
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:07	DD	C
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C

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ANALYTICAL RESULTS

Workorder: 9822957 Drinking Water (12/11/09)

Lab ID: **9822957004** Date Collected: 12/11/2009 11:30 Matrix: Water

Sample ID: **DW-004 E_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:07	DD	C
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			12/21/09 12:07	DD	C
Diisopropyl ether	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:07	DD	C
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			12/21/09 12:07	DD	C
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:07	DD	C
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:07	DD	C
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:07	DD	C
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			12/21/09 12:07	DD	C
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			12/21/09 12:07	DD	C
Iodomethane	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 12:07	DD	C
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			12/21/09 12:07	DD	C
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:07	DD	C
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:07	DD	C
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			12/21/09 12:07	DD	C
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			12/21/09 12:07	DD	C
Methyl t-Butyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			12/21/09 12:07	DD	C
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 12:07	DD	C
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			12/21/09 12:07	DD	C
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			12/21/09 12:07	DD	C
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			12/21/09 12:07	DD	C
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:07	DD	C
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:07	DD	C
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
Tetrahydrofuran	4.3	ug/L		3.0	1.3	EPA 524.2			12/21/09 12:07	DD	C
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:07	DD	C
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			12/21/09 12:07	DD	C
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:07	DD	C
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:07	DD	C
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:07	DD	C
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:07	DD	C

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ANALYTICAL RESULTS

Workorder: 9822957 Drinking Water (12/11/09)

Lab ID: **9822957004** Date Collected: 12/11/2009 11:30 Matrix: Water

Sample ID: **DW-004 E_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:07	DD	C
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:07	DD	C
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:07	DD	C
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			12/21/09 12:07	DD	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	95.4	%		70-130		EPA 524.2			12/21/09 12:07	DD	C
4-Bromofluorobenzene (S)	90.3	%		70-130		EPA 524.2			12/21/09 12:07	DD	C
1,2-Dichlorobenzene-d4 (S)	95.9	%		70-130		EPA 524.2			12/23/09 04:50	DD	D
4-Bromofluorobenzene (S)	81.5	%		70-130		EPA 524.2			12/23/09 04:50	DD	D
PETROLEUM HC's											
Diesel Range Organics C10-C28	0.090J	mg/L		0.17	0.021	SW846 8015D	12/18/09	KAK	12/19/09 13:08	JJH	A1
Gasoline Range Organics	27.5J	ug/L		100	4.2	SW846 8015D			12/19/09 11:21	ECR	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	98.6	%		48-123		SW846 8015D	12/18/09	KAK	12/19/09 13:08	JJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	94.5	%		90-129		SW846 8015D			12/19/09 11:21	ECR	C

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9822957 Drinking Water (12/11/09)

Lab ID: **9822957005** Date Collected: 12/11/2009 11:10 Matrix: Water

Sample ID: **DW-005 A_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			12/21/09 12:33	DD	C
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			12/21/09 12:33	DD	C
tert-Amyl methyl ether	1.4	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
tert-Amyl Alcohol	10.9	ug/L		4.0	2.0	EPA 524.2			12/21/09 12:33	DD	C
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:33	DD	C
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:33	DD	C
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 12:33	DD	C
2-Butanone	ND	ug/L		2.5	1.0	EPA 524.2			12/21/09 12:33	DD	C
tert.- Butyl Alcohol	139	ug/L		4.0	1.7	EPA 524.2			12/21/09 12:33	DD	C
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:33	DD	C
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:33	DD	C
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			12/21/09 12:33	DD	C
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:33	DD	C
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			12/21/09 12:33	DD	C
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:33	DD	C
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:33	DD	C
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:33	DD	C
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 12:33	DD	C
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 12:33	DD	C
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			12/21/09 12:33	DD	C
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			12/21/09 12:33	DD	C
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
1,4-Dichlorobenzene	0.28J	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
1,2-Dichloroethane	1.2	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 12:33	DD	C
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:33	DD	C
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C

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ANALYTICAL RESULTS

Workorder: 9822957 Drinking Water (12/11/09)

Lab ID: **9822957005** Date Collected: 12/11/2009 11:10 Matrix: Water

Sample ID: **DW-005 A_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:33	DD	C
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			12/21/09 12:33	DD	C
Diisopropyl ether	1.3	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:33	DD	C
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			12/21/09 12:33	DD	C
Ethyl Ether	0.33J	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:33	DD	C
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:33	DD	C
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:33	DD	C
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			12/21/09 12:33	DD	C
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			12/21/09 12:33	DD	C
Iodomethane	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 12:33	DD	C
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			12/21/09 12:33	DD	C
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:33	DD	C
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:33	DD	C
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			12/21/09 12:33	DD	C
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			12/21/09 12:33	DD	C
Methyl t-Butyl Ether	130	ug/L		10.0	4.0	EPA 524.2			12/23/09 05:16	DD	D
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			12/21/09 12:33	DD	C
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 12:33	DD	C
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			12/21/09 12:33	DD	C
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			12/21/09 12:33	DD	C
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			12/21/09 12:33	DD	C
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:33	DD	C
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:33	DD	C
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
Tetrahydrofuran	2.3J	ug/L		3.0	1.3	EPA 524.2			12/21/09 12:33	DD	C
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:33	DD	C
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			12/21/09 12:33	DD	C
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:33	DD	C
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:33	DD	C
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:33	DD	C
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:33	DD	C

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ANALYTICAL RESULTS

Workorder: 9822957 Drinking Water (12/11/09)

Lab ID: **9822957005** Date Collected: 12/11/2009 11:10 Matrix: Water

Sample ID: **DW-005 A_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:33	DD	C
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 12:33	DD	C
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 12:33	DD	C
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			12/21/09 12:33	DD	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	103	%		70-130		EPA 524.2			12/21/09 12:33	DD	C
4-Bromofluorobenzene (S)	89.4	%		70-130		EPA 524.2			12/21/09 12:33	DD	C
1,2-Dichlorobenzene-d4 (S)	87.4	%		70-130		EPA 524.2			12/23/09 05:16	DD	D
4-Bromofluorobenzene (S)	74.8	%		70-130		EPA 524.2			12/23/09 05:16	DD	D
PETROLEUM HC's											
Diesel Range Organics C10-C28	0.075J	mg/L		0.17	0.021	SW846 8015D	12/18/09	KAK	12/19/09 14:06	JJH	A1
Gasoline Range Organics	33.3J	ug/L		100	4.2	SW846 8015D			12/19/09 11:54	ECR	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	102	%		48-123		SW846 8015D	12/18/09	KAK	12/19/09 14:06	JJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	91.5	%		90-129		SW846 8015D			12/19/09 11:54	ECR	C

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9822957 Drinking Water (12/11/09)

Lab ID: **9822957006** Date Collected: 12/11/2009 11:05 Matrix: Water

Sample ID: **DW-005 B_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			12/21/09 09:30	DD	C
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			12/21/09 09:30	DD	C
tert-Amyl methyl ether	1.3	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
tert-Amyl Alcohol	10.7	ug/L		4.0	2.0	EPA 524.2			12/21/09 09:30	DD	C
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:30	DD	C
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:30	DD	C
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 09:30	DD	C
2-Butanone	ND	ug/L		2.5	1.0	EPA 524.2			12/21/09 09:30	DD	C
tert.- Butyl Alcohol	119	ug/L		4.0	1.7	EPA 524.2			12/21/09 09:30	DD	C
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:30	DD	C
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:30	DD	C
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			12/21/09 09:30	DD	C
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:30	DD	C
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			12/21/09 09:30	DD	C
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:30	DD	C
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:30	DD	C
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:30	DD	C
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 09:30	DD	C
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 09:30	DD	C
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			12/21/09 09:30	DD	C
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			12/21/09 09:30	DD	C
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
1,4-Dichlorobenzene	0.31J	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
1,2-Dichloroethane	1.1	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 09:30	DD	C
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:30	DD	C
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C

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ANALYTICAL RESULTS

Workorder: 9822957 Drinking Water (12/11/09)

Lab ID: **9822957006** Date Collected: 12/11/2009 11:05 Matrix: Water

Sample ID: **DW-005 B_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:30	DD	C
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			12/21/09 09:30	DD	C
Diisopropyl ether	1.1	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:30	DD	C
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			12/21/09 09:30	DD	C
Ethyl Ether	0.31J	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:30	DD	C
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:30	DD	C
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:30	DD	C
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			12/21/09 09:30	DD	C
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			12/21/09 09:30	DD	C
Iodomethane	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 09:30	DD	C
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			12/21/09 09:30	DD	C
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:30	DD	C
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:30	DD	C
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			12/21/09 09:30	DD	C
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			12/21/09 09:30	DD	C
Methyl t-Butyl Ether	122	ug/L		5.0	2.0	EPA 524.2			12/23/09 05:43	DD	D
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			12/21/09 09:30	DD	C
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 09:30	DD	C
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			12/21/09 09:30	DD	C
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			12/21/09 09:30	DD	C
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			12/21/09 09:30	DD	C
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:30	DD	C
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:30	DD	C
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
Tetrahydrofuran	ND	ug/L		3.0	1.3	EPA 524.2			12/21/09 09:30	DD	C
Toluene	0.16J	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:30	DD	C
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			12/21/09 09:30	DD	C
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:30	DD	C
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:30	DD	C
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:30	DD	C
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:30	DD	C

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ANALYTICAL RESULTS

Workorder: 9822957 Drinking Water (12/11/09)

Lab ID: **9822957006** Date Collected: 12/11/2009 11:05 Matrix: Water

Sample ID: **DW-005 B_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:30	DD	C
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:30	DD	C
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:30	DD	C
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			12/21/09 09:30	DD	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	100	%		70-130		EPA 524.2			12/21/09 09:30	DD	C
4-Bromofluorobenzene (S)	91.7	%		70-130		EPA 524.2			12/21/09 09:30	DD	C
1,2-Dichlorobenzene-d4 (S)	96.5	%		70-130		EPA 524.2			12/23/09 05:43	DD	D
4-Bromofluorobenzene (S)	84.8	%		70-130		EPA 524.2			12/23/09 05:43	DD	D
PETROLEUM HC's											
Diesel Range Organics C10-C28	0.14J	mg/L		0.17	0.021	SW846 8015D	12/18/09	KAK	12/19/09 16:02	JJH	A1
Gasoline Range Organics	35.1J	ug/L		100	4.2	SW846 8015D			12/19/09 12:28	ECR	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	94.4	%		48-123		SW846 8015D	12/18/09	KAK	12/19/09 16:02	JJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	102	%		90-129		SW846 8015D			12/19/09 12:28	ECR	C

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9822957 Drinking Water (12/11/09)

Lab ID: **9822957007** Date Collected: 12/11/2009 11:00 Matrix: Water

Sample ID: **DW-005 C_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			12/21/09 09:56	DD	C
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			12/21/09 09:56	DD	C
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
tert-Amyl Alcohol	ND	ug/L		4.0	2.0	EPA 524.2			12/21/09 09:56	DD	C
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:56	DD	C
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:56	DD	C
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 09:56	DD	C
2-Butanone	ND	ug/L		2.5	1.0	EPA 524.2			12/21/09 09:56	DD	C
tert.- Butyl Alcohol	518	ug/L		40.0	17.0	EPA 524.2			12/23/09 06:09	DD	D
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:56	DD	C
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:56	DD	C
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			12/21/09 09:56	DD	C
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:56	DD	C
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			12/21/09 09:56	DD	C
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:56	DD	C
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:56	DD	C
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:56	DD	C
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 09:56	DD	C
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 09:56	DD	C
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			12/21/09 09:56	DD	C
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			12/21/09 09:56	DD	C
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 09:56	DD	C
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:56	DD	C
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C

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ANALYTICAL RESULTS

Workorder: 9822957 Drinking Water (12/11/09)

Lab ID: **9822957007** Date Collected: 12/11/2009 11:00 Matrix: Water

Sample ID: **DW-005 C_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:56	DD	C
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			12/21/09 09:56	DD	C
Diisopropyl ether	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:56	DD	C
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			12/21/09 09:56	DD	C
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:56	DD	C
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:56	DD	C
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:56	DD	C
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			12/21/09 09:56	DD	C
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			12/21/09 09:56	DD	C
Iodomethane	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 09:56	DD	C
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			12/21/09 09:56	DD	C
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:56	DD	C
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:56	DD	C
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			12/21/09 09:56	DD	C
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			12/21/09 09:56	DD	C
Methyl t-Butyl Ether	0.47J	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			12/21/09 09:56	DD	C
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 09:56	DD	C
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			12/21/09 09:56	DD	C
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			12/21/09 09:56	DD	C
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			12/21/09 09:56	DD	C
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:56	DD	C
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:56	DD	C
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
Tetrahydrofuran	8.1	ug/L		3.0	1.3	EPA 524.2			12/21/09 09:56	DD	C
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:56	DD	C
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			12/21/09 09:56	DD	C
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:56	DD	C
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:56	DD	C
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:56	DD	C
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:56	DD	C

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ANALYTICAL RESULTS

Workorder: 9822957 Drinking Water (12/11/09)

Lab ID: **9822957007** Date Collected: 12/11/2009 11:00 Matrix: Water

Sample ID: **DW-005 C_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:56	DD	C
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 09:56	DD	C
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 09:56	DD	C
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			12/21/09 09:56	DD	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	96.4	%		70-130		EPA 524.2			12/21/09 09:56	DD	C
4-Bromofluorobenzene (S)	89.4	%		70-130		EPA 524.2			12/21/09 09:56	DD	C
1,2-Dichlorobenzene-d4 (S)	97	%		70-130		EPA 524.2			12/23/09 06:09	DD	D
4-Bromofluorobenzene (S)	82.6	%		70-130		EPA 524.2			12/23/09 06:09	DD	D
PETROLEUM HC's											
Diesel Range Organics C10-C28	0.15J	mg/L		0.17	0.021	SW846 8015D	12/18/09	KAK	12/19/09 17:00	JJH	A1
Gasoline Range Organics	27.1J	ug/L		100	4.2	SW846 8015D			12/19/09 13:02	ECR	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	108	%		48-123		SW846 8015D	12/18/09	KAK	12/19/09 17:00	JJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	93	%		90-129		SW846 8015D			12/19/09 13:02	ECR	C

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9822957 Drinking Water (12/11/09)

Lab ID: **9822957008** Date Collected: 12/11/2009 11:15 Matrix: Water

Sample ID: **DW-005 D_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			12/21/09 10:22	DD	C
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			12/21/09 10:22	DD	C
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
tert-Amyl Alcohol	ND	ug/L		4.0	2.0	EPA 524.2			12/21/09 10:22	DD	C
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 10:22	DD	C
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 10:22	DD	C
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 10:22	DD	C
2-Butanone	ND	ug/L		2.5	1.0	EPA 524.2			12/21/09 10:22	DD	C
tert.- Butyl Alcohol	243	ug/L		40.0	17.0	EPA 524.2			12/23/09 06:35	DD	D
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 10:22	DD	C
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 10:22	DD	C
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			12/21/09 10:22	DD	C
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 10:22	DD	C
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			12/21/09 10:22	DD	C
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 10:22	DD	C
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 10:22	DD	C
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 10:22	DD	C
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 10:22	DD	C
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 10:22	DD	C
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			12/21/09 10:22	DD	C
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			12/21/09 10:22	DD	C
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 10:22	DD	C
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 10:22	DD	C
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C

ANALYTICAL LABORATORY SERVICES, INC.
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34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9822957 Drinking Water (12/11/09)

Lab ID: **9822957008** Date Collected: 12/11/2009 11:15 Matrix: Water

Sample ID: **DW-005 D_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 10:22	DD	C
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			12/21/09 10:22	DD	C
Diisopropyl ether	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 10:22	DD	C
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			12/21/09 10:22	DD	C
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 10:22	DD	C
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 10:22	DD	C
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 10:22	DD	C
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			12/21/09 10:22	DD	C
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			12/21/09 10:22	DD	C
Iodomethane	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 10:22	DD	C
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			12/21/09 10:22	DD	C
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 10:22	DD	C
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 10:22	DD	C
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			12/21/09 10:22	DD	C
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			12/21/09 10:22	DD	C
Methyl t-Butyl Ether	0.36J	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			12/21/09 10:22	DD	C
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			12/21/09 10:22	DD	C
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			12/21/09 10:22	DD	C
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			12/21/09 10:22	DD	C
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			12/21/09 10:22	DD	C
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 10:22	DD	C
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 10:22	DD	C
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
Tetrahydrofuran	9.4	ug/L		3.0	1.3	EPA 524.2			12/21/09 10:22	DD	C
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 10:22	DD	C
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			12/21/09 10:22	DD	C
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 10:22	DD	C
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 10:22	DD	C
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 10:22	DD	C
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 10:22	DD	C

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ANALYTICAL RESULTS

Workorder: 9822957 Drinking Water (12/11/09)

Lab ID: **9822957008** Date Collected: 12/11/2009 11:15 Matrix: Water

Sample ID: **DW-005 D_20091211_N** Date Received: 12/14/2009 20:12

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 10:22	DD	C
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			12/21/09 10:22	DD	C
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			12/21/09 10:22	DD	C
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			12/21/09 10:22	DD	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	95	%		70-130		EPA 524.2			12/21/09 10:22	DD	C
4-Bromofluorobenzene (S)	83.8	%		70-130		EPA 524.2			12/21/09 10:22	DD	C
1,2-Dichlorobenzene-d4 (S)	96.6	%		70-130		EPA 524.2			12/23/09 06:35	DD	D
4-Bromofluorobenzene (S)	80.6	%		70-130		EPA 524.2			12/23/09 06:35	DD	D
PETROLEUM HC's											
Diesel Range Organics C10-C28	0.17J	mg/L		0.17	0.022	SW846 8015D	12/18/09	KAK	12/19/09 17:58	JJH	A1
Gasoline Range Organics	25.3J	ug/L		100	4.2	SW846 8015D			12/19/09 13:36	ECR	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	97.6	%		48-123		SW846 8015D	12/18/09	KAK	12/19/09 17:58	JJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	93.8	%		90-129		SW846 8015D			12/19/09 13:36	ECR	C

Sample Comments:

Anna G Milliken
Laboratory Manager

Analytical Laboratory Services, Inc.
Environmental • Industrial Hygiene • Field Services
34 Dogwood Lane • Middletown, PA 17057 • 717.944.5541 • Fax: 717.944.1430

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Page 1 of 1
Courier:
Tracking #:
* 9 8 2 2 9 5 7 *

Co. Name: RERSG Inc
Contact (Report to): Mark K / Brenda M Phone: 215.729 3220
Address: 6901 Kingsessing Ave Phila, Pa. 19142

Bill to (if different than Report to): Same PO#: 3904

Project Name/#: Calvert Citgo #5977 ALSI Quote #:

TAT: [✓] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALSI approval and surcharges.
Date Required:
Approved By: DB

Email? ✓ Y mark K / Brenda K
Fax? Y No

	Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	Full Suite DW VOCs by 524.2 include fuel oxygenates	TPH-DRO 8015	TPH-GRO 8015
	***Container Type						VOA	AG	VOA
	***Container Size						40mL	1L	40ml
	***Preservative						HCL	H2SO4	HCL
1	DW-004 B	2794 Fridge	12/11/09	11:45	G	DW	2	2	2
2	DW-004 C	2794 pre	12/11/09	11:40	G	DW	2	2	2
3	DW-004 D	2794 mid	12/11/09	11:35	G	DW	2	2	2
4	DW-004 E	2794 post	12/11/09	11:30	G	DW	2	2	2
5	DW-005 A	2802 pre	12/11/09	11:10	G	DW	2	2	2
6	DW-005 B	2802 mid	12/11/09	11:05	G	DW	2	2	2
7	DW-005 C	2802 post	12/11/09	11:00	G	DW	2	2	2
8	DW-005 D	2802 fridge	12/11/09	11:15	G	DW	2	2	2

Enter Number of Containers Per Analysis

Completed by Sample Management — Performed by: [initials]
Cooler Temp: 1
Therm. ID: 51023551
No. of Coolers:
Notes:

Circle appropriate Y or N: Correct containers? Y; Correct sample volume? Y; Correct preservation? Y; Headspace/Volatiles? Y
Custody seals Present? Y; (if present) Seals intact? Y; Received on ice? Y; COC/Labels complete/accurate? Y; Container in good condition? Y

SAMPLED BY (Please Print): T. Crooks

LOGGED BY (signature): [signature] Date: 12/15/09 Time: 0121
REVIEWED BY (signature): [signature] Date: 12/16/09 Time: 1735

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1	[signature]	12/14/09	10:55	2	Ali Hines	12-14	1107
3	Ali Hines	12-14	1830	4	UM	12/14	1830
5	UM	12/14	2012	6	[signature]	12/14/09	2012
7				8			
9				10			

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [✓]
EDDs Required? ✓ If yes, format type: EQUIS
SDWA Forms? yes [ ] yes [ ] yes [ ] yes [ ] Other
State Samples Collected In? MD [✓] NJ [ ] NY [ ] PA [ ]
Enter PWSID No.
DOD Criteria Required?

ALSI FIELD SERVICES: [✓] Pickup [ ] Labor [ ] Composite Sampling [ ] Rental Equipment [ ] Other:

* G=Grab; C=Composite
**Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY Rev 6/07

ATTACHMENT 5: CORRESPONDANCE & PRIOR REPORTING

As per Sid Duff 5/8/91

PENN HILL

1-4000 steel tank installed approx 1978

3-4000 STP 3 tanks installed approx 1979 or 1980 (cathodic protection system not connected and not required until 1998)

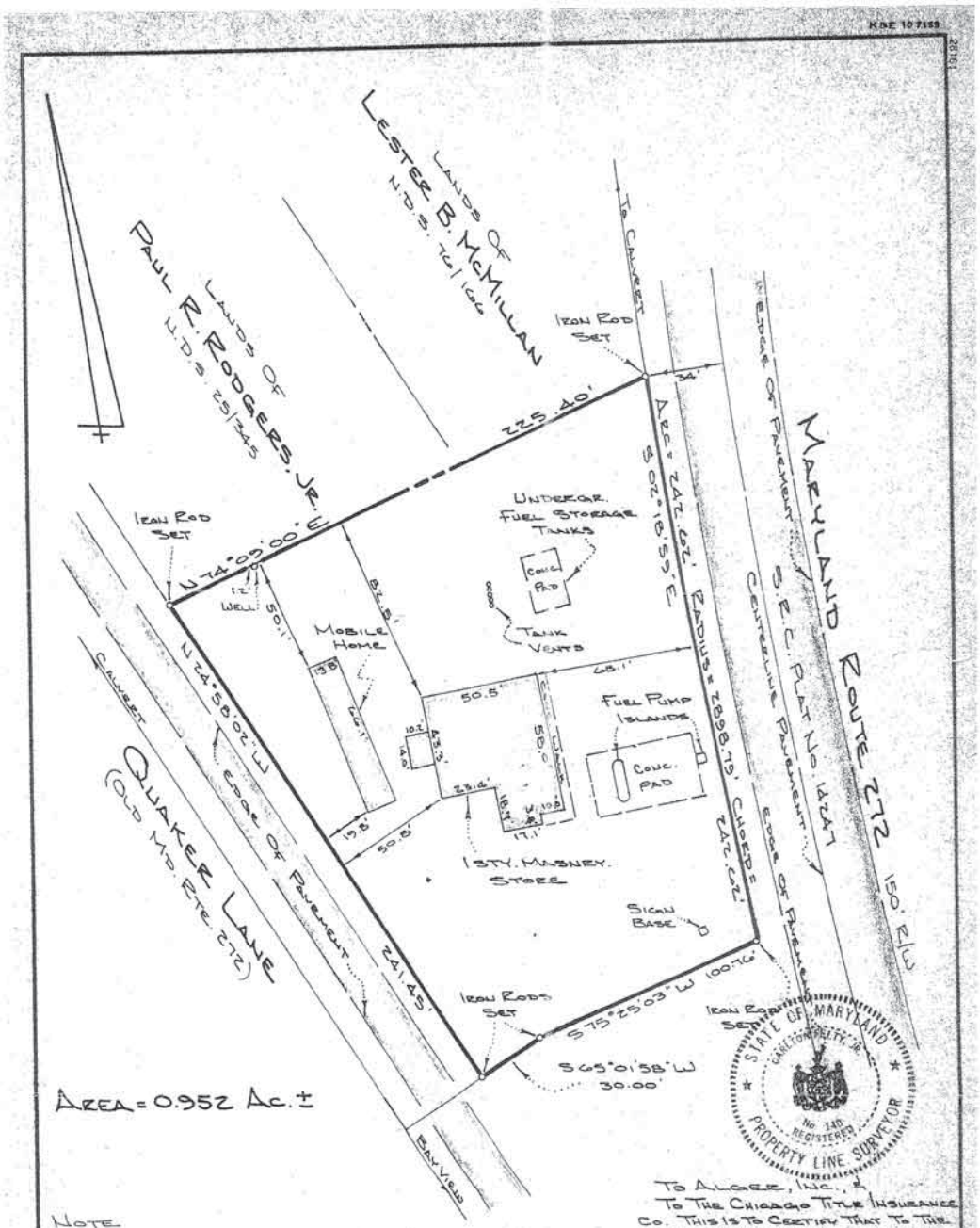
CALVERT

4-4000 steel tanks for gasoline
1-4000 " " for deisel
Installed in 1979.

All tanks last tightness tested in March of 1986.

Called Clower with this info

301-398-7400



NOTE

1) FOR DEED REFERENCE SEE LIBER W.A.S. 79, FOLIO 374.
2) THIS SURVEY IS SUBJECT TO A TITLE SEARCH.

TO ALGER, INC., &
TO THE CHICAGO TITLE INSURANCE CO. THIS IS TO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THE IMPROVEMENTS INDICATED HEREON ARE LOCATED AS SHOWN.

Carlton Perry Jr. #340
REG. SURVEYOR
3/9/86

SURVEY & IMPROVEMENTS LOCATION
ON THE LANDS OF
ALGER, INC. - FORMERLY ALGER OIL CO., INC.
9TH ELECTION DIST., CECIL COUNTY, MD.
FOR - COUNTRY STORES, INC.

MCRONE Inc.
Engineers • Planners
Surveyors
Annapolis, Maryland
Centreville - Chestertown - Denton - Easton
Elkton - Leonardtown - Prince Frederick

DRAWN BY JOINER
SCALE 1" = 50'
DATE 2-86
JOB NO. 8086000507
FOLDER 2204

FORM NO. 2

SUBDIVISION PLAT RECORDED IN PLAT BOOK PAGE

REMEDIATION SITE REPORT

State of Maryland
Department of the Environment
Hazardous and Solid Waste Management Administration
2500 Broening Highway, Baltimore, Maryland 21224
(301) 631-3442

Date 6/10/92
Time In:
Time Out:

Site Name: Alger Oil - Country Store
Facility #
Address: RT 272 Calvert
Case #
Facility owner/operator: Alger Oil
Address:
Remediation firm: Geo Matrix

(OPEN) INITIAL CLOSE (FOLLOW-UP)

Monitoring well #	Gw1	2	3	4												
Flush mount or stick-up (F/S)	S	S	S	S												
Stick-up height																
Depth to water (ft.) *	15.0	14.9	13.3	13.5												
Product thickness (in.)																
Odors present? (Y/N)																

* Water elevations should be measured with respect to ground surface on flush mount wells and with respect to top of casing for stick-ups. Also, indicate which wells are currently being pumped.

1. Monitoring wells labelled, capped and locked? YES ☐ NO ☐
2. Pump and treat system:
   Pump operating? YES ☐ NO ☐ Totalizer reading (if present)
   Separator functioning including overfill shut-off? YES ☐ NO ☐ UNKNOWN ☐
   Product level in tank
   Sample discharge effluent YES ☐ NO ☐ MDE sample #
   Location of sample taken:
3. Air stripping system:
   System operating? YES ☐ NO ☐ Totalizer reading (if present)
   Sample discharge effluent YES ☐ NO ☐ MDE sample #
   Location of sample taken:
4. Vapor extraction system:
   System operating? YES ☐ NO ☐
5. Hand recovery:
   Bailing? YES ☐ NO ☐
   Sorbents? YES ☐ NO ☐
6. Recovery information:
   Recovery information on site? YES ☐ NO ☐
   If YES, total recovered to date
   Is site under orders? YES ☐ NO ☐
   Product being handled properly on-site? YES ☐ NO ☐
7. Did inspector bail product? YES ☐ NO ☐ Amount removed:
8. Comments and/or actions required by this Administration:

1. Resample all monitoring wells - purge 4-5 well volumes Analyze for Benzene Toluene Xylene Ethybenzene Methy Tert Buthly Ether - MTBE } submit to MDE
2. Same domestic well for SAME }
3. Install 2 wells - 1 near B-4 1 near VICINITY of CORNER of Dumpster (field marked) - contact MDE prior to Drilling - (20' screen minimum)

Inspector's name (printed) and signature: Barbara Brown/mdl
Contact person's name (printed) and signature:

PHOTOS TAKEN ☐ ADDITIONAL COMMENTS PAGE ☐ SITE SKETCH ☐

MARYLAND RECYCLES

MDE 235 6/90

GEOMATRIX (A. LTD.)
EARTH SCIENCE CONSULTANTS
32-38 Hope Road • Kingston 8 • Jamaica, W.I. • Telephone (809) 929-4125

August 3, 1992

Mr. Ken Thomas
Alger Oil, Inc.
559 Sylmar Road
Rising Sun, Maryland 21911

RE: Field Investigation Calvert Country Store, Cecil County, MD

Dear Mr. Thomas:

We have reviewed the results of the laboratory analyses of the groundwater and the tap water at the Shell Gas Station site on Route 272, Calvert, Maryland. The samples were obtained from six monitoring wells and from the tap supplying potable water to the premise (Calvert Country Store). The samples were analyzed for BTEX and MTBE.

Wells GW-5, GW-3, and GW-1 indicated elevated values of BTEX. We are proposing to the State (MDE) a long-term monitoring program for the site in lieu of any clean-up operations. (The letter to the State is attached).

Since the values of BTEX in the dissolved phase (groundwater) are quite high, particularly GW-5, the State may require a risk assessment be done, and a clean-up operation be implemented at the site to mitigate the subsurface contamination. In that case, we would offer alternative mitigation measure that would be the least expensive and most efficient.

Please review the letter to the State and include your comments. Do not hesitate to call either myself or Donald A. Jackson if additional information is required.

Sincerely
Geomatrix, Inc.

Kobina Atobrah, Ph.D, P.G.
Vice-President

Enclosure

8/5 Ken talked to Kobina. Kobina is calling Barbara Brown on Wed 8/12. Ken will then talk to Kobina for results.

GEOMATRIX (JA. LTD.)
EARTH SCIENCE CONSULTANTS
32-36 Slipe Road • Kingston 8 • Jamaica, W.I. • Telephone (809) 929-4125

August 3, 1992

Ms. Barbara Brown
Dept. of the Environment
UST/LUST Division
Hazardous and Solid Waste Management Administration
2500 Broening Highway
Baltimore, Maryland 21224.

RE: Field Investigation- Calvert Country Store, Cecil County, Maryland.

Dear Ms. Brown:

Geomatrix, Inc. (Geomatrix) is pleased to submit this brief progress report on behalf of Alger Oil, Inc. on the site referenced above.

Groundwater samples were collected from wells, GW-1, through GW-6 and tap water samples from the well supplying potable water to the premises. The samples were submitted to Gascoyne Laboratories, Inc. in Baltimore, Maryland. The results of the laboratory analyses for BTEX and MTBE performed on the samples are attached.

The groundwater has apparently been impacted at the site, however the risk to the environment and to human health appears to be relatively low based on the following relevant indicators:

. No free product was observed in any of the monitoring wells.

. The ground surface at the site has been paved with asphalt and/or cement, and there is very minimal possibility of routes of inhalation, ingestion and dermal contact from the subsurface media.

. The soil profile and the geologic formation (weathered saprolite, decomposed bedrock) are relatively tight and will tend not to allow infiltration of precipitation.

. The hydraulic gradient (slope) of the groundwater is relatively flat. This in conjunction with the anticipated low infiltration of precipitation as a result of the paved areas and tight soils will therefore, result in groundwater movement being relatively slow. Hence [illegible] will move relatively slowly.

Posi-it™ brand fax transmittal memo 7671	# of pages ▸ 3
To Ba. Brown	From Ken Alger
Co.	Co. Alger Oil Inc.
Dept.	Phone #
Fax #	Fax #

GEOMATRIX
EARTH SCIENCE CONSULTANTS

. The tap water is clean. The well that supplies potable water to the site has not been impacted by the leaks of the old oil/fuel that have occurred previously.

. The site is primarily surrounded by farm lands. There is no down gradient receptors such as wells or streams that would be potentially threatened by any subsurface contamination.

Based on these observations, we recommend that a long-term monitoring program be implemented at site to evaluate the status of the subsurface contamination from time to time.

We look forward to a meeting with you at your earliest convenience to discuss and affirm the details of the monitoring program. Please do not hesitate to call either myself or Donald A Jackson if additional information is required.

Sincerely
Geomatrix, Inc.

Kobina Atobrah, Ph.D, P.G.
Principal Hydrogeologist

Enclosure

cc: Mr. Ken Thomas
Alger Oil, Inc.
559 Sylmar Road
Rising Sun, MD 21911

PROJECT\ALGEROIL

F.C. HAAB
HEATING OILS
2314 MARKET STREET, PHILADELPHIA, PA 19103

HAAB DIVISION
2314 Market Street
Philadelphia, PA 19103
563-0800

ST. MARTINS DIVISION
7600 Germantown Avenue
Philadelphia, PA 19119
563-0800 247-0800

SUNHEAT DIVISION
2314 Market Street
Philadelphia, PA 19103
563-0800 564-0800

WAMPLER DIVISION
8701 West Chester Pike
Upper Darby, PA 19082
563-0800 789-6340

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

August 23, 1991

Mr. Herbert Mead
2500 Brdening Highway
Baltimore, MD 21224

Dear Mr. Mead:

Enclosed please find a copy of the geologist's report on our convenience store gas station in Calvert. Included within the report are the results of the tank tightness tests.

It appears that some clean up is required for the site and it is our intention to proceed as quickly as possible. Before proceeding we would like to have some guidance as to what would be necessary to satisfy the requirements of the State in order for this site to be considered "clean". Accordingly, could you have your office advise us so we may begin the clean up process.

Yours very truly,

F. C. HAAB COMPANY, INC.

Robert A. Blazer

RAB:ab

Enclosure

cc: Donald A. Jackson
John Dougan (w/EXT. OF CONTRACT COPY)
Ken Thomas

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt Fee will provide you the signature of the person delivered to and the date of delivery.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Mr Herbert Mead
2500 Brdening Highway
Baltimore MD 21224

4a. Article Number

P 294 892 685

4b. Service Type

☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery

AUG 26 1991

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

Doris a. Mitchell

PS Form **3811**, November 1990 ☆U.S. GPO: 1991—287-066 **DOMESTIC RETURN RECEIPT**

P 294 892 685

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

☆U.S.G.P.O. 1989-234-555

Sent to MR HERBERT MEAD	
Street and No. 2500 BRDENING HGWY	
P.O., State and ZIP Code BALTIMORE MD 21224	
Postage	$2.90
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$3.90
Postmark or Date ROBERT A BLAZER 8/23/91	

PS Form 3800, June 1985

GEOMATRIX INC.
EARTH SCIENCE CONSULTANTS
6801 Kenilworth Avenue, Suite 100 • Riverdale • Maryland 20737 • Telephone (301) 779-5302 • Fax (301) 779-5842

August 12, 1991

Mr. Bob Blazer
F. C. Haab Company, Inc.
2314 Market Street,
Philadelphia, PA 19103

RE: PRELIMINARY ENVIRONMENTAL SITE ASSESSMENT FOR
CALVERT COUNTRY STORE, CALVERT, MARYLAND

Dear Bob:

In compliance with your request, Geomatrix, Inc. has completed a Preliminary Environmental Site Assessment of the above referenced property and is forwarding two copies of the report on our activities to date.

Following the results of the investigation, the report recommended that a comprehensive risk assessment be carried out to determine the potential impact of the contamination on the environment. In addition, steps to further aid in the design of a soil and groundwater remediation program are proposed as part of the recommendations. Upon receiving your notice to proceed, we will forward a work plan for these tasks.

Geomatrix appreciates the opportunity to work for you as the environmental consultant on this project. Please, feel free to contact us, if you have any question.

Sincerely,
GEOMATRIX, INC.

Donald A. Jackson, P.G.
President

PRELIMINARY ENVIRONMENTAL SITE ASSESSMENT

FOR

CALVERT COUNTRY STORE

RT. 272 AND QUAKER LANE

CALVERT, CECIL COUNTY

MARYLAND

SUBMITTED TO:

FC HAAB COMPANY
2314 MARKET STREET
PHILADELPHIA, PA 19103

SUBMITTED FROM:

GEOMATRIX, INC.
6801 KENILWORTH AVENUE, SUITE 100
RIVERDALE, MARYLAND 20737

AUGUST, 1991

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1.0 INTRODUCTION

Geomatrix, Inc. completed an environmental site assessment of the Calvert Country Store property located on Route 272 in Calvert, Maryland. The purpose of the investigation was to assess the property for potential petroleum product contamination from underground storage tanks on site and make a preliminary determination of the extent of hydrocarbon contamination. In addition, it was to provide data that may be necessary to plan remedial measures.

The scope of work performed was in accordance with the recommended tasks as outlined in our proposal. An account of our investigation is presented below.

2.0 SITE SETTING

2.1 Site Location

The Calvert Country Store facility is located between MD. Rte. 272 and Quaker Lane (Old MD. Rt. 272) in Calvert, Cecil County, Maryland, (see Figure 1). The site is primarily surrounded by farm settlements. It is bounded in the northwest and the northeast by one - story residential homes, and to the east, west and south by farm lands.

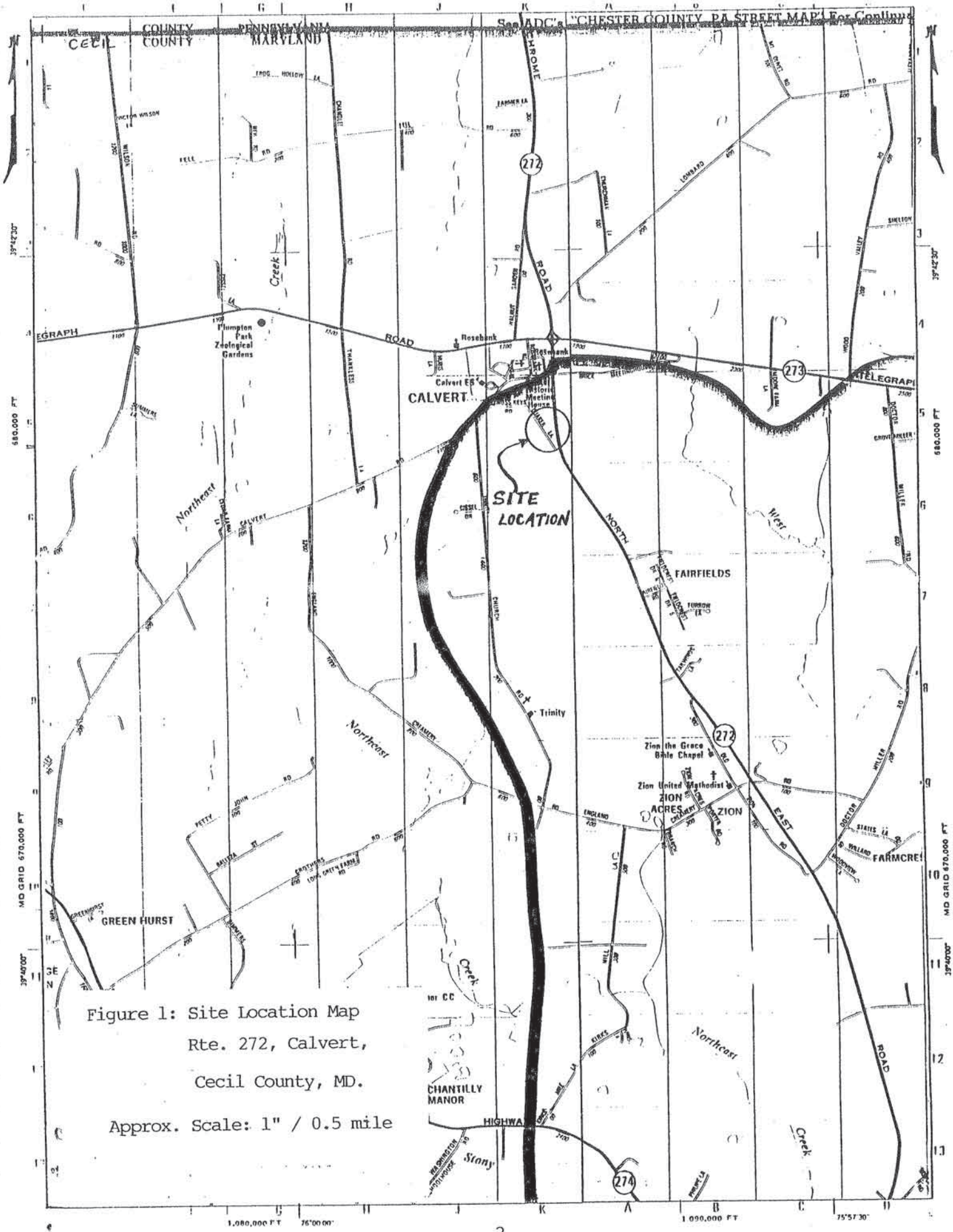


Figure 1: Site Location Map

Rte. 272, Calvert,

Cecil County, MD.

Approx. Scale: 1" / 0.5 mile

2.2 Site Description

The Calvert Country Store facility is about 0.96 acre of land comprising of a mobile home, a convenience store and a gasoline retail station. To the northeastern quadrant of the site are located four 4,000 gallon underground storage tanks for grades 87, 89 and 93 octane rating gasoline and one 4,000 gallons diesel fuel underground storage tank. Two pump islands are located to the south east and gas pipelines run subsurface from the tanks to the pump islands. The convenience store occupies the central portion of the land, while the mobile home is located northwest to west of the property. The rest of the property is either grassed or used as parking space and/or gasoline retail islands (Figure 2).

2.3 Topography and Drainage

The surface topography of the site exhibits a gently undulating lowland with slope generally towards the southeast/southwest direction of the property. Surface water drainage follows the general direction of the slope. No drainage sewers other than run-off drains located on each side of the roads, were observed at the site.

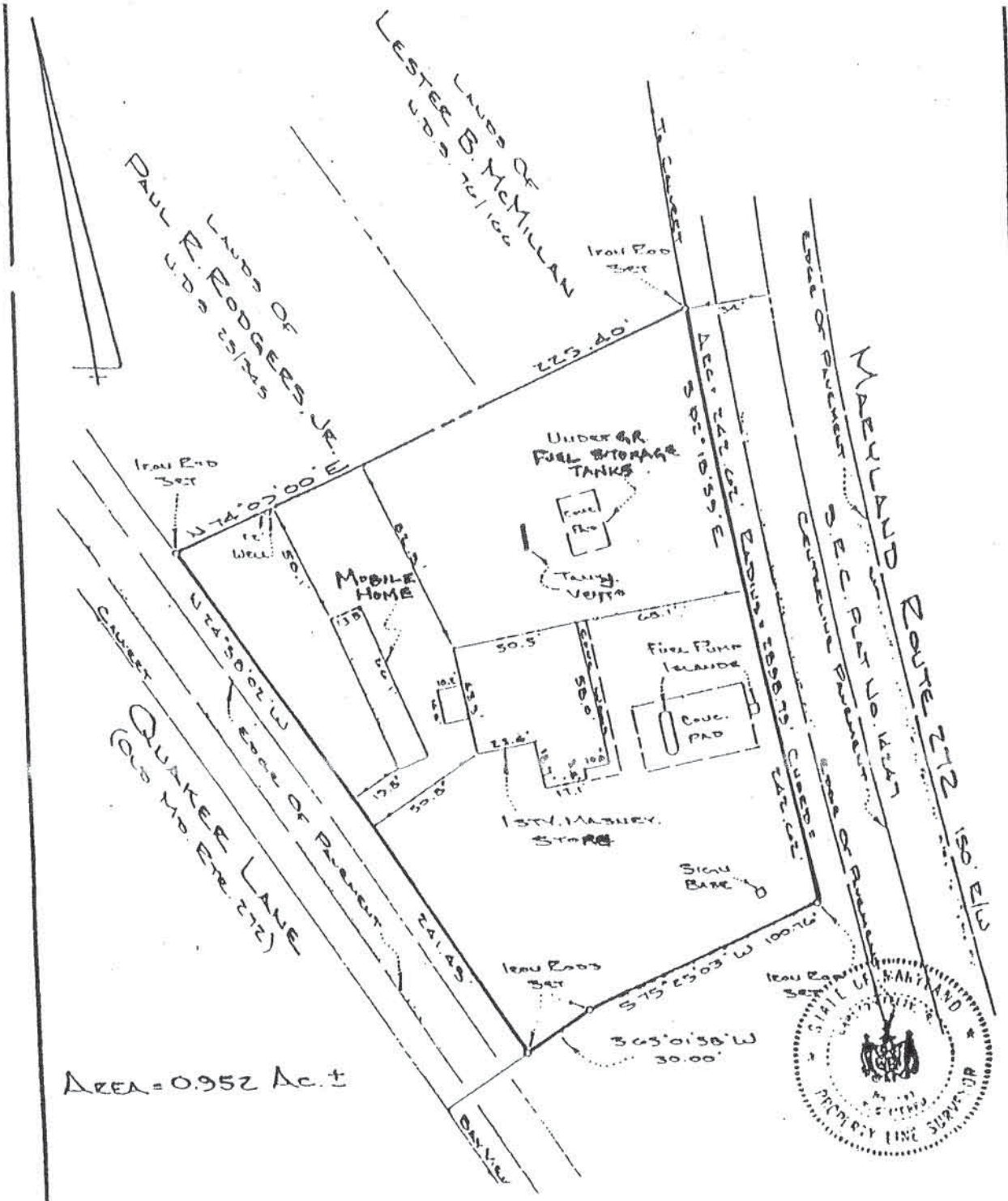


Figure 2: Site Map
Calvert Country Store
Cecil County, MD.

Approx. Scale: 1" / 70 feet.

SURVEY & IMPROVEMENTS LOCATION	McCRONE Inc. Engineers • Planners Surveyors Annapolis, Maryland Centreville · Chestertown · Denton · Easton Elkton · Leonardtown · Prince Frederick	DRAWN BY JOINER
ON THE LANDS OF		SCALE
ALGER, INC. ~ FORMERLY ALGER OIL CO., INC.		DATE 2-86
9TH ELECTION DIST., CECIL COUNTY, MD.		JOB NO. 8686000701
FOR ~ COUNTRY STORES, INC.		FOLDER 2204

FORM NO.:

SUBDIVISION PLAT RECORDED IN PLAT BOOK PAGE

3.0 REGIONAL GEOLOGY AND HYDROGEOLOGY

The site is located within the Precambrian to Paleozoic crystalline rocks of the Piedmont Plateau of Maryland. It is a few miles northwest of the fall zone separating the Coastal Plain from the Piedmont Physiographic Province. The Piedmont Physiographic province consists of hard crystalline rocks of metamorphic and igneous rocks complex. The metamorphic rocks, according to literature, are mica and chlorite schists, gneisses and metadacites. The igneous rocks are both intrusive and volcanic. They are mainly gabbros and dacites with ranging degrees of metamorphism, (see Department of Geology, Mines and Water Resources Bulletin 21). Figure 3 shows the general geology.

The water-bearing capability of the Piedmont crystalline rocks tends to be poor due to their very low primary porosity. They have little contribution to movement and storage of groundwater and are not major sources of water supply. Their capability to store and transmit water increases with fracturing and interconnection of such fractures. The chemical characteristics of the water they store have been reported generally satisfactory.

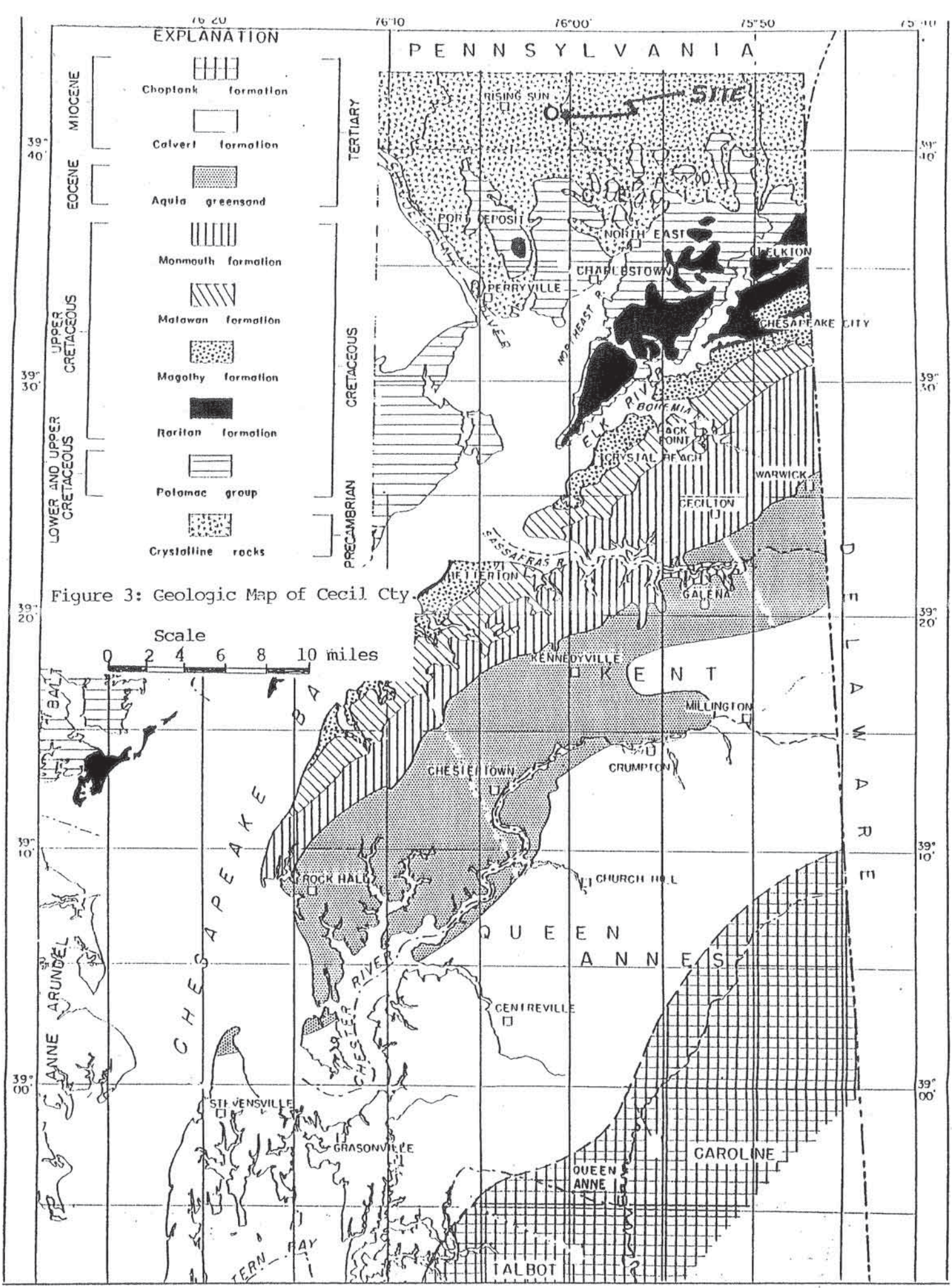


Figure 3: Geologic Map of Cecil Cty.

4.0 SITE INVESTIGATION

A site investigation program was carried out at the site and consisted of a reconnaissance survey of the site and the general area, drilling and collection of soil and water samples and the installation of monitoring wells.

4.1 Drilling and Sampling

A total of nine (9) borings were drilled to five to ten feet (5-10 feet) depth into the first water bearing interval. Figure 4 shows the borings layout. Their depths range between 31 and 37 feet below ground surface. The borings were drilled using a B-57 Mobile Rig fitted with 10" O.D. hollow stem augers. Soil samples were collected generally at 5 foot-interval with steel split-spoon samplers and continuously at intervals showing evidence of contamination. These samples were screened for hydrocarbon contamination using Hnu Photoionization Detector equipped with an 11.7 ev probe. Also, water samples were collected from selected borings through a stainless steel screen installed temporarily in the borings. All items used for sampling and drilling were decontaminated between holes to prevent possible cross contamination. The soil samples were properly labeled and described in the boring logs as shown in Appendix 1. A summary of the PID data from the field analysis of the soil samples are presented in Table 1.

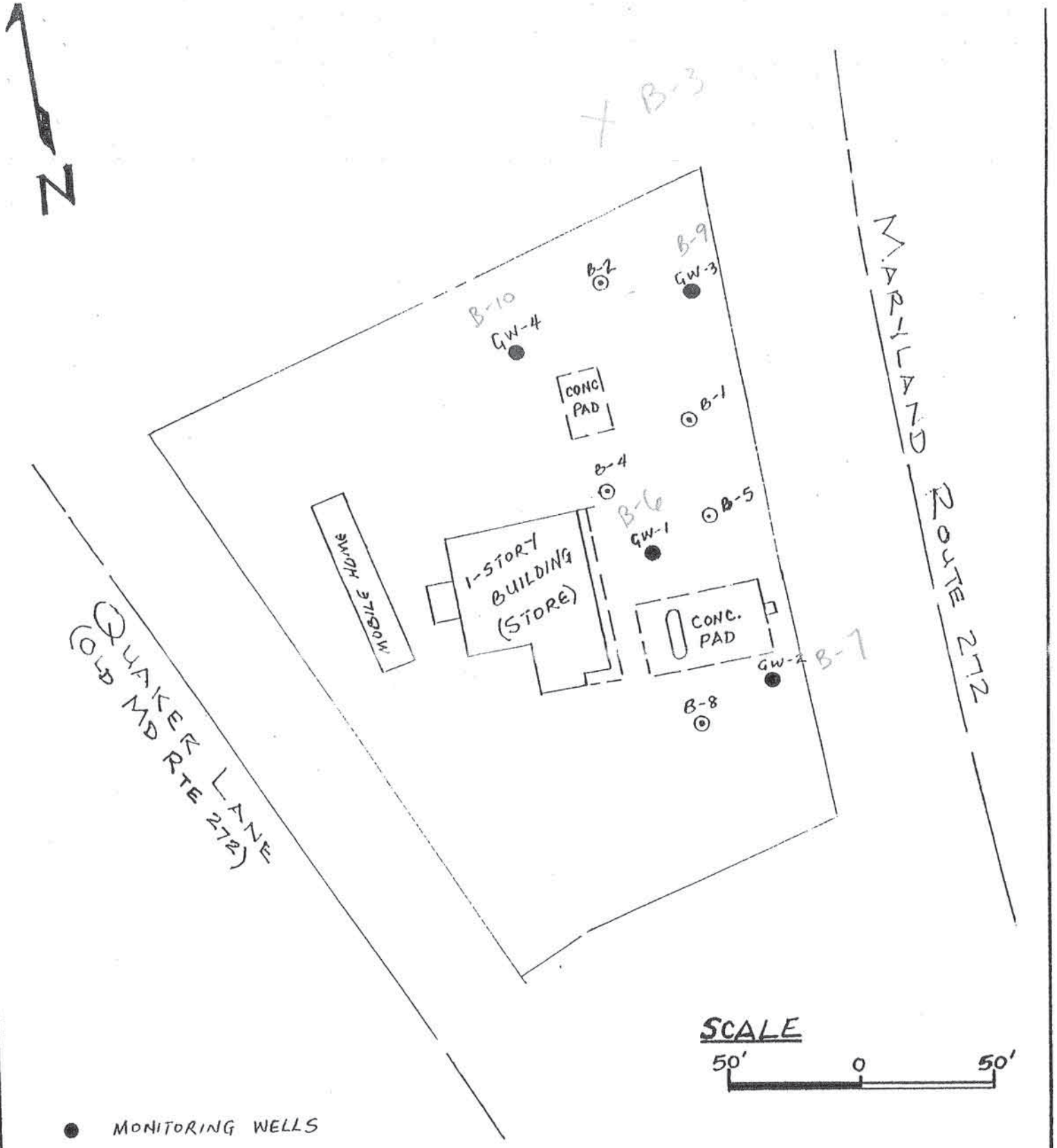


Figure 4: Borehole and Well Location Map.

TABLE 1: SOIL PID HEADSPACE READING

DEPTH	0-5'	5-10'	10-15'	15-20'	20-25'	25-30'	30-31'	
B-1	--	20	100	120	120	50		*
B-2	--	0	0	0	4	3	0	*
B-4	2	250	300	305	50	50	200	*
B-5	1	2.5	400	60	40	5	5	*
B-6 (GW-1)	15	15	150	100	20	2	2	*
B-7 (GW-2)	--	10	2	0	1	0	0	*
B-8	CLEAN							*
B-9 (GW-3)	15	450	500	150	50	10	--	*
B-10 (GW-4)	0	0	5	20	1	0	0	

* MAX PID READING IN PPM @ SPECIFIED INTERVALS

4.2 Well Installation

Four 4" diameter wells were installed at the site in the locations of borings B-6, B-7, B-9 and B-10. The wells GW-1, GW-2, GW-3 and GW-4, respectively are approximately 28 feet deep. The well assemblages consists of 4" diameter schedule 40 PVC casing and 10 foot-screen with 0.020 inch machine slotted openings. Figure 5 shows a typical construction detail of the monitoring wells.

Well 105 shows 19 FBG

The screen was set about 2 to 3 feet above the depth at which water was first encountered, in order to ensure detection of free product hydrocarbon and also in recognition of seasonal water table fluctuation. A sand pack was placed between the screen and the wall of the borehole to approximately 3 feet above the screen. A 1.5 to 2 foot-column of bentonite pellets was placed above the sand pack and the remaining section of the well annulus was grouted to the ground level with bentonite/cement mix. Protective lock covers attached to the casing top and flush mount manhole covers were placed on all wells. Appendix 2 shows the well construction details and drawings.

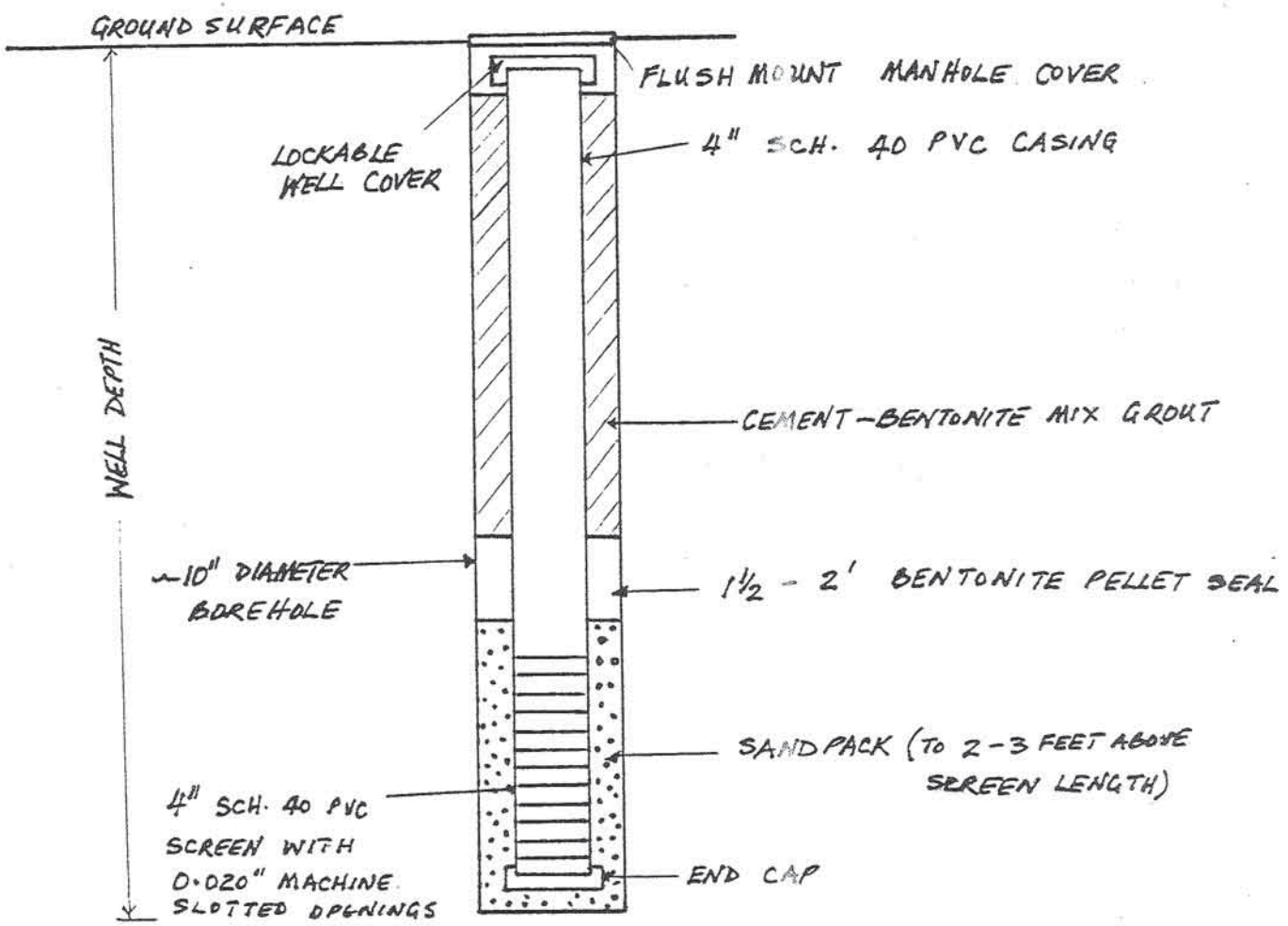


Figure 5: Typical Well Construction Diagram.

5.0 SITE CONDITIONS

5.1 Site Geology

According to the lithologic logs kept during the drilling, the site is underlain by light brown, medium dense silty clay with trace to appreciable amounts of sand and gravel (probable fill material in some parts) to a depth ranging from 9 to 27 feet. The silty clay material is then underlain by a dry weathered and decomposed mica schist ranging in depth from about 17 feet in boring B-4 to 24.5 feet at boring B-10 (GW-4). Damp to wet, weathered and decomposed mica schists continue to the total depths of drilling within the area (Table 2). The lithologic units encountered are in accordance with the general geology of the area as described earlier.

5.2 Hydrogeology

The main aquifers encountered exist within the weathered crystalline rocks of the Piedmont Physiographic province and are classified from literature as generally of poor primary porosity. These aquifers are believed to contribute very little to groundwater movement and storage.

TABLE 2: COMPOSITE LITHOLOGIC LOG FOR CALVERT PROJECT SITE

LITHOLOGY	DEPTH RANGE	THICKNESS RANGE
ASPHALT	3.5"- 5.0"	3.5" - 5.0"
SILTY CLAY W/TRACE TO SOME SAND AND GRAVEL	9' - 27'	9' - 27'
DRY WEATHERED MICA SCHIST	17' - 24.5'	8 - 15'
DAMP TO WET WEATHERED MICA SCHIST	> 29'	> 4'

Depth to water measurements were taken on July 15, 1991 from the four wells, GW-1, GW-2, GW-3 and GW-4, installed at the site. Groundwater depths ranged from 14.40 feet at well GW-3 to 15.27 feet at well GW-1. The estimated groundwater flow direction was to the southwest direction of the property. The static water table exhibited a relatively flat geometry with hydraulic gradient of about 0.2. Figure 6 shows the groundwater flow map based on the July 15, 1991 groundwater data.

5.3 Hydrocarbon Contamination Occurrence

The hydrocarbon contamination found at the site occurred both in liquid and dissolved hydrocarbon phases. The liquid phase occurred as residual hydrocarbon generally within the unsaturated zone and the capillary fringe, while the dissolved hydrocarbon occurred mainly within the groundwater. No free product was found floating on the groundwater. The occurrence of contaminant hydrocarbon was determined qualitatively on the field, using the Hnu photoionization detector (PID) unit to analyze the soil vapor and also by visual observation of soil samples. Based on the analysis, selected soil samples were sent to the laboratory for further analysis. Water samples from selected permanent and temporary monitoring wells were also analyzed in the laboratory as discussed in Section 6.0, below.

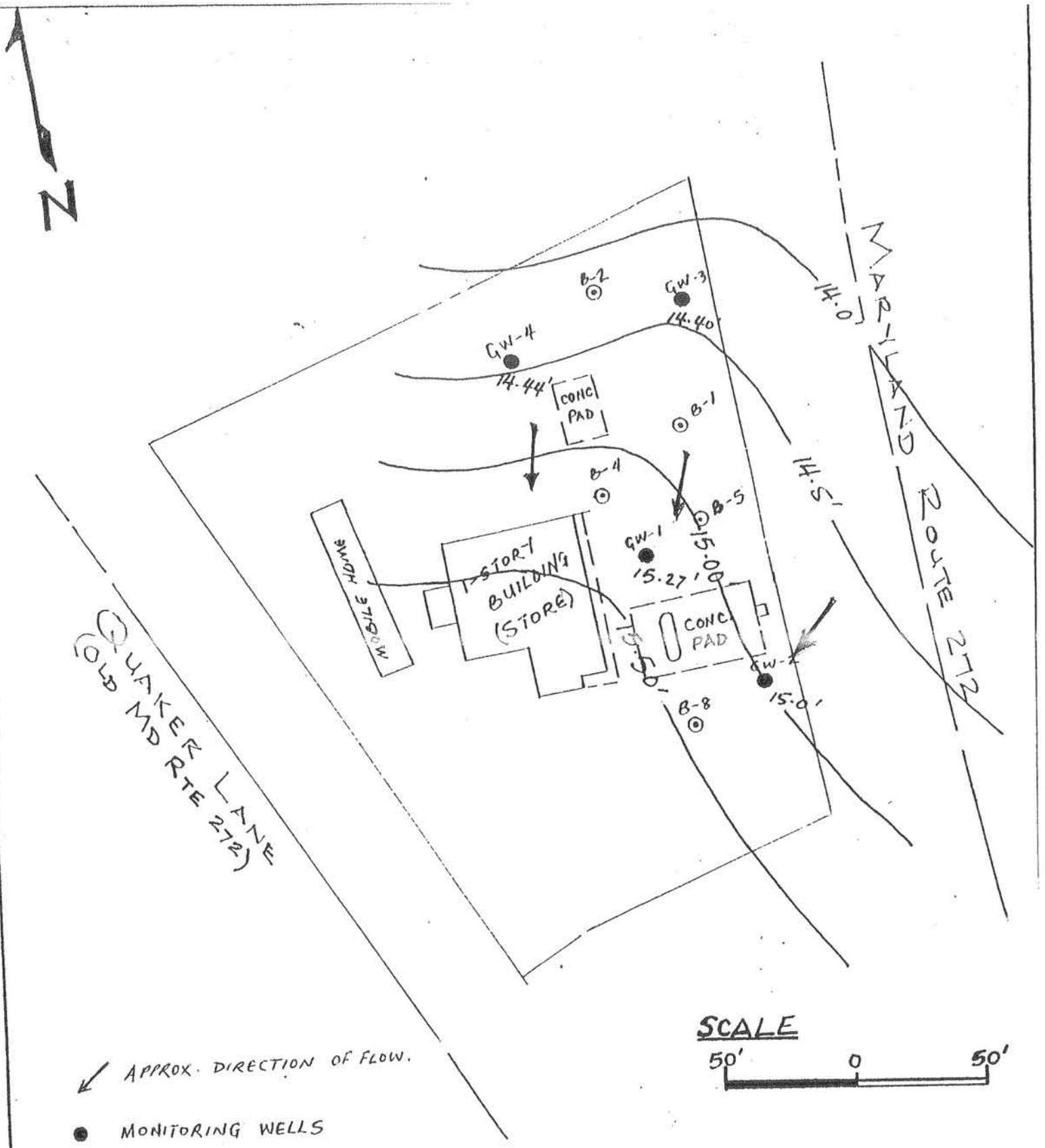


Figure 6: Groundwater Flow Map

6.0 LABORATORY RESULTS

Based on the field screening of the soil samples, selected samples were analyzed in the laboratory to further confirm the presence, type, distribution and magnitude of the hydrocarbon contaminants in the soil. A total of thirteen soil samples representing PID measurements ranging from 2 to 500 ppm was analyzed in the laboratory. A wide range in PID reading was utilized to allow the possibility of extrapolating field result and/or laboratory results to other areas of the site where only field or laboratory results may be available. The laboratory analyze of the soil and groundwater samples were done using EPA method 8015 modified for TPH and EPA method 8020 (with confirmation from EPA method 8240) for BTEX and naphthalene. Table 3 shows comparative results of field and laboratory analysis.

The soil samples from boring B-4 showed the highest level of hydrocarbon contamination with benzene, toluene, ethylbenzene and total xylene compounds in the following amounts:

Benzene	1,200 ppb
Toluene	30,000 ppb
Ethylbenzene	10,000 ppb
Total Xylene	53,000 ppb
Naphthalene	7,500 ppb

TABLE 3: COMPARATIVE FIELD LABORATORY ANALYTICAL DATA FOR SOIL

	(ppm) PID	(ppm) TPH	B	T	E	X	NAPHTHALENE
B-1 /S-3 (B-1)	120	6*	ND	24	3	22	46
B-1 /S-5	40	ND	28	67	6	36	13
B-4 /S-5	300	540*	1,200	30,000	10,000	53,000	7,500
B-4 /S-11	50	60*	85	680	260	1,700	940
B-5 /S-4	2.5	66*	16	79	76	710	840
B-5 /S-11	5	1*	18	89	12	72	29
B-6 /S-4 (GW-1)	150	50*	ND	16	ND	60	450
B-6 /S-6 (GW-1)	20	ND	11	21	2	15	38
B-7 /S-2 (GW-2)	2	ND	ND	6	ND	6	ND
B-9 /S-5 (GW-3)	450	6*	ND	ND	3	24	210
B-9 /S-7 (GW-3)	500	110*	ND	53	240	2,100	3,100
B-9/S-12 (GW-3)	10	ND	ND	8	2	17	51
B10 /S-4 (GW-4)	20	ND	ND	7	ND	11	3

* GASOLINE CONCENTRATION IN PPM

BTEX & NAPHTHALENE CONCENTRATION IN PPB

Six groundwater samples were also analyzed from the monitoring wells GW-1 through GW-4 and the two temporary wells at borings B-4 and B-5. These samples were analyzed for TPH, BTEX and naphthalene. The results of analysis are summarized in Table 4. See also Appendix 3 for full laboratory results.

The benzene concentration levels in the groundwater ranged from 41 to 35,000 ppb. Other pollutants, ranged from 2 to 2000 ppb for ethylbenzene, 8 to 1,100 ppb for xylene, 23 to 36,000 ppb for toluene and 2 to 620 ppb for naphthalene. The TPH/gasoline concentration in the groundwater ranged from 1.0 to 140 ppm.

7.0 SUMMARY OF FINDINGS

The results of our investigation at the Calvert Country Store facility showed that the soils and groundwater are impacted by liquid - and dissolved - phased hydrocarbons. The levels of contamination vary from one location to the other within the area of investigation. Generally, areas in close proximity and that are hydrogeologically down-gradient to the subsurface storage tanks were found to be most impacted both in soils and groundwater. The magnitude of contamination reduced with distance from these tanks in both upgradient and downgradient directions.

TABLE 4: CONCENTRATION/DISTRIBUTION OF HYDROCARBON CONTAMINANTS IN GROUNDWATER SAMPLES

	TPH	B	T	E	X	NAPHTHALENE
B-4	140*	35,000	36,000	2,000	11,000	620
B-5	1*	320	170	22	120	15
GW-1 (MW-6)	4*	380	780	ND	1,000	13
GW-2 (MW-7)	ND	41	19	2	8	2
GW-3 (B-9)	11*	2,100	960	97	1,300	130
GW-4 (MW-10)	ND	ND	23	7	36	9

* Gasoline Concentration in ppm.

Concentration of BTEX and Naphthalene in ppb.

Based on the interpretation of the laboratory analytical results, the lateral extents of the impact of hydrocarbon contamination in the soil and the groundwater were defined. Generally, groundwater contamination by benzene and naphthalene extends to about two-thirds of the site. Readings of benzene concentration exceeded the regulated maximum concentration limit (based on EPA MCL of 0.5 ppb of benzene) in drinking water. See Figures 7 and 8 for the iso-concentration maps of benzene and naphthalene. Liquid-phased hydrocarbon was found less widespread in the groundwater. The approximate outer limit of impact by dispersed liquid gasoline is represented by the 0 ppm contour line on Figure 9.

The lateral extent of soil contamination by hydrocarbon is generally represented by the TPH/Gasoline iso-concentration map in Figure 10. Liquid gasoline contamination extends laterally from the north eastern corner of the convenience store to well GW-3 on the SW-NE axis. The center of the plume is represented by the 500 ppm gasoline-limit. Sharper gradient of iso-concentration contours noticed along the SE-NW axis implies that the preferred flow direction of the liquid contaminants will probably be towards the SW-NE axis. This approximately coincides with the flow direction of the groundwater in the area.

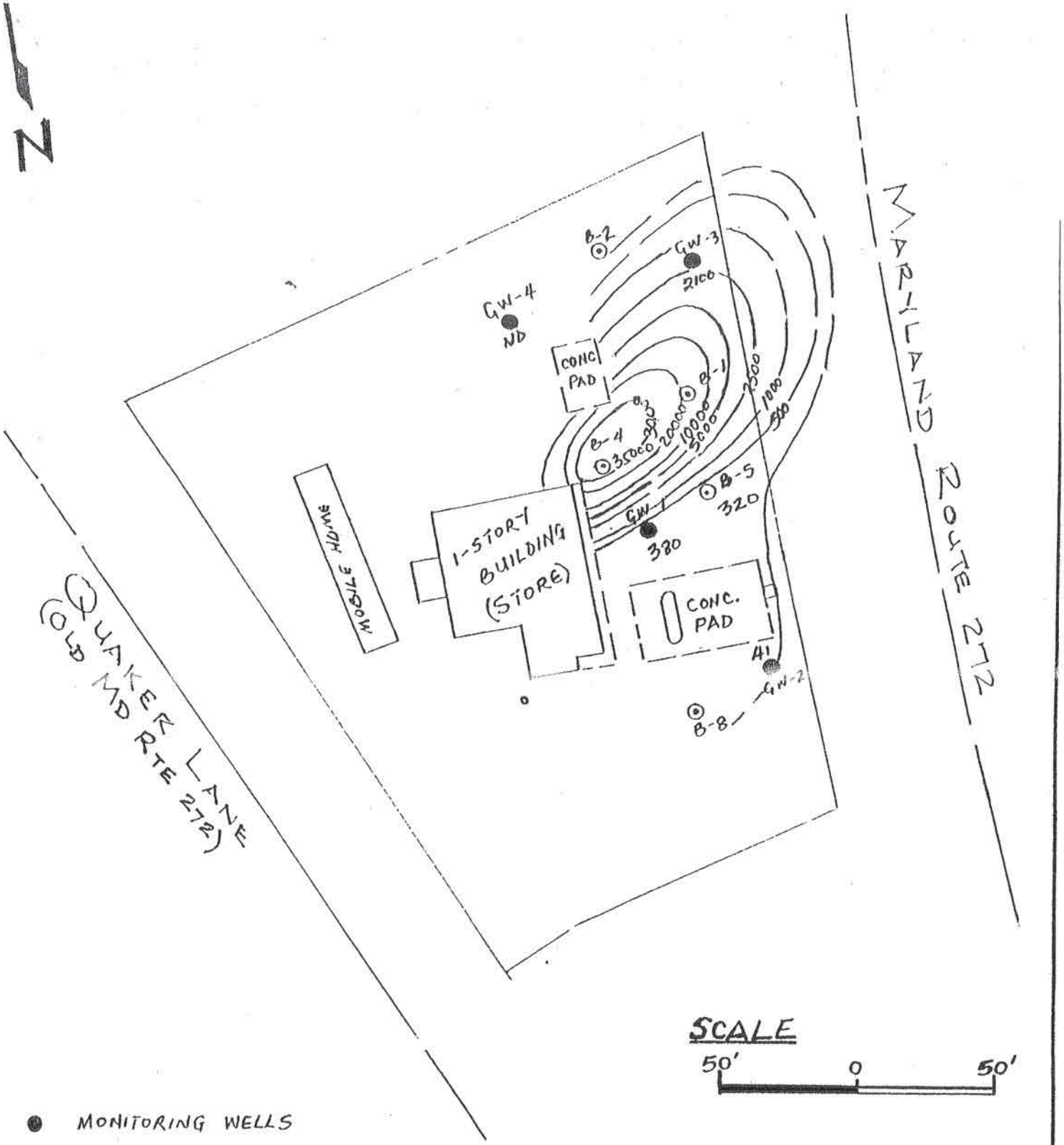


Figure 7: Iso-concentration Map For Benzene in Groundwater.

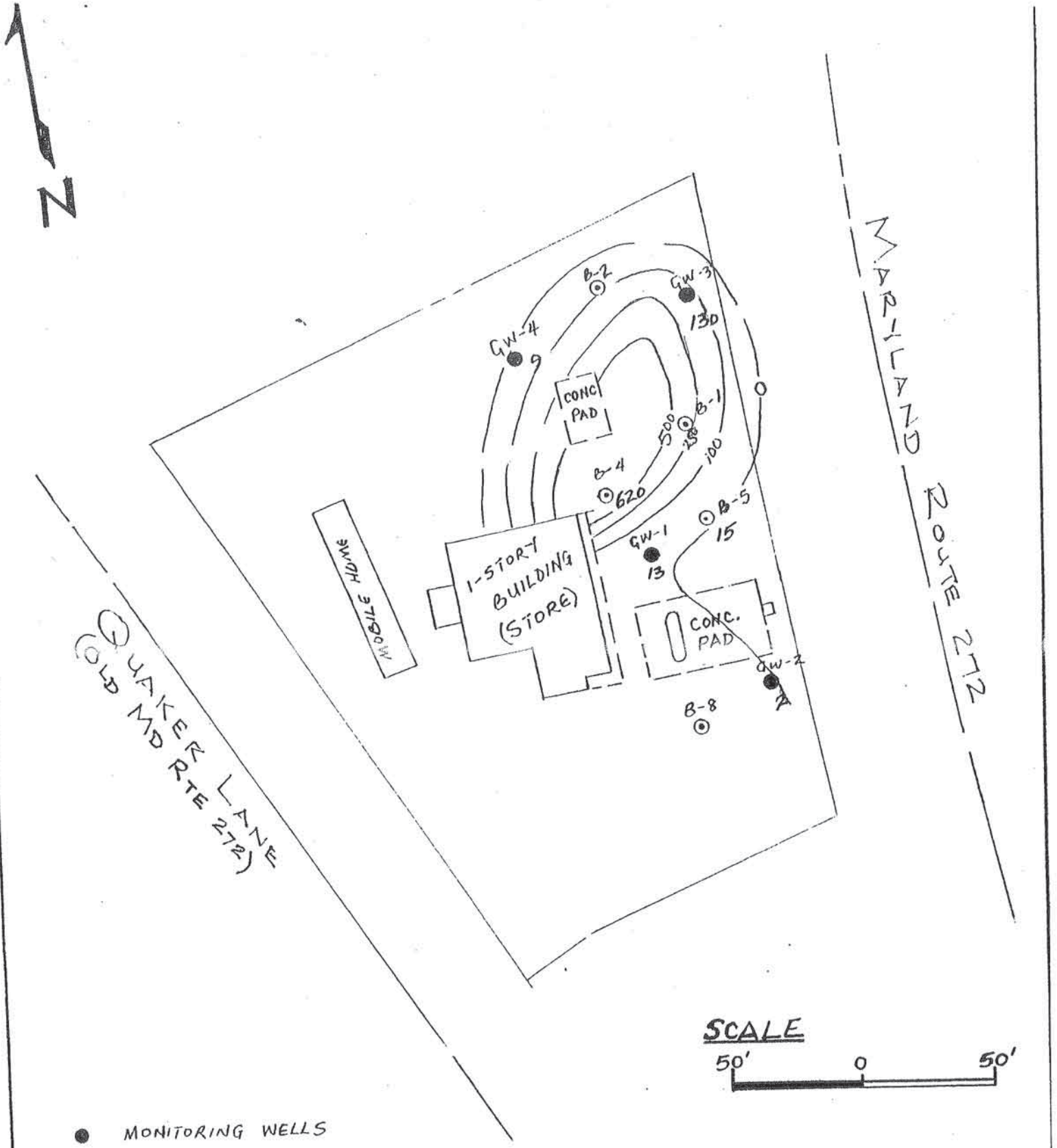


Figure 8: Iso-concentration Map For Naphthalene in Groundwater.

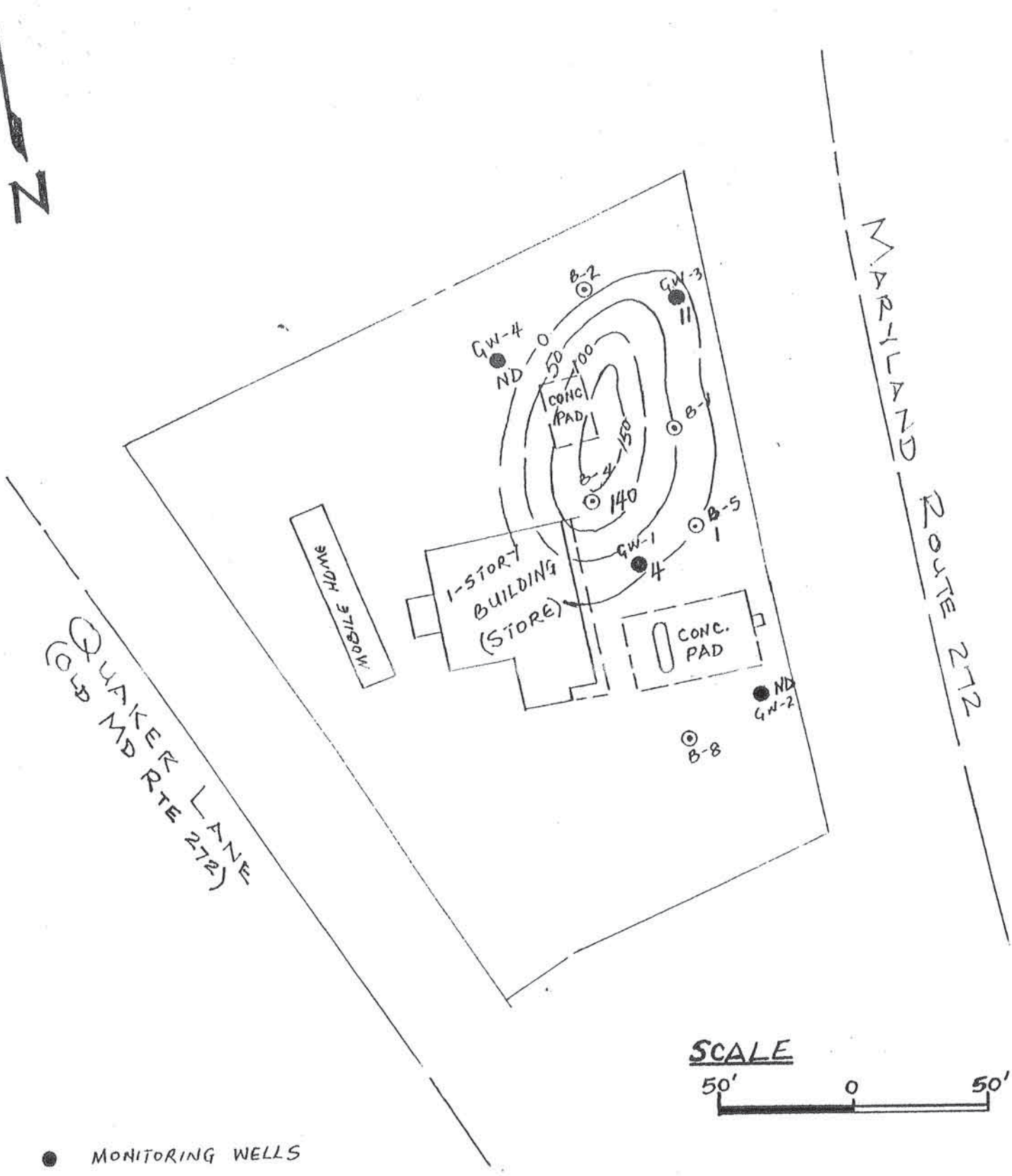


Figure 9: Isoconcentration Map For Gasoline in Groundwater.

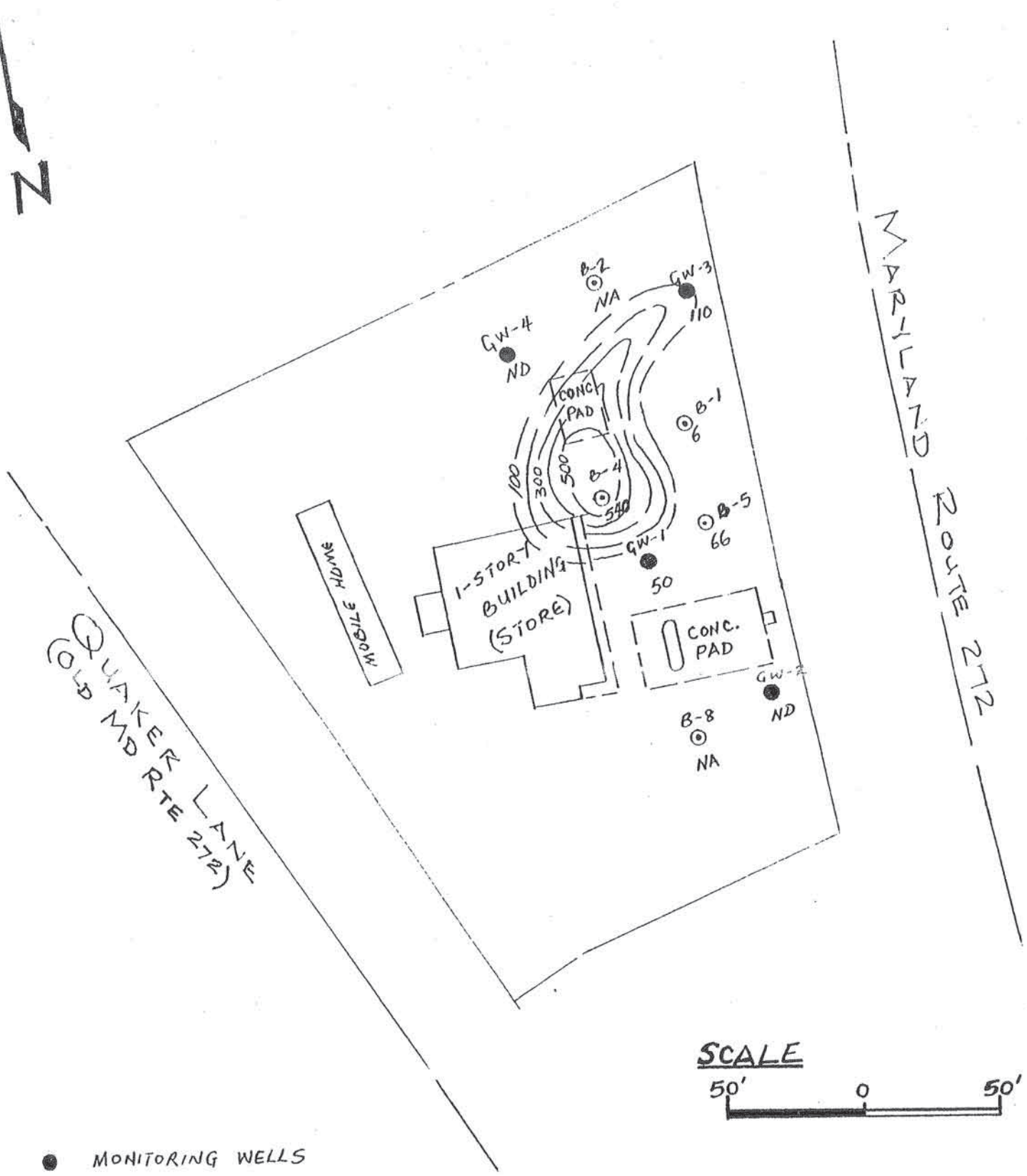


Figure 10: Iso-concentration Map For Gasoline in Soil.

8.0 RECOMMENDATIONS

Based on our findings from the site investigation, the following actions are recommended to mitigate the potential environmental impact.

1. A comprehensive risk assessment of the apparent contaminantion should be carried out. This assessment should include, but not limited to identifying potential receptors of contamination, estimating the potential for contaminants migration and impact on the environment.

2. A pump test should be performed to evaluate the hydrogeologic parameters necessary to determine the travel time and the extent of contaminant transport.

3. A vacuum extraction test should be performed to determine the feasibility of soil gas venting at the site.

4. A remediation program will be designed based on the outcome of the pump test, vacuum extraction test and risk analysis to effectively clean-up the contaminated soil and groundwater.

APPENDIX 1

BORING LOGS

PROJECT: HAAB - CALVERT

LOCATION: Route 272, Calvert County

GEOMATRIX, INC. PROJECT NO.: GM298-191

BORING: B-1

DATE: 06/19/91

BORING REPORT

Depth From	Depth To	Soil Description	Sample No.	Sample From	Sample To	Blows/6" Penetration	Rec/ Att.
0	4"	Asphalt				/	
5'		Light brown, m/dense silty clay w/	1	5	6.5	2 3 5	18
	6.5'	trace sand; PID = 20ppm					/
							/
10'		Highly weathered, decomposed schist;	2	10	11.5	3 4 5	18
	11.5'	PID = 100ppm					/
15'		Highly weathered, decomposed schist;	3	15	16.5	2 2 4	18
	16.5'	PID = 120ppm					/
20'		Weathered, consolidated, medium to	4	20	21.5	3 4 7	18
		coarse grained mica schist w/trace					/
	21.5'	silty clay; PID = 120ppm					/
23'		Wet, brown, silty clay to med. grain	5	23	25	5 6 11 12	24
	25'	sand; PID = 40ppm					/
25'		Light brown silty to clayey sand,	6	25	27	7 9 10 14	24

Water 23' Caved Sheet No. 1 of 2

PROJECT: S.C. HAAB - CALVERT

BORING: B-1

LOCATION: Route 272, Calvert County

DATE: 06/19/91

GEOMATRIX, INC. PROJECT NO.: GM298-191

BORING REPORT

Depth From	Depth To	Soil Description	Sample No.	Sample From	Sample To	Blows/6" Penetration	Rec/ Att.
	27'	PID = 50ppm					/
27'		Light brown, silty to clayey sand,	7	27	29	5 7 8 12	24
	29'	PID = 10ppm					/
							/
							/
							/
							/
							/
							/
							/
							/
							/
							/
							/

Water 23' Caved

PROJECT: HAAB - CALVERT

BORING: B-2

LOCATION: Route 272, Calvert County

DATE: 06/19/91

GEOMATRIX, INC. PROJECT NO.: GM298-191

BORING REPORT

Depth From	Depth To	Soil Description	Sample No.	Sample From	Sample To	Blows/6" Penetration				Rec/ Att.
0	5'	Grass root and brown top soil								/
5'		Brown dense silty clay and cobbly to	1	5	6.5	3	10	8		18
	6.5'	medium grained sand; PID = 0ppm								/
10'		Brown, dense silty to sandy clay;	2	10	11.5	3	4	5		18
	11.5'	PID = 0ppm								/
15'		Brown, dense silty to sandy clay;	3	15	16.5	4	5	9		18
	16.5'	PID = 0ppm								/
20'		Brown, dense silty to sandy clay;	4	20	21.5	4	6	7		18
	21.5'	PID = 4ppm								/
23'		Brown, dense silty to sandy clay;	5	23	25	4	5	8	13	24
	25'	PID = 3ppm								/
25'		Brown, dense silty to sandy clay;	6	25	27	6	7	8	12	24
	27'	PID = 1ppm								/
27'		Highly weathered and decomposed	7	27	29	3	12	7	33	24

Water ~25' Caved Sheet No. 1 of 2

PROJECT: S.C. HAAB - CALVERT

BORING: B-2

LOCATION: Route 272, Calvert County

DATE: 06/19/91

GEOMATRIX, INC. PROJECT NO.: GM298-191

BORING REPORT

Depth From	Depth To	Soil Description	Sample No.	Sample From	Sample To	Blows/6" Penetration	Rec/ Att.
	29'	schist; PID = 0ppm					/
29'		Highly weathered and decomposed	8	29	31	9 10 16 20	24
	31'	PID = 0ppm					/
							/
							/
							/
							/
							/
							/
							/
							/
							/
							/
							/

Water ~25' Caved

PROJECT: S.C. HAAB - CALVERT

BORING: B-4

LOCATION: Route 272, Calvert County

DATE: 06/17/91

GEOMATRIX, INC. PROJECT NO.: GM298-191

BORING REPORT

Depth From	Depth To	Soil Description	Sample No.	Sample From	Sample To	Blows/6" Penetration	Rec/ Att.
0	4"	Asphalt					/
3'		Brown dense, dry silty clay w/trace	1	3	5	5 7 11 10	24
	5'	gravel; PID = 2ppm					/
5'		Brown dense, dry silty clay; PID	2	5	7	3 3 4 5	24/
	7'	= 30ppm					/
7'		Yellowish brown, silty clay; PID =	3	7	9	3 4 5 4	24
	9'	250ppm					/
9'		Yellowish brown, silty clay; PID =	4	9	11	3 3 3 5	24
	11'	300ppm					/
11'		Yellowish brown, highly weathered and	5	11	13	4 4 4 4	24
	13'	decomposed schist; PID = 300ppm					/
13'		Yellowish brown, highly weathered and	6	13	15	3 4 4 5	24
	15'	decomposed schist; PID = 300ppm					/
15'		Yellowish brown, highly weathered	7	15	17	2 3 2 4	24

Water 27' Caved 25' Sheet No. 1 of 2

PROJECT: S.C. HAAB - CALVERT

BORING: B-4

LOCATION: Route 272, Calvert County

DATE: 06/17/91

GEOMATRIX, INC. PROJECT NO.: GM298-191

BORING REPORT

Depth From	Depth To	Soil Description	Sample No.	Sample From	Sample To	Blows/6" Penetration	Rec/ Att.
	17'	and decomposed schist; PID = 300ppm				/	
17'		Damp to wet yellowish brown, highly	8	17	19	2 2 3 5	24
		weathered, decomposed schist, PID				/	
	19'	= 300ppm				/	
19'		Damp yellowish brown, highly weathered	9	19	21	1 2 3 5	24
	21'	decomposed schist; PID = 305ppm				/	
21'		Damp yellowish brown, highly weathered	10	21	23	2 3 4 5	24
	23'	decomposed schist; PID = 50ppm				/	
25'		Wet decomposed and highly weathered	11	25	27	3 3 4	24
	27'	schist; PID = 50ppm				/	
29'		Wet decomposed/highly weathered schist	12	29	31	4 6 12 5	24
	31'	PID = 200ppm				/	
		B.O.T.B. 33'				/	
		Water 21.5' after 1 hour				/	

Water 27' Caved 25' Sheet No. 2 of 2

PROJECT: S.C. HAAB - CALVERT BORING: B-5

LOCATION: Route 272, Calvert County DATE: 06/14/91

GEOMATRIX, INC. PROJECT NO.: GM298-191

BORING REPORT

Depth From	Depth To	Soil Description	Sample No.	Sample From	Sample To	Blows/6" Penetration	Rec/ Att.
0	3.5"	Asphalt				/	
1.5'		Yellowish brown m/dense silty clay;	1	1.5	3	3 4 6	18
	3.0'	PID = 1ppm				/	
3.5'		Yellowish brown m/dense silty clay	2	3.5	5.0	5 7 6	18
	5.0'	w/some coarse to cobbly sand;PID=1ppm				/	
5'		Yellowish brown to greyish silty clay	3	5	6.5	4 5 7	18
	6.5'	PID = 2.5ppm	4	10	11.5	3 3 5	/
10'		Yellowish brown silty clay to weath-				/	
		ered mica schist (sapprolitic)				/	
	11.5'	PID = 400ppm				/	
12'		Weathered and decomposed mica schist	5	12	14	3 3 8 7	24
	14'	PID = 50ppm				/	
14'		Weathered, decomposed mica schist;	6	14	16	3 3 5 6	24
	16'	PID = 60ppm				/	

Water ~29' Caved Sheet No. 1 of 2

PROJECT: S.C. HAAB - CALVERT BORING: B-5

LOCATION: Route 272, Calvert County DATE: 06/14/91

GEOMATRIX, INC. PROJECT NO.: GM298-191

BORING REPORT

Depth From	Depth To	Soil Description	Sample No.	Sample From	Sample To	Blows/6" Penetration				Rec/ Att.
16'		Weathered, decomposed mica schist;	7	16	18	2	3	5	9	24
	18'	PID = 50ppm								/
18'		Weathered damp, decomposed mica	8	18	20	3	3	5	9	24
	20'	schist; PID = 50ppm								/
20'		Weathered, damp decomposed mica	9	20	22	4	4	7	9	24
	22'	schist; PID = 40ppm								/
22'	24'	Weathered mica schist (damp) PID=5ppm	10	22	24	3	5	7	12	24
25'	27'	Weathered mica schist (damp) PID=5ppm	11	25	27	3	5	8	8	24
30'	32'	Wet, weathered mica schist PID=5ppm	12	30	32	3	7	11	17	/
										/
										/
										/
										/
										/

Water ~29' Caved Sheet No. 2 of 2

PROJECT: S.C. HAAB - CALVERT

LOCATION: Route 272, Calvert County

GEOMATRIX, INC. PROJECT NO.: GM298-191

BORING: B-6 (GW-1)

DATE: 06/18/91

BORING REPORT

Depth From	Depth To	Soil Description	Sample No.	Sample From	Sample To	Blows/6" Penetration				Rec/ Att.
0	4"	Asphalt								/
1'	3'	Damp to dry dense silty clay	1	1	3	7	6	7	10	24
3'		Dry, brown silty clay, w/some cobbles	2	3	5	6	10	11	10	24
	5'	PID = 15ppm								/
5'	7'	Dry, brown silty clay; PID = 15ppm	3	5	7	4	6	8	8	24
10'	12'	Dry, brown silty clay; PID = 150ppm	4	10	12	2	3	4	6	24
15'		Damp, brown, weathered, decomposed	5	15	17	6	5	5	8	24
	17'	schist w/fine sand grains; PID = 100ppm								/
20'		Damp, brown, weathered, decomposed	6	20	22	1	4	5	8	24
	22'	schist; PID = 20ppm								/
25'		Wet, brown, weathered, decomposed	7	25	27	5	5	9	9	24
	27'	schist; PID = 2ppm	8	30	32	7	7	9	15	24
30'		Wet, brown, weathered, decomposed								/
	32'	schist; PID = 2ppm								/

Water 18.6' after 30 mins. Caved

Sheet No. 1 of 1

PROJECT: S.C. HAAB - CALVERT

LOCATION: Route 272, Calvert County

GEOMATRIX, INC. PROJECT NO.: GM298-191

BORING: B-7 (GW-2)

DATE: 06/14/91

BORING REPORT

Depth From	Depth To	Soil Description	Sample No.	Sample From	Sample To	Blows/6" Penetration	Rec/ Att.
0	4"	Asphalt				/	
5'		Yellowish brown dry, m/dense silty	1	5	6.5	5 7 6	18
	6.5'	clay w/some sand and gravel;PID=10ppm (Fill)				/	
10'		Yellowish brown, dry m/dense silty	2	10	11.5	3 3 6	18
		(PID = 10ppm to 10.3') to greyish				/	
		micaeous, highly weathered and decom-				/	
		posed metamorphic rock; PID = 2ppm				/	
	11.5'	(sapprolitic)				/	
15'		Golden, brown dry highly weathered/	3	15	16.5	4 3 5	18
		decomposed metamorphic rocks w/mica				/	
	16.5'	and quart vein; PID = 0ppm				/	
20'		Golden brown, dry highly weathered/	4	20	21.5	3 9 7	18
		decomposed metamorphic rocks w/mica				/	
	21.5'	quart vein; PID = 1ppm				/	

Water 25.0' Caved

PROJECT: S.C. HAAB - CALVERT BORING: B-7 (GW-2)

LOCATION: Route 272, Calvert County DATE: 06/14/91

GEOMATRIX, INC. PROJECT NO.: GM298-191

BORING REPORT

Depth From	Depth To	Soil Description	Sample No.	Sample From	Sample To	Blows/6" Penetration				Rec/ Att.
25'		Golden brown, dry, highly weathered/	5	25	26.5	3	4	5		18
		decomposed metamorphic rocks w/mica								/
	26.5'	and quart vein; PID = oppm								/
30'		Golden brown, dry, highly weathered/	6	30	31.5	2	12	15		18
		decomposed metamorphic rocks w/mica								/
	31.5'	and quart vein, PID = 0ppm								/
										/
										/
										/
										/
										/
										/
										/
										/

Water 25' Caved Sheet No. 2 of 2

PROJECT: S.C. HAAB - CALVERT

LOCATION: Route 272, Calvert County

GEOMATRIX, INC. PROJECT NO.: GM298-191

BORING: B-8

DATE: 06/14/91

BORING REPORT

Depth From	Depth To	Soil Description	Sample No.	Sample From	Sample To	Blows/6" Penetration	Rec/ Att.
0	5"	Asphalt				/	
1		Brown, loose gravel to brown dry	1	1	3	3 7 5 5	24
	3'	silty clay PID = 0ppm (Fill)				/	
5'		Yellowish brown, dry medium dense	2	5	7	6 7 10 11	24
	7'	clay w/trace silt; PID = 1ppm (Fill)				/	
7'		Brown, loose gravel to brown dry	3	10	11.5	3 3 3	18
	10'	silty clay; PID = 0ppm				/	
10'		Yellowish brown dry med/dense clay to				/	
		greyish brown clayey silt; PID = 0ppm				/	
	11.5'	(sapprolitic)				/	
15'		Brown highly weathered, decomposed	4	15	16.5	4 3 5	18
		metamorphosed rocks (sapprolite);				/	
	16.5'	PID = oppm				/	
20'		Brown highly weathered, decomposed	5	20	21.5	2 4 6	18

Water 30' Caved Sheet No. 1 of 2

PROJECT: S.C. HAAB - CALVERT BORING: B-8

LOCATION: Route 272, Calvert County DATE: 06/14/91

GEOMATRIX, INC. PROJECT NO.: GM298-191

BORING REPORT

Depth From	Depth To	Soil Description	Sample No.	Sample From	Sample To	Blows/6" Penetration	Rec/ Att.
		metamorphosed rocks (sapprolite)					/
	21.5'	PID = 0ppm					/
							/
25'		Wet to damp, brown sapprolite	6	25	26.5	4 6 8	18
	26.5'	PID = 1ppm					/
30'		Wet to damp, brown sapprolite	7	30	31.5	5 8 13	18
	31.5'	PID = 1ppm					/
							/
		Water encountered after 1 hr. @ 19.5'					/
							/
							/
							/
							/
							/

Water 30.5' Caved Sheet No. 2 of 2

PROJECT: S.C. HAAB - CALVERT

BORING: B-9 (GW-3)

LOCATION: Route 272, Calvert County

DATE: 06/13/91

GEOMATRIX, INC. PROJECT NO.: GM298-191

BORING REPORT

Depth From	Depth To	Soil Description	Sample No.	Sample From	Sample To	Blows/6" Penetration	Rec/ Att.
0	4"	Asphalt				/	
4"		Brown, dry, slightly dense silty	1	1	3	6 5 6 8	24
	3'	clay; PID = 4ppm				/	
3'		Brown, dry silty clay w/some cobbles;	2	3	5	4 4 7 10	24
	5'	PID = 4ppm				/	
5'		L/brown to yellowish silty clay w/	3	5	7	3 9 4 5	24
	7'	some med. grained sand; PID = 5ppm				/	
7'		L/brown to yellowish clayey silt;	4	7	9	1 2 3 6	24
	9'	PID = 18ppm				/	
9'		L/brown to black weathered, decomposed	5	9	11	3 4 5 5	24
		schists w/clayey silt and trace sand;	6	11	13	2 3 5 6	24
	11'	PID = 450ppm				/	
11'		L/brown to black weathered, decomposed				/	
		schists w/clayey silt and trace sand				/	

Water 25.0' Caved

PROJECT: S.C. HAAB - CALVERT

LOCATION: Route 272, Calvert County

GEOMATRIX, INC. PROJECT NO.: GM298-191

BORING: B-9 (GW-3)

DATE: 06/13/91

BORING REPORT

Depth From	Depth To	Soil Description	Sample No.	Sample From	Sample To	Blows/6" Penetration	Rec/ Att.
	13'	PID = 450ppm					/
13'		L/brown to black weathered, decomposed	7	13	15	2 3 5 7	24
		schists w/clayey silt and trace sand;					/
	15'	PID = 500ppm					/
15'		L/brown to black weathered, decomposed					/
		schists w/clayey silt and trace sand;	8	15	17	3 4 4 7	24
	17'	PID = 150ppm					/
17'		Brown to v/dark brown silty clay;	9	17	19	2 4 6 8	24
	19'	PID = 100ppm					/
19'		Brown, dry, slightly dense silty	10	19	21	3 4 6 9	24
	21'	clay; PID = 50ppm					/
21'		Brown, damp, slightly dense silty	11	21	23	2 6 7 8	24
	23'	clay; PID = 20ppm					/
23'		Brown to greenish damp clayey silt to	12	23	25	3 9 17 16	24

Water 25.0' Caved

PROJECT: S.C. HAAB - CALVERT

BORING: B-9 (GW-3)

LOCATION: Route 272, Calvert County

DATE: 06/14/91

GEOMATRIX, INC. PROJECT NO.: GM298-191

BORING REPORT

Depth From	Depth To	Soil Description	Sample No.	Sample From	Sample To	Blows/6"-Penetration	Rec/Att.
	25'	wet, weathered crystalline rocks;					/
		PID = 10ppm					/
28'		Wet, weathered schist - clayey,	13	28	30	3 4 4 10	24
	30'	and sandy, PID = 10ppm					/
							/
							/
							/
							/
							/
							/
							/
							/
							/
							/

Water 25.0' Caved Sheet No. 3 of 3

PROJECT: S.C. HAAB - CALVERT

LOCATION: Route 272, Calvert County

GEOMATRIX, INC. PROJECT NO.: GM298-191

BORING: B-10 (GW-4)

DATE: 06/17/91

BORING REPORT

Depth From	Depth To	Soil Description	Sample No.	Sample From	Sample To	Blows/6" Penetration	Rec/ Att.
0	0.05'	Grass root and yellowish brown soil				/	
3'		Light brown, med. dense silty clay	1	3	5	6 9 12	18
	5'	w/trace sand; PID = 0ppm				/	
5'		Lt/brown med. dense silty clay w/	2	5	7	4 11 8 8	24
	7'	trace sand and cobble; PID = 0ppm				/	
10'	12'	Brown silty to sandy, d/clay PID=5ppm	3	10	12	4 3 3 7	24
15'		Brownish to yellowish weathered,	4	15	17	2 2 3 4	24
	17'	decomposed schist PID = 20ppm				/	
17'		Brownish to yellowish weathered,	5	17	19	3 3 4 8	24
	19'	decomposed schist, PID = 3ppm				/	
20'		Brown weathered, decomposed schist	6	20	22	2 3 5 9	24
	22'	with more mica; PID 0 ppm				/	
25'	27'	Wet weathered schist; 0ppm	7	25	27	2 6 9 13	24
30'	32'	Wet weathered schist; 0ppm	8	30	32	7 8 13 10	24

Water 24.5' Caved Sheet No. 1 of 2

PROJECT: S.C. HAAB - CALVERT

LOCATION: Route 272, Calvert County

GEOMATRIX, INC. PROJECT NO.: GM298-191

BORING: B-10 (GW-4)

DATE: 06/17/91

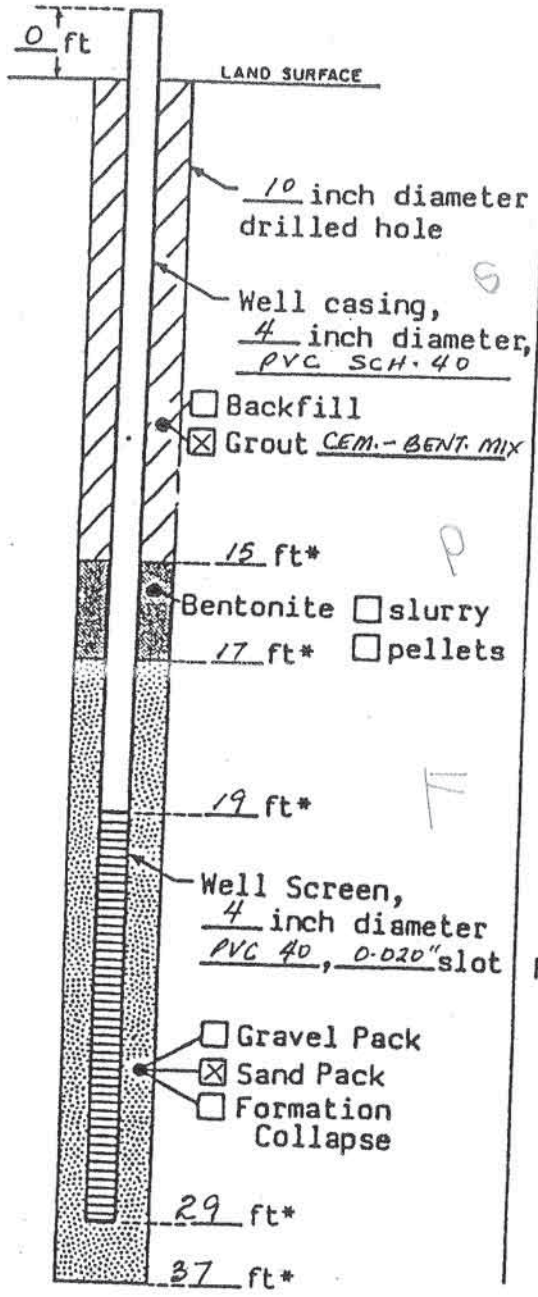
BORING REPORT

Depth From	Depth To	Soil Description	Sample No.	Sample From	Sample To	Blows/6" Penetration				Rec/ Att.
35'	37'	Wet weathered schist, 0ppm	9	35	37	5	6	14	19	24
										/
										/
										/
										/
										/
										/
										/
										/
										/
										/
										/
										/
										/

Water 24.5' Caved Sheet No. 2 of 2

GEOMATRIX, INC.

WELL CONSTRUCTION LOG



Project HAAB - CALVERT Well GW-4
Town/City CALVERT
County CECIL State MD
Topographic Setting UNDULATING LOWLAND
Land-Surface Elevation and Datum _____ feet ☐ surveyed ☐ estimated
Installation Date 6/17/91
Drilling Method HOLLOW STEM AUGER
Drilling Contractor GEOMATRIX
Type of Drilling Fluid —
Development Technique(s) and Date(s)
PUMPING

Water Lost During Drilling — gallons
Water Removed During Development _____ gallons
Static Depth to Water 14.44 feet below M.P.
Pumping Depth to Water — feet below M.P.
Pumping Duration _____ hours
Yield — gpm Date _____
Specific Capacity _____ gpm/ft
Well Purpose MONITORING WELL

Remarks

Measuring Point is Top of Well Casing Unless Otherwise Noted.

*Depth Below Land Surface

Prepared by MICHAEL O. DIRAN

APPENDIX 3

LABORATORY ANALYTICAL DATA

BTEX Analysis with Naphthalene
EPA Method 8020 With Confirmation From EPA Method 8240

Client: Geomatrix
Client Sample ID: B-9
SPECTRALYTIX Sample ID: GEM 91-009-9106726 Sample Type: water
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Benzene	2100	1	µg/L
Toluene	960	1	µg/L
Ethylbenzene	97	1	µg/L
Total Xylenes	1300	1	µg/L
Naphthalene	130	1	µg/L

Units of µg/L are equivalent to ppb.
ND = Compound not detected at or above the listed detection limit.

Total Petroleum Hydrocarbons
GC/FID - EPA Method 8015 Modified

Client: Geomatrix
Client Sample ID: B-5
SPECTRALYTIX Sample ID: GEM 91-009-9106727 Sample Type: Water
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Gasoline	1	1.0	mg/L

ND = Compound not detected at or above the listed detection limit.

BTEX Analysis with Naphthalene
EPA Method 8020 With Confirmation From EPA Method 8240

Client: Geomatrix
Client Sample ID: B-5
SPECTRALYTIX Sample ID: GEM 91-009-9106727 Sample Type: water
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Benzene	320	1	µg/L
Toluene	170	1	µg/L
Ethylbenzene	22	1	µg/L
Total Xylenes	120	1	µg/L
Naphthalene	15	1	µg/L

Units of µg/L are equivalent to ppb.
ND = Compound not detected at or above the listed detection limit.

Total Petroleum Hydrocarbons
GC/FID - EPA Method 8015 Modified

Client: Geomatrix
Client Sample ID: MW-10
SPECTRALYTIX Sample ID: GEM 91-009-9106728 Sample Type: Water
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Total Petroleum Hydrocarbons	ND	1.0	mg/L

ND = Compound not detected at or above the listed detection limit.

BTEX Analysis with Naphthalene
EPA Method 8020 With Confirmation From EPA Method 8240

Client: Geomatrix
Client Sample ID: MW-10
SPECTRALYTIX Sample ID: GEM 91-009-9106728 Sample Type: water
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Benzene	ND	1	µg/L
Toluene	23	1	µg/L
Ethylbenzene	7	1	µg/L
Total Xylenes	36	1	µg/L
Naphthalene	9	1	µg/L

Units of µg/L are equivalent to ppb.
ND = Compound not detected at or above the listed detection limit.

Total Petroleum Hydrocarbons
GC/FID - EPA Method 8015 Modified

Client: Geomatrix
Client Sample ID: MW-6
SPECTRALYTIX Sample ID: GEM 91-009-9106730 Sample Type: Water
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Gasoline	4	1.0	mg/L

ND = Compound not detected at or above the listed detection limit.

BTEX Analysis with Naphthalene
EPA Method 8020 With Confirmation From EPA Method 8240

Client: Geomatrix
Client Sample ID: MW-6
SPECTRALYTIX Sample ID: GEM 91-009-9106730 Sample Type: water
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Benzene	380	1	µg/L
Toluene	780	1	µg/L
Ethylbenzene	ND	1	µg/L
Total Xylenes	1000	1	µg/L
Naphthalene	13	1	µg/L

Units of µg/L are equivalent to ppb.
ND = Compound not detected at or above the listed detection limit.

Total Petroleum Hydrocarbons
GC/FID - EPA Method 8015 Modified

Client: Geomatrix
Client Sample ID: B-4
SPECTRALYTIX Sample ID: GEM 91-009-9106731 Sample Type: Water
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Gasoline	140	1.0	mg/L

ND = Compound not detected at or above the listed detection limit.

BTEX Analysis with Naphthalene
EPA Method 8020 With Confirmation From EPA Method 8240

Client: Geomatrix
Client Sample ID: B-4
SPECTRALYTIX Sample ID: GEM 91-009-9106731 Sample Type: water
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Benzene	35,000	1	µg/L
Toluene	36,000	1	µg/L
Ethylbenzene	2000	1	µg/L
Total Xylenes	11,000	1	µg/L
Naphthalene	620	1	µg/L

Units of µg/L are equivalent to ppb.
ND = Compound not detected at or above the listed detection limit.

Total Petroleum Hydrocarbons
GC/FID - EPA Method 8015 Modified

Client: Geomatrix
Client Sample ID: B-1-3/S-3
SPECTRALYTIX Sample ID: GEM 91-009-9106732 Sample Type: Soil
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Gasoline	6	1.0	mg/kg

ND = Compound not detected at or above the listed detection limit.

BTEX Analysis with Naphthalene
EPA Method 8020 With Confirmation From EPA Method 8240

Client: Geomatrix
Client Sample ID: B-1-3/S-5
SPECTRALYTIX Sample ID: GEM 91-009-9106733 Sample Type: soil
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Benzene	28	1	µg/L
Toluene	67	1	µg/L
Ethylbenzene	6	1	µg/L
Total Xylenes	36	1	µg/L
Naphthalene	13	1	µg/L

Units of µg/L are equivalent to ppb.
ND = Compound not detected at or above the listed detection limit.

Total Petroleum Hydrocarbons
GC/FID - EPA Method 8015 Modified

Client: Geomatrix
Client Sample ID: B-4/S-5
SPECTRALYTIX Sample ID: GEM 91-009-9106734 Sample Type: Soil
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Gasoline	540	1.0	mg/kg

ND = Compound not detected at or above the listed detection limit.

BTEX Analysis with Naphthalene
EPA Method 8020 With Confirmation From EPA Method 8240

Client: Geomatrix
Client Sample ID: B-4/S-5
SPECTRALYTIX Sample ID: GEM 91-009-9106734 Sample Type: soil
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Benzene	1,200	1	µg/L
Toluene	30,000	1	µg/L
Ethylbenzene	10,000	1	µg/L
Total Xylenes	53,000	1	µg/L
Naphthalene	7,500	1	µg/L

Units of µg/L are equivalent to ppb.
ND = Compound not detected at or above the listed detection limit.

Total Petroleum Hydrocarbons
GC/FID - EPA Method 8015 Modified

Client: Geomatrix
Client Sample ID: B-4/S-11
SPECTRALYTIX Sample ID: GEM 91-009-9106735 Sample Type: Soil
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Gasoline	60	1.0	mg/kg

ND = Compound not detected at or above the listed detection limit.

BTEX Analysis with Naphthalene
EPA Method 8020 With Confirmation From EPA Method 8240

Client: Geomatrix
Client Sample ID: B-4/S-11
SPECTRALYTIX Sample ID: GEM 91-009-9106735 Sample Type: soil
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Benzene	85	1	µg/L
Toluene	680	1	µg/L
Ethylbenzene	260	1	µg/L
Total Xylenes	1,700	1	µg/L
Naphthalene	940	1	µg/L

Units of µg/L are equivalent to ppb.
ND = Compound not detected at or above the listed detection limit.

Total Petroleum Hydrocarbons
GC/FID - EPA Method 8015 Modified

Client: Geomatrix
Client Sample ID: B-5/S-4
SPECTRALYTIX Sample ID: GEM 91-009-9106736 Sample Type: Soil
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Gasoline	66	1.0	mg/kg

ND = Compound not detected at or above the listed detection limit.

BTEX Analysis with Naphthalene
EPA Method 8020 With Confirmation From EPA Method 8240

Client: Geomatrix
Client Sample ID: B-5/S-4
SPECTRALYTIX Sample ID: GEM 91-009-9106736 Sample Type: soil
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Benzene	16	1	µg/L
Toluene	79	1	µg/L
Ethylbenzene	76	1	µg/L
Total Xylenes	710	1	µg/L
Naphthalene	840	1	µg/L

Units of µg/L are equivalent to ppb.
ND = Compound not detected at or above the listed detection limit.

Total Petroleum Hydrocarbons
GC/FID - EPA Method 8015 Modified

Client: Geomatrix
Client Sample ID: B-5/S-11
SPECTRALYTIX Sample ID: GEM 91-009-9106737 Sample Type: Soil
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Gasoline	1	1.0	mg/kg

ND = Compound not detected at or above the listed detection limit.

BTEX Analysis with Naphthalene
EPA Method 8020 With Confirmation From EPA Method 8240

Client: Geomatrix
Client Sample ID: B-5/S-11
SPECTRALYTIX Sample ID: GEM 91-009-9106737 Sample Type: soil
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Benzene	18	1	µg/L
Toluene	89	1	µg/L
Ethylbenzene	12	1	µg/L
Total Xylenes	72	1	µg/L
Naphthalene	29	1	µg/L

Units of µg/L are equivalent to ppb.
ND = Compound not detected at or above the listed detection limit.

Total Petroleum Hydrocarbons
GC/FID - EPA Method 8015 Modified

Client: Geomatrix
Client Sample ID: B-6/S-4
SPECTRALYTIX Sample ID: GEM 91-009-9106738 Sample Type: Soil
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Gasoline	50	1.0	mg/kg

ND = Compound not detected at or above the listed detection limit.

BTEX Analysis with Naphthalene
EPA Method 8020 With Confirmation From EPA Method 8240

Client: Geomatrix
Client Sample ID: B-6/S-4
SPECTRALYTIX Sample ID: GEM 91-009-9106738 Sample Type: soil
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Benzene	ND	1	µg/L
Toluene	16	1	µg/L
Ethylbenzene	ND	1	µg/L
Total Xylenes	60	1	µg/L
Naphthalene	450	1	µg/L

Units of µg/L are equivalent to ppb.
ND = Compound not detected at or above the listed detection limit.

Total Petroleum Hydrocarbons
GC/FID - EPA Method 8015 Modified

Client: Geomatrix
Client Sample ID: B-6/S-6
SPECTRALYTIX Sample ID: GEM 91-009-9106739 Sample Type: Soil
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Total Petroleum Hydrocarbons	ND	1.0	mg/kg

ND = Compound not detected at or above the listed detection limit.

BTEX Analysis with Naphthalene
EPA Method 8020 With Confirmation From EPA Method 8240

Client: Geomatrix
Client Sample ID: B-6/S-6
SPECTRALYTIX Sample ID: GEM 91-009-9106739 Sample Type: soil
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Benzene	11	1	µg/L
Toluene	21	1	µg/L
Ethylbenzene	2	1	µg/L
Total Xylenes	15	1	µg/L
Naphthalene	38	1	µg/L

Units of µg/L are equivalent to ppb.
ND = Compound not detected at or above the listed detection limit.

Total Petroleum Hydrocarbons
GC/FID - EPA Method 8015 Modified

Client: Geomatrix
Client Sample ID: B-9/S-5
SPECTRALYTIX Sample ID: GEM 91-009-9106740 Sample Type: Soil
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Gasoline	6	1.0	mg/kg

ND = Compound not detected at or above the listed detection limit.

BTEX Analysis with Naphthalene
EPA Method 8020 With Confirmation From EPA Method 8240

Client: Geomatrix
Client Sample ID: B-9/S-5
SPECTRALYTIX Sample ID: GEM 91-009-9106740 Sample Type: soil
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Benzene	ND	1	µg/L
Toluene	ND	1	µg/L
Ethylbenzene	3	1	µg/L
Total Xylenes	24	1	µg/L
Naphthalene	210	1	µg/L

Units of µg/L are equivalent to ppb.
ND = Compound not detected at or above the listed detection limit.

Total Petroleum Hydrocarbons
GC/FID - EPA Method 8015 Modified

Client: Geomatrix
Client Sample ID: B-9/S-7
SPECTRALYTIX Sample ID: GEM 91-009-9106741 Sample Type: Soil
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Gasoline	110	1.0	mg/kg

ND = Compound not detected at or above the listed detection limit.

BTEX Analysis with Naphthalene
EPA Method 8020 With Confirmation From EPA Method 8240

Client: Geomatrix
Client Sample ID: B-9/S-7
SPECTRALYTIX Sample ID: GEM 91-009-9106741 Sample Type: soil
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Benzene	ND	1	µg/L
Toluene	53	1	µg/L
Ethylbenzene	240	1	µg/L
Total Xylenes	2,100	1	µg/L
Naphthalene	3,100	1	µg/L

Units of µg/L are equivalent to ppb.
ND = Compound not detected at or above the listed detection limit.

Total Petroleum Hydrocarbons
GC/FID - EPA Method 8015 Modified

Client: Geomatrix
Client Sample ID: B-9/S-12
SPECTRALYTIX Sample ID: GEM 91-009-9106742 Sample Type: Soil
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Total Petroleum Hydrocarbons	ND	1.0	mg/kg

ND = Compound not detected at or above the listed detection limit.

BTEX Analysis with Naphthalene
EPA Method 8020 With Confirmation From EPA Method 8240

Client: Geomatrix
Client Sample ID: B-9/S-12
SPECTRALYTIX Sample ID: GEM 91-009-9106742 Sample Type: soil
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Benzene	ND	1	µg/L
Toluene	8	1	µg/L
Ethylbenzene	2	1	µg/L
Total Xylenes	17	1	µg/L
Naphthalene	51	1	µg/L

Units of µg/L are equivalent to ppb.
ND = Compound not detected at or above the listed detection limit.

Total Petroleum Hydrocarbons
GC/FID - EPA Method 8015 Modified

Client: Geomatrix
Client Sample ID: B-10/S-4
SPECTRALYTIX Sample ID: GEM 91-009-9106743 Sample Type: Soil
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Total Petroleum Hydrocarbons	ND	1.0	mg/kg

ND = Compound not detected at or above the listed detection limit.

BTEX Analysis with Naphthalene
EPA Method 8020 With Confirmation From EPA Method 8240

Client: Geomatrix
Client Sample ID: B-10/S-4
SPECTRALYTIX Sample ID: GEM 91-009-9106743 Sample Type: soil
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Benzene	ND	1	µg/L
Toluene	7	1	µg/L
Ethylbenzene	ND	1	µg/L
Total Xylenes	11	1	µg/L
Naphthalene	3	1	µg/L

Units of µg/L are equivalent to ppb.
ND = Compound not detected at or above the listed detection limit.

Total Petroleum Hydrocarbons
GC/FID - EPA Method 8015 Modified

Client: Geomatrix
Client Sample ID: B-7/S-2
SPECTRALYTIX Sample ID: GEM 91-009-9106744 Sample Type: Soil
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Total Petroleum Hydrocarbons	ND	1.0	mg/kg

ND = Compound not detected at or above the listed detection limit.

BTEX Analysis with Naphthalene
EPA Method 8020 With Confirmation From EPA Method 8240

Client: Geomatrix
Client Sample ID: B-7/S-2
SPECTRALYTIX Sample ID: GEM 91-009-9106744 Sample Type: soil
Date Sampled : 6/25/91 Date Received: 6/28/91

Analyte	Result	Detection Limit	Units
Benzene	ND	1	µg/L
Toluene	6	1	µg/L
Ethylbenzene	ND	1	µg/L
Total Xylenes	6	1	µg/L
Naphthalene	ND	1	µg/L

Units of µg/L are equivalent to ppb.
ND = Compound not detected at or above the listed detection limit.

APPENDIX 4

TANK TEST RESULTS

Horner Creative Products, Inc.

Award of Certification

This is to certify that

TIMOTHY P. ELDRETH

has sucessfully completed training on the operation
of the Ezy-Chek Leak Detector

Given this 2ND. day of FEBRUARY, 19 90

R. Buza

#PA 0045

LITHO IN U.S.A.

ALGER COUNTRY STORE
CALVERT MD.
TANK TEST
TANK TESTER VER 2.01
FUEL TYPE: REGULAR UNLEADED
CAPACITY TANK 1: 4000 GALLONS
TEMPERATURE COEFFICIENT: 611 ppm/deg F
TEST CRITERIA: +0.000 GPH TO +0.000 GPH

06/26/91 TEST TIME FROM 18:41 TO 19:48
DATA ANALYSIS INDICATES:

A GROSS VOLUME CHANGE OF: -0.140 GALLONS
A VOLUME CHANGE DUE TO TEMPERATURE OF: -0.076 GALLONS

A LIQUID VOLUME RATE OF CHANGE OF: -0.053 GPH
WITH A 95 % CONFIDENCE INTERVAL OF: +/-0.005 GPH
(-0.049 TO -0.058 GPH)

TESTER.....

CUSTOMER.....

Syphon System LEAK RATE OF +.009 GPH

ALGER COUNTRY STORE
CALVERT MD.
TANK TEST
TANK TESTER VER 2.01
FUEL TYPE: SUPER UNLEADED
CAPACITY TANK 2: 4000 GALLONS
TEMPERATURE COEFFICIENT: 593 ppm/deg F
TEST CRITERIA: +0.000 GPH TO +0.000 GPH

06/27/91 TEST TIME FROM 20:16 TO 20:49
DATA ANALYSIS INDICATES:

A GROSS VOLUME CHANGE OF: +0.000 GALLONS
A VOLUME CHANGE DUE TO TEMPERATURE OF: -0.033 GALLONS

A LIQUID VOLUME RATE OF CHANGE OF: -0.019 GPH
WITH A 95 % CONFIDENCE INTERVAL OF: +/-0.005 GPH
(-0.013 TO +0.000 GPH)

TESTER.....

CUSTOMER.....

ALGER COUNTRY STORE
CALVERT MD.
TANK TEST
TANK TESTER VER 2.01
FUEL TYPE: DIESEL
CAPACITY TANK 1: 4000 GALLONS
TEMPERATURE COEFFICIENT: 466 ppm/deg F
TEST CRITERIA: +0.000 GPH TO +0.000 GPH

06/28/91 TEST TIME FROM 09:16 TO 10:22
DATA ANALYSIS INDICATES:

A GROSS VOLUME CHANGE OF: -0.099 GALLONS
A VOLUME CHANGE DUE TO TEMPERATURE OF: -0.104 GALLONS

A LIQUID VOLUME RATE OF CHANGE OF: +0.006 GPH
WITH A 95 % CONFIDENCE INTERVAL OF: +/-0.001 GPH
(+0.007 TO +0.005 GPH)

TESTER.....D.

CUSTOMER.....

ALGER COUNTRY STORE
CALVERT MD.
TANK TEST
TANK TESTER VER 2.01
FUEL TYPE: MIDGRADED UNLEADED
CAPACITY TANK 1: 4000 GALLONS
TEMPERATURE COEFFICIENT: 604 ppm/deg F
TEST CRITERIA: +0.000 GPH TO +0.000 GPH

06/27/91 TEST TIME FROM 19:07 TO 20:13
DATA ANALYSIS INDICATES:

A GROSS VOLUME CHANGE OF: -0.009 GALLONS
A VOLUME CHANGE DUE TO TEMPERATURE OF: +0.006 GALLONS

A LIQUID VOLUME RATE OF CHANGE OF: -0.008 GPH
WITH A 95 % CONFIDENCE INTERVAL OF: +/-0.001 GPH
(-0.007 TO -0.010 GPH)

TESTER.....

CUSTOMER.....

CALVERT ON PURCHASE 1986

EZY-CHEK WORK SHEET

March 1

Company Name: Alger Oil, Inc.
Contact: Ken Thomas or Barry Cameron
Address: 359 Sylmar Road
City, State: Rising Sun, MD 21911
Telephone: 301-658-5502
Contractor: Edwards Service Station Equipment
Address: 110 Pearl Street, P.O. Box 742
City, State: Rising Sun, MD 21911

Tank Farm Location: Algers Country St
Contact: Sid Duff
Address: Route 272
City, State: Calvert, MD
Telephone: 301-658-3687
Operator: Jesse M. Foster, Jr.
Date: March 18, 1986
Telephone: 301-658-2408

Tank#	Capacity	Diameter	Product	High Test Results	Low Test
1	4000	64"	Regular	-.022	
2	4000	64"	Regular	-.022	
3	4000	64"	Super	-.012	
4	4000	64"	No lead	-.015	
5	4000	64"	Diesel	-.014	

Remarks: Tank #1 and tank #2 is a sypon system. Tank #2 has the sumerged pump.

DATA ANALYSIS INDICATED:

A GROSS VOLUME CHANGE OF:	-0.140 GALLONS
A VOLUME CHANGE DUE TO TEMPERATURE OF:	-0.076 GALLONS
A LIQUID VOLUME RATE OF CHANGE OF:	-0.053 GPH
WITH A 95 % CONFIDENCE INTERVAL OF:	+/-0.005 GPH
	(-0.049 TO -0.058 GPH)

TESTER.....

CUSTOMER.....

Syphon System LEAK RATE OF +.009 GPH

BOTH INVALID INDICATE:

A GROSS VOLUME CHANGE OF:	+0.002 GALLONS
A VOLUME CHANGE DUE TO TEMPERATURE OF:	-0.072 GALLONS

A LIQUID VOLUME RATE OF CHANGE OF:	+0.062 GPH
WITH A 95 % CONFIDENCE INTERVAL OF:	+/-0.003 GPH
	(+0.065 TO +0.000 GPH)

TESTER..E. [signature]

CUSTOMER.....

06/27/91 TEST TIME FROM 20:16 TO 20:49
DATA ANALYSIS INDICATES:

A GROSS VOLUME CHANGE OF:	+0.000 GALLONS
A VOLUME CHANGE DUE TO TEMPERATURE OF:	-0.033 GALLONS
A LIQUID VOLUME RATE OF CHANGE OF:	-0.019 GPH
WITH A 95 % CONFIDENCE INTERVAL OF:	+/-0.005 GPH
	(-0.013 TO +0.000 GPH)

TESTER.....

CUSTOMER.....

A GROSS VOLUME CHANGE OF: -0.099 GALLONS
A VOLUME CHANGE DUE TO TEMPERATURE OF: -0.104 GALLONS

A LIQUID VOLUME RATE OF CHANGE OF: +0.006 GPH
WITH A 95 % CONFIDENCE INTERVAL OF: +/-0.001 GPH
(+0.007 TO +0.005 GPH)

TESTER.....

CUSTOMER.....

06/27/91 TEST TIME FROM 19:07 TO 20:13
DATA ANALYSIS INDICATES:

A GROSS VOLUME CHANGE OF:	-0.009 GALLONS
A VOLUME CHANGE DUE TO TEMPERATURE OF:	+0.006 GALLONS
A LIQUID VOLUME RATE OF CHANGE OF:	-0.008 GPH
WITH A 95 % CONFIDENCE INTERVAL OF:	+/-0.001 GPH
	(-0.007 TO -0.010 GPH)

TESTER.....

CUSTOMER.....

Horner Creative Products, Inc.

Award of Certificatio

This is to certify that

TIMOTHY P. ELDRETH

has sucessfully completed training on the operation of the Ezy-Chek Leak Detector

Given this 2ND. day of FEBRUARY, 19 90

R. Buza

FAX NO:

EXACT LOCATION Facility #

Country Stores Inc
7515 N. East Rd
N. East, MD 21901

SCHEDULED START DATE 3/16/95

Start Time: 8:00 **End Time:** 14:00

Applicable Specifications:

Unit # 57 **Testers Cert. #** 307 **Agent** **SO#** 130800

Taxable: **Message:**

TANKS TESTED

			Pass/Fail
Tank 1: Size	4K	Product MID	Pass
Tank 2: Size	4K	Product SUP	Pass
Tank 3: Size	4K	Product REG	Pass
Tank 4: Size	4K	Product PREM	Pass
Tank 5: Size	4K	Product DSL	Pass
Tank 6: Size		Product	
Tank 7: Size		Product	
Tank 8: Size		Product	
Tank 9: Size		Product	
Tank 10: Size		Product	

LINES & LEAK DETECTORS

	Pass/Fail	
Line 1	Pass	Leak Det Test
Line 2		Leak Det Test
Line 3	Pass	Leak Det Test
Line 4	Pass	Leak Det Test
Line 5	TO TEST	Leak Det Test
Line 6		Leak Det Test
Line 7		Leak Det Test
Line 8		Leak Det Test
Line 9		Leak Det Test
Line 10		Leak Det Test

Site Survey: $

Helium Leak Detection Service: **Start Time** **End Time**

PARTS INSTALLED: Quantity Model Red Jacket Leak Detectors

Other Parts

Installation Labor:

Pd. 3/16/95 CK. # 1052
S.B.

TANKNOLOGY is authorized to make and will be paid at its commercial rate for making any minor adjustments and repairs to piping and valves necessary. See Standard Terms and Conditions on the reverse side, which are incorporated herein by reference and which are included as part of this agreement. By signing this agreement, you acknowledge you have read, understand and agree to the terms and conditions on the reverse side of this agreement.

ACCEPTED BY:

Name: Vinod Patel
Title: MANAGER
For: Country Stores (Customer)
Signature: Vinod Patel
Date: 3/16/95 Time: 14:00

TANKNOLOGY SERVICE DIVISION

Name: Robert Navarro
Title: Op's Manager
Signature:
Date: 3/16/95
State: MD License #

Printed in the U.S.A.

TANKNOLOGY CORPORATION INTERNATIONAL
5225 Hollister Street • Houston, Texas 77040-6294 • 800-888-8563 • Fax: (713) 690-2255

TAK-03

CUSTOMER

GEOMATRIX INC.
EARTH SCIENCE CONSULTANTS
6801 Kenilworth Avenue, Suite 100 • Riverdale • Maryland 20737 • Telephone (301) 779-5302 • Fax (301) 779-5842

August 3, 1992

Ms. Barbara Brown
Dept. of the Environment
UST/LUST Division
Hazardous and Solid Waste
Management Administration
2500 Broening Highway
Baltimore, Maryland 21224

RE: Field Investigation- Calvert Country Store, Cecil County, Maryland.

Dear Ms. Brown:

Geomatrix, Inc. (Geomatrix) is pleased to submit this brief progress report on behalf of Alger Oil, Inc. on the site referenced above.

Groundwater samples were collected from wells, GW-1, through GW-6 and tap water samples from the well supplying potable water to the premises. The samples were submitted to Gascoyne Laboratories, Inc. in Baltimore, Maryland. The results of the laboratory analyses for BTEX and MTBE performed on the samples are attached.

The groundwater has apparently been impacted at the site, however the risk to the environment and to human health appears to be relatively low based on the following relevant indicators:

- No free product was observed in any of the monitoring wells.
- The ground surface at the site has been paved with asphalt and/or cement, and there is very minimal possibility of routes of inhalation, ingestion and dermal contact from the subsurface media.
- The soil profile and the geologic formation (weathered saprolite, decomposed bedrock) are relatively tight and will tend not to allow infiltration of precipitation.
- The hydraulic gradient (slope) of the groundwater is relatively flat. This in conjunction with the anticipated low infiltration of precipitation as a result of the paved areas and tight soils will therefore, result in groundwater movement being relatively slow. Hence any contamination which may exist will move relatively slowly.

GEOMATRIX

EARTH SCIENCE CONSULTANTS

- The tap water is clean. The well that supplies potable water to the site has not been impacted by the leaks of the old oil/fuel that have occurred previously.

- The site is primarily surrounded by farm lands. There is no down gradient receptors such as wells or streams that would be potentially threatened by any subsurface contamination.

Based on these observations, we recommend that **a long-term monitoring program** be implemented at site to evaluate the status of the subsurface contamination from time to time.

We look forward to a meeting with you at your earliest convenience to discuss and affirm the details of the monitoring program. Please do not hesitate to call either myself or Donald A Jackson if additional information is required.

Sincerely
Geomatrix, Inc.

Kobina Atobrah, Ph.D, P.G.
Principal Hydrogeologist

Enclosure

cc: Mr. Ken Thomas
Alger Oil, Inc.
559 Sylmar Road
Rising Sun, MD 21911

proposal\algeroil

Gascoyne Laboratories, Inc.

Baltimore, MD 21224

(410) 633-1800
FAX NO.
(410) 633-6553
(800) GAS-COYN

REPORT OF ANALYSIS

Report No. 92-07-333 Report Date: July 30, 1992

Report To: Geomatrix, Inc. Page: 1 of 3

Sample I.D. Submitted Water: Calvert, dated 07/16/92

	GW-1	GW-3	GW-5	Detection Limits
Methyl tert-butyl ether	ND	4300	14,000	1000
Benzene	9800	13,000	39,000	500
Toluene	7000	17,000	40,000	500
Ethylbenzene	600	1100	2300	500
Total Xylenes	2700	9200	12,000	1000
Surrogate Recoveries (%)				
1,2-Dichloroethane-d_4	108	104	111	
Toluene-d_8	94	98	88	
1,4-Bromofluorobenzene	104	101	103	

Notes: (1) Results are expressed as micrograms/liter (ppb).

(2) ND-Not Detected.

(3) Analyses were performed according to EPA Method(s) 8240

(4) Analyst(s): RC; Date Test Completed: 07/20/92

Thomas A. McVicker
QA/QC Officer

Please see reverse side for explanations and other information

Gascoyne Laboratories, Inc.
Baltimore, MD 21224
(410) 633-1800
FAX NO.
(410) 633-6553
(800) GAS-COYN

REPORT OF ANALYSIS

Report No. 92-07-333 Report Date: July 30, 1992

Report To: Geomatrix, Inc. Page: 2 of 3

Sample I.D. Submitted Water: Calvert, dated 07/16/92

	GW-2	GW-4	GW-6	Detection Limits
Methyl tert-butyl ether	ND	ND	40	10
Benzene	ND	27	21	5
Toluene	ND	34	23	5
Ethylbenzene	ND	*	ND	5
Total Xylenes	ND	17	10	10
Surrogate Recoveries (%)				
1,2-Dichloroethane-d_4	99	103	107	
Toluene-d_8	101	97	95	
1,4-Bromofluorobenzene	104	100	98	

Notes: (1) Results are expressed as micrograms/liter (ppb).

(2) ND-Not Detected.

(3) Analyses were performed according to EPA Method(s) 8240

(4) Analyst(s): RC; Date Test Completed: 07/21/92

(5) *-Detected below quantitation level.

Thomas A. McVicker
QA/QC Officer

Please see reverse side for explanations and other information.

Gascoyne Laboratories, Inc.
Baltimore, MD 21224
(410) 633-1800
FAX NO.
(410) 633-6553
(800) GAS-COYN

REPORT OF ANALYSIS

Report No. 92-07-333 Report Date: July 30, 1992

Report To: Geomatrix, Inc. Page: 3 of 3

Sample I.D. Submitted Water: Calvert, dated 07/16/92

	Tap	Detection Limits
Methyl tert-butyl ether	ND	10
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	4

Surrogate Recoveries (%)

1,2-Dichloroethane-d_4	99
Toluene-d_8	100
1,4-Bromofluorobenzene	97

Notes: (1) Results are expressed as micrograms/liter (ppb).

(2) ND-Not Detected.

(3) Analyses were performed according to EPA Method(s) 524.1

(4) Analyst(s): RC; Date Test Completed: 07/18/92

Thomas A. McVicker
QA/QC Officer

Please see reverse side for explanations and other information.

TANK REMOVAL/ABANDONMENT

Maryland Department of the Environment
Waste Management Administration
2500 Broening Highway, Baltimore, Maryland 21224
(410) 631-3442

Date 2/11/97
Time In: _____
Time Out: _____

Facility # _____
Case # 92-2616 CE
OPEN CLOSE
INITIAL FOLLOW-UP

Site Name: COUNTRY STORE
Address: 2815 NORTHEAST RD CALVERT 2190

1a. 5 Tank(s) removed 1b. — Tanks(s) abandoned in-place
2. 0 Number of USTs remaining on-site
3. Has an environmental assessment been completed? YES ☐ NO ☒
4. Has piping been properly abandoned? YES ☒ NO ☐ UNKNOWN ☐
5. Has all liquid been removed from tanks(s)? YES ☒ NO ☐
6. Have tank(s) been purged of explosive or combustible vapors? YES ☒ NO ☐

Tank #	Type of Product	Age (yrs.)	Size	Type of Tank	Perforations		Type of Piping	Disposal Site
					Tank (Y/N)	Piping (Y/N)		
1	GASOLINE		4,000	STEEL	N	N	STEEL	EDWARDS TO BE CUT FOR SCRAP
2	GASOLINE		4,000	STEEL	N	N	STEEL	
3	GASOLINE		4,000	STEEL	N	N	STEEL	
4	GASOLINE		4,000	STEEL	N	N	STEEL	
5	DIESEL		4,000	STEEL	N	N	STEEL	

7. Is groundwater contaminated? YES ☒ NO ☐ NOT DETECTABLE AT THIS TIME ☐

8. Is soil contaminated? YES ☒ TYPE OF PRODUCT _____ NO ☐ NOT DETECTABLE AT THIS TIME ☐

8a. Were contaminated soils removed? YES ☐ (Complete Contaminated Soil Removal form) NO ☐ (Describe in Item 11)

9. ACTIONS REQUIRED IMMEDIATELY OF THE OWNER BY THIS ADMINISTRATION:
☐ STOP OPERATIONS ☐ PUMP OUT LIQUID ☐ CONTAIN AND CLEANUP SPILL

☐ OTHER: _____

10. ACTION REQUIRED WITHIN 30 DAYS OF THE OWNER BY THIS ADMINISTRATION:
☒ ALL TANK REMOVAL/ABANDONMENT DOCUMENTATION INCLUDING:

SOIL DISPOSAL RECEIPTS TO BE SENT TO THIS ADMINISTRATION

☐ PROPERLY ABANDON PIPING IN COMPLIANCE WITH COMAR _____
☐ _____ MONITORING WELL(S) REQUIRED IN LOCATION(S) DESCRIBED IN ITEM 11
☐ COMPLETE AN ENVIRONMENTAL ASSESSMENT IN COMPLIANCE WITH COMAR _____ (submit two copies)
☒ AMEND REGISTRATION FORM ☐ REGISTRATION FORM PROVIDED TO CONTACT PERSON

☐ OTHER: _____

11. Comments: ADDITIONAL COMMENTS PAGE? ☐ YES ☐ NO

EDWARDS WAS THE REMOVAL CONTRACTOR. TANKS LOOKED GOOD NO VISIBLE PERFORATIONS. NEW TANKS ARE TO BE INSTALLED INTO THIS EXCAVATION. SOILS ARE TO BE PROPERLY DISPOSED. CONTAMINATION PRESENT IN EXCAVATION IS FROM TANKS PRIOR TO THIS SET OF TANKS THAT WAS REMOVED. WELLS ALREADY PRESENT ON SITE

12. Has inspector completed: Site Sketch? ☐ Yes ☒ No Site Photographs? ☐ Yes ☒ No

13. Were tanks labeled? ☐ Yes (describe in item 11) ☒ No
14. Is follow-up required by this Administration? YES ☒ NO ☐ (NEW INSTALLATION)
Inspector's name (printed) and signature: MICHAEL T. FRANK / Michael T. Frank
Contact person's name (printed) and signature: DAVE EDWARDS
Contractor's name (printed) and signature: _____

State of Maryland
Department of the Environment
Waste Management Administration
2500 Broening Highway, Baltimore, Maryland 21224

CASE # 92-2616 CE

Report of Observations

FACILITY I.D. #

Type of Inspection/Observation: Site Visit Date 1/21/97

Facility Name: Former Alger County Store

Remarks: Regional inspector Mike Frank c regional geologist Barbara Brown visited site. Gauged MW-5 1.5" of dark yellow gas in well. C.K Patel c C. Patel observed gauging. Work requested previously has not been completed. Plus c diesel out of service

TIME IN : Barbara A Brown **TIME OUT :**

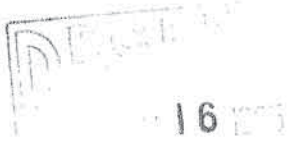
Observer: [signature] Person Interviewed: C.K. LEFT BEFORE DEPART [illegible]

ALGER COUNTRY STORES

P O BOX 639

RISING SUN MARYLAND 21911-0639

November 10, 1995



Mr. Herbert Meade, Chief
Compliance/Remediation Dvision
Maryland Department of the Environment
2500 Broening Highway
Baltimore, Maryland
21224

Dear Mr. Meade:

Enclosed is a laboratory analysis report required on Case #92-2616-CE, Alger Country Store, Calvert, Maryland.

If there are any questions, please call.

Very truly yours,

Kenneth D. Thomas
General Manager

MARTEL

Certificate of Laboratory Analysis

Martel Lab Number: 27372

Log Identification: W-38912

Sampling by Martel.
Project Identification: Alger's Country Store Well Monitoring

Alger Oil, Inc.
P.O. Box 639
Rising Sun, Maryland 21911
ATTENTION: Ken Thomas

November 1, 1995

CLIENT IDENTIFICATION: ALGERS

ANALYTICAL PARAMETER	METHOD	RESULT	UNITS
LOG IDENTIFICATION: W-38912			
DATE RECEIVED: 10/26/95			
SAMPLE ID: 1. Well CE-88-2553			
SAMPLING DATE: 10/26/95 TIME: 12:50			
Total Petroleum Hydrocarbons	EPA 418.1	<2	mg/l
SAMPLE ID: 2. Well CE-88-2549			
SAMPLING DATE: 10/26/95 TIME: 12:55			
Total Petroleum Hydrocarbons	EPA 418.1	<2	mg/l
SAMPLE ID: 3. Well Untagged in Grass			
SAMPLING DATE: 10/26/95 TIME: 13:20			
Total Petroleum Hydrocarbons	EPA 418.1	<2	mg/l
SAMPLE ID: 4. Well CE-88-2551			
SAMPLING DATE: 10/26/95 TIME: 13:25			
Benzene	EPA 8020	2.5	mg/l
Toluene	EPA 8020	3.9	mg/l
Ethylbenzene	EPA 8020	<0.05	mg/l
Total Xylenes	EPA 8020	3.2	mg/l
a,a,a-trifluorotoluene(surrogate recovery)	EPA 8020	92	%

MARTEL
-38 Sangamon Avenue Springfield

Certificate of Laboratory Analysis

CLIENT IDENTIFICATION: ALGERS
LOG IDENTIFICATION: W-38912
November 1, 1995

ANALYTICAL PARAMETER	METHOD	RESULT	UNITS
SAMPLE ID: 5. Well CE-88-2548			
SAMPLING DATE: 10/26/95 TIME: 13:55			
Benzene	EPA 8020	10	mg/l
Toluene	EPA 8020	10	mg/l
Ethylbenzene	EPA 8020	<0.05	mg/l
Total Xylenes	EPA 8020	6.2	mg/l
a,a,a-trifluorotoluene(surrogate recovery)	EPA 8020	89	%
SAMPLE ID: 6. Well Untagged in Pavement			
SAMPLING DATE: 10/26/95 TIME: 14:00			
Benzene	EPA 8020	27	mg/l
Toluene	EPA 8020	28	mg/l
Ethylbenzene	EPA 8020	<0.05	mg/l
Total Xylenes	EPA 8020	9.2	mg/l
a,a,a-trifluorotoluene(surrogate recovery)	EPA 8020	105	%
SAMPLE ID: 7. Field Blank			
SAMPLING DATE: 10/26/95 TIME: 14:05			
Benzene	EPA 8020	<1	ug/l
Toluene	EPA 8020	<1	ug/l
Ethylbenzene	EPA 8020	<1	ug/l
Total Xylenes	EPA 8020	<1	ug/l
a,a,a-trifluorotoluene(surrogate recovery)	EPA 8020	107	%
SAMPLE ID: 8. Trip Blank			
SAMPLING DATE: 10/26/95 TIME: 11:00			
Benzene	EPA 8020	<1	ug/l
Toluene	EPA 8020	<1	ug/l
Ethylbenzene	EPA 8020	<1	ug/l
Total Xylenes	EPA 8020	<1	ug/l
a,a,a-trifluorotoluene(surrogate recovery)	EPA 8020	94	%

Certificate of Laboratory Analysis

CLIENT IDENTIFICATION: ALGERS
LOG IDENTIFICATION: W-38912
November 1, 1995
PAGE 3

All procedures used are in accordance with the following methods: "Methods of Chemical Analysis of Water and Wastewater", EPA 600/4-79/020, U.S. EPA, Cincinnati, Revised March 1983. "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods". SW-846, U.S. EPA Washington D.C., Third Edition, September 1986.

Stuart W. Whitby
QC APPROVAL

11/03/95
DATE

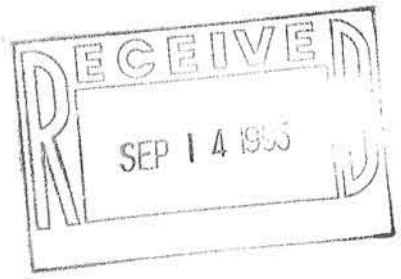
Thomas Mcnashy
LABORATORY APPROVAL

11/03/95
DATE

ALGER COUNTRY STORES
P O BOX 639
RISING SUN MARYLAND 21911-0639

September 11, 1995

Mr. Herbert Meade, Chief
Compliance/Remediation Division
Maryland Department of the Environment
2500 Broening Highway
Baltimore, Maryland
21224



Dear Mr. Meade:

Enclosed is a laboratory analysis report required on Case #92-2616-CE, Alger Country Store, Calvert, Maryland.

If there are any questions, please call.

Very truly yours,

Kenneth D. Thomas
General Manager

Enclosure:

MARTEL
1025 Cromwell Bridge Road Baltimore
Meadowfern Suite 102 Houston, Texas
8 Sangamon Avenue Springfield, Illinois

Certificate of Laboratory Analysis

EPA Method Number 602, 8020
Log Number: 37018 Sample Id: 1. Well CE-88-2553
Units: ug/l Analysis Date/Time: 06/20/95 01:50

Compound	Std Detection Limit	Conc
Benzene	1	ND
Toluene	1	ND
Ethylbenzene	1	ND
Total Xylene	1	ND
Surrogate: a,a,a-Trifluorotoluene, % Recovery		94

EPA Method Number 602, 8020
Log Number: 37018 Sample Id: 2. Well CE-88-2549
Units: ug/l Analysis Date/Time: 06/20/95 03:09

Compound	Std Detection Limit	Conc
Benzene	1	ND
Toluene	1	ND
Ethylbenzene	1	ND
Total Xylene	1	ND
Surrogate: a,a,a-Trifluorotoluene, % Recovery		91

EPA Method Number 602, 8020
Log Number: 37018 Sample Id: 3. Untagged Well in Grass
Units: ug/l Analysis Date/Time: 06/20/95 04:28

Compound	Std Detection Limit	Conc
Benzene	1	ND
Toluene	1	ND
Ethylbenzene	1	ND
Total Xylene	1	ND
Surrogate: a,a,a-Trifluorotoluene, % Recovery		91

EPA Method Number 602, 8020
Log Number: 37018 Sample Id: 4. Well CE-88-2551
Units: ug/l Analysis Date/Time: 06/20/95 01:50

Compound	Std Detection Limit	Conc
Benzene	50	3,330
Toluene	50	5,040
Ethylbenzene	50	ND
Total Xylene	50	3,940
Surrogate: a,a,a-Trifluorotoluene, % Recovery		89

EPA Method Number 602, 8020
Log Number: 37018 Sample Id: 5. Well CE-88-2548
Units: ug/l Analysis Date/Time: 06/20/95 12:25

Compound	Std Detection Limit	Conc
Benzene	50	10,010
Toluene	50	9,300
Ethylbenzene	50	590
Total Xylene	50	4,370
Surrogate: a,a,a-Trifluorotoluene, % Recovery		95

EPA Method Number 602, 8020
Log Number: 37018 Sample Id: 6. Untagged Well in Pavement
Units: ug/l Analysis Date/Time: 06/20/95 13:49

Compound	Std Detection Limit	Conc
Benzene	50	21,000
Toluene	50	34,000
Ethylbenzene	50	2,600
Total Xylene	50	19,700
Surrogate: a,a,a-Trifluorotoluene, % Recovery		96

MARTEL
1025 Cromwell Bridge Road Baltimore, Maryland
[illegible] Meadowfern Suite 102 Houston, Texas 77067
3 Sangamon Avenue Springfield, Illinois 62702 (2[illegible] 22-0039 Facsimile [illegible]

Certificate of Laboratory Analysis

EPA Method Number 602, 8020
Log Number: 37018 Sample Id: 7. Field Blank
Units: ug/l Analysis Date/Time: 06/20/95 07:08

Compound	Std Detection Limit	Conc
Benzene	1	ND
Toluene	1	ND
Ethylbenzene	1	ND
Total Xylene	1	ND
Surrogate: a,a,a-Trifluorotoluene, % Recovery		90

EPA Method Number 602, 8020
Log Number: 37018 Sample Id: 8. Trip Blank
Units: ug/l Analysis Date/Time: 06/20/95 08:27

Compound	Std Detection Limit	Conc
Benzene	1	ND
Toluene	1	ND
Ethylbenzene	1	ND
Total Xylene	1	ND
Surrogate: a,a,a-Trifluorotoluene, % Recovery		90

ALGER COUNTRY STORES
P O BOX 639
RISING SUN MARYLAND 21911-0639

March 09, 1995

Mr. Herbert Meade, Chief
Compliance/Remediation Division
Maryland Department of the Environment
2500 Broening Highway
Baltimore, Maryland
21224

Dear Mr. Meade:

Enclosed is a laboratory analysis report required on Case #92-2616-CE, Alger Country Store, Calvert, Maryland.

If there are any questions, please call.

Very truly yours,

Kenneth D. Thomas
General Manager

Enclosure: (2)

MARTEL

[illegible] Cromwell Bridge Road Baltimore, Maryland 212[illegible] (410) 825-7790 Facsimile [illegible]
350 Meadowfern Suite 102 Houston, Texas 77067 (713) 872-9100 Facsimile (713) [illegible]
1438 Sangamon Avenue Springfield, Illinois 62702 (217) 522-0009 Facsimile (217) [illegible]

Certificate of Laboratory Analysis

Martel Lab Number: 25145

Log Identification: W-35003

Sampling by Martel.
Project Identification: 1st quarter 1995 Groundwater Monitoring
Sampling location is the Alger's Country Store
2815 Northeast Road

Alger Oil, Inc.
P.O. Box 639
Rising Sun, Maryland 21911
ATTENTION: Ken Thomas

January 31, 1995

CLIENT IDENTIFICATION: ALGERS

ANALYTICAL PARAMETER	METHOD	RESULT	UNITS
LOG IDENTIFICATION: W-35003			
DATE RECEIVED: 01/18/95			
SAMPLE ID: 1. Well CE-88-2553, Grab			
SAMPLING DATE: 01/17/95 TIME: 11:30			
Total Petroleum Hydrocarbons	EPA 418.1	<1	mg/l
Benzene	EPA 8020	<1	ug/l
Toluene	EPA 8020	<1	ug/l
Ethylbenzene	EPA 8020	<1	ug/l
Total Xylenes	EPA 8020	<1	ug/l
SAMPLE ID: 2. Untagged Well in Grass			
SAMPLING DATE: 01/17/95 TIME: 12:10			
Total Petroleum Hydrocarbons	EPA 418.1	<1	mg/l
Benzene	EPA 8020	<1	ug/l
Toluene	EPA 8020	<1	ug/l
Ethylbenzene	EPA 8020	<1	ug/l
Total Xylenes	EPA 8020	<1	ug/l

MARTEL
[illegible] Cromwell Bridge Road Baltimore, Maryland 21[illegible] (410) 825-7790 Facsimile [illegible]
[illegible] Meadowfern Suite 102 Houston, Texas 77067 (713) 872-9100 Facsimile [illegible]
7435 Sangamon Avenue Springfield, Illinois 62702 (217) 522-0009 Facsimile (217) 522-4119

Certificate of Laboratory Analysis

CLIENT IDENTIFICATION: ALGERS
LOG IDENTIFICATION: W-35003
January 31, 1995

ANALYTICAL PARAMETER	METHOD	RESULT	UNITS
SAMPLE ID: 3. Well CE-88-2549			
SAMPLING DATE: 01/17/95 TIME: 12:35			
Total Petroleum Hydrocarbons	EPA 418.1	<1	mg/l
Benzene	EPA 8020	<1	ug/l
Toluene	EPA 8020	<1	ug/l
Ethylbenzene	EPA 8020	<1	ug/l
Total Xylenes	EPA 8020	<1	ug/l
SAMPLE ID: 4. Well CE-88-2551			
SAMPLING DATE: 01/17/95 TIME: 13:00			
Total Petroleum Hydrocarbons	EPA 418.1	2	mg/l
Benzene	EPA 8020	28	ug/l
Toluene	EPA 8020	26	ug/l
Ethylbenzene	EPA 8020	1.8	ug/l
Total Xylenes	EPA 8020	12	ug/l
SAMPLE ID: 5. Well CE-88-2548			
SAMPLING DATE: 01/17/95 TIME: 13:20			
Total Petroleum Hydrocarbons	EPA 418.1	<1	mg/l
Benzene	EPA 8020	12	ug/l
Toluene	EPA 8020	11	ug/l
Ethylbenzene	EPA 8020	0.70	ug/l
Total Xylenes	EPA 8020	4.5	ug/l
SAMPLE ID: 6. Untagged Well in Pavement			
SAMPLING DATE: 01/17/95 TIME: 13:45			
Total Petroleum Hydrocarbons	EPA 418.1	23	mg/l
Benzene	EPA 8020	24	ug/l
Toluene	EPA 8020	29	ug/l
Ethylbenzene	EPA 8020	1.9	ug/l
Total Xylenes	EPA 8020	10	ug/l

MARTEL
25 Cromwell Bridge Road Baltimore, Maryland 21[illegible] (410) 825-7799 Facsimile [illegible]
350 Meadowfern Suite 102 Houston, Texas 77067 (713) 872-9100 Facsimile (713) [illegible]
1438 Sangamon Avenue Springfield, Illinois 62702 (217) 522-0009 Facsimile (217) 522-[illegible]

Certificate of Laboratory Analysis

CLIENT IDENTIFICATION: ALGERS
LOG IDENTIFICATION: W-35003
January 31, 1995

ANALYTICAL PARAMETER	METHOD	RESULT	UNITS
SAMPLE ID: 7. Field Blank SAMPLING DATE: 01/17/95 TIME: 11:20			
Benzene	EPA 8020	<1	ug/l
Toluene	EPA 8020	<1	ug/l
Ethylbenzene	EPA 8020	<1	ug/l
Total Xylenes	EPA 8020	<1	ug/l
SAMPLE ID: 8. Trip Blank SAMPLING DATE: 01/17/95 TIME: 10:00			
Benzene	EPA 8020	<1	ug/l
Toluene	EPA 8020	<1	ug/l
Ethylbenzene	EPA 8020	<1	ug/l
Total Xylenes	EPA 8020	<1	ug/l

All procedures used are in accordance with the following methods: "Methods of Chemical Analysis of Water and Wastewater", EPA 600/4-79/020, U.S. EPA, Cincinnati, Revised March 1983. "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, U.S. EPA Washington D.C., Third Edition, September 1986.

Margaret E. Wilcox
QC APPROVAL

01/31/95
DATE

Thomas Meuschke
LABORATORY APPROVAL

01/31/95
DATE

ALGER COUNTRY STORES
P O BOX 639
RISING SUN MARYLAND 21911-0639

October 06, 1994

Mr. Herbert Meade, Chief
Compliance/Remediation Division
Maryland Department of the Environment
2500 Broening Highway
Baltimore, Maryland
21224

Dear Mr. Meade:

Enclosed is a laboratory analysis report required on Case #92-2616-CE, Alger Country Store, Calvert, Maryland.

If there are any questions, please call.

Very truly yours,

Kenneth D. Thomas
General Manager

Enclosure: (2)

CLIENT IDENTIFICATION: ALGERS
LOG IDENTIFICATION: W-33293
September 30, 1994
PAGE 2

ANALYTICAL PARAMETER	METHOD	RESULT	UNITS
SAMPLE ID: 4. Well CE-88-2551 SAMPLING DATE: 09/16/94 TIME: 13:57			
Total Petroleum Hydrocarbons	EPA 418.1	3.9	mg/l
SAMPLE ID: 5. Well CE-88-2548 SAMPLING DATE: 09/16/94 TIME: 14:05			
Total Petroleum Hydrocarbons	EPA 418.1	2.0	mg/l
SAMPLE ID: 6. Untagged Well in Pavement SAMPLING DATE: 09/16/94 TIME: 14:10			
Total Petroleum Hydrocarbons	EPA 418.1	9.6	mg/l

All procedures used are in accordance with the following methods: "Methods of Chemical Analysis of Water and Wastewater", EPA 600/4-79/020, U.S. EPA, Cincinnati, Revised March 1983.

Margaret E Wilcox
QC APPROVAL

October 1, 1994
DATE

Thomas Nienstedt
LABORATORY APPROVAL

09/30/94
DATE

MARTEL
[illegible] Reisterstown Road Baltimore, Maryland [illegible] 410 [illegible] Facsimile [illegible]
[illegible] Suite 12 Houston Texas 77057 [illegible] 972-9135 Facsimile [illegible]
436 Sunnyglen Avenue Springfield, Illinois 62702 (217) 522-0009 Facsimile [illegible]

Certificate of Laboratory Analysis

Martel Lab Number: 24330

Log Identification: W-33293

Sampling by Martel.
Project Identification: 3rd quarter 1994 Groundwater Monitoring.
Sampling Location is the Alger's Country Store,
2815 Northeast Road.

Alger Oil, Inc.
P.O. Box 639
Rising Sun, Maryland 21911
ATTENTION: Ken Thomas

September 30, 1994

CLIENT IDENTIFICATION: ALGERS

ANALYTICAL PARAMETER	METHOD	RESULT	UNITS
LOG IDENTIFICATION: W-33293			
DATE RECEIVED: 09/19/94			
SAMPLE ID: 1. Well CE-88-2553			
SAMPLING DATE: 09/16/94 TIME: 13:35			
Total Petroleum Hydrocarbons	EPA 418.1	<1	mg/l
SAMPLE ID: 2. Well CE-88-2549			
SAMPLING DATE: 09/16/94 TIME: 13:43			
Total Petroleum Hydrocarbons	EPA 418.1	3.9	mg/l
SAMPLE ID: 3. Untagged Well in Grass			
SAMPLING DATE: 09/16/94 TIME: 13:50			
Total Petroleum Hydrocarbons	EPA 418.1	<1	mg/l

ALGER COUNTRY STORE

P.O.BOX 639

RISING SUN, MARYLAND 21911

May 20, 1994

State of Maryland
Department of the Environment
Hazardous and Solid Waste Management Administration
2500 Broening Highway
Baltimore, Maryland 21224

To Whom It May Concern:

With regard to the requirements of Maryland DOE Report of Observations dated August 19, 1993 the following information is submitted.

DATE	PRODUCT LEVEL IN WELL	AMOUNT RECOVERED
Week ended 02/04/94	Not Able to Monitor-Ice	N/A
Week ended 02/11/94	Not Able to Monitor-Ice	N/A
Week ended 02/18/94	1/16"	None
Week ended 02/25/94	1/16"	None
week ended 03/04/94	1/16"	None
Week ended 03/11/94	-0-	None
Week ended 03/18/94	-0-	None
Week ended 03/25/94	-0-	None
Week ended 04/01/94	-0-	None
Week ended 04/08/94	-0-	None
Week ended 04/15/94	-0-	None
Week ended 04/22/94	-0-	None
Week ended 04/29/94	-0-	None

Also please find enclosed a copy of laboratory tests completed on the above location.

Finally, due to the absence of free product request monitoring be reduced to monthly rather than weekly.

Very truly yours,

Kenneth D. Thomas

Kenneth D. Thomas
General Manager

MARTEL

25 Cromwell Bridge Road Baltimore, Maryland 21204 (410) 825-7790 Facsimile (410) 821-1054
250 Meadowfern Suite 102 Houston, Texas 77067 (713) 872-9100 Facsimile (713) 872-7916
1438 Sangamon Avenue Springfield, Illinois 62702 (217) 522-0009 Facsimile (217) 522-2119

Certificate of Laboratory Analysis

Martel Lab Number: 23334

Log Identification: W-31317

Sampling by Martel.
Project Identification: Quarterly Groundwater Monitoring
1st quarter 1994

Alger Oil, Inc.
P.O. Box 639
Rising Sun, Maryland 21911
ATTENTION: Ken Thomas

May 16, 1994

CLIENT IDENTIFICATION: ALGERS

ANALYTICAL PARAMETER	METHOD	RESULT	UNITS
LOG IDENTIFICATION: W-31317			
DATE RECEIVED: 05/06/94			
SAMPLE ID: 1. Well CE-88-2553			
SAMPLING DATE: 05/06/94 TIME: 12:45			
Total Petroleum Hydrocarbons	EPA 418.1	<1	mg/l
SAMPLE ID: 2. Well CE-88-2549			
SAMPLING DATE: 05/06/94 TIME: 12:55			
Total Petroleum Hydrocarbons	EPA 418.1	<1	mg/l
SAMPLE ID: 3. Well CE-88-2548			
SAMPLING DATE: 05/06/94 TIME: 13:25			
Total Petroleum Hydrocarbons	EPA 418.1	2.6	mg/l

MARTEL
25 Cromwell Bridge Road Baltimore, Maryland 2120[illegible]10) 825-7790 Facsimile (410) 821-1054
250 Meadowfern Suite 102 Houston, Texas 77067 (713) 872-9100 Facsimile (713) 872-7916
1438 Sangamon Avenue Springfield, Illinois 62702 (217) 522-0009 Facsimile (217) 522-2119

Certificate of Laboratory Analysis

CLIENT IDENTIFICATION: ALGERS
LOG IDENTIFICATION: W-31317
May 16, 1994

ANALYTICAL PARAMETER	METHOD	RESULT	UNITS
SAMPLE ID: 4. Untagged Well off NE corner of building in pavement SAMPLING DATE: 05/06/94 TIME: 13:50			
Total Petroleum Hydrocarbons	EPA 418.1	25	mg/l
SAMPLE ID: 5. Well CE-88-2551 SAMPLING DATE: 05/06/94 TIME: 14:15			
Total Petroleum Hydrocarbons	EPA 418.1	2.6	mg/l
SAMPLE ID: 6. Untagged Well in grass SAMPLING DATE: 05/06/94 TIME: 14:40			
Total Petroleum Hydrocarbons	EPA 418.1	1	mg/l

All procedures used are in accordance with the following methods: "Methods of Chemical Analysis of Water and Wastewater", EPA 600/4-79/020, U.S. EPA, Cincinnati, Revised March 1983.

Margaret E. Wilcox
QC APPROVAL

05/16/94
DATE

Thomas Mercadante
LABORATORY APPROVAL

05/16/94
DATE

MARTEL
25 Cromwell Bridge Road Baltimore, Maryland 2120[illegible] 10) 825-7790 Facsimile (410) 821-1054
250 Meadowfern Suite 102 Houston, Texas 77067 (713) 872-9100 Facsimile (713) 872-7916
1438 Sangamon Avenue Springfield, Illinois 62702 (217) 522-0009 Facsimile (217) 522-2119

Certificate of Laboratory Analysis

05/16/94

Analytical Information
Dates, Times, Analysts

Log Number	Test Code	Date Performed	Time Performed	Analyst Initials
** Sample Id: 1. Well CE-88-2553				
31317	TPH	05/10/94	09:00	LJS
** Sample Id: 2. Well CE-88-2549				
31317	TPH	05/10/94	09:00	LJS
** Sample Id: 3. Well CE-88-2548				
31317	TPH	05/10/94	09:00	LJS
** Sample Id: 4. Untagged Well off NE corner of building in pavement				
31317	TPH	05/10/94	09:00	LJS
** Sample Id: 5. Well CE-88-2551				
31317	TPH	05/10/94	09:00	LJS
** Sample Id: 6. Untagged Well in grass				
31317	TPH	05/10/94	09:00	LJS

CHAIN-OF-CUSTODY / SAMPLE INFORMATION FORM

BOTH SIDES OF FORM MUST BE FILLED OUT

Martel ■ 1025 Cromwell Bridge Rd. ■ Baltimore, Maryland 21204 ■ (410) 825-7790 ■ FAX (410) 821-1054

Project Name/No. ALGERS W-31317 Sampler Name T. Merashoff

Sample Turnaround Time Requested (Routine is 2-3 weeks; Priority incurs at least 50% surcharge) Priority (1 week)

Station No./ Sample ID	Station Location	Matrix	Container Description/ Preservation Status	Is Sample Potentially Hazardous? If Yes Explain	No. of Containers	Date/Time Taken	Analyses Required / Comments
(1)	Well CE-88-2553	water	32oz glass/H_2SO_4	No	1	5/6/94 1245	TPH
(2)	Well CE-88-2549	↓	↓	↓	1	1255	↓
(3)	Well CE-88-2548				1	1325	
(4)	Untagged well off NE corner ~~of pavement~~				1	1350	
(5)	Well CE-88-2551				1	1415	
(6)	Untagged well in grass				1	1440	

Transferred by:	Received by:	Date	Time
T. Merashoff		5/6/94	1550
Transferred by:	Received by:	Date	Time
Transferred by:	Received by:	Date	Time
Transferred by:	Received by:	Date	Time

Cooler Receipt Information (LAB USE ONLY)

Sufficient ice/cool packs? (Yes)/No If No, temp. = _____

Sample containers preserved? (Yes)/No If No, explain below

Samples properly sealed? (Yes)/No If No, explain below

Initials: [signature] Date: 5-6-94

ALGER COUNTRY STORE

P. O. BOX 639

RISING SUN, MARYLAND 21911

October 27, 1993

State of Maryland
Department of the Environment
Hazardous & Solid Waste
Management Administration
2500 Broening Highway
Baltimore, Maryland 21224

To Whom It May Concern:

With regard to the requirements of Maryland DOE Report of Observations dated August 19, 1993, the following information is submitted.

DATE	PRODUCT LEVEL IN WELL	AMOUNT RECOVERED
09/24/93	1/8"	None
09/29/93	1/8"	None
10/01/93	1/8"	None
10/04/93	1/8"	None
10/08/93	1/8"	None
10/11/93	-0-	None
10/15/93	1/16"	None
10/18/93	1/16"	None
10/22/93	1/16"	None

Very truly yours,

Kenneth D. Thomas

Kenneth D. Thomas
General Manager

A L G E R C O U N T R Y S T O R E

P. O. BOX 6 3 9

R I S I N G S U N , M A R Y L A N D

2 1 9 1 1

September 21, 1993

State of Maryland
Department of the Environment
Hazardous & Solid Waste
Management Administration
2500 Broening Highway
Baltimore, Maryland 21224

To Whom It May Concern:

With regard to the requirements of Maryland DOE Report of Observations dated August 19, 1993, the following information is submitted.

DATE	Product Level in Well	Amount Recovered
08/19/93	6"	None
08/24/93	6"	3/4 Gallon
08/26/93	-0-	None
08/27/93	-1/8"	None
08/30/93	-1/8"	None
09/02/93	1/8"	None
09/07/93	1/8"	None
09/10/93	-1/8"	None
09/13/93	1/8"	None
09/17/93	1/8"	None
09/20/93	-1/8"	None

Very truly yours,

Kenneth D. Thomas
General Manager

Susan

A L G E R C O U N T R Y S T O R E

P. O. BOX 6 3 9

R I S I N G S U N , M A R Y L A N D

2 1 9 1 1

August 31, 1993

Maryland Department of the Environment
2500 Broening Highway
Baltimore, Maryland
21224

Dear Sir:

Enclosed please find laboratory results for the following location as required.

Alger Country Store
Calvert, Maryland
Case # 92-2616 CE

Very truly yours,

ALGER COUNTRY STORE

Kenneth D. Thomas
General Manager

Martel Lab Number: 21157

Log Identification: W-27606

Sampling by Martel.

Alger Oil, Inc.
P.O. Box 639
Rising Sun, Maryland 21911
ATTENTION: Ken Thomas

August 27, 1993

CLIENT IDENTIFICATION: ALGERS

ANALYTICAL PARAMETER	METHOD	RESULT	UNITS
LOG IDENTIFICATION: W-27606			
DATE RECEIVED: 08/24/93			
SAMPLE ID: 1. CE-88-2551			
SAMPLING DATE: 08/24/93 TIME: 11:25			
Total Petroleum Hydrocarbons	EPA 418.1	8	ppm
SAMPLE ID: 2. CE-88-2548			
SAMPLING DATE: 08/24/93 TIME: 11:30			
Total Petroleum Hydrocarbons	EPA 418.1	4	ppm
SAMPLE ID: 3. CE-88-2549			
SAMPLING DATE: 08/24/93 TIME: 11:35			
Total Petroleum Hydrocarbons	EPA 418.1	<1	ppm
SAMPLE ID: 4. CE-88-2553			
SAMPLING DATE: 08/24/93 TIME: 11:50			
Total Petroleum Hydrocarbons	EPA 418.1	<1	ppm

CLIENT IDENTIFICATION: ALGERS
LOG IDENTIFICATION: W-27606
August 27, 1993

ANALYTICAL PARAMETER	METHOD	RESULT	UNITS
SAMPLE ID: 5. CE-88-2550 SAMPLING DATE: 08/24/93 TIME: 11:40			
Total Petroleum Hydrocarbons	EPA 418.1	<1	ppm
SAMPLE ID: 6. 005 SAMPLING DATE: 08/24/93 TIME: 11:55			
Total Petroleum Hydrocarbons	EPA 418.1	22	ppm

All procedures used are in accordance with the following methods: "Methods of Chemical Analysis of Water and Wastewater", EPA 600/4-79/020, U.S. EPA, Cincinnati, Revised March 1983.

Margaret E. Wilcox
QC APPROVAL

08/30/93
DATE

LABORATORY APPROVAL

8/30/93
DATE

Analytical Information
Dates, Times, Analysts
(dates may refer to date begun or date approved)

Log Number	Test Code	Date Performed	Time Performed	Analyst Initials
** Sample Id: 1. CE-88-2551				
27606	TPH	08/25/93	08:15	LJS
** Sample Id: 2. CE-88-2548				
27606	TPH	08/25/93	08:15	LJS
** Sample Id: 3. CE-88-2549				
27606	TPH	08/25/93	08:15	LJS
** Sample Id: 4. CE-88-2553				
27606	TPH	08/25/93	08:15	LJS
** Sample Id: 5. CE-88-2550				
27606	TPH	08/25/93	08:15	LJS
** Sample Id: 6. 005				
27606	TPH	08/25/93	08:15	LJS

A L G E R C O U N T R Y S T O R E

P. O. BOX 6 3 9

R I S I N G S U N, M A R Y L A N D

2 1 9 1 1

May 28, 1993

Maryland Department of the Environment
2500 Broening Highway
Baltimore, Maryland
21224

Dear Sir:

Enclosed please find a copy of laboratory tests completed as required on the following location.

Alger Country Store
Calvert, Maryland

Case #92-2616 CE

Very truly yours,

ALGER COUNTRY STORE

Kenneth D. Thomas
General Manager

FAX FROM MARTEL

1025 Cromwell Bridge Road • Baltimore, Maryland 21204 • Telephone (410) 825-7790 • Facsimile (410) 821-1054
250 Meadowfern, Suite 102 • Houston, Texas 77067 • Telephone (713) 872-9100 • Facsimile (713) 872-7916
1438 Sangamon Avenue • Springfield, Illinois 62702 • Telephone (217) 522-0009 • Facsimile (217) 522-0009

TO: **Kenneth Thomas**

ORGANIZATION: **Alger Oil Company**

RECIPIENT'S FAX NO.: **(410) 658-6207**

FROM: **Ted Savage**

DATE: **May 28, 1993**

NO. OF PAGES: **3**
(including cover page)

RE: **SAMPLE RESULTS:**
ALGERS COUNTRY STORE
2815 NE ROAD
N.E., MARYLAND 21901

MESSAGE:

THE FOLLOWING IS PRELIMINARY DATA AND WILL UNDERGO ADDITIONAL QUALITY CONTROL REVIEW. FINAL CERTIFICATE(S) OF ANALYSIS WILL BE GENERATED AND SENT FOLLOWING COMPLETION OF ALL ANALYSES AND QUALITY CONTROL.

#1 - TPH, mg/l	7.9
#2 - TPH, mg/l	2.6
#3 - TPH, mg/l	1.6
#4 - TPH, mg/l	1.6
#5 - TPH, mg/l	28

#1 - Well CE-88-2551	(Grab Sample) 5/20/93 @ 1255
#2 - Well CE-88-2548	(Grab Sample) 5/20/93 @ 1300
#3 - Well CE-88-2549	(Grab Sample) 5/20/93 @ 1310
#4 - Well CE-88-2553	(Grab Sample) 5/20/93 @ 1315
#5 - I.D. Plate Missing #005	(Grab Sample) 5/20/93 @ 1325 *

(*) See attached map for the location of well 005

TPH = Total Petroleum Hydrocarbons by EPA Method 418.1
Tested on 5/27/93 @ 1800 hours (MG)

CE-88-2
1
mw3
GRASS
mw4
005
5
ISLAND
STORE
ENTER
CE-88-2548
2
mw1
ENTRANCE
RT. 272 (NORTH →)
PUMPS
ISLAND
CE-88-2553
4
mw6
CE-88-2549
3
mw2

CHAIN-OF-CUSTODY / SAMPLE INFORMATION FORM

BOTH SIDES OF FORM MUST BE FILLED OUT

Martel ▪ 1025 Cromwell Bridge Rd. ▪ Baltimore, Maryland 21204 ▪ (410) 825-7790 ▪ FAX (410) 821-1054

Project Name/No ALGERS W-26129 Sampler Name T. Panzarella

Sample Turnaround Time Requested (Routine is 2-3 weeks; Priority incurs at least 50% surcharge) P. due date 5/31/93

Station No./ Sample ID	Station Location	Matrix	Container Description/ Preservation Status	Is Sample Potentially Hazardous? If Yes Explain	No. of Containers	Date/Time Taken	Analyses Required / Comments
(1)	MONITORING well CE-88-2551 / grab	H_2O	w/m Literglass/H_2SO_4	No	1	5/20/93 1255	TPH
(2)	CE-88-2548 /				1	1300	
(3)	CE-88-2549 /				1	1310	
(4)	CE-88-2553 /				1	1315	
(5)	005 (*) /				1	1325	/ GASOLINE odor

Transferred by:	Received by:	Date	Time
T. Panzarella	T. Panzarella	5/20/93	1500
Transferred by:	Received by:	Date	Time
Transferred by:	Received by:	Date	Time
Transferred by:	Received by:	Date	Time

Comments

Hours on back

(*) IDENTIFICATION PLATE MISSING - I ASSIGNED #005 FOR THIS LOCATION - SEE ATTACHED MAP WHEN THOMAS NEEDS

GEOMATRIX INC.
EARTH SCIENCE CONSULTANTS
6801 Kenilworth Avenue, Suite 100 • Riverdale • Maryland 20737 • Telephone (301) 779-5302 • Fax (301) 779-5842

August 3, 1992

Ms. Barbara Brown
Dept. of the Environment
UST/LUST Division
Hazardous and Solid Waste
Management Administration
2500 Broening Highway
Baltimore, Maryland 21224

RE: Field Investigation- Calvert Country Store, Cecil County, Maryland.

Dear Ms. Brown:

Geomatrix, Inc. (Geomatrix) is pleased to submit this brief progress report on behalf of Alger Oil, Inc. on the site referenced above.

Groundwater samples were collected from wells, GW-1, through GW-6 and tap water samples from the well supplying potable water to the premises. The samples were submitted to Gascoyne Laboratories, Inc. in Baltimore, Maryland. The results of the laboratory analyses for BTEX and MTBE performed on the samples are attached.

The groundwater has apparently been impacted at the site, however the risk to the environment and to human health appears to be relatively low based on the following relevant indicators:

- No free product was observed in any of the monitoring wells.
- The ground surface at the site has been paved with asphalt and/or cement, and there is very minimal possibility of routes of inhalation, ingestion and dermal contact from the subsurface media.
- The soil profile and the geologic formation (weathered saprolite, decomposed bedrock) are relatively tight and will tend not to allow infiltration of precipitation.
- The hydraulic gradient (slope) of the groundwater is relatively flat. This in conjunction with the anticipated low infiltration of precipitation as a result of the paved areas and tight soils will therefore, result in groundwater movement being relatively slow. Hence any contamination which may exist will move relatively slowly.

GEOMATRIX

EARTH SCIENCE CONSULTANTS

- The tap water is clean. The well that supplies potable water to the site has not been impacted by the leaks of the old oil/fuel that have occurred previously.

- The site is primarily surrounded by farm lands. There is no down gradient receptors such as wells or streams that would be potentially threatened by any subsurface contamination.

Based on these observations, we recommend that **a long-term monitoring program** be implemented at site to evaluate the status of the subsurface contamination from time to time.

We look forward to a meeting with you at your earliest convenience to discuss and affirm the details of the monitoring program. Please do not hesitate to call either myself or Donald A Jackson if additional information is required.

Sincerely
Geomatrix, Inc.

Kobina Atobrah, Ph.D, P.G.
Principal Hydrogeologist

Enclosure

cc: Mr. Ken Thomas
Alger Oil, Inc.
559 Sylmar Road
Rising Sun, MD 21911

proposal\algeroil

Gascoyne Laboratories, Inc.

Baltimore, MD 21224

(410) 633-1800
FAX NO.
(410) 633-6553
(800) GAS-COYN

REPORT OF ANALYSIS

Report No. 92-07-333 Report Date: July 30, 1992

Report To: Geomatrix, Inc. Page: 1 of 3

Sample I.D. Submitted Water: Calvert, dated 07/16/92

	GW-1	GW-3	GW-5	Detection Limits
Methyl tert-butyl ether	ND	4300	14,000	1000
Benzene	9800	13,000	39,000	500
Toluene	7000	17,000	40,000	500
Ethylbenzene	600	1100	2300	500
Total Xylenes	2700	9200	12,000	1000
Surrogate Recoveries (%)				
1,2-Dichloroethane-d_4	108	104	111	
Toluene-d_8	94	98	88	
1,4-Bromofluorobenzene	104	101	103	

Notes: (1) Results are expressed as micrograms/liter (ppb).

(2) ND-Not Detected.

(3) Analyses were performed according to EPA Method(s) 8240

(4) Analyst(s): RC; Date Test Completed: 07/20/92

Thomas A. McVicker
QA/QC Officer

Please see reverse side for explanations and other information

Gascoyne Laboratories, Inc.
Baltimore, MD 21224
(410) 633-1800
FAX NO.
(410) 633-6553
(800) GAS-COYN

REPORT OF ANALYSIS

Report No. 92-07-333 Report Date: July 30, 1992

Report To: Geomatrix, Inc. Page: 2 of 3

Sample I.D. Submitted Water: Calvert, dated 07/16/92

	GW-2	GW-4	GW-6	Detection Limits
Methyl tert-butyl ether	ND	ND	40	10
Benzene	ND	27	21	5
Toluene	ND	34	23	5
Ethylbenzene	ND	*	ND	5
Total Xylenes	ND	17	10	10
Surrogate Recoveries (%)				
1,2-Dichloroethane-d_4	99	103	107	
Toluene-d_8	101	97	95	
1,4-Bromofluorobenzene	104	100	98	

Notes: (1) Results are expressed as micrograms/liter (ppb).

(2) ND-Not Detected.

(3) Analyses were performed according to EPA Method(s) 8240

(4) Analyst(s): RC; Date Test Completed: 07/21/92

(5) *-Detected below quantitation level.

Thomas A. McVicker
QA/QC Officer

Please see reverse side for explanations and other information.

Gascoyne Laboratories, Inc.
Baltimore, MD 21224
(410) 633-1800
FAX NO.
(410) 633-6553
(800) GAS-COYN

REPORT OF ANALYSIS

Report No. 92-07-333 Report Date: July 30, 1992

Report To: Geomatrix, Inc. Page: 3 of 3

Sample I.D. Submitted Water: Calvert, dated 07/16/92

	Tap	Detection Limits
Methyl tert-butyl ether	ND	10
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	4

Surrogate Recoveries (%)

1,2-Dichloroethane-d_4	99
Toluene-d_8	100
1,4-Bromofluorobenzene	97

Notes: (1) Results are expressed as micrograms/liter (ppb).

(2) ND-Not Detected.

(3) Analyses were performed according to EPA Method(s) 524.1

(4) Analyst(s): RC; Date Test Completed: 07/18/92

Thomas A. McVicker
QA/QC Officer

Please see reverse side for explanations and other information.

React Environmental Services, Inc.

P.O. Box 33342, 6901 Kingsessing Avenue, Philadelphia, PA 19142
(215) 729-3220 / Fax (215) 729-1557
http:\\www.reactenv.com

May 26, 2004

Maryland Department of the Environment
Multi-Service Building, Rm. 202
120 Broadway
Centerville, MD 21617
Attn: Mr. Frederick Keer, Project Geologist
Via facsimile: (410) 819-4070

RE: Calvert Citgo (Former Alger Country Store)
2815 North East Road, North East, MD
Facility I.D. No. 0005678
MDE Case Number 92-2616-CE
React Project Reference No. 5977-002

Mr. Keer:

In accordance with your request, please find enclosed React Environmental Services, Inc. (React's) and Franklin Engineering (Franklin's) *revised* workplan for site assessment services at the Calvert Citgo station (former Alger Country Store) in North East, Maryland.

This revised workplan incorporates the comments made by MDE's Project Geologist Fredrick Keer in correspondence dated May 13, 2004. This work plan details the specific tasks to be completed as part of this investigation. After the MDE approves this plan, the work plan will be initiated immediately.

If you have any questions regarding this information, please do not hesitate to contact our office.

Sincerely,

React Environmental Services, Inc.

Jason D. Plucinski
Project Scientist

Charlene R. Drake
Project Manager

cc. Mr. Joe Graci, Franklin Engineering

WORK PLAN FOR ENVIRONMENTAL INVESTIGATION
Calvert Citgo (Former Alger Country Store)
2815 Northeast Rd (Route 272), Northeast,
Cecil County, Maryland

1.0 INTRODUCTION

The following work plan was developed in accordance with the Guidance Document on the Content of Environmental Investigation Work Plans and Quality Assurance Project Plans, presented in Appendix of the Maryland Department of the Environment (MDE's) Cleanup Standards for Soil and Groundwater, Interim Final Guidance, August 2001.

2.0 CONCEPTUAL SITE MODEL

2.1 Background/Purpose

React Environmental Services, Inc. (React) was contracted by F.C. Haab Company to perform environmental consulting services at the Calvert Citgo (formerly the Alger Country Store) located at 2815 Northeast Road (Route 272), North East, Cecil County, Maryland. Appendix A (attached) includes a Physical Setting Report that details the subject property.

The purpose of React's activities is to satisfy the requests of the MDE outlined in the Notice of Violation (NV 2004-038) from the MDE dated January 5, 2004. Specifically, the MDE is requiring:

1. A hydrogeological study, including groundwater wells is to be completed.
2. A risk assessment is to be performed.
3. Well caps/locks on existing wells are to be repaired/replaced as required.

2.2 Site History

Based on the review of limited environmental reporting provided to React, the site has operated as a retail petroleum station since at least 1979. According to the former site owner, F.C. Haab, the original tanks that were installed at the time the site was developed as a gasoline station in 1979 were removed sometime in 1994-1995. Shortly thereafter, a total of six (6) USTs were installed. Four (4) 4,000-gallon, steel-constructed underground storage tanks (USTs) containing gasoline, one (1) 4,000-gallon, steel-constructed UST containing diesel fuel, and one (1) UST (of unknown size and construction) containing kerosene currently exist at the site. The most recent tank tightness test results provided to React was conducted in March 1995; all tanks passed. Currently, the site is operating as a retail petroleum station and convenience store.

2.3 Previous Site Characterization

React has reviewed a report of Preliminary Environmental Site Assessment conducted by Geomatrix, Inc. conducted in August 1991 and a Report of Direct Push Soil Sampling conducted by Advanced Environmental Concepts, Inc. (AEC) in October 2003. Geomatrix advanced ten (10) soil borings and submitted a total of thirteen (13) soil samples for laboratory analysis.

Samples were analyzed for: Total Petroleum Hydrocarbons (TPH) for Gasoline Range Organics (GRO); Benzene; Ethylbenzene; Methyl tertiary-butyl Ether (MTBE); Naphthalene; Toluene; and total Xylenes. No samples exceeded the applicable Non-Residential Cleanup Standards presented in Tables 1 and 2 of the Voluntary Cleanup Program's (VCP) interim guidance. However, eight (8) of the thirteen (13) samples submitted exceeded the Protection of Groundwater standards for at least one (1) analyte. Historical results, along with the Protection of Groundwater Standards and the Non-Residential Cleanup Standards are summarized in attached Tables 1A and 1B, respectively.

Four (4) of Geomatrix's soil borings were completed with monitoring wells, and two (2) of the borings were completed with temporary well points. Groundwater samples were then collected and submitted for laboratory analysis of the same analytes. Each sample exceeded the Generic Numeric Cleanup Standards for groundwater for Type I and II aquifers for at least one analyte. Results from the June 25, 2991 groundwater sampling event are presented in Table 2, attached, along with the applicable Cleanup Standards. Later correspondence from Geomatrix, dated August 3, 1992, refers to what is likely a second groundwater sampling event. However, no specific findings are presented, and no laboratory reports are included.

AEC advanced a total of four (4) soil borings on the subject property on October 8, 2003. Five (5) samples were collected for: Total Petroleum Hydrocarbons (TPH) for Gasoline Range Organics (GRO); Total Petroleum Hydrocarbons (TPH) for Diesel Range Organics (DRO): Benzene; Ethylbenzene; Methyl tertiary-butyl Ether (MTBE); Naphthalene; Toluene; and total Xylenes. Results of this sampling is summarized in Tables 1A and 1B, attached. No groundwater sampling was included in AEC's assessment. Based on the laboratory results, and what AEC identified as free product in soil boring B-2; they concluded that subsurface soils have been impacted across the site and potentially off-site.

Figure 1, attached, presents the soil sampling locations from both Geomatrix and AEC's assessments, along with the monitoring well locations. Soil boring and well construction logs generated from information reported by Geomatrix and AEC are included in Appendix C.

Review of the well construction logs revealed that the screened intervals of the wells (beginning approximately 19 FBG) installed by Geomatrix are well below the water table (measured in March 2004 to be between 12-14 FBG). As MDE indicates in their May 13, 2004 correspondence, this screened interval prevents liquid phase hydrocarbons (LPH) from entering the wells under most circumstances. Additionally, the well construction logs for monitoring wells MW-4 (observed) and MW-5 (not observed by React or MDE) are not known, and well logs are not available.

2.4 Recent Activities

On March 2, 2004 React mobilized to the subject property. A total of five (5) monitoring wells were located (the four installed by Geomatrix and described in their August 1991 reporting, plus an additional well (MW-5) immediately south of the convenience store building). No documentation describing the installation or construction of MW-5 was supplied to React. MDE has reported that historical data indicated six monitoring wells exist at the site, but based on site inspections conducted by MDE in August 2003, several recent inspections by React, and the absence of any specific well records for a sixth well, it is believed only five (5) monitoring wells exist at the subject property. One explanation for the discrepancy could be that Geomatrix

considered the two (2) observation wells located within the tank field as monitoring wells; therefore the four wells they installed were designated MW-1 through MW-4, and they designated the two tank field observation wells.

React accessed each well and collected depth to water measurements using a liquid level device capable of measuring water and separate phase petroleum. No measurable product was observed in any of the wells, but a sheen was observed in MW-3. Spatial locations of each of the wells were measured and recorded so that an accurate basemap could be generated. The well elevations (top of casing elevations) were then sighted using a transit level and survey equipment. Groundwater elevations were then calculated, and a groundwater contour map was generated (see Figure 2, attached). Referring to Figure 2, groundwater flow is to the south/southeast.

Before demobilizing, React installed expandable plugs and brass locks on all five (5) monitoring wells.

2.5 Potential Migration Pathways

2.5.1 Ingestion

Ingestion exposure to contaminants in the soil may come from:

Oral ingestion of contaminated soil/dust;
Ingestion via plant uptake.

Human exposure via plant uptake and ingestion of contaminated plants and ingestion of contaminated soil/dust has been eliminated in a residential / undeveloped exposure setting because based upon field screening results and observations recorded in boring logs, soils from the surface to approximately 5 FBG do not indicate evidence of petroleum impacts. The interval of petroleum impacts identified via laboratory analysis is well below the aeration zone utilized by plant roots. Therefore, the exposure pathway of ingestion of surface soil has been eliminated.

Ingestion exposure to contaminants in the groundwater may come from:

Ingestion from drinking contaminated groundwater,
Ingestion of contaminated fish.

A potable well exists at the subject property that supplies water for drinking and food preparation at the convenience store. Therefore, the exposure pathway of ingestion of contaminated drinking water is a potential migration pathway. Prior reporting however indicates that this well has been previously sampled; laboratory analysis has confirmed acceptably "clean" conditions.

The nearest surface water body, is the West Branch of Little North East Creek, which is located approximately 1.2 miles east of the subject property. It is not known whether or not this creek is used for recreational fishing. Given the location of the Creek and the fact that it is located sidegradient to the site, future impact to the surface water body from contaminated groundwater migrating from the site is unlikely. Therefore, the exposure pathway of ingestion of contaminated fish has been eliminated.

2.5.2 Dermal Contact

Dermal contact can occur by:

Direct contact with soil;
Direct contact with water (bathing, immersion).

Previous soil investigations did identify contaminants of concern at depths less than 5 FBG. Therefore, the exposure pathway of direct contact with surface soil has been eliminated.

Due to shallow water depth, it is improbable that the nearest downgradient surface water body, West Branch of Little North East Creek, may be used for recreational swimming. The supply well on-site is not used for bathing. No other wells were identified within ¼ mile downgradient in the anticipated migration pathway. Therefore, the exposure pathway of direct contact with surface water or groundwater has been eliminated.

2.5.3 Inhalation

Inhalation can occur by:

Inhalation of contaminated soil or dust.
Inhalation of contaminants from volatilization from surface soil to air;
Inhalation of contaminants from volatilization from subsurface soil to soil gas and migration of these substances into buildings;
Inhalation of contaminants from volatilization from groundwater to soil vapor and migration of these vapors into buildings.

Based upon review of data collected to date, contaminants of concern exist in the soil at a minimum depth of five (5) FBG overlain by uncontaminated soil. Once characterization of soils is completed, React will be able to determine whether the exposure pathway of inhalation of contaminated soil or dust has been eliminated.

The on-site building is constructed without sub-grade features, is occupied only for commercial use, and contains a concrete slab floor. Furthermore, the site is in operation as a gasoline service station. Once characterization of groundwater is completed, React will be able to determine whether further evaluation of volatilization of contaminants to indoor air is warranted.

2.6 Previous Remedial Actions

Based on the reporting reviewed by React, no remedial actions were completed at the site.

3.0 PROJECT OBJECTIVES

The objective of the sampling project is to delineate the horizontal and vertical extent of subsurface contamination. Data will be compared to appropriate Maryland Soil and Groundwater Cleanup Standards. This information will be used to identify whether any open pathways to sensitive receptors exist and to define the extent of site remediation, if warranted. The investigation will proceed in a systematic fashion. If full delineation cannot be made on the basis of the work scope defined within this Workplan, additional characterization will be recommended.

Analysis will be performed by a licensed independent testing laboratory. Laboratory reporting limits will be sufficiently low to document attainment of the appropriate standards.

4.0 DESCRIPTION OF WORK

4.1 Media to be Sampled

Sub-surface soil will be collected from on-site boring locations during a two-day sampling event. Two (2) groundwater sampling events will be conducted over a six-month time period to account for seasonal variation. Due to the fact that the on-site monitoring wells appear to be improperly constructed, and the MDE has requested these wells be replaced, React proposes these wells be replaced prior to implementing the groundwater investigation. Five (5) monitoring wells will be installed adjacent to the five (5) current locations. A Maryland-licensed well driller will install the replacement wells, after the existing wells are abandoned. Wells will be constructed so that the water table is within the screened interval, and sufficient length of screen is installed to correctly monitor normal water table fluctuations.

After the replacement wells are installed, and developed, the wells will be allowed a two-week period of stabilization period prior to sampling. Groundwater samples will then be collected from the five (5) on-site groundwater monitoring wells and the one (1) on-site water supply well. In addition, at the specific request of the Department, all potable wells within a half-mile radius (0.5 mile) will be located and sampled.

4.2 Sample Types and Purpose

Both soil and groundwater samples will be analyzed for: Total Petroleum Hydrocarbons (TPH) for Gasoline Range and Diesel Range Organics (GRO/DRO) via EPA method 8015b; and a full volatile organic compounds (VOC) scan which includes methyl tertiary-butyl ether (MTBE), tertiary butyl alcohol (TBA), and other oxygenates using EPA Method 8260b. The purpose of the analytical program is to identify exceedances of Maryland Cleanup Standards.

All potable wells within a half-mile (0.5 mile) radius will be sampled for full VOC scan, including MTBE, TBA, and other oxygenates using EPA Method 524. At the specific request of the Department, additional sample will be collected and preserved during field sampling activities in case high concentrations of VOCs require that EPA Method 8260b be utilized. The results will be compared to Safe Drinking Water standards. The purpose of sampling is to verify that water from the on-site well and area wells (if any) is safe for potable use.

Quality Control/Quality Assurance Samples will be collected and analyzed for TPH-DRO, TPH-GRO, and full VOC scan. The purpose of these samples is to verify the quality of the environmental sampling data derived in the investigation.

4.3 Sampling Methodology

An estimated 6-8 soil borings will be advanced to a depth of at least 30 FBG or refusal (whichever is encountered first) using a direct-push Geoprobe-type drill rig. The depth of 30 feet was specified by the MDE and corresponds to the maximum reported depth of soil impact.

Continuous soil samples will be collected from each boring in macro core PETG (clear plastic) liners at continuous four-foot intervals. Each soil interval will then be continuously described and inspected for evidence of petroleum contamination and odors. Each sample will be screened for the presence of volatile organic compounds (VOCs) with a portable Photoionization Detector (PID) equipped with a 10.2 eV lamp. This instrument is capable of detecting a range of VOCs, including those associated with petroleum products. PID readings will then be reported on soil boring logs. A minimum of one (1) sample per boring will then be collected in accordance with React's standard operating procedure, included in Appendix B.

Once the soil borings are advanced, they will each be completed with temporary well screens. Screens will be left in place for several hours prior to sampling to allow for stabilization. Samples will then be collected from the temporary well screens and analyzed for the parameters specified in **Section 4.2**. Following sampling, screens will be removed, and the boreholes will be properly grouted by the Maryland-licensed well driller.

The five (5) replacement groundwater monitoring wells, MW-1 through MW-5 will be sampled in accordance with React's standard operating procedures for low-flow groundwater sampling, included in Appendix B.

The on-site water supply well will be sampled in accordance with React's standard operating procedures for potable well sampling, included in Appendix B.

4.4 Number and Type of Samples to be Collected

The laboratory analytical program for soil will be determined based on a biased sampling approach. The ten (10) samples exhibiting the highest PID readings (minimum one sample per boring) will be submitted to an independent certified laboratory for analysis of the parameters specified in **Section 4.2**.

One soil sample from each of the 6-8 borings will be collected and submitted to an independent certified laboratory for analysis of the parameters specified in **Section 4.2**. In addition, one groundwater sample will be collected from each of the temporary well screens installed in each of the borings and analyzed for the parameters specified in **Section 4.2**.

One sample from each of the five (5) replacement groundwater monitoring wells and one (1) sample from the on-site water supply well will be collected for a total of six (6) groundwater samples. Samples will be analyzed for the parameters specified in **Section 4.2**.

One sample from each of the off-site potable wells will be collected; samples will be analyzed for analysis of the parameters specified in **Section 4.2**.

4.5 Sample Preservation and Packaging

Each soil sample will be appropriately packaged in method-appropriate, laboratory-supplied containers. Samples for volatile analysis will be packaged in EnCore-brand volatile containers, in accordance with React's SOP (Appendix B).

Each groundwater sample will be appropriately packaged in method-appropriate, laboratory-supplied containers. Samples for volatile analysis will placed in 40-ml sample vials containing HCl, as required by the laboratory method. Each sample will be labeled with a designated site ID and the date and time of sampling. Samples will be delivered to the laboratory within 24 hours of sampling.

4.6 Sample Designations and COC Requirements

Sample designations will follow the following format:

Soil samples collected from borings will be identified with the soil boring (SB) number in a consecutive fashion, consistent with prior sampling. Additionally, each soil sample will designated the depth of sampling in feet below grade. For example, SB-001: 10'.

Water samples collected from monitoring wells will be identified with the monitoring well (MW) number in accordance with the existing monitoring well designations. For example, MW-001 through MW-005.

Water samples collected from the on-site water supply well will be identified as supply well (SW) 001.

Each sample will be logged in the field utilizing a hand held portable data assistant (PDA). This data will be automatically uploaded into React's central chemistry database and into the project specific database. The corresponding sample designation will be recorded on the laboratory supplied chain of custody (COC).

Samples will be shipped in a cooler or other the appropriate container. Legal field custody begins when the clean sample containers are obtained from the laboratory and ends when those samples are relinquished to the laboratory for testing. This continuity will be reflected by the appropriate entries on the COC form.

A sample or other physical evidence is said to be under custody if it meets the following conditions:

- It is in the field investigator's physical possession.
- It is in the field investigator's view, after being in his/her possession.
- It was in the field investigator's physical possession and he/she secured it to prevent tampering.
- It is placed in a designated secure area.

Field COC
A COC record will accompany each cooler containing samples sent to the analytical laboratory. The primary purpose of the COC procedures is to document the possession of the samples from collection through storage, analysis, and reporting. COC forms should become the permanent record of all sample handling and shipment activities.

The sampling person or team that collects the samples will retain sample custody in the field. The samples must remain in the possession of and in view of a member of the sampling team until they are placed in a designated secure area or relinquished. The COC forms and labels must be completed before the samples are shipped or delivered to the laboratory.

Laboratory COC:
Laboratory COC procedures, including sample receipt, sample storage, and disbursement for extraction and/or analyses, are provided in the laboratories' QAPP. Samples for this scope of work will be taken to GLA Laboratories of King of Prussia, PA. React has reviewed the QAPP for GLA Laboratories and has found it to be acceptable.

4.7 Sample Handling and Analysis Requirements

React's contract laboratory, GLA will perform sampling handling and analysis in accordance with the analytical method. React has reviewed the QAPP for GLA Laboratories and found it to be acceptable.

4.8 Site Restoration

Bore holes will be backfilled with their respective drill cuttings, topped with approximately 12" of bentonite, and finished with approximately 4" of asphalt "cold patch." No locations are anticipated to be advanced through concrete.

5.0 RECORD KEEPING

Samples collected for specific field analyses or measurements will remain in the custody of the sampling personnel. All information specific to the investigation including sample location, site id, date, time of sampling, soil type as well as information described in the groundwater sampling SOP (Appendix B) will be recorded in the hand held portable data assistant (PDA) and uploaded into the project database.

Samples collected and sent to a third party for analysis will be labeled in the field by sampling personnel. The sample label will contain the following information:

- Laboratory name
- Project name
- Sample ID (each analytical sample will be assigned a unique number by the sampler)
- Preservation method
- Analytical method
- Sampler's initial and signature
- Time and date of sample collection

6.0 MANAGEMENT OF INVESTIGATION-DERIVED WASTE

Drill cuttings will all be returned to their respective bore holes. React will field-filter purge water using granular activated carbon (GAC) units. GAC is a proven technology for removing organic contaminants.

TABLES

React Environmental Services, Inc.

6901 Kingsessing Avenue, Philadelphia, PA 19142 * 654A Mount Road, Aston, PA 19014

PRIMARY CHEMISTRY REPORT

TABLE 1A : SUMMARY OF HISTORICAL SOIL SAMPLING RESULTS

Report Date: 3/5/2004

PROJECT NO.: **5977**
PROJECT NAME: **CALVERT CITGO**
SITE ADDRESS: **2815 NORTH EAST ROAD, NORTHEAST, MD.**

SAMPLING PERIOD: 6/25/1991 TO 10/8/2003 (INCLUSIVE)
MATRIX TYPE: SOIL

APPLICABLE REGULATORY REPORTING STANDARD:*

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Soil, **Protection of Groundwater**, Tables 1 & 2.

Exceedences of the Regulatory Standard are Printed in **Bold.** U = Constituent not detected above Laboratory Reporting Limits. J = Estimated Value. NT = Constituent Not Tested For. "<" = Indicates that the reported concentration is the Laboratory Method Detection Limit (MDL). # = MDL exceeds the Practical Quantitation Limit (PQL). D = Identifies all compounds identified in an analysis at a secondary dilution factor. B = Analyte is found in the associated blank as well as in the sample. NS= No Applicable Standard

CONSTITUENT	UNITS	*STANDARD	SAMPLE LOCATION:	AE-B-001:16'	AE-B-001:20'	AE-B-003:14'	AE-B-003:16'	AE-B-004:20'
			SAMPLE DATE:	10/08/2003	10/08/2003	10/08/2003	10/08/2003	10/08/2003
			SAMPLE DEPTH (fbg):	16.00	20.00	14.00	16.00	20.00
Benzene	(ug/kg)	*5.0*		**182**	<50	<50	<50	**11360**
TPH-Diesel Range Organics (DRO)	(mg/kg)	*N/S*		28.2	<5	<5	<5	<0.50
Ethylbenzene	(ug/kg)	*15000*		544	<50	<50	<50	**37120**
TPH-Gasoline Range Organics (GRO)	(mg/kg)	*N/S*		<1	<1	4.8	<1	<0.10
Methyl tert-butyl ether (MTBE)	(ug/kg)	*280000*		<50	<50	<50	<50	427
Toluene	(ug/kg)	*8800*		740	<50	<50	<50	**93120**
Xylene (total)	(ug/kg)	*170000*		1908	<50	<50	<50	110880

CONSTITUENT	UNITS	*STANDARD	SAMPLE LOCATION:	GM-B-001:15-16	GM-B-001:23-25'	GM-B-004:5-7'	GM-B-004:25-27'	GM-B-005:10-11
			SAMPLE DATE:	06/25/1991	06/25/1991	06/25/1991	06/25/1991	06/25/1991
			SAMPLE DEPTH (fbg):	15.00	23.00	5.00	25.00	10.00
Benzene	(ug/kg)	*5.0*		<1	**28**	**1200**	**85**	**16**
Ethylbenzene	(ug/kg)	*15000*		3	6	10000	260	76
TPH-Gasoline Range Organics (GR0)	(mg/kg)	*N/S*		6	<1	540	60	66
Naphthalene	(ug/kg)	*330*		46	13	**7500**	**940**	**840**
Toluene	(ug/kg)	*8800*		24	67	**30000**	680	79
Xylene (total)	(ug/kg)	*170000*		22	36	53000	1700	710

PROJECT NO.: 5977
PROJECT NAME: CALVERT CITGO
SITE ADDRESS: 2815 NORTH EAST ROAD, NORTHEAST, MD.

SAMPLING PERIOD: 6/25/1991 TO 10/8/2003 (INCLUSIVE)
MATRIX TYPE: SOIL

APPLICABLE REGULATORY REPORTING STANDARD:*

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Soil, Protection of Groundwater, Tables 1 & 2.

Exceedences of the Regulatory Standard are Printed in **Bold.** U = Constituent not detected above Laboratory Reporting Limits. J = Estimated Value. NT = Constituent Not Tested For. "<" = Indicates that the reported concentration is the Laboratory Method Detection Limit (MDL). # = MDL exceeds the Practical Quantitation Limit (PQL). D = Identifies all compounds identified in an analysis at a secondary dilution factor. B = Analyte is found in the associated blank as well as in the sample. NS= No Applicable Standard

CONSTITUENT	UNITS	*STANDARD	SAMPLE LOCATION:	GM-B-005:25-27'	GM-B-006:10-12'	GM-B-006:20-22'	GM-B-007:10-11	GM-B-009:9-11'
			SAMPLE DATE:	06/25/1991	06/25/1991	06/25/1991	06/25/1991	06/25/1991
			SAMPLE DEPTH (fbg):	25.00	10.00	20.00	10.00	9.00
Benzene	(ug/kg)	*5.0*		**18**	<1	**11**	<1	<1
Ethylbenzene	(ug/kg)	*15000*		12	<1	2	<1	3
TPH-Gasoline Range Oraganics(GR0)	(mg/kg)	*N/S*		1	50	<1	<1	6
Naphthalene	(ug/kg)	*330*		29	**450**	38	<1	210
Toluene	(ug/kg)	*8800*		89	16	21	6	<1
Xylene (total)	(ug/kg)	*170000*		72	60	15	6	24

CONSTITUENT	UNITS	*STANDARD	SAMPLE LOCATION:	GM-B-009:13-15'	GM-B-009:23-25'	GM-B-010:15-17'
			SAMPLE DATE:	06/25/1991	06/25/1991	06/25/1991
			SAMPLE DEPTH (fbg):	13.00	23.00	15.00
Benzene	(ug/kg)	*5.0*		<1	<1	<1
Ethylbenzene	(ug/kg)	*15000*		240	2	<1
TPH-Gasoline Range Organics (GR0)	(mg/kg)	*N/S*		110	<1	<1
Naphthalene	(ug/kg)	*330*		**3100**	51	3
Toluene	(ug/kg)	*8800*		53	8	7
Xylene (total)	(ug/kg)	*170000*		2100	17	11

React Environmental Services, Inc.

6901 Kingsessing Avenue, Philadelphia, PA 19142 * 654A Mount Road, Aston, PA 19014

PRIMARY CHEMISTRY REPORT

TABLE 1B : SUMMARY OF HISTORICAL SOIL SAMPLING RESULTS

Report Date: 3/5/2004

PROJECT NO.: **5977**
PROJECT NAME: **CALVERT CITGO**
SITE ADDRESS: **2815 NORTH EAST ROAD, NORTHEAST, MD.**

SAMPLING PERIOD: 6/25/1991 TO 10/8/2003 (INCLUSIVE)
MATRIX TYPE: SOIL

APPLICABLE REGULATORY REPORTING STANDARD:*

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Soil, **Non-Residential Cleanup Standard**, Tables 1 & 2.

Exceedences of the Regulatory Standard are Printed in **Bold.** U = Constituent not detected above Laboratory Reporting Limits. J = Estimated Value. NT = Constituent Not Tested For. "<" = Indicates that the reported concentration is the Laboratory Method Detection Limit (MDL). # = MDL exceeds the Practical Quantitation Limit (PQL). D = Identifies all compounds identified in an analysis at a secondary dilution factor. B = Analyte is found in the associated blank as well as in the sample.

CONSTITUENT	UNITS	*STANDARD	SAMPLE LOCATION:	AE-B-001:16'	AE-B-001:20'	AE-B-003:14'	AE-B-003:16'	AE-B-004:20'
			SAMPLE DATE:	10/08/2003	10/08/2003	10/08/2003	10/08/2003	10/08/2003
			SAMPLE DEPTH (fbg):	16.00	20.00	14.00	16.00	20.00
Benzene	(ug/kg)	*100000*		182	<50	<50	<50	11360
TPH-Diesel Range Organics (DRO)	(mg/kg)	*620*		28.2	<5	<5	<5	<0.50
Ethylbenzene	(ug/kg)	*20000000*		544	<50	<50	<50	37120
TPH-Gasoline Range Organics (GRO)	(mg/kg)	*620*		<1	<1	4.8	<1	<0.10
Methyl tert-butyl ether (MTBE)	(ug/kg)	*2700000*		<50	<50	<50	<50	427
Toluene	(ug/kg)	*41000000*		740	<50	<50	<50	93120
Xylene (total)	(ug/kg)	*410000000*		1908	<50	<50	<50	110880

CONSTITUENT	UNITS	*STANDARD	SAMPLE LOCATION:	GM-B-001:15-16	GM-B-001:23-25'	GM-B-004:5-7'	GM-B-004:25-27'	GM-B-005:10-11
			SAMPLE DATE:	06/25/1991	06/25/1991	06/25/1991	06/25/1991	06/25/1991
			SAMPLE DEPTH (fbg):	15.00	23.00	5.00	25.00	10.00
Benzene	(ug/kg)	*100000*		<1	28	1200	85	16
Ethylbenzene	(ug/kg)	*20000000*		3	6	10000	260	76
TPH-Gasoline Range Organics (GR0)	(mg/kg)	*620*		6	<1	540	60	66
Naphthalene	(ug/kg)	*4100000*		46	13	7500	940	840
Toluene	(ug/kg)	*41000000*		24	67	30000	680	79
Xylene (total)	(ug/kg)	*410000000*		22	36	53000	1700	710

PROJECT NO.: 5977
PROJECT NAME: CALVERT CITGO
SITE ADDRESS: 2815 NORTH EAST ROAD, NORTHEAST, MD.

SAMPLING PERIOD: 6/25/1991 TO 10/8/2003 (INCLUSIVE)
MATRIX TYPE: SOIL

APPLICABLE REGULATORY REPORTING STANDARD:*

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Soil, Non-Residential Cleanup Standard, Tables 1 & 2.

Exceedences of the Regulatory Standard are Printed in **Bold.** U = Constituent not detected above Laboratory Reporting Limits. J = Estimated Value. NT = Constituent Not Tested For. "<" = Indicates that the reported concentration is the Laboratory Method Detection Limit (MDL). # = MDL exceeds the Practical Quantitation Limit (PQL). D = Identifies all compounds identified in an analysis at a secondary dilution factor. B = Analyte is found in the associated blank as well as in the sample.

CONSTITUENT	UNITS	*STANDARD	SAMPLE LOCATION:	GM-B-005:25-27'	GM-B-006:10-12'	GM-B-006:20-22'	GM-B-007:10-11	GM-B-009:9-11'
			SAMPLE DATE:	06/25/1991	06/25/1991	06/25/1991	06/25/1991	06/25/1991
			SAMPLE DEPTH (fbg):	25.00	10.00	20.00	10.00	9.00
Benzene	(ug/kg)	*100000*		18	<1	11	<1	<1
Ethylbenzene	(ug/kg)	*20000000*		12	<1	2	<1	3
TPH-Gasoline Range Organics (GR0)	(mg/kg)	*620*		1	50	<1	<1	6
Naphthalene	(ug/kg)	*4100000*		29	450	38	<1	210
Toluene	(ug/kg)	*41000000*		89	16	21	6	<1
Xylene (total)	(ug/kg)	*410000000*		72	60	15	6	24

CONSTITUENT	UNITS	*STANDARD	SAMPLE LOCATION:	GM-B-009:13-15'	GM-B-009:23-25'	GM-B-010:15-17'
			SAMPLE DATE:	06/25/1991	06/25/1991	06/25/1991
			SAMPLE DEPTH (fbg):	13.00	23.00	15.00
Benzene	(ug/kg)	*100000*		<1	<1	<1
Ethylbenzene	(ug/kg)	*20000000*		240	2	<1
TPH- Gasoline Range Organics (GR0)	(mg/kg)	*620*		110	<1	<1
Naphthalene	(ug/kg)	*4100000*		3100	51	3
Toluene	(ug/kg)	*41000000*		53	8	7
Xylene (total)	(ug/kg)	*410000000*		2100	17	11

React Environmental Services, Inc.

6901 Kingsessing Avenue, Philadelphia, PA 19142 * 654A Mount Road, Aston, PA 19014

PRIMARY CHEMISTRY REPORT

TABLE 2 : SUMMARY OF GROUNDWATER SAMPLING RESULTS

Report Date: 3/3/2004

PROJECT NO.: **5977**
PROJECT NAME: **CALVERT CITGO**
SITE ADDRESS: **2815 NORTH EAST, NORTHEAST, MD.**

SAMPLING PERIOD: 6/25/1991
MATRIX TYPE: WATER

APPLICABLE REGULATORY REPORTING STANDARD:*

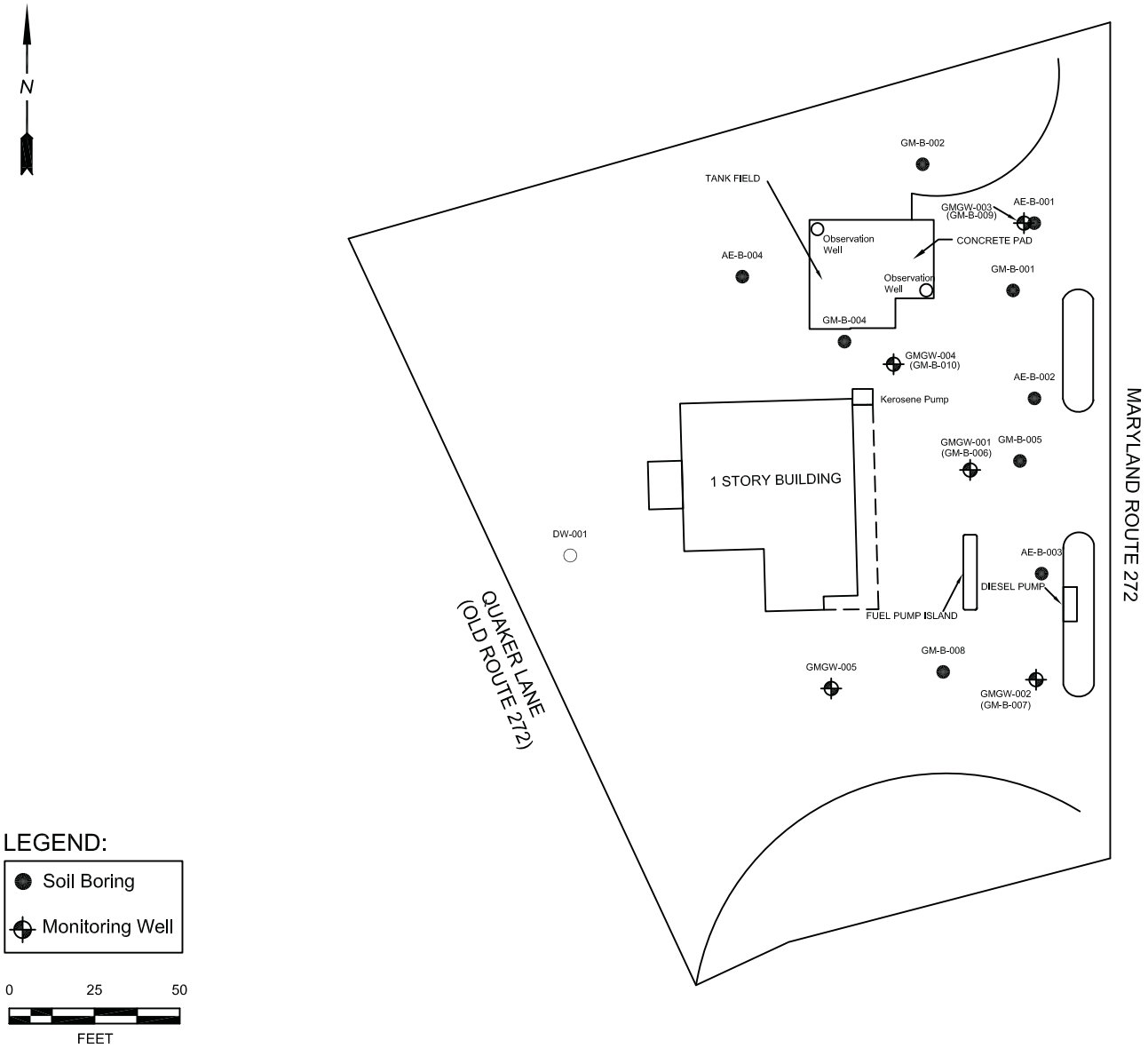
Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Groundwater for Type I & II Aquifers, Tables 1 & 2.

Exceedences of the Regulatory Standard are Printed in **Bold.** U = Constituent not detected above Laboratory Reporting Limits. J = Estimated Value. NT = Constituent Not Tested For. "<" = Indicates that the reported concentration is the Laboratory Method Detection Limit (MDL). # = MDL exceeds the Practical Quantitation Limit (PQL). D = Identifies all compounds identified in an analysis at a secondary dilution factor. B = Analyte is found in the associated blank as well as in the sample. ** Detection Limits Not Known (no laboratory reports available)

CONSTITUENT	UNITS	*STANDARD	SAMPLE LOCATION:	GM-B-004	GM-B-005	GMGW-001 (MW-6)	GMGW-002 (MW-7)	GMGW-003 (B-9)
			SAMPLE DATE:	06/25/1991	06/25/1991	06/25/1991	06/25/1991	06/25/1991
Benzene	(ug/kg)	*5*		**35000**	**320**	**380**	**41**	**2100**
Ethylbenzene	(ug/kg)	*700*		**2000**	22	<1	2	97
TPH-Gasoline Range Organics (GRO)	(mg/kg)	*0.047*		**140**	**1**	**4**	ND**	**11**
Naphthalene	(ug/kg)	*10*		**620**	**15**	**1000**	2	**130**
Toluene	(ug/kg)	*1*		**36000**	**170**	**780**	**19**	**960**
Xylene (total)	(ug/kg)	*100*		**11000**	**120**	**1000**	8	**1300**

CONSTITUENT	UNITS	*STANDARD	SAMPLE LOCATION:	GMGW-004 (MW-10)
			SAMPLE DATE:	06/25/1991
Benzene	(ug/kg)	*5*		<1
Ethylbenzene	(ug/kg)	*700*		7
TPH-Gasoline Range Organics (GRO)	(mg/kg)	*0.047*		<1
Naphthalene	(ug/kg)	*10*		9
Toluene	(ug/kg)	*1*		**23**
Xylene (total)	(ug/kg)	*100*		36

FIGURES



SITE DIAGRAM

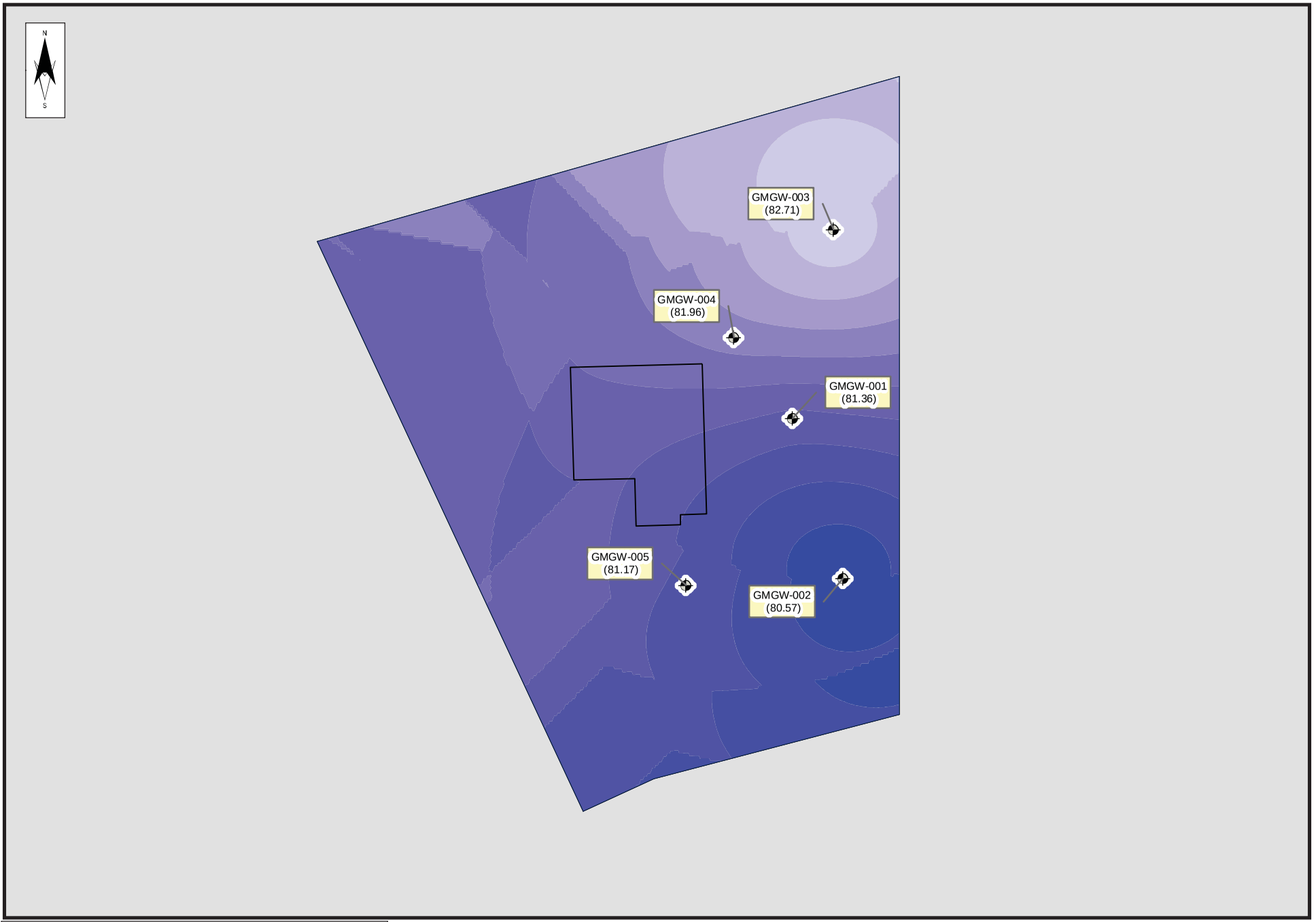
(N:\GISKEY\ACAD2K\Logs\site_diagram_landscape.dwg)

FIGURE NO.: 1

DRAWING DATE: FEBRUARY 2004

Project Name: CALVERT CITGO
Project No.: 5977
Location: 2815 North East Road
Northeast, MD.

React Environmental Services, Inc.



Groundwater Elevation Contours

Method: Ordinary Kriging

Data Source: Groundwater Monitoring Event, March 2 2004

Display: Contours (Elevation in feet- NAVD88)

80.6 - 80.8 | 80.8 - 81 | 81 - 81.2 | 81.2 - 81.4 | 81.4 - 81.6 | 81.6 - 81.9 | 81.9 - 82.1 | 82.1 - 82.3 | 82.3 - 82.5 | 82.5 - 82.7

0 10 20 40 60 80 Feet

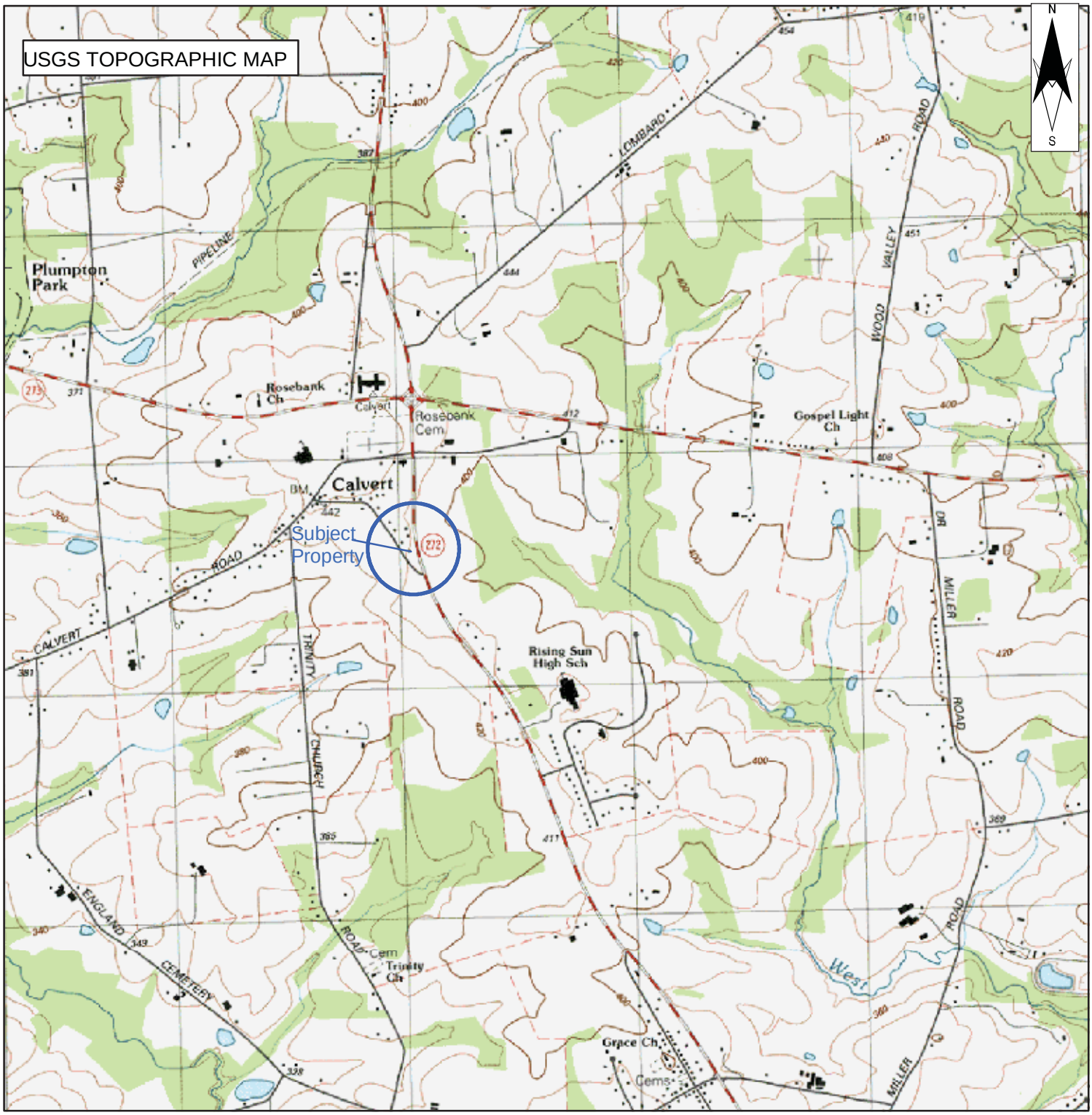
1 inch equals 50 feet

FIGURE 2	*SITE SPECIFIC GROUNDWATER CONTOUR MAP (03-02-04)*
PROJECT NAME:	*CALVERT CITGO*
PROJECT NUMBER:	*5977*
DATE:	*MARCH 2004*

REACT ENVIRONMENTAL SERVICES, INC.

APPENDIX A

PHYSICAL SETTING REPORT
& WELL SEARCH



QUADRANGLE:	**USGS 7.5- MINUTE SERIES BAY VIEW**
COORDINATES:	**740395 N, 1599946 E (NAD 83 MD State Plane, US Feet) / 39.695 N. Latitude, 75.977 W. Longitude**
SCALE:	**1" = 2000' (1:24000)** 0 600 1,200 2,400 3,600 4,800 Feet
SOURCE:	**United States Geological Survey (USGS) 1992**
TOPOGRAPHY:	**Local topography is slightly hilly. Regional topography slopes gradually to the southeast, towards the Chesapeake Bay.**
SURFACE WATER:	**North East River approximately seven miles south of the property.**
OTHER FEATURES:	**N/A**

PROJECT NAME:	***Calvert Citgo***
PROJECT ADDRESS:	***2815 North East Road, North East, MD***
PROJECT NUMBER:	***5977***
DATE:	***MARCH 2004***

REACT ENVIRONMENTAL SERVICES, INC.

QUADRANGLE:	**USGS 7.5-MINUTE SERIES BAY VIEW**
COORDINATES:	**740395 N, 1599946 E (NAD 83 MD State Plane, US Feet) / 39.695 N. Latitude, 75.977 W. Longitude**
SCALE:	**1" = 2000' (1:24000)** 0 550 1,100 2,200 3,300 4,400 Feet
SOURCE:	**United States Geological Survey (USGS) 1993**

PROJECT NAME: *Calvert Citgo*
PROJECT ADDRESS: *2815 North East Road, North East, MD*
PROJECT NUMBER: *5977*
DATE: *MARCH 2004*

QUADRANGLE:	**USGS 7.5-MINUTE SERIES BAY VIEW**
COORDINATES:	**740395 N, 1599946 E (NAD 83 MD State Plane, US Feet) / 39.695 N. Latitude, 75.977 W. Longitude**
SCALE:	**1" = 400' (1:4800)** 0 80 160 320 480 640 Feet
SOURCE:	**United States Geological Survey (USGS) 1993**

PROJECT NAME: *Calvert Citgo*
PROJECT ADDRESS: *2815 North East Road, North East, MD*
PROJECT NUMBER: *5977*
DATE: *MARCH 2004*

The EDR GeoCheck® Report

Calvert Citgo
N. East Road
North East, MD 21901

Inquiry Number: 01134304.1r

February 23, 2004

EDR® Environmental Data Resources Inc

The Standard in Environmental Risk Management Information

440 Wheelers Farms Road
Milford, Connecticut 06460

Nationwide Customer Service

Telephone: 1-800-352-0050
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FORM-ARB

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GEOCHECK ADDENDUM

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

GEOCHECK® - PHYSICAL SETTING SOURCE REPORT

TARGET PROPERTY ADDRESS

CALVERT CITGO
N. EAST ROAD
NORTH EAST, MD 21901

TARGET PROPERTY COORDINATES

Latitude (North):	39.696301 - 39° 41' 46.7''
Longitude (West):	75.978798 - 75° 58' 43.7''
Universal Tranverse Mercator:	Zone 18
UTM X (Meters):	416078.0
UTM Y (Meters):	4394299.0
Elevation:	417 ft. above sea level

EDR's GeoCheck Report has been developed to assist the environmental professional with the collection of physical setting source information in accordance with ASTM 1527-00, Section 7.2.3. Section 7.2.3 requires that a current USGS 7.5 Minute Topographic Map (or equivalent, such as the USGS Digital Elevation Model) be reviewed. It also requires that one or more additional physical setting sources be sought when (1) conditions have been identified in which hazardous substances or petroleum products are likely to migrate to or from the property, and (2) more information than is provided in the current USGS 7.5 Minute Topographic Map (or equivalent) is generally obtained, pursuant to local good commercial or customary practice, to assess the impact of migration of recognized environmental conditions in connection with the property. Such additional physical setting sources generally include information about the topographic, hydrologic, hydrogeologic, and geologic characteristics of a site, and wells in the area.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata. EDR's GeoCheck Report is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

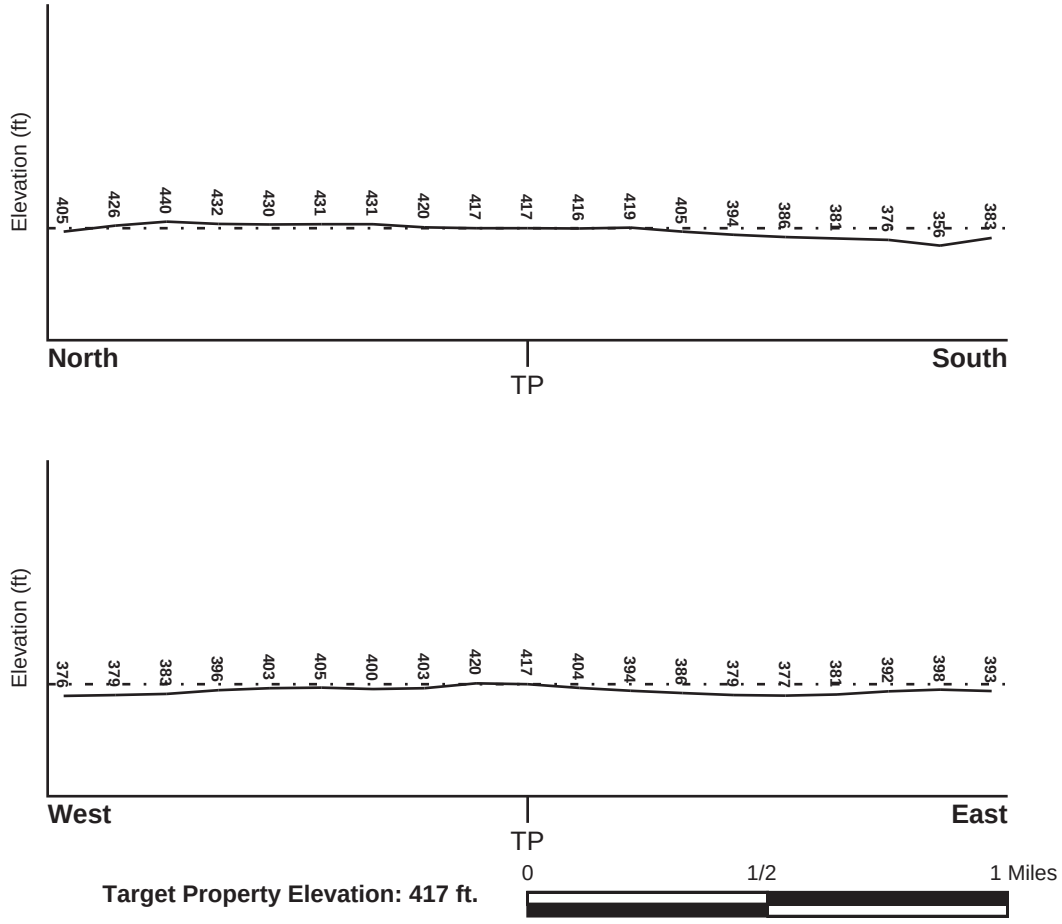
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

USGS Topographic Map:	39075-F8 BAY VIEW, MD PA
General Topographic Gradient:	General SE
Source:	USGS 7.5 min quad index

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
CECIL, MD	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 2400190015A

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
BAY VIEW	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Paleozoic
System:	Cambrian
Series:	Cambrian
Code:	Ce *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Eugeosynclinal Deposits

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	CHESTER
Soil Surface Texture:	silt loam
Hydrologic Group:	Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.
Soil Drainage Class:	Well drained. Soils have intermediate water holding capacity. Depth to water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel:	LOW
Depth to Bedrock Min:	> 60 inches
Depth to Bedrock Max:	> 60 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	8 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 2.00 Min: 0.60	Max: 5.50 Min: 4.50
2	8 inches	42 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 2.00 Min: 0.60	Max: 5.50 Min: 4.50
3	42 inches	62 inches	silt loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 2.00 Min: 0.60	Max: 5.50 Min: 4.50

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: extremely stony - silt loam
loam
channery - loam
very stony - loam

Surficial Soil Types: extremely stony - silt loam
loam
channery - loam
very stony - loam

Shallow Soil Types: No Other Soil Types

Deeper Soil Types: loam
channery - fine sandy loam
clay loam
weathered bedrock
stratified

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

According to ASTM E 1527-00, Section 7.2.2, "one or more additional state or local sources of environmental records may be checked, in the discretion of the environmental professional, to enhance and supplement federal and state sources... Factors to consider in determining which local or additional state records, if any, should be checked include (1) whether they are reasonably ascertainable, (2) whether they are sufficiently useful, accurate, and complete in light of the objective of the records review (see 7.1.1), and (3) whether they are obtained, pursuant to local, good commercial or customary practice." One of the record sources listed in Section 7.2.2 is water well information. Water well information can be used to assist the environmental professional in assessing sources that may impact groundwater flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	1.000
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	USGS0389806	0 - 1/8 Mile NNW
A2	USGS0389760	1/4 - 1/2 Mile NNW
A3	USGS0389827	1/4 - 1/2 Mile NNW
4	USGS0389817	1/4 - 1/2 Mile WNW
6	USGS0389787	1/4 - 1/2 Mile SSE
12	USGS0389830	1/4 - 1/2 Mile NW
C13	USGS0389771	1/2 - 1 Mile NNW
C14	USGS0389772	1/2 - 1 Mile NNW
D15	USGS0389839	1/2 - 1 Mile NW
D16	USGS0389838	1/2 - 1 Mile NW
17	USGS0389783	1/2 - 1 Mile SE
18	USGS0389766	1/2 - 1 Mile ENE
19	USGS0389855	1/2 - 1 Mile NNW
20	USGS0389726	1/2 - 1 Mile West
21	USGS0389773	1/2 - 1 Mile WNW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

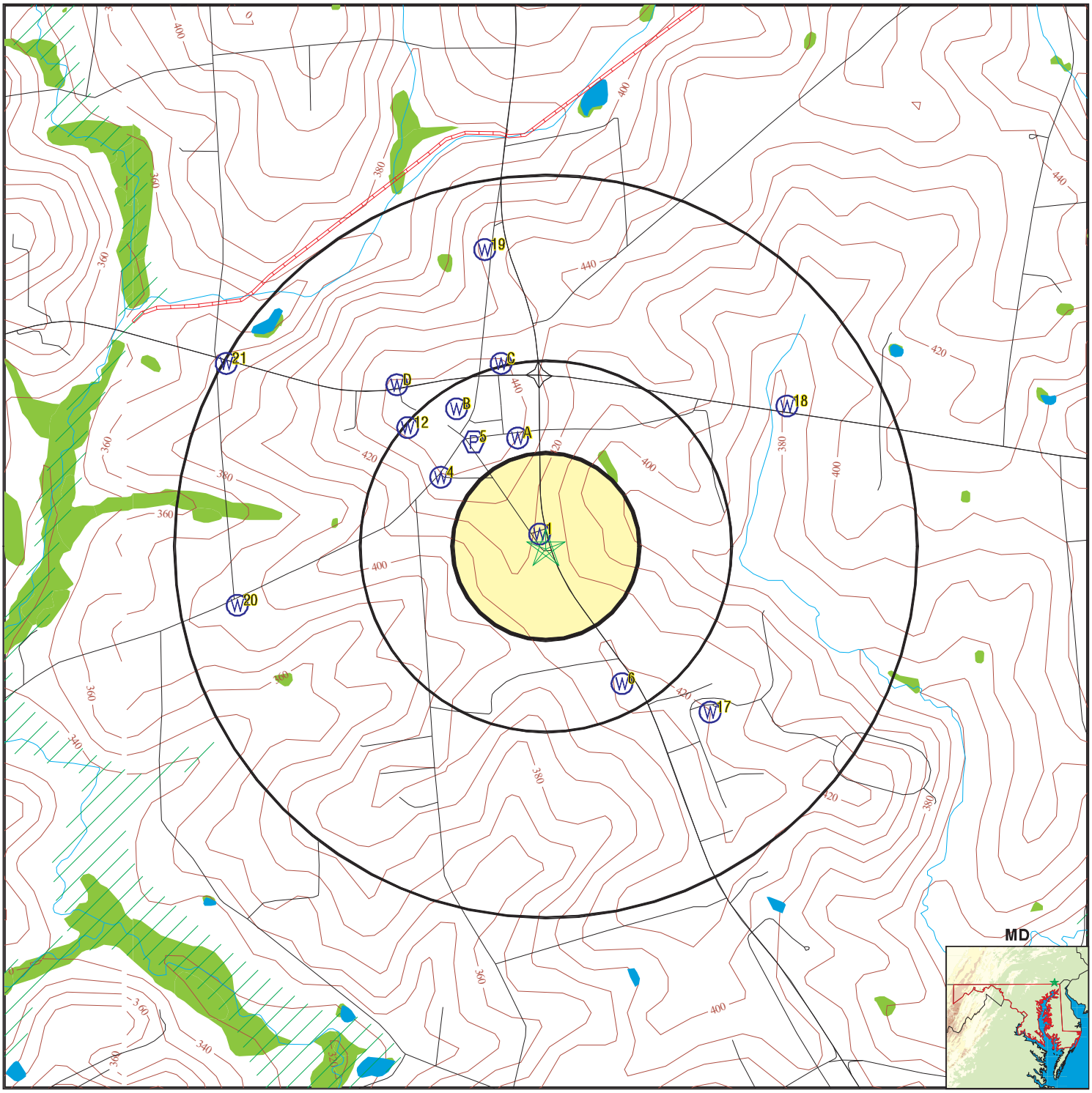
MAP ID	WELL ID	LOCATION FROM TP
5	MD1060035	1/4 - 1/2 Mile NW

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B7	442	1/4 - 1/2 Mile NNW
B8	443	1/4 - 1/2 Mile NNW
B9	441	1/4 - 1/2 Mile NNW
B10	439	1/4 - 1/2 Mile NNW
B11	440	1/4 - 1/2 Mile NNW

PHYSICAL SETTING SOURCE MAP - 01134304.1r



- County Boundary
- Major Roads
- Contour Lines
- Oil & Gas pipelines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- 100-year flood zone
- 500-year flood zone
- Wetlands

TARGET PROPERTY:	Calvert Citgo	CUSTOMER:	React Environmental Services
ADDRESS:	N. East Road	CONTACT:	Evelyn Druding
CITY/STATE/ZIP:	North East MD 21901	INQUIRY #:	01134304.1r
LAT/LONG:	39.6963 / 75.9788	DATE:	February 23, 2004 6:53 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

1
NNW
0 - 1/8 Mile
Higher | **FED USGS** | **USGS0389806**

Agency:	USGS	Site ID:	394148075584601
Site Name:	CE Ad 40		
Dec. Latitude:	39.69678		
Dec. Longitude:	-75.97911		
Coord Sys:	NAD83		
State:	MD		
County:	Cecil County		
Altitude:	420.00		
Hydrologic code:	02060002		
Topographic:	Flat surface		
Site Type:	Ground-water other than Spring		
Const Date:	19591125	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	300PLCG		
Aquifer type:	Not Reported		
Well depth:	102		
Hole depth:	102	Source:	Not Reported
Project no:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1959-11-25	25.00	

A2
NNW
1/4 - 1/2 Mile
Higher | **FED USGS** | **USGS0389760**

Agency:	USGS	Site ID:	394201075584901
Site Name:	CE Ad 23		
Dec. Latitude:	39.70039		
Dec. Longitude:	-75.97995		
Coord Sys:	NAD83		
State:	MD		
County:	Cecil County		
Altitude:	430.00		
Hydrologic code:	02060002		
Topographic:	Flat surface		
Site Type:	Ground-water other than Spring		
Const Date:	1945	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	300PLCG		
Aquifer type:	Not Reported		
Well depth:	69.0		
Hole depth:	69.0	Source:	Not Reported
Project no:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1952-12-12	12.00	

A3
NNW
1/4 - 1/2 Mile
Higher

FED USGS **USGS0389827**

Agency:	USGS	Site ID:	394202075585101
Site Name:	CE Ad 53		
Dec. Latitude:	39.70067		
Dec. Longitude:	-75.9805		
Coord Sys:	NAD83		
State:	MD		
County:	Cecil County		
Altitude:	440.00		
Hydrologic code:	02060002		
Topographic:	Flat surface		
Site Type:	Ground-water other than Spring		
Const Date:	19651119	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	300PCSC		
Aquifer type:	Not Reported		
Well depth:	140		
Hole depth:	140	Source:	Not Reported
Project no:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1965-11-19	25.00	

4
WNW
1/4 - 1/2 Mile
Higher

FED USGS **USGS0389817**

Agency:	USGS	Site ID:	394156075590401
Site Name:	CE Ad 24		
Dec. Latitude:	39.699		
Dec. Longitude:	-75.98411		
Coord Sys:	NAD83		
State:	MD		
County:	Cecil County		
Altitude:	440.00		
Hydrologic code:	02060002		
Topographic:	Flat surface		
Site Type:	Ground-water other than Spring		
Const Date:	Not Reported	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	300PCSC		
Aquifer type:	Not Reported		
Well depth:	27.6		
Hole depth:	27.6	Source:	Not Reported
Project no:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1982-10-01	17.50	

5
NW
1/4 - 1/2 Mile
Higher

FRDS PWS **MD1060035**

PWS ID: MD1060035 PWS Status: Active
Date Initiated: 7706 Date Deactivated: Not Reported
PWS Name: N. CARROLL SHOPPING CENTER
C/O H.M. ASSOC. 300 WATER ST.
BALTIMORE, MD 21202

Addressee / Facility: Not Reported

Facility Latitude: 39 42 01 Facility Longitude: 075 58 58
City Served: FINKSBURG
Treatment Class: Untreated Population: 00000025

PWS currently has or had major violation(s) or enforcement: Yes

Violations information not reported.

ENFORCEMENT INFORMATION:

System Name: NORTH CARROLL SHOPPING CEN
Violation Type: Initial Tap Sampling for Pb and Cu
Contaminant: LEAD & COPPER RULE
Compliance Period: 1994-01-01 - 1994-06-30 Analytical Value: 00000000.00
Violation ID: 9400001V Enforcement ID: 9300007E
Enforcement Date: 1995-06-09 Enf. Action: State Violation/Reminder Notice

System Name: NORTH CARROLL SHOPPING CEN
Violation Type: Initial Tap Sampling for Pb and Cu
Contaminant: LEAD & COPPER RULE
Compliance Period: 1994-01-01 - 1994-06-30 Analytical Value: 00000000.00
Violation ID: 9400001V Enforcement ID: 9600001E
Enforcement Date: 1995-12-14 Enf. Action: State Violation/Reminder Notice

System Name: NORTH CARROLL SHOPPING CEN
Violation Type: Initial Tap Sampling for Pb and Cu
Contaminant: LEAD & COPPER RULE
Compliance Period: 1994-01-01 - 1994-06-30 Analytical Value: 00000000.00
Violation ID: 9400001V Enforcement ID: 9600002E
Enforcement Date: 1995-12-14 Enf. Action: State Public Notif Requested

System Name: NORTH CARROLL SHOPPING CEN
Violation Type: Initial Tap Sampling for Pb and Cu
Contaminant: LEAD & COPPER RULE
Compliance Period: 1994-01-01 - 1994-06-30 Analytical Value: 00000000.00
Violation ID: 9400001V Enforcement ID: 9610003
Enforcement Date: 1996-01-29 Enf. Action: State Compliance Achieved

System Name: NORTH CARROLL SHOPPING CEN
Violation Type: Initial Tap Sampling for Pb and Cu
Contaminant: LEAD & COPPER RULE
Compliance Period: 1994-01-01 - 2015-12-31 Analytical Value: 0000000.000000000
Violation ID: 94V0001 Enforcement ID: 93E0007
Enforcement Date: 1995-06-09 Enf. Action: State Violation/Reminder Notice

ENFORCEMENT INFORMATION:

System Name:	NORTH CARROLL SHOPPING CEN		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	94V0002	Enforcement ID:	93E0007
Enforcement Date:	1995-06-09	Enf. Action:	State Violation/Reminder Notice
System Name:	NORTH CARROLL SHOPPING CEN		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1994-01-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9710001	Enforcement ID:	96E0001
Enforcement Date:	1995-12-14	Enf. Action:	State Violation/Reminder Notice
System Name:	NORTH CARROLL SHOPPING CEN		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9710002	Enforcement ID:	9610004
Enforcement Date:	1996-08-08	Enf. Action:	State Compliance Achieved
System Name:	NORTH CARROLL SHOPPING CEN		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9710002	Enforcement ID:	9616065
Enforcement Date:	1995-12-27	Enf. Action:	State Public Notif Received
System Name:	NORTH CARROLL SHOPPING CEN		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9710002	Enforcement ID:	96E0001
Enforcement Date:	1995-12-14	Enf. Action:	State Violation/Reminder Notice
System Name:	NORTH CARROLL SHOPPING CEN		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9710002	Enforcement ID:	96E0002
Enforcement Date:	1995-12-14	Enf. Action:	State Public Notif Requested
System Name:	NORTH CARROLL SHOPPING CEN		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1994-01-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9710002	Enforcement ID:	9610003
Enforcement Date:	1996-01-29	Enf. Action:	State Compliance Achieved
System Name:	NORTH CARROLL SHOPPING CEN		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1994-01-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9710002	Enforcement ID:	9616065
Enforcement Date:	1995-12-27	Enf. Action:	State Public Notif Received
System Name:	NORTH CARROLL SHOPPING CEN		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1994-01-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9710002	Enforcement ID:	96E0002
Enforcement Date:	1995-12-14	Enf. Action:	State Public Notif Requested

ENFORCEMENT INFORMATION:

System Name:	NORTH CARROLL SHOPPING CEN		
Violation Type:	OCCT Study Recommendation		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1996-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9710002	Enforcement ID:	9710001
Enforcement Date:	1997-09-30	Enf. Action:	State Violation/Reminder Notice
System Name:	NORTH CARROLL SHOPPING CEN		
Violation Type:	OCCT Study Recommendation		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1996-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9710002	Enforcement ID:	9813209
Enforcement Date:	1998-09-30	Enf. Action:	State Violation/Reminder Notice
System Name:	NORTH CARROLL SHOPPING CEN		
Violation Type:	OCCT Study Recommendation		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1996-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9710002	Enforcement ID:	9916319
Enforcement Date:	1998-11-08	Enf. Action:	State Compliance Achieved
System Name:	NORTH CARROLL SHOPPING CEN		
Violation Type:	Public Education		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1996-01-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	9710002	Enforcement ID:	9813210
Enforcement Date:	1997-12-31	Enf. Action:	State Compliance Achieved

---

6
SSE **FED USGS** **USGS0389787**
1/4 - 1/2 Mile
Higher

Agency:	USGS	Site ID:	394127075583101
Site Name:	CE Ad 67		
Dec. Latitude:	39.69094		
Dec. Longitude:	-75.97495		
Coord Sys:	NAD83		
State:	MD		
County:	Cecil County		
Altitude:	420		
Hydrologic code:	02060002		
Topographic:	Flat surface		
Site Type:	Ground-water other than Spring		
Const Date:	19880927	Inven Date:	19940124
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	300WSCK		
Aquifer type:	Unconfined single aquifer		
Well depth:	107		
Hole depth:	107	Source:	driller
Project no:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1988-09-27	20	

Note: The site had been pumped recently.

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

B7
NNW **MD WELLS** **442**
1/4 - 1/2 Mile
Higher

Site Name:	Calvert Manor Nursing Home		
Public Water Sys. ID:	0070206	Total Depth:	158
NAD 27 Northing Coordinate:	682000	NAD 27 Easting Coordinate:	1086000
Aquifer Type:	Unconfined	Case Depth:	118
Depth to Top of 1st Screen:	0	Depth to bot. of 1st Screen:	0
Depth to Top of 2nd Screen:	0	Depth to bot. of 2nd Screen:	0
Depth to Top of 3rd Screen:	0	Depth to bot. of 3rd Screen:	0

B8
NNW **MD WELLS** **443**
1/4 - 1/2 Mile
Higher

Site Name:	Calvert Manor Nursing Home		
Public Water Sys. ID:	0070206	Total Depth:	400
NAD 27 Northing Coordinate:	682000	NAD 27 Easting Coordinate:	1086000
Aquifer Type:	Unconfined	Case Depth:	147
Depth to Top of 1st Screen:	147	Depth to bot. of 1st Screen:	400
Depth to Top of 2nd Screen:	0	Depth to bot. of 2nd Screen:	0
Depth to Top of 3rd Screen:	0	Depth to bot. of 3rd Screen:	0

B9
NNW **MD WELLS** **441**
1/4 - 1/2 Mile
Higher

Site Name:	Calvert Manor Nursing Home		
Public Water Sys. ID:	0070206	Total Depth:	275
NAD 27 Northing Coordinate:	682000	NAD 27 Easting Coordinate:	1086000
Aquifer Type:	Unconfined	Case Depth:	0
Depth to Top of 1st Screen:	Not Reported	Depth to bot. of 1st Screen:	Not Reported
Depth to Top of 2nd Screen:	Not Reported	Depth to bot. of 2nd Screen:	Not Reported
Depth to Top of 3rd Screen:	Not Reported	Depth to bot. of 3rd Screen:	Not Reported

---

B10
NNW **MD WELLS** **439**
1/4 - 1/2 Mile
Higher

Site Name:	Calvert Manor Nursing Home		
Public Water Sys. ID:	0070206	Total Depth:	140
NAD 27 Northing Coordinate:	682000	NAD 27 Easting Coordinate:	1086000
Aquifer Type:	Unconfined	Case Depth:	0
Depth to Top of 1st Screen:	Not Reported	Depth to bot. of 1st Screen:	Not Reported
Depth to Top of 2nd Screen:	Not Reported	Depth to bot. of 2nd Screen:	Not Reported
Depth to Top of 3rd Screen:	Not Reported	Depth to bot. of 3rd Screen:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

B11
NNW
1/4 - 1/2 Mile
Higher

MD WELLS **440**

Site Name:	Calvert Manor Nursing Home		
Public Water Sys. ID:	0070206	Total Depth:	116
NAD 27 Northing Coordinate:	682000	NAD 27 Easting Coordinate:	1086000
Aquifer Type:	Unconfined	Case Depth:	0
Depth to Top of 1st Screen:	Not Reported	Depth to bot. of 1st Screen:	Not Reported
Depth to Top of 2nd Screen:	Not Reported	Depth to bot. of 2nd Screen:	Not Reported
Depth to Top of 3rd Screen:	Not Reported	Depth to bot. of 3rd Screen:	Not Reported

---

12
NW
1/4 - 1/2 Mile
Higher

FED USGS **USGS0389830**

Agency:	USGS	Site ID:	394203075591001
Site Name:	CE Ad 52		
Dec. Latitude:	39.70094		
Dec. Longitude:	-75.98578		
Coord Sys:	NAD83		
State:	MD		
County:	Cecil County		
Altitude:	450.00		
Hydrologic code:	02060002		
Topographic:	Flat surface		
Site Type:	Ground-water other than Spring		
Const Date:	19810123	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	300PCSC		
Aquifer type:	Unconfined single aquifer		
Well depth:	365		
Hole depth:	365	Source:	Not Reported
Project no:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1981-01-23	40.0	

C13
NNW
1/2 - 1 Mile
Higher

FED USGS **USGS0389771**

Agency:	USGS	Site ID:	394212075585301
Site Name:	CE Ad 44		
Dec. Latitude:	39.70344		
Dec. Longitude:	-75.98106		
Coord Sys:	NAD83		
State:	MD		
County:	Cecil County		
Altitude:	440.00		
Hydrologic code:	02060002		
Topographic:	Flat surface		
Site Type:	Ground-water other than Spring		
Const Date:	19810926	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	300PCSC		
Aquifer type:	Not Reported		
Well depth:	400		
Hole depth:	400	Source:	Not Reported
Project no:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1981-09-26	20.00	

C14
NNW
1/2 - 1 Mile
Higher

FED USGS **USGS0389772**

Agency:	USGS	Site ID:	394212075585302
Site Name:	CE Ad 45		
Dec. Latitude:	39.70344		
Dec. Longitude:	-75.98106		
Coord Sys:	NAD83		
State:	MD		
County:	Cecil County		
Altitude:	440.00		
Hydrologic code:	02060002		
Topographic:	Flat surface		
Site Type:	Ground-water other than Spring		
Const Date:	19650809	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	300PCSC		
Aquifer type:	Not Reported		
Well depth:	158		
Hole depth:	158	Source:	Not Reported
Project no:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1965-08-09	25.00	

D15
NW
1/2 - 1 Mile
Higher

FED USGS **USGS0389839**

Agency:	USGS	Site ID:	394209075591202
Site Name:	CE Ad 47		
Dec. Latitude:	39.70261		
Dec. Longitude:	-75.98633		
Coord Sys:	NAD83		
State:	MD		
County:	Cecil County		
Altitude:	440.00		
Hydrologic code:	02060002		
Topographic:	Hillside (slope)		
Site Type:	Ground-water other than Spring		
Const Date:	19570716	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	300PCSC		
Aquifer type:	Not Reported		
Well depth:	104		
Hole depth:	104	Source:	Not Reported
Project no:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1957-07-16	36.00	

D16
NW
1/2 - 1 Mile
Higher

FED USGS **USGS0389838**

Agency:	USGS	Site ID:	394209075591201
Site Name:	CE Ad 46		
Dec. Latitude:	39.70261		
Dec. Longitude:	-75.98633		
Coord Sys:	NAD83		
State:	MD		
County:	Cecil County		
Altitude:	440.00		
Hydrologic code:	02060002		
Topographic:	Hillside (slope)		
Site Type:	Ground-water other than Spring		
Const Date:	19820628	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	300PCSC		
Aquifer type:	Not Reported		
Well depth:	138		
Hole depth:	138	Source:	Not Reported
Project no:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1982-06-28	24.00	

17
SE
1/2 - 1 Mile
Higher

FED USGS **USGS0389783**

Agency:	USGS	Site ID:	394123075581501
Site Name:	CE Ad 27		
Dec. Latitude:	39.68983		
Dec. Longitude:	-75.9705		
Coord Sys:	NAD83		
State:	MD		
County:	Cecil County		
Altitude:	430.00		
Hydrologic code:	02060002		
Topographic:	Flat surface		
Site Type:	Ground-water other than Spring		
Const Date:	Not Reported	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	300PSAB		
Aquifer type:	Not Reported		
Well depth:	27.3		
Hole depth:	27.3	Source:	Not Reported
Project no:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1952-12-12	15.60	

18
ENE
1/2 - 1 Mile
Lower

FED USGS **USGS0389766**

Agency:	USGS	Site ID:	394206075580101
Site Name:	CE Ad 12		
Dec. Latitude:	39.70178		
Dec. Longitude:	-75.96661		
Coord Sys:	NAD83		
State:	MD		
County:	Cecil County		
Altitude:	390.00		
Hydrologic code:	02060002		
Topographic:	Not Reported		
Site Type:	Ground-water other than Spring		
Const Date:	195211	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	300PLCG		
Aquifer type:	Not Reported		
Well depth:	109		
Hole depth:	109.20	Source:	Not Reported
Project no:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1952-11-17	3.84	

19
NNW
1/2 - 1 Mile
Higher

FED USGS **USGS0389855**

Agency:	USGS	Site ID:	394228075585601
Site Name:	CE Ad 3		
Dec. Latitude:	39.70789		
Dec. Longitude:	-75.98189		
Coord Sys:	NAD83		
State:	MD		
County:	Cecil County		
Altitude:	420.00		
Hydrologic code:	02060002		
Topographic:	Flat surface		
Site Type:	Ground-water other than Spring		
Const Date:	19511012	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	300PCSC		
Aquifer type:	Not Reported		
Well depth:	90.0		
Hole depth:	90.0	Source:	Not Reported
Project no:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1951-10-12	9.00	

20
West
1/2 - 1 Mile
Lower

FED USGS **USGS0389726**

Agency:	USGS	Site ID:	394138075594101
Site Name:	CE Ad 25		
Dec. Latitude:	39.694		
Dec. Longitude:	-75.99439		
Coord Sys:	NAD83		
State:	MD		
County:	Cecil County		
Altitude:	390.00		
Hydrologic code:	02060002		
Topographic:	Flat surface		
Site Type:	Ground-water other than Spring		
Const Date:	1938	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	Not Reported		
Aquifer type:	Not Reported		
Well depth:	90.0		
Hole depth:	90.0	Source:	Not Reported
Project no:	Not Reported		

Ground-water levels, Number of Measurements: 0

21
WNW
1/2 - 1 Mile
Lower

FED USGS **USGS0389773**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Agency:	USGS	Site ID:	394212075594301
Site Name:	CE Ad 26		
Dec. Latitude:	39.70344		
Dec. Longitude:	-75.99495		
Coord Sys:	NAD83		
State:	MD		
County:	Cecil County		
Altitude:	370.00		
Hydrologic code:	02060002		
Topographic:	Flat surface		
Site Type:	Ground-water other than Spring		
Const Date:	Not Reported	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	300PCSC		
Aquifer type:	Not Reported		
Well depth:	18.7		
Hole depth:	18.7	Source:	Not Reported
Project no:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1952-12-12	7.88	

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

EPA Region 3 Statistical Summary Readings for Zip Code: 21901

Number of sites tested: 55.

Maximum Radon Level: 25.6 pCi/L.
Minimum Radon Level: -0.1 pCi/L.

pCi/L <4	pCi/L 4-10	pCi/L 10-20	pCi/L 20-50	pCi/L 50-100	pCi/L >100
44 (80.00%)	7 (12.73%)	3 (5.45%)	1 (1.82%)	0 (0.00%)	0 (0.00%)

Federal EPA Radon Zone for CECIL County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002. 7.5-Minute DEMs correspond to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STATE RECORDS

Maryland Community Public Drinking Water Wells
Source: Department of the Environment
Telephone: 410-631-3586

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

EPA Region 3 Statistical Summary Readings
Source: Region 3 EPA
Telephone: 215-814-2082
Radon readings for Delaware, D.C., Maryland, Pennsylvania, Virginia and West Virginia.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

APPENDIX B

REACT'S STANDARD OPERATING PROCEDURES FOR SOIL & GROUNDWATER SAMPLING

React Environmental Services, Inc.

6901 Kingsessing Avenue, Philadelphia, PA 19142
(215) 729-3220 / Fax (215) 729-1557
http://www.Reactenv.com

Standard Operating Procedure for Low Flow Purging and Sampling of Wells

Equipment Requirements:

Pump

- The pump should be either a continuous discharge or cyclic discharge pump, with adjustable flow rate controls and capability of being run at a low enough flow rate to avoid causing draw down in the well. Additionally, the pump should be suitable for both purging and sampling. Peristaltic and other suction lift pumps should be avoided. Grab sampling devices, like bailers and Kemmerer samplers, as well as inertial lift devices cannot be used as they create too much disturbance to the water column.

Tubing

Graduated Cylinder

Timepiece capable of measuring in seconds (for flow rate calculation)

Water Level Measurement Equipment

- Equipment must not disturb the water column; equipment must be capable of recording at +/- 0.01 ft.

Closed flow-through cell of known volume

Water Quality indicator for pH, temperature, conductivity and turbidity

Typical equipment and supplies: Decontamination supplies, sample bottles, preservation supplies, shipping containers and field documentation material

Procedure:

1. Preliminary Preparation

In office, **at least two days prior** to sampling event:

a. Check on the availability of necessary bottle ware and equipment in the supply room; if needed, request a supply order from the database manager

b. Notify Database Managers (Brenda, Natalie and Toby) of upcoming sampling event via email with the following information: project number/project name, site address, date of the event, primary person going into the field, and:

1. TYPE of SAMPLING EVENT (Soil or Groundwater):
    a. Number of primary sample locations.
    b. Number of QAQC samples and types (field blank, trip blank, field spike).
    c. Analyses list (and necessary bottle ware for each test)
2. GAUGING EVENT:
    a. Monitoring well list.
    b. Known product at the site (i.e. Diesel fuel No. 2)

Providing this information at least two days in advance will ensure that site diagrams, physical setting reports and PDA setup will be ready for the sampling date.

Before going into the field for sampling event:

c. Clean and decontaminate all equipment. Equipment should not be allowed to contact the ground or other surfaces that could impart contaminants.

d. Cut silicon tubing to match the length of the depth at which the pump is set in the well. Excess tubing can affect the temperature of the water sampled.

e. Calibrate instrumentation used during low flow purging and sampling according to manufacturer's instructions.

f. Calculate the following volumes and rates:

- Volume of the pump and discharge tubing
- Optimum pump discharge rate
- Volume of the flow through cell (corrected for displacement volume of field parameter measurement instrumentation installed within the cell)

2. Pump Placement

a. If the well is screened or open across a single zone of interest, the pump intake should be positioned at or near the mid-point of the well screen.

b. If the screened zone consists of different layers of hydraulic conductivity, the pump intake should be positioned adjacent to the zone of highest hydraulic conductivity.

c. If screen length allows, the pump intake should be at least two feet from the top and bottom of the screen.

d. If a portable pump is used, it is imperative to minimize disturbance to the water column during installation. Time must be allowed (prior to operation) to allow the water column to settle. An initial turbidity reading must be collected to verify that turbidity has settled.

3. Pumping Rate

a. The pumping rate should be determined on a well-to-well basis, even for wells in the same network.

b. If possible, pumping rate for each well should be calculated in advance of the sampling event:

- Pump should be started at 100mL/min or less
- As soon as pumping begins, water level should be measured to determine drawdown
- Rate should be adjusted to the point at which drawdown stabilizes

4. Drawdown and Water-Level Measurement
    a. Prior to installing the pump, an initial water level measurement should be made.
    b. Measure water level on a continuous or periodic basis is critical for determining the optimum flow rate.
    c. Stabilize pumping water level should as soon as possible with minimal drawdown.
    d. Measure every one to two minutes until the point at which the water level in the well has stabilized or when drawdown ceases.
    e. Measurements can be discontinued once the water level in the well has stabilized.
    f. Drawdown should never exceed the distance between the top of the well screen and the pump intake.

5. Measurement of Water Quality Indicator Parameters and Turbidity
    a. Measure water quality parameters with a flow through cell to determine when purging is complete and sampling can begin
        - Conductivity, pH, dissolved oxygen and turbidity
    b. Measurement frequency should be based on the time required to completely evacuate one volume of the cell. The following volumes and rates must be known prior to the sampling event:
        - Volume of the pump and discharge tubing
        - Optimum pump discharge rate
        - Volume of the flow through cell (corrected for displacement volume of field parameter measurement instrumentation installed within the cell)
    c. Parameters are considered stable when three consecutive readings made several minutes apart fall within the following ranges:

Conductivity	+/- 3% of reading
pH	+/- 0.2 pH units
Dissolved Oxygen	+/- 10% of reading or +/- 0.2 mg/L
Turbidity	+/- 10% of the prior reading or +/- 1.0 NTU

    *If readings do not stabilize after three hours, call a project manager

6. Sample Collection (Following Purging)
    Grab sampling devices, like bailers and Kemmerer samplers, as well as inertial lift devices cannot be used for low-flow sampling!
    a. Sampling can begin after drawdown and chemical indicator parameters are stabilized.
    b. Disconnect flow-through cell
    c. Adjust pumping rate to 500 mL/min or less
        - Sampling rates for sensitive parameters (VOCs) should be lower than 250 mL/min
    d. Sample for the most sensitive parameters or those of greatest interest first
    e. Samples that require filtration should be sampled last

7. Post Sample Collection
    a. Return equipment and unused bottle ware to sample room
    b. Put samples into refrigerator
    c. Give Natalie the PDA
    d. Request a chain of custody from Brenda
    e. Check on lab pickup time, and assist with transfer of samples

Reference:

ASTM Designation: D 6771-02; Standard Practice for “Low-Flow Purging and Sampling for Wells and Devices Used for Ground-Water Quality Invenstigations.”

LOW FLOW PURGING AND SAMPLING FIELD LOG

PROJECT NUMBER _____ **PROJECT NAME:**_____

SITE ID:_____ **ADDRESS:**_____

GEOLOGIST: _____ **PROJECT MANAGER:** _____ **DATE:** _____

? **EQUIPMENT CALIBRATION** ? **EQUIPMENT DECONTAMINATION**

PUMP PLACEMENT:

? **MIDPOINT (SINGLE ZONE OF INTEREST)**

? **ADJACENT TO ZONE OF HIGHEST HYDRAULIC CONDUCTIVITY (MANY ZONES OF INTEREST)**

? **AT LEAST 2 FEET FROM THE TOP AND 2 FEET FROM THE BOTTOM OF THE SCREEN**

INITIAL WATER LEVEL: _____ **INITIAL PUMPING RATE:** _____

STABILIZED PUMPING WATER LEVEL: _____ **PUMP RATE**_____

SAMPLING FLOW RATE: _____

DRAWDOWN MEASUREMENTS:

Time	Drawdown	Time	Drawdown

WATER QULAITY INDICATOR MEASUREMENTS:

Time	Indicator	Value

STANDARD OPERATING PROCEDURES FOR:
POTABLE WELL WATER SAMPLING

Ground Water Sampling

The following is the standard sampling procedure used by React Environmental for the purpose of sampling water from drinking wells:

Purging

Immediately prior to sampling, the technician must purge, or evacuate, three to five times the well volume. This is done to remove stagnant water and allow a representative sample of the aquifer to flow into the well. Evacuation is done by allowing a tap to run for 15 minutes or longer.

Sample Collection

Sampling should be collected from the tap closest to the pump well. If the samples are collected after a treatment unit, the size, and purpose of the unit should be noted on sample sheets and in the field logbook. All screens, if they exist, should be removed prior to sampling for bacteria, or for volatile organics.

All sampling containers are safely stored away from potential sources of contamination during transportation. Surgical gloves are changed between each sample location.

Well Water Sampling

Water is transferred to the appropriate containers directly from the tap. Vials are filled, leaving no headspace or air bubbles, and sealed. All sample containers are labelled on-site and stored for transport to the lab.

REACT ENVIRONMENTAL'S SOIL SAMPLING PROTOCOL

A. Decontamination Procedures

Non-aqueous matrix field sampling equipment cleaning and decontamination procedures are as follows:

1. Laboratory grade glassware detergent and tap water scrub to remove visual contamination.
2. Generous tap water rinse.
3. Distilled and de-ionized water rinse.

All sampling equipment is decontaminated prior to use, and field decontaminated between each separate sampling event.

B. Soil Sampling

1. Bucket Auger (to be used for: BNS, TPH, TOC, Acid Extractables)
   Procedures for use:

   a. Remove unnecessary non-soil material from the sampling point.
   b. Attach the bucket and handle to an extension rod.
   c. Continue boring until the desired depth is attained.
   d. Use a second decontaminated auger to collect the sample.
   e. Wearing new surgical gloves, transfer the sample using a decontaminated hand trowel, into an appropriate, labeled container.
   f. When collecting samples at depths greater than 12 inches, it is advisable to discard 1/2 inch of material on the top of the auger due to cave in.

2. Soil Corer (to be used for Volatile Organics)
   Procedures for use:

   a. Insert collection tube into the sampler
   b. Remove unnecessary non-soil material from the sampling point.
   c. Attach the corer and handle to an extension rod.
   d. Continue boring until the desired depth is attained.
   e. Wearing new surgical gloves, remove the collection tube. Follow procedures for the use of EnCore samplers.

3. Hand Trowel
   Procedures for use:

   a. Clear surface debris
   b. Collect sample from 0-6 inches using a decontaminated hand trowel
   c. Wearing new surgical gloves, transfer the sample to the container

B. Soil Sampling (continued)

4. Backhoe Sampling

   Procedures for use:

   a. Begin with a steam cleaned backhoe
   b. Operate the backhoe in a deliberate fashion removing <6 inches of soil per scoop
   c. Once selected depth is attained, steam clean backhoe bucket
   d. Excavate sample into bucket
   e. Wearing new surgical gloves, remove a sample, using a decontaminated hand trowel. The sample is obtained from the front of the bucket, in an area not in contact with the machinery surface.
   f. Place the sample into a decontaminated stainless steel bucket, and mix the sample to homogenize it.
   g. Place the homogenized sample into an appropriate, labeled sampling container.

5. Manual Geoprobe® (to be used for Volatile Organics):

   Procedures for use:

   a. Insert collection tube into the sampler
   b. Attach the corer and handle to an extension rod.
   c. Insert coring point and primary extension rod.
   d. Attach extension coupling, reverse-thread stopper, and anvil to the corer.
   e. Attach extension rods to correspond with desired depth. Fit slide hammer to extension rods and attach safety hook.
   f. Hammer corer to desired depth and release the reverse-thread stopper.
   g. Continue to hammer corer to collect soil matrix from desired depth.
   h. Wearing new surgical gloves, remove the collection tube and transfer to a sample container.
   i. Repeat **Section A.** (Decontamination Procedures) prior to re-use.

6. Split Spoon Sampling

   Procedures for use:

   a. Begin with decontaminated stainless steel split spoon sampler
   b. Advance Split Spoon to desired depth
   c. Wearing new surgical gloves, retrieve the sampler
   d. Split the sampler and retrieve the soil core
   e. Place the undisturbed soil core into an appropriate, labeled sampling container. If samples are to be collected for volatile organics, see procedures for the use of EnCore samplers.

B. Soil Sampling (continued)

7. EnCore™ Samplers
   Procedures for use:

   a. Using T-handle, push sampler into soil until coring body is completely full.
   b. Remove sampler from soil and wipe excess soil from coring body exterior.
   c. Cap coring body while it is still on T-handle. Push and twist cap over bottom until grooves on locking arms seat over ridge on coring body. Cap must be seated to seal sampler.
   d. Remove the capped sampler from T-handle and lock plunger by rotating plunger rod counter clockwise until wings rest firmly against tab.
   e. Attach completed label to cap on coring body and return encore to zipper bag.
   f. Seal bag and put on ice.

C. Sample Preservation and Transport

1. Samples will be transferred from sampling devices to appropriately preserved and labeled sampling containers.
2. After they are packaged, samples will be placed into a cooler and maintained at 4? C immediately.

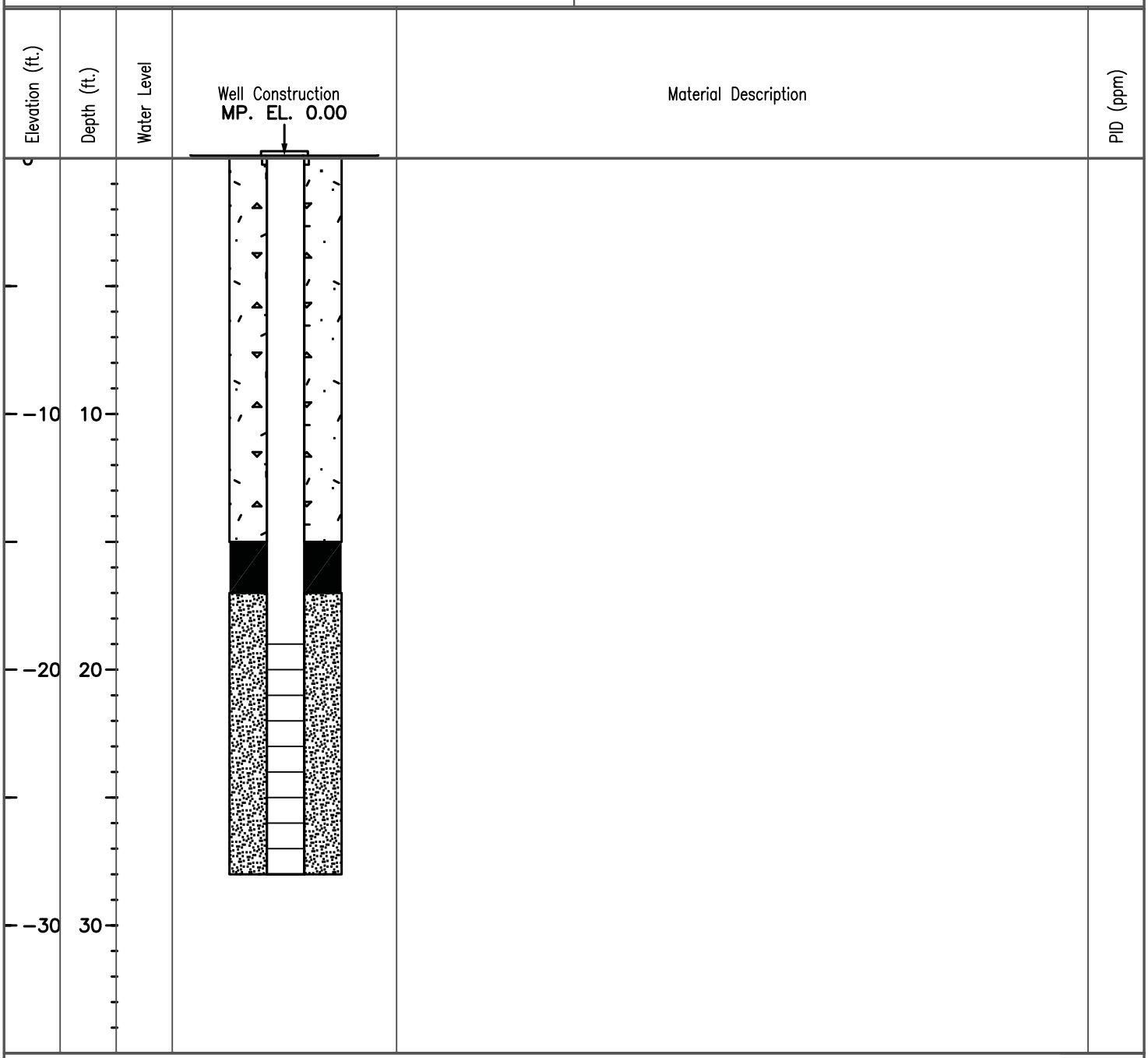
3. Samples will be delivered, within allowable holding times, with an appropriate chain of custody, to a state certified laboratory for analysis.

APPENDIX C

SOIL BORING & WELL CONSTRUCTION LOGS
(GEOMATRIX & AEC)

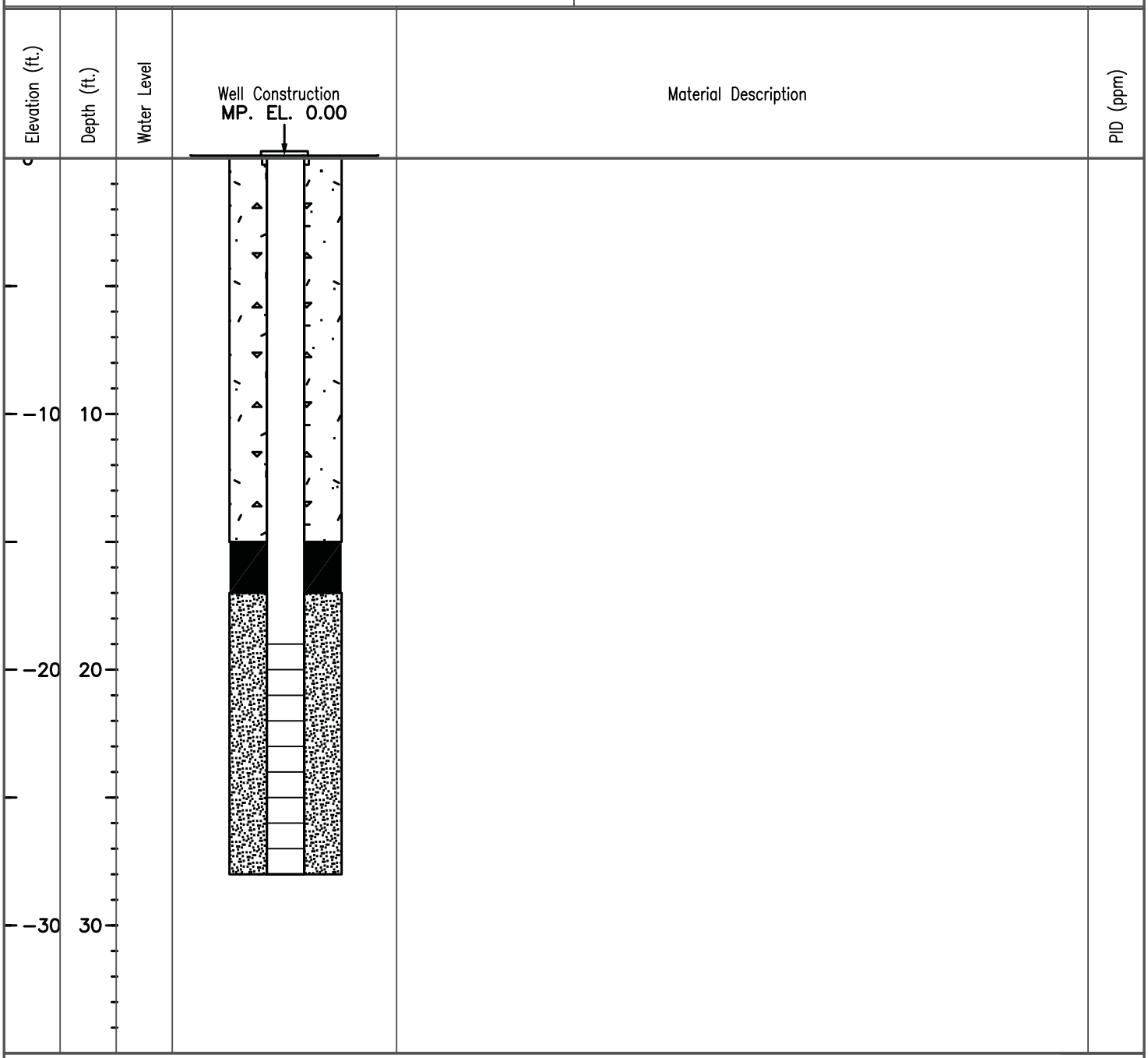
WELL CONSTRUCTION LOG

Site ID: GMGW-001		Project Name: Calvert Citgo	Project Number: 5977
Consulting Firm: Geomatrix, Inc.		Site Address: Route 272 & Quaker Lane	
Geologist Unknown		Location: Northeast, MD.	
Reviewed By:		Date Started: 06/17/91	Date Completed: 06/17/91
Driller: Unknown		Casing: type: Schedule 40 PVC dia: 4.00in fm: 0.0' to: 19.00'	
Drilling Method: HOLLOW STEM AUGER		Screened Interval: type: Slotted size: 0.020in dia: 4.00in fm: 19.00' to: 28.00'	
Borehole Dia.: 10.00in		Annular Fill: type: Grout fm: 0.00' to: 15.00'	
Elevation: 0.00'	Datum:	type: Sand Pack (generic) fm: 17.00' to: 28.00'	
Measuring Point: 0.00'	Static Water Level:	type: fm: to:	
Total Depth: 37.00'	Completed Depth: 28.00'	Remarks:	
Permit No.:	Permit Date: 06/17/91		
Purpose: Monitoring Well, Shallow			



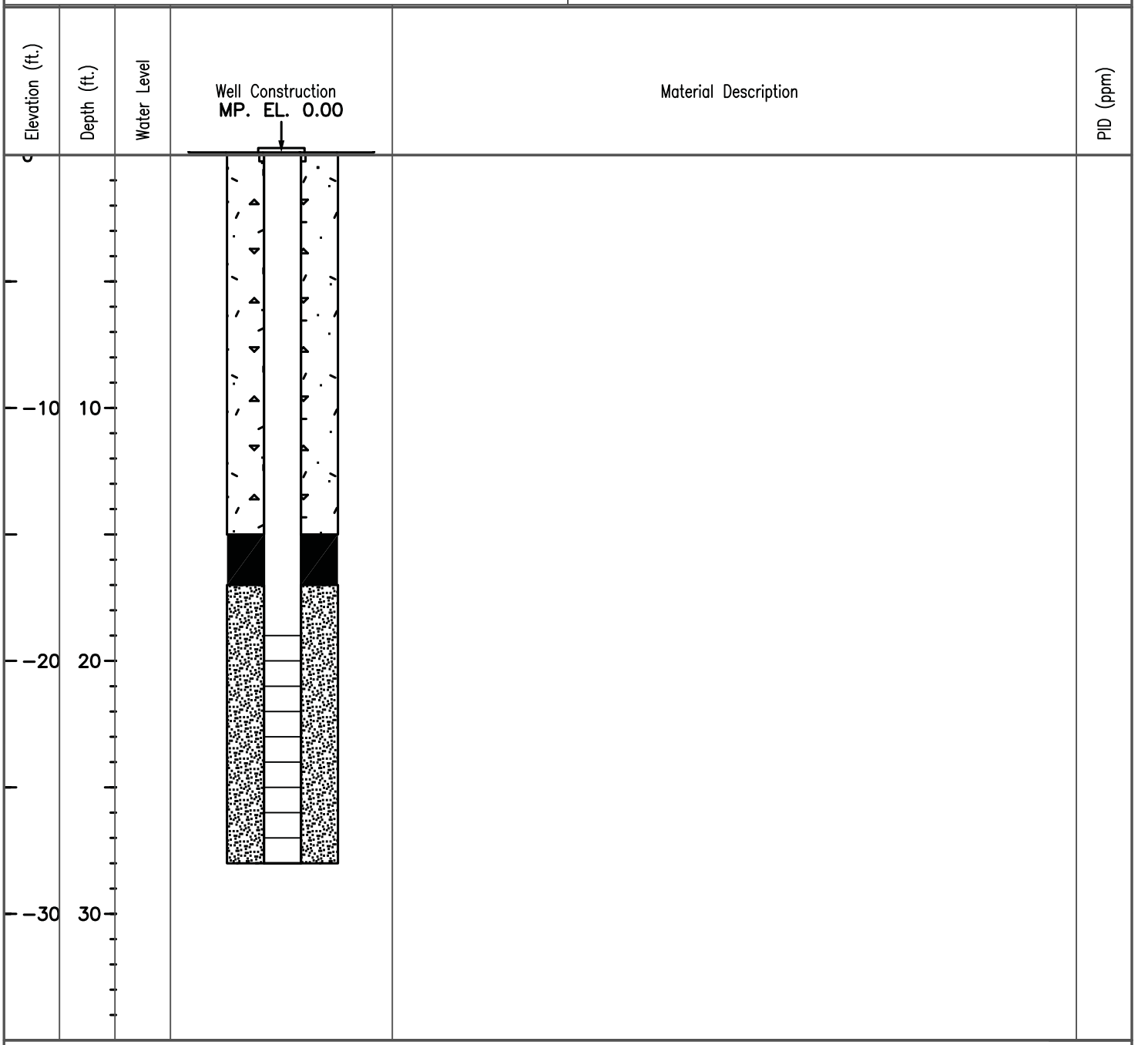
WELL CONSTRUCTION LOG

Site ID: GMGW-002		Project Name: Calvert Citgo	Project Number: 5977
Consulting Firm: Geomatrix, Inc.		Site Address: Route 272 & Quaker Lane	
Geologist Unknown		Location: Northeast, MD.	
Reviewed By:		Date Started: 06/17/91	Date Completed: 06/17/91
Driller: Unknown		Casing: type: Schedule 40 PVC dia: 4.00in fm: 0.0' to: 19.00'	
Drilling Method: HOLLOW STEM AUGER		Screened Interval: type: Slotted size: 0.020in dia: 4.00in fm: 19.00' to: 28.00'	
Borehole Dia.: 10.00in		Annular Fill: type: Grout fm: 0.00' to: 15.00'	
Elevation: 0.00'	Datum:	type: Sand Pack (generic) fm: 17.00' to: 28.00'	
Measuring Point: 0.00'	Static Water Level:	type: fm: to:	
Total Depth: 37.00'	Completed Depth: 28.00'	Remarks:	
Permit No.:	Permit Date: 06/17/91		
Purpose: Monitoring Well, Shallow			



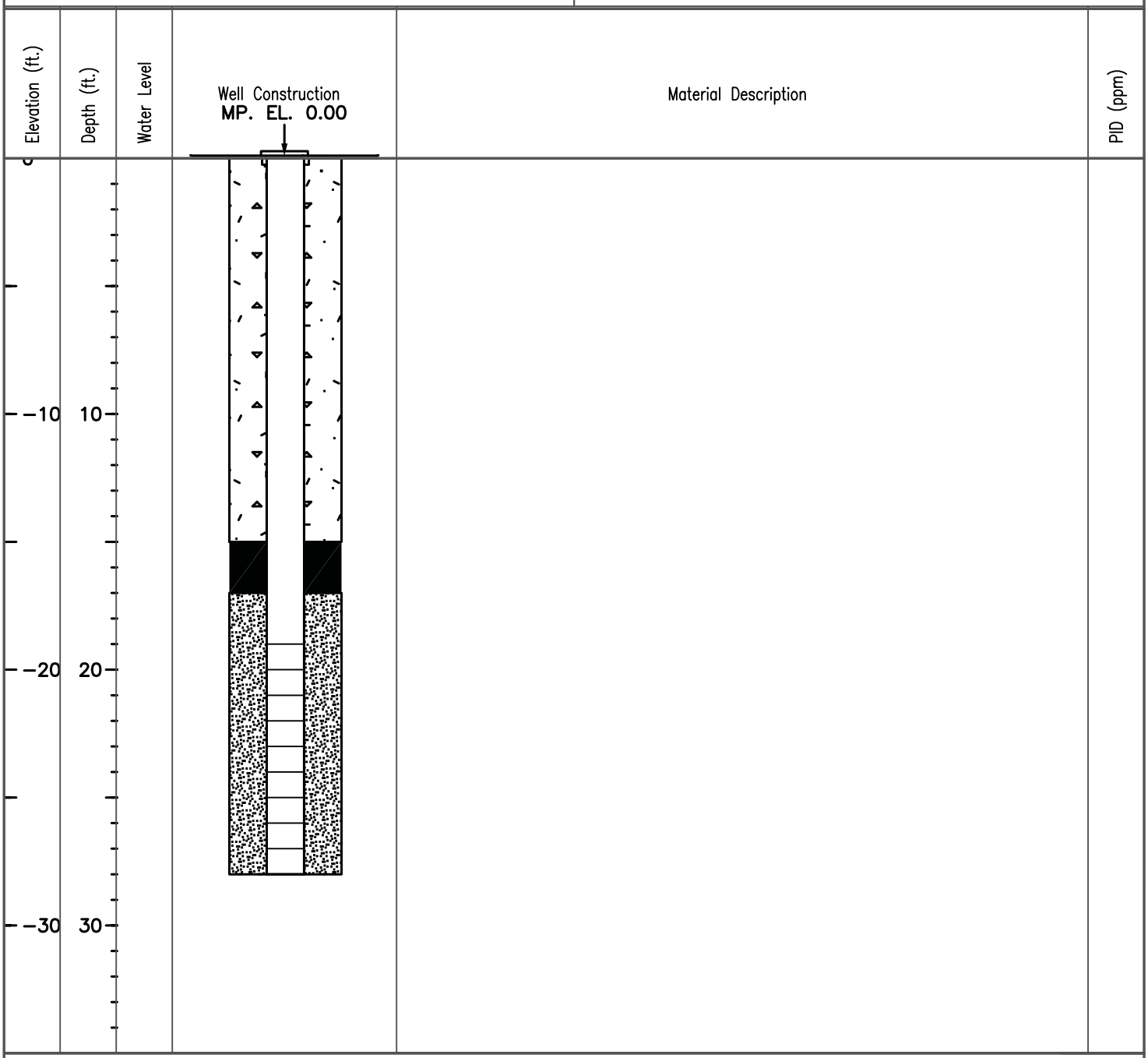
WELL CONSTRUCTION LOG

Site ID: GMGW-003		Project Name: Calvert Citgo	Project Number: 5977
Consulting Firm:		Site Address: Route 272 & Quaker Lane	
Geologist Unknown		Location: Northeast, MD.	
Reviewed By:		Date Started: 06/17/91	Date Completed: 06/17/91
Driller: Unknown		Casing: type: Schedule 40 PVC dia: 4.00in fm: 0.0' to: 19.00'	
Drilling Method: HOLLOW STEM AUGER		Screened Interval: type: Slotted size: 0.020in dia: 4.00in fm: 19.00' to: 28.00'	
Borehole Dia.: 10.00in		Annular Fill: type: Cement/Bentonite Slurry fm: 0.00' to: 15.00' type: Sand Pack (generic) fm: 17.00' to: 28.00' type: fm: to:	
Elevation: 0.00'	Datum:	Remarks:	
Measuring Point: 0.00'	Static Water Level:		
Total Depth: 37.00'	Completed Depth: 28.00'		
Permit No.:	Permit Date: 06/17/91		
Purpose: Monitoring Well, Shallow			



WELL CONSTRUCTION LOG

Site ID: GMGW-004		**Project Name: Calvert Citgo**	Project Number: 5977
Consulting Firm: Geomatrix, Inc.		Site Address: Route 272 & Quaker Lane	
Geologist Unknown		Location: Northeast, MD.	
Reviewed By:		Date Started: 06/17/91	Date Completed: 06/17/91
Driller: Unknown		Casing: type: Schedule 40 PVC dia: 4.00in fm: 0.0' to: 19.00'	
Drilling Method: HOLLOW STEM AUGER		Screened Interval: type: Slotted size: 0.020in dia: 4.00in fm: 19.00' to: 28.00'	
Borehole Dia.: 10.00in		Annular Fill: type: Cement/Bentonite Slurry fm: 0.00' to: 15.00'	
Elevation: 0.00'	Datum:	type: Sand Pack (generic) fm: 17.00' to: 28.00'	
Measuring Point: 0.00'	Static Water Level:	type: fm: to:	
Total Depth: 37.00'	Completed Depth: 28.00'	Remarks:	
Permit No.:	Permit Date: 06/17/91		
Purpose: Monitoring Well, Shallow			

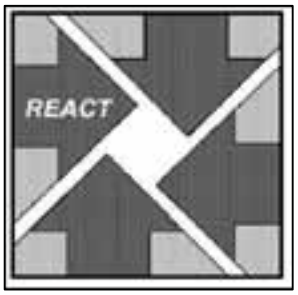


SOIL BORING LOG

Boring ID: GM-B-001	**Project Name: Calvert Citgo**
Date(s): 06/19/01 - 06/19/01	Project Number: 5977
Total Depth: 29.00'	Location: ROUTE 272 & Quaker Lane, Northeast, MD.
Borehole Dia.: 2.00in	Geologist: Unknown
Static Water Level:	Purpose: Soil Boring
Permit No.: N/A	Contractor: Geomatrix, Inc.
Permit Date: /	Drilling Method: HOLLOW STEM AUGER

Remarks: Sample collected between 15-16.5 FBG

Elevation (ft)	Depth (ft)	Recovery	Sample No.	Material Description	PID Reading	Notes
			1 0-5	Asphalt		
-5	5		2 5-10	Light brown, medium/dense silty clay w/ trace sand	20 ppm	
-10	10		3 10-15	Highly Weathered, decomposed schist	20 ppm 100 ppm	
-15	15		4 15-20	Highly Weathered, decomposed schist	100 ppm 120 ppm	
-20	20		5 20-23	Weathered, consolidated, medium to Coarse grained mica schist with trace silty clay	120 ppm 120 ppm	
-25	25		6 23-25	Wet, Brown, Silty clay to medium grain sand	120 ppm	
			7 27-29	Light brown silty to clayey sand Light Brown, silty to clayey sand	50 ppm	
-30	30			END OF BORING		
-35	35					
-40	40					
-45	45					
-50	50					
-55	55					
-60						



SOIL BORING LOG

Boring ID: GM-B-002	**Project Name: Calvert Citgo**
Date(s): 06/19/01 - 06/19/01	Project Number: 5977
Total Depth: 31.00'	Location: ROUTE 272 & Quaker Lane, Northeast, MD.
Borehole Dia.: 2.00in	Geologist: Unknown
Static Water Level:	Purpose: Soil Boring
Permit No.: N/A	Contractor: Geomatrix, Inc.
Permit Date: /	Drilling Method: HOLLOW STEM AUGER

Remarks: No samples collected

Elevation (ft)	Depth (ft)	Recovery	Sample No.	Material Description	PID Reading	Notes
			1 0-5	Grass root and top soil		
-5	5		2 5-10	Brown, dense silty clay and cobbley to medium grained sand	0 ppm	
-10	10		3 10-15	Brown, dense silty to sandy clay	0 ppm 0 ppm	
-15	15		4 15-20	Brown, dense silty to sandy clay	0 ppm 0 ppm	
-20	20		5 20-23	Brown, dense silty to sandy clay	0 ppm 4 ppm	
			6 23-25			
-25	25		7 25-27	Brown, dense silty to sandy clay	4 ppm 50 ppm	
			8 27-29			
-30	30			Brown, dense silty to sandy clay	50 ppm	
				Highly Weathered and decomposed		
-35	35			Schist, highly weathered and decomposed		
-40	40					
-45	45					
-50	50					
-55	55					

SOIL BORING LOG

Boring ID: GM-B-004	**Project Name: Calvert Citgo**
Date(s): 06/17/01 - 06/17/01	Project Number: 5977
Total Depth: 33.00'	Location: ROUTE 272 & Quaker Lane, Norhteast, MD.
Borehole Dia.: 2.00in	Geologist: Unknown
Static Water Level:	Purpose: Soil Boring
Permit No.: N/A	Contractor: Geomatrix, Inc.
Permit Date: /	Drilling Method: HOLLOW STEM AUGER

Remarks: Samples collected between 5-7 FBG and between 25-27 FBG

Elevation (ft)	Depth (ft)	Recovery	Sample No.	Material Description	PID Reading	Notes
0			1	Asphalt	2.00 ppm	
			0-3			
			2	Brown, dense, dry silty clay w/trace gravel		
-5	5		3-5	Brown, dense, dry silty clay	2.00 ppm	
			3		250 ppm	
			5-7			
			4	Yellowish brown, silty clay		
			7-9			
-10	10		5		250 ppm	
			9-11	Yellowish brown, silty clay	300 ppm	
			6			
			11-13			
			7			
-15	15		13-15	Yellowish brown, highly weathered and decomposed schist	300 ppm	
			8			
			15-17	Yellowish brown, highly weathered and decomposed schist	305 ppm	
			9			
			17-19	Yellowish brown, highly weathered and decomposed schist		
			10			
-20	20		19-21	Damp to wet yellowish brown, highly weathered decomposed schist	305 ppm	
			11		50 ppm	
			21-25	Damp to wet yellowish brown, highly weathered decomposed schist		
				Damp to wet yellowish brown, highly weathered decomposed schist		
-25	25		12		50 ppm	
			25-29		50 ppm	
				Damp to wet yellowish brown, highly weathered decomposed schist		
-30	30				50 ppm	
					200 ppm	
				Damp to wet yellowish brown, highly weathered decomposed schist		
-35	35			END OF BORING		
-40	40					
-45	45					
-50	50					
-55	55					
60						

SOIL BORING LOG

Boring ID: GM-B-005	**Project Name: Calvert Citgo**
Date(s): 06/14/01 - 06/14/01	Project Number: 5977
Total Depth: 32.00'	Location: ROUTE 272 & Quaker Lane, Northeast, MD.
Borehole Dia.: 2.00in	Geologist: Unknown
Static Water Level:	Purpose: Soil Boring
Permit No.: N/A	Contractor: Geomatrix, Inc.
Permit Date: /	Drilling Method: HOLLOW STEM AUGER

Remarks: Samples collected between 10-11.5 FBG and between 25-27 FBG

Elevation (ft)	Depth (ft)	Recovery	Sample No.	Material Description	PID Reading	Notes
0			1	Asphalt	1 ppm	
			0-1.5 2	Yellowish brown medium, dense silty clay		
			1.5-3.5 3			
-5	5		3.5-5 4	Yellowish brown medium, dense silty clay	1 ppm	
			5-10		2.5 ppm	
				Yellowish brown to greyish silty clay		
-10	10				2.5 ppm	
			5		400 ppm	
			12-14 6	Yellowish brown silty clay to weathered mica shist (sapprolitic)		
-15	15		14-16 7	Weathered and decomposed mics shist	400 ppm	
			16-18 8		60 ppm	
			18-20	Weathered decomposed mica shist		
-20	20			Weathered decomposed mica shist	60 ppm	
			10	Weathered damp decomposed mica shist	40 ppm	
			22-24			
-25	25		11	Weathered damp decomposed mica shist	40 ppm	
			25-27	Weathered mica shist (damp)	5 ppm	
				Weathered mica shist (damp)		
-30	30			Wet weathered mica shist	5 ppm	
					5 ppm	
-35	35					
-40	40					
-45	45					
-50	50					
-55	55					
-60						

SOIL BORING LOG

Boring ID: GM-B-006	**Project Name: Calvert Citgo**
Date(s): 06/18/01 - 06/18/01	Project Number: 5977
Total Depth: 32.00'	Location: Route 272 & Quaker Lane, Northeast, MD.
Borehole Dia.: 2.00in	Geologist: Unknown
Static Water Level:	Purpose: Soil Boring
Permit No.: N/A	Contractor: Geomatrix, Inc.
Permit Date:	Drilling Method: HOLLOW STEM AUGER

Remarks: Samples collected between 10-12 FBG and between 20-22 FBG

Elevation (ft)	Depth (ft)	Recovery	Sample No.	Material Description	PID Reading	Notes
0				Asphalt	15 ppm	
			1	Damp to dry dense silty clay		
			1-3			
			2	Dry, brown silty clay, with some cobbles		
-5	5		3-5			
			3	Dry, brown silty clay	15 ppm	
			5-7		15 ppm	
-10	10		4		15 ppm	
			10-12		150 ppm	
-15	15		5	Damp, brown, weathered, decomposed schist with fine sand grains	150 ppm	
			15-17		100 ppm	
-20	20		6	Damp, brown, weathered, decomposed shist	100 ppm	
			20-22		20 ppm	
-25	25		7	Wet, brown, weathered, decomposed schist	20 ppm	
			25-27	END OF BORING	2 ppm	
			8			
			27-30			
-30	30				2 ppm	
					2 ppm	
-35	35					
-40	40					
-45	45					
-50	50					
-55	55					
-60						

SOIL BORING LOG

Boring ID: GM-B-007	**Project Name: Calvert Citgo**
Date(s): 06/14/01 - 06/14/01	Project Number: 5977
Total Depth: 31.50'	Location: Route 272 & Quaker Lane, Northeast, MD.
Borehole Dia.: 2.00in	Geologist: Unknown
Static Water Level:	Purpose: Soil Boring
Permit No.: N/A	Contractor: Geomatrix, Inc.
Permit Date: /	Drilling Method: HOLLOW STEM AUGER

Remarks: Sample collected between 10-11.5 FBG

Elevation (ft)	Depth (ft)	Recovery	Sample No.	Material Description	PID Reading	Notes
			1 0-5	Asphalt		
-5	5			Yellowish brown dry, medium dense silty clay with some sand and gravel	10 ppm	
-10	10		2 10-15	Yellowish brown, dry medium dense silty to greyish micaeous, highly weathered and decomposed metamorphic rock (sapprolitic)	10 ppm 2 ppm	
-15	15		3 15-20	Golden, brown dry highly weathered/decomposed metamorphic rocks with mica and quart vein	2 ppm 0 ppm	
-20	20		4 20-25	Golden, brown dry highly weathered/decomposed metamorphic rocks with mica and quart vein	0 ppm 1 ppm	
-25	25		5 25-30	Golden, brown dry highly weathered/decomposed metamorphic rocks with mica and quart vein	1 ppm 0 ppm	
-30	30		6 30-31.5	Golden, brown dry highly weathered/decomposed metamorphic rocks with mica and quart vein	0 ppm 0 ppm	
-35	35					
-40	40					
-45	45					
-50	50					
-55	55					

SOIL BORING LOG

Boring ID: GM-B-008	**Project Name: Calvert Citgo**
Date(s): 06/14/01 - 06/14/01	Project Number: 5977
Total Depth: 31.50'	Location: Route 272 & Quaker Lane, Northeast, MD.
Borehole Dia.: 2.00in	Geologist: Unknown
Static Water Level:	Purpose: Soil Boring
Permit No.: N/A	Contractor: Geomatrix, Inc.
Permit Date: /	Drilling Method: HOLLOW STEM AUGER

Remarks: No samples collected

Elevation (ft)	Depth (ft)	Recovery	Sample No.	Material Description	PID Reading	Notes
			1	Asphalt		
			1-3	Brown, loose gravel to brown dry silty clay		
			2			
-5	5		3-5	Yellowish brown, dry medium dense clay with trace silt		
			3			
			5-7	Brown, loose gravel to brown dry silty clay		
-10	10		4			
			10-15	Yellowish brown dry medium dense clay to greyish brown clayey silt (sapprolitic)		
-15	15		5			
			15-20	Brown highly weathered, decomposed metamorphosed rocks (sapprolite)		
-20	20			Brown highly weathered, decomposed metamorphosed rocks (sapprolite)		
-25	25		6			
			25-30	Wet to damp, brown sapprolite		
-30	30		7			
			30-31.5	Wet to damp, brown sapprolite		
-35	35					
-40	40					
-45	45					
-50	50					
-55	55					

SOIL BORING LOG

Boring ID: GM-B-009	**Project Name: Calvert Citgo**
Date(s): 06/14/01 - 06/14/01	Project Number: 5977
Total Depth: 30.00'	Location: Route 272 & Quaker Lane, Northeast, MD.
Borehole Dia.: 2.00in	Geologist: Unknown
Static Water Level:	Purpose: Soil Boring
Permit No.: N/A	Contractor: Unknown
Permit Date: /	Drilling Method: HOLLOW STEM AUGER

Remarks: Samples collected between 9-11 FBG and between 13-15 FBG

Elevation (ft)	Depth (ft)	Recovery	Sample No.	Material Description	PID Reading	Notes
			1	Asphalt	15 ppm	
			0-3	Brown, dry,slightly dense silty clay		
			2			
-5	5		3-5	Brown, dry silty clay with some cobbles		
			3		15 ppm	
			5-7	Light brown to yellowish silty clay with some medium grained sand	450 ppm	
			4			
			7-9	Light brown to yellowish clayey silt		
-10	10		5			
			9-10	Light brownto black weathered, decomposed shists with clayey silt and trace sand	450 ppm	
			10-11		500 ppm	
			7	Light brown to black weathered, decomposed schists with clayey silt and trace sand		
-15	15		13-15			
			8		500 ppm	
			15-17	Light brown to black weathered, decomposed schists with clayey silt and trace sand	150 ppm	
			9			
			17-19	Brown to very dark borwn silty clay		
-20	20		10			
			19-21		150 ppm	
			11		50 ppm	
			21-23	Brown, dry, slightly dense clay		
			12			
-25	25		23-25			
				Brown, dry, slightly dense clay	50 ppm	
					10 ppm	
			13	Brown, damp, slightly dense clay		
-30	30		28-30			
				Brown to greenish damp clayey silt to wet weathered crystalline rocks	10 ppm	
				Wet, weathered schist- clayey, and sandy		
-35	35			END OF BORING		
-40	40					
-45	45					
-50	50					
-55	55					

SOIL BORING LOG

Boring ID: GM-B-010	**Project Name: Calvert Citgo**
Date(s): 06/17/01 - 06/17/01	Project Number: 5977
Total Depth: 37.00'	Location: Route 272 & Quaker Lane, Northeast, MD.
Borehole Dia.: 2.00in	Geologist: Unknown
Static Water Level:	Purpose: Soil Boring
Permit No.: N/A	Contractor: Geomatrix, Inc.
Permit Date: /	Drilling Method: HOLLOW STEM AUGER

Remarks: Sample collected between 15-17 FBG

Elevation (ft)	Depth (ft)	Recovery	Sample No.	Material Description	PID Reading	Notes
0				Grass root and yellowish brown soil	0.00 ppm	
			1	Light brown, medium dense silty clay with trace sand		
-5	5		3-5	Light brown medium dense silty clay with trace sand and cobble	0 ppm	
			2		0 ppm	
			5-7			
				Brown silty to sandy, dark clay		
-10	10		3		6 ppm	
			10-12		5 ppm	
				Brownish to yellowish weathered, decomposed shist		
-15	15		4		5 ppm	
			15-17		20 ppm	
			5	Brownish to yellowish weathered, decomposed shist		
			17-19	Brown weathered decomposed shist with more mica		
-20	20		6		20 ppm	
			20-22		1.00 ppm	
				Wet weathered schist		
-25	25		7		1 ppm	
			25-27		0 ppm	
				Wet weathered shist		
-30	30		8		0 ppm	
			30-32		0 ppm	
				Wet weathered schist		
-35	35		9			
			35-37			
-40	40					
-45	45					
-50	50					
-55	55					
60						

SOIL BORING LOG

Boring ID: AE-B-001	**Project Name: Calvert Citgo**
Date(s): 10/08/03 - 10/08/03	Project Number: 5977
Total Depth: 20.00'	Location: ROUTE 272 & Quaker Lane
Borehole Dia.: 2.00in	Geologist: N/A
Static Water Level:	Purpose: Soil Boring
Permit No.: N/A	Contractor: AEC, Inc.
Permit Date: / /	Drilling Method: DIRECT GEOPROBE

Remarks: Samples collected at 16' & 20' FBG.

Elevation (ft)	Depth (ft)	Recovery	Sample No.	Material Description	PID Reading	Notes
0				Construction Material	15.00 ppm	
				Tan clay	15.00 ppm	
					15.00 ppm	
					15.00 ppm	
-5	5				15.00 ppm	
				Orange clay	15.00 ppm	
				Light tan, soft clay	10.00 ppm	
-10	10			Light tan straited clay	830 ppm	
					830 ppm	
					830 ppm	
					830 ppm	
					830 ppm	
-15	15				830 ppm	
				Greenish/Tan clay, some fine sand	830 ppm	
					3.7 ppm	
					3.7 ppm	
					3.7 ppm	
-20	20			END OF BORING	3.7 ppm	
-25	25					
30						

SOIL BORING LOG

Boring ID: AE-B-002	**Project Name: Calvert Citgo**
Date(s): 10/08/03 - 10/08/03	Project Number: 5977
Total Depth: 20.00'	Location: ROUTE 272 & Quaker Lane
Borehole Dia.: 2.00in	Geologist: N/A
Static Water Level:	Purpose: Soil Boring
Permit No.: N/A	Contractor: AEC, Inc.
Permit Date: / /	Drilling Method: DIRECT GEOPROBE

Remarks: No sample collected

Elevation (ft)	Depth (ft)	Recovery	Sample No.	Material Description	PID Reading	Notes
0	0			Construction material Brown, tight clay		
	5			Orange, tight clay Light tan sOft clay	400 ppm 400 ppm 400 ppm 400 ppm	
-5				Light tan sandy cLay	630 ppm 630 ppm 360 ppm	
	10					
-10				Orange/Tan straited clay	630 ppm 720 ppm 720 ppm 720 ppm 720 ppm	
	15					
-15				Light Tan sandy clay		
	20			END OF BORING		
-20						
	25					
-25						

SOIL BORING LOG

Boring ID: AE-B-003	**Project Name: Calvert Citgo**
Date(s): 10/08/04 - 10/08/04	Project Number: 5977
Total Depth: 20.00'	Location: ROUTE 272 & Quaker Lane
Borehole Dia.: 2.00in	Geologist: N/A
Static Water Level:	Purpose: Soil Boring
Permit No.: N/A	Contractor: AEC, Inc.
Permit Date: / /	Drilling Method: DIRECT GEOPROBE

Remarks: Samples collected at 14' & 16' FBG

Elevation (ft)	Depth (ft)	Recovery	Sample No.	Material Description	PID Reading	Notes
0				Construction Material Tan clay		
-5	5			Orange clay Light tan, soft cLay		
-10	10			Light tan straited clay	402 ppm 402 ppm 402 ppm 402 ppm 402 ppm 402 ppm 402 ppm	
-15	15			Greenish/Tan clay, some fine sand	0 ppm 0 ppm 0 ppm	
-20	20			END OF BORING	0 ppm	
-25	25					
-30						

SOIL BORING LOG

Boring ID: AE-B-004	**Project Name: Calvert Citgo**
Date(s): 10/08/03 - 10/08/03	Project Number: 5977
Total Depth: 20.00'	Location: ROUTE 272 & Quaker Lane
Borehole Dia.: 2.00in	Geologist: N/A
Static Water Level:	Purpose: Soil Boring
Permit No.: N/A	Contractor: AEC, Inc.
Permit Date: / /	Drilling Method: DIRECT GEOPROBE

Remarks: Samples collected at 20'FBG

Elevation (ft)	Depth (ft)	Recovery	Sample No.	Material Description	PID Reading	Notes
				Construction Material		
				Tan cLay		
-5	5					
				Orange cLay		
				Light tan, soft cLay		
-10	10			**Light tan striated cLay**	2000 ppm	
					2000 ppm	
					2000 ppm	
					2000 ppm	
					2000 ppm	
-15	15				2000 ppm	
					2000 ppm	
				Greenish/Tan clay, some fine sand	1680 ppm	
					1680 ppm	
					1680 ppm	
-20	20				1680 ppm	
				END OF BORING		
-25	25					
	30					

REPSG
React Environmental
Professional Services Group, Inc.

SITE ASSESSMENT REPORT

Calvert Citgo (Former Alger Country Store)
2815 North East Road
Town of North East
Cecil County, Maryland
MDE Case No. 92-2616-CE

REPSG Project Reference No. 005977.130.01

December 18, 2008

PREPARED FOR:

Alger Fuel, Inc.
2314 Market Street
Philadelphia, PA 19145
Attn: Mr. Chris Haab

PREPARED BY:

Suzanne Shourds
Environmental Risk Analyst

REVIEWED BY:

Brenda MacPhail
Project Manager

P.O. Box 5377
6901 Kingsessing Avenue, Suite 201
Philadelphia, PA 19142-0377

215 729.3220
215 729.1557 (Fax)
www.repsg.com

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ATTACHMENTS

1.0 INTRODUCTION

React Environmental Professional Services Group, Inc. (REPSG, formerly "React Environmental Services Group, Inc." or "React") was retained by Alger Fuel, Inc. to perform a Site Assessment at 2815 North East Road in the town of North East, Cecil County, Maryland (Site), known as Maryland Department of the Environment (MDE) Case No. 92-2616-CE. This Site Assessment Report (SAR) has been prepared in general accordance with the *Maryland Environmental Assessment Technology for Leaking Underground Storage Tanks*, (MEAT Guidance) produced by the Oil Control Program Waste Management Administration of the MDE (as revised February 2003). The specific scope of the investigation has been defined per REPSG Proposal No. 08-789 and was designed to satisfy the conditions of a Notice of Violation (NOV) prepared by MDE on July 9, 2008.

The NOV is related to the Hydrogeological Investigation/Work Plan, submitted by React on March 5, 2004 (and approved on December 7, 2005 by the Department) for the above reference Site. Specifically, the MDE's NOV letter requested that a completed Site Conceptual Model (SCM) and Supplemental Work Plan (SWP) be completed in order to prepare a comprehensive Corrective Action Plan (CAP). The NOV stated that the SCM should address the following: source(s) of petroleum contamination; any features and pathways, surface and/or subsurface, that may have influenced the transport of groundwater and contaminants; fate and transport (known and/or predicted) of contaminants; and a proposal for supplemental data to fill in the gaps in order to further prove and/or refine the SCM. The NOV further went on to request that additional investigation of groundwater (via on-Site monitoring wells, measuring points (which are observation wells located within the gasoline underground storage tank (UST) field), and temporary well points) be conducted, in addition to soil sampling and potable well sampling (to occur on-Site and at specified locations off-Site).This groundwater investigation, and a potable well investigation.

1.1 Site Location and Description

The Site consists of an irregularly shaped parcel of land located at the street address: 2815 North East Road, in the Town of North East, Cecil County, Maryland. The Site measures approximately 1.05 acres in area; it is bounded by North East Road (MD Route 272) and residential development to the east, Quaker Lane (old MD Route 272) and agricultural land to the west, an access road and agricultural land to the south, and a mixture of residential and agricultural land to the north.

Development at the Site consists of a single-story convenience store structure, located centrally at the Site; a gasoline fuel pump island, located off the south eastern portion of the structure; a diesel fuel pump island, located to the east of the gasoline island; a concrete pad, located off the northeast corner of the structure; landscaping; and parking and drive areas. The concrete pad at the Site is situated directly above the four (4) gasoline USTs, which are denoted on **Figure 1** as the gasoline UST field and are detailed in **Section 1.3**.

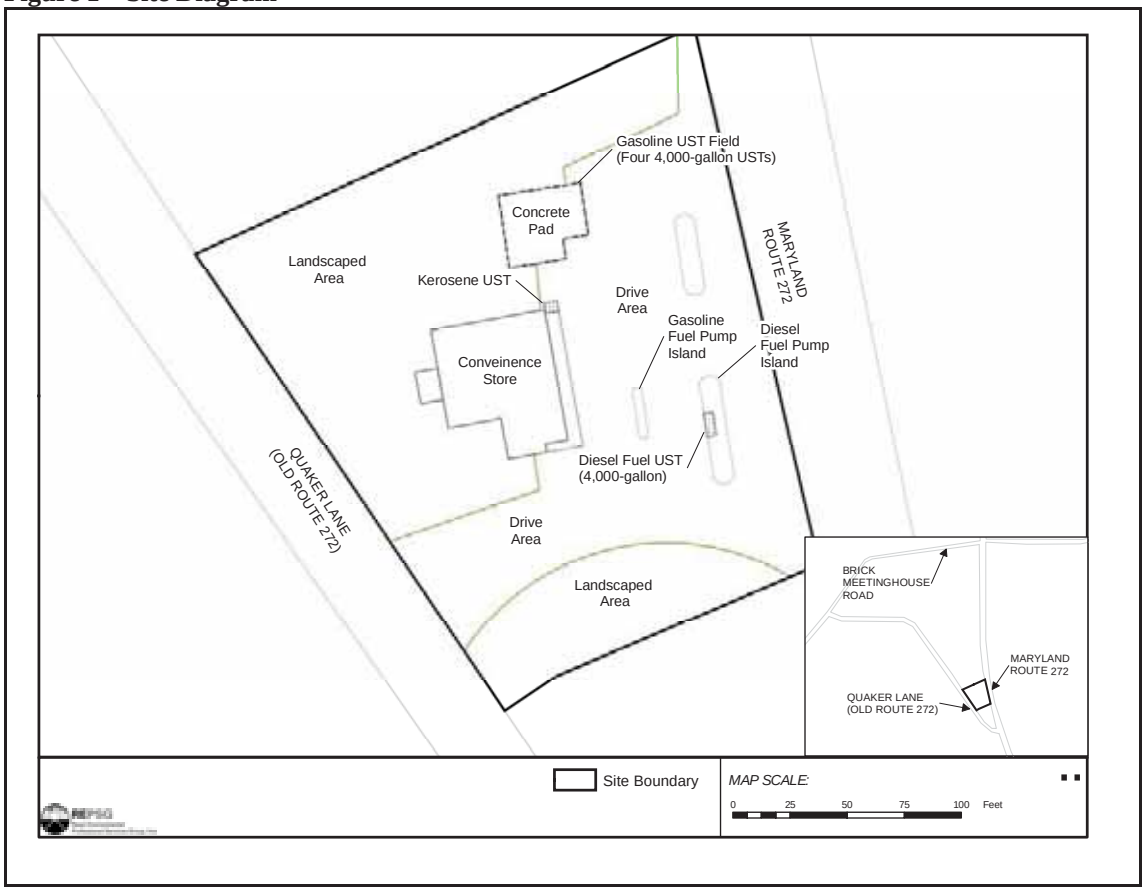
1.2 Vicinity Well Information

As requested in the July 9, 2008 MDE NOV, REPSG conducted a drinking water well search for the Site, encompassing a one half mile radius of the Site. A well search for Cecil County, MD conducted by REPSG in conjunction with the MDE (Ms. Denise Swatzbaugh), indicated that within a one-half mile radius of the Site there are: 38 drinking water wells (used for either public or home use); three (3) industrial, commercial state, or federal use wells; and one (1) farm use well (for livestock watering and agricultural irrigation). Three (3) of the 28 drinking water wells and one (1) of the industrial wells are located within 500 feet of the Site. Two (2) of the drinking water wells and one (1) of the industrial wells are located within 1,000 feet of the Site. All other wells are located between 1,000 feet and a half mile radius of the Site. Documentation of available total well depth, screen depths, and additional pertinent information for these wells is included in **Attachment 2** of this SAR. A figure depicting the locations of these wells in relation to the Site is included in **Attachment 1**.

1.3 Site History

As noted in React's Revised Workplan (dated May 26, 2004), a review of prior environmental reporting indicated that the Site operated as a retail petroleum station since the late 1950's. Currently the site contains a total of six (6) underground storage tanks (USTs) (four (4) 4,000-gallon, steel-constructed USTs containing gasoline, one (1) 4,000-gallon, steel-constructed UST containing diesel fuel, and one (1) UST (of unknown size and construction) containing kerosene. According to the former site owner, F.C. Haab, these USTs were installed in 1997. Currently, the site is operating as a retail petroleum station and convenience store. Relevant Site features are depicted in **Figure 1**.

Figure 1 – Site Diagram

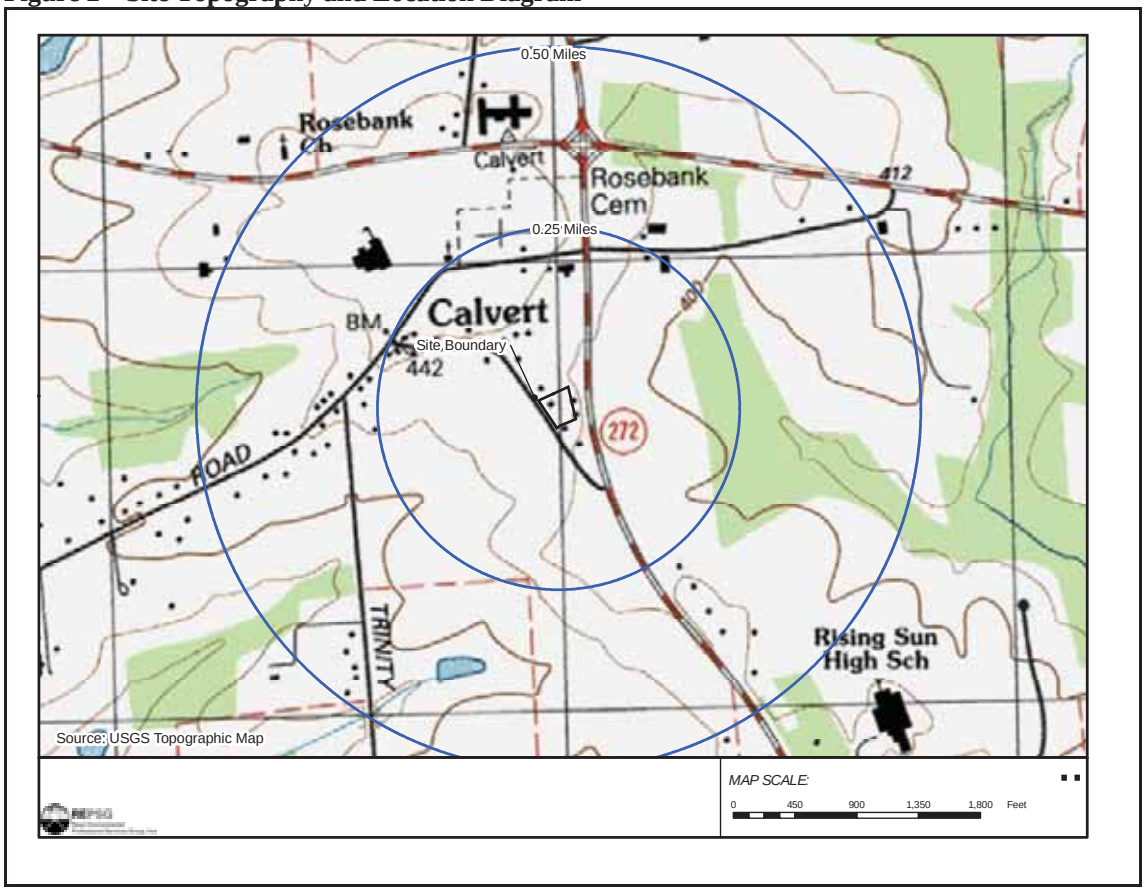


2.0 LOCAL/REGIONAL GEOLOGY AND HYDROLOGY

2.1 Topography

According to USGS topographic mapping (7.5-minute series, *Bay View, Maryland* Quadrangle) the Site is located at an elevation of approximately 419 feet above Mean Sea Level (MSL). Topography at the Site slopes very gently to the southwest. See **Figure 2**, below (also see **Attachment 1**).

Figure 2 – Site Topography and Location Diagram



2.2 Site & Regional Geology

2.2.1 Lithology

According to the available surficial geology information, the Site is underlain by clay residuum; made up mostly of massive kaolinitic clay, with little mica or quartz

2.2.2 Mineralogy

Soils at the Site were observed during Site investigations to be very densely packed overall. Grain size of soils at the Site were observed to be small and finely textured.

2.2.3 Stratigraphy

Information gathered from the Maryland Geological Survey[1], demonstrated that the Site and its vicinity is located within the Boulder Gneiss formation (formerly mapped as Sykesville and Laurel Formations.) This formation is thick-bedded to massive, pebble- and boulder-bearing, arenaceous to pelitic metamorphic rock, typically a medium-grained, garnet-oligoclase-mica-quartz gneiss; locally an intensely foliated gneiss or schist; apparent thickness 15,000 feet. Soils at the Site were observed during Site investigations to be comprised of mostly clays and silts down to depths of 28 fbg, with some weathered schist present at depths greater then 10 fbg.

2.2.4 Other Geologic Structures

No specific geologic structures relevant to this SAR were noted during the subsurface soil and groundwater investigations conducted at the Site.

2.3 Surface Water

No surface water bodies are present at the Site. The nearest body of water in the vicinity of the Site is a small enclosed body of water, connected to North East Creek and located approximately 1,695 feet southwest of the Site. Surface water drainage follows the general direction of the slope at the Site (southwest). Aside from run-off drains located on either side of the roads at the Site, no drainage sewers are present.

[1] Index to Online Geologic Maps (1968): http://www.mgs.md.gov/esic/geo/index.html

2.4 Hydrology

The Site is underlain by the Piedmont and Blue Ridge crystalline-rock aquifer systems; igneous and metamorphic-rock aquifers. Metamorphic-rock consists mostly of mica and chlorite schists, gneisses, and metadacites. Igneous rocks are volcanic and intrusive. The Piedmont crystalline rock tends to possess very poor water-bearing capability, due mostly to its very low porosity. Rock fracturing increases its ability to store and transport water. As stated above, bedrock at and in the vicinity of the Site is known to be fractured, increasing the likelihood for contaminant transport at the Site. Current subsurface investigations, which included the installation and sampling of temporary well points, indicated that the surficial groundwater table was encountered at the Site between 20 to 24.5 fbg. Groundwater in the on-Site monitoring wells was encountered between 17.23 and 19.82 fbg. Groundwater in the on-Site measuring points (UST field observation wells) was encountered between 10.75 and 11.35 fbg. Groundwater at the Site generally flows in a southwesterly direction[2].

3.0 PREVIOUS SITE CHARACTERIZATION

As noted in React's Revised Workplan, a Preliminary Environmental Site Assessment Report was conducted by Geomatrix, Inc. in August 1991, and a Report of Direct Push Soil Sampling was conducted by Advanced Environmental Concepts, Inc. (AEC) in October 2003.

In August 1991, Geomatrix collected a total of thirteen (13) soil samples, water "grab" samples, and monitoring well groundwater samples for: total petroleum hydrocarbons (TPH) for gasoline range organics (GRO); benzene; ethylbenzene; methyl tert-butyl Ether (MTBE); naphthalene; toluene; and total xylenes. No soil concentrations were above applicable standards; however both the water "grab" samples and the monitoring well groundwater results indicated compound concentrations above applicable standards for one or more of all of the analyzed compounds.

On October 8, 2003, AEC collected five (5) samples for: TPH-GRO, TPH-DRO, Benzene, Ethylbenzene, MTBE, Naphthalene, Toluene, and total Xylenes. AEC identified as free product in soil boring B-2; they concluded that subsurface soils have impacted across the site and potentially off-Site.

[2] Groundwater Flow direction is assumed to be southwest as reported in prior investigations completed by Geomatrix, Inc.

On March 2, 2004 React mobilized to the Site and located, accessed and gauged five (5) monitoring wells at the Site. No measurable product was observed in any of the wells, but sheen was observed in MW-003.

More detailed information about the 1991, 2003, and 2004 investigations conducted at the Site is provided in React's Revised Workplan (submitted to the MDE in May 2004).

Most recently, AEC has conducted multiple rounds of on-Site monitoring well gauging and sampling. The two most recent events for which REPSG was able to review documentation occurred on March 12, 2008 and August 14, 2008. On both dates, these sampling events included analysis of the on-Site potable well (DW-001) for the full suite drinking water volatile organic compounds (VOCs) via EPA method 524.2, and the on-Site monitoring wells (MW-001 through MW-003, and MW-005 through MW-007) for VOCs via EPA method 8260, and TPH-DRO and TPH-GRO via EPA method 8015B. Additionally, MP-001 and MP-002 were included in the March 12, 2008 sampling event. A copy of both of AEC's most recent groundwater monitoring reports is provided in **Attachment 6**.

Elevated concentrations above the applicable EPA maximum contaminant levels (MCLs) of MTBE were detected in DW-001 on August 14, 2008. Additionally, several compounds were detected in exceedences of the applicable MDE Voluntary Cleanup Program (VCP) soil standards[3] in the groundwater samples, including: TPH-GRO; benzene; ethylbenzene; isopropylbenzene; tetrachloroethylene (PCE); total xylene; 1,2-dichloroethane; methyl chloride, and MTBE.

4.0 INVESTIGATIVE METHODS

This Site Assessment (SA) consisted of a subsurface soil investigation, a groundwater investigation, and a potable well investigation. The subsurface soil investigation was conducted over two days on November 5, 2008 and November 24, 2008. The groundwater investigation was conducted over two days on November 5, 2008 and November 17, 2008. The potable well investigation was conducted on November 24, 2008. Soil sampling locations are provided on **Figure 3** in **Section 4.1** and groundwater sampling locations are provided on **Figure 5** in **Section 4.2**.

[3] Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Soil, Protection of Groundwater, Tables 1 and 2 (March 2008).

4.1 Soil Sampling Investigation

The subsurface soil sampling portion of the investigation conducted at the Site took place over two days on November 5, 2008 and November 24, 2008. On November 5, 2008, REPSG personnel advanced a total of six (6) soil borings (B-002, B-004, B-005, and B-007 through B-009) at the Site using a track-mounted direct-push Geoprobe®, under the direction of a REPSG geologist. On November 24, 2008, REPSG personnel advanced a total of six (6) soil borings (B-001, B-003, B-006, B-010 through B-012) at the Site using a track-mounted direct-push Geoprobe®, under the direction of a REPSG geologist. Boring locations were based on the documented historical usage of the Site as a gasoline service station and prior investigation results. The soil sampling plan was submitted to the MDE on August 22, 2008 and approved with adjustments on September 24, 2008. Soil borings completed via Geoprobe for this SA were advanced through unconsolidated soils to depths of 28 fbg. Groundwater was encountered at depths ranging from 20 fbg to 24.5 fbg in all of the borings. Temporary well points were installed in four (4) of the subsurface soil borings (discussed in detail in **Section 4.2**). Soils present at the Site were observed to consist of clayey silts and weathered schist that varied in color from light brown to brown, to depths of 28 fbg. Soil Boring Logs are provided in **Attachment 4.**

Soils from these borings were field-screened for indications of impacts to the subsurface soils. In addition to visual and olfactory screening, REPSG used a portable PID equipped with a 10.2eV lamp, capable of detecting organic vapors. PID readings were measured at six inch intervals along the soil borings. PID readings for each sample are detailed in the attached Soil Boring Logs.

One soil sample was collected from each of the twelve (12) soil borings. Boring depths and observations are detailed in **Table 1**. Sampling parameters and methods are detailed in **Section 5.1** of this report.

Table 1 – Soil Boring Depths and Observations

Site ID	Total Depth of Boring (ft)	Sample Depth (ft)	Depth to Water (ft)	Observations	Highest PID Reading
B-001	24	19.5	20	No odors.	0 ppm
B-002	28	24	24.5	Slight solvent odors.	0 ppm
B-003	24	19.5	20	Slight to strong solvent and petroleum odors.	0 ppm
B-004	24	16	21	Slight solvent and petroleum odors.	60 ppm (at 16 fbg)
B-005	28	23	24.5	Slight varnish and strong petroleum odors.	350 ppm (at 23 fbg)
B-006	20	19.5	20	No odors.	0 ppm
B-007	28	24	24.5	Slight solvent odors.	0 ppm
B-008	28	12	24.5	Slight to strong petroleum and solvent odors.	3300 ppm (at 12 fbg)
B-009	28	24	24.5	Slight petroleum odors.	0 ppm
B-010	24	20.5	21	No odors.	0 ppm
B-011	24	20.5	21	No odors.	0 ppm
B-012	20	19.5	20	No odors.	0 ppm

4.2 Groundwater Investigation

On November 5, 2008, following the completion of the subsurface soil investigation, REPSG installed four (4) temporary well points (TWP-001 through TWP-004) in select soil borings[4] (see **Table 2**). These temporary well points were installed to assess the presence of any liquid-phase product in groundwater at the Site, and to allow the collection of groundwater samples for additional Site coverage. These temporary well points were sampled via purge-method sampling. These temporary well points were abandoned directly after sampling. One groundwater sample was collected from each of the four (4) temporary well points. The surficial groundwater table was encountered in temporary well points at the Site on November 5, 2008 was between 20 to 24.5 fbg. Groundwater in the on-Site monitoring wells on November 17, 2008 was encountered between 17.23 and 19.82 fbg. Groundwater in the on-Site measuring points (UST field observation wells) on November 17, 2008 was encountered between 10.75 and 11.35 fbg. Groundwater at the Site generally flows in a southwesterly direction.

[4] The decision to install four (4) temporary well points rather then the MDE required twelve (12) temporary well points (as per the MDE approved Sample Plan) was made on-Site by REPSG Project Manager Brenda Macphail and the MDE Case Manager Susan Bull.

Several rounds of groundwater monitoring data have been conducted previously at the Site by prior consultants, as discussed in **Section 3.0**. In the July 9, 2008 NOV, the MDE requested that quarterly groundwater sampling be conducted of the permanent wells located on-Site. In accordance with this request, REPSG mobilized to the Site to gauge and sample the six (6) on-Site monitoring wells (MW-001 through MW-003, and MW-005 through MW-007) and the two (2) on-Site measuring points (MP-001 and MP-002) via purge-method sampling. One groundwater sample was collected from each of the six (6) on-Site monitoring wells and the two (2) on-Site measuring points on November 17, 2008.

No liquid-phase product was encountered in the monitoring wells, measuring points, or temporary well points at the time that the groundwater samples were collected. All purged water was filtered through a carbon filter to remove impurities before it was discarded. REPSG's standard operating procedure for groundwater sampling is presented in **Attachment 3**.

Sampling parameters and EPA Methods are detailed in **Section 5.2** of this report.

Table 2 – Temporary Well Point Details

Site ID	Total Depth of Well Point (ft)	Depth to Water (ft)	Associated Soil Boring
TWP-001	28	24.5	B-005
TWP-002	28	24.5	B-008
TWP-003	28	24.5	B-002
TWP-004	24	21	B-007

4.3 Potable Well Water Investigation

In the July 9, 2008 MDE NOV, the Department provided REPSG with a specific listing of potable wells within the immediate vicinity of the Site. In conjunction with the MDE, REPSG developed a "*water well sampling access survey*" (approved by the MDE on September 24, 2008) in order to request updated information and access for sampling from the owners of the specified wells. Documentation of the results of these surveys was provided to the MDE by REPSG in correspondence dated November 20, 2008.

On November 24, 2008 REPSG mobilized to the Site in order to gauge and sample one (1) on-Site potable well (DW-001), and to sample six (6) off-Site potable wells (DW-002 through DW-007) located at nearby residential dwellings (as identified via the MDE's July 9, 2008 NOV letter and REPSG's subsequent Water Well Access Survey Letters. All purged water from DW-001 was filtered through a carbon filter to remove impurities before it was discarded. No liquid-phase product was encountered in the potable well at the time that the water sample was collected. REPSG's standard operating procedure for potable well sampling is presented in **Attachment 3**.

Samples were collected from either a drinking water tap located at the residence (DW-006), from an outside faucet (DW-002 through DW-005), or directly from the well (DW-007). These samples were taken without the implementation of any infiltration systems. REPSG's standard operating procedure for drinking water sampling is presented in **Attachment 3**. Sampling parameters and methods are detailed in **Section 5.3** of this report.

The location of DW-001 at the Site is depicted on **Figure 5**, in **Section 4.2**. The residential potable well samples collected correspond to the addresses provided by the MDE in their July 9, 2008 NOV letter (see **Table 3,** below).

Table 3 – Off-Site Potable Well Samples and Corresponding Addresses

Site ID	Residential Site Address	Well Permit No.
DW-002	64 Quaker Lane, North East, MD. 21901	Not Available
DW-003	2780 Northeast Road, North East, MD. 21901	CE950678
DW-004	2794 Northeast Road, North East, MD. 21901	CE951470
DW-005	2802 Northeast Road, North East, MD. 21901	CE951499
DW-006	2825 Northeast Road, North East, MD. 21901	Not Available
DW-007	64 Quaker Lane, North East, MD. 21901	Not Available

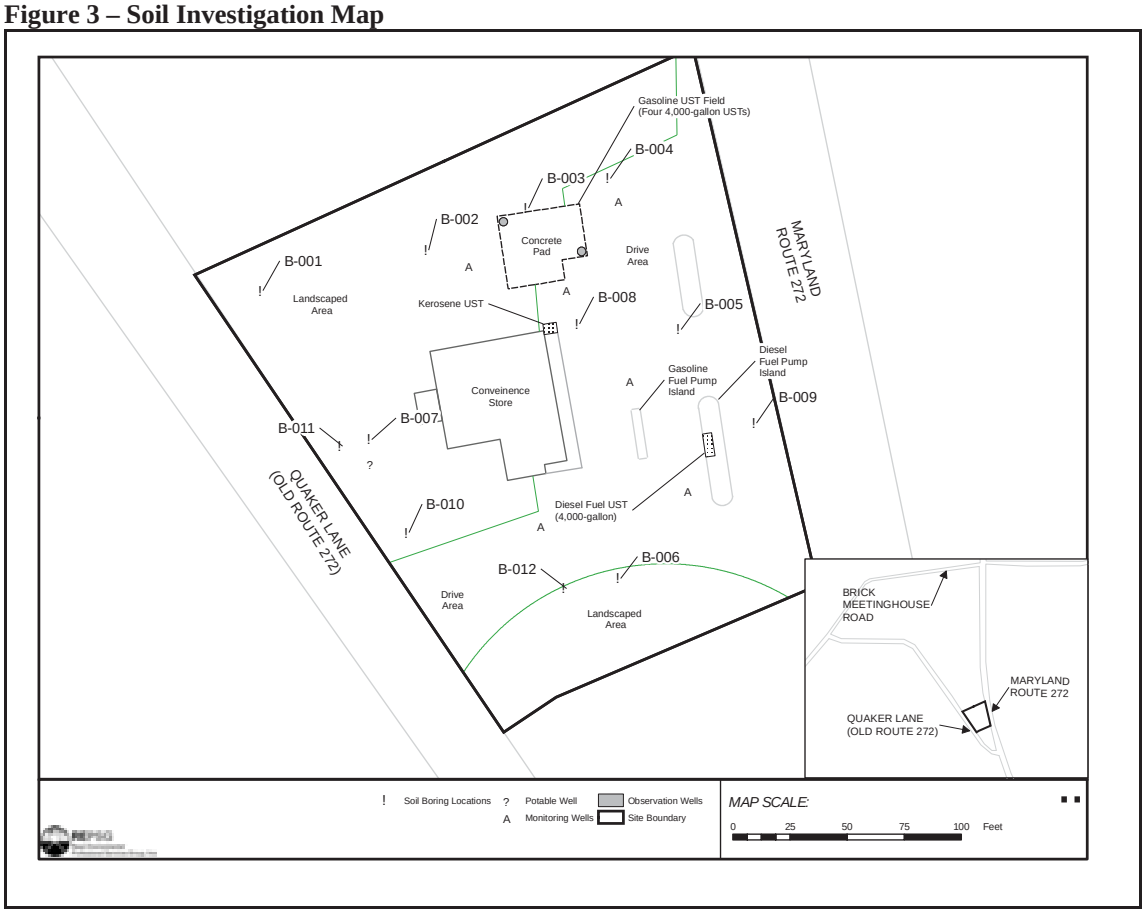
5.0 RESULTS OF THE WORK PERFORMED

5.1 Soil Investigation Methods and Results

The subsurface soil samples collected for laboratory analysis (B-001 through B-012) were collected and packaged directly into EnCore™ samplers, and unpreserved four ounce jars, as required by EPA Methods 8260 and 8015D. REPSG's standard operating procedure for soil sampling is presented in **Attachment 3**. Soil boring locations are shown on **Figure 3** (see also **Attachment 1**). Soil Boring Logs are provided in **Attachment 4.**

All soil samples collected were analyzed for volatile organic compounds (VOCs) plus tert-butyl alcohol (TBA) via EPA method 8260, TPH-DRO via EPA method 8015D, and TPH-GRO via EPA method 8015D. Samples were submitted, packed on ice and under chain of custody, to Analytical Laboratory services, Inc. of Middletown, PA.

Figure 3 – Soil Investigation Map



Results of the soil investigation laboratory analyses were compared against the applicable MDE VCP soil standards (see **Attachment 2**).

Analysis results indicated the presence of the following compound concentrations above the applicable MDE VCP soil standards:

- 1,1-dichloroethane in sample B-001 (19.5 fbg);
- 1,2-dibromoethane, 1,2-dichloroethane, and benzene in sample B-005 (23.5 fbg);
- 1,1,2-trichloroethane, 1,2-dibromoethane, 1,2-dichloroethane, and benzene in sample B-008 (12.5 fbg); and
- Benzene in sample B-011 (20.5 fbg).

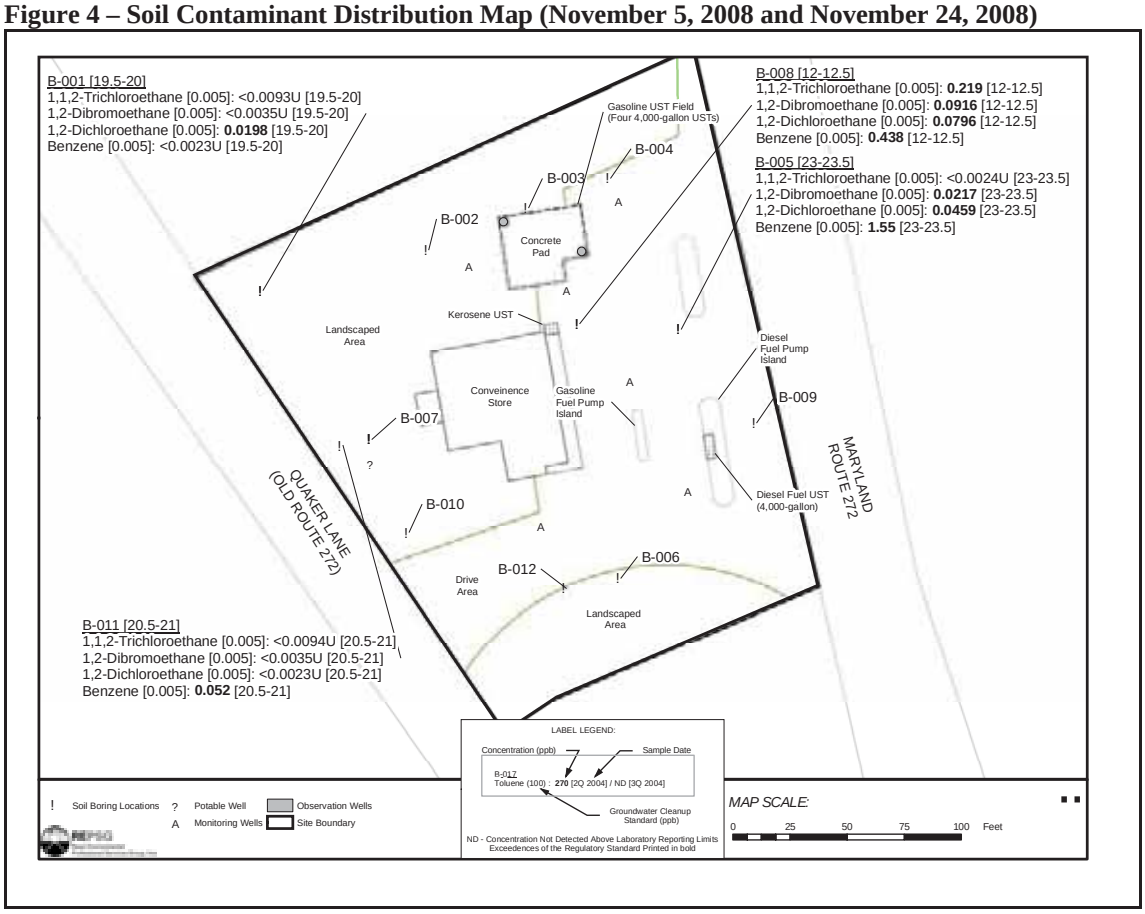
Several compounds were detected at levels above the laboratory reporting detection limits (RDL), but below the applicable MDE VCP soil standards, including one or more of the following: 2-hezanone, acetone, benzene, ethylbenzene, isopropyl ether, methyl ethyl ketone (MEK), methyl isobutylketone (MIBK), methylene chloride, toluene, TPH-DRO, TPH-GRO, and total xylenes.

All other analyzed constituents were not reported at concentrations above the laboratory detection limits[5]. All other laboratory detection limits were sufficiently below the standard to be considered valid regulatory data (see **Attachment 2**).

A complete table showing all tested parameters compared to the MDE VCP soil standards is provided in **Attachment 2**. The complete analytical laboratory report is provided in **Attachment 5.** A contaminant distribution map showing all locations of exceedences with their corresponding results in soils at the Site is presented as **Figure 4**, below.

[5] With the exception of several compounds in sample B-008, which had elevated RDLs as a result of matrix interference.

Figure 4 – Soil Contaminant Distribution Map (November 5, 2008 and November 24, 2008)



5.2 Groundwater Investigation Methods and Results

The groundwater samples collected for laboratory analysis (MW-001 through MW-003, MW-005 through MW-007, MP-001, MP-002, and TWP-001 through TWP-004) were collected and packaged directly into 1-liter unpreserved amber glass bottles and 40-milliliter HCL preserved VOA vials, as required by EPA Methods 8260 and 8015D. REPSG's standard operating procedure for groundwater sampling is presented in **Attachment 3**. Monitoring well, measuring point (UST field observation wells), and temporary well point locations are shown on **Figure 5** (see also **Attachment 1**). Depth to water information for each sample location is presented in **Table 4**, below.

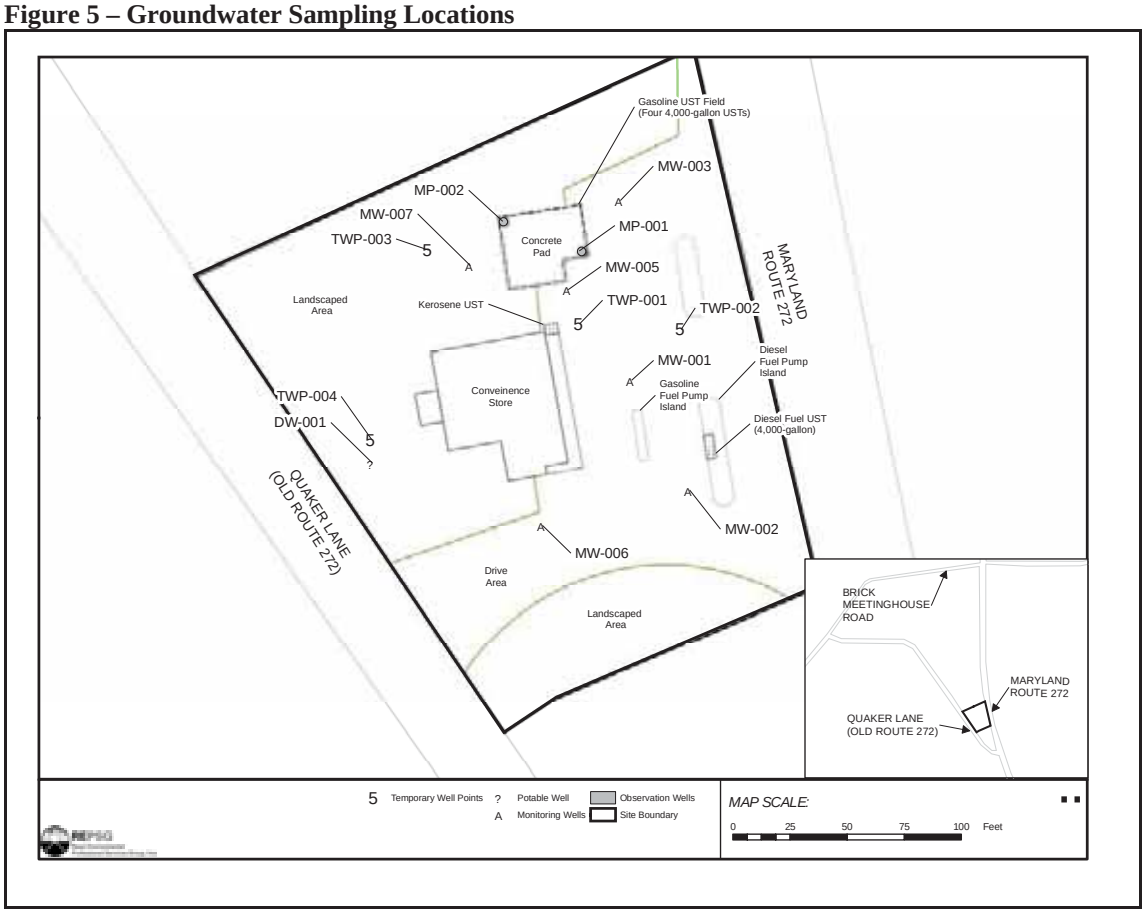
Table 4 – Depth to Water

Sample ID	Depth to Water (ft)
MW-001	19.02
MW-002	18.61
MW-003	17.23
MW-005	19.02
MW-006	19.31
MW-007	18.32
MP-001	10.75
MP-002	11.35
TWP-001	24.5
TWP-002	24.5
TWP-003	24.5
TWP-004	21

All groundwater samples collected were analyzed for VOCs plus TBA via EPA method 8260, TPH-DRO via EPA method 8015D, and TPH-GRO via EPA method 8015D[6]. Samples were submitted, packed on ice and under chain of custody, to Analytical Laboratory services, Inc. of Middletown, PA.

[6] With the exception of TWP-002 which was not analyzed for TPH-GRO as a result of limited matrix availability.

Figure 5 – Groundwater Sampling Locations



Results of the groundwater investigation laboratory analyses were compared against the applicable MDE VCP groundwater standards[7] (see **Attachment 2**).

Analysis results indicated the presence TPH-DRO and TPH-GRO and VOC compound concentrations above the applicable MDE VCP groundwater standards in all samples analyzed for the compounds. These compounds are presented in **Table 5**, below. Contaminant distribution maps for both dates of groundwater sampling (November 5, 2008 and November 17, 2008) showing all exceedences in groundwater at the Site are presented as **Figures 6** and **7**.

[7] Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Groundwater for Type I & II Aquifers, Tables 1 and 2 (March 2008).

Table 5 – Exceedences in Groundwater (November 5, 2008 and November 17, 2008)

		Sample ID	TWP-001		TWP-002		TWP-003		TWP-004	
		Sample Date	11/05/2008		11/05/2008		11/05/2008		11/05/2008	
Compound	**Standard**	**Units**								
1,2-Dibromoethane	0.05	ug/l	**265**		**179**		**13.7**		**11.4**	
1,2-Dichloroethane	5	ug/l	**913**		**680**		**27.1**		**21.4**	
Acetone	550	ug/l	**1270**		**2110**		50	U	10	U
Benzene	5	ug/l	**15300**		**43000**		**835**		**708**	
Diesel Range Organics (DRO)	47	ug/l	**5600**		**2300**		**250**		**83**	J
Ethylbenzene	700	ug/l	**1060**		482		16.9		12.8	
Gasoline Range Organics (GRO)	47	ug/l	**39700**		-		**3440**		**673**	
Methyl ethyl ketone	700	ug/l	**1320**		**1300**		50	U	8.8	J
Methyl tert-butyl ether	20	ug/l	**949**		**11900**		**28.1**		**52**	
Tetrachloroethylene	5	ug/l	5	U	5	U	5	U	1	U
Toluene	1000	ug/l	**20600**		**50200**		518		750	
Xylene (total)	10000	ug/l	5140		2680		915		57.4	
		Sample ID	MP-001		MP-002		MW-001		MW-002	
		Sample Date	11/17/2008		11/17/2008		11/17/2008		11/17/2008	
Compound	**Standard**	**Units**								
1,2-Dibromoethane	0.05	ug/l	5	U	1	U	5	U	1	U
1,2-Dichloroethane	5	ug/l	5	U	1	U	27.1		1	U
Acetone	550	ug/l	50	U	61.1		50	U	10	U
Benzene	5	ug/l	**19.3**		3.1		**13800**		**68.1**	
Diesel Range Organics (DRO)	47	ug/l	**97200**		**1700**		**12100**		**2900**	
Ethylbenzene	700	ug/l	5	U	1	U	**1340**		1.9	
Gasoline Range Organics (GRO)	47	ug/l	**1180**		**175**	J	**16800**		**96.1**	J
Methyl ethyl ketone	700	ug/l	50	U	65.4		50	U	10	U
Methyl tert-butyl ether	20	ug/l	5	U	0.67	J	5.4		14.7	
Tetrachloroethylene	5	ug/l	5	U	1	U	5	U	1	U
Toluene	1000	ug/l	38.7		9.8		764		5.8	
Xylene (total)	10000	ug/l	15.1		2.4	J	3210		7.9	
		Sample ID	MW-003		MW-005		MW-006		MW-007	
		Sample Date	11/17/2008		11/17/2008		11/17/2008		11/17/2008	
Compound	**Standard**	**Units**								
1,2-Dibromoethane	0.05	ug/l	5	U	5	U	1	U	5	U
1,2-Dichloroethane	5	ug/l	5	U	5	U	1	U	5	U
Acetone	550	ug/l	86.3		97.2		10	U	50	U
Benzene	5	ug/l	**24.5**		**410**		**17.1**		**961**	
Diesel Range Organics (DRO)	47	ug/l	**5300**		**7500**		**2900**		**2000**	
Ethylbenzene	700	ug/l	**1440**		**2610**		8.2		**999**	
Gasoline Range Organics (GRO)	47	ug/l	**31200**		**148000**		**341**		**59300**	
Methyl ethyl ketone	700	ug/l	50	U	76.8		10	U	50	U
Methyl tert-butyl ether	20	ug/l	5	U	5	U	6.7		5	U
Tetrachloroethylene	5	ug/l	5	U	5	U	**15.1**		5	U
Toluene	1000	ug/l	**3170**		**34500**		42.3		**24000**	
Xylene (total)	10000	ug/l	5740		**13600**		33.4		6030	

QUALIFIERS: U = Constituent not detected above Method Detection Limit (MDL). J = Estimated Value.
Exceedences of the regulatory standard are printed in **bold**.

Several compounds were detected at levels above the laboratory RDL, but below the applicable MDE VCP groundwater standards, including one or more of the following: 2-hezanone, acetone, benzene, chloroform, ethylbenzene, isopropyl ether, MEK, methyl MIBK, MTBE, methylene chloride, tert-amyl alcohol, tert-butyl alcohol, toluene, trichloroethylene (TCE), and total xylenes. Analytical results for which the reported compound concentrations exceed the RDL are presented in **Attachment 2.**

All other analyzed constituents were not reported at concentrations above the laboratory detection limits[8]. All other laboratory detection limits were sufficiently below the standard to be considered valid regulatory data (see **Attachment 2**).

A complete table showing all tested parameters compared to the MDE VCP groundwater standards is provided in **Attachment 2**. The analytical laboratory report is provided in **Attachment 5.**

[8] With the exception of several compounds (denoted in the analytical summary table included in Attachment 2 with a "#" symbol) in multiple groundwater samples, which had elevated RDLs has a result of matrix interference.

Figure 6 – Groundwater Contaminant Distribution Map (November 5, 2008)

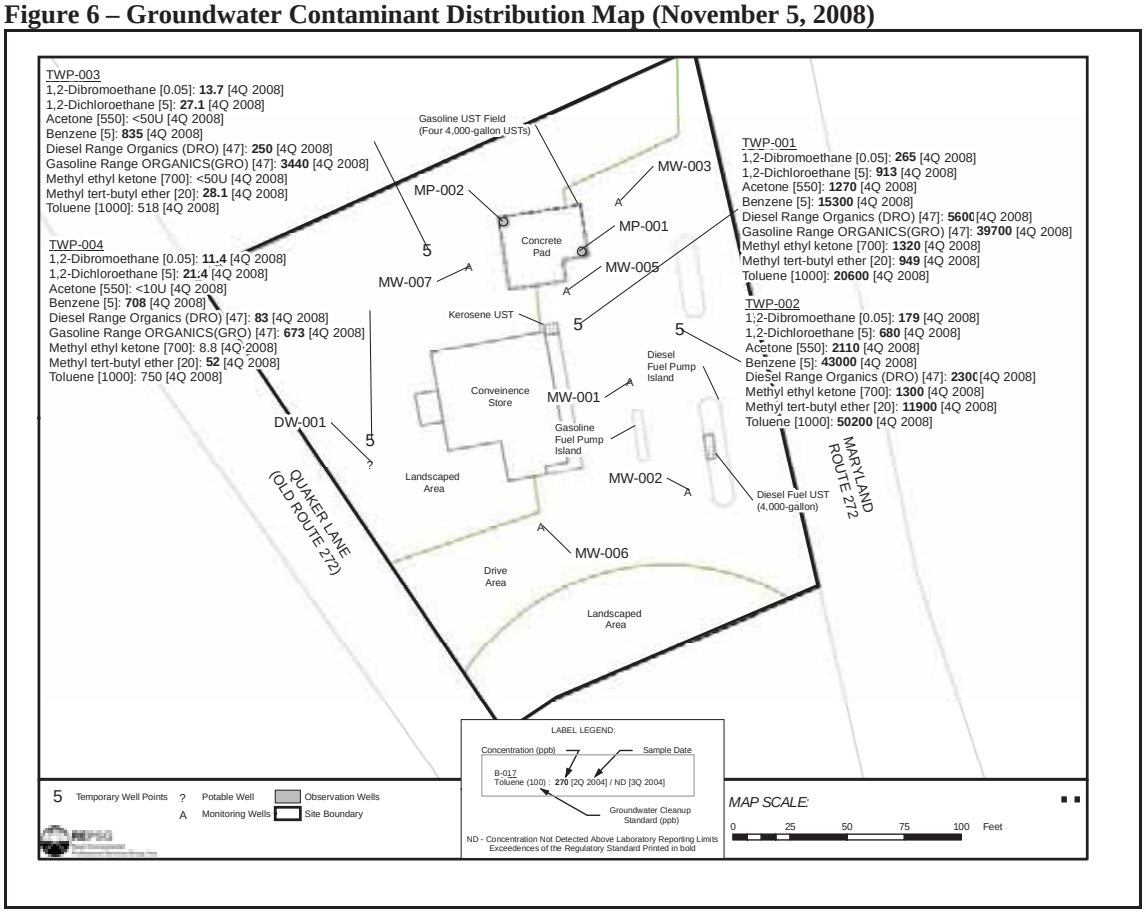
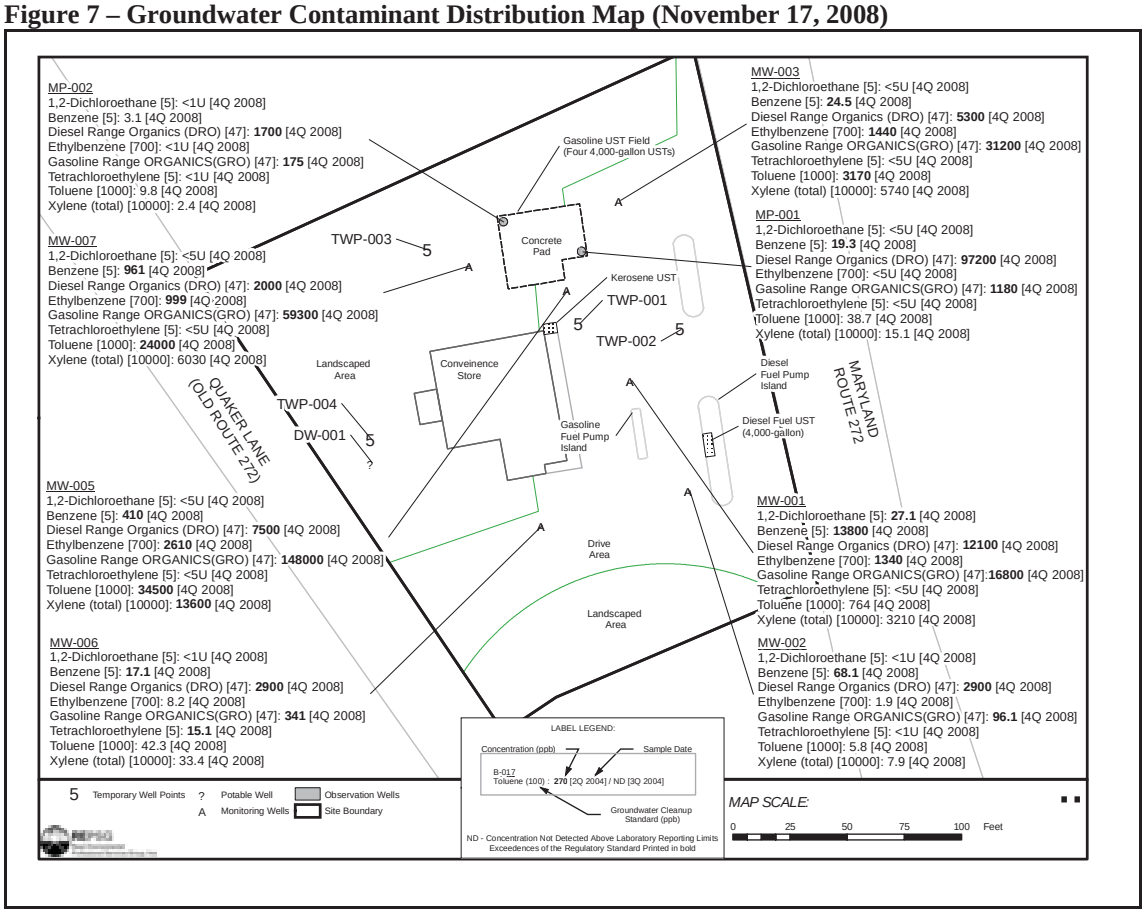


Figure 7 – Groundwater Contaminant Distribution Map (November 17, 2008)



5.3 Potable Well Investigation Methods and Results

The potable well water samples collected for laboratory analysis (DW-001 through DW-007) were collected pre-filtration and packaged directly into 40-milliliter HCL preserved VOA vials, as required by EPA Method 524.2. REPSG's standard operating procedure for potable well sampling is presented in **Attachment 3**. None of the locations sampled had a filtration system in place. The location of DW-001 at the Site is depicted on **Figure 5**, in **Section 4.2**. The residential potable well samples collected correspond to the addresses provided by the MDE in their July 9, 2008 NOV letter (see **Table 3** in **Section 4.3**).

All drinking water samples collected were analyzed for the full suite[9] of drinking water VOCs plus TBA and MTBE via EPA method 524.2. Samples were submitted, packed on ice and under chain of custody, to Analytical Laboratory services, Inc. of Middletown, PA.

As there are no specified potable well standards in Maryland, results of the potable well investigation laboratory analyses were compared against the applicable U.S Environmental Protection Agency (EPA) drinking water (DW) standards[10] as per REPSG verbal correspondence with the MDE[11].

Analysis results indicated the presence of the following compound concentrations above the applicable EPA DW standards: 1,1-dichloroethane in sample DW-004 (CE951470); and MTBE in samples DW-004 and DW-005 (CE951499). Well DW-004 is located 0.337 miles from the site in the southwest direction Well DW-005 is located 378 feet in the southwest direction from the site. The anticipated direction of groundwater flow is southwest. An additional well was tested (DW-003, CE950678) in the west southwest direction and was found to meet applicable EPA DW Standards.

Several compounds were detected at levels above the laboratory reporting detection limits (RDL), but below the applicable EPA DW standards. Analytical results for which the reported compound concentrations exceed the RDL are presented in **Attachment 2.**

All other analyzed constituents were not reported at concentrations above the laboratory detection limits[12]. All other laboratory detection limits were sufficiently below the standard to be considered valid regulatory data (see **Attachment 2**).

A complete table showing all tested parameters compared to the EPA DW standards is provided in **Attachment 2**. The analytical laboratory report is provided in **Attachment 5.**

In addition to the potable well sampling conducted by REPSG, the Department collected one (1) split drinking water sample at the residence located at 64 Quaker Lane and one (1) split drinking water sample from the commercial property located at 2825 Northeast Road on November 24, 2008. The results of these samples were not available to REPSG as of the time of this reporting.

[9] A complete list of all compounds analyzed for is included in the analytical lab reports provided in **Attachment 5**.
[10] EPA National Primary Drinking Water Standards (as published on the EPA website).
[11] Nancy Reilman, Safe Drinking Water Act expert; MDE Safe Drinking Water Act Implementation Division; 410-537-3702.
[12] With the exception of 1,1,2,2-tetrachloroethane and 1,2-dibromoethane in all potable well samples, which had elevated RDLs has a result of matrix interference.

6.0 SITE CONCEPTUAL ASSESSMENT & CONCLUSIONS

The source of on-Site contamination is most likely the historical releases of petroleum products from the gasoline UST field located in the north central portion of the Site.

A total of four (4) compounds (1,1,2-trichloroethane; 1,2-dibromoethane; 1,2-dichloroethane; and benzene) were identified in Site soils with concentrations above the applicable MDE VCP soil standards. Sample B-008 (12 fbg), situated south of the gasoline UST field, demonstrated the presence of all four of these compounds, and had the highest concentrations of 1,1,2-trichloroethane, 1,2-dibromoethane, and 1,2-dichloroethane exhibited at the Site. The highest concentration of benzene was detected in sample B-005 (23.5 fbg), situated to the east of sample B-008.

No concentrations of TPH-DRO and TPH-GRO were detected above the applicable MDE VCP soil standards. However, concentrations above 10 parts per million (ppm) of TPH-DRO and TPH-GRO were detected in B-008, and concentrations of TPH-GRO above 10 ppm were detected in sample B-005. MEAT Guidance dictates that TPH-DRO or TPH-GRO soil contamination at a Site below 230 ppm does not pose a risk or a threat of adverse effects if left in place; however TPH-DRO or TPH-DRO contaminant levels greater then 10 ppm, if removed from the Site, are considered “oil-contaminated” soil. Recommendations for the treatment of these soils in the event of future removal are discussed in **Section 7.0**.

The identified COCs in soil at the Site are: 1,1,2-trichloroethane; 1,2-dibromoethane; 1,2-dichloroethane; and benzene. The extent of these COCs at the Site has been delineated horizontally within the Site boundary to the north by sample B-003, to the south by samples B-006 and B-012, and to the east by B-009. Horizontal delineation within the Site boundary to the west has been established for 1,1,2-trichloroethane and 1,2-dibromoethane by sample B-011. However, horizontal delineation within the Site boundary to the west has not yet been established for 1,2-dichloroethane and benzene. Recommendations for the further horizontal delineation of Site soil contamination is discussed in **Section 7.0**. Vertical delineation of 1,1,2-trichloroethane in soils at the Site has occurred down to the six-inch interval above the soil-groundwater interface in sample B-005 (23.5 fbg). REPSG concludes that the absence of this compound in Site groundwater demonstrates a lack of migration of this compound from soil to groundwater. Vertical delineation of 1,2-dibromoethane, 1,2-dichloroethane, and benzene down to the soil-groundwater interface has not yet been achieved. The presence of these three compounds in Site groundwater confirms their migration from soil into groundwater at the Site. More information about migration of COCs at the Site is discussed in **Section 6.4**.

The identified COCs in groundwater at the Site are: TPH-DRO, TPH-GRO, benzene, toluene, ethylbenzene, MTBE, PCE, acetone, total xylenes, 1,2-dichloroethane, 1,2-dibromoethane, and MEK. Monitoring well MW-005, situated at the southeast corner of the gasoline UST field has been identified as the source well at the Site. MW-005 has demonstrated the greatest concentration of TPH-GRO, ethylbenzene, and total xylenes at the Site, while the greatest concentration of TPH-DRO at the Site was found in MP-001. Located just to south of MW-001, and installed in the location of soil boring B-008, TWP-001 exhibited the greatest concentrations of 1,2-dibromoethane, 1,2-dichloroethane and MEK at the Site. Located to the east of TWP-001, and installed in the location of soil boring B-008, TWP-002 exhibited the greatest concentrations of acetone, benzene, MTBE, and toluene at the Site. The southernmost well, MW-006, exhibited the greatest concentrations of PCE at the Site.

The direction of groundwater flow at the Site is assumed to be southwest[13]. Two of the off-Site potable wells (1,1-dichloroethane in sample DW-004; and MTBE in samples DW-004 and DW-005), located to the southwest have compounds in excess of EPA DW standards. Recommendations for the further horizontal delineation of Site groundwater contamination is discussed in **Section 7.0**. More information about migration of COCs at the Site is discussed in **Section 6.4**.

6.1 Specific Sensitive Receptors

As discussed in **Section 1.2**, a well search conducted for a half mile vicinity surrounding the Site was completed by REPSG in conjunction with the MDE. This well search indicated that within a one-half mile radius of the Site there are: 38 drinking water wells (used for either public or home use); three (3) industrial, commercial state, or federal use wells; and one (1) farm use well (for livestock watering and agricultural irrigation). Three (3) of the 28 drinking water wells and one (1) of the industrial wells are located within 500 feet of the Site. Two (2) of the drinking water wells and one (1) of the industrial wells are located within 1,000 feet of the Site. All other wells are located between 1,000 feet and a half mile radius of the Site. Documentation of available total well depth, screen depths, and additional pertinent information for these wells is included in **Attachment 2** of this SAR. A figure depicting the locations of these wells in relation to the Site is included in **Attachment 1**.

Due to their proximity to the Site, these wells present potential sensitive receptor pathways to Site groundwater contamination.

[13] Groundwater Flow direction is assumed to be southwest as reported in prior investigations completed by Geomatrix, Inc.

6.2 Liquid Phase Hydrocarbons

No liquid phase product (LPH) was detected in any of the monitoring wells, measuring points, temporary well points, or potable well samples analyzed for this SAR.

6.3 Current and Future Use of Impacted Groundwater

On-Site and off-Site groundwater within a half mile radius is used for public consumption via potable wells. As shown in the potable well results section of this SAR (**Section 5.3**), petroleum impacts to the groundwater at the Site are not currently present at the on-Site potable well (DW-001), but have been measured at two (2) off-Site locations (as demonstrated by samples DW-004 and DW-005).

6.4 Migration of Contamination

6.4.1 Contaminant Fate

The contaminant fate characteristics of each COC in soil and groundwater are as follows:

- 1,1,2-Trichloroethane is a colorless, sweet-smelling liquid, used as a solvent that does not burn easily, can be dissolved in water, and evaporates easily.
- Benzene is a colorless, aromatic, highly flammable liquid widely used in the United States in the production of other chemicals and materials and is a natural component of gasoline and crude oil. It can move from water and soil into air, however, due to reactions with other airborne chemicals, it breaks down within a few days. Benzene has low-moderate solubility in water, and high to very high mobility in soil.
- Toluene is a clear, colorless, aromatic liquid often produced during the process of making gasoline and other fuels from crude oil. It has low solubility in water, and high to very high mobility in soil.
- Ethylbenzene is a colorless, flammable liquid, with an odor similar to gasoline, found in petroleum and coal tar. It has low solubility in water and moderate mobility in soil.
- MTBE is a flammable liquid with a distinctive odor; it is often used as an additive in unleaded gasoline. It evaporates quickly from surface water, and so is commonly found as a vapor in the air.
- PCE is a sweet-smelling, non-flammable manufactured liquid used for dry cleaning and metal degreasing that evaporates quickly from water into the air.

- Acetone is a naturally occurring flammable, colorless liquid with a distinct smell and taste, which evaporates easily. It has high solubility in water, and also moves quickly from soil and water into the air.
- Xylenes are a colorless, sweet-smelling and flammable liquid, which are commonly used in paint, paint thinners, and in gasoline. They quickly evaporate from soil and surface water into the air, and will dissolve in water through soil, and enter into groundwater.
- 1,2-Dichloroethane is a manufactured, clear sweet-smelling and pleasant tasting liquid used in the production of vinyl chloride and as a leaded gasoline additive. 1,2-Dichloroethane breaks down slowly in water, and easily evaporates into the air.
- 1,2-Dibromoethane is a naturally occurring and colorless liquid with a mild and sweet odor often used in pesticides and as a leaded gasoline additive. 1,2-Dibromoethane easily evaporates from surface water and soil into the air, and will dissolve in water through soil, and enter into groundwater.
- MEK is a naturally occurring and manufactured colorless liquid with a sharp, sweet odor used in glues and as a cleaning agent. MEK does not adhere to soil or water, and evaporates somewhat easily into the air, where it is broken down quickly by sunlight.[14]

6.4.2 Migration of Contaminants in Soil to Groundwater

The COCs characteristically have high potential to migrate in soil or leach from soil into groundwater. Site-specific clayey silts soils are only moderately favorable for migration. However, the presence of the four soil COCs in multiple monitoring wells at the Site, verifies that migration of contaminants from soil to groundwater has occurred. Due to the localized nature of 1,1,2-Trichloroethane in soils (at B-008), and the absence of 1,1,2-Trichloroethane in groundwater, migration of this compound from soil to groundwater is not likely. Additionally, several COCs identified in Site groundwater (toluene, ethylbenzene, MTBE, PCE, acetone, total xylenes, and MEK) were not identified in Site soils. Toluene, ethylbenzene, MTBE, total xylenes and MEK are commonly associated with gasoline. PCE and acetone are not common gasoline constituents and do not appear to have migrated into groundwater from on-Site conditions.

[14] Information on contaminant fate provided by the Agency for Toxic Substances and Disease Registry Division of Toxicology and Environmental Medicine's website: http://www.atsdr.cdc.gov/

6.4.3 Migration of Contaminants in Groundwater

Exceedences of the MDE VCP groundwater standards were detected in: all six active monitoring wells; both measuring points; and all four temporary well points that were installed. REPSG's on-site groundwater and potable well characterization data, in combination with AECs recent groundwater characterization data, indicate that COC concentration levels are at steady-state. Recommendations for dealing with current and potential future impacts to Site groundwater are provided in **Section 7.0**.

6.5 Human Exposure

The Site is completely developed and is currently comprised of a convenience store and retail gasoline service station. Current land use is commercial and the Site is currently completely capped with either pavement or landscaping; there are no proposed changes to land use. The Site Assessment has determined that with the cap in place, the exposure routes from Site soils to potential receptors are incomplete. Human receptors to on-Site soil contamination will occur only if construction or utility work is performed on-Site. A Site-Specific Health and Safety Plan and best management practices should be implemented during activities conducted in these areas to prevent exposure to Site contaminants by dermal sorption, ingestion or inhalation.

The direction of groundwater flow at the Site is assumed to be southwest. The source area of the groundwater impacts at the Site appears to be the gasoline UST field located in the north central portion of the Site. No on-Site sources of acetone or PCE in groundwater were identified. As discussed in **Section 6.0**, the presence of two compounds in excess of the applicable EPA DW standards at two of the off-Site potable wells (1,1-dichloroethane in sample DW-004; and MTBE in samples DW-004 and DW-005) demonstrates petroleum impacts to groundwater extending approximately 1,695 feet southwest of the Site. Additional information regarding these wells is presented in **Section 1.2** of this report.

Depth to groundwater at the Site is approximately 10.75 to 19.82 fbg. Human receptors to on-Site groundwater contamination will occur if construction or utility work is performed on-Site at depths greater than 10.75 fbg. A Site-Specific Health and Safety Plan and best management practices should be implemented during activities conducted in these areas to prevent exposure to Site contaminants by dermal sorption, ingestion or inhalation. Additionally, an on-Site receptor to groundwater (DW-001) is present. During the course of this investigation, results from the on-Site potable well did not report any concentrations above the applicable EPA DW standards, however previously conducted investigations have shown impacts to this well. The nearest current groundwater impact at the Site to this receptor is located at temporary well point TWP-004, located 10 feet to the north. There are also several off-Site receptors to Site groundwater (as discussed in the previous paragraph). Currently, samples DW-004 and DW-005 only, are demonstrating concentrations in excess of EPA DW standards. Recommendations for dealing with current and potential future impacts to these receptors are provided in **Section 7.0**.

6.6 Environmental Ecological Exposure

No wetlands or surface water bodies are present on-Site. No wetlands or surface water bodies are located within the maximum contaminant plume extent.

6.7 Impact to Utilities and Other Buried Services

The majority of the electrical services to the service station at the Site are situated aboveground, with the exception of one electrical line that runs from the building and up a service pole at the rear of the structure. One call was contacted for additional utility information, and it was determined that telephone lines for the Site are situated aboveground. A private septic tank system is located off the southwest side of the convenience store structure at the Site for sewage disposal. No identification of water lines at the Site was able to be determined. Piping associated with the USTs at the Site was situated underground towards the front of the store.

6.8 Other Sensitive Receptors

No sensitive receptors such as surface water, historic structures, or subways are located within the vicinity of the area. The nearest body of surface water is located 1,695 feet southwest of the Site.

7.0 RECOMMENDATIONS

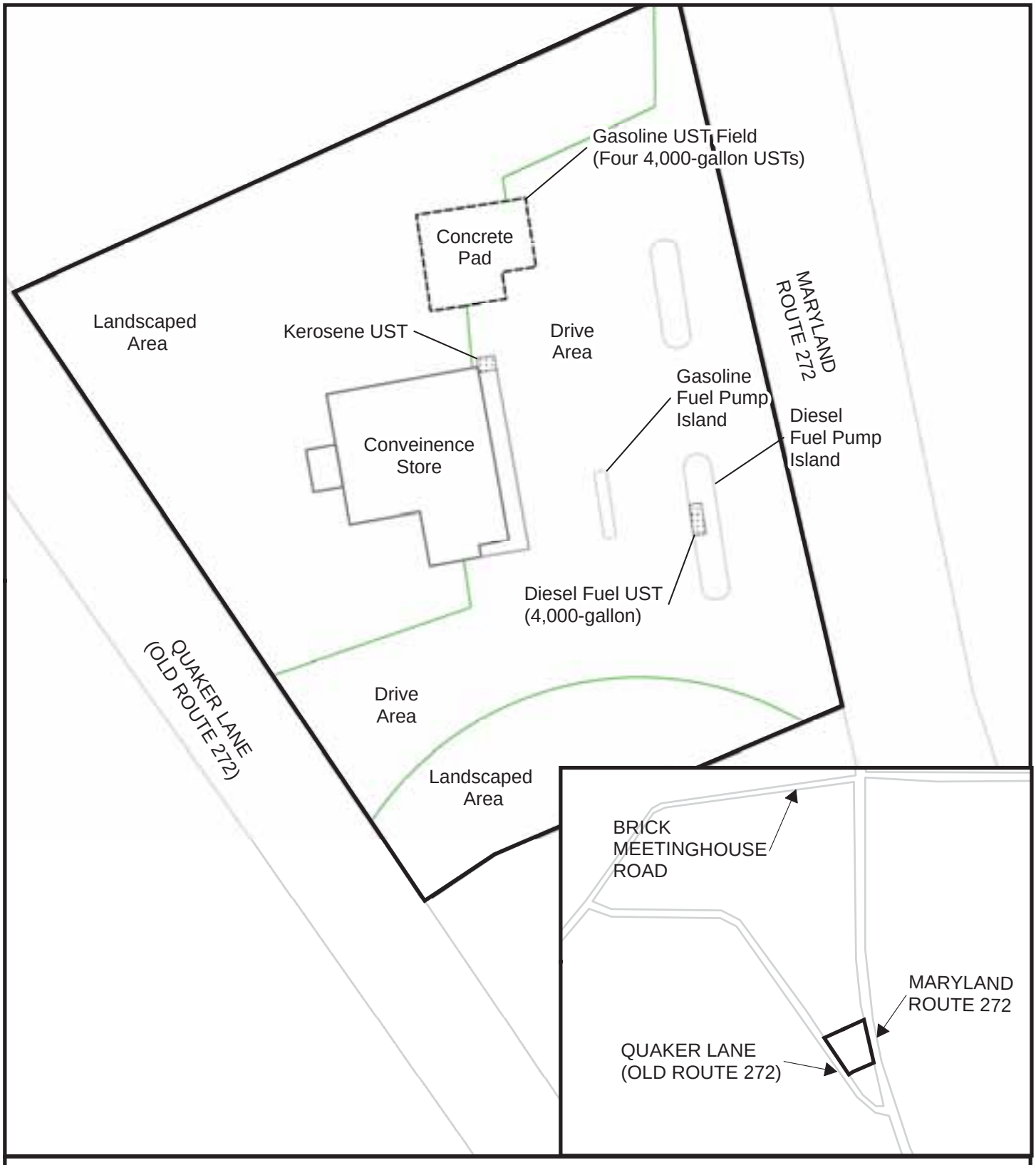
According to the MEAT guidance, the "MDE has determined that soil contamination at a release site with Total Petroleum Hydrocarbons (TPH) levels below 230 parts per million (ppm), as determine by EPA method 8015B DRO/GRO, does not pose a risk or a threat of adverse effects if left in place." The MEAT guidance further dictates that any soil with TPH-DRO or TPH-DRO contaminant levels greater then 10 ppm, if removed from the Site, is to be considered "oil-contaminated" soil. As none of the soil samples analyzed exhibited concentrations of TPH-DRO or TPH-GRO above 230 ppm, REPSG concludes that TPH-DRO and TPH-GRO are not compounds of concern (COCs) in soils at the Site as long as they remain in place. However, because levels of TPH-DRO and TPH-GRO above 10 ppm are present in soils at the Site, should future Site activities require the removal and disposal of these soils, REPSG recommends that the disposal be oversaw by the MDE, and that all removed soils be disposed of by an MDE approved disposal facility.

As horizontal delineation to the west has not yet been established for 1,2-dichloroethane and benzene, REPSG recommends that an additional subsurface soil investigation be conducted. This investigation should encompass soils further west of current sample B-011, and should include a minimum analysis of 1,1,2-trichloroethane; 1,2-dibromoethane; 1,2-dichloroethane; and benzene.

According to the MEAT Guidance document, appropriate remediation options for petroleum impacts to groundwater including monitored natural attenuation (MNA) and/or a pump and treat system. REPSG recommends installing an additional downgradient well at the Site in order to fully delineate the plume, following with a comprehensive groundwater monitoring program which should be conducted in accordance with MDE regulations. This monitoring program should include, at a minimum, quarterly groundwater gauging and sampling events. Analysis parameters should include TPH-DRO, TPH-GRO, benzene, toluene, ethylbenzene, MTBE, total xylenes, 1,2-dichloroethane, 1,2-dibromoethane, and MEK. REPSG further recommends that a Site survey of the groundwater monitoring wells be conducted in order to confirm groundwater directional flow. REPSG requests removal of PCE, and acetone from the sampling protocol.

The MEAT Guidance document further indicates that any avenues of human exposure to contaminated groundwater through the previously discussed impacted potable wells, be treated with wither a well water filtration system. REPSG recommends that an MDE approved water filtration system be installed on the two potable wells located exhibiting petroleum impacts (DW-004 and DW-005) if they do not already have such a system in place. REPSG has initiated contact with the owners of the two off-Site potable wells exhibiting petroleum impacts in order to determine if any filtration systems are currently in place at the residences. No information regarding any filtration systems at the residences has been provided to REPSG as of the time of this reporting. In the event that filtration systems are not currently in place at the residences, it is REPSG's recommendation that the owners of these two residences be provided with bottled water until such time as filtration systems can be installed. Upon installation of these filtration systems, REPSG recommends that a post-filtration sample be collected from both residences, and analyzed for the full suite drinking water VOCs in order to determine if any additional upgrades to the filtration system are needed. REPSG further recommends that the on-Site potable well (DW-001) and that the two off-Site potables exhibiting petroleum impacts (DW-004 and DW-005) be placed on a regular monitoring schedule in accordance with MDE regulations. This monitoring program should include, at a minimum, quarterly groundwater gauging and sampling events. Analysis parameters should include TPH-DRO, TPH-GRO, benzene, toluene, ethylbenzene, MTBE,, total xylenes, 1,2-dichloroethane, 1,2-dibromoethane, and MEK.

ATTACHMENT 1: FIGURES



Site Diagram

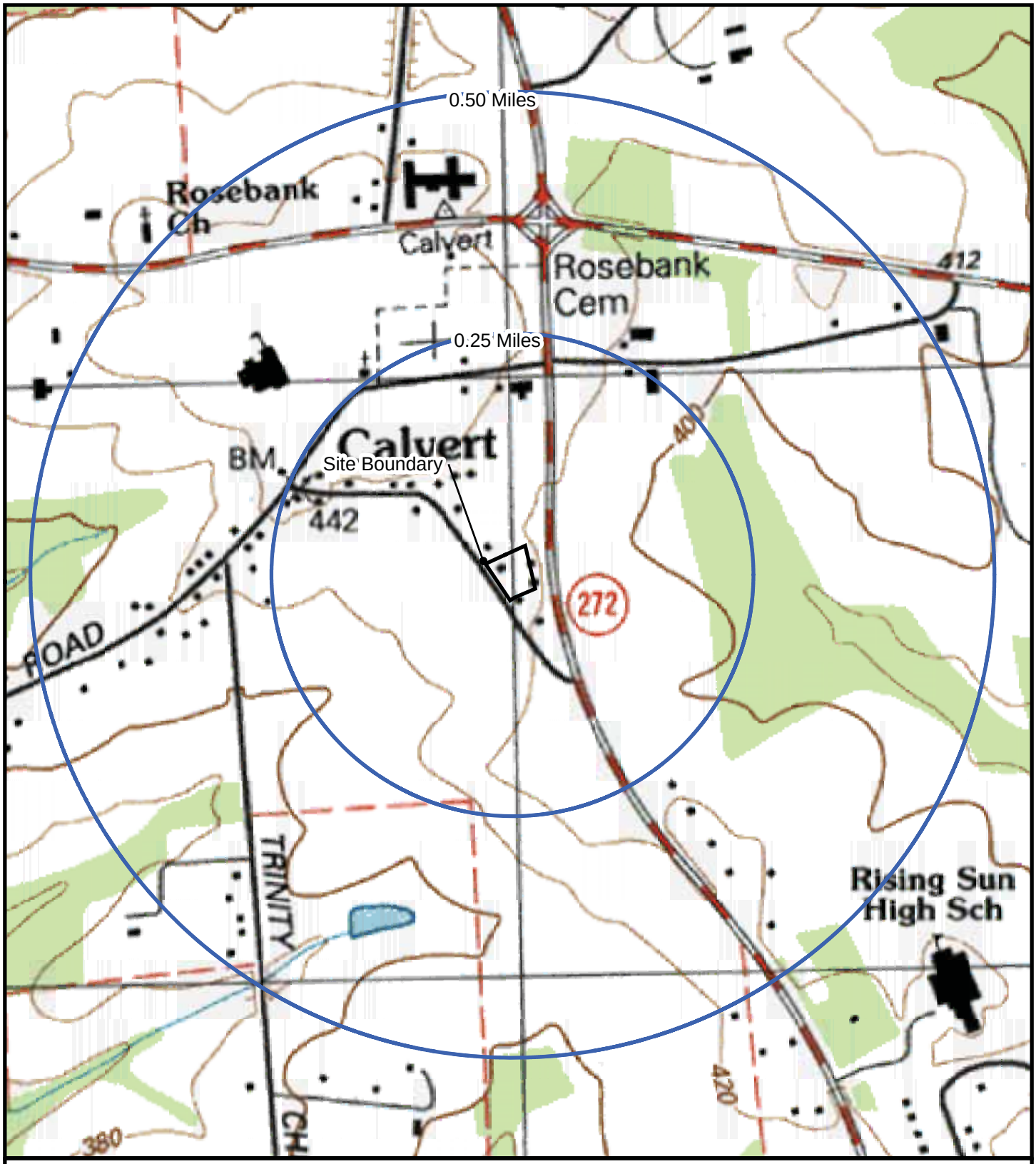
Site Boundary

REPSG
React Environmental
Professional Services Group, Inc.

MAP SCALE: 1 inch = 45 feet
0 10 20 40 60 80 Feet

PROJECT NAME: ***CALVERT CITGO***
PROJECT ADDRESS: ***2815 NORTH EAST ROAD, NORTH EAST, MD***
PROJECT NUMBER: ***005977***
DATE: ***DECEMBER 2008***

N
S



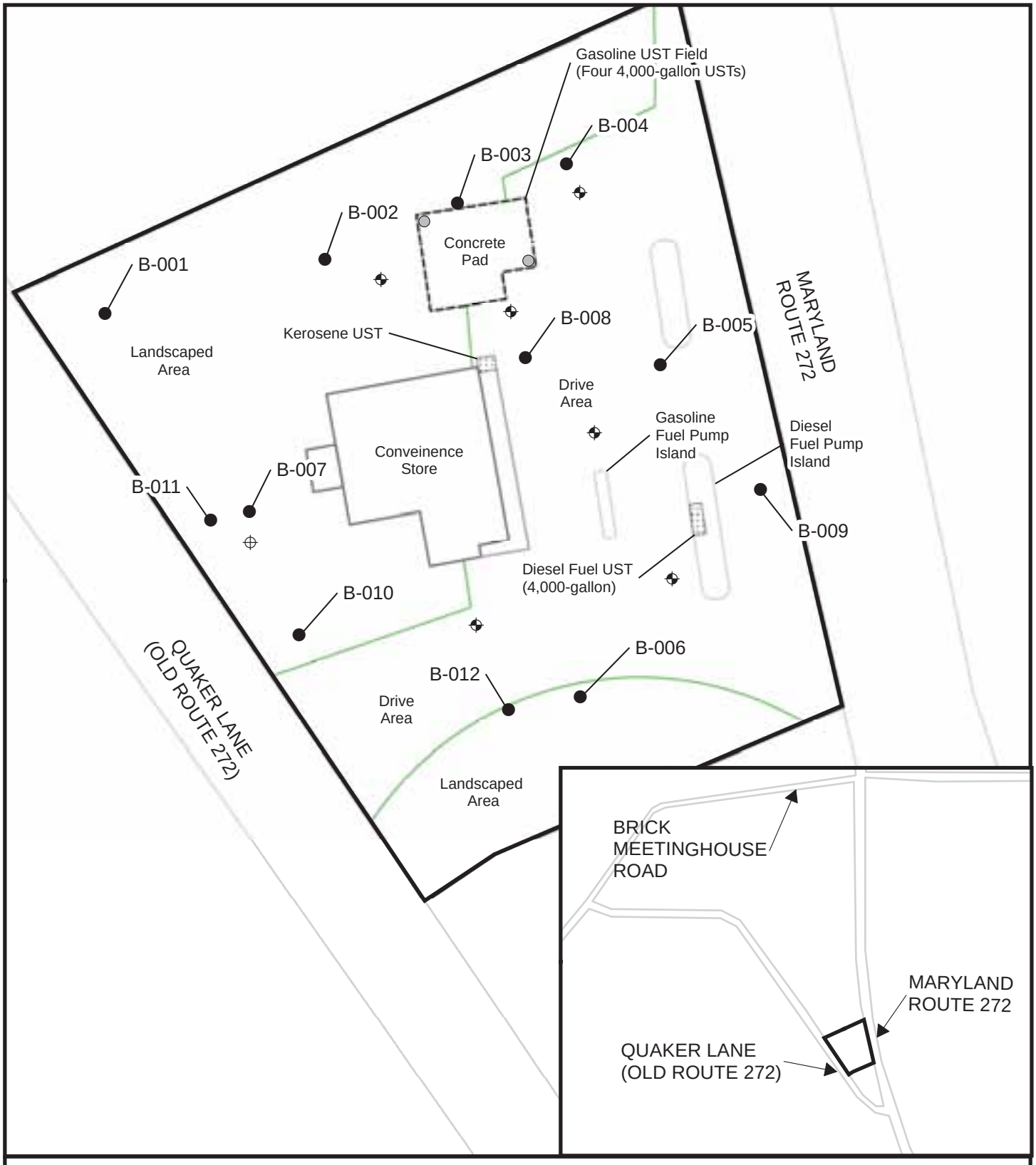
Site Location

REPSG
React Environmental Professional Services Group, Inc.

MAP SCALE: 1 inch = 750 feet
0 165 330 660 990 1,320 Feet

PROJECT NAME: ***CALVERT CITGO***
PROJECT ADDRESS: ***2815 NORTH EAST ROAD, NORTH EAST, MD***
PROJECT NUMBER: ***005977***
DATE: ***DECEMBER 2008***

N
S



Soil Sample Locations

- Soil Boring Locations
- Potable Well
- Monitoring Wells
- Observation Wells
- Site Boundary

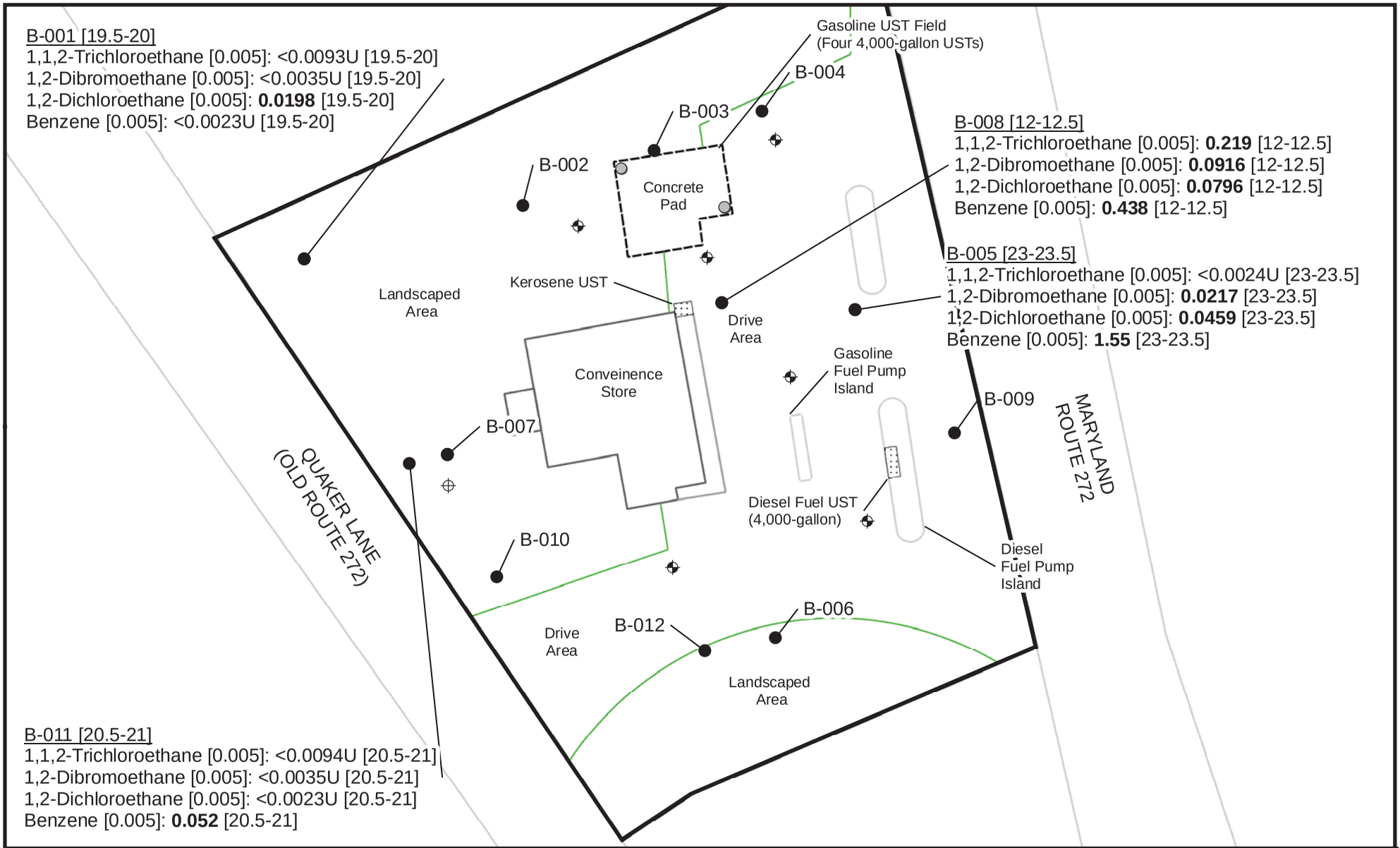
REPSG
React Environmental
Professional Services Group, Inc.

MAP SCALE: 1 inch = 45 feet

0 10 20 40 60 80 Feet

PROJECT NAME: ***CALVERT CITGO***
PROJECT ADDRESS: ***2815 NORTH EAST ROAD, NORTH EAST, MD***
PROJECT NUMBER: ***005977***
DATE: ***DECEMBER 2008***

N
S



SOIL CONTAMINANT DISTRIBUTION MAP

Soil Boring Locations | Monitoring Wells | Site Boundary
Potable Well | Observation Wells

LABEL LEGEND:
Concentration (mg/kg) — Sample Depth (fbg)
B-017
Benzo(a)pyrene (2.5) **2.7** [2] / ND [6] / ND [16]
Soil Cleanup Standard (mg/kg)

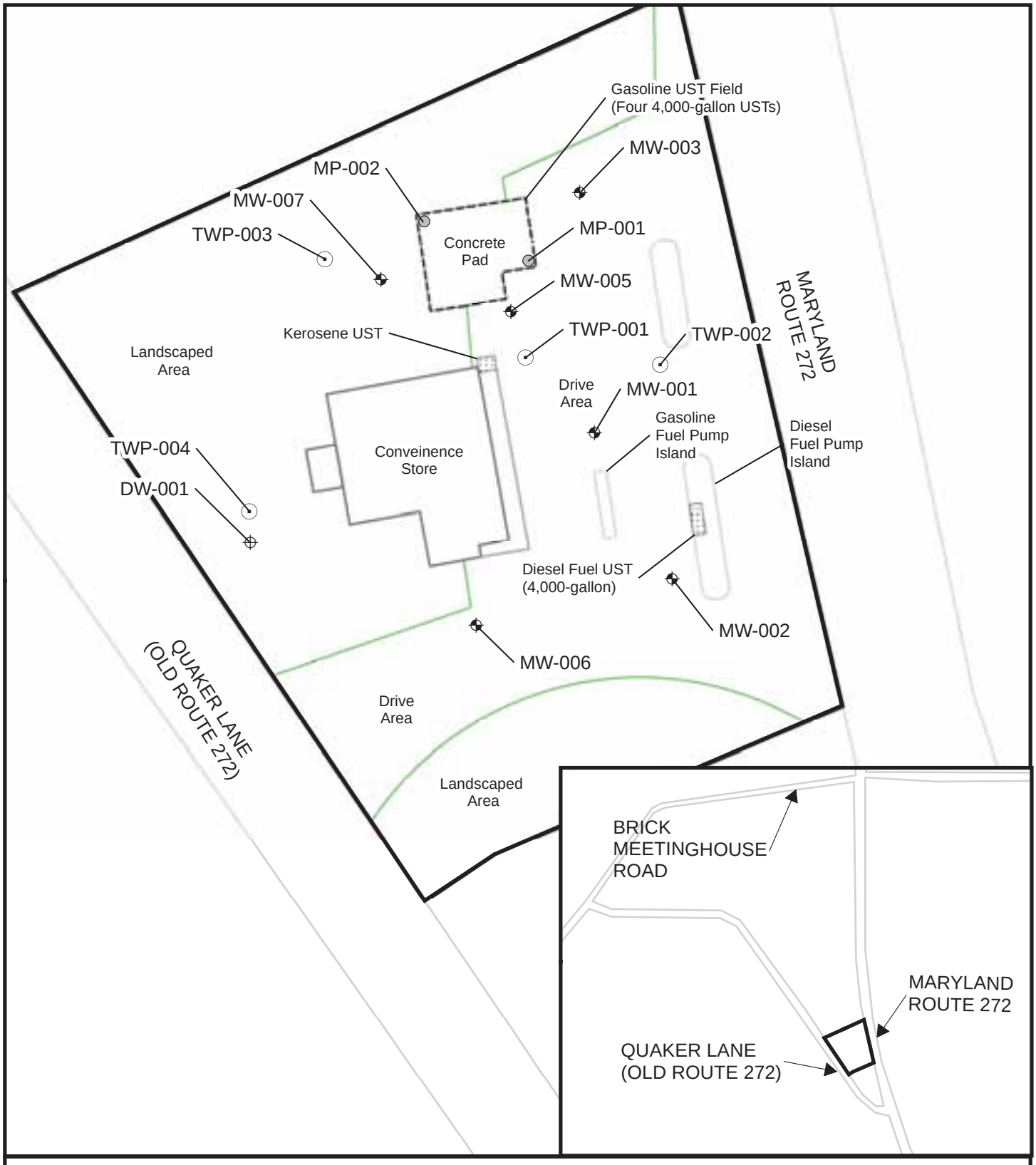
ND - Concentration Not Detected Above Laboratory Reporting Limits
Exceedences of the Regulatory Standard Printed in bold

N
S

REPSG
React Environmental Professional Services Group, Inc.

MAP SCALE: 1 inch = 45 feet
0 10 20 40 60 80 Feet

PROJECT NAME: ***CALVERT CITGO***
PROJECT ADDRESS: ***2815 NORTH EAST ROAD, NORTH EAST, MD***
PROJECT NUMBER: ***005977***
DATE: ***DECEMBER 2008***



Groundwater Sample Locations

Temporary Well Points | Potable Well | Observation Wells

Monitoring Wells | Site Boundary

REPSG
React Environmental
Professional Services Group, Inc.

MAP SCALE: 1 inch = 45 feet

0 10 20 40 60 80 Feet

PROJECT NAME: ***CALVERT CITGO***

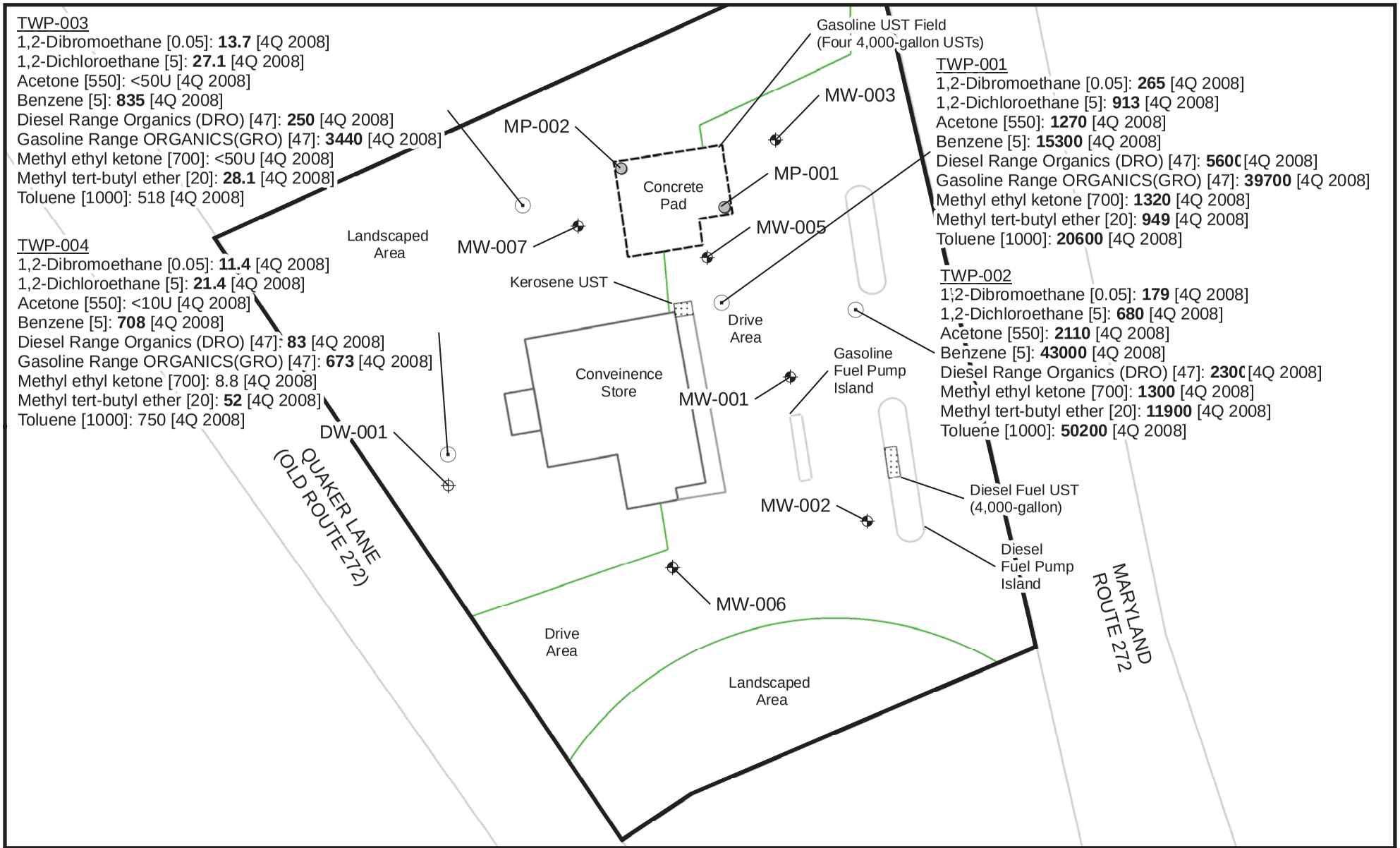
PROJECT ADDRESS: ***2815 NORTH EAST ROAD, NORTH EAST, MD***

PROJECT NUMBER: ***005977***

DATE: ***DECEMBER 2008***

N

S



GROUNDWATER CONTAMINANT DISTRIBUTION MAP (November 5, 2008)

REPSG
React Environmental Professional Services Group, Inc.

MAP SCALE: 1 inch = 45 feet

0 10 20 40 60 80 Feet

PROJECT NAME:	***CALVERT CITGO***
PROJECT ADDRESS:	***2815 NORTH EAST ROAD, NORTH EAST, MD***
PROJECT NUMBER:	***005977***
DATE:	***DECEMBER 2008***

LABEL LEGEND:

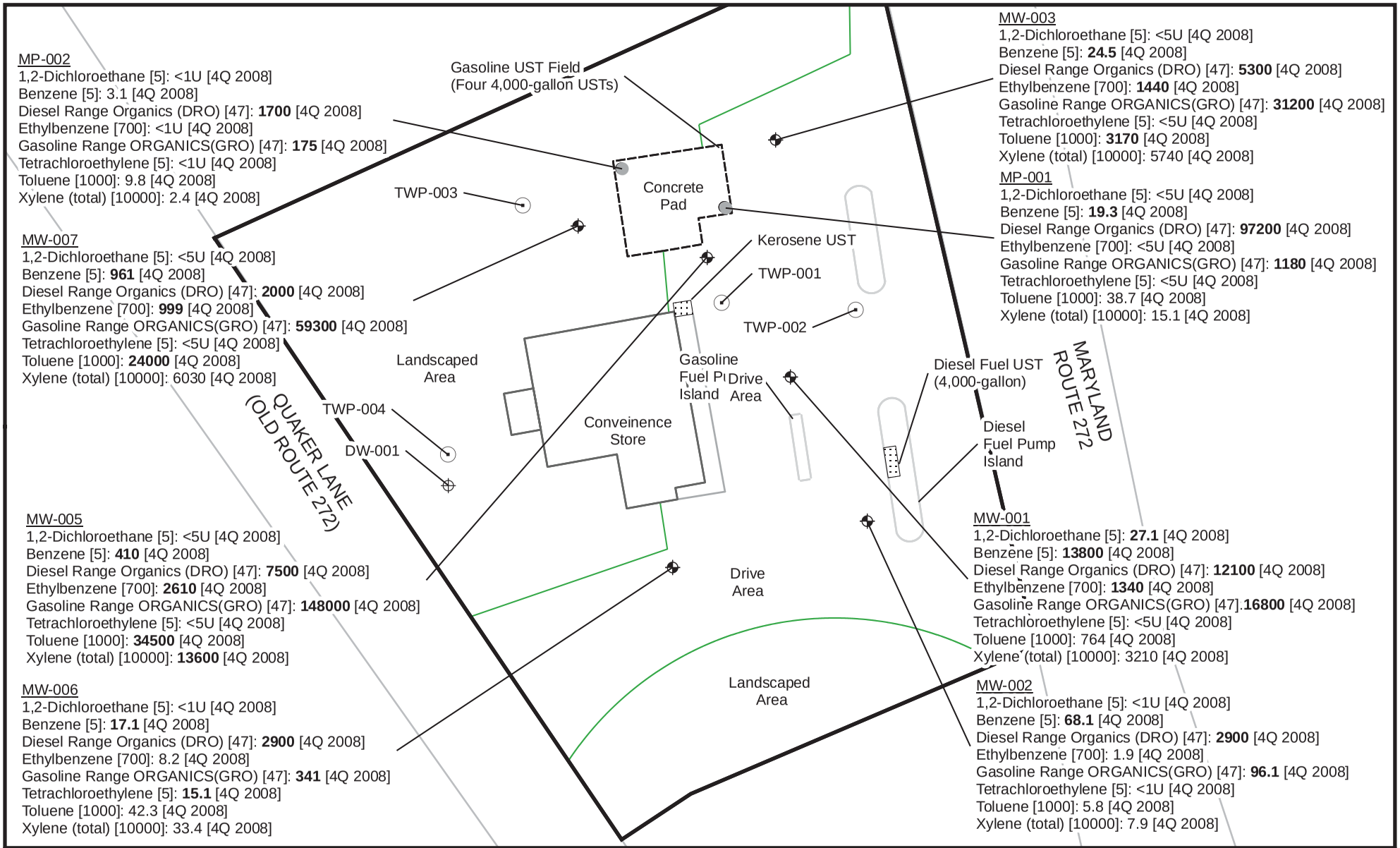
Concentration (ppb) — Sample Date

B-017
Toluene (100) : **270** [2Q 2004] / ND [3Q 2004]

Groundwater Cleanup Standard (ppb)

ND - Concentration Not Detected Above Laboratory Reporting Limits
Exceedences of the Regulatory Standard Printed in bold

N
S



GROUNDWATER CONTAMINANT DISTRIBUTION MAP (November 17, 2008)

REPSG
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Professional Services Group, Inc.

MAP SCALE: 1 inch = 45 feet

0 10 20 40 60 80 Feet

PROJECT NAME:	***CALVERT CITGO***
PROJECT ADDRESS:	***2815 NORTH EAST ROAD, NORTH EAST, MD***
PROJECT NUMBER:	***005977***
DATE:	***DECEMBER 2008***

LABEL LEGEND:

Concentration (ppb) — Sample Date

B-017
Toluene (100) : **270** [2Q 2004] / ND [3Q 2004]

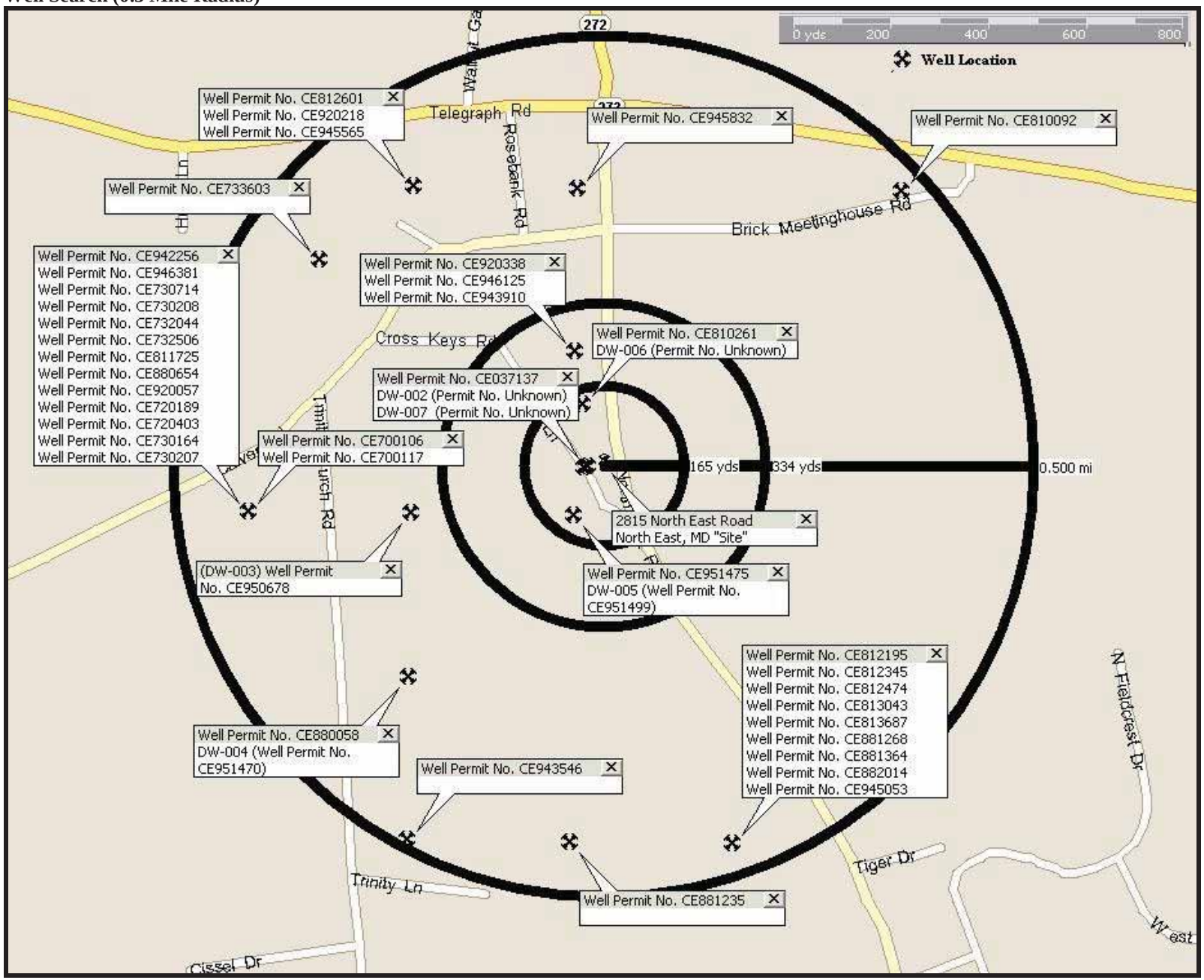
Groundwater Cleanup Standard (ppb)

ND - Concentration Not Detected Above Laboratory Reporting Limits
Exceedences of the Regulatory Standard Printed in bold

N

S

Well Search (0.5 Mile Radius)



ATTACHMENT 2: TABLES

REPSG
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Analytical Chemistry Report — Matrix: Soil

Calvert Citgo 2815 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 11/05/2008

Regulatory Standard*:

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Soil, Protection of Groundwater, Tables 1 & 2.

Constituent	Unit	*Standard	Location:	B-002	B-004	B-005	B-007	B-008	B-009
			Date:	11/05/2008	11/05/2008	11/05/2008	11/05/2008	11/05/2008	11/05/2008
			Depth (ft):	24-24.5	16-16.5	23-23.5	24-24.5	12-12.5	24-24.5
Not Otherwise Specified									
DBCP	mg/kg	0.005		<0.001U	<0.001U	<0.001U	<0.001U	<0.158U#	<0.001U
TERT-AMYL METHYL ETHER	mg/kg	**		<0.0004U	<0.0005U	<0.0005U	<0.0005U	-	<0.0004U
Petroleum Screening Parameters									
Diesel Range Organics (DRO)	mg/kg	**		<0.46U	<0.5U	<0.51U	<0.51U	58.6	<0.46U
Gasoline Range ORGANICS(GRO)	mg/kg	**		<3.07U	<3.4U	30.9	<3.62U	145	<3.36U
Volatile Organic Compounds (VOCs)									
1,1,1-trichloroethane	mg/kg	60		<0.0004U	<0.0005U	<0.0005U	<0.0005U	<0.0131U	<0.0004U
1,1,2,2-Tetrachloroethane	mg/kg	0.005		<0.0005U	<0.0006U	<0.0006U	<0.0006U	<0.0131U#	<0.0006U
1,1,2-Trichloroethane	mg/kg	0.005		<0.0009U	<0.0009U	<0.001U	<0.001U	0.219	<0.0009U
1,1-Dichloroethane	mg/kg	4.5		<0.0003U	<0.0003U	<0.0004U	<0.0004U	<0.0066U	<0.0003U
1,1-Dichloroethylene	mg/kg	0.005		<0.0005U	<0.0006U	<0.0006U	<0.0006U	<0.0131U#	<0.0006U
1,2-Dibromoethane	mg/kg	0.005		<0.0003U	<0.0003U	0.0217	<0.0004U	0.0916	<0.0003U
1,2-Dichloroethane	mg/kg	0.005		<0.0003U	<0.0003U	0.0459	<0.0004U	0.0796	<0.0003U
1,2-Dichloropropane	mg/kg	0.005		<0.0003U	<0.0003U	<0.0004U	<0.0004U	<0.0131U#	<0.0003U
2-Hexanone	mg/kg	**		<0.0009U	<0.0009U	0.0497	<0.001U	<0.046U	<0.0009U
Acetone	mg/kg	2.5		<0.009U	<0.009U	0.316	<0.01U	1.38	<0.009U
Benzene	mg/kg	0.005		<0.0004U	<0.0005U	1.55	0.0025	0.438	<0.0004U
Bromodichloromethane	mg/kg	**		<0.0003U	<0.0003U	<0.0004U	<0.0004U	<0.0131U	<0.0003U
Bromoform	mg/kg	0.067		<0.001U	<0.001U	<0.001U	<0.001U	<0.0131U	<0.001U

Print Date: 12/09/2008

** No Applicable Regulatory Standard

Exceedences of the regulatory standard are printed in bold. # = Reporting limit exceeds regulatory standard. NOC = Not of Concern.

QUALIFIERS: U = Constituent not detected above Method Detection Limit (MDL). J = Estimated Value. < = Indicates that the reported concentration is the Method Detection Limit (MDL). D = Compound identified at a secondary dilution factor. B = Analyte reported in associated field or trip blank. N = Tentatively Identified Compound (TIC). Y = Tentatively Identified Compound (TIC) also identified in Method Blank. E = Reported result is over instrument calibration range. This result is an estimate; the true result may be higher. C = Calibration verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.

REPSG
React Environmental
Professional Services Group, Inc.

Analytical Chemistry Report — Matrix: Soil

Calvert Citgo 2815 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 11/05/2008

Regulatory Standard*:

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Soil, Protection of Groundwater, Tables 1 & 2.

Constituent	Unit	*Standard	Location:	B-002	B-004	B-005	B-007	B-008	B-009
			Date:	11/05/2008	11/05/2008	11/05/2008	11/05/2008	11/05/2008	11/05/2008
			Depth (ft):	24-24.5	16-16.5	23-23.5	24-24.5	12-12.5	24-24.5
Carbon disulfide	mg/kg	190		<0.0003U	<0.0003U	<0.0004U	<0.0004U	<0.0066U	<0.0003U
Carbon tetrachloride	mg/kg	0.005		<0.0005U	<0.0006U	<0.0006U	<0.0006U	<0.0131U#	<0.0006U
Chlorobenzene	mg/kg	0.8		<0.0004U	<0.0005U	<0.0005U	<0.0005U	<0.0131U	<0.0004U
Chlorobromomethane	mg/kg	**		<0.0005U	<0.0006U	<0.0006U	<0.0006U	<0.0131U	<0.0006U
Chloroethane	mg/kg	0.019		<0.0005U	<0.0006U	<0.0006U	<0.0006U	<0.0197U#	<0.0006U
Chloroform	mg/kg	0.005		<0.0003U	<0.0003U	<0.0004U	<0.0004U	<0.0131U#	<0.0003U
cis-1,2-Dichloroethylene	mg/kg	0.35		<0.0005U	<0.0006U	<0.0006U	<0.0006U	<0.0131U	<0.0006U
cis-1,3-Dichloropropene	mg/kg	0.005		<0.0004U	<0.0005U	<0.0005U	<0.0005U	<0.0131U#	<0.0004U
Dibromochloromethane	mg/kg	0.005		<0.0005U	<0.0006U	<0.0006U	<0.0006U	<0.0131U#	<0.0006U
Ethyl tert-butyl ether	mg/kg	**		<0.0003U	<0.0003U	<0.0004U	<0.0004U	-	<0.0003U
Ethylbenzene	mg/kg	15		<0.0003U	<0.0003U	0.178	<0.0004U	1.56	<0.0003U
Isopropyl Ether	mg/kg	**		<0.0002U	<0.0002U	0.0054	<0.0002U	-	<0.0002U
m/p-xylene	mg/kg	**		<0.001U	<0.001U	0.868	<0.001U	6	<0.001U
Methyl bromide	mg/kg	0.041		<0.0005U	<0.0006U	<0.0006U	<0.0006U	<0.0131U	<0.0006U
Methyl chloride	mg/kg	0.01		<0.0003U	<0.0003U	<0.0004U	<0.0004U	<0.0131U#	<0.0003U
Methyl ethyl ketone	mg/kg	7.9		<0.002U	<0.002U	0.259	<0.002U	0.939	<0.002U
Methyl isobutylketone (MIBK)	mg/kg	1.3		<0.001U	<0.001U	<0.001U	<0.001U	0.592	<0.001U
Methyl tert-butyl ether	mg/kg	280		<0.0003U	<0.0003U	0.0085	<0.0004U	-	0.004
Methylene chloride	mg/kg	190		0.0058	0.0074	0.0069	0.0071	<0.0066U	0.01
o-Xylene	mg/kg	**		<0.0003U	<0.0003U	0.397	<0.0004U	2.62	<0.0003U
Styrene	mg/kg	570		<0.0003U	<0.0003U	<0.0004U	<0.0004U	<0.0131U	<0.0003U

** No Applicable Regulatory Standard

Exceedences of the regulatory standard are printed in bold. # = Reporting limit exceeds regulatory standard. NOC = Not of Concern.

QUALIFIERS: U = Constituent not detected above Method Detection Limit (MDL). J = Estimated Value. < = Indicates that the reported concentration is the Method Detection Limit (MDL). D = Compound identified at a secondary dilution factor. B = Analyte reported in associated field or trip blank. N = Tentatively Identified Compound (TIC). Y = Tentatively Identified Compound (TIC) also identified in Method Blank. E = Reported result is over instrument calibration range. This result is an estimate; the true result may be higher. C = Calibration verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.

REPSG
React Environmental
Professional Services Group, Inc.

Analytical Chemistry Report — Matrix: Soil

Calvert Citgo 2815 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 11/05/2008

Regulatory Standard*:

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Soil, Protection of Groundwater, Tables 1 & 2.

Constituent	Unit	*Standard	Location:	B-002	B-004	B-005	B-007	B-008	B-009
			Date:	11/05/2008	11/05/2008	11/05/2008	11/05/2008	11/05/2008	11/05/2008
			Depth (ft):	24-24.5	16-16.5	23-23.5	24-24.5	12-12.5	24-24.5
Tert-Amyl alcohol	mg/kg	**		<0.005U	<0.006U	-	<0.006U	-	<0.006U
TERT-AMYL ETHYL ETHER	mg/kg	**		<0.001U	<0.001U	<0.001U	<0.001U	-	<0.001U
tert-Butylalcohol	mg/kg	**		<0.002U	<0.002U	<0.002U	<0.002U	-	<0.002U
Tetrachloroethylene	mg/kg	480		<0.0005U	<0.0006U	<0.0006U	<0.0006U	<0.0263U	<0.0006U
Toluene	mg/kg	8.8		<0.0003U	<0.0003U	3.52	<0.0004U	3.34	<0.0003U
trans-1,2-Di-chloroethylene	mg/kg	0.82		<0.0004U	<0.0005U	<0.0005U	<0.0005U	<0.0131U	<0.0004U
trans-1,3-Dichloropropene	mg/kg	0.005		<0.0006U	<0.0007U	<0.0007U	<0.0007U	<0.0131U#	<0.0007U
Trichloroethylene	mg/kg	0.015		<0.0005U	<0.0006U	<0.0006U	<0.0006U	<0.0131U	<0.0006U
Vinyl chloride	mg/kg	0.005		<0.0003U	<0.0003U	<0.0004U	<0.0004U	<0.0131U#	<0.0003U
Xylene (total)	mg/kg	170		<0.001U	<0.001U	1.26	<0.001U	8.62	<0.001U

** No Applicable Regulatory Standard

Exceedences of the regulatory standard are printed in bold. # = Reporting limit exceeds regulatory standard. NOC = Not of Concern.

QUALIFIERS: U = Constituent not detected above Method Detection Limit (MDL). J = Estimated Value. < = Indicates that the reported concentration is the Method Detection Limit (MDL). D = Compound identified at a secondary dilution factor. B = Analyte reported in associated field or trip blank. N = Tentatively Identified Compound (TIC). Y = Tentatively Identified Compound (TIC) also identified in Method Blank. E = Reported result is over instrument calibration range. This result is an estimate; the true result may be higher. C = Calibration verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.

REPSG
React Environmental
Professional Services Group, Inc.

Analytical Chemistry Report — Matrix: Soil

Calvert Citgo 2815 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 11/24/2008

Regulatory Standard*:

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Soil, Protection of Groundwater, Tables 1 & 2.

Constituent	Unit	*Standard	Location:	B-001	B-003	B-006	B-011	B-010	B-012
			Date:	11/24/2008	11/24/2008	11/24/2008	11/24/2008	11/24/2008	11/24/2008
			Depth (ft):	19.5-20	19.5-20	19.5-20	20.5-21	20.5-21	19.5-20
Not Otherwise Specified ----------									
DBCP	mg/kg	0.005		<0.0012U	<0.0011U	<0.0012U	<0.0012U	<0.0012U	<0.0014U
TERT-AMYL METHYL ETHER	mg/kg	**		<0.00046U	<0.00043U	<0.0005U	<0.00047U	<0.00049U	<0.00057U
Petroleum Screening Parameters ----------									
Diesel Range Organics (DRO)	mg/kg	**		<0.96U	<0.92U	<0.98U	<0.98U	<0.99U	<1.1U
Gasoline Range ORGANICS(GRO)	mg/kg	**		<3.28U	<3.08U	<3.68U	4.53	<3.63U	<4.36U
Volatile Organic Compounds (VOCs) ----------									
1,1,1-trichloroethane	mg/kg	60		<0.00046U	<0.00043U	<0.0005U	<0.00047U	<0.00049U	<0.00057U
1,1,2,2-Tetrachloroethane	mg/kg	0.005		<0.00058U	<0.00053U	<0.00062U	<0.00058U	<0.00062U	<0.00072U
1,1,2-Trichloroethane	mg/kg	0.005		<0.00093U	<0.00085U	<0.00099U	<0.00094U	<0.00099U	<0.0011U
1,1-Dichloroethane	mg/kg	4.5		<0.00035U	<0.00032U	<0.00037U	<0.00035U	<0.00037U	<0.00043U
1,1-Dichloroethylene	mg/kg	0.005		<0.00058U	<0.00053U	<0.00062U	<0.00058U	<0.00062U	<0.00072U
1,2-Dibromoethane	mg/kg	0.005		<0.00035U	<0.00032U	<0.00037U	<0.00035U	<0.00037U	<0.00043U
1,2-Dichloroethane	mg/kg	0.005		0.0198	<0.00032U	<0.00037U	<0.00035U	<0.00037U	<0.00043U
1,2-Dichloropropane	mg/kg	0.005		<0.00035U	<0.00032U	<0.00037U	<0.00035U	<0.00037U	<0.00043U
2-Hexanone	mg/kg	**		<0.00093U	<0.00085U	<0.00099U	0.0074	<0.00099U	<0.0011U
Acetone	mg/kg	2.5		0.0133	0.0418	0.0149	0.0319	<0.0099U	<0.0115U
Benzene	mg/kg	0.005		<0.00046U	0.0019	<0.0005U	0.052	<0.00049U	<0.00057U
Bromodichloromethane	mg/kg	**		<0.00035U	<0.00032U	<0.00037U	<0.00035U	<0.00037U	<0.00043U
Bromoform	mg/kg	0.067		<0.0013U	<0.0012U	<0.0014U	<0.0013U	<0.0014U	<0.0016U

** No Applicable Regulatory Standard

Exceedences of the regulatory standard are printed in bold. # = Reporting limit exceeds regulatory standard. NOC = Not of Concern.

QUALIFIERS: U = Constituent not detected above Method Detection Limit (MDL). J = Estimated Value. < = Indicates that the reported concentration is the Method Detection Limit (MDL). D = Compound identified at a secondary dilution factor. B = Analyte reported in associated field or trip blank. N = Tentatively Identified Compound (TIC). Y = Tentatively Identified Compound (TIC) also identified in Method Blank. E = Reported result is over instrument calibration range. This result is an estimate; the true result may be higher. C = Calibration verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.

REPSG
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Professional Services Group, Inc.

Analytical Chemistry Report — Matrix: Soil

Calvert Citgo 2815 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 11/24/2008

Regulatory Standard*:

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Soil, Protection of Groundwater, Tables 1 & 2.

Constituent	Unit	*Standard	Location:	B-001	B-003	B-006	B-011	B-010	B-012
			Date:	11/24/2008	11/24/2008	11/24/2008	11/24/2008	11/24/2008	11/24/2008
			Depth (ft):	19.5-20	19.5-20	19.5-20	20.5-21	20.5-21	19.5-20
Carbon disulfide	mg/kg	190		<0.00035U	<0.00032U	<0.00037U	<0.00035U	<0.00037U	<0.00043U
Carbon tetrachloride	mg/kg	0.005		<0.00058U	<0.00053U	<0.00062U	<0.00058U	<0.00062U	<0.00072U
Chlorobenzene	mg/kg	0.8		<0.00046U	<0.00043U	<0.0005U	<0.00047U	<0.00049U	<0.00057U
Chlorobromomethane	mg/kg	**		<0.00058U	<0.00053U	<0.00062U	<0.00058U	<0.00062U	<0.00072U
Chloroethane	mg/kg	0.019		<0.00058U	<0.00053U	<0.00062U	<0.00058U	<0.00062U	<0.00072U
Chloroform	mg/kg	0.005		<0.00035U	<0.00032U	<0.00037U	<0.00035U	<0.00037U	<0.00043U
cis-1,2-Dichloroethylene	mg/kg	0.35		<0.00058U	<0.00053U	<0.00062U	<0.00058U	<0.00062U	<0.00072U
cis-1,3-Dichloropropene	mg/kg	0.005		<0.00046U	<0.00043U	<0.0005U	<0.00047U	<0.00049U	<0.00057U
Dibromochloromethane	mg/kg	0.005		<0.00058U	<0.00053U	<0.00062U	<0.00058U	<0.00062U	<0.00072U
Ethyl tert-butyl ether	mg/kg	**		<0.00035U	<0.00032U	<0.00037U	<0.00035U	<0.00037U	<0.00043U
Ethylbenzene	mg/kg	15		<0.00035U	0.0004	<0.00037U	0.0145	<0.00037U	<0.00043U
Isopropyl Ether	mg/kg	**		<0.00023U	<0.00021U	<0.00025U	<0.00023U	<0.00025U	<0.00029U
m/p-xylene	mg/kg	**		<0.0012U	0.0015	<0.0012U	0.133	<0.0012U	<0.0014U
Methyl bromide	mg/kg	0.041		<0.00058U	<0.00053U	<0.00062U	<0.00058U	<0.00062U	<0.00072U
Methyl chloride	mg/kg	0.01		<0.00035U	<0.00032U	<0.00037U	<0.00035U	<0.00037U	<0.00043U
Methyl ethyl ketone	mg/kg	7.9		<0.0023U	<0.0021U	<0.0025U	<0.0023U	<0.0025U	<0.0029U
Methyl isobutylketone (MIBK)	mg/kg	1.3		<0.0012U	<0.0011U	<0.0012U	0.0074	<0.0012U	<0.0014U
Methyl tert-butyl ether	mg/kg	280		<0.00035U	<0.00032U	<0.00037U	0.0006	<0.00037U	0.0013
Methylene chloride	mg/kg	190		0.0054	<0.00074U	0.0013	0.0018	<0.00086U	0.0023
o-Xylene	mg/kg	**		<0.00035U	0.0011	<0.00037U	0.0373	<0.00037U	<0.00043U
Styrene	mg/kg	570		<0.00035U	<0.00032U	<0.00037U	<0.00035U	<0.00037U	<0.00043U

** No Applicable Regulatory Standard

Exceedences of the regulatory standard are printed in bold. # = Reporting limit exceeds regulatory standard. NOC = Not of Concern.

QUALIFIERS: U = Constituent not detected above Method Detection Limit (MDL). J = Estimated Value. < = Indicates that the reported concentration is the Method Detection Limit (MDL). D = Compound identified at a secondary dilution factor. B = Analyte reported in associated field or trip blank. N = Tentatively Identified Compound (TIC). Y = Tentatively Identified Compound (TIC) also identified in Method Blank. E = Reported result is over instrument calibration range. This result is an estimate; the true result may be higher. C = Calibration verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.

REPSG
React Environmental
Professional Services Group, Inc.

Analytical Chemistry Report — Matrix: Soil

Calvert Citgo 2815 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 11/24/2008

Regulatory Standard*:

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Soil, Protection of Groundwater, Tables 1 & 2.

Constituent	Unit	*Standard	Location:	B-001	B-003	B-006	B-011	B-010	B-012
			Date:	11/24/2008	11/24/2008	11/24/2008	11/24/2008	11/24/2008	11/24/2008
			Depth (ft):	19.5-20	19.5-20	19.5-20	20.5-21	20.5-21	19.5-20
Tert-Amyl alcohol	mg/kg	**		<0.0058U	<0.0053U	<0.0062U	0.0822	<0.0062U	<0.0072U
TERT-AMYL ETHYL ETHER	mg/kg	**		<0.0012U	<0.0011U	<0.0012U	<0.0012U	<0.0012U	<0.0014U
tert-Butylalcohol	mg/kg	**		<0.0023U	<0.0021U	<0.0025U	<0.0023U	<0.0025U	<0.0029U
Tetrachloroethylene	mg/kg	480		<0.00058U	<0.00053U	<0.00062U	<0.00058U	<0.00062U	<0.00072U
Toluene	mg/kg	8.8		<0.00035U	0.0087	<0.00037U	0.0072	<0.00037U	<0.00043U
trans-1,2-Di-chloroethylene	mg/kg	0.82		<0.00046U	<0.00043U	<0.0005U	<0.00047U	<0.00049U	<0.00057U
trans-1,3-Dichloropropene	mg/kg	0.005		<0.00069U	<0.00064U	<0.00075U	<0.0007U	<0.00074U	<0.00086U
Trichloroethylene	mg/kg	0.015		<0.00058U	<0.00053U	<0.00062U	<0.00058U	<0.00062U	<0.00072U
Vinyl chloride	mg/kg	0.005		<0.00035U	<0.00032U	<0.00037U	<0.00035U	<0.00037U	<0.00043U
Xylene (total)	mg/kg	170		<0.0012U	0.0025	<0.0012U	0.171	<0.0012U	<0.0014U

** No Applicable Regulatory Standard

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Analytical Chemistry Report — Matrix: Water

Calvert Citgo 2815 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 11/05/2008

Regulatory Standard*:

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Groundwater for Type I & II Aquifers, Tables 1 and 2 (March 2008).

Constituent	Unit	*Standard	Location:	TWP-001	TWP-002	TWP-003	TWP-004
			Date:	11/05/2008	11/05/2008	11/05/2008	11/05/2008
			Depth (ft):	NA	NA	NA	NA
Not Otherwise Specified							
DBCP	ug/l	0.2		<12U#	<12U#	<12U#	<2.4U#
TERT-AMYL METHYL ETHER	ug/l	**		<4U	<4U	<4U	<0.8U
Petroleum Screening Parameters							
Diesel Range Organics (DRO)	ug/l	47		5600	2300	250	83
Gasoline Range ORGANICS(GRO)	ug/l	47		39700	-	3440	673
Volatile Organic Compounds (VOCs)							
1,1,1-trichloroethane	ug/l	200		<1U	<1U	<1U	<0.2U
1,1,2,2-Tetrachloroethane	ug/l	0.053		<1U#	<1U#	<1U#	<0.2U#
1,1,2-Trichloroethane	ug/l	5		<1U	<1U	<1U	<0.2U
1,1-Dichloroethane	ug/l	90		<0.5U	<0.5U	<0.5U	<0.1U
1,1-Dichloroethylene	ug/l	7		<1U	<1U	<1U	<0.2U
1,2-Dibromoethane	ug/l	0.05		265	179	13.7	11.4
1,2-Dichloroethane	ug/l	5		913	680	27.1	21.4
1,2-Dichloropropane	ug/l	5		<1U	<1U	<1U	<0.2U
2-Hexanone	ug/l	**		147	59.9	9.1	7.1
Acetone	ug/l	550		1270	2110	<20U	<4U
Benzene	ug/l	5		15300	43000	835	708
Bromodichloromethane	ug/l	80		<1U	<1U	<1U	<0.2U
Bromoform	ug/l	80		<1U	<1U	<1U	<0.2U

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Analytical Chemistry Report — Matrix: Water

Calvert Citgo 2815 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 11/05/2008

Regulatory Standard*:

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Groundwater for Type I & II Aquifers, Tables 1 and 2 (March 2008).

Constituent	Unit	*Standard	Location:	TWP-001	TWP-002	TWP-003	TWP-004
			Date:	11/05/2008	11/05/2008	11/05/2008	11/05/2008
			Depth (ft):	NA	NA	NA	NA
Carbon disulfide	ug/l	100		<0.5U	<0.5U	<0.5U	<0.1U
Carbon tetrachloride	ug/l	5		<1U	<1U	<1U	<0.2U
Chlorobenzene	ug/l	100		<1U	<1U	<1U	<0.2U
Chlorobromomethane	ug/l	**		<1U	<1U	<1U	<0.2U
Chloroethane	ug/l	3.6		<1.5U	<1.5U	<1.5U	<0.3U
Chloroform	ug/l	80		<1U	2.7	<1U	<0.2U
cis-1,2-Dichloroethylene	ug/l	70		<1U	<1U	<1U	<0.2U
cis-1,3-Dichloropropene	ug/l	0.44		<1U#	<1U#	<1U#	<0.2U
Dibromochloromethane	ug/l	80		<1U	<1U	<1U	<0.2U
Ethyl tert-butyl ether	ug/l	**		<0.5U	<0.5U	<0.5U	<0.1U
Ethylbenzene	ug/l	700		1060	482	16.9	12.8
Isopropyl Ether	ug/l	**		130	90.3	4.4	5.1
m/p-xylene	ug/l	**		3570	1740	743	34.6
Methyl bromide	ug/l	0.85		<1U#	<1U#	<1U#	<0.2U
Methyl chloride	ug/l	19		<1U	<1U	<1U	<0.2U
Methyl ethyl ketone	ug/l	700		1320	1300	<15U	8.8
Methyl isobutylketone (MIBK)	ug/l	630		83.9	55.6	<6.5U	<1.3U
Methyl tert-butyl ether	ug/l	20		949	11900	28.1	52
Methylene chloride	ug/l	5		<0.5U	<0.5U	<0.5U	<0.1U
o-Xylene	ug/l	**		1570	934	172	22.7
Styrene	ug/l	100		<1U	3.4	<1U	<0.2U

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Analytical Chemistry Report — Matrix: Water

Calvert Citgo 2815 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 11/05/2008

Regulatory Standard*:

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Groundwater for Type I & II Aquifers, Tables 1 and 2 (March 2008).

Constituent	Unit	*Standard	Location:	TWP-001	TWP-002	TWP-003	TWP-004
			Date:	11/05/2008	11/05/2008	11/05/2008	11/05/2008
			Depth (ft):	NA	NA	NA	NA
Tert-Amyl alcohol	ug/l	**		48400	75200	419	80.5
TERT-AMYL ETHYL ETHER	ug/l	**		<1U	<1U	<1U	<0.2U
tert-Butylalcohol	ug/l	**		3970	34500	82	24.8
Tetrachloroethylene	ug/l	5		<2U	<2U	<2U	<0.4U
Toluene	ug/l	1000		20600	50200	518	750
trans-1,2-Di-chloroethylene	ug/l	100		<1U	<1U	<1U	<0.2U
trans-1,3-Dichloropropene	ug/l	0.44		<1U#	<1U#	<1U#	<0.2U
Trichloroethylene	ug/l	5		<1U	<1U	<1U	<0.2U
Vinyl chloride	ug/l	2		<1U	<1U	<1U	<0.2U
Xylene (total)	ug/l	10000		5140	2680	915	57.4

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Analytical Chemistry Report — Matrix: Water

Calvert Citgo 2815 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 11/17/2008

Regulatory Standard*:

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Groundwater for Type I & II Aquifers, Tables 1 and 2 (March 2008).

Constituent	Unit	*Standard	Location:	MP-001	MP-002	MW-001	MW-002	MW-003	MW-005
			Date:	11/17/2008	11/17/2008	11/17/2008	11/17/2008	11/17/2008	11/17/2008
			Depth (ft):	NA	NA	NA	NA	NA	NA
Not Otherwise Specified									
DBCP	ug/l	0.2		<12U#	<2.4U#	<12U#	<2.4U#	<12U#	<12U#
TERT-AMYL METHYL ETHER	ug/l	**		<4U	<0.8U	<4U	<0.8U	<4U	<4U
Petroleum Screening Parameters									
Diesel Range Organics (DRO)	ug/l	47		97200	1700	12100	2900	5300	7500
Gasoline Range ORGANICS(GRO)	ug/l	47		1180	175	16800	96.1	31200	148000
Volatile Organic Compounds (VOCs)									
1,1,1-trichloroethane	ug/l	200		<1U	<0.2U	<1U	<0.2U	<1U	<1U
1,1,2,2-Tetrachloroethane	ug/l	0.053		<1U#	<0.2U#	<1U#	<0.2U#	<1U#	<1U#
1,1,2-Trichloroethane	ug/l	5		<1U	<0.2U	<1U	<0.2U	<1U	<1U
1,1-Dichloroethane	ug/l	90		<0.5U	<0.1U	<0.5U	<0.1U	<0.5U	<0.5U
1,1-Dichloroethylene	ug/l	7		<1U	<0.2U	<1U	<0.2U	<1U	<1U
1,2-Dibromoethane	ug/l	0.05		<1.5U#	<0.3U#	<1.5U#	<0.3U#	<1.5U#	<1.5U#
1,2-Dichloroethane	ug/l	5		<1U	<0.2U	27.1	<0.2U	<1U	<1U
1,2-Dichloropropane	ug/l	5		<1U	<0.2U	<1U	<0.2U	<1U	<1U
2-Hexanone	ug/l	**		<3.5U	<0.7U	4.7	<0.7U	22.2	19.8
Acetone	ug/l	550		<20U	61.1	<20U	<4U	86.3	97.2
Benzene	ug/l	5		19.3	3.1	13800	68.1	24.5	410
Bromodichloromethane	ug/l	80		<1U	<0.2U	<1U	<0.2U	<1U	<1U
Bromoform	ug/l	80		<1U	<0.2U	<1U	<0.2U	<1U	<1U

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Constituent	Unit	*Standard	Location:	MP-001	MP-002	MW-001	MW-002	MW-003	MW-005
			Date:	11/17/2008	11/17/2008	11/17/2008	11/17/2008	11/17/2008	11/17/2008
			Depth (ft):	NA	NA	NA	NA	NA	NA
Carbon disulfide	ug/l	100		<0.5U	<0.1U	<0.5U	<0.1U	<0.5U	<0.5U
Carbon tetrachloride	ug/l	5		<1U	<0.2U	<1U	<0.2U	<1U	<1U
Chlorobenzene	ug/l	100		<1U	<0.2U	<1U	<0.2U	<1U	<1U
Chlorobromomethane	ug/l	**		<1U	<0.2U	<1U	<0.2U	<1U	<1U
Chloroethane	ug/l	3.6		<1.5U	<0.3U	<1.5U	<0.3U	<1.5U	<1.5U
Chloroform	ug/l	80		<1U	<0.2U	<1U	<0.2U	<1U	<1U
cis-1,2-Dichloroethylene	ug/l	70		<1U	<0.2U	<1U	<0.2U	<1U	<1U
cis-1,3-Dichloropropene	ug/l	0.44		<1U#	<0.2U	<1U#	<0.2U	<1U#	<1U#
Dibromochloromethane	ug/l	80		<1U	<0.2U	<1U	<0.2U	<1U	<1U
Ethyl tert-butyl ether	ug/l	**		<0.5U	<0.1U	<0.5U	<0.1U	<0.5U	<0.5U
Ethylbenzene	ug/l	700		<1.5U	<0.3U	1340	1.9	1440	2610
Isopropyl Ether	ug/l	**		<0.5U	<0.1U	26.1	<0.1U	<0.5U	<0.5U
m/p-xylene	ug/l	**		9.4	1.4	3040	5.5	3960	9370
Methyl bromide	ug/l	0.85		<1U#	<0.2U	<1U#	<0.2U	<1U#	<1U#
Methyl chloride	ug/l	19		<1U	<0.2U	<1U	<0.2U	<1U	<1U
Methyl ethyl ketone	ug/l	700		<15U	65.4	<15U	<3U	<15U	76.8
Methyl isobutylketone (MIBK)	ug/l	630		<6.5U	<1.3U	<6.5U	<1.3U	<6.5U	<6.5U
Methyl tert-butyl ether	ug/l	20		<1U	0.67	5.4	14.7	<1U	<1U
Methylene chloride	ug/l	5		<0.5U	<0.1U	1	<0.1U	<0.5U	<0.5U
o-Xylene	ug/l	**		5.7	0.98	169	2.4	1780	4240
Styrene	ug/l	100		<1U	<0.2U	<1U	<0.2U	<1U	<1U

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Analytical Chemistry Report — Matrix: Water

Calvert Citgo 2815 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 11/17/2008

Regulatory Standard*:

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Groundwater for Type I & II Aquifers, Tables 1 and 2 (March 2008).

Constituent	Unit	*Standard	Location:	MP-001	MP-002	MW-001	MW-002	MW-003	MW-005
			Date:	11/17/2008	11/17/2008	11/17/2008	11/17/2008	11/17/2008	11/17/2008
			Depth (ft):	NA	NA	NA	NA	NA	NA
Tert-Amyl alcohol	ug/l	**		<2.5U	31.3	8300	<0.5U	452	1050
TERT-AMYL ETHYL ETHER	ug/l	**		<1U	<0.2U	<1U	<0.2U	<1U	<1U
tert-Butylalcohol	ug/l	**		171	50.8	842	52.1	<15U	<15U
Tetrachloroethylene	ug/l	5		<2U	<0.4U	<2U	<0.4U	<2U	<2U
Toluene	ug/l	1000		38.7	9.8	764	5.8	3170	34500
trans-1,2-Di-chloroethylene	ug/l	100		<1U	<0.2U	<1U	<0.2U	<1U	<1U
trans-1,3-Dichloropropene	ug/l	0.44		<1U#	<0.2U	<1U#	<0.2U	<1U#	<1U#
Trichloroethylene	ug/l	5		<1U	<0.2U	<1U	2.8	<1U	<1U
Vinyl chloride	ug/l	2		<1U	<0.2U	<1U	<0.2U	<1U	<1U
Xylene (total)	ug/l	10000		15.1	2.4	3210	7.9	5740	13600

Constituent	Unit	*Standard	Location:	MW-006	MW-007
			Date:	11/17/2008	11/17/2008
			Depth (ft):	NA	NA
Not Otherwise Specified					
DBCP	ug/l	0.2		<2.4U#	<12U#
TERT-AMYL METHYL ETHER	ug/l	**		<0.8U	<4U
Petroleum Screening Parameters					
Diesel Range Organics (DRO)	ug/l	47		2900	2000
Gasoline Range ORGANICS(GRO)	ug/l	47		341	59300

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Analytical Chemistry Report — Matrix: Water

Calvert Citgo 2815 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 11/17/2008

Regulatory Standard*:

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Groundwater for Type I & II Aquifers, Tables 1 and 2 (March 2008).

Volatile Organic Compounds (VOCs)				
1,1,1-trichloroethane	ug/l	200	<0.2U	<1U
1,1,2,2-Tetrachloroethane	ug/l	0.053	<0.2U#	<1U#
1,1,2-Trichloroethane	ug/l	5	<0.2U	<1U
1,1-Dichloroethane	ug/l	90	<0.1U	<0.5U
1,1-Dichloroethylene	ug/l	7	<0.2U	<1U
1,2-Dibromoethane	ug/l	0.05	<0.3U#	<1.5U#
1,2-Dichloroethane	ug/l	5	<0.2U	<1U
1,2-Dichloropropane	ug/l	5	<0.2U	<1U
2-Hexanone	ug/l	**	<0.7U	<3.5U
Acetone	ug/l	550	<4U	<20U
Benzene	ug/l	5	17.1	961
Bromodichloromethane	ug/l	80	<0.2U	<1U
Bromoform	ug/l	80	<0.2U	<1U
Carbon disulfide	ug/l	100	<0.1U	<0.5U
Carbon tetrachloride	ug/l	5	<0.2U	<1U
Chlorobenzene	ug/l	100	6.3	<1U
Chlorobromomethane	ug/l	**	<0.2U	<1U
Chloroethane	ug/l	3.6	<0.3U	<1.5U
Chloroform	ug/l	80	<0.2U	<1U
cis-1,2-Dichloroethylene	ug/l	70	<0.2U	<1U
cis-1,3-Dichloropropene	ug/l	0.44	<0.2U	<1U#
Dibromochloromethane	ug/l	80	<0.2U	<1U
Ethyl tert-butyl ether	ug/l	**	<0.1U	<0.5U

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Analytical Chemistry Report — Matrix: Water

Calvert Citgo 2815 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 11/17/2008

Regulatory Standard*:

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Groundwater for Type I & II Aquifers, Tables 1 and 2 (March 2008).

Constituent	Unit	*Standard	Location:	MW-006	MW-007
			Date:	11/17/2008	11/17/2008
			Depth (ft):	NA	NA
Ethylbenzene	ug/l	700		8.2	999
Isopropyl Ether	ug/l	**		<0.1U	<0.5U
m/p-xylene	ug/l	**		27.3	4030
Methyl bromide	ug/l	0.85		<0.2U	<1U#
Methyl chloride	ug/l	19		<0.2U	<1U
Methyl ethyl ketone	ug/l	700		<3U	<15U
Methyl isobutylketone (MIBK)	ug/l	630		<1.3U	<6.5U
Methyl tert-butyl ether	ug/l	20		6.7	<1U
Methylene chloride	ug/l	5		<0.1U	1.6
o-Xylene	ug/l	**		6.1	2000
Styrene	ug/l	100		<0.2U	<1U
Tert-Amyl alcohol	ug/l	**		<0.5U	284
TERT-AMYL ETHYL ETHER	ug/l	**		<0.2U	<1U
tert-Butylalcohol	ug/l	**		<3U	<15U
Tetrachloroethylene	ug/l	5		15.1	<2U
Toluene	ug/l	1000		42.3	24000
trans-1,2-Di-chloroethylene	ug/l	100		<0.2U	<1U
trans-1,3-Dichloropropene	ug/l	0.44		<0.2U	<1U#
Trichloroethylene	ug/l	5		<0.2U	<1U
Vinyl chloride	ug/l	2		<0.2U	<1U
Xylene (total)	ug/l	10000		33.4	6030

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Analytical Chemistry Report — Matrix: Water

Calvert Citgo 2815 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 11/17/2008

Regulatory Standard*:

Maryland Department of the Environment (MDE) Voluntary Cleanup Program (VCP): Generic Numeric Cleanup Standards for Groundwater for Type I & II Aquifers, Tables 1 and 2 (March 2008).

** No Applicable Regulatory Standard

Exceedences of the regulatory standard are printed in bold. # = Reporting limit exceeds regulatory standard. NOC = Not of Concern.

QUALIFIERS: U = Constituent not detected above Method Detection Limit (MDL). J = Estimated Value. < = Indicates that the reported concentration is the Method Detection Limit (MDL). D = Compound identified at a secondary dilution factor. B = Analyte reported in associated field or trip blank. N = Tentatively Identified Compound (TIC). Y = Tentatively Identified Compound (TIC) also identified in Method Blank. E = Reported result is over instrument calibration range. This result is an estimate; the true result may be higher. C = Calibration verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.

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Analytical Chemistry Report — Matrix: Water

Calvert Citgo 2815 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 11/24/2008

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-001	DW-002	DW-003	DW-004	DW-005	DW-006
			Date:	11/24/2008	11/24/2008	11/24/2008	11/24/2008	11/24/2008	11/24/2008
			Depth (ft):	NA	NA	NA	NA	NA	NA
Not Otherwise Specified									
1,1,-dichloropropanone	ug/l	**		<4U	<4U	<4U	<4U	<4U	<4U
2-Nitropropane	ug/l	**		<3U	<3U	<3U	<3U	<3U	<3U
Acrylonitrile	ug/l	**		<2.5U	<2.5U	<2.5U	<2.5U	<2.5U	<2.5U
Allyl chloride	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Chloroacetonitrile	ug/l	**		<2.5U	<2.5U	<2.5U	<2.5U	<2.5U	<2.5U
Chlorobutane, 1-	ug/l	**		<1U	<1U	<1U	<1U	<1U	<1U
DBCP	ug/l	0.2		<0.5U#	<0.5U#	<0.5U#	<0.5U#	<0.5U#	<0.5U#
Dichlorofluoromethane	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Ethyl cyanide	ug/l	**		<2.5U	<2.5U	<2.5U	<2.5U	<2.5U	<2.5U
Ethyl methacrylate	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Isopropanol	ug/l	**		<25U	<25U	<25U	<25U	<25U	<25U
Methacrylonitrile	ug/l	**		<1U	<1U	<1U	<1U	<1U	<1U
Methyl acrylate	ug/l	**		<1U	<1U	<1U	<1U	<1U	<1U
Methyl iodide	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Methyl methacrylate	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
n-Hexane	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Pentachloroethane	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
TERT-AMYL METHYL ETHER	ug/l	**		<0.5U	<0.5U	<0.5U	0.79	1.8	<0.5U
trans-1,4-Dichloro-2-butene	ug/l	**		<1U	<1U	<1U	<1U	<1U	<1U
Vinyl Acetate	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U

Print Date: 12/15/2008

** No Applicable Regulatory Standard

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Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Semi-Volatile Organic Compounds (SVOCs)								
Hexachloroethane	ug/l	**	<3U	<3U	<3U	<3U	<3U	<3U
Nitrobenzene	ug/l	**	<5U	<5U	<5U	<5U	<5U	<5U
Volatile Organic Compounds (VOCs)								
1,1,1,2-Tetrachloroethane	ug/l	**	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
1,1,1-trichloroethane	ug/l	200	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
1,1,2,2-Tetrachloroethane	ug/l	**	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
1,1,2-Trichloroethane	ug/l	5	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
1,1-Dichloroethane	ug/l	**	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
1,1-Dichloroethylene	ug/l	7	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
1,1-Dichloropropene	ug/l	**	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
1,2,3-Trichlorobenzene	ug/l	**	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
1,2,3-Trichloropropane	ug/l	**	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
1,2-Dibromoethane	ug/l	**	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
1,2-Dichloroethane	ug/l	5	<0.5U	<0.5U	<0.5U	5.5	3.6	<0.5U
1,2-Dichloropropane	ug/l	**	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
1,3-Dichloropropane	ug/l	**	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
1,3-Dichloropropene	ug/l	**	<1U	<1U	<1U	<1U	<1U	<1U
1,4-Dioxane	ug/l	**	<4U	<4U	<4U	<4U	<4U	<4U
2-Hexanone	ug/l	**	<2.5U	<2.5U	<2.5U	<2.5U	<2.5U	<2.5U
Acetone	ug/l	**	<5U	<5U	<5U	<5U	<5U	<5U
Benzene	ug/l	5	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Benzene, 1,2,4-trimethyl	ug/l	**	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U

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Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-001	DW-002	DW-003	DW-004	DW-005	DW-006
			Date:	11/24/2008	11/24/2008	11/24/2008	11/24/2008	11/24/2008	11/24/2008
			Depth (ft):	NA	NA	NA	NA	NA	NA
Benzene, 1,3,5-trimethyl-	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Bromobenzene	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Bromodichloromethane	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Bromoform	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Carbon disulfide	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Carbon tetrachloride	ug/l	5		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Chlorobenzene	ug/l	100		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Chlorobromomethane	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Chloroethane	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Chloroform	ug/l	**		1	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
cis-1,2-Dichloroethylene	ug/l	70		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
cis-1,3-Dichloropropene	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Cymene	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Dibromochloromethane	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Dichlorodifluoromethane	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Diethyl ether	ug/l	**		<0.5U	0.27	<0.5U	<0.5U	0.26	<0.5U
Ethyl tert-butyl ether	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Ethylbenzene	ug/l	700		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Isopropyl benzene	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Isopropyl Ether	ug/l	**		1.9	<0.5U	0.25	3.8	3.5	<0.5U
m/p-xylene	ug/l	**		<1U	<1U	<1U	<1U	<1U	<1U

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Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-001	DW-002	DW-003	DW-004	DW-005	DW-006
			Date:	11/24/2008	11/24/2008	11/24/2008	11/24/2008	11/24/2008	11/24/2008
			Depth (ft):	NA	NA	NA	NA	NA	NA
Methyl bromide	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Methyl chloride	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Methyl ethyl ketone	ug/l	**		<2.5U	<2.5U	<2.5U	<2.5U	<2.5U	<2.5U
Methyl isobutylketone (MIBK)	ug/l	**		<2.5U	<2.5U	<2.5U	<2.5U	<2.5U	<2.5U
Methyl tert-butyl ether	ug/l	20		18.1	<0.5U	0.49	216	277	0.33
Methylene bromide	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Methylene chloride	ug/l	5		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
n-Butylbenzene	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
n-Propylbenzene	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
o-Chlorotoluene	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
o-Xylene	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
p-Chlorotoluene	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
sec-Butylbenzene	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
sec-Dichloropropane	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Styrene	ug/l	100		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Tert-Amyl alcohol	ug/l	**		<4U	<4U	<4U	56.3	35.9	<4U
TERT-AMYL ETHYL ETHER	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
tert-Butylalcohol	ug/l	**		<4U	<4U	<4U	1500	554	<4U
tert-Butylbenzene	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Tetrachloroethylene	ug/l	5		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Tetrahydrofuran	ug/l	**		<3U	<3U	<3U	<3U	<3U	<3U

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Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-001	DW-002	DW-003	DW-004	DW-005	DW-006
			Date:	11/24/2008	11/24/2008	11/24/2008	11/24/2008	11/24/2008	11/24/2008
			Depth (ft):	NA	NA	NA	NA	NA	NA
Toluene	ug/l	1000		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
trans-1,2-Di-chloroethylene	ug/l	100		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
trans-1,3-Dichloropropene	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Trichloroethylene	ug/l	5		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Trichlorofluoromethane	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Vinyl chloride	ug/l	2		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Xylene (total)	ug/l	10000		<1.5U	<1.5U	<1.5U	<1.5U	<1.5U	<1.5U
Volatile/Semi-Volatile Organic Compounds (V/SVOCs)									
1,2,4-Trichlorobenzene	ug/l	70		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
Hexachlorobutadiene	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
m-Dichlorobenzene	ug/l	**		<0.5U	<0.5U	<0.5U	0.34	<0.5U	<0.5U
Naphthalene	ug/l	**		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
o-Dichlorobenzene	ug/l	600		<0.5U	<0.5U	<0.5U	<0.5U	<0.5U	<0.5U
p-Dichlorobenzene	ug/l	75		<0.5U	<0.5U	<0.5U	0.23	0.23	<0.5U

Constituent	Unit	*Standard	Location:	DW-007
			Date:	11/24/2008
			Depth (ft):	NA
Not Otherwise Specified				
1,1,-dichloropropanone	ug/l	**		<4U

Print Date: 12/15/2008

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Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-007
			Date:	11/24/2008
			Depth (ft):	NA
2-Nitropropane	ug/l	**		<3U
Acrylonitrile	ug/l	**		<2.5U
Allyl chloride	ug/l	**		<0.5U
Chloroacetonitrile	ug/l	**		<2.5U
Chlorobutane, 1-	ug/l	**		<1U
DBCP	ug/l	0.2		<0.5U#
Dichlorofluoromethane	ug/l	**		<0.5U
Ethyl cyanide	ug/l	**		<2.5U
Ethyl methacrylate	ug/l	**		<0.5U
Isopropanol	ug/l	**		<25U
Methacrylonitrile	ug/l	**		<1U
Methyl acrylate	ug/l	**		<1U
Methyl iodide	ug/l	**		<0.5U
Methyl methacrylate	ug/l	**		<0.5U
n-Hexane	ug/l	**		<0.5U
Pentachloroethane	ug/l	**		<0.5U
TERT-AMYL METHYL ETHER	ug/l	**		<0.5U
trans-1,4-Dichloro-2-butene	ug/l	**		<1U
Vinyl Acetate	ug/l	**		<0.5U
Semi-Volatile Organic Compounds (SVOCs)				
Hexachloroethane	ug/l	**		<3U

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Calvert Citgo 2815 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 11/24/2008

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-007
			Date:	11/24/2008
			Depth (ft):	NA
Nitrobenzene	ug/l	**		<5U
Volatile Organic Compounds (VOCs)				
1,1,1,2-Tetrachloroethane	ug/l	**		<0.5U
1,1,1-trichloroethane	ug/l	200		<0.5U
1,1,2,2-Tetrachloroethane	ug/l	**		<0.5U
1,1,2-Trichloroethane	ug/l	5		<0.5U
1,1-Dichloroethane	ug/l	**		<0.5U
1,1-Dichloroethylene	ug/l	7		<0.5U
1,1-Dichloropropene	ug/l	**		<0.5U
1,2,3-Trichlorobenzene	ug/l	**		<0.5U
1,2,3-Trichloropropane	ug/l	**		<0.5U
1,2-Dibromoethane	ug/l	**		<0.5U
1,2-Dichloroethane	ug/l	5		<0.5U
1,2-Dichloropropane	ug/l	**		<0.5U
1,3-Dichloropropane	ug/l	**		<0.5U
1,3-Dichloropropene	ug/l	**		<1U
1,4-Dioxane	ug/l	**		<4U
2-Hexanone	ug/l	**		<2.5U
Acetone	ug/l	**		<5U
Benzene	ug/l	5		<0.5U
Benzene, 1,2,4-trimethyl	ug/l	**		<0.5U

** No Applicable Regulatory Standard

Exceedences of the regulatory standard are printed in bold. # = Reporting limit exceeds regulatory standard. NOC = Not of Concern.

QUALIFIERS: U = Constituent not detected above Method Detection Limit (MDL). J = Estimated Value. < = Indicates that the reported concentration is the Method Detection Limit (MDL). D = Compound identified at a secondary dilution factor. B = Analyte reported in associated field or trip blank. N = Tentatively Identified Compound (TIC). Y = Tentatively Identified Compound (TIC) also identified in Method Blank. E = Reported result is over instrument calibration range. This result is an estimate; the true result may be higher. C = Calibration verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.

REPSG
React Environmental
Professional Services Group, Inc.

Analytical Chemistry Report — Matrix: Water

Calvert Citgo 2815 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 11/24/2008

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-007
			Date:	11/24/2008
			Depth (ft):	NA
Benzene, 1,3,5-trimethyl-	ug/l	**		<0.5U
Bromobenzene	ug/l	**		<0.5U
Bromodichloromethane	ug/l	**		<0.5U
Bromoform	ug/l	**		<0.5U
Carbon disulfide	ug/l	**		<0.5U
Carbon tetrachloride	ug/l	5		<0.5U
Chlorobenzene	ug/l	100		<0.5U
Chlorobromomethane	ug/l	**		<0.5U
Chloroethane	ug/l	**		<0.5U
Chloroform	ug/l	**		<0.5U
cis-1,2-Dichloroethylene	ug/l	70		<0.5U
cis-1,3-Dichloropropene	ug/l	**		<0.5U
Cymene	ug/l	**		<0.5U
Dibromochloromethane	ug/l	**		<0.5U
Dichlorodifluoromethane	ug/l	**		<0.5U
Diethyl ether	ug/l	**		<0.5U
Ethyl tert-butyl ether	ug/l	**		<0.5U
Ethylbenzene	ug/l	700		<0.5U
Isopropyl benzene	ug/l	**		<0.5U
Isopropyl Ether	ug/l	**		<0.5U
m/p-xylene	ug/l	**		<1U

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REPSG
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Analytical Chemistry Report — Matrix: Water

Calvert Citgo 2815 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 11/24/2008

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-007
			Date:	11/24/2008
			Depth (ft):	NA
Methyl bromide	ug/l	**		<0.5U
Methyl chloride	ug/l	**		<0.5U
Methyl ethyl ketone	ug/l	**		<2.5U
Methyl isobutylketone (MIBK)	ug/l	**		<2.5U
Methyl tert-butyl ether	ug/l	20		<0.5U
Methylene bromide	ug/l	**		<0.5U
Methylene chloride	ug/l	5		<0.5U
n-Butylbenzene	ug/l	**		<0.5U
n-Propylbenzene	ug/l	**		<0.5U
o-Chlorotoluene	ug/l	**		<0.5U
o-Xylene	ug/l	**		<0.5U
p-Chlorotoluene	ug/l	**		<0.5U
sec-Butylbenzene	ug/l	**		<0.5U
sec-Dichloropropane	ug/l	**		<0.5U
Styrene	ug/l	100		<0.5U
Tert-Amyl alcohol	ug/l	**		<4U
TERT-AMYL ETHYL ETHER	ug/l	**		<0.5U
tert-Butylalcohol	ug/l	**		<4U
tert-Butylbenzene	ug/l	**		<0.5U
Tetrachloroethylene	ug/l	5		<0.5U
Tetrahydrofuran	ug/l	**		<3U

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REPSG
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Analytical Chemistry Report — Matrix: Water

Calvert Citgo 2815 Northeast Rd North East, Maryland — REPSG Project No.: 005977 — Sample Date: 11/24/2008

Regulatory Standard*:

EPA National Primary Drinking Water Standards: Office OF Water. June 2003

Constituent	Unit	*Standard	Location:	DW-007
			Date:	11/24/2008
			Depth (ft):	NA
Toluene	ug/l	1000		<0.5U
trans-1,2-Di-chloroethylene	ug/l	100		<0.5U
trans-1,3-Dichloropropene	ug/l	**		<0.5U
Trichloroethylene	ug/l	5		<0.5U
Trichlorofluoromethane	ug/l	**		<0.5U
Vinyl chloride	ug/l	2		<0.5U
Xylene (total)	ug/l	10000		<1.5U
Volatile/Semi-Volatile Organic Compounds (V/SVOCs)				
1,2,4-Trichlorobenzene	ug/l	70		<0.5U
Hexachlorobutadiene	ug/l	**		<0.5U
m-Dichlorobenzene	ug/l	**		<0.5U
Naphthalene	ug/l	**		<0.5U
o-Dichlorobenzene	ug/l	600		<0.5U
p-Dichlorobenzene	ug/l	75		<0.5U

** No Applicable Regulatory Standard

Exceedences of the regulatory standard are printed in bold. # = Reporting limit exceeds regulatory standard. NOC = Not of Concern.

QUALIFIERS: U = Constituent not detected above Method Detection Limit (MDL). J = Estimated Value. < = Indicates that the reported concentration is the Method Detection Limit (MDL). D = Compound identified at a secondary dilution factor. B = Analyte reported in associated field or trip blank. N = Tentatively Identified Compound (TIC). Y = Tentatively Identified Compound (TIC) also identified in Method Blank. E = Reported result is over instrument calibration range. This result is an estimate; the true result may be higher. C = Calibration verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.

Vicinity Well Information Table

Located between 1,000 feet and 0.5 miles of the Site

Permit No.	Location	Water Usage	Completion Date	Depth (ft)	Pump Rate	Level Before	Level During	Replacement	Screen Type	Top Screen	Bottom Screen	Latitude (Deg. Decimal)	Longitude (Deg. Decimal)
CE812195	N FIELD CREST DR	DW	10-Jul-86	120	22	25	35	N	HO	78	120	39.690629	75.976357
CE812345	FURROW LA	DW	05-Aug-86	126	40	20	40	N	HO	77	126	39.690629	75.976357
CE812474	FIELDCREST DR	DW	07-Oct-86	110	15	35	85	N	HO	60	110	39.690629	75.976357
CE813043	RT 272	DW	05-Aug-87	260	4	30	150	N	HO	80	260	39.690629	75.976357
CE813687	MD 272	DW	17-Mar-88	169	5	20	80	N	HO	64	169	39.690629	75.976357
CE881268	N FIELDCREST DRIVE	DW	20-Jun-90	400	3	40	300	N	HO	80	400	39.690629	75.976357
CE881364	N FIELD CREST DRIVE	DW	15-Sep-90	420	2	45	400	N	HO	64	420	39.690629	75.976357
CE882014	MD 272	DW	02-Oct-91	400	3	18	240	N	HO	90	400	39.690629	75.976357
CE945053	289 N FIELDCREST DR	DW	07-Dec-01	225	8	17	120	Y	HO	35	225	39.690629	75.976357
CE881235	N FIELD CREST DRIVE	DW	19-Jun-90	300	6	40	200	N	HO	80	300	39.69066	75.97991
CE943546	564 TRINTY CHURCH RD	DW	20-Sep-99	225	10	28	98	N	HO	90	225	39.690691	75.983463
CE880058	MD 272	DW	27-Sep-88	107	12	20	70	N	HO	82	107	39.693436	75.983423
CE950678	2780 NORTH EAST RD	DW	16-Nov-04	500	3	18	285	N	HO	67	500	39.69618	75.983384
CE951470	2794 NORTH EAST RD	DW	17-Mar-06	200	10	18	95	N	HO	70	200	39.69618	75.983384
CE700106	OLD CALVERT RD	DW	30-Oct-69	123	5	36	100	Y	HO	80	123	39.696211	75.986937
CE700117	MD 273	DW	18-Nov-69	75	6	25	46	N	HO	40	75	39.696211	75.986937
CE720189	MD 273	DW	19-Nov-71	102	8	8	102	N	HO	73	102	39.696211	75.986937
CE720403	LOMBARD	DW	11-Dec-72	94	7	30	37	N	HO	58	94	39.696211	75.986937
CE730164	TRINITY CHURCH RD	DW	25-Oct-72	148	7	10	140	N	HO	124	148	39.696211	75.986937
CE730207	MD 272	DW	13-Apr-73	140	20	25	100	N	HO	100	140	39.696211	75.986937
CE730208	MD 272	DW	10-Apr-73	135	20	22	80	N	HO	118	135	39.696211	75.986937
CE730714	POST	DW	23-Jan-74	123	12	30	90	N	HO	70	123	39.696211	75.986937
CE732044	LOMBARD	DW	14-Jun-77	180	8	12	80	N	HO	87	180	39.696211	75.986937
CE732506	MD 272	DW	18-Nov-78	82	60	23	82	N	HO	67	82	39.696211	75.986937
CE811725	CROSS KEYS RD	DW	30-Aug-85	112	10	40	70	S	HO	90	112	39.696211	75.986937
CE880654	CALVERT RD	DW	02-Aug-89	127	7	20	60	Y	HO	88	127	39.696211	75.986937
CE920057	CALVERT RD	DW	22-Oct-92	134	8	30	110	N	HO	96	134	39.696211	75.986937
CE942556	CALVERT RD	DW	01-Jul-98	220	8	18	40	Y	HO	95	220	39.696211	75.986937
CE946381	TRINITY CHURCH RD	DW	21-Oct-03	200	30	15	40	S	HO	135	200	39.696211	75.986937
CE810092	TELEGRAPH RD	DW	28-Sep-81	119	15	25	50	N	HO	109	119	39.701578	75.972644
CE812601	ROSE BANK RD	DW	16-Dec-86	140	15	20	95	S	HO	100	148	39.70167	75.983305
CE920218	WALNUT GARDEN RD	DW	11-Feb-93	89	10	18	70	N	HO	80	89	39.70167	75.983305
CE945565	120 QUAKER LANE	DW	12-Aug-02	250	10	25	80	Y	HO	81	250	39.70167	75.983305
CE945832	LOMBARD RD	F	14-Nov-02	300	20	18	45	S	HO	115	300	39.70164	75.979751
CE733603	MD 273	I	23-Jan-81	365	16	40	225	N	HO	132	365	39.700436	75.985387

Located between 500 feet and 1,000 feet of the Site

Permit No.	Location	Water Usage	Completion Date	Depth (ft)	Pump Rate	Level Before	Level During	Replacement	Screen Type	Top Screen	Bottom Screen	Latitude (Deg. Decimal)	Longitude (Deg. Decimal)
CE920338	BRICK MEETING HOUSE	DW	05-May-93	173	10	5	80	Y	HO	90	173	39.698895	75.979791
CE946125	BRICK MEETING HOUSE	DW	03-Apr-03	180	10	15	35	S	HO	103	180	39.698895	75.979791
CE943910	NORTH EAST RD	I	24-May-00	225	10	15	35	N	PL	10	225	39.698895	75.979791

Located within 500 feet of the Site

Permit No.	Location	Water Usage	Completion Date	Depth (ft)	Pump Rate	Level Before	Level During	Replacement	Screen Type	Top Screen	Bottom Screen	Latitude (Deg. Decimal)	Longitude (Deg. Decimal)
CE951475	2770 NORTH EAST RD	DW	16-Mar-06	250	15	12	110	N	HO	65	250	39.69615	75.97983
CE951499	2802 NORTH EAST RD	DW	24-Mar-06	250	10	17	115	N	HO	87	250	39.69615	75.97983
CE810261	RTE 272	DW	15-Apr-82	155	12	40	80	N	HO	123	155	39.698	75.979616
CE037137		I	25-Nov-59	102	12	25						39.696963	75.979514

WATER USE CODE
DW: Combination code for: Home or Public Use; F: Farm (livestock watering & Agricultural Irrigation); I: Industrial, Commercial, State and Federal Gov. (required an appropriation permit).

CASING & SCREEN CODES
PL = Plastic; HO= Open Hole

ATTACHMENT 3: REPSG STANDARD OPERATING PROCEDURES

Equipment Requirements:

- Decontamination supplies
- Sample bottles
- Preservation supplies
- Shipping containers
- Field documentation material

Procedures:

1. Decontamination Procedures

Non-aqueous matrix field sampling equipment cleaning and decontamination procedures are as follows:

1. Laboratory grade glassware detergent and tap water scrub to remove visual contamination.
2. Generous tap water rinse.
3. Distilled and de-ionized water rinse.

All sampling equipment is decontaminated prior to use, and field decontaminated between each separate sampling event.

2. Soil Sampling

1. Bucket Auger (to be used for: BNS, TPH, TOC, Acid Extractables)

a) Remove unnecessary non-soil material from the sampling point.
b) Attach the bucket and handle to an extension rod.
c) Continue boring until the desired depth is attained.
d) Use a second decontaminated auger to collect the sample.
e) Wearing new surgical gloves, transfer the sample using a decontaminated hand trowel, into an appropriate, labeled container.
f) When collecting samples at depths greater than 12 inches, it is advisable to discard 1/2 inch of material on the top of the auger due to cave in.

2. Soil Corer (to be used for Volatile Organics)

a) Insert collection tube into the sampler
b) Remove unnecessary non-soil material from the sampling point.
c) Attach the corer and handle to an extension rod.
d) Continue boring until the desired depth is attained.
e) Wearing new surgical gloves, remove the collection tube and transfer to a sample container.

3. Hand Trowel

a) Clear surface debris
b) Collect sample from 0-24 inches using a decontaminated hand trowel
c) Wearing new surgical gloves, transfer the sample to the container

4. Backhoe Sampling

a) Begin with a steam cleaned backhoe
b) Operate the backhoe in a deliberate fashion removing <6 inches of soil per scoop
c) Once selected depth is attained, steam clean backhoe bucket
d) Excavate sample into bucket
e) Wearing new surgical gloves, remove a sample, using a decontaminated hand trowel. The sample is obtained from the front of the bucket, in an area not in contact with the machinery surface.
f) Place the sample into a decontaminated stainless steel bucket, and mix the sample to homogenize
g) Place the homogenized sample into an appropriate, labeled sampling container.

5. Split Spoon Sampling

a) Begin with decontaminated stainless steel split spoon sampler
b) Advance Split Spoon to desired depth
c) Wearing new surgical gloves, retrieve the sampler
d) Split the sampler and retrieve the soil core
e) Place the undisturbed soil core into an appropriate, labeled sampling container.

6. Manual Geoprobe

a) Insert collection tube into the sampler
b) Attach the corer and handle to an extension rod
c) Insert coring point and primary extension rod
d) Attach extension coupling, reverse- thread stopper, and anvil to the corer
e) Hammer corer to desired depth and release the reverse-thread stopper
f) Continue to hammer corer to collect soil matrix from desired depth
g) Wearing new surgical gloves, remove the collection tube and transfer to a sample container
h) Repeat decontamination procedures prior to re-use

7. EnCore™ Samplers

a) Using T-handle, push sampler into soil until coring body is completely full
b) Remove sampler form soil and wipe excess soil from coring body exterior
c) Cap coring body while it is still on T-handle. Push and twist cap over bottom until grooves on locking arms seat over ridge on coring body. Cap must be seated to seal sampler.

d) Remove the capped sampler from T-handle and lock plunger by rotating plunger rod counter clockwise until wings rest firmly against tab
e) Attach completed label to cap on coring body and return encore to zipper bag
f) Seal bag and put on ice

3. Sample Preservation and Transport

1. Samples will be transferred from sampling devices to appropriately preserved and labeled sampling containers.

2. After they are packaged, samples will be placed into a cooler and maintained at 4^0C immediately.

3. Samples will be delivered, within allowable holding times, with an appropriate chain of custody, to a state certified laboratory for analysis.[1]

[1] Sampling Protocol based on ASTM Standard D4700, Description and Sampling of Contaminated Soils: A Field Pocket Guide (EPA/625/12-91/002)

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GROUNDWATER SAMPLING PROTOCOL

The following is the standard sampling procedure used by React Environmental Professional Services Group, Inc. for the purpose of sampling ground water from monitoring wells[1].

Purging

All equipment entering each of the wells is dedicated solely to that well. All equipment was decontaminated and handled with new surgical gloves throughout the sampling procedure.
Immediately prior to sampling, the technician records field measurements of indicator parameters such as: temperature, pH, specific conductance and dissolved oxygen. These parameters are measured in the purge water during purging until they stabilize. This is done to allow a representative sample of the aquifer to flow into the well.

Sample Collection

All equipment and entering the well, and all sampling containers are safely stored away from potential sources of contamination during transportation. Surgical gloves are changed between each sample location.

Ground Water Sampling

After evacuation of the required volume of water from the well, a representative ground water sample is developed. A decontaminated Teflon Bottom-Fill Check Valve Bailer is lowered in the well by using a new length of PTFE cord. The bailer is retrieved and the sample is transferred to the appropriate containers. Samples analyzed for volatile organic compounds are collected utilizing VOA samplers.

VOA samplers are inserted into the bottom of the bailer, allowing samples to be collected without induced volatilization through top of bailer sample collection techniques. Vials are filled, leaving no headspace or air bubbles, and sealed. All sample containers are labeled on-site and stored for transport to the lab.

[1] Sampling protocol developed in accordance with ASTM Standard D 4448.

P.O. Box 5377
6901 Kingsessing Avenue, Suite 201
Philadelphia, PA 19142-0377

215 729.3220
215 729.1557 (Fax)
www.repsg.com

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React Environmental
Professional Services Group, Inc.

WELL WATER SAMPLING PROTOCOL

The following is the standard sampling procedure used by React Environmental Professional Services Group, Inc. for the purpose of sampling ground water from drinking wells.

Purging

Immediately prior to sampling, the technician must purge, or evacuate, three to five times the well volume. This is done to remove stagnant water and allow a representative sample of the aquifer to flow into the well. Evacuation is done by allowing a tap to run for 15 minutes or longer.

Sample Collection

Sampling should be collected from the tap closest to the pump well. If the samples are collected after a treatment unit, the size, and purpose of the unit should be noted on sample sheets and in the field logbook. All screens, if they exist, should be removed prior to sampling for bacteria, or for volatile organics.

All sampling containers are safely stored away from potential sources of contamination during transportation. Surgical gloves are changed between each sample location.

Ground Water Sampling

Water is transferred to the appropriate containers directly from the tap. Vials are filled, leaving no headspace or air bubbles, and sealed. All sample containers are labeled on-site and stored for transport to the lab.

P.O. Box 5377
6901 Kingsessing Avenue, Suite 201
Philadelphia, PA 19142-0377

215 729.3220
215 729.1557 (Fax)
www.repsg.com

ATTACHMENT 4: SOIL BORING LOGS

REPSG
React Environmental
Professional Services Group, Inc.

Boring ID: B-001

Calvert Citgo 2815 Northeast Rd
REPSG Project No.: 005977

Installation Date: 11/24/08
Drilling Contractor: SGS
Drilling Method: Geoprobe
Logged By: J.Crooks
Notes:

Borehole Dm.: 2 in.
Total Depth: 24 ft.
Water Level (ATD): 20 ft.
Water Level (AD): NA

North (ft): 741425.94
East (ft): 1599406.9
STATE PLANE COORDINATE FEET (NAD 83)

Surface Elevation (ft.): NA
NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88)

DEPTH (ft)	ELEV (ft)	CORE SAMPLE	RECOVERY	REMARKS	FID (ppm)	PID (ppm)	GRAB SAMPLE	GRAPHIC LOG	WATER LEVEL	MATERIAL DESCRIPTION
0.0										
						0				0.5 (TOPSOIL) Topsoil
						0				(CH) High Plasticity Clay brown and light brown, clay and silty clay, very dense, moist
2.0		S-1	80%			0				
						0				
4.0						0				4.0
						0				(CH) High Plasticity Clay brown and light brown, clay and silty clay, very dense, moist
6.0		S-2	100%			0				
						0				
8.0						0				8.0
						0				(CH) High Plasticity Clay brown and, with schist, dense, moist
10.0		S-3	100%			0				
						0				
12.0						0				12.0
						0				(CH) High Plasticity Clay brown and light brown, with schist, medium dense, moist
14.0		S-4	100%			0				
						0				
16.0						0				16.0
						0				(CH) High Plasticity Clay brown and light brown, with schist, medium dense, saturated
18.0		S-5	100%			0				
						0				
20.0						0			▽	20.0
						0				(CH) High Plasticity Clay brown and light brown, with schist, medium dense, very moist
22.0		S-6	100%			0				
						0				
24.0						0				24.0

Bottom of borehole at 24 ft.

REPSG
React Environmental
Professional Services Group, Inc.

Boring ID: B-002

Calvert Citgo 2815 Northeast Rd
REPSG Project No.: 005977

Installation Date: 11/5/08
Drilling Contractor: SGS
Drilling Method: Geoprobe
Logged By: J.Crooks
Notes:

Borehole Dm.: 2 in.
Total Depth: 28 ft.
Water Level (ATD): 24.5 ft.
Water Level (AD): NA

North (ft): 741443.69
East (ft): 1599479.3
STATE PLANE COORDINATE FEET (NAD 83)

Surface Elevation (ft.): NA
NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88)

DEPTH (ft)	ELEV (ft)	CORE SAMPLE	RECOVERY	REMARKS	FID (ppm)	PID (ppm)	GRAB SAMPLE	GRAPHIC LOG	WATER LEVEL	MATERIAL DESCRIPTION
0.0						0				(CH) High Plasticity Clay brown and orange, clay and silty clay, medium dense, moist
2.0		S-1	100%			0				
4.0						0				
6.0		S-2	100%			0				
8.0						0				8.0
10.0		S-3	100%			0				(CH) High Plasticity Clay brown and orange, clay and silty clay, dense, moist
12.0						0				10.0
14.0		S-4	100%	Slight solvent odors.		0				(CH) High Plasticity Clay brown and light brown, clay and silty clay, with schist, dense, moist
16.0				Slight solvent odors.		0				
18.0		S-5	100%	Slight solvent odors.		0				
20.0				Slight solvent odors.		0				
22.0		S-6	100%	Slight solvent odors.		0				
24.0				Slight solvent odors.		0				
26.0		S-7	100%	Slight solvent odors.		0				
28.0				Slight solvent odors.		0				28.0

Bottom of borehole at 28 ft.

REPSG
React Environmental
Professional Services Group, Inc.

Boring ID: B-003

Calvert Citgo 2815 Northeast Rd
REPSG Project No.: 005977

Installation Date: 11/24/08
Drilling Contractor: SGS
Drilling Method: Geoprobe
Logged By: J.Crooks
Notes:

Borehole Dm.: 2 in.
Total Depth: 24 ft.
Water Level (ATD): 20 ft.
Water Level (AD): NA

North (ft): 741462
East (ft): 1599522.9
STATE PLANE COORDINATE FEET (NAD 83)

Surface Elevation (ft.): NA
NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88)

DEPTH (ft)	ELEV (ft)	CORE SAMPLE	RECOVERY	REMARKS	FID (ppm)	PID (ppm)	GRAB SAMPLE	GRAPHIC LOG	WATER LEVEL	MATERIAL DESCRIPTION
0.0										
						0				0.5 (TOPSOIL) Topsoil
						0				(CH) with some limestone
2.0		S-1	80%			0				
						0				
4.0						0				4.0
						0				(CH) High Plasticity Clay light brown and orange, clay and silty clay, very dense, moist
6.0		S-2	100%			0				6.0
						0				(CH) High Plasticity Clay brown and light brown, with schist, dense, moist
8.0						0				8.0
						0				(CH) High Plasticity Clay brown and, with schist, dense, moist
10.0		S-3	100%			0				
						0				
12.0				Slight varnish & gasoline odors.		0				12.0
				Slight varnish & gasoline odors.		0				(CH) High Plasticity Clay brown and, with schist, very dense, moist
14.0		S-4	100%	Slight varnish & gasoline odors.		0				
				Slight varnish & gasoline odors.		0				
16.0				Strong varnish & gasoline odors.		0				16.0
				Strong varnish & gasoline odors.		0				(CH) High Plasticity Clay brown and, with schist, dense, very moist
18.0		S-5	100%	Strong varnish & gasoline odors.		0				
				Strong varnish & gasoline odors.		0				
20.0				Strong varnish & gasoline odors.		0			▽	20.0
				Strong varnish & gasoline odors.		0				
22.0		S-6	100%	Strong varnish & gasoline odors.		0				
				Strong varnish & gasoline odors.		0				
24.0				Strong varnish & gasoline odors.		0				Bottom of borehole at 24 ft.

REPSG
React Environmental
Professional Services Group, Inc.

Boring ID: B-004

Calvert Citgo 2815 Northeast Rd
REPSG Project No.: 005977

Installation Date: 11/5/08
Drilling Contractor: SGS
Drilling Method: Geoprobe
Logged By: J.Crooks
Notes:

Borehole Dm.: 2 in.
Total Depth: 24 ft.
Water Level (ATD): 21 ft.
Water Level (AD): NA

North (ft): 741475
East (ft): 1599558.8
STATE PLANE COORDINATE FEET (NAD 83)

Surface Elevation (ft.): NA
NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88)

DEPTH (ft)	ELEV (ft)	CORE SAMPLE	RECOVERY	REMARKS	FID (ppm)	PID (ppm)	GRAB SAMPLE	GRAPHIC LOG	WATER LEVEL	MATERIAL DESCRIPTION
0.0										(CH) with some sand
2.0		S-1	100%			0				
4.0						0				4.0 (CH) High Plasticity Clay light brown and orange, clay and silty clay, medium dense, moist
6.0		S-2	100%			0				
8.0				Slight varnish odors.		0				
10.0		S-3	100%	Slight varnish odors.		0				9.0 (CH) High Plasticity Clay brown and light brown, clay and silty clay, with schist, dense, moist
12.0				Slight varnish odors.		0				12.0 (CH) High Plasticity Clay brown and light brown, clay and silty clay, with schist, very dense, moist
14.0		S-4	100%	Slight petroleum odors.		40				
16.0				Slight petroleum odors.		60				
18.0		S-5	100%	Slight petroleum odors.		0				
20.0						0				20.0 (CH) High Plasticity Clay brown and light brown, clay and silty clay, with schist, dense, saturated
22.0		S-6	100%			0			▽ 21.0	(CH) High Plasticity Clay brown and light brown, clay and silty clay, with schist, dense, moist
24.0						0				24.0

Bottom of borehole at 24 ft.

REPSG
React Environmental
Professional Services Group, Inc.

Boring ID: B-005

Calvert Citgo 2815 Northeast Rd
REPSG Project No.: 005977

Installation Date: 11/5/08
Drilling Contractor: SGS
Drilling Method: Geoprobe
Logged By: J.Crooks
Notes:

Borehole Dm.: 2 in.
Total Depth: 28 ft.
Water Level (ATD): 24.5 ft.
Water Level (AD): NA

North (ft): 741409
East (ft): 1599589.6
STATE PLANE COORDINATE FEET (NAD 83)

Surface Elevation (ft.): NA
NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88)

DEPTH (ft)	ELEV (ft)	CORE SAMPLE	RECOVERY	REMARKS	FID (ppm)	PID (ppm)	GRAB SAMPLE	GRAPHIC LOG	WATER LEVEL	MATERIAL DESCRIPTION
0.0				Slight varnish odors.		0				(CH) with some sand
				Slight varnish odors.		0				
2.0		S-1	100%	Slight varnish odors.		0				
				Slight varnish odors.		0				
4.0				Slight varnish odors.		0				4.0
				Slight varnish odors.		0				(CH) with some sand
6.0		S-2	100%	Slight varnish odors.		0				
				Slight varnish odors.		0				
8.0				Slight varnish odors.		0				8.0
				Petroleum odors.		0				(CH) with some sand
10.0		S-3	100%	Petroleum odors.		0				10.0
				Petroleum odors.		0				(CH) High Plasticity Clay brown and light brown, clay and silty clay, with schist, dense, moist
12.0				Strong Petroleum odors.		0				
				Strong Petroleum odors.		0				
14.0		S-4	100%	Strong Petroleum odors.		150				
				Strong Petroleum odors.		150				
16.0				Petroleum odors.		150				
				Petroleum odors.		260				
18.0		S-5	100%	Petroleum odors.		140				
				Petroleum odors.		110				
20.0				Petroleum odors.		275				
				Petroleum odors.		200				
22.0		S-6	100%	Petroleum odors.		230				
				Petroleum odors.		350				
24.0				Petroleum odors.		210				
				Petroleum odors.		0			▽	
26.0		S-7	100%	Petroleum odors.		0				
				Petroleum odors.		120				
28.0				Petroleum odors.		120				28.0

Bottom of borehole at 28 ft.

REPSG
React Environmental
Professional Services Group, Inc.

Boring ID: B-006

Calvert Citgo 2815 Northeast Rd
REPSG Project No.: 005977

Installation Date: 11/24/08
Drilling Contractor: SGS
Drilling Method: Geoprobe
Logged By: J.Crooks
Notes:

Borehole Dm.: 2 in.
Total Depth: 20 ft.
Water Level (ATD): 20 ft.
Water Level (AD): NA

North (ft): 741300
East (ft): 1599563.3
STATE PLANE COORDINATE FEET (NAD 83)

Surface Elevation (ft.): NA
NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88)

DEPTH (ft)	ELEV (ft)	CORE SAMPLE	RECOVERY	REMARKS	FID (ppm)	PID (ppm)	GRAB SAMPLE	GRAPHIC LOG	WATER LEVEL	MATERIAL DESCRIPTION
0.0										
2.0		S-1	100%			0 0 0 0 0				(CH) High Plasticity Clay, clay and silty clay, very dense, moist
4.0									4.0	
6.0		S-2	100%			0 0 0 0 0				(CH) High Plasticity Clay light brown, clay and silty clay, very dense, moist
8.0									8.0	
10.0		S-3	100%			0 0 0 0 0				(CH) High Plasticity Clay light brown, clay and silty clay, very dense, moist
12.0									10.0	(CH) High Plasticity Clay brown and orange, with schist, very dense, moist
14.0		S-4	100%			0 0 0 0 0			12.0	(CH) High Plasticity Clay light brown and orange, with schist, dense, moist
16.0									16.0	
18.0		S-5	100%			0 0 0 0 0				(CH) High Plasticity Clay light brown and orange, with schist, dense, saturated
20.0									20.0	

Bottom of borehole at 20 ft.

REPSG
React Environmental
Professional Services Group, Inc.

Boring ID: B-007

Calvert Citgo 2815 Northeast Rd
REPSG Project No.: 005977

Installation Date: 11/5/08
Drilling Contractor: SGS
Drilling Method: Geoprobe
Logged By: J.Crooks
Notes:

Borehole Dm.: 2 in.
Total Depth: 28 ft.
Water Level (ATD): 24.5 ft.
Water Level (AD): NA

North (ft): 741360.88
East (ft): 1599454.4
STATE PLANE COORDINATE FEET (NAD 83)

Surface Elevation (ft.): NA
NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88)

DEPTH (ft)	ELEV (ft)	CORE SAMPLE	RECOVERY	REMARKS	FID (ppm)	PID (ppm)	GRAB SAMPLE	GRAPHIC LOG	WATER LEVEL	MATERIAL DESCRIPTION
0.0										
						0				0.5 (TOPSOIL) Topsoil brown orange, medium dense
						0				(CH) High Plasticity Clay brown and orange, clay and silty clay, very dense, moist
2.0		S-1	100%			0				
						0				
4.0						0				
						0				
6.0		S-2	100%			0				
						0				
8.0						0				
						0				
10.0		S-3	100%			0				10.0
						0				(CH) High Plasticity Clay brown and orange, clay and silty clay, with schist, very dense, moist
12.0				Slight solvent odors.		0				12.0
				Slight solvent odors.		0				
14.0		S-4	100%	Slight solvent odors.		0				
				Slight solvent odors.		0				
16.0				Slight solvent odors.		0				
				Slight solvent odors.		0				
18.0		S-5	100%	Slight solvent odors.		0				
				Slight solvent odors.		0				
20.0				Slight solvent odors.		0				
				Slight solvent odors.		0				
22.0		S-6	100%	Slight solvent odors.		0				
				Slight solvent odors.		0				
24.0				Slight solvent odors.		0				
				Slight solvent odors.		0			▽	(CH) High Plasticity Clay brown and light brown, clay and silty clay, with schist, very dense, saturated
26.0		S-7	100%	Slight solvent odors.		0				
				Slight solvent odors.		0				
28.0				Slight solvent odors.		0				28.0

Bottom of borehole at 28 ft.

REPSG
React Environmental
Professional Services Group, Inc.

Boring ID: B-008

Calvert Citgo 2815 Northeast Rd
REPSG Project No.: 005977

Installation Date: 11/5/08
Drilling Contractor: SGS
Drilling Method: Geoprobe
Logged By: J.Crooks
Notes:

Borehole Dm.: 2 in.
Total Depth: 28 ft.
Water Level (ATD): 24.5 ft.
Water Level (AD): NA

North (ft): 741411.31
East (ft): 1599545.3
STATE PLANE COORDINATE FEET (NAD 83)

Surface Elevation (ft.): NA
NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88)

DEPTH (ft)	ELEV (ft)	CORE SAMPLE	RECOVERY	REMARKS	FID (ppm)	PID (ppm)	GRAB SAMPLE	GRAPHIC LOG	WATER LEVEL	MATERIAL DESCRIPTION
0.0				Slight petroleum odors.		0				(CH) with some sand
				Slight petroleum odors.		0				
2.0		S-1	100%	Slight petroleum odors.		0				
				Slight petroleum odors.		0				
4.0				Slight petroleum odors.		0				
				Slight petroleum odors.		0				
6.0		S-2	100%	Slight petroleum odors.		0				
				Slight petroleum odors.		50				
8.0				Slight petroleum odors.		50			8.0	
				Strong Petroleum/Solvent odors.		3300				(CH) High Plasticity Clay brown and light brown, clay and silty clay, very dense, moist
10.0		S-3	100%	Strong Petroleum/Solvent odors.		3300				
				Strong Petroleum/Solvent odors.		3400				
12.0				Strong Petroleum/Solvent odors.		3500			12.0	
				Strong Petroleum odors.		2600				(CH) High Plasticity Clay brown and light brown, clay and silty clay, with schist, very dense, moist
14.0		S-4	100%	Strong Petroleum odors.		2700				
				Strong Petroleum odors.		2800				
16.0				Strong Petroleum odors.		2900				
				Strong Petroleum odors.		3000				
18.0		S-5	100%	Strong Petroleum odors.		3000				
				Strong Petroleum odors.		3100				
20.0				Strong Petroleum odors.		3200				
				Slight petroleum odors.		300				
22.0		S-6	100%	Slight petroleum odors.		120				
				Slight petroleum odors.		71				
24.0				Slight petroleum odors.		0			24.0	
				Slight petroleum odors.		0			▽	(CH) High Plasticity Clay brown and light brown, clay and silty clay, with schist, very dense, saturated
26.0		S-7	100%	Slight petroleum odors.		0				
				Slight petroleum odors.		0				
28.0				Slight petroleum odors.		0			28.0	

Bottom of borehole at 28 ft.

REPSG
React Environmental
Professional Services Group, Inc.

Boring ID: B-009

Calvert Citgo 2815 Northeast Rd
REPSG Project No.: 005977

Installation Date: 11/5/08
Drilling Contractor: SGS
Drilling Method: Geoprobe
Logged By: J.Crooks
Notes:

Borehole Dm.: 2 in.
Total Depth: 28 ft.
Water Level (ATD): 24.5 ft.
Water Level (AD): NA

North (ft): 741368.06
East (ft): 1599622.6
STATE PLANE COORDINATE FEET (NAD 83)

Surface Elevation (ft.): NA
NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88)

DEPTH (ft)	ELEV (ft)	CORE SAMPLE	RECOVERY	REMARKS	FID (ppm)	PID (ppm)	GRAB SAMPLE	GRAPHIC LOG	WATER LEVEL	MATERIAL DESCRIPTION
0.0		S-1	100%	Slight Petroleum/Solvent odors.		0				(CH) with some sand
				Slight Petroleum/Solvent odors.		0				
2.0				Slight Petroleum/Solvent odors.		0				
				Slight Petroleum/Solvent odors.		0				
4.0				Slight Petroleum/Solvent odors.		0				4.0
		S-2	100%	Slight petroleum odors.		0				(CH) High Plasticity Clay brown and orange, clay and silty clay, dense, moist
				Slight petroleum odors.		0				
6.0				Slight petroleum odors.		0				
				Slight petroleum odors.		0				
8.0				Slight petroleum odors.		0				
		S-3	100%	Slight petroleum odors.		0				
10.0				Slight petroleum odors.		0				
				Slight petroleum odors.		0				
12.0				Slight petroleum odors.		0				11.5
		S-4	100%	Slight petroleum odors.		0				(CH) High Plasticity Clay brown and light brown, clay and silty clay, dense, moist
				Slight petroleum odors.		0				
14.0				Slight petroleum odors.		0				
				Slight petroleum odors.		0				
16.0				Slight petroleum odors.		0				16.0
		S-5	100%	Slight petroleum odors.		0				(CH) High Plasticity Clay brown and light brown, clay and silty clay, with schist, very dense, moist
				Slight petroleum odors.		0				
18.0				Slight petroleum odors.		0				
				Slight petroleum odors.		0				
20.0				Slight petroleum odors.		0				
		S-6	100%	Slight petroleum odors.		0				
22.0				Slight petroleum odors.		0				
				Slight petroleum odors.		0				
24.0				Slight petroleum odors.		0				24.0
		S-7	100%	Slight petroleum odors.		0			▽	(CH) High Plasticity Clay brown and light brown, clay and silty clay, with schist, very dense, saturated
26.0				Slight petroleum odors.		0				
				Slight petroleum odors.		0				
28.0				Slight petroleum odors.		0				28.0

Bottom of borehole at 28 ft.

REPSG
React Environmental
Professional Services Group, Inc.

Boring ID: B-010

Calvert Citgo 2815 Northeast Rd
REPSG Project No.: 005977

Installation Date: 11/24/08
Drilling Contractor: SGS
Drilling Method: Geoprobe
Logged By: J.Crooks
Notes:

Borehole Dm.: 2 in.
Total Depth: 24 ft.
Water Level (ATD): 21 ft.
Water Level (AD): NA

North (ft): 741320.19
East (ft): 1599470.8
STATE PLANE COORDINATE FEET (NAD 83)

Surface Elevation (ft.): NA
NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88)

DEPTH (ft)	ELEV (ft)	CORE SAMPLE	RECOVERY	REMARKS	FID (ppm)	PID (ppm)	GRAB SAMPLE	GRAPHIC LOG	WATER LEVEL	MATERIAL DESCRIPTION
0.0						0				0.5 (TOPSOIL) Topsoil
						0				(CH) High Plasticity Clay light brown and orange, clay and silty clay, very dense, moist
2.0		S-1	100%			0				
						0				
4.0						0				4.0 (CH) High Plasticity Clay light brown and orange, clay and silty clay, very dense, moist
						0				
6.0		S-2	100%			0				
						0				
8.0						0				8.0 (CH) High Plasticity Clay brown, clay and silty clay, dense, moist
						0				9.0 (CH) High Plasticity Clay brown and orange, with schist, dense, moist
10.0		S-3	100%			0				
						0				
12.0						0				12.0 (CH) High Plasticity Clay brown orange, with schist, dense, moist
						0				
14.0		S-4	100%			0				
						0				
16.0						0				16.0 (CH) High Plasticity Clay reddish brown, with schist, dense, saturated
						0				
18.0		S-5	100%			0				
						0				
20.0						0				20.0 (CH) High Plasticity Clay brown orange, with schist, dense, very moist
						0			▽	
22.0		S-6	100%			0				
						0				
24.0						0				24.0

Bottom of borehole at 24 ft.

REPSG
React Environmental
Professional Services Group, Inc.

Boring ID: B-011

Calvert Citgo 2815 Northeast Rd
REPSG Project No.: 005977

Installation Date: 11/24/08
Drilling Contractor: SGS
Drilling Method: Geoprobe
Logged By: J.Crooks
Notes:

Borehole Dm.: 2 in.
Total Depth: 24 ft.
Water Level (ATD): 21 ft.
Water Level (AD): NA

North (ft): 741357.94
East (ft): 1599441.6
STATE PLANE COORDINATE FEET (NAD 83)

Surface Elevation (ft.): NA
NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88)

DEPTH (ft)	ELEV (ft)	CORE SAMPLE	RECOVERY	REMARKS	FID (ppm)	PID (ppm)	GRAB SAMPLE	GRAPHIC LOG	WATER LEVEL	MATERIAL DESCRIPTION
0.0						0				0.5 (TOPSOIL) Topsoil
						0				(CH) High Plasticity Clay brown and orange, clay and silty clay, very dense, moist
2.0		S-1	100%			0				
						0				
4.0						0				4.0
						0				(CH) High Plasticity Clay brown and light brown, clay and silty clay, very dense, moist
6.0		S-2	100%			0				
						0				
8.0						0				8.0
						0				(CH) High Plasticity Clay brown and light brown, with schist, dense, moist
10.0		S-3	100%			0				
						0				
12.0						0				12.0
						0				(CH) High Plasticity Clay brown and light brown, with schist, dense, moist
14.0		S-4	100%			0				
						0				
16.0						0				16.0
						0				(CH) High Plasticity Clay brown and light brown, with schist, medium dense, saturated
18.0		S-5	100%			0				
						0				
20.0						0				20.0
						0			▽	(CH) High Plasticity Clay brown and, with schist, medium dense, very moist
22.0		S-6	100%			0				
						0				
24.0						0				24.0

Bottom of borehole at 24 ft.

REPSG
React Environmental
Professional Services Group, Inc.

Boring ID: B-012

Calvert Citgo 2815 Northeast Rd
REPSG Project No.: 005977

Installation Date: 11/24/08
Drilling Contractor: SGS
Drilling Method: Geoprobe
Logged By: J.Crooks
Notes:

Borehole Dm.: 2 in.
Total Depth: 20 ft.
Water Level (ATD): 20 ft.
Water Level (AD): NA

North (ft): 741295.69
East (ft): 1599539.6
STATE PLANE COORDINATE FEET (NAD 83)

Surface Elevation (ft.): NA
NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88)

DEPTH (ft)	ELEV (ft)	CORE SAMPLE	RECOVERY	REMARKS	FID (ppm)	PID (ppm)	GRAB SAMPLE	GRAPHIC LOG	WATER LEVEL	MATERIAL DESCRIPTION
0.0						0				0.5 (TOPSOIL) Topsoil
						0				(CH) High Plasticity Clay light brown and orange, clay and silty clay, very dense, moist
2.0		S-1	100%			0				
						0				
4.0						0				4.0 (CH) High Plasticity Clay light brown and orange, clay and silty clay, very dense, moist
						0				
6.0		S-2	100%			0				
						0				
8.0						0				8.0 (CH) High Plasticity Clay brown, clay and silty clay, dense, moist
						0				9.0 (CH) High Plasticity Clay brown and orange, with schist, dense, moist
10.0		S-3	100%			0				
						0				
12.0						0				12.0 (CH) High Plasticity Clay brown orange, with schist, dense, moist
						0				
14.0		S-4	100%			0				
						0				
16.0						0				16.0 (CH) High Plasticity Clay reddish brown, with schist, dense, saturated
						0				
18.0		S-5	100%			0				
						0				
20.0						0			▽	20.0

Bottom of borehole at 20 ft.

ATTACHMENT 5: ANALYTICAL LABORATORY REPORTS

ANALYTICAL LABORATORY SERVICES, INC.
www.analyticallab.com
NELAP Accredited
PA 22-293 NJ PA010
ACCREDITED IN ACCORDANCE WITH nelac
34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

Certificate of Analysis

Project Name:	**MD SITE - SOILS - MDE -REV**	Workorder:	**9762523**
Purchase Order:		Workorder ID:	**Soil (11/05/08)**

Mr. Mark Kuczynski
REPSG
6901 Kingsessing Ave., Ste 201
PO Box 5377
Philadelphia, PA 19142

November 13, 2008

Dear Mr. Kuczynski,

Enclosed are the analytical results for samples received by the laboratory on Thursday, November 06, 2008

ALSI is a National Environmental Laboratory Accreditation Conference (NELAC) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAC.

If you have any questions regarding this certificate of analysis, please contact Anna Milliken (Project Coordinator) or Anna G Milliken (Laboratory Manager) at (717) 944-5541.

Please visit us at www.analyticallab.com for a listing of ALSI's NELAC accreditations and Scope of Work, as well as other links to Water Quality documentation on the internet.

NOTE: ALSI has changed the report generation tool and while we have tried to retain the existing format, you will notice some changes in the laboratory report. Please feel free to contact ALSI in case you have any questions.

Analytical Laboratory Services, Inc.

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Anna G Milliken
Laboratory Manager

ANALYTICAL LABORATORY SERVICES, INC.
www.analyticallab.com
NELAP Accredited
PA 22-293 NJ PA010
ACCREDITED IN ACCORDANCE WITH nelac
34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

SAMPLE SUMMARY

Workorder: 9762523 Soil (11/05/08) Discard Date: 11/27/2008

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
9762523001	B-002:24_20081105_N	Solid	11/5/08 18:00	11/6/08 19:49	Brenda MacPhail
9762523002	B-004:16_20081105_N	Solid	11/5/08 10:50	11/6/08 19:49	Brenda MacPhail
9762523003	B-005:23_20081105_N	Solid	11/5/08 13:30	11/6/08 19:49	Brenda MacPhail
9762523004	B-007:24_20081105_N	Solid	11/5/08 16:40	11/6/08 19:49	Brenda MacPhail
9762523005	B-008:12_20081105_N	Solid	11/5/08 14:10	11/6/08 19:49	Brenda MacPhail
9762523006	Duplicate-001_20081105_FD	Solid	11/5/08 00:00	11/6/08 19:49	Brenda MacPhail
9762523007	B-009:24_20081105_N	Solid	11/5/08 15:30	11/6/08 19:49	Brenda MacPhail

Workorder Comments:

Notes

-- Samples collected by ALSI personnel are done so in accordance with the procedures set forth in the ALSI Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

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ANALYTICAL RESULTS

Workorder: 9762523 Soil (11/05/08)

Lab ID: **9762523001** Date Collected: 11/5/2008 18:00 Matrix: Solid

Sample ID: **B-002:24_20081105_N** Date Received: 11/6/2008 19:49

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's										
Diesel Range Organics C10-C28	ND		mg/kg	6.4	SW846 8015D	11/7/08	CMG	11/9/08 08:52	KJH	A1
Gasoline Range Organics	ND		ug/kg	10600	SW846 8015D	11/7/08	TEH	11/10/08 14:34	TEH	E1
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	82.2		%	46-124	SW846 8015D	11/7/08	CMG	11/9/08 08:52	KJH	A1
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	99.1		%	25-166	SW846 8015D	11/7/08	TEH	11/10/08 14:34	TEH	E1
VOLATILE ORGANICS										
Acetone	ND		ug/kg	26.8	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
tert-Amyl methyl ether	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
tert-Amyl Alcohol	ND		ug/kg	5.4	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
tert-Amyl Ethylether	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
Benzene	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
Bromochloromethane	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
Bromodichloromethane	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
Bromoform	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
Bromomethane	ND		ug/kg	4.3	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
2-Butanone	ND		ug/kg	10.7	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
tert.- Butyl Alcohol	ND		ug/kg	11	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
Carbon Disulfide	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
Carbon Tetrachloride	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
Chlorobenzene	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
Chlorodibromomethane	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
Chloroethane	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
Chloroform	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
Chloromethane	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.3	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
1,2-Dibromoethane	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
1,1-Dichloroethane	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
1,2-Dichloroethane	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
1,1-Dichloroethene	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
cis-1,2-Dichloroethene	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
trans-1,2-Dichloroethene	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
1,2-Dichloropropane	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
cis-1,3-Dichloropropene	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
trans-1,3-Dichloropropene	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
Diisopropyl ether	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
Ethyl tert-butyl ether	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
Ethylbenzene	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
2-Hexanone	ND		ug/kg	10.7	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
Methyl t-Butyl Ether	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
4-Methyl-2-Pentanone(MIBK)	ND		ug/kg	10.7	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D

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ANALYTICAL RESULTS

Workorder: 9762523 Soil (11/05/08)

Lab ID: **9762523001** Date Collected: 11/5/2008 18:00 Matrix: Solid

Sample ID: **B-002:24_20081105_N** Date Received: 11/6/2008 19:49

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	5.8		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
Styrene	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
Tetrachloroethene	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
Toluene	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
Total Xylenes	ND		ug/kg	6.4	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
1,1,1-Trichloroethane	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
1,1,2-Trichloroethane	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
Trichloroethene	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
Vinyl Chloride	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
o-Xylene	ND		ug/kg	2.1	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
mp-Xylene	ND		ug/kg	4.3	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	86		%	56-124	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
4-Bromofluorobenzene (S)	74		%	51-128	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
Dibromofluoromethane (S)	89		%	62-123	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
Toluene-d8 (S)	90		%	59-131	8260/5035	11/7/08	JAH	11/10/08 11:51	JAH	D
WET CHEMISTRY										
Moisture	16.8		%	0.1	SM20-2540 G			11/7/08 07:40	EL	A
Total Solids	83.2		%	0.1	SM20-2540 G			11/7/08 07:40	EL	A

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9762523 Soil (11/05/08)

Lab ID: **9762523002** Date Collected: 11/5/2008 10:50 Matrix: Solid

Sample ID: **B-004:16_20081105_N** Date Received: 11/6/2008 19:49

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Acetone	ND		ug/kg	29.1	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
tert-Amyl methyl ether	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
tert-Amyl Alcohol	ND		ug/kg	5.8	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
tert-Amyl Ethylether	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
Benzene	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
Bromochloromethane	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
Bromodichloromethane	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
Bromoform	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
Bromomethane	ND		ug/kg	4.7	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
2-Butanone	ND		ug/kg	11.6	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
tert.- Butyl Alcohol	ND		ug/kg	12	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
Carbon Disulfide	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
Carbon Tetrachloride	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
Chlorobenzene	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
Chlorodibromomethane	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
Chloroethane	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
Chloroform	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
Chloromethane	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.7	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
1,2-Dibromoethane	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
1,1-Dichloroethane	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
1,2-Dichloroethane	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
1,1-Dichloroethene	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
cis-1,2-Dichloroethene	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
trans-1,2-Dichloroethene	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
1,2-Dichloropropane	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
cis-1,3-Dichloropropene	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
trans-1,3-Dichloropropene	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
Diisopropyl ether	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
Ethyl tert-butyl ether	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
Ethylbenzene	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
2-Hexanone	ND		ug/kg	11.6	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
Methyl t-Butyl Ether	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
4-Methyl-2-Pentanone(MIBK)	ND		ug/kg	11.6	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
Methylene Chloride	7.4		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
Styrene	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
Tetrachloroethene	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
Toluene	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
Total Xylenes	ND		ug/kg	7.0	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
1,1,1-Trichloroethane	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
1,1,2-Trichloroethane	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
Trichloroethene	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
Vinyl Chloride	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D

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ANALYTICAL RESULTS

Workorder: 9762523 Soil (11/05/08)

Lab ID: **9762523002** Date Collected: 11/5/2008 10:50 Matrix: Solid

Sample ID: **B-004:16_20081105_N** Date Received: 11/6/2008 19:49

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
o-Xylene	ND		ug/kg	2.3	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
mp-Xylene	ND		ug/kg	4.7	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	92		%	56-124	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
4-Bromofluorobenzene (S)	75		%	51-128	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
Dibromofluoromethane (S)	94		%	62-123	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
Toluene-d8 (S)	88		%	59-131	8260/5035	11/7/08	JAH	11/10/08 12:22	JAH	D
PETROLEUM HC's										
Diesel Range Organics C10-C28	ND		mg/kg	7.0	SW846 8015D	11/7/08	CMG	11/9/08 10:58	KJH	A1
Gasoline Range Organics	ND		ug/kg	11700	SW846 8015D	11/7/08	TEH	11/10/08 15:07	TEH	E1
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	70		%	46-124	SW846 8015D	11/7/08	CMG	11/9/08 10:58	KJH	A1
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	96.9		%	25-166	SW846 8015D	11/7/08	TEH	11/10/08 15:07	TEH	E1
WET CHEMISTRY										
Moisture	24.0		%	0.1	SM20-2540 G			11/7/08 07:40	EL	A
Total Solids	76.0		%	0.1	SM20-2540 G			11/7/08 07:40	EL	A

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9762523 Soil (11/05/08)

Lab ID: **9762523003** Date Collected: 11/5/2008 13:30 Matrix: Solid

Sample ID: **B-005:23_20081105_N** Date Received: 11/6/2008 19:49

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's										
Diesel Range Organics C10-C28	ND		mg/kg	7.1	SW846 8015D	11/7/08	CMG	11/9/08 14:07	KJH	A1
Gasoline Range Organics	30900		ug/kg	13200	SW846 8015D	11/7/08	TEH	11/10/08 15:42	TEH	E1
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	67.5		%	46-124	SW846 8015D	11/7/08	CMG	11/9/08 14:07	KJH	A1
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	95.1		%	25-166	SW846 8015D	11/7/08	TEH	11/10/08 15:42	TEH	E1
VOLATILE ORGANICS										
Acetone	316		ug/kg	30.2	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
tert-Amyl methyl ether	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
tert-Amyl Ethylether	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
Benzene	1550		ug/kg	60.1	8260/5035	11/7/08	JAH	11/10/08 06:35	MES	B
Bromochloromethane	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
Bromodichloromethane	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
Bromoform	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
Bromomethane	ND		ug/kg	4.8	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
2-Butanone	259		ug/kg	12.1	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
tert.- Butyl Alcohol	ND		ug/kg	12	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
Carbon Disulfide	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
Carbon Tetrachloride	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
Chlorobenzene	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
Chlorodibromomethane	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
Chloroethane	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
Chloroform	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
Chloromethane	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.8	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
1,2-Dibromoethane	21.7		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
1,1-Dichloroethane	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
1,2-Dichloroethane	45.9		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
1,1-Dichloroethene	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
cis-1,2-Dichloroethene	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
trans-1,2-Dichloroethene	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
1,2-Dichloropropane	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
cis-1,3-Dichloropropene	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
trans-1,3-Dichloropropene	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
Diisopropyl ether	5.4		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
Ethyl tert-butyl ether	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
Ethylbenzene	178		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
2-Hexanone	49.7		ug/kg	12.1	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
Methyl t-Butyl Ether	8.5		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
4-Methyl-2-Pentanone(MIBK)	ND		ug/kg	12.1	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
Methylene Chloride	6.9		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C

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ANALYTICAL RESULTS

Workorder: 9762523 Soil (11/05/08)

Lab ID: **9762523003** Date Collected: 11/5/2008 13:30 Matrix: Solid

Sample ID: **B-005:23_20081105_N** Date Received: 11/6/2008 19:49

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Styrene	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
Tetrachloroethene	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
Toluene	3520		ug/kg	60.1	8260/5035	11/7/08	JAH	11/10/08 06:35	MES	B
Total Xylenes	1260		ug/kg	180	8260/5035	11/7/08	JAH	11/10/08 06:35	MES	B
1,1,1-Trichloroethane	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
1,1,2-Trichloroethane	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
Trichloroethene	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
Vinyl Chloride	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
o-Xylene	397		ug/kg	60.1	8260/5035	11/7/08	JAH	11/10/08 06:35	MES	B
mp-Xylene	868		ug/kg	120	8260/5035	11/7/08	JAH	11/10/08 06:35	MES	B
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	89.9		%	71-146	8260/5035	11/7/08	JAH	11/10/08 06:35	MES	B
4-Bromofluorobenzene (S)	113		%	46-138	8260/5035	11/7/08	JAH	11/10/08 06:35	MES	B
Dibromofluoromethane (S)	99.7		%	42-143	8260/5035	11/7/08	JAH	11/10/08 06:35	MES	B
Toluene-d8 (S)	109		%	54-141	8260/5035	11/7/08	JAH	11/10/08 06:35	MES	B
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	75		%	56-124	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
4-Bromofluorobenzene (S)	80		%	51-128	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
Dibromofluoromethane (S)	78		%	62-123	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
Toluene-d8 (S)	83		%	59-131	8260/5035	11/7/08	JAH	11/7/08 14:48	MES	C
WET CHEMISTRY										
Moisture	25.5		%	0.1	SM20-2540 G			11/7/08 07:40	EL	A
Total Solids	74.5		%	0.1	SM20-2540 G			11/7/08 07:40	EL	A

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9762523 Soil (11/05/08)

Lab ID: **9762523004** Date Collected: 11/5/2008 16:40 Matrix: Solid

Sample ID: **B-007:24_20081105_N** Date Received: 11/6/2008 19:49

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's										
Diesel Range Organics C10-C28	ND		mg/kg	7.1	SW846 8015D	11/7/08	CMG	11/9/08 15:10	KJH	A1
Gasoline Range Organics	ND		ug/kg	12400	SW846 8015D	11/7/08	TEH	11/10/08 16:16	TEH	E1
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	78.4		%	46-124	SW846 8015D	11/7/08	CMG	11/9/08 15:10	KJH	A1
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	92.9		%	25-166	SW846 8015D	11/7/08	TEH	11/10/08 16:16	TEH	E1
VOLATILE ORGANICS										
Acetone	ND		ug/kg	30.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
tert-Amyl methyl ether	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
tert-Amyl Alcohol	ND		ug/kg	6.1	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
tert-Amyl Ethylether	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
Benzene	2.5		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
Bromochloromethane	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
Bromodichloromethane	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
Bromoform	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
Bromomethane	ND		ug/kg	4.9	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
2-Butanone	ND		ug/kg	12.2	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
tert.- Butyl Alcohol	ND		ug/kg	12	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
Carbon Disulfide	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
Carbon Tetrachloride	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
Chlorobenzene	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
Chlorodibromomethane	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
Chloroethane	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
Chloroform	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
Chloromethane	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.9	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
1,2-Dibromoethane	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
1,1-Dichloroethane	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
1,2-Dichloroethane	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
1,1-Dichloroethene	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
cis-1,2-Dichloroethene	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
trans-1,2-Dichloroethene	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
1,2-Dichloropropane	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
cis-1,3-Dichloropropene	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
trans-1,3-Dichloropropene	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
Diisopropyl ether	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
Ethyl tert-butyl ether	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
Ethylbenzene	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
2-Hexanone	ND		ug/kg	12.2	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
Methyl t-Butyl Ether	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
4-Methyl-2-Pentanone(MIBK)	ND		ug/kg	12.2	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D

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ANALYTICAL RESULTS

Workorder: 9762523 Soil (11/05/08)

Lab ID: **9762523004** Date Collected: 11/5/2008 16:40 Matrix: Solid

Sample ID: **B-007:24_20081105_N** Date Received: 11/6/2008 19:49

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	7.1		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
Styrene	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
Tetrachloroethene	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
Toluene	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
Total Xylenes	ND		ug/kg	7.3	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
1,1,1-Trichloroethane	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
1,1,2-Trichloroethane	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
Trichloroethene	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
Vinyl Chloride	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
o-Xylene	ND		ug/kg	2.4	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
mp-Xylene	ND		ug/kg	4.9	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	85		%	56-124	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
4-Bromofluorobenzene (S)	73		%	51-128	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
Dibromofluoromethane (S)	90		%	62-123	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
Toluene-d8 (S)	91		%	59-131	8260/5035	11/7/08	JAH	11/10/08 12:54	JAH	D
WET CHEMISTRY										
Moisture	25.5		%	0.1	SM20-2540 G			11/7/08 07:40	EL	A
Total Solids	74.5		%	0.1	SM20-2540 G			11/7/08 07:40	EL	A

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9762523 Soil (11/05/08)

Lab ID: **9762523005** Date Collected: 11/5/2008 14:10 Matrix: Solid

Sample ID: **B-008:12_20081105_N** Date Received: 11/6/2008 19:49

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's										
Diesel Range Organics C10-C28	58.6		mg/kg	7.5	SW846 8015D	11/7/08	CMG	11/9/08 16:13	KJH	A1
Gasoline Range Organics	145000		ug/kg	13900	SW846 8015D	11/7/08	TEH	11/10/08 19:43	TEH	E1
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	74.7		%	46-124	SW846 8015D	11/7/08	CMG	11/9/08 16:13	KJH	A1
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	87.4		%	25-166	SW846 8015D	11/7/08	TEH	11/10/08 19:43	TEH	E1
VOLATILE ORGANICS										
Acetone	1380		ug/kg	657	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
Benzene	438		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
Bromochloromethane	ND		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
Bromodichloromethane	ND		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
Bromoform	ND		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
Bromomethane	ND		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
2-Butanone	939		ug/kg	657	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
Carbon Disulfide	ND		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
Carbon Tetrachloride	ND		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
Chlorobenzene	ND		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
Chlorodibromomethane	ND		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
Chloroethane	ND		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
Chloroform	ND		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
Chloromethane	ND		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
1,2-Dibromo-3-chloropropane	ND		ug/kg	460	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
1,2-Dibromoethane	91.6		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
1,1-Dichloroethane	ND		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
1,2-Dichloroethane	79.6		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
1,1-Dichloroethene	ND		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
cis-1,2-Dichloroethene	ND		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
trans-1,2-Dichloroethene	ND		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
1,2-Dichloropropane	ND		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
cis-1,3-Dichloropropene	ND		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
trans-1,3-Dichloropropene	ND		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
Ethylbenzene	1560		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
2-Hexanone	ND		ug/kg	329	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
4-Methyl-2-Pentanone(MIBK)	592		ug/kg	329	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
Methylene Chloride	ND		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
Styrene	ND		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
1,1,2,2-Tetrachloroethane	ND		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
Tetrachloroethene	ND		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
Toluene	3340		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
Total Xylenes	8620		ug/kg	197	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
1,1,1-Trichloroethane	ND		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B

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ANALYTICAL RESULTS

Workorder: 9762523 Soil (11/05/08)

Lab ID: **9762523005** Date Collected: 11/5/2008 14:10 Matrix: Solid

Sample ID: **B-008:12_20081105_N** Date Received: 11/6/2008 19:49

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
1,1,2-Trichloroethane	219		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
Trichloroethene	ND		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
Vinyl Chloride	ND		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
o-Xylene	2620		ug/kg	65.7	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
mp-Xylene	6000		ug/kg	131	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	76.4		%	71-146	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
4-Bromofluorobenzene (S)	104		%	46-138	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
Dibromofluoromethane (S)	85.1		%	42-143	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
Toluene-d8 (S)	97.1		%	54-141	8260/5035	11/7/08	JAH	11/8/08 06:06	DD	B
WET CHEMISTRY										
Moisture	30.1		%	0.1	SM20-2540 G			11/7/08 07:40	EL	A
Total Solids	69.9		%	0.1	SM20-2540 G			11/7/08 07:40	EL	A

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9762523 Soil (11/05/08)

Lab ID: **9762523006** Date Collected: 11/5/2008 00:00 Matrix: Solid

Sample ID: **Duplicate-001_20081105_FD** Date Received: 11/6/2008 19:49

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's										
Diesel Range Organics C10-C28	99.5		mg/kg	14.0	SW846 8015D	11/7/08	CMG	11/13/08 12:05	KJH	A1
Gasoline Range Organics	49000		ug/kg	13200	SW846 8015D	11/7/08	TEH	11/10/08 16:51	TEH	E1
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	105		%	46-124	SW846 8015D	11/7/08	CMG	11/13/08 12:05	KJH	A1
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	97.5		%	25-166	SW846 8015D	11/7/08	TEH	11/10/08 16:51	TEH	E1
VOLATILE ORGANICS										
Acetone	1350		ug/kg	644	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
Benzene	2880		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
Bromochloromethane	ND		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
Bromodichloromethane	ND		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
Bromoform	ND		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
Bromomethane	ND		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
2-Butanone	1250		ug/kg	644	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
Carbon Disulfide	ND		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
Carbon Tetrachloride	ND		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
Chlorobenzene	ND		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
Chlorodibromomethane	ND		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
Chloroethane	ND		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
Chloroform	ND		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
Chloromethane	ND		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
1,2-Dibromo-3-chloropropane	ND		ug/kg	451	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
1,2-Dibromoethane	183		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
1,1-Dichloroethane	ND		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
1,2-Dichloroethane	147		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
1,1-Dichloroethene	ND		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
cis-1,2-Dichloroethene	ND		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
trans-1,2-Dichloroethene	ND		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
1,2-Dichloropropane	ND		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
cis-1,3-Dichloropropene	ND		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
trans-1,3-Dichloropropene	ND		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
Ethylbenzene	10500		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
2-Hexanone	ND		ug/kg	322	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
4-Methyl-2-Pentanone(MIBK)	3100		ug/kg	322	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
Methylene Chloride	ND		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
Styrene	ND		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
1,1,2,2-Tetrachloroethane	ND		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
Tetrachloroethene	ND		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
Toluene	30100		ug/kg	322	8260/5035	11/7/08	MES	11/12/08 05:32	MES	B
Total Xylenes	57500		ug/kg	967	8260/5035	11/7/08	MES	11/12/08 05:32	MES	B
1,1,1-Trichloroethane	ND		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B

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ANALYTICAL RESULTS

Workorder: 9762523 Soil (11/05/08)

Lab ID: **9762523006** Date Collected: 11/5/2008 00:00 Matrix: Solid

Sample ID: **Duplicate-001_20081105_FD** Date Received: 11/6/2008 19:49

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
1,1,2-Trichloroethane	1290		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
Trichloroethene	ND		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
Vinyl Chloride	ND		ug/kg	64.4	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
o-Xylene	15900		ug/kg	322	8260/5035	11/7/08	MES	11/12/08 05:32	MES	B
mp-Xylene	41700		ug/kg	644	8260/5035	11/7/08	MES	11/12/08 05:32	MES	B
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	80.9		%	71-146	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
4-Bromofluorobenzene (S)	102		%	46-138	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
Toluene-d8 (S)	99.1		%	54-141	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
Dibromofluoromethane (S)	86.6		%	42-143	8260/5035	11/7/08	JAH	11/8/08 06:33	DD	B
1,2-Dichloroethane-d4 (S)	96.1		%	71-146	8260/5035	11/7/08	MES	11/12/08 05:32	MES	B
Toluene-d8 (S)	97.2		%	54-141	8260/5035	11/7/08	MES	11/12/08 05:32	MES	B
Dibromofluoromethane (S)	94		%	42-143	8260/5035	11/7/08	MES	11/12/08 05:32	MES	B
4-Bromofluorobenzene (S)	90.5		%	46-138	8260/5035	11/7/08	MES	11/12/08 05:32	MES	B
WET CHEMISTRY										
Moisture	25.8		%	0.1	SM20-2540 G			11/7/08 07:40	EL	A
Total Solids	74.2		%	0.1	SM20-2540 G			11/7/08 07:40	EL	A

Sample Comments:

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected. Reporting limits were adjusted accordingly.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9762523 Soil (11/05/08)

Lab ID: **9762523007** Date Collected: 11/5/2008 15:30 Matrix: Solid

Sample ID: **B-009:24_20081105_N** Date Received: 11/6/2008 19:49

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's										
Diesel Range Organics C10-C28	ND		mg/kg	6.5	SW846 8015D	11/7/08	CMG	11/9/08 18:19	KJH	A1
Gasoline Range Organics	ND		ug/kg	11600	SW846 8015D	11/7/08	TEH	11/10/08 17:26	TEH	E1
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	83.7		%	46-124	SW846 8015D	11/7/08	CMG	11/9/08 18:19	KJH	A1
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	93.8		%	25-166	SW846 8015D	11/7/08	TEH	11/10/08 17:26	TEH	E1
VOLATILE ORGANICS										
Acetone	ND		ug/kg	28.1	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
tert-Amyl methyl ether	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
tert-Amyl Alcohol	ND		ug/kg	5.6	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
tert-Amyl Ethylether	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
Benzene	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
Bromochloromethane	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
Bromodichloromethane	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
Bromoform	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
Bromomethane	ND		ug/kg	4.5	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
2-Butanone	ND		ug/kg	11.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
tert.- Butyl Alcohol	ND		ug/kg	11	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
Carbon Disulfide	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
Carbon Tetrachloride	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
Chlorobenzene	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
Chlorodibromomethane	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
Chloroethane	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
Chloroform	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
Chloromethane	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.5	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
1,2-Dibromoethane	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
1,1-Dichloroethane	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
1,2-Dichloroethane	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
1,1-Dichloroethene	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
cis-1,2-Dichloroethene	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
trans-1,2-Dichloroethene	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
1,2-Dichloropropane	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
cis-1,3-Dichloropropene	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
trans-1,3-Dichloropropene	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
Diisopropyl ether	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
Ethyl tert-butyl ether	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
Ethylbenzene	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
2-Hexanone	ND		ug/kg	11.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
Methyl t-Butyl Ether	4.0		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
4-Methyl-2-Pentanone(MIBK)	ND		ug/kg	11.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C

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ANALYTICAL RESULTS

Workorder: 9762523 Soil (11/05/08)

Lab ID: **9762523007** Date Collected: 11/5/2008 15:30 Matrix: Solid

Sample ID: **B-009:24_20081105_N** Date Received: 11/6/2008 19:49

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	10		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
Styrene	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
Tetrachloroethene	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
Toluene	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
Total Xylenes	ND		ug/kg	6.7	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
1,1,1-Trichloroethane	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
1,1,2-Trichloroethane	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
Trichloroethene	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
Vinyl Chloride	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
o-Xylene	ND		ug/kg	2.2	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
mp-Xylene	ND		ug/kg	4.5	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	81		%	56-124	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
4-Bromofluorobenzene (S)	77		%	51-128	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
Dibromofluoromethane (S)	86		%	62-123	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
Toluene-d8 (S)	94		%	59-131	8260/5035	11/7/08	JAH	11/7/08 16:33	MES	C
WET CHEMISTRY										
Moisture	18.4		%	0.1	SM20-2540 G			11/7/08 07:40	EL	A
Total Solids	81.6		%	0.1	SM20-2540 G			11/7/08 07:40	EL	A

Sample Comments:

Anna G Milliken
Laboratory Manager

Report ID: 9762523

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Page 1 of 2

Courier:

Tracking #:

9762523

Co. Name: REPSG, Inc

Contact (Report to): mkuczynski Phone: 215-729-3220

Address: 6901 Kingsessing Avenue
Philadelphia, Pa. 19142 2nd Floor

Bill to (if different than Report to): same as above PO#: 2589

Project Name/#: Calvert Citgo #5977.130.01 ALSI Quote #: 111218

TAT: ☑ Normal-Standard 7 to 10-12 business days. ☐ Rush-Subject to ALSI approval and surcharges. Date Required: 7 days Approved By: Dan Beahen

Email? ☑ Y mkuczynski@repsg.com

Fax? ☐ Y No.:

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	VOC's by Method 8260 include TBA + MTBE	TPH-DRO method 8015B	TPH-GRO method 8015B
1 B-001:		11/5/08		G	S	X3	X1	X1
2 B-002:		11/5/08	18:00	G	S	X3	X1	X1
3 B-003: 24		11/5/08	18:00	G	S	X3	X1	X1
4 B-004: 16		11/5/08	10:50	G	S	X3	X1	X1
5 B-005: 23		11/5/08	13:30	G	S	X3	X1	X1
6 B-006:		11/5/08		G	S	X3	X1	X1
7 B-007: 24		11/5/08	16:40	G	S	X3	X1	X1
8 B-008: 12		11/5/08	14:00	G	S	X3	X1	X1

Enter Number of Containers Per Analysis

	Container Type	Container Size	Preservative
	Enc	CG	Enc
	5g	4oz	5g
	UP	UP	UP

ANALYSES/METHOD REQUESTED

Receipt Information (completed by Sample Receiver)
Performed by: Rich Lewis
Cooler Temp: 1
Therm. ID: S102358
No. of Coolers:
Notes:

	Circle appropriate Y or N.
Correct containers?	Y N
Correct sample volume?	Y N
Correct preservation?	Y N
Headspace/Volatiles?	Y N
COC/Labels complete/accurate?	Y N
Container in good condition?	Y N
Custody seals Present?	Y N
(If present) Seals intact?	Y N
Received on Ice?	Y N

SAMPLED BY (Please Print): per email from M. Kuczynski Brenda L MacNeil 11/7/08

LOGGED BY (signature): DATE 11-07-08 TIME 0804

REVIEWED BY (signature): DATE 11/12/08 TIME 1737

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1	11/6	1820	2 Ron Hodges	11-6	1220
3 Ron Hodges	11-6	1800	4 VM	11/6	1800
5 VM	11/6	1949	6	11/6	1949
7			8		
9			10		

Data Deliverables: ☐ Standard ☐ CLP-like ☐ NJ-Reduced ☐ NJ-Full ☐

EDDs Required? ☑ If yes, format type: EQUIS

SDWA Forms? yes ☐

State Samples Collected In? MD ☑ NJ ☐ NY ☐ PA ☐ Other

DOD Criteria Required?

ALSI FIELD SERVICES: ☑ Pickup ☐ Labor ☐ Composite Sampling ☐ Rental Equipment ☐ Other:

* G=Grab; C=Composite

**Matrix: Al=Air; DW=Drinking Water; GW=Groundwater; Oi=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY

***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

Rev 6/07

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Environmental • Industrial Hygiene • Field Services
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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT/ SAMPLER. INSTRUCTIONS ON THE BACK.

Courier:

Tracking #:

9762523

Co. Name: REPSG, Inc

Contact (Report to): Mark Kuczynski Phone:

Address: 6901 Kingessing Avenue 215.729.3220
Phila, Pa 19142 2nd Floor

Bill to (if different than Report to): Same as above PO#: 2589

Project Name/#: Calvert Citgo #5977.130.01 ALSI Quote #: 111218

TAT: ✓ Normal-Standard TAT is 5 business days. Date Required:
Rush-Subject to ALSI approval and surcharges. Approved By: Dan Beahan

Email? ✓ Y mkuczynski@repsg.com

Fax? Y No.:

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	VOC's by method 8260 include TBA + MTBE	TPH - DRO method 8015B	TPH - GRO method 8015B							
						Enter Number of Containers Per Analysis									
1 Duplicate-001:		11.5.08	X	G	S	X3	X1	X1							
2 B-009:24		11.5.08	15:30	G	S	X3	X1	X1							
3															
4															
5															
6															
7															
8															

***Container Type: Enc. CG Enc
***Container Size: 5g 4oz 5g
***Preservative: UP UP UP

ANALYSES/METHOD REQUESTED

Receipt Information (completed by Sample Receipt)
Performed In: Client Lab
Cooler Temp: 1
Therm. ID: 5102359
No. of Coolers:
Notes:

	Correct containers?	Correct sample volumes?	Correct preservation?	Headspace/Volatiles?	Circle appropriate Y or N.
	Y N	Y N	Y N	Y N	
	Y N	Y N	Y N	Y N	
	Y N	Y N	Y N	Y N	
	Y N	Y N	Y N	Y N	
	Y N	Y N	Y N	Y N	
	Y N	Y N	Y N	Y N	
	Y N	Y N	Y N	Y N	
	Y N	Y N	Y N	Y N	

	Custody seals Present?	(if present) Seals intact?	Received on ice?	COC/Labels complete/accurate?	Container in good condition?
	Y N	Y N	Y N	Y N	Y N
	Y N	Y N	Y N	Y N	Y N
	Y N	Y N	Y N	Y N	Y N
	Y N	Y N	Y N	Y N	Y N
	Y N	Y N	Y N	Y N	Y N
	Y N	Y N	Y N	Y N	Y N
	Y N	Y N	Y N	Y N	Y N
	Y N	Y N	Y N	Y N	Y N

SAMPLED BY (Please Print):

LOGGED BY(signature): DATE: 11/7/08 #0104

REVIEWED BY(signature): DATE: 11/12/08 #1937

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1	11/6	12:20	2 Ron Hodges	11-6	1220
3 Ron Hodges	11-6	1800	4 VM	11/6	1800
5 VM	11/6	1949	6 Ronald Winn	11/6	1949
7			8		
9			10		

Data Deliverables: ☐ Standard ☐ CLP-Like ☐ NJ-Reduced ☐ NJ-Full ☐

EDDs Required? ✓ If yes, format type: EQUIS

SDWA Forms? ⇨ yes ☐ yes ☐ yes ☐ yes ☐

State Samples Collected in? MD ☒ NJ ☐ NY ☐ PA ☐

Other

DOD Criteria Required?

ALSI FIELD SERVICES
☒ Pickup
☐ Labor
☐ Composite Sampling
☐ Rental Equipment
☐ Other:

* G=Grab; C=Composite

**Matrix: Al=Air; DW=Drinking Water; GW=Groundwater; Oil=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

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Susan J. Baer

From: Mark Kuczynski [Mkuczynski@repsg.com]
Sent: Friday, November 07, 2008 10:02 AM
To: Susan J. Baer
Subject: RE: MD job

You can have Brenda MacPhail as the sampler. Thanks.

From: Susan J. Baer [mailto:sbaer@analyticallab.com]
Sent: Friday, November 07, 2008 10:02
To: Mark Kuczynski
Subject: RE: MD job

OK Mark. That will be no problem. The person who filled out the chains of custody indicated that the GW samples were one workorder (page 1 of 1) and that the SO samples were one workorder (1 of 2 and 2 of 2). This will ensure separate entry.

Can you tell me who collected the samples, or should I put "collected by client" on the reports? (This field was blank on the chain of custody.)

Thanks.

Sue

From: Mark Kuczynski [mailto:Mkuczynski@repsg.com]
Sent: Friday, November 07, 2008 9:53 AM
To: Susan J. Baer
Subject: MD job

Sue, for the soil and GW samples that came in yesterday for the MD job, please have separate lab reports, invoices, and EDDs for the water and the soil samples. Let me know of any questions. Thanks.

Mark Kuczynski
Environmental Database Manager
REPSG
React Environmental
Professional Services Group, Inc
P.O. Box 5377
6901 Kingsessing Ave., Suite 201
Philadelphia, PA 19142
Phone: 215-729-3220 ex. 311
Fax: 215 729-1557
Cell: 267-688-7309
MKuczynski@repsg.com
www.repsg.com

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Certificate of Analysis

Project Name:	**MD SITE - SOILS - MDE -REV**	Workorder:	**9765159**
Purchase Order:	**2665**	Workorder ID:	**Soil (11/24/08)**

Mr. Mark Kuczynski
REPSG
6901 Kingsessing Ave., Ste 201
PO Box 5377
Philadelphia, PA 19142

December 10, 2008

Dear Mr. Kuczynski,

Enclosed are the analytical results for samples received by the laboratory on Tuesday, November 25, 2008

ALSI is a National Environmental Laboratory Accreditation Conference (NELAC) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAC.

If you have any questions regarding this certificate of analysis, please contact Anna Milliken (Project Coordinator) or Anna G Milliken (Laboratory Manager) at (717) 944-5541.

Please visit us at www.analyticallab.com for a listing of ALSI's NELAC accreditations and Scope of Work, as well as other links to Water Quality documentation on the internet.

NOTE: ALSI has changed the report generation tool and while we have tried to retain the existing format, you will notice some changes in the laboratory report. Please feel free to contact ALSI in case you have any questions.

Analytical Laboratory Services, Inc.

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Anna G Milliken
Laboratory Manager

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SAMPLE SUMMARY

Workorder: 9765159 Soil (11/24/08) Discard Date: 12/24/2008

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
9765159001	B-001:19.5_20081124_N	Solid	11/24/08 12:05	11/25/08 19:45	Joe Crooks
9765159002	B-003:19.5_20081124_N	Solid	11/24/08 10:40	11/25/08 19:45	Joe Crooks
9765159003	B-006:19.5_20081124_N	Solid	11/24/08 16:15	11/25/08 19:45	Joe Crooks
9765159004	B-011:20.5_20081124_N	Solid	11/24/08 13:55	11/25/08 19:45	Joe Crooks
9765159005	B-010:20.5_20081124_N	Solid	11/24/08 14:35	11/25/08 19:45	Joe Crooks
9765159006	B-012:19.5_20081124_N	Solid	11/24/08 15:30	11/25/08 19:45	Joe Crooks
9765159007	Duplicate_20081124_FD	Solid	11/24/08 00:00	11/25/08 19:45	Joe Crooks

Workorder Comments:

Notes

-- Samples collected by ALSI personnel are done so in accordance with the procedures set forth in the ALSI Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

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ANALYTICAL RESULTS

Workorder: 9765159 Soil (11/24/08)

Lab ID: **9765159001** Date Collected: 11/24/2008 12:05 Matrix: Solid

Sample ID: **B-001:19.5_20081124_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	ND	mg/kg		6.8	0.96	SW846 8015D	11/26/08	RSS	11/28/08 20:19	KJH	A1
Gasoline Range Organics	ND	ug/kg		11300	3280	SW846 8015D	11/26/08	TEH	11/26/08 16:04	TEH	E1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	89.7	%		46-124		SW846 8015D	11/26/08	RSS	11/28/08 20:19	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	80.3	%		25-166		SW846 8015D	11/26/08	TEH	11/26/08 16:04	TEH	E1
VOLATILE ORGANICS											
Acetone	13.3J	ug/kg		28.9	9.3	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
tert-Amyl methyl ether	ND	ug/kg		2.3	0.46	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
tert-Amyl Alcohol	ND	ug/kg		5.8	5.8	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
tert-Amyl Ethylether	ND	ug/kg		2.3	1.2	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
Benzene	ND	ug/kg		2.3	0.46	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
Bromochloromethane	ND	ug/kg		2.3	0.58	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
Bromodichloromethane	ND	ug/kg		2.3	0.35	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
Bromoform	ND	ug/kg		2.3	1.3	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
Bromomethane	ND	ug/kg		4.6	0.58	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
2-Butanone	ND	ug/kg		11.6	2.3	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
tert.- Butyl Alcohol	ND	ug/kg		11.6	2.3	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
Carbon Disulfide	ND	ug/kg		2.3	0.35	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
Carbon Tetrachloride	ND	ug/kg		2.3	0.58	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
Chlorobenzene	ND	ug/kg		2.3	0.46	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
Chlorodibromomethane	ND	ug/kg		2.3	0.58	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
Chloroethane	ND	ug/kg		2.3	0.58	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
Chloroform	ND	ug/kg		2.3	0.35	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
Chloromethane	ND	ug/kg		2.3	0.35	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
1,2-Dibromo-3-chloropropane	ND	ug/kg		4.6	1.2	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
1,2-Dibromoethane	ND	ug/kg		2.3	0.35	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
1,1-Dichloroethane	ND	ug/kg		2.3	0.35	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
1,2-Dichloroethane	19.8	ug/kg		2.3	0.35	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
1,1-Dichloroethene	ND	ug/kg		2.3	0.58	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
cis-1,2-Dichloroethene	ND	ug/kg		2.3	0.58	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
trans-1,2-Dichloroethene	ND	ug/kg		2.3	0.46	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
1,2-Dichloropropane	ND	ug/kg		2.3	0.35	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
cis-1,3-Dichloropropene	ND	ug/kg		2.3	0.46	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
trans-1,3-Dichloropropene	ND	ug/kg		2.3	0.69	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
Diisopropyl ether	ND	ug/kg		2.3	0.23	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
Ethyl tert-butyl ether	ND	ug/kg		2.3	0.35	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
Ethylbenzene	ND	ug/kg		2.3	0.35	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
2-Hexanone	ND	ug/kg		11.6	0.93	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
Methyl t-Butyl Ether	ND	ug/kg		2.3	0.35	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
4-Methyl-2-Pentanone(MIBK)	ND	ug/kg		11.6	1.2	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C

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ANALYTICAL RESULTS

Workorder: 9765159 Soil (11/24/08)

Lab ID: **9765159001** Date Collected: 11/24/2008 12:05 Matrix: Solid

Sample ID: **B-001:19.5_20081124_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	5.4	ug/kg		2.3	0.81	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
Styrene	ND	ug/kg		2.3	0.35	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
1,1,2,2-Tetrachloroethane	ND	ug/kg		2.3	0.58	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
Tetrachloroethene	ND	ug/kg		2.3	0.58	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
Toluene	ND	ug/kg		2.3	0.35	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
Total Xylenes	ND	ug/kg		6.9	1.2	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
1,1,1-Trichloroethane	ND	ug/kg		2.3	0.46	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
1,1,2-Trichloroethane	ND	ug/kg		2.3	0.93	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
Trichloroethene	ND	ug/kg		2.3	0.58	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
Vinyl Chloride	ND	ug/kg		2.3	0.35	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
o-Xylene	ND	ug/kg		2.3	0.35	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
mp-Xylene	ND	ug/kg		4.6	1.2	8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	82.3	%		56-124		8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
4-Bromofluorobenzene (S)	98.9	%		51-128		8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
Dibromofluoromethane (S)	95	%		62-123		8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
Toluene-d8 (S)	116	%		59-131		8260/5035	11/26/08	ECR	11/26/08 14:39	MES	C
WET CHEMISTRY											
Moisture	23.3	%		0.1	0.1	SM20-2540 G			11/26/08 06:30	EL	A
Total Solids	76.7	%		0.1	0.1	SM20-2540 G			11/26/08 06:30	EL	A

Sample Comments:

This laboratory report was reprinted due to a modification to one or more sample reports in this workorder. The necessity for this is due to the consecutive numbering of samples in a given workorder.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9765159 Soil (11/24/08)

Lab ID: **9765159002** Date Collected: 11/24/2008 10:40 Matrix: Solid

Sample ID: **B-003:19.5_20081124_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	ND	mg/kg		6.5	0.92	SW846 8015D	11/26/08	RSS	11/28/08 21:23	KJH	A1
Gasoline Range Organics	ND	ug/kg		10600	3080	SW846 8015D	11/26/08	TEH	11/26/08 16:38	TEH	E1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	92.2	%		46-124		SW846 8015D	11/26/08	RSS	11/28/08 21:23	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	95.3	%		25-166		SW846 8015D	11/26/08	TEH	11/26/08 16:38	TEH	E1
VOLATILE ORGANICS											
Acetone	41.8	ug/kg		26.6	8.5	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
tert-Amyl methyl ether	ND	ug/kg		2.1	0.43	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
tert-Amyl Alcohol	ND	ug/kg		5.3	5.3	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
tert-Amyl Ethylether	ND	ug/kg		2.1	1.1	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
Benzene	1.9J	ug/kg		2.1	0.43	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
Bromochloromethane	ND	ug/kg		2.1	0.53	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
Bromodichloromethane	ND	ug/kg		2.1	0.32	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
Bromoform	ND	ug/kg		2.1	1.2	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
Bromomethane	ND	ug/kg		4.3	0.53	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
2-Butanone	ND	ug/kg		10.6	2.1	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
tert.- Butyl Alcohol	ND	ug/kg		10.6	2.1	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
Carbon Disulfide	ND	ug/kg		2.1	0.32	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
Carbon Tetrachloride	ND	ug/kg		2.1	0.53	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
Chlorobenzene	ND	ug/kg		2.1	0.43	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
Chlorodibromomethane	ND	ug/kg		2.1	0.53	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
Chloroethane	ND	ug/kg		2.1	0.53	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
Chloroform	ND	ug/kg		2.1	0.32	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
Chloromethane	ND	ug/kg		2.1	0.32	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
1,2-Dibromo-3-chloropropane	ND	ug/kg		4.3	1.1	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
1,2-Dibromoethane	ND	ug/kg		2.1	0.32	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
1,1-Dichloroethane	ND	ug/kg		2.1	0.32	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
1,2-Dichloroethane	ND	ug/kg		2.1	0.32	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
1,1-Dichloroethene	ND	ug/kg		2.1	0.53	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
cis-1,2-Dichloroethene	ND	ug/kg		2.1	0.53	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
trans-1,2-Dichloroethene	ND	ug/kg		2.1	0.43	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
1,2-Dichloropropane	ND	ug/kg		2.1	0.32	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
cis-1,3-Dichloropropene	ND	ug/kg		2.1	0.43	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
trans-1,3-Dichloropropene	ND	ug/kg		2.1	0.64	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
Diisopropyl ether	ND	ug/kg		2.1	0.21	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
Ethyl tert-butyl ether	ND	ug/kg		2.1	0.32	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
Ethylbenzene	0.40J	ug/kg		2.1	0.32	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
2-Hexanone	ND	ug/kg		10.6	0.85	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
Methyl t-Butyl Ether	ND	ug/kg		2.1	0.32	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
4-Methyl-2-Pentanone(MIBK)	ND	ug/kg		10.6	1.1	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C

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ANALYTICAL RESULTS

Workorder: 9765159 Soil (11/24/08)

Lab ID: **9765159002** Date Collected: 11/24/2008 10:40 Matrix: Solid

Sample ID: **B-003:19.5_20081124_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	ND	ug/kg		2.1	0.74	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
Styrene	ND	ug/kg		2.1	0.32	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
1,1,2,2-Tetrachloroethane	ND	ug/kg		2.1	0.53	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
Tetrachloroethene	ND	ug/kg		2.1	0.53	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
Toluene	8.7	ug/kg		2.1	0.32	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
Total Xylenes	2.5J	ug/kg		6.4	1.1	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
1,1,1-Trichloroethane	ND	ug/kg		2.1	0.43	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
1,1,2-Trichloroethane	ND	ug/kg		2.1	0.85	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
Trichloroethene	ND	ug/kg		2.1	0.53	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
Vinyl Chloride	ND	ug/kg		2.1	0.32	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
o-Xylene	1.1J	ug/kg		2.1	0.32	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
mp-Xylene	1.5J	ug/kg		4.3	1.1	8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	94.5	%		56-124		8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
4-Bromofluorobenzene (S)	96.1	%		51-128		8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
Dibromofluoromethane (S)	95.4	%		62-123		8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
Toluene-d8 (S)	105	%		59-131		8260/5035	11/26/08	MES	11/28/08 14:36	MES	C
WET CHEMISTRY											
Moisture	18.1	%		0.1	0.1	SM20-2540 G			11/26/08 06:30	EL	A
Total Solids	81.9	%		0.1	0.1	SM20-2540 G			11/26/08 06:30	EL	A

Sample Comments:

This laboratory report was reprinted due to a modification to one or more sample reports in this workorder. The necessity for this is due to the consecutive numbering of samples in a given workorder.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9765159 Soil (11/24/08)

Lab ID: **9765159003** Date Collected: 11/24/2008 16:15 Matrix: Solid

Sample ID: **B-006:19.5_20081124_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	ND	mg/kg		6.9	0.98	SW846 8015D	11/26/08	RSS	11/28/08 22:26	KJH	A1
Gasoline Range Organics	ND	ug/kg		12700	3680	SW846 8015D	11/26/08	TEH	11/26/08 17:13	TEH	E1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	88	%		46-124		SW846 8015D	11/26/08	RSS	11/28/08 22:26	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	96.6	%		25-166		SW846 8015D	11/26/08	TEH	11/26/08 17:13	TEH	E1
VOLATILE ORGANICS											
Acetone	14.9J	ug/kg		31.1	9.9	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
tert-Amyl methyl ether	ND	ug/kg		2.5	0.50	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
tert-Amyl Alcohol	ND	ug/kg		6.2	6.2	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
tert-Amyl Ethylether	ND	ug/kg		2.5	1.2	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
Benzene	ND	ug/kg		2.5	0.50	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
Bromochloromethane	ND	ug/kg		2.5	0.62	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
Bromodichloromethane	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
Bromoform	ND	ug/kg		2.5	1.4	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
Bromomethane	ND	ug/kg		5.0	0.62	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
2-Butanone	ND	ug/kg		12.4	2.5	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
tert.- Butyl Alcohol	ND	ug/kg		12.4	2.5	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
Carbon Disulfide	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
Carbon Tetrachloride	ND	ug/kg		2.5	0.62	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
Chlorobenzene	ND	ug/kg		2.5	0.50	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
Chlorodibromomethane	ND	ug/kg		2.5	0.62	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
Chloroethane	ND	ug/kg		2.5	0.62	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
Chloroform	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
Chloromethane	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
1,2-Dibromo-3-chloropropane	ND	ug/kg		5.0	1.2	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
1,2-Dibromoethane	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
1,1-Dichloroethane	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
1,2-Dichloroethane	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
1,1-Dichloroethene	ND	ug/kg		2.5	0.62	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
cis-1,2-Dichloroethene	ND	ug/kg		2.5	0.62	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
trans-1,2-Dichloroethene	ND	ug/kg		2.5	0.50	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
1,2-Dichloropropane	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
cis-1,3-Dichloropropene	ND	ug/kg		2.5	0.50	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
trans-1,3-Dichloropropene	ND	ug/kg		2.5	0.75	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
Diisopropyl ether	ND	ug/kg		2.5	0.25	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
Ethyl tert-butyl ether	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
Ethylbenzene	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
2-Hexanone	ND	ug/kg		12.4	0.99	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
Methyl t-Butyl Ether	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
4-Methyl-2-Pentanone(MIBK)	ND	ug/kg		12.4	1.2	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C

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ANALYTICAL RESULTS

Workorder: 9765159 Soil (11/24/08)

Lab ID: **9765159003** Date Collected: 11/24/2008 16:15 Matrix: Solid

Sample ID: **B-006:19.5_20081124_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	1.3J	ug/kg		2.5	0.87	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
Styrene	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
1,1,2,2-Tetrachloroethane	ND	ug/kg		2.5	0.62	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
Tetrachloroethene	ND	ug/kg		2.5	0.62	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
Toluene	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
Total Xylenes	ND	ug/kg		7.5	1.2	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
1,1,1-Trichloroethane	ND	ug/kg		2.5	0.50	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
1,1,2-Trichloroethane	ND	ug/kg		2.5	0.99	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
Trichloroethene	ND	ug/kg		2.5	0.62	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
Vinyl Chloride	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
o-Xylene	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
mp-Xylene	ND	ug/kg		5.0	1.2	8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	96.3	%		56-124		8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
4-Bromofluorobenzene (S)	98.7	%		51-128		8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
Dibromofluoromethane (S)	100	%		62-123		8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
Toluene-d8 (S)	116	%		59-131		8260/5035	11/26/08	MES	11/28/08 12:29	MES	C
WET CHEMISTRY											
Moisture	23.5	%		0.1	0.1	SM20-2540 G			11/26/08 06:30	EL	A
Total Solids	76.5	%		0.1	0.1	SM20-2540 G			11/26/08 06:30	EL	A

Sample Comments:

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Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9765159 Soil (11/24/08)

Lab ID: **9765159004** Date Collected: 11/24/2008 13:55 Matrix: Solid

Sample ID: **B-011:20.5_20081124_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	31.9	ug/kg		29.2	9.4	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
tert-Amyl methyl ether	ND	ug/kg		2.3	0.47	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
tert-Amyl Alcohol	82.2	ug/kg		5.8	5.8	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
tert-Amyl Ethylether	ND	ug/kg		2.3	1.2	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
Benzene	52.0	ug/kg		2.3	0.47	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
Bromochloromethane	ND	ug/kg		2.3	0.58	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
Bromodichloromethane	ND	ug/kg		2.3	0.35	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
Bromoform	ND	ug/kg		2.3	1.3	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
Bromomethane	ND	ug/kg		4.7	0.58	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
2-Butanone	ND	ug/kg		11.7	2.3	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
tert.- Butyl Alcohol	ND	ug/kg		11.7	2.3	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
Carbon Disulfide	ND	ug/kg		2.3	0.35	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
Carbon Tetrachloride	ND	ug/kg		2.3	0.58	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
Chlorobenzene	ND	ug/kg		2.3	0.47	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
Chlorodibromomethane	ND	ug/kg		2.3	0.58	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
Chloroethane	ND	ug/kg		2.3	0.58	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
Chloroform	ND	ug/kg		2.3	0.35	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
Chloromethane	ND	ug/kg		2.3	0.35	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
1,2-Dibromo-3-chloropropane	ND	ug/kg		4.7	1.2	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
1,2-Dibromoethane	ND	ug/kg		2.3	0.35	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
1,1-Dichloroethane	ND	ug/kg		2.3	0.35	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
1,2-Dichloroethane	ND	ug/kg		2.3	0.35	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
1,1-Dichloroethene	ND	ug/kg		2.3	0.58	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
cis-1,2-Dichloroethene	ND	ug/kg		2.3	0.58	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
trans-1,2-Dichloroethene	ND	ug/kg		2.3	0.47	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
1,2-Dichloropropane	ND	ug/kg		2.3	0.35	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
cis-1,3-Dichloropropene	ND	ug/kg		2.3	0.47	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
trans-1,3-Dichloropropene	ND	ug/kg		2.3	0.70	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
Diisopropyl ether	ND	ug/kg		2.3	0.23	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
Ethyl tert-butyl ether	ND	ug/kg		2.3	0.35	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
Ethylbenzene	14.5	ug/kg		2.3	0.35	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
2-Hexanone	7.4J	ug/kg		11.7	0.94	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
Methyl t-Butyl Ether	0.60J	ug/kg		2.3	0.35	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
4-Methyl-2-Pentanone(MIBK)	7.4J	ug/kg		11.7	1.2	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
Methylene Chloride	1.8J	ug/kg		2.3	0.82	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
Styrene	ND	ug/kg		2.3	0.35	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
1,1,2,2-Tetrachloroethane	ND	ug/kg		2.3	0.58	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
Tetrachloroethene	ND	ug/kg		2.3	0.58	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
Toluene	7.2	ug/kg		2.3	0.35	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
Total Xylenes	171	ug/kg		7.0	1.2	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
1,1,1-Trichloroethane	ND	ug/kg		2.3	0.47	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
1,1,2-Trichloroethane	ND	ug/kg		2.3	0.94	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
Trichloroethene	ND	ug/kg		2.3	0.58	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
Vinyl Chloride	ND	ug/kg		2.3	0.35	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C

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ANALYTICAL RESULTS

Workorder: 9765159 Soil (11/24/08)

Lab ID: **9765159004** Date Collected: 11/24/2008 13:55 Matrix: Solid

Sample ID: **B-011:20.5_20081124_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
o-Xylene	37.3	ug/kg		2.3	0.35	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
mp-Xylene	133	ug/kg		4.7	1.2	8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	96	%		56-124		8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
Toluene-d8 (S)	108	%		59-131		8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
4-Bromofluorobenzene (S)	94	%		51-128		8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
Dibromofluoromethane (S)	95.8	%		62-123		8260/5035	11/26/08	MES	11/28/08 14:04	MES	C
PETROLEUM HC's											
Diesel Range Organics C10-C28	ND	mg/kg		6.9	0.98	SW846 8015D	11/26/08	RSS	11/28/08 23:29	KJH	A1
Gasoline Range Organics	4530J	ug/kg		13000	3770	SW846 8015D	11/26/08	TEH	11/26/08 17:47	TEH	E1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	88.9	%		46-124		SW846 8015D	11/26/08	RSS	11/28/08 23:29	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	92.3	%		25-166		SW846 8015D	11/26/08	TEH	11/26/08 17:47	TEH	E1
WET CHEMISTRY											
Moisture	25.4	%		0.1	0.1	SM20-2540 G			11/26/08 06:30	EL	A
Total Solids	74.6	%		0.1	0.1	SM20-2540 G			11/26/08 06:30	EL	A

Sample Comments:

This report was modified to correct the sample ID per an email received from Brenda MacPhail of REPSG on 12/10/08. SJB 12/10/08

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9765159 Soil (11/24/08)

Lab ID: **9765159005** Date Collected: 11/24/2008 14:35 Matrix: Solid

Sample ID: **B-010:20.5_20081124_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	ND	mg/kg		7.0	0.99	SW846 8015D	11/26/08	RSS	11/29/08 00:33	KJH	A1
Gasoline Range Organics	ND	ug/kg		12500	3630	SW846 8015D	11/26/08	TEH	11/26/08 18:22	TEH	E1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	106	%		46-124		SW846 8015D	11/26/08	RSS	11/29/08 00:33	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	90.1	%		25-166		SW846 8015D	11/26/08	TEH	11/26/08 18:22	TEH	E1
VOLATILE ORGANICS											
Acetone	ND	ug/kg		30.9	9.9	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
tert-Amyl methyl ether	ND	ug/kg		2.5	0.49	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
tert-Amyl Alcohol	ND	ug/kg		6.2	6.2	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
tert-Amyl Ethylether	ND	ug/kg		2.5	1.2	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
Benzene	ND	ug/kg		2.5	0.49	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
Bromochloromethane	ND	ug/kg		2.5	0.62	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
Bromodichloromethane	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
Bromoform	ND	ug/kg		2.5	1.4	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
Bromomethane	ND	ug/kg		4.9	0.62	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
2-Butanone	ND	ug/kg		12.3	2.5	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
tert.- Butyl Alcohol	ND	ug/kg		12.3	2.5	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
Carbon Disulfide	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
Carbon Tetrachloride	ND	ug/kg		2.5	0.62	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
Chlorobenzene	ND	ug/kg		2.5	0.49	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
Chlorodibromomethane	ND	ug/kg		2.5	0.62	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
Chloroethane	ND	ug/kg		2.5	0.62	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
Chloroform	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
Chloromethane	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
1,2-Dibromo-3-chloropropane	ND	ug/kg		4.9	1.2	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
1,2-Dibromoethane	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
1,1-Dichloroethane	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
1,2-Dichloroethane	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
1,1-Dichloroethene	ND	ug/kg		2.5	0.62	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
cis-1,2-Dichloroethene	ND	ug/kg		2.5	0.62	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
trans-1,2-Dichloroethene	ND	ug/kg		2.5	0.49	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
1,2-Dichloropropane	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
cis-1,3-Dichloropropene	ND	ug/kg		2.5	0.49	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
trans-1,3-Dichloropropene	ND	ug/kg		2.5	0.74	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
Diisopropyl ether	ND	ug/kg		2.5	0.25	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
Ethyl tert-butyl ether	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
Ethylbenzene	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
2-Hexanone	ND	ug/kg		12.3	0.99	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
Methyl t-Butyl Ether	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
4-Methyl-2-Pentanone(MIBK)	ND	ug/kg		12.3	1.2	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C

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ANALYTICAL RESULTS

Workorder: 9765159 Soil (11/24/08)

Lab ID: **9765159005** Date Collected: 11/24/2008 14:35 Matrix: Solid

Sample ID: **B-010:20.5_20081124_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	ND	ug/kg		2.5	0.86	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
Styrene	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
1,1,2,2-Tetrachloroethane	ND	ug/kg		2.5	0.62	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
Tetrachloroethene	ND	ug/kg		2.5	0.62	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
Toluene	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
Total Xylenes	ND	ug/kg		7.4	1.2	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
1,1,1-Trichloroethane	ND	ug/kg		2.5	0.49	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
1,1,2-Trichloroethane	ND	ug/kg		2.5	0.99	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
Trichloroethene	ND	ug/kg		2.5	0.62	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
Vinyl Chloride	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
o-Xylene	ND	ug/kg		2.5	0.37	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
mp-Xylene	ND	ug/kg		4.9	1.2	8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	98.5	%		56-124		8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
4-Bromofluorobenzene (S)	96.2	%		51-128		8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
Dibromofluoromethane (S)	98.1	%		62-123		8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
Toluene-d8 (S)	103	%		59-131		8260/5035	11/26/08	MES	11/28/08 13:01	MES	C
WET CHEMISTRY											
Moisture	25.3	%		0.1	0.1	SM20-2540 G			11/26/08 06:30	EL	A
Total Solids	74.7	%		0.1	0.1	SM20-2540 G			11/26/08 06:30	EL	A

Sample Comments:

This laboratory report was reprinted due to a modification to one or more sample reports in this workorder. The necessity for this is due to the consecutive numbering of samples in a given workorder.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9765159 Soil (11/24/08)

Lab ID: **9765159006** Date Collected: 11/24/2008 15:30 Matrix: Solid

Sample ID: **B-012:19.5_20081124_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	ND	mg/kg		7.6	1.1	SW846 8015D	11/26/08	RSS	11/29/08 03:43	KJH	A1
Gasoline Range Organics	ND	ug/kg		15000	4360	SW846 8015D	11/26/08	TEH	11/26/08 18:56	TEH	E1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	94.6	%		46-124		SW846 8015D	11/26/08	RSS	11/29/08 03:43	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	89.7	%		25-166		SW846 8015D	11/26/08	TEH	11/26/08 18:56	TEH	E1
VOLATILE ORGANICS											
Acetone	ND	ug/kg		35.8	11.5	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
tert-Amyl methyl ether	ND	ug/kg		2.9	0.57	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
tert-Amyl Alcohol	ND	ug/kg		7.2	7.2	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
tert-Amyl Ethylether	ND	ug/kg		2.9	1.4	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
Benzene	ND	ug/kg		2.9	0.57	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
Bromochloromethane	ND	ug/kg		2.9	0.72	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
Bromodichloromethane	ND	ug/kg		2.9	0.43	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
Bromoform	ND	ug/kg		2.9	1.6	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
Bromomethane	ND	ug/kg		5.7	0.72	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
2-Butanone	ND	ug/kg		14.3	2.9	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
tert.- Butyl Alcohol	ND	ug/kg		14.3	2.9	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
Carbon Disulfide	ND	ug/kg		2.9	0.43	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
Carbon Tetrachloride	ND	ug/kg		2.9	0.72	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
Chlorobenzene	ND	ug/kg		2.9	0.57	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
Chlorodibromomethane	ND	ug/kg		2.9	0.72	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
Chloroethane	ND	ug/kg		2.9	0.72	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
Chloroform	ND	ug/kg		2.9	0.43	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
Chloromethane	ND	ug/kg		2.9	0.43	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
1,2-Dibromo-3-chloropropane	ND	ug/kg		5.7	1.4	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
1,2-Dibromoethane	ND	ug/kg		2.9	0.43	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
1,1-Dichloroethane	ND	ug/kg		2.9	0.43	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
1,2-Dichloroethane	ND	ug/kg		2.9	0.43	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
1,1-Dichloroethene	ND	ug/kg		2.9	0.72	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
cis-1,2-Dichloroethene	ND	ug/kg		2.9	0.72	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
trans-1,2-Dichloroethene	ND	ug/kg		2.9	0.57	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
1,2-Dichloropropane	ND	ug/kg		2.9	0.43	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
cis-1,3-Dichloropropene	ND	ug/kg		2.9	0.57	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
trans-1,3-Dichloropropene	ND	ug/kg		2.9	0.86	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
Diisopropyl ether	ND	ug/kg		2.9	0.29	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
Ethyl tert-butyl ether	ND	ug/kg		2.9	0.43	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
Ethylbenzene	ND	ug/kg		2.9	0.43	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
2-Hexanone	ND	ug/kg		14.3	1.1	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
Methyl t-Butyl Ether	1.3J	ug/kg		2.9	0.43	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
4-Methyl-2-Pentanone(MIBK)	ND	ug/kg		14.3	1.4	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C

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ANALYTICAL RESULTS

Workorder: 9765159 Soil (11/24/08)

Lab ID: **9765159006** Date Collected: 11/24/2008 15:30 Matrix: Solid

Sample ID: **B-012:19.5_20081124_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	2.3J	ug/kg		2.9	1.0	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
Styrene	ND	ug/kg		2.9	0.43	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
1,1,2,2-Tetrachloroethane	ND	ug/kg		2.9	0.72	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
Tetrachloroethene	ND	ug/kg		2.9	0.72	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
Toluene	ND	ug/kg		2.9	0.43	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
Total Xylenes	ND	ug/kg		8.6	1.4	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
1,1,1-Trichloroethane	ND	ug/kg		2.9	0.57	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
1,1,2-Trichloroethane	ND	ug/kg		2.9	1.1	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
Trichloroethene	ND	ug/kg		2.9	0.72	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
Vinyl Chloride	ND	ug/kg		2.9	0.43	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
o-Xylene	ND	ug/kg		2.9	0.43	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
mp-Xylene	ND	ug/kg		5.7	1.4	8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	96.9	%		56-124		8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
4-Bromofluorobenzene (S)	99.2	%		51-128		8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
Dibromofluoromethane (S)	101	%		62-123		8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
Toluene-d8 (S)	113	%		59-131		8260/5035	11/26/08	MES	11/28/08 13:33	MES	C
WET CHEMISTRY											
Moisture	32.0	%		0.1	0.1	SM20-2540 G			11/26/08 06:30	EL	A
Total Solids	68.0	%		0.1	0.1	SM20-2540 G			11/26/08 06:30	EL	A

Sample Comments:

This laboratory report was reprinted due to a modification to one or more sample reports in this workorder. The necessity for this is due to the consecutive numbering of samples in a given workorder.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9765159 Soil (11/24/08)

Lab ID: **9765159007** Date Collected: 11/24/2008 00:00 Matrix: Solid

Sample ID: **Duplicate_20081124_FD** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	ND	mg/kg		6.7	0.95	SW846 8015D	11/26/08	RSS	11/29/08 05:49	KJH	A1
Gasoline Range Organics	ND	ug/kg		11800	3430	SW846 8015D	11/26/08	TEH	11/26/08 19:30	TEH	E1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	113	%		46-124		SW846 8015D	11/26/08	RSS	11/29/08 05:49	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	88.5	%		25-166		SW846 8015D	11/26/08	TEH	11/26/08 19:30	TEH	E1
VOLATILE ORGANICS											
Acetone	18.2J	ug/kg		30.6	9.8	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
tert-Amyl methyl ether	ND	ug/kg		2.4	0.49	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
tert-Amyl Alcohol	86.1	ug/kg		6.1	6.1	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
tert-Amyl Ethylether	ND	ug/kg		2.4	1.2	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
Benzene	67.6	ug/kg		2.4	0.49	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
Bromochloromethane	ND	ug/kg		2.4	0.61	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
Bromodichloromethane	ND	ug/kg		2.4	0.37	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
Bromoform	ND	ug/kg		2.4	1.3	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
Bromomethane	ND	ug/kg		4.9	0.61	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
2-Butanone	ND	ug/kg		12.2	2.4	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
tert.- Butyl Alcohol	ND	ug/kg		12.2	2.4	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
Carbon Disulfide	ND	ug/kg		2.4	0.37	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
Carbon Tetrachloride	ND	ug/kg		2.4	0.61	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
Chlorobenzene	ND	ug/kg		2.4	0.49	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
Chlorodibromomethane	ND	ug/kg		2.4	0.61	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
Chloroethane	ND	ug/kg		2.4	0.61	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
Chloroform	ND	ug/kg		2.4	0.37	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
Chloromethane	ND	ug/kg		2.4	0.37	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
1,2-Dibromo-3-chloropropane	ND	ug/kg		4.9	1.2	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
1,2-Dibromoethane	ND	ug/kg		2.4	0.37	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
1,1-Dichloroethane	ND	ug/kg		2.4	0.37	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
1,2-Dichloroethane	ND	ug/kg		2.4	0.37	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
1,1-Dichloroethene	ND	ug/kg		2.4	0.61	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
cis-1,2-Dichloroethene	ND	ug/kg		2.4	0.61	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
trans-1,2-Dichloroethene	ND	ug/kg		2.4	0.49	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
1,2-Dichloropropane	ND	ug/kg		2.4	0.37	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
cis-1,3-Dichloropropene	ND	ug/kg		2.4	0.49	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
trans-1,3-Dichloropropene	ND	ug/kg		2.4	0.73	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
Diisopropyl ether	ND	ug/kg		2.4	0.24	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
Ethyl tert-butyl ether	ND	ug/kg		2.4	0.37	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
Ethylbenzene	13.1	ug/kg		2.4	0.37	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
2-Hexanone	12.7	ug/kg		12.2	0.98	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
Methyl t-Butyl Ether	0.70J	ug/kg		2.4	0.37	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
4-Methyl-2-Pentanone(MIBK)	10.8J	ug/kg		12.2	1.2	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C

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ANALYTICAL RESULTS

Workorder: 9765159 Soil (11/24/08)

Lab ID: **9765159007** Date Collected: 11/24/2008 00:00 Matrix: Solid

Sample ID: **Duplicate_20081124_FD** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	2.0J	ug/kg		2.4	0.86	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
Styrene	ND	ug/kg		2.4	0.37	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
1,1,2,2-Tetrachloroethane	ND	ug/kg		2.4	0.61	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
Tetrachloroethene	ND	ug/kg		2.4	0.61	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
Toluene	9.3	ug/kg		2.4	0.37	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
Total Xylenes	180	ug/kg		7.3	1.2	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
1,1,1-Trichloroethane	ND	ug/kg		2.4	0.49	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
1,1,2-Trichloroethane	ND	ug/kg		2.4	0.98	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
Trichloroethene	ND	ug/kg		2.4	0.61	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
Vinyl Chloride	ND	ug/kg		2.4	0.37	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
o-Xylene	39.5	ug/kg		2.4	0.37	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
mp-Xylene	140	ug/kg		4.9	1.2	8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	93.9	%		56-124		8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
4-Bromofluorobenzene (S)	98.3	%		51-128		8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
Dibromofluoromethane (S)	96.2	%		62-123		8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
Toluene-d8 (S)	114	%		59-131		8260/5035	11/26/08	MES	11/28/08 15:07	MES	C
WET CHEMISTRY											
Moisture	22.8	%		0.1	0.1	SM20-2540 G			11/26/08 06:30	EL	A
Total Solids	77.2	%		0.1	0.1	SM20-2540 G			11/26/08 06:30	EL	A

Sample Comments:

This sample was collected in a soil jar for the volatile analysis. The sample was prepared by Method 5035 after the 48-hour holding time.

This laboratory report was reprinted due to a modification to one or more sample reports in this workorder. The necessity for this is due to the consecutive numbering of samples in a given workorder.

Anna G Milliken
Laboratory Manager

Report ID: 9765159

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Page 1 of 1

Courier:

Tracking #:

97651159

Co. Name: R.E.P.S.G., Inc.

Contact (Report to): RFeingold

Phone: 215-729-3220

Address: 6901 Kingsessing Ave. Phila. PA 19142

Bill to (if different than Report to): Same as above

PO#: 2665

Project Name/#: Calvert Citgo / 5977.130

ALSI Quote #:

TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALSI approval and surcharges.

Date Required: 12/5/08

Approved By:

Email? Y rfeingold@rcrpg.com

Fax? Y No.:

Needs Planned then file up front

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	Enter Number of Containers Per Analysis								Total # of Bottles
						***Container Type	Jar	Encore	Encore	Jar				
						***Container Size	4oz	5g	5g	40z				
						*** Preservative	NONE	NONE	NONE	NONE				
1 B-001: 19.5'		11/24/08	12:05	G	SO		X	X	X	X	5			
2 B-003: 19.5'		11/24/08	10:40	G	SO		X	X	X	X	5			
3 B-006: 19.5'		11/24/08	16:45	G	SO		X	X	X	X	5			
4 B-007: 20.5'		11/24/08	13:55	G	SO		X	X	X	X	5			
5 B-010: 20.5'		11/24/08	14:35	G	SO		X	X	X	X	5			
6 B-012: 19.5'		11/24/08	15:30	G	SO		X	X	X	X	5			
7 Duplicate		11/24/08	—	G	SO		X	X	X	X	5			
8														

ANALYSES/METHOD REQUESTED

Receipt Information (completed by Sample Receiving)

Performed by: [illegible]

Cooler Temp: 3

Therm. ID: 5[illegible]

No. of Coolers:

Notes:

	Correct containers?	Correct sample volume?	Correct preservation?	Headspace/Volatiles?	Circle appropriate Y or N.
	Y	Y	Y	Y	

	Custody seals Present?	(If present) Seals intact?	Received on ice?	COC/Labels complete/accurate?	Container in good condition?
	N	N	N	N	N
	Y	Y	Y	Y	Y

SAMPLED BY (Please Print): J. Crooks

LOGGED BY(signature): DATE: TIME:

REVIEWED BY(signature): DATE: 11 Dec 08 TIME: 1431

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1	11/25	1250	2	11/25	1250
3	11/25	1800	4 VM	11/25	1800
5 VM	11/25	1945	6	11/25	1945
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] (new)

SDWA Forms?: yes [ ] yes [ ] yes [ ] yes [ ]

State Samples Collected in?: MD [X] NJ [ ] NY [ ] PA [ ]

EDDs Required?: [X] If yes, format type: EQUIS

Other:

DOD Criteria Required?

ALSI FIELD SERVICES

[X] Pickup [ ] Labor [ ] Composite Sampling [ ] Rental Equipment [ ] Other:

* G=Grab; C=Composite

** Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

*** Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY

Rev 6/07

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Certificate of Analysis

Project Name:	**MD SITE - SOILS - MDE -REV**	Workorder:	**9762518**
Purchase Order:		Workorder ID:	**Groundwater (11/05/08)**

Mr. Mark Kuczynski
REPSG
6901 Kingsessing Ave., Ste 201
PO Box 5377
Philadelphia, PA 19142

November 17, 2008

Dear Mr. Kuczynski,

Enclosed are the analytical results for samples received by the laboratory between Thursday, November 06, 2008 and Tuesday, November 11, 2008

ALSI is a National Environmental Laboratory Accreditation Conference (NELAC) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAC.

If you have any questions regarding this certificate of analysis, please contact Anna Milliken (Project Coordinator) or Anna G Milliken (Laboratory Manager) at (717) 944-5541.

Please visit us at www.analyticallab.com for a listing of ALSI's NELAC accreditations and Scope of Work, as well as other links to Water Quality documentation on the internet.

NOTE: ALSI has changed the report generation tool and while we have tried to retain the existing format, you will notice some changes in the laboratory report. Please feel free to contact ALSI in case you have any questions.

Analytical Laboratory Services, Inc.

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Anna G Milliken
Laboratory Manager

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SAMPLE SUMMARY

Workorder: 9762518 Groundwater (11/05/08) Discard Date: 12/01/2008

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
9762518001	TWP-001_20081105_N	Ground Water	11/5/08 16:00	11/6/08 19:49	Brenda MacPhail
9762518002	TWP-002_20081105_N	Ground Water	11/5/08 00:00	11/6/08 19:49	Brenda MacPhail
9762518003	TWP-003_20081005_N	Ground Water	11/5/08 00:00	11/6/08 19:49	Brenda MacPhail
9762518004	TWP-004_20081105_N	Ground Water	11/5/08 00:00	11/6/08 19:49	Brenda MacPhail
9762518005	Duplicate-001_20081105_FD	Ground Water	11/5/08 00:00	11/6/08 19:49	Brenda MacPhail
9762518006	Field Blank-001_20081105_FB	Ground Water	11/5/08 00:00	11/6/08 19:49	Brenda MacPhail
9762518007	Trip Blank-001_20081105_TB	Ground Water	11/5/08 00:00	11/6/08 19:49	Brenda MacPhail
9762518008	TWP-001_20081105_N	Ground Water	11/5/08 16:00	11/11/08 18:48	Brenda MacPhail

Workorder Comments:

This report was re-issued to include the method detection limits (MDL) for each analyte in order to meet MDE standard at the request of Mark Kuczynski on 11/17/08. SJB 11/17/08

Notes

-- Samples collected by ALSI personnel are done so in accordance with the procedures set forth in the ALSI Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

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ANALYTICAL RESULTS

Workorder: 9762518 Groundwater (11/05/08)

Lab ID: **9762518001** Date Collected: 11/5/2008 16:00 Matrix: Ground Water

Sample ID: **TWP-001_20081105_N** Date Received: 11/6/2008 19:49

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	5.6	mg/L		1.8	0.22	SW846 8015D	11/7/08	FPM	11/13/08 15:21	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	97.6	%		40-117		SW846 8015D	11/7/08	FPM	11/13/08 15:21	KJH	A1

Sample Comments:

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected. Reporting limits were adjusted accordingly.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9762518 Groundwater (11/05/08)

Lab ID: **9762518002** Date Collected: 11/5/2008 00:00 Matrix: Ground Water

Sample ID: **TWP-002_20081105_N** Date Received: 11/6/2008 19:49

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	2110	ug/L		50.0	20.0	SW846 8260B			11/13/08 04:50	DD	B
tert-Amyl methyl ether	ND	ug/L		10.0	4.0	SW846 8260B			11/13/08 04:50	DD	B
tert-Amyl Alcohol	75200	ug/L		2500	250	SW846 8260B			11/13/08 15:22	JAH	C
tert-Amyl Ethylether	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:50	DD	B
Benzene	43000	ug/L		500	200	SW846 8260B			11/13/08 15:22	JAH	C
Bromochloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:50	DD	B
Bromodichloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:50	DD	B
Bromoform	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:50	DD	B
Bromomethane	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:50	DD	B
2-Butanone	1300	ug/L		50.0	15.0	SW846 8260B			11/13/08 04:50	DD	B
tert.- Butyl Alcohol	34500	ug/L		5000	1500	SW846 8260B			11/13/08 15:22	JAH	C
Carbon Disulfide	ND	ug/L		5.0	0.50	SW846 8260B			11/13/08 04:50	DD	B
Carbon Tetrachloride	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:50	DD	B
Chlorobenzene	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:50	DD	B
Chlorodibromomethane	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:50	DD	B
Chloroethane	ND	ug/L		5.0	1.5	SW846 8260B			11/13/08 04:50	DD	B
Chloroform	2.7J	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:50	DD	B
Chloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:50	DD	B
1,2-Dibromo-3-chloropropane	ND	ug/L		35.0	12.0	SW846 8260B			11/13/08 04:50	DD	B
1,2-Dibromoethane	179	ug/L		5.0	1.5	SW846 8260B			11/13/08 04:50	DD	B
1,1-Dichloroethane	ND	ug/L		5.0	0.50	SW846 8260B			11/13/08 04:50	DD	B
1,2-Dichloroethane	680	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:50	DD	B
1,1-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:50	DD	B
cis-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:50	DD	B
trans-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:50	DD	B
1,2-Dichloropropane	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:50	DD	B
cis-1,3-Dichloropropene	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:50	DD	B
trans-1,3-Dichloropropene	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:50	DD	B
Diisopropyl ether	90.3	ug/L		5.0	0.50	SW846 8260B			11/13/08 04:50	DD	B
Ethyl tert-butyl ether	ND	ug/L		5.0	0.50	SW846 8260B			11/13/08 04:50	DD	B
Ethylbenzene	482	ug/L		5.0	1.5	SW846 8260B			11/13/08 04:50	DD	B
2-Hexanone	59.9	ug/L		25.0	3.5	SW846 8260B			11/13/08 04:50	DD	B
Methyl t-Butyl Ether	11900	ug/L		500	100	SW846 8260B			11/13/08 15:22	JAH	C
4-Methyl-2-Pentanone(MIBK)	55.6	ug/L		25.0	6.5	SW846 8260B			11/13/08 04:50	DD	B
Methylene Chloride	ND	ug/L		5.0	0.50	SW846 8260B			11/13/08 04:50	DD	B
Styrene	3.4J	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:50	DD	B
1,1,2,2-Tetrachloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:50	DD	B
Tetrachloroethene	ND	ug/L		5.0	2.0	SW846 8260B			11/13/08 04:50	DD	B
Toluene	50200	ug/L		500	100	SW846 8260B			11/13/08 15:22	JAH	C
Total Xylenes	2680	ug/L		15.0	2.0	SW846 8260B			11/13/08 04:50	DD	B
1,1,1-Trichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:50	DD	B
1,1,2-Trichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:50	DD	B
Trichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:50	DD	B
Vinyl Chloride	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:50	DD	B

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ANALYTICAL RESULTS

Workorder: 9762518 Groundwater (11/05/08)

Lab ID: **9762518002** Date Collected: 11/5/2008 00:00 Matrix: Ground Water

Sample ID: **TWP-002_20081105_N** Date Received: 11/6/2008 19:49

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
o-Xylene	934	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:50	DD	B
mp-Xylene	1740	ug/L		10.0	1.5	SW846 8260B			11/13/08 04:50	DD	B
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	97.5	%		62-133		SW846 8260B			11/13/08 04:50	DD	B
4-Bromofluorobenzene (S)	92.3	%		79-114		SW846 8260B			11/13/08 04:50	DD	B
Dibromofluoromethane (S)	78	%		78-116		SW846 8260B			11/13/08 04:50	DD	B
Toluene-d8 (S)	87.8	%		76-127		SW846 8260B			11/13/08 04:50	DD	B
1,2-Dichloroethane-d4 (S)	115	%		62-133		SW846 8260B			11/13/08 15:22	JAH	C
4-Bromofluorobenzene (S)	101	%		79-114		SW846 8260B			11/13/08 15:22	JAH	C
Toluene-d8 (S)	110	%		76-127		SW846 8260B			11/13/08 15:22	JAH	C
Dibromofluoromethane (S)	99.2	%		78-116		SW846 8260B			11/13/08 15:22	JAH	C
PETROLEUM HC's											
Diesel Range Organics C10-C28	2.3	mg/L		0.81	0.10	SW846 8015D	11/7/08	FPM	11/13/08 15:54	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	83.2	%		40-117		SW846 8015D	11/7/08	FPM	11/13/08 15:54	KJH	A1

Sample Comments:

The GCMS volatiles analysis was performed at a dilution due to the level of target compounds.

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected. Reporting limits were adjusted accordingly.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9762518 Groundwater (11/05/08)

Lab ID: **9762518003** Date Collected: 11/5/2008 00:00 Matrix: Ground Water

Sample ID: **TWP-003_20081005_N** Date Received: 11/6/2008 19:49

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		50.0	20.0	SW846 8260B			11/13/08 04:19	DD	E
tert-Amyl methyl ether	ND	ug/L		10.0	4.0	SW846 8260B			11/13/08 04:19	DD	E
tert-Amyl Alcohol	419	ug/L		25.0	2.5	SW846 8260B			11/13/08 04:19	DD	E
tert-Amyl Ethylether	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:19	DD	E
Benzene	835	ug/L		5.0	2.0	SW846 8260B			11/13/08 04:19	DD	E
Bromochloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:19	DD	E
Bromodichloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:19	DD	E
Bromoform	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:19	DD	E
Bromomethane	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:19	DD	E
2-Butanone	ND	ug/L		50.0	15.0	SW846 8260B			11/13/08 04:19	DD	E
tert.- Butyl Alcohol	82.0	ug/L		50.0	15.0	SW846 8260B			11/13/08 04:19	DD	E
Carbon Disulfide	ND	ug/L		5.0	0.50	SW846 8260B			11/13/08 04:19	DD	E
Carbon Tetrachloride	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:19	DD	E
Chlorobenzene	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:19	DD	E
Chlorodibromomethane	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:19	DD	E
Chloroethane	ND	ug/L		5.0	1.5	SW846 8260B			11/13/08 04:19	DD	E
Chloroform	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:19	DD	E
Chloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:19	DD	E
1,2-Dibromo-3-chloropropane	ND	ug/L		35.0	12.0	SW846 8260B			11/13/08 04:19	DD	E
1,2-Dibromoethane	13.7	ug/L		5.0	1.5	SW846 8260B			11/13/08 04:19	DD	E
1,1-Dichloroethane	ND	ug/L		5.0	0.50	SW846 8260B			11/13/08 04:19	DD	E
1,2-Dichloroethane	27.1	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:19	DD	E
1,1-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:19	DD	E
cis-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:19	DD	E
trans-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:19	DD	E
1,2-Dichloropropane	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:19	DD	E
cis-1,3-Dichloropropene	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:19	DD	E
trans-1,3-Dichloropropene	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:19	DD	E
Diisopropyl ether	4.4J	ug/L		5.0	0.50	SW846 8260B			11/13/08 04:19	DD	E
Ethyl tert-butyl ether	ND	ug/L		5.0	0.50	SW846 8260B			11/13/08 04:19	DD	E
Ethylbenzene	16.9	ug/L		5.0	1.5	SW846 8260B			11/13/08 04:19	DD	E
2-Hexanone	9.1J	ug/L		25.0	3.5	SW846 8260B			11/13/08 04:19	DD	E
Methyl t-Butyl Ether	28.1	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:19	DD	E
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		25.0	6.5	SW846 8260B			11/13/08 04:19	DD	E
Methylene Chloride	ND	ug/L		5.0	0.50	SW846 8260B			11/13/08 04:19	DD	E
Styrene	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:19	DD	E
1,1,2,2-Tetrachloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:19	DD	E
Tetrachloroethene	ND	ug/L		5.0	2.0	SW846 8260B			11/13/08 04:19	DD	E
Toluene	518	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:19	DD	E
Total Xylenes	915	ug/L		15.0	2.0	SW846 8260B			11/13/08 04:19	DD	E
1,1,1-Trichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:19	DD	E
1,1,2-Trichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:19	DD	E
Trichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:19	DD	E
Vinyl Chloride	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:19	DD	E

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ANALYTICAL RESULTS

Workorder: 9762518 Groundwater (11/05/08)

Lab ID: **9762518003** Date Collected: 11/5/2008 00:00 Matrix: Ground Water

Sample ID: **TWP-003_20081005_N** Date Received: 11/6/2008 19:49

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
o-Xylene	172	ug/L		5.0	1.0	SW846 8260B			11/13/08 04:19	DD	E
mp-Xylene	743	ug/L		10.0	1.5	SW846 8260B			11/13/08 04:19	DD	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	82.9	%		62-133		SW846 8260B			11/13/08 04:19	DD	E
Dibromofluoromethane (S)	87.5	%		78-116		SW846 8260B			11/13/08 04:19	DD	E
Toluene-d8 (S)	94.9	%		76-127		SW846 8260B			11/13/08 04:19	DD	E
4-Bromofluorobenzene (S)	99.2	%		79-114		SW846 8260B			11/13/08 04:19	DD	E
PETROLEUM HC's											
Diesel Range Organics C10-C28	0.25	mg/L		0.18	0.023	SW846 8015D	11/7/08	FPM	11/8/08 20:18	KJH	A1
Gasoline Range Organics	3440	ug/L		100	29.1	SW846 8015D			11/11/08 16:18	TEH	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	85.1	%		40-117		SW846 8015D	11/7/08	FPM	11/8/08 20:18	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	97.9	%		68-117		SW846 8015D			11/11/08 16:18	TEH	C

Sample Comments:

This sample was extracted and analyzed in duplicate in the 8015 diesel range organics analysis. Precision between the sample and its duplicate was outside laboratory control limits.

The GCMS volatiles analysis was performed at a dilution due to the level of target compounds.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9762518 Groundwater (11/05/08)

Lab ID: **9762518004** Date Collected: 11/5/2008 00:00 Matrix: Ground Water

Sample ID: **TWP-004_20081105_N** Date Received: 11/6/2008 19:49

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		10.0	4.0	SW846 8260B			11/13/08 03:48	DD	E
tert-Amyl methyl ether	ND	ug/L		2.0	0.80	SW846 8260B			11/13/08 03:48	DD	E
tert-Amyl Alcohol	80.5	ug/L		5.0	0.50	SW846 8260B			11/13/08 03:48	DD	E
tert-Amyl Ethylether	ND	ug/L		1.0	0.20	SW846 8260B			11/13/08 03:48	DD	E
Benzene	708	ug/L		10.0	4.0	SW846 8260B			11/13/08 23:00	DD	F
Bromochloromethane	ND	ug/L		1.0	0.20	SW846 8260B			11/13/08 03:48	DD	E
Bromodichloromethane	ND	ug/L		1.0	0.20	SW846 8260B			11/13/08 03:48	DD	E
Bromoform	ND	ug/L		1.0	0.20	SW846 8260B			11/13/08 03:48	DD	E
Bromomethane	ND	ug/L		1.0	0.20	SW846 8260B			11/13/08 03:48	DD	E
2-Butanone	8.8J	ug/L		10.0	3.0	SW846 8260B			11/13/08 03:48	DD	E
tert.- Butyl Alcohol	24.8	ug/L		10.0	3.0	SW846 8260B			11/13/08 03:48	DD	E
Carbon Disulfide	ND	ug/L		1.0	0.10	SW846 8260B			11/13/08 03:48	DD	E
Carbon Tetrachloride	ND	ug/L		1.0	0.20	SW846 8260B			11/13/08 03:48	DD	E
Chlorobenzene	ND	ug/L		1.0	0.20	SW846 8260B			11/13/08 03:48	DD	E
Chlorodibromomethane	ND	ug/L		1.0	0.20	SW846 8260B			11/13/08 03:48	DD	E
Chloroethane	ND	ug/L		1.0	0.30	SW846 8260B			11/13/08 03:48	DD	E
Chloroform	ND	ug/L		1.0	0.20	SW846 8260B			11/13/08 03:48	DD	E
Chloromethane	ND	ug/L		1.0	0.20	SW846 8260B			11/13/08 03:48	DD	E
1,2-Dibromo-3-chloropropane	ND	ug/L		7.0	2.4	SW846 8260B			11/13/08 03:48	DD	E
1,2-Dibromoethane	11.4	ug/L		1.0	0.30	SW846 8260B			11/13/08 03:48	DD	E
1,1-Dichloroethane	ND	ug/L		1.0	0.10	SW846 8260B			11/13/08 03:48	DD	E
1,2-Dichloroethane	21.4	ug/L		1.0	0.20	SW846 8260B			11/13/08 03:48	DD	E
1,1-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/13/08 03:48	DD	E
cis-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/13/08 03:48	DD	E
trans-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/13/08 03:48	DD	E
1,2-Dichloropropane	ND	ug/L		1.0	0.20	SW846 8260B			11/13/08 03:48	DD	E
cis-1,3-Dichloropropene	ND	ug/L		1.0	0.20	SW846 8260B			11/13/08 03:48	DD	E
trans-1,3-Dichloropropene	ND	ug/L		1.0	0.20	SW846 8260B			11/13/08 03:48	DD	E
Diisopropyl ether	5.1	ug/L		1.0	0.10	SW846 8260B			11/13/08 03:48	DD	E
Ethyl tert-butyl ether	ND	ug/L		1.0	0.10	SW846 8260B			11/13/08 03:48	DD	E
Ethylbenzene	12.8	ug/L		1.0	0.30	SW846 8260B			11/13/08 03:48	DD	E
2-Hexanone	7.1	ug/L		5.0	0.70	SW846 8260B			11/13/08 03:48	DD	E
Methyl t-Butyl Ether	52.0	ug/L		1.0	0.20	SW846 8260B			11/13/08 03:48	DD	E
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		5.0	1.3	SW846 8260B			11/13/08 03:48	DD	E
Methylene Chloride	ND	ug/L		1.0	0.10	SW846 8260B			11/13/08 03:48	DD	E
Styrene	ND	ug/L		1.0	0.20	SW846 8260B			11/13/08 03:48	DD	E
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/13/08 03:48	DD	E
Tetrachloroethene	ND	ug/L		1.0	0.40	SW846 8260B			11/13/08 03:48	DD	E
Toluene	750	ug/L		10.0	2.0	SW846 8260B			11/13/08 23:00	DD	F
Total Xylenes	57.4	ug/L		3.0	0.40	SW846 8260B			11/13/08 03:48	DD	E
1,1,1-Trichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/13/08 03:48	DD	E
1,1,2-Trichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/13/08 03:48	DD	E
Trichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/13/08 03:48	DD	E
Vinyl Chloride	ND	ug/L		1.0	0.20	SW846 8260B			11/13/08 03:48	DD	E

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ANALYTICAL RESULTS

Workorder: 9762518 Groundwater (11/05/08)

Lab ID: **9762518004** Date Collected: 11/5/2008 00:00 Matrix: Ground Water

Sample ID: **TWP-004_20081105_N** Date Received: 11/6/2008 19:49

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
o-Xylene	22.7	ug/L		1.0	0.20	SW846 8260B			11/13/08 03:48	DD	E
mp-Xylene	34.6	ug/L		2.0	0.30	SW846 8260B			11/13/08 03:48	DD	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	86.8	%		62-133		SW846 8260B			11/13/08 03:48	DD	E
Dibromofluoromethane (S)	82.9	%		78-116		SW846 8260B			11/13/08 03:48	DD	E
Toluene-d8 (S)	90.2	%		76-127		SW846 8260B			11/13/08 03:48	DD	E
4-Bromofluorobenzene (S)	97.4	%		79-114		SW846 8260B			11/13/08 03:48	DD	E
1,2-Dichloroethane-d4 (S)	84.4	%		62-133		SW846 8260B			11/13/08 23:00	DD	F
Toluene-d8 (S)	94.5	%		76-127		SW846 8260B			11/13/08 23:00	DD	F
Dibromofluoromethane (S)	87.4	%		78-116		SW846 8260B			11/13/08 23:00	DD	F
4-Bromofluorobenzene (S)	94.2	%		79-114		SW846 8260B			11/13/08 23:00	DD	F
PETROLEUM HC's											
Diesel Range Organics C10-C28	0.083J	mg/L		0.20	0.025	SW846 8015D	11/7/08	FPM	11/8/08 22:24	KJH	A1
Gasoline Range Organics	673	ug/L		100	29.1	SW846 8015D			11/11/08 15:44	TEH	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	84.7	%		40-117		SW846 8015D	11/7/08	FPM	11/8/08 22:24	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	116	%		68-117		SW846 8015D			11/11/08 15:44	TEH	C

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9762518 Groundwater (11/05/08)

Lab ID: **9762518005** Date Collected: 11/5/2008 00:00 Matrix: Ground Water

Sample ID: **Duplicate-001_20081105_FD** Date Received: 11/6/2008 19:49

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	1220	ug/L		50.0	20.0	SW846 8260B			11/13/08 05:20	DD	E
tert-Amyl methyl ether	ND	ug/L		10.0	4.0	SW846 8260B			11/13/08 05:20	DD	E
tert-Amyl Alcohol	47000	ug/L		500	50.0	SW846 8260B			11/14/08 00:01	DD	F
tert-Amyl Ethylether	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 05:20	DD	E
Benzene	8810	ug/L		100	40.0	SW846 8260B			11/14/08 00:01	DD	F
Bromochloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 05:20	DD	E
Bromodichloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 05:20	DD	E
Bromoform	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 05:20	DD	E
Bromomethane	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 05:20	DD	E
2-Butanone	1270	ug/L		50.0	15.0	SW846 8260B			11/13/08 05:20	DD	E
tert.- Butyl Alcohol	4880	ug/L		50.0	15.0	SW846 8260B			11/13/08 05:20	DD	E
Carbon Disulfide	ND	ug/L		5.0	0.50	SW846 8260B			11/13/08 05:20	DD	E
Carbon Tetrachloride	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 05:20	DD	E
Chlorobenzene	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 05:20	DD	E
Chlorodibromomethane	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 05:20	DD	E
Chloroethane	ND	ug/L		5.0	1.5	SW846 8260B			11/13/08 05:20	DD	E
Chloroform	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 05:20	DD	E
Chloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 05:20	DD	E
1,2-Dibromo-3-chloropropane	ND	ug/L		35.0	12.0	SW846 8260B			11/13/08 05:20	DD	E
1,2-Dibromoethane	162	ug/L		5.0	1.5	SW846 8260B			11/13/08 05:20	DD	E
1,1-Dichloroethane	ND	ug/L		5.0	0.50	SW846 8260B			11/13/08 05:20	DD	E
1,2-Dichloroethane	655	ug/L		5.0	1.0	SW846 8260B			11/13/08 05:20	DD	E
1,1-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 05:20	DD	E
cis-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 05:20	DD	E
trans-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 05:20	DD	E
1,2-Dichloropropane	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 05:20	DD	E
cis-1,3-Dichloropropene	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 05:20	DD	E
trans-1,3-Dichloropropene	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 05:20	DD	E
Diisopropyl ether	105	ug/L		5.0	0.50	SW846 8260B			11/13/08 05:20	DD	E
Ethyl tert-butyl ether	ND	ug/L		5.0	0.50	SW846 8260B			11/13/08 05:20	DD	E
Ethylbenzene	229	ug/L		5.0	1.5	SW846 8260B			11/13/08 05:20	DD	E
2-Hexanone	131	ug/L		25.0	3.5	SW846 8260B			11/13/08 05:20	DD	E
Methyl t-Butyl Ether	913	ug/L		5.0	1.0	SW846 8260B			11/13/08 05:20	DD	E
4-Methyl-2-Pentanone(MIBK)	75.9	ug/L		25.0	6.5	SW846 8260B			11/13/08 05:20	DD	E
Methylene Chloride	ND	ug/L		5.0	0.50	SW846 8260B			11/13/08 05:20	DD	E
Styrene	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 05:20	DD	E
1,1,2,2-Tetrachloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 05:20	DD	E
Tetrachloroethene	ND	ug/L		5.0	2.0	SW846 8260B			11/13/08 05:20	DD	E
Toluene	8870	ug/L		100	20.0	SW846 8260B			11/14/08 00:01	DD	F
Total Xylenes	1250	ug/L		15.0	2.0	SW846 8260B			11/13/08 05:20	DD	E
1,1,1-Trichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 05:20	DD	E
1,1,2-Trichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 05:20	DD	E
Trichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 05:20	DD	E
Vinyl Chloride	ND	ug/L		5.0	1.0	SW846 8260B			11/13/08 05:20	DD	E

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ANALYTICAL RESULTS

Workorder: 9762518 Groundwater (11/05/08)

Lab ID: **9762518005** Date Collected: 11/5/2008 00:00 Matrix: Ground Water

Sample ID: **Duplicate-001_20081105_FD** Date Received: 11/6/2008 19:49

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
o-Xylene	470	ug/L		5.0	1.0	SW846 8260B			11/13/08 05:20	DD	E
mp-Xylene	782	ug/L		10.0	1.5	SW846 8260B			11/13/08 05:20	DD	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	93.2	%		62-133		SW846 8260B			11/13/08 05:20	DD	E
Dibromofluoromethane (S)	79.8	%		78-116		SW846 8260B			11/13/08 05:20	DD	E
Toluene-d8 (S)	92.6	%		76-127		SW846 8260B			11/13/08 05:20	DD	E
4-Bromofluorobenzene (S)	99.7	%		79-114		SW846 8260B			11/13/08 05:20	DD	E
1,2-Dichloroethane-d4 (S)	87	%		62-133		SW846 8260B			11/14/08 00:01	DD	F
Dibromofluoromethane (S)	84	%		78-116		SW846 8260B			11/14/08 00:01	DD	F
Toluene-d8 (S)	93.2	%		76-127		SW846 8260B			11/14/08 00:01	DD	F
4-Bromofluorobenzene (S)	94.5	%		79-114		SW846 8260B			11/14/08 00:01	DD	F
PETROLEUM HC's											
Diesel Range Organics C10-C28	5.8	mg/L		0.88	0.11	SW846 8015D	11/7/08	FPM	11/13/08 16:33	KJH	A1
Gasoline Range Organics	83300	ug/L		2000	581	SW846 8015D			11/12/08 12:24	TEH	D
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	103	%		40-117		SW846 8015D	11/7/08	FPM	11/13/08 16:33	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	112	%		68-117		SW846 8015D			11/12/08 12:24	TEH	D

Sample Comments:

The gasoline range organics analysis for this sample was diluted due to the amount of analyte present. The detection limit was raised accordingly.

The GCMS volatiles analysis was performed at a dilution due to the level of target compounds.

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected. Reporting limits were adjusted accordingly.

Anna G Milliken
Laboratory Manager

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34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9762518 Groundwater (11/05/08)

Lab ID: **9762518006** Date Collected: 11/5/2008 00:00 Matrix: Ground Water

Sample ID: **Field Blank-001_20081105_FB** Date Received: 11/6/2008 19:49

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		10.0	4.0	SW846 8260B			11/12/08 23:12	DD	E
tert-Amyl methyl ether	ND	ug/L		2.0	0.80	SW846 8260B			11/12/08 23:12	DD	E
tert-Amyl Alcohol	ND	ug/L		5.0	0.50	SW846 8260B			11/12/08 23:12	DD	E
tert-Amyl Ethylether	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 23:12	DD	E
Benzene	ND	ug/L		1.0	0.40	SW846 8260B			11/12/08 23:12	DD	E
Bromochloromethane	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 23:12	DD	E
Bromodichloromethane	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 23:12	DD	E
Bromoform	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 23:12	DD	E
Bromomethane	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 23:12	DD	E
2-Butanone	ND	ug/L		10.0	3.0	SW846 8260B			11/12/08 23:12	DD	E
tert.- Butyl Alcohol	ND	ug/L		10.0	3.0	SW846 8260B			11/12/08 23:12	DD	E
Carbon Disulfide	ND	ug/L		1.0	0.10	SW846 8260B			11/12/08 23:12	DD	E
Carbon Tetrachloride	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 23:12	DD	E
Chlorobenzene	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 23:12	DD	E
Chlorodibromomethane	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 23:12	DD	E
Chloroethane	ND	ug/L		1.0	0.30	SW846 8260B			11/12/08 23:12	DD	E
Chloroform	5.1	ug/L		1.0	0.20	SW846 8260B			11/12/08 23:12	DD	E
Chloromethane	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 23:12	DD	E
1,2-Dibromo-3-chloropropane	ND	ug/L		7.0	2.4	SW846 8260B			11/12/08 23:12	DD	E
1,2-Dibromoethane	ND	ug/L		1.0	0.30	SW846 8260B			11/12/08 23:12	DD	E
1,1-Dichloroethane	ND	ug/L		1.0	0.10	SW846 8260B			11/12/08 23:12	DD	E
1,2-Dichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 23:12	DD	E
1,1-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 23:12	DD	E
cis-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 23:12	DD	E
trans-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 23:12	DD	E
1,2-Dichloropropane	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 23:12	DD	E
cis-1,3-Dichloropropene	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 23:12	DD	E
trans-1,3-Dichloropropene	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 23:12	DD	E
Diisopropyl ether	ND	ug/L		1.0	0.10	SW846 8260B			11/12/08 23:12	DD	E
Ethyl tert-butyl ether	ND	ug/L		1.0	0.10	SW846 8260B			11/12/08 23:12	DD	E
Ethylbenzene	ND	ug/L		1.0	0.30	SW846 8260B			11/12/08 23:12	DD	E
2-Hexanone	ND	ug/L		5.0	0.70	SW846 8260B			11/12/08 23:12	DD	E
Methyl t-Butyl Ether	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 23:12	DD	E
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		5.0	1.3	SW846 8260B			11/12/08 23:12	DD	E
Methylene Chloride	ND	ug/L		1.0	0.10	SW846 8260B			11/12/08 23:12	DD	E
Styrene	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 23:12	DD	E
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 23:12	DD	E
Tetrachloroethene	ND	ug/L		1.0	0.40	SW846 8260B			11/12/08 23:12	DD	E
Toluene	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 23:12	DD	E
Total Xylenes	ND	ug/L		3.0	0.40	SW846 8260B			11/12/08 23:12	DD	E
1,1,1-Trichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 23:12	DD	E
1,1,2-Trichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 23:12	DD	E
Trichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 23:12	DD	E
Vinyl Chloride	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 23:12	DD	E

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ANALYTICAL RESULTS

Workorder: 9762518 Groundwater (11/05/08)

Lab ID: **9762518006** Date Collected: 11/5/2008 00:00 Matrix: Ground Water

Sample ID: **Field Blank-001_20081105_FB** Date Received: 11/6/2008 19:49

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
o-Xylene	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 23:12	DD	E
mp-Xylene	ND	ug/L		2.0	0.30	SW846 8260B			11/12/08 23:12	DD	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	82.1	%		62-133		SW846 8260B			11/12/08 23:12	DD	E
Dibromofluoromethane (S)	86.3	%		78-116		SW846 8260B			11/12/08 23:12	DD	E
Toluene-d8 (S)	94.8	%		76-127		SW846 8260B			11/12/08 23:12	DD	E
4-Bromofluorobenzene (S)	96.1	%		79-114		SW846 8260B			11/12/08 23:12	DD	E
PETROLEUM HC's											
Diesel Range Organics C10-C28	ND	mg/L		0.16	0.020	SW846 8015D	11/7/08	FPM	11/9/08 00:30	KJH	A1
Gasoline Range Organics	ND	ug/L		100	29.1	SW846 8015D			11/11/08 15:07	TEH	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	87.4	%		40-117		SW846 8015D	11/7/08	FPM	11/9/08 00:30	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	116	%		68-117		SW846 8015D			11/11/08 15:07	TEH	C

Sample Comments:

Anna G Milliken
Laboratory Manager

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34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9762518 Groundwater (11/05/08)

Lab ID: **9762518007** Date Collected: 11/5/2008 00:00 Matrix: Ground Water

Sample ID: **Trip Blank-001_20081105_TB** Date Received: 11/6/2008 19:49

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		10.0	4.0	SW846 8260B			11/12/08 22:11	DD	A
tert-Amyl methyl ether	ND	ug/L		2.0	0.80	SW846 8260B			11/12/08 22:11	DD	A
tert-Amyl Alcohol	ND	ug/L		5.0	0.50	SW846 8260B			11/12/08 22:11	DD	A
tert-Amyl Ethylether	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 22:11	DD	A
Benzene	ND	ug/L		1.0	0.40	SW846 8260B			11/12/08 22:11	DD	A
Bromochloromethane	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 22:11	DD	A
Bromodichloromethane	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 22:11	DD	A
Bromoform	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 22:11	DD	A
Bromomethane	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 22:11	DD	A
2-Butanone	ND	ug/L		10.0	3.0	SW846 8260B			11/12/08 22:11	DD	A
tert.- Butyl Alcohol	ND	ug/L		10.0	3.0	SW846 8260B			11/12/08 22:11	DD	A
Carbon Disulfide	ND	ug/L		1.0	0.10	SW846 8260B			11/12/08 22:11	DD	A
Carbon Tetrachloride	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 22:11	DD	A
Chlorobenzene	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 22:11	DD	A
Chlorodibromomethane	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 22:11	DD	A
Chloroethane	ND	ug/L		1.0	0.30	SW846 8260B			11/12/08 22:11	DD	A
Chloroform	4.8	ug/L		1.0	0.20	SW846 8260B			11/12/08 22:11	DD	A
Chloromethane	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 22:11	DD	A
1,2-Dibromo-3-chloropropane	ND	ug/L		7.0	2.4	SW846 8260B			11/12/08 22:11	DD	A
1,2-Dibromoethane	ND	ug/L		1.0	0.30	SW846 8260B			11/12/08 22:11	DD	A
1,1-Dichloroethane	ND	ug/L		1.0	0.10	SW846 8260B			11/12/08 22:11	DD	A
1,2-Dichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 22:11	DD	A
1,1-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 22:11	DD	A
cis-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 22:11	DD	A
trans-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 22:11	DD	A
1,2-Dichloropropane	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 22:11	DD	A
cis-1,3-Dichloropropene	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 22:11	DD	A
trans-1,3-Dichloropropene	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 22:11	DD	A
Diisopropyl ether	ND	ug/L		1.0	0.10	SW846 8260B			11/12/08 22:11	DD	A
Ethyl tert-butyl ether	ND	ug/L		1.0	0.10	SW846 8260B			11/12/08 22:11	DD	A
Ethylbenzene	ND	ug/L		1.0	0.30	SW846 8260B			11/12/08 22:11	DD	A
2-Hexanone	ND	ug/L		5.0	0.70	SW846 8260B			11/12/08 22:11	DD	A
Methyl t-Butyl Ether	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 22:11	DD	A
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		5.0	1.3	SW846 8260B			11/12/08 22:11	DD	A
Methylene Chloride	ND	ug/L		1.0	0.10	SW846 8260B			11/12/08 22:11	DD	A
Styrene	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 22:11	DD	A
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 22:11	DD	A
Tetrachloroethene	ND	ug/L		1.0	0.40	SW846 8260B			11/12/08 22:11	DD	A
Toluene	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 22:11	DD	A
Total Xylenes	ND	ug/L		3.0	0.40	SW846 8260B			11/12/08 22:11	DD	A
1,1,1-Trichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 22:11	DD	A
1,1,2-Trichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 22:11	DD	A
Trichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 22:11	DD	A
Vinyl Chloride	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 22:11	DD	A

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ANALYTICAL RESULTS

Workorder: 9762518 Groundwater (11/05/08)

Lab ID: **9762518007** Date Collected: 11/5/2008 00:00 Matrix: Ground Water

Sample ID: **Trip Blank-001_20081105_TB** Date Received: 11/6/2008 19:49

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
o-Xylene	ND	ug/L		1.0	0.20	SW846 8260B			11/12/08 22:11	DD	A
mp-Xylene	ND	ug/L		2.0	0.30	SW846 8260B			11/12/08 22:11	DD	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	80.4	%		62-133		SW846 8260B			11/12/08 22:11	DD	A
4-Bromofluorobenzene (S)	94.7	%		79-114		SW846 8260B			11/12/08 22:11	DD	A
Dibromofluoromethane (S)	85.9	%		78-116		SW846 8260B			11/12/08 22:11	DD	A
Toluene-d8 (S)	96	%		76-127		SW846 8260B			11/12/08 22:11	DD	A

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9762518 Groundwater (11/05/08)

Lab ID: **9762518008** Date Collected: 11/5/2008 16:00 Matrix: Ground Water

Sample ID: **TWP-001_20081105_N** Date Received: 11/11/2008 18:48

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Gasoline Range Organics	39700	ug/L		2000	581	SW846 8015D			11/12/08 11:50	TEH	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	110	%		68-117		SW846 8015D			11/12/08 11:50	TEH	A
VOLATILE ORGANICS											
Acetone	1270	ug/L		50.0	20.0	SW846 8260B			11/14/08 01:03	DD	C
tert-Amyl methyl ether	ND	ug/L		10.0	4.0	SW846 8260B			11/14/08 01:03	DD	C
tert-Amyl Alcohol	48400	ug/L		1250	125	SW846 8260B			11/14/08 01:28	DD	D
tert-Amyl Ethylether	ND	ug/L		5.0	1.0	SW846 8260B			11/14/08 01:03	DD	C
Benzene	15300	ug/L		250	100	SW846 8260B			11/14/08 01:28	DD	D
Bromochloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/14/08 01:03	DD	C
Bromodichloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/14/08 01:03	DD	C
Bromoform	ND	ug/L		5.0	1.0	SW846 8260B			11/14/08 01:03	DD	C
Bromomethane	ND	ug/L		5.0	1.0	SW846 8260B			11/14/08 01:03	DD	C
2-Butanone	1320	ug/L		50.0	15.0	SW846 8260B			11/14/08 01:03	DD	C
tert.- Butyl Alcohol	3970	ug/L		50.0	15.0	SW846 8260B			11/14/08 01:03	DD	C
Carbon Disulfide	ND	ug/L		5.0	0.50	SW846 8260B			11/14/08 01:03	DD	C
Carbon Tetrachloride	ND	ug/L		5.0	1.0	SW846 8260B			11/14/08 01:03	DD	C
Chlorobenzene	ND	ug/L		5.0	1.0	SW846 8260B			11/14/08 01:03	DD	C
Chlorodibromomethane	ND	ug/L		5.0	1.0	SW846 8260B			11/14/08 01:03	DD	C
Chloroethane	ND	ug/L		5.0	1.5	SW846 8260B			11/14/08 01:03	DD	C
Chloroform	ND	ug/L		5.0	1.0	SW846 8260B			11/14/08 01:03	DD	C
Chloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/14/08 01:03	DD	C
1,2-Dibromo-3-chloropropane	ND	ug/L		35.0	12.0	SW846 8260B			11/14/08 01:03	DD	C
1,2-Dibromoethane	265	ug/L		5.0	1.5	SW846 8260B			11/14/08 01:03	DD	C
1,1-Dichloroethane	ND	ug/L		5.0	0.50	SW846 8260B			11/14/08 01:03	DD	C
1,2-Dichloroethane	913	ug/L		5.0	1.0	SW846 8260B			11/14/08 01:03	DD	C
1,1-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/14/08 01:03	DD	C
cis-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/14/08 01:03	DD	C
trans-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/14/08 01:03	DD	C
1,2-Dichloropropane	ND	ug/L		5.0	1.0	SW846 8260B			11/14/08 01:03	DD	C
cis-1,3-Dichloropropene	ND	ug/L		5.0	1.0	SW846 8260B			11/14/08 01:03	DD	C
trans-1,3-Dichloropropene	ND	ug/L		5.0	1.0	SW846 8260B			11/14/08 01:03	DD	C
Diisopropyl ether	130	ug/L		5.0	0.50	SW846 8260B			11/14/08 01:03	DD	C
Ethyl tert-butyl ether	ND	ug/L		5.0	0.50	SW846 8260B			11/14/08 01:03	DD	C
Ethylbenzene	1060	ug/L		250	75.0	SW846 8260B			11/14/08 01:28	DD	D
2-Hexanone	147	ug/L		25.0	3.5	SW846 8260B			11/14/08 01:03	DD	C
Methyl t-Butyl Ether	949	ug/L		5.0	1.0	SW846 8260B			11/14/08 01:03	DD	C
4-Methyl-2-Pentanone(MIBK)	83.9	ug/L		25.0	6.5	SW846 8260B			11/14/08 01:03	DD	C
Methylene Chloride	ND	ug/L		5.0	0.50	SW846 8260B			11/14/08 01:03	DD	C
Styrene	ND	ug/L		5.0	1.0	SW846 8260B			11/14/08 01:03	DD	C
1,1,2,2-Tetrachloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/14/08 01:03	DD	C
Tetrachloroethene	ND	ug/L		5.0	2.0	SW846 8260B			11/14/08 01:03	DD	C

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ANALYTICAL RESULTS

Workorder: 9762518 Groundwater (11/05/08)

Lab ID: **9762518008** Date Collected: 11/5/2008 16:00 Matrix: Ground Water

Sample ID: **TWP-001_20081105_N** Date Received: 11/11/2008 18:48

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Toluene	20600	ug/L		250	50.0	SW846 8260B			11/14/08 01:28	DD	D
Total Xylenes	5140	ug/L		750	100	SW846 8260B			11/14/08 01:28	DD	D
1,1,1-Trichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/14/08 01:03	DD	C
1,1,2-Trichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/14/08 01:03	DD	C
Trichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/14/08 01:03	DD	C
Vinyl Chloride	ND	ug/L		5.0	1.0	SW846 8260B			11/14/08 01:03	DD	C
o-Xylene	1570	ug/L		250	50.0	SW846 8260B			11/14/08 01:28	DD	D
mp-Xylene	3570	ug/L		500	75.0	SW846 8260B			11/14/08 01:28	DD	D
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	108	%		62-133		SW846 8260B			11/14/08 01:03	DD	C
Dibromofluoromethane (S)	77.5	%	1	78-116		SW846 8260B			11/14/08 01:03	DD	C
Toluene-d8 (S)	82.9	%		76-127		SW846 8260B			11/14/08 01:03	DD	C
4-Bromofluorobenzene (S)	91.8	%		79-114		SW846 8260B			11/14/08 01:03	DD	C
1,2-Dichloroethane-d4 (S)	109	%		62-133		SW846 8260B			11/14/08 01:28	DD	D
Toluene-d8 (S)	115	%		76-127		SW846 8260B			11/14/08 01:28	DD	D
Dibromofluoromethane (S)	101	%		78-116		SW846 8260B			11/14/08 01:28	DD	D
4-Bromofluorobenzene (S)	105	%		79-114		SW846 8260B			11/14/08 01:28	DD	D

Sample Comments:

The gasoline range organics analysis for this sample was diluted due to the amount of analyte present. The detection limit was raised accordingly.

The GCMS volatiles analysis was performed at a dilution due to the level of target compounds.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS QUALIFIERS\FLAGS

Workorder: 9762518 Groundwater (11/05/08)

PARAMETER QUALIFIERS\FLAGS

[1] The surrogate recovery was outside of the established control limits.

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Page 1 of 1 (2)
Courier:
Tracking #:

SB 11/7/08

* 9 7 6 2 5 1 8 *

Co. Name: REPSG, Inc
Contact (Report to): Mark Kuczynski
Address: 6901 Kingsessing Ave 2nd Fl, Philadelphia, PA 19142
Phone: 215-729-3220
Bill to (if different than Report to): Same
PO#: 2609
Project Name/#: Calvert Citgo
ALSI Quote #: 111218
TAT: [✓] Normal-Standard TAT is ~~10-12~~ 5 business days. [ ] Rush-Subject to ALSI approval and surcharges.
Date Required:
Approved By: Dan B.
Email? ✓Y mtkuczynski@repsg.com bmacphail@repsg.com
Fax? Y No

	VOA	AG	VOA
***Container Type	VOA	AG	VOA
***Container Size	40mL	1L	40mL
***Preservative	HCL	H_2SO_4	HCL

ANALYSES/METHOD REQUESTED: VOC's by method (include TBA + MTBE) 8260B; TPH-DRO 8015; TPH-GRO 8015

Enter Number of Containers Per Analysis

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	VOC's 8260B	TPH-DRO 8015	TPH-GRO 8015	Notes
1 TWP-001	No vials received	11.5.08	16:00	G	GW	~~2~~	2	~~2~~	> No vials rcvd for TWP-001 SB 11/7/08
2 TWP-002		11.5.08		G	GW	3	1	[illegible]	
3 TWP-003		11.5.08		G	GW	2	2	2	
4 TWP-004		11.5.08		G	GW	2	1.5	2	
5 Duplicate-001		11.5.08	X	G	GW	2	2	2	No time SB 11-7-08
6 Field Blank-001		11.5.08		X	DI	2	2	2	
7 Trip Blank-001		11.5.08		X	DI	2			
8									

Cooler Temp: 1
Therm. ID: 5107358
No. of Coolers:
Notes:

Circle appropriate Y or N.
Correct containers? Y N
Correct sample volume? Y N
Correct preservation? Y N
Headspace/Volatiles? Y N
Custody seals Present? Y N
(If present) Seals intact? Y N
Received on ice? Y N
COC/Labels complete/accurate? Y N
Container in good condition? Y N

SAMPLED BY (Please Print): Brenda L. MacPhail * per email from M. Kuczynski 11/7/08
LOGGED BY (signature): [signature] Date: 11-7-08 Time: 1047
REVIEWED BY (signature):

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1	[signature]	11/6	12:20	2	Ron Hodges	11-6	1220
3	Ron Hodges	11-6	1800	4	VM	11/6	1800
5	VM	11/6	1949	6	[signature]	11/6	1949
7				8			
9				10			

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full
EDDs Required? ✓ If yes, format type: EQUIS
SDWA Forms? yes
State Samples Collected In? MD ✓ NJ NY PA Other
DOD Criteria Required?

ALSI FIELD SERVICES: [✓] Pickup [ ] Labor [ ] Composite Sampling [ ] Rental Equipment [ ] Other:

* G=Grab; C=Composite
**Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

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Rev 6/07

Report ID: 9762518

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Page 1 of 2 — 11/18/08

Courier:

Tracking #:

COC# 9762518

Co. Name: REPS & INC

Contact (Report to): Ron Feingold — Phone: 215 729 3220

Address: 6901 Lindbergh Ave Philadelphia, PA 19142

Bill to (if different than Report to): SAME — PO#: 2609

Project Name/#: Culvert Citso — ALSI Quote #: 11/2/08

TAT: [✓] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALSI approval and surcharges. — Date Required: — Approved By:

Email? [X] Y RFeingold@REPSG.com — Fax? [ ] Y No.:

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	VOCs by method 8260B include TBA + MTBE	TPH-DRO 8015	TPH-GRO 8015
8 TWP-001		11/5/08	16:00	G	GW	2	2	
2								
3	The TPHDRO was received with							
4	the original Sample Submission							
5	on 11/06/08 EAB							
6								
7	4 VIALS							
8								

***Container Type: G G G
***Container Size: 40 40 4p
*** Preservative:

ANALYSES/METHOD REQUESTED — Enter Number of Containers Per Analysis

Receipt Information (completed by Sample Receiver)
Performed by:
Cooler Temp: 2
Therm. ID: 502355
No. of Coolers:
Notes:

	Circle appropriate Y or N.
Correct containers?	N
Correct sample volume?	N
Correct preservation?	N
Headspace/Volatiles?	N
Custody seals Present?	Y
(if present) Seals intact?	Y
Received on ice?	Y
COC/Labels complete/accurate?	N
Container in good condition?	Y

SAMPLED BY (Please Print):

LOGGED BY(signature): DATE 11-11-08 TIME 1221

REVIEWED BY(signature): DATE TIME

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 Mr Tyska REPSG	11/11/08	15:35	2 Ron Hongay	11-11	1327
3 Rob Hongay	11-11-8	1700	4 VM	11/11	1700
5 VM	11/11	1848	6 Ronald Wise	11/11/08	1848
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ]

EDDs Required? [X] If yes, format type: EQuIS

SDWA Forms? yes [ ] yes [ ] yes [ ] yes [ ] Other

State Samples Collected In? MD [X] NJ [ ] NY [ ] PA [ ]

EDD: PWSID No.

DOD Criteria Required?

ALSI FIELD SERVICES: [X] Pickup [ ] Labor [ ] Composite Sampling [ ] Rental Equipment [ ] Other:

* G=Grab; C=Composite

**Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY

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Susan J. Baer

From: Mark Kuczynski [Mkuczynski@repsg.com]
Sent: Friday, November 07, 2008 10:02 AM
To: Susan J. Baer
Subject: RE: MD job

You can have Brenda MacPhail as the sampler. Thanks.

From: Susan J. Baer [mailto:sbaer@analyticallab.com]
Sent: Friday, November 07, 2008 10:02
To: Mark Kuczynski
Subject: RE: MD job

OK Mark. That will be no problem. The person who filled out the chains of custody indicated that the GW samples were one workorder (page 1 of 1) and that the SO samples were one workorder (1 of 2 and 2 of 2). This will ensure separate entry.

Can you tell me who collected the samples, or should I put "collected by client" on the reports? (This field was blank on the chain of custody.)

Thanks.

Sue

From: Mark Kuczynski [mailto:Mkuczynski@repsg.com]
Sent: Friday, November 07, 2008 9:53 AM
To: Susan J. Baer
Subject: MD job

Sue, for the soil and GW samples that came in yesterday for the MD job, please have separate lab reports, invoices, and EDDs for the water and the soil samples. Let me know of any questions. Thanks.

Mark Kuczynski
Environmental Database Manager
REPSG
React Environmental
Professional Services Group, Inc
P.O. Box 5377
6901 Kingsessing Ave., Suite 201
Philadelphia, PA 19142
Phone: 215-729-3220 ex. 311
Fax: 215 729-1557
Cell: 267-688-7309
MKuczynski@repsg.com
www.repsg.com

Susan J. Baer

From: Mark Kuczynski [Mkuczynski@repsg.com]
Sent: Monday, November 10, 2008 5:15 PM
To: Susan J. Baer; Vanessa Shomper
Cc: Ron Feingold; Suzanne Shourds
Subject: RE: Calvert Citgo-Grounwater (ALSI #9762518 001)
Importance: High

Sue, Vanessa,

4 voas were left at our office in our fridge for the VOC and the GRO analysis for sample TWP-001. First, can we have a courier pick up these straggling voa vials tomorrow (Tuesday). Second, can you let me know how many days this will push back receiving all of our results? Would there be any way to still receive results on time or maybe only a day late since its only 1 sample? Third, thanks for bringing this to our attention. Please let me know our options here. Thank you.

Mark

From: Susan J. Baer [mailto:sbaer@analyticallab.com]
Sent: Monday, November 10, 2008 16:54
To: Mark Kuczynski
Subject: Calvert Citgo-Grounwater (ALSI #9762518 001)

Good Afternoon Mark,

I wanted to confirm that groundwater sample TWP-001 that was received on 11/05/08 for this project did not include the 40mL VOA containers for the VOCs by 8260 and TPHGRO analyses. The chain of custody did indicate that 2 vials should have been received for each analysis.

I do recall speaking to Ron Feingold prior to receipt of these samples and him mentioning that one location required only TPHDRO. Hopefully, this is the one. Please confirm. Thank you.

Sue

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Certificate of Analysis

Project Name:	**MD SITE - SOILS - MDE -REV**	Workorder:	**9764091**
Purchase Order:		Workorder ID:	**Groundwater (11/17/08)**

Mr. Mark Kuczynski
REPSG
6901 Kingsessing Ave., Ste 201
PO Box 5377
Philadelphia, PA 19142

November 26, 2008

Dear Mr. Kuczynski,

Enclosed are the analytical results for samples received by the laboratory on Tuesday, November 18, 2008

ALSI is a National Environmental Laboratory Accreditation Conference (NELAC) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAC.

If you have any questions regarding this certificate of analysis, please contact Anna Milliken (Project Coordinator) or Anna G Milliken (Laboratory Manager) at (717) 944-5541.

Please visit us at www.analyticallab.com for a listing of ALSI's NELAC accreditations and Scope of Work, as well as other links to Water Quality documentation on the internet.

NOTE: ALSI has changed the report generation tool and while we have tried to retain the existing format, you will notice some changes in the laboratory report. Please feel free to contact ALSI in case you have any questions.

Analytical Laboratory Services, Inc.

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Anna G Milliken
Laboratory Manager

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34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

SAMPLE SUMMARY

Workorder: 9764091 Groundwater (11/17/08) Discard Date: 12/09/2008

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
9764091001	MW-001_20081117_N	Water	11/17/08 13:45	11/18/08 20:00	Joe Crooks
9764091002	MW-002_20081117_N	Water	11/17/08 14:30	11/18/08 20:00	Joe Crooks
9764091003	MW-003_20081117_N	Water	11/17/08 10:00	11/18/08 20:00	Joe Crooks
9764091004	MW-005_20081117_N	Water	11/17/08 13:00	11/18/08 20:00	Joe Crooks
9764091005	MW-006_20081117_N	Water	11/17/08 15:30	11/18/08 20:00	Joe Crooks
9764091006	MW-007_20081117_N	Water	11/17/08 11:25	11/18/08 20:00	Joe Crooks
9764091007	MP-001_20081117_N	Water	11/17/08 08:45	11/18/08 20:00	Joe Crooks
9764091008	MP-002_20081117_N	Water	11/17/08 10:35	11/18/08 20:00	Joe Crooks
9764091009	Duplicate-001_20081117_FD	Water	11/17/08 00:00	11/18/08 20:00	Joe Crooks
9764091010	Field Blank_20081117_FB	Water	11/17/08 12:00	11/18/08 20:00	Joe Crooks
9764091011	Trip Blank_20081118_TB	Water	11/18/08 20:00	11/18/08 20:00	Joe Crooks

Workorder Comments:

Notes

-- Samples collected by ALSI personnel are done so in accordance with the procedures set forth in the ALSI Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

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ANALYTICAL RESULTS

Workorder: 9764091 Groundwater (11/17/08)

Lab ID: **9764091001** Date Collected: 11/17/2008 13:45 Matrix: Water

Sample ID: **MW-001_20081117_N** Date Received: 11/18/2008 20:00

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	12.1	mg/L		1.6	0.21	SW846 8015D	11/20/08	CMG	11/22/08 05:08	JJH	A1
Gasoline Range Organics	16800	ug/L		1000	291	SW846 8015D			11/19/08 14:38	TEH	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	94	%		40-117		SW846 8015D	11/20/08	CMG	11/22/08 05:08	JJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	114	%		68-117		SW846 8015D			11/19/08 14:38	TEH	C
VOLATILE ORGANICS											
Acetone	ND	ug/L		50.0	20.0	SW846 8260B			11/21/08 04:13	DD	E
tert-Amyl methyl ether	ND	ug/L		10.0	4.0	SW846 8260B			11/21/08 04:13	DD	E
tert-Amyl Alcohol	8300	ug/L		500	50.0	SW846 8260B			11/22/08 00:29	DD	E
tert-Amyl Ethylether	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:13	DD	E
Benzene	13800	ug/L		100	40.0	SW846 8260B			11/22/08 00:29	DD	E
Bromochloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:13	DD	E
Bromodichloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:13	DD	E
Bromoform	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:13	DD	E
Bromomethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:13	DD	E
2-Butanone	ND	ug/L		50.0	15.0	SW846 8260B			11/21/08 04:13	DD	E
tert.- Butyl Alcohol	842	ug/L		50.0	15.0	SW846 8260B			11/21/08 04:13	DD	E
Carbon Disulfide	ND	ug/L		5.0	0.50	SW846 8260B			11/21/08 04:13	DD	E
Carbon Tetrachloride	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:13	DD	E
Chlorobenzene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:13	DD	E
Chlorodibromomethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:13	DD	E
Chloroethane	ND	ug/L		5.0	1.5	SW846 8260B			11/21/08 04:13	DD	E
Chloroform	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:13	DD	E
Chloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:13	DD	E
1,2-Dibromo-3-chloropropane	ND	ug/L		35.0	12.0	SW846 8260B			11/21/08 04:13	DD	E
1,2-Dibromoethane	ND	ug/L		5.0	1.5	SW846 8260B			11/21/08 04:13	DD	E
1,1-Dichloroethane	ND	ug/L		5.0	0.50	SW846 8260B			11/21/08 04:13	DD	E
1,2-Dichloroethane	27.1	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:13	DD	E
1,1-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:13	DD	E
cis-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:13	DD	E
trans-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:13	DD	E
1,2-Dichloropropane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:13	DD	E
cis-1,3-Dichloropropene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:13	DD	E
trans-1,3-Dichloropropene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:13	DD	E
Diisopropyl ether	26.1	ug/L		5.0	0.50	SW846 8260B			11/21/08 04:13	DD	E
Ethyl tert-butyl ether	ND	ug/L		5.0	0.50	SW846 8260B			11/21/08 04:13	DD	E
Ethylbenzene	1340	ug/L		100	30.0	SW846 8260B			11/22/08 00:29	DD	E
2-Hexanone	4.7J	ug/L		25.0	3.5	SW846 8260B			11/21/08 04:13	DD	E
Methyl t-Butyl Ether	5.4	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:13	DD	E
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		25.0	6.5	SW846 8260B			11/21/08 04:13	DD	E

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ANALYTICAL RESULTS

Workorder: 9764091 Groundwater (11/17/08)

Lab ID: **9764091001** Date Collected: 11/17/2008 13:45 Matrix: Water

Sample ID: **MW-001_20081117_N** Date Received: 11/18/2008 20:00

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	1.0J	ug/L		5.0	0.50	SW846 8260B			11/21/08 04:13	DD	E
Styrene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:13	DD	E
1,1,2,2-Tetrachloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:13	DD	E
Tetrachloroethene	ND	ug/L		5.0	2.0	SW846 8260B			11/21/08 04:13	DD	E
Toluene	764	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:13	DD	E
Total Xylenes	3210	ug/L		300	40.0	SW846 8260B			11/22/08 00:29	DD	E
1,1,1-Trichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:13	DD	E
1,1,2-Trichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:13	DD	E
Trichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:13	DD	E
Vinyl Chloride	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:13	DD	E
o-Xylene	169	ug/L		100	20.0	SW846 8260B			11/22/08 00:29	DD	E
mp-Xylene	3040	ug/L		200	30.0	SW846 8260B			11/22/08 00:29	DD	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	98	%		62-133		SW846 8260B			11/21/08 04:13	DD	E
Dibromofluoromethane (S)	99.7	%		78-116		SW846 8260B			11/21/08 04:13	DD	E
Toluene-d8 (S)	94.7	%		76-127		SW846 8260B			11/21/08 04:13	DD	E
4-Bromofluorobenzene (S)	91.4	%		79-114		SW846 8260B			11/21/08 04:13	DD	E
1,2-Dichloroethane-d4 (S)	95.6	%		62-133		SW846 8260B			11/22/08 00:29	DD	E
4-Bromofluorobenzene (S)	88.5	%		79-114		SW846 8260B			11/22/08 00:29	DD	E
Toluene-d8 (S)	94.2	%		76-127		SW846 8260B			11/22/08 00:29	DD	E
Dibromofluoromethane (S)	88.8	%		78-116		SW846 8260B			11/22/08 00:29	DD	E

Sample Comments:

The gasoline range organics analysis for this sample was diluted due to the amount of analyte present. The detection limit was raised accordingly.

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected. Reporting limits were adjusted accordingly.

The GCMS volatiles analysis was performed at a dilution due to the level of target compounds.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9764091 Groundwater (11/17/08)

Lab ID: **9764091002** Date Collected: 11/17/2008 14:30 Matrix: Water

Sample ID: **MW-002_20081117_N** Date Received: 11/18/2008 20:00

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	2.9	mg/L		1.6	0.20	SW846 8015D	11/20/08	CMG	11/22/08 06:10	JJH	A1
Gasoline Range Organics	96.1J	ug/L		100	29.1	SW846 8015D			11/19/08 12:23	TEH	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	101	%		40-117		SW846 8015D	11/20/08	CMG	11/22/08 06:10	JJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	111	%		68-117		SW846 8015D			11/19/08 12:23	TEH	C
VOLATILE ORGANICS											
Acetone	ND	ug/L		10.0	4.0	SW846 8260B			11/21/08 00:19	DD	E
tert-Amyl methyl ether	ND	ug/L		2.0	0.80	SW846 8260B			11/21/08 00:19	DD	E
tert-Amyl Alcohol	ND	ug/L	1	5.0	0.50	SW846 8260B			11/21/08 00:19	DD	E
tert-Amyl Ethylether	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:19	DD	E
Benzene	68.1	ug/L	2	1.0	0.40	SW846 8260B			11/21/08 00:19	DD	E
Bromochloromethane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:19	DD	E
Bromodichloromethane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:19	DD	E
Bromoform	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:19	DD	E
Bromomethane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:19	DD	E
2-Butanone	ND	ug/L		10.0	3.0	SW846 8260B			11/21/08 00:19	DD	E
tert.- Butyl Alcohol	52.1	ug/L		10.0	3.0	SW846 8260B			11/21/08 00:19	DD	E
Carbon Disulfide	ND	ug/L		1.0	0.10	SW846 8260B			11/21/08 00:19	DD	E
Carbon Tetrachloride	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:19	DD	E
Chlorobenzene	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:19	DD	E
Chlorodibromomethane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:19	DD	E
Chloroethane	ND	ug/L		1.0	0.30	SW846 8260B			11/21/08 00:19	DD	E
Chloroform	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:19	DD	E
Chloromethane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:19	DD	E
1,2-Dibromo-3-chloropropane	ND	ug/L		7.0	2.4	SW846 8260B			11/21/08 00:19	DD	E
1,2-Dibromoethane	ND	ug/L		1.0	0.30	SW846 8260B			11/21/08 00:19	DD	E
1,1-Dichloroethane	ND	ug/L		1.0	0.10	SW846 8260B			11/21/08 00:19	DD	E
1,2-Dichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:19	DD	E
1,1-Dichloroethene	ND	ug/L	1	1.0	0.20	SW846 8260B			11/21/08 00:19	DD	E
cis-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:19	DD	E
trans-1,2-Dichloroethene	ND	ug/L	2	1.0	0.20	SW846 8260B			11/21/08 00:19	DD	E
1,2-Dichloropropane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:19	DD	E
cis-1,3-Dichloropropene	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:19	DD	E
trans-1,3-Dichloropropene	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:19	DD	E
Diisopropyl ether	ND	ug/L		1.0	0.10	SW846 8260B			11/21/08 00:19	DD	E
Ethyl tert-butyl ether	ND	ug/L		1.0	0.10	SW846 8260B			11/21/08 00:19	DD	E
Ethylbenzene	1.9	ug/L	1	1.0	0.30	SW846 8260B			11/21/08 00:19	DD	E
2-Hexanone	ND	ug/L		5.0	0.70	SW846 8260B			11/21/08 00:19	DD	E
Methyl t-Butyl Ether	14.7	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:19	DD	E
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		5.0	1.3	SW846 8260B			11/21/08 00:19	DD	E

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ANALYTICAL RESULTS

Workorder: 9764091 Groundwater (11/17/08)

Lab ID: **9764091002** Date Collected: 11/17/2008 14:30 Matrix: Water

Sample ID: **MW-002_20081117_N** Date Received: 11/18/2008 20:00

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	ND	ug/L		1.0	0.10	SW846 8260B			11/21/08 00:19	DD	E
Styrene	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:19	DD	E
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:19	DD	E
Tetrachloroethene	ND	ug/L		1.0	0.40	SW846 8260B			11/21/08 00:19	DD	E
Toluene	5.8	ug/L	2	1.0	0.20	SW846 8260B			11/21/08 00:19	DD	E
Total Xylenes	7.9	ug/L	1	3.0	0.40	SW846 8260B			11/21/08 00:19	DD	E
1,1,1-Trichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:19	DD	E
1,1,2-Trichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:19	DD	E
Trichloroethene	2.8	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:19	DD	E
Vinyl Chloride	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:19	DD	E
o-Xylene	2.4	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:19	DD	E
mp-Xylene	5.5	ug/L	1	2.0	0.30	SW846 8260B			11/21/08 00:19	DD	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	117	%		62-133		SW846 8260B			11/21/08 00:19	DD	E
4-Bromofluorobenzene (S)	95.9	%		79-114		SW846 8260B			11/21/08 00:19	DD	E
Dibromofluoromethane (S)	102	%		78-116		SW846 8260B			11/21/08 00:19	DD	E
Toluene-d8 (S)	110	%		76-127		SW846 8260B			11/21/08 00:19	DD	E

Sample Comments:

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected. Reporting limits were adjusted accordingly.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9764091 Groundwater (11/17/08)

Lab ID: **9764091003** Date Collected: 11/17/2008 10:00 Matrix: Water

Sample ID: **MW-003_20081117_N** Date Received: 11/18/2008 20:00

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	5.3	mg/L		1.6	0.20	SW846 8015D	11/20/08	CMG	11/22/08 08:15	JJH	A1
Gasoline Range Organics	31200	ug/L		2000	581	SW846 8015D			11/19/08 15:51	TEH	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	91.1	%		40-117		SW846 8015D	11/20/08	CMG	11/22/08 08:15	JJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	111	%		68-117		SW846 8015D			11/19/08 15:51	TEH	C
VOLATILE ORGANICS											
Acetone	86.3	ug/L		50.0	20.0	SW846 8260B			11/21/08 04:46	DD	E
tert-Amyl methyl ether	ND	ug/L		10.0	4.0	SW846 8260B			11/21/08 04:46	DD	E
tert-Amyl Alcohol	452	ug/L		25.0	2.5	SW846 8260B			11/21/08 04:46	DD	E
tert-Amyl Ethylether	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:46	DD	E
Benzene	24.5	ug/L		5.0	2.0	SW846 8260B			11/21/08 04:46	DD	E
Bromochloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:46	DD	E
Bromodichloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:46	DD	E
Bromoform	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:46	DD	E
Bromomethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:46	DD	E
2-Butanone	ND	ug/L		50.0	15.0	SW846 8260B			11/21/08 04:46	DD	E
tert.- Butyl Alcohol	ND	ug/L		50.0	15.0	SW846 8260B			11/21/08 04:46	DD	E
Carbon Disulfide	ND	ug/L		5.0	0.50	SW846 8260B			11/21/08 04:46	DD	E
Carbon Tetrachloride	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:46	DD	E
Chlorobenzene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:46	DD	E
Chlorodibromomethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:46	DD	E
Chloroethane	ND	ug/L		5.0	1.5	SW846 8260B			11/21/08 04:46	DD	E
Chloroform	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:46	DD	E
Chloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:46	DD	E
1,2-Dibromo-3-chloropropane	ND	ug/L		35.0	12.0	SW846 8260B			11/21/08 04:46	DD	E
1,2-Dibromoethane	ND	ug/L		5.0	1.5	SW846 8260B			11/21/08 04:46	DD	E
1,1-Dichloroethane	ND	ug/L		5.0	0.50	SW846 8260B			11/21/08 04:46	DD	E
1,2-Dichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:46	DD	E
1,1-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:46	DD	E
cis-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:46	DD	E
trans-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:46	DD	E
1,2-Dichloropropane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:46	DD	E
cis-1,3-Dichloropropene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:46	DD	E
trans-1,3-Dichloropropene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:46	DD	E
Diisopropyl ether	ND	ug/L		5.0	0.50	SW846 8260B			11/21/08 04:46	DD	E
Ethyl tert-butyl ether	ND	ug/L		5.0	0.50	SW846 8260B			11/21/08 04:46	DD	E
Ethylbenzene	1440	ug/L		50.0	15.0	SW846 8260B			11/21/08 23:34	DD	E
2-Hexanone	22.2J	ug/L		25.0	3.5	SW846 8260B			11/21/08 04:46	DD	E
Methyl t-Butyl Ether	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:46	DD	E
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		25.0	6.5	SW846 8260B			11/21/08 04:46	DD	E

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ANALYTICAL RESULTS

Workorder: 9764091 Groundwater (11/17/08)

Lab ID: **9764091003** Date Collected: 11/17/2008 10:00 Matrix: Water

Sample ID: **MW-003_20081117_N** Date Received: 11/18/2008 20:00

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	ND	ug/L		5.0	0.50	SW846 8260B			11/21/08 04:46	DD	E
Styrene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:46	DD	E
1,1,2,2-Tetrachloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:46	DD	E
Tetrachloroethene	ND	ug/L		5.0	2.0	SW846 8260B			11/21/08 04:46	DD	E
Toluene	3170	ug/L		50.0	10.0	SW846 8260B			11/21/08 23:34	DD	E
Total Xylenes	5740	ug/L		150	20.0	SW846 8260B			11/21/08 23:34	DD	E
1,1,1-Trichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:46	DD	E
1,1,2-Trichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:46	DD	E
Trichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:46	DD	E
Vinyl Chloride	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 04:46	DD	E
o-Xylene	1780	ug/L		50.0	10.0	SW846 8260B			11/21/08 23:34	DD	E
mp-Xylene	3960	ug/L		100	15.0	SW846 8260B			11/21/08 23:34	DD	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	105	%		62-133		SW846 8260B			11/21/08 04:46	DD	E
4-Bromofluorobenzene (S)	99.8	%		79-114		SW846 8260B			11/21/08 04:46	DD	E
Dibromofluoromethane (S)	102	%		78-116		SW846 8260B			11/21/08 04:46	DD	E
Toluene-d8 (S)	98.1	%		76-127		SW846 8260B			11/21/08 04:46	DD	E
1,2-Dichloroethane-d4 (S)	93.1	%		62-133		SW846 8260B			11/21/08 23:34	DD	E
4-Bromofluorobenzene (S)	88	%		79-114		SW846 8260B			11/21/08 23:34	DD	E
Toluene-d8 (S)	94.8	%		76-127		SW846 8260B			11/21/08 23:34	DD	E
Dibromofluoromethane (S)	90.2	%		78-116		SW846 8260B			11/21/08 23:34	DD	E

Sample Comments:

The gasoline range organics analysis for this sample was diluted due to the amount of analyte present. The detection limit was raised accordingly.

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected. Reporting limits were adjusted accordingly.

The GCMS volatiles analysis was performed at a dilution due to the level of target compounds.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9764091 Groundwater (11/17/08)

Lab ID: **9764091004** Date Collected: 11/17/2008 13:00 Matrix: Water

Sample ID: **MW-005_20081117_N** Date Received: 11/18/2008 20:00

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	7.5	mg/L		0.82	0.10	SW846 8015D	11/20/08	CMG	11/24/08 11:29	KJH	A1
Gasoline Range Organics	148000	ug/L		10000	2910	SW846 8015D			11/24/08 12:34	TEH	D
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	84.9	%		40-117		SW846 8015D	11/20/08	CMG	11/24/08 11:29	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	114	%		68-117		SW846 8015D			11/24/08 12:34	TEH	D
VOLATILE ORGANICS											
Acetone	97.2	ug/L		50.0	20.0	SW846 8260B			11/21/08 05:52	DD	E
tert-Amyl methyl ether	ND	ug/L		10.0	4.0	SW846 8260B			11/21/08 05:52	DD	E
tert-Amyl Alcohol	1050	ug/L		25.0	2.5	SW846 8260B			11/21/08 05:52	DD	E
tert-Amyl Ethylether	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:52	DD	E
Benzene	410	ug/L		5.0	2.0	SW846 8260B			11/21/08 05:52	DD	E
Bromochloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:52	DD	E
Bromodichloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:52	DD	E
Bromoform	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:52	DD	E
Bromomethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:52	DD	E
2-Butanone	76.8	ug/L		50.0	15.0	SW846 8260B			11/21/08 05:52	DD	E
tert.- Butyl Alcohol	ND	ug/L		50.0	15.0	SW846 8260B			11/21/08 05:52	DD	E
Carbon Disulfide	ND	ug/L		5.0	0.50	SW846 8260B			11/21/08 05:52	DD	E
Carbon Tetrachloride	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:52	DD	E
Chlorobenzene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:52	DD	E
Chlorodibromomethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:52	DD	E
Chloroethane	ND	ug/L		5.0	1.5	SW846 8260B			11/21/08 05:52	DD	E
Chloroform	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:52	DD	E
Chloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:52	DD	E
1,2-Dibromo-3-chloropropane	ND	ug/L		35.0	12.0	SW846 8260B			11/21/08 05:52	DD	E
1,2-Dibromoethane	ND	ug/L		5.0	1.5	SW846 8260B			11/21/08 05:52	DD	E
1,1-Dichloroethane	ND	ug/L		5.0	0.50	SW846 8260B			11/21/08 05:52	DD	E
1,2-Dichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:52	DD	E
1,1-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:52	DD	E
cis-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:52	DD	E
trans-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:52	DD	E
1,2-Dichloropropane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:52	DD	E
cis-1,3-Dichloropropene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:52	DD	E
trans-1,3-Dichloropropene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:52	DD	E
Diisopropyl ether	ND	ug/L		5.0	0.50	SW846 8260B			11/21/08 05:52	DD	E
Ethyl tert-butyl ether	ND	ug/L		5.0	0.50	SW846 8260B			11/21/08 05:52	DD	E
Ethylbenzene	2610	ug/L		250	75.0	SW846 8260B			11/22/08 01:23	DD	E
2-Hexanone	19.8J	ug/L		25.0	3.5	SW846 8260B			11/21/08 05:52	DD	E
Methyl t-Butyl Ether	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:52	DD	E
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		25.0	6.5	SW846 8260B			11/21/08 05:52	DD	E

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ANALYTICAL RESULTS

Workorder: 9764091 Groundwater (11/17/08)

Lab ID: **9764091004** Date Collected: 11/17/2008 13:00 Matrix: Water

Sample ID: **MW-005_20081117_N** Date Received: 11/18/2008 20:00

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	ND	ug/L		5.0	0.50	SW846 8260B			11/21/08 05:52	DD	E
Styrene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:52	DD	E
1,1,2,2-Tetrachloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:52	DD	E
Tetrachloroethene	ND	ug/L		5.0	2.0	SW846 8260B			11/21/08 05:52	DD	E
Toluene	34500	ug/L		250	50.0	SW846 8260B			11/22/08 01:23	DD	E
Total Xylenes	13600	ug/L		750	100	SW846 8260B			11/22/08 01:23	DD	E
1,1,1-Trichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:52	DD	E
1,1,2-Trichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:52	DD	E
Trichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:52	DD	E
Vinyl Chloride	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:52	DD	E
o-Xylene	4240	ug/L		250	50.0	SW846 8260B			11/22/08 01:23	DD	E
mp-Xylene	9370	ug/L		500	75.0	SW846 8260B			11/22/08 01:23	DD	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	108	%		62-133		SW846 8260B			11/21/08 05:52	DD	E
Dibromofluoromethane (S)	98.7	%		78-116		SW846 8260B			11/21/08 05:52	DD	E
4-Bromofluorobenzene (S)	92.1	%		79-114		SW846 8260B			11/21/08 05:52	DD	E
Toluene-d8 (S)	87.9	%		76-127		SW846 8260B			11/21/08 05:52	DD	E
1,2-Dichloroethane-d4 (S)	95.2	%		62-133		SW846 8260B			11/22/08 01:23	DD	E
4-Bromofluorobenzene (S)	88.9	%		79-114		SW846 8260B			11/22/08 01:23	DD	E
Toluene-d8 (S)	93.5	%		76-127		SW846 8260B			11/22/08 01:23	DD	E
Dibromofluoromethane (S)	91.7	%		78-116		SW846 8260B			11/22/08 01:23	DD	E

Sample Comments:

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected. Reporting limits were adjusted accordingly.

The gasoline range organics analysis for this sample was diluted due to the amount of analyte present. The detection limit was raised accordingly.

The GCMS volatiles analysis was performed at a dilution due to the level of target compounds.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9764091 Groundwater (11/17/08)

Lab ID: **9764091005** Date Collected: 11/17/2008 15:30 Matrix: Water

Sample ID: **MW-006_20081117_N** Date Received: 11/18/2008 20:00

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	2.9	mg/L		1.7	0.21	SW846 8015D	11/20/08	CMG	11/22/08 11:22	JJH	A1
Gasoline Range Organics	341	ug/L		100	29.1	SW846 8015D			11/19/08 13:23	TEH	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	80.9	%		40-117		SW846 8015D	11/20/08	CMG	11/22/08 11:22	JJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	136	%	3	68-117		SW846 8015D			11/19/08 13:23	TEH	C
VOLATILE ORGANICS											
Acetone	ND	ug/L		10.0	4.0	SW846 8260B			11/21/08 00:53	DD	E
tert-Amyl methyl ether	ND	ug/L		2.0	0.80	SW846 8260B			11/21/08 00:53	DD	E
tert-Amyl Alcohol	ND	ug/L		5.0	0.50	SW846 8260B			11/21/08 00:53	DD	E
tert-Amyl Ethylether	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:53	DD	E
Benzene	17.1	ug/L		1.0	0.40	SW846 8260B			11/21/08 00:53	DD	E
Bromochloromethane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:53	DD	E
Bromodichloromethane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:53	DD	E
Bromoform	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:53	DD	E
Bromomethane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:53	DD	E
2-Butanone	ND	ug/L		10.0	3.0	SW846 8260B			11/21/08 00:53	DD	E
tert.- Butyl Alcohol	ND	ug/L		10.0	3.0	SW846 8260B			11/21/08 00:53	DD	E
Carbon Disulfide	ND	ug/L		1.0	0.10	SW846 8260B			11/21/08 00:53	DD	E
Carbon Tetrachloride	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:53	DD	E
Chlorobenzene	6.3	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:53	DD	E
Chlorodibromomethane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:53	DD	E
Chloroethane	ND	ug/L		1.0	0.30	SW846 8260B			11/21/08 00:53	DD	E
Chloroform	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:53	DD	E
Chloromethane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:53	DD	E
1,2-Dibromo-3-chloropropane	ND	ug/L		7.0	2.4	SW846 8260B			11/21/08 00:53	DD	E
1,2-Dibromoethane	ND	ug/L		1.0	0.30	SW846 8260B			11/21/08 00:53	DD	E
1,1-Dichloroethane	ND	ug/L		1.0	0.10	SW846 8260B			11/21/08 00:53	DD	E
1,2-Dichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:53	DD	E
1,1-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:53	DD	E
cis-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:53	DD	E
trans-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:53	DD	E
1,2-Dichloropropane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:53	DD	E
cis-1,3-Dichloropropene	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:53	DD	E
trans-1,3-Dichloropropene	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:53	DD	E
Diisopropyl ether	ND	ug/L		1.0	0.10	SW846 8260B			11/21/08 00:53	DD	E
Ethyl tert-butyl ether	ND	ug/L		1.0	0.10	SW846 8260B			11/21/08 00:53	DD	E
Ethylbenzene	8.2	ug/L		1.0	0.30	SW846 8260B			11/21/08 00:53	DD	E
2-Hexanone	ND	ug/L		5.0	0.70	SW846 8260B			11/21/08 00:53	DD	E
Methyl t-Butyl Ether	6.7	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:53	DD	E
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		5.0	1.3	SW846 8260B			11/21/08 00:53	DD	E

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ANALYTICAL RESULTS

Workorder: 9764091 Groundwater (11/17/08)

Lab ID: **9764091005** Date Collected: 11/17/2008 15:30 Matrix: Water

Sample ID: **MW-006_20081117_N** Date Received: 11/18/2008 20:00

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	ND	ug/L		1.0	0.10	SW846 8260B			11/21/08 00:53	DD	E
Styrene	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:53	DD	E
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:53	DD	E
Tetrachloroethene	15.1	ug/L		1.0	0.40	SW846 8260B			11/21/08 00:53	DD	E
Toluene	42.3	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:53	DD	E
Total Xylenes	33.4	ug/L		3.0	0.40	SW846 8260B			11/21/08 00:53	DD	E
1,1,1-Trichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:53	DD	E
1,1,2-Trichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:53	DD	E
Trichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:53	DD	E
Vinyl Chloride	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:53	DD	E
o-Xylene	6.1	ug/L		1.0	0.20	SW846 8260B			11/21/08 00:53	DD	E
mp-Xylene	27.3	ug/L		2.0	0.30	SW846 8260B			11/21/08 00:53	DD	E

Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	115	%		62-133	SW846 8260B			11/21/08 00:53	DD	E
4-Bromofluorobenzene (S)	98.7	%		79-114	SW846 8260B			11/21/08 00:53	DD	E
Dibromofluoromethane (S)	108	%		78-116	SW846 8260B			11/21/08 00:53	DD	E
Toluene-d8 (S)	110	%		76-127	SW846 8260B			11/21/08 00:53	DD	E

Sample Comments:

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected. Reporting limits were adjusted accordingly.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9764091 Groundwater (11/17/08)

Lab ID: **9764091006** Date Collected: 11/17/2008 11:25 Matrix: Water

Sample ID: **MW-007_20081117_N** Date Received: 11/18/2008 20:00

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	2.0	mg/L		0.33	0.042	SW846 8015D	11/20/08	CMG	11/24/08 12:40	KJH	A1
Gasoline Range Organics	59300	ug/L		2000	581	SW846 8015D			11/19/08 15:16	TEH	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	56.5	%		40-117		SW846 8015D	11/20/08	CMG	11/24/08 12:40	KJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	115	%		68-117		SW846 8015D			11/19/08 15:16	TEH	C
VOLATILE ORGANICS											
Acetone	ND	ug/L		50.0	20.0	SW846 8260B			11/21/08 05:19	DD	E
tert-Amyl methyl ether	ND	ug/L		10.0	4.0	SW846 8260B			11/21/08 05:19	DD	E
tert-Amyl Alcohol	284	ug/L		25.0	2.5	SW846 8260B			11/21/08 05:19	DD	E
tert-Amyl Ethylether	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:19	DD	E
Benzene	961	ug/L		5.0	2.0	SW846 8260B			11/21/08 05:19	DD	E
Bromochloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:19	DD	E
Bromodichloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:19	DD	E
Bromoform	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:19	DD	E
Bromomethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:19	DD	E
2-Butanone	ND	ug/L		50.0	15.0	SW846 8260B			11/21/08 05:19	DD	E
tert.- Butyl Alcohol	ND	ug/L		50.0	15.0	SW846 8260B			11/21/08 05:19	DD	E
Carbon Disulfide	ND	ug/L		5.0	0.50	SW846 8260B			11/21/08 05:19	DD	E
Carbon Tetrachloride	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:19	DD	E
Chlorobenzene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:19	DD	E
Chlorodibromomethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:19	DD	E
Chloroethane	ND	ug/L		5.0	1.5	SW846 8260B			11/21/08 05:19	DD	E
Chloroform	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:19	DD	E
Chloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:19	DD	E
1,2-Dibromo-3-chloropropane	ND	ug/L		35.0	12.0	SW846 8260B			11/21/08 05:19	DD	E
1,2-Dibromoethane	ND	ug/L		5.0	1.5	SW846 8260B			11/21/08 05:19	DD	E
1,1-Dichloroethane	ND	ug/L		5.0	0.50	SW846 8260B			11/21/08 05:19	DD	E
1,2-Dichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:19	DD	E
1,1-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:19	DD	E
cis-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:19	DD	E
trans-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:19	DD	E
1,2-Dichloropropane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:19	DD	E
cis-1,3-Dichloropropene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:19	DD	E
trans-1,3-Dichloropropene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:19	DD	E
Diisopropyl ether	ND	ug/L		5.0	0.50	SW846 8260B			11/21/08 05:19	DD	E
Ethyl tert-butyl ether	ND	ug/L		5.0	0.50	SW846 8260B			11/21/08 05:19	DD	E
Ethylbenzene	999	ug/L		5.0	1.5	SW846 8260B			11/21/08 05:19	DD	E
2-Hexanone	ND	ug/L		25.0	3.5	SW846 8260B			11/21/08 05:19	DD	E
Methyl t-Butyl Ether	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:19	DD	E
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		25.0	6.5	SW846 8260B			11/21/08 05:19	DD	E

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ANALYTICAL RESULTS

Workorder: 9764091 Groundwater (11/17/08)

Lab ID: **9764091006** Date Collected: 11/17/2008 11:25 Matrix: Water

Sample ID: **MW-007_20081117_N** Date Received: 11/18/2008 20:00

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	1.6J	ug/L		5.0	0.50	SW846 8260B			11/21/08 05:19	DD	E
Styrene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:19	DD	E
1,1,2,2-Tetrachloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:19	DD	E
Tetrachloroethene	ND	ug/L		5.0	2.0	SW846 8260B			11/21/08 05:19	DD	E
Toluene	24000	ug/L		500	100	SW846 8260B			11/25/08 09:06	MES	F
Total Xylenes	6030	ug/L		300	40.0	SW846 8260B			11/22/08 00:56	DD	E
1,1,1-Trichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:19	DD	E
1,1,2-Trichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:19	DD	E
Trichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:19	DD	E
Vinyl Chloride	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 05:19	DD	E
o-Xylene	2000	ug/L		100	20.0	SW846 8260B			11/22/08 00:56	DD	E
mp-Xylene	4030	ug/L		200	30.0	SW846 8260B			11/22/08 00:56	DD	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	106	%		62-133		SW846 8260B			11/21/08 05:19	DD	E
4-Bromofluorobenzene (S)	95.3	%		79-114		SW846 8260B			11/21/08 05:19	DD	E
Dibromofluoromethane (S)	102	%		78-116		SW846 8260B			11/21/08 05:19	DD	E
Toluene-d8 (S)	96.5	%		76-127		SW846 8260B			11/21/08 05:19	DD	E
1,2-Dichloroethane-d4 (S)	96.7	%		62-133		SW846 8260B			11/22/08 00:56	DD	E
4-Bromofluorobenzene (S)	87.9	%		79-114		SW846 8260B			11/22/08 00:56	DD	E
Dibromofluoromethane (S)	91.5	%		78-116		SW846 8260B			11/22/08 00:56	DD	E
Toluene-d8 (S)	94.5	%		76-127		SW846 8260B			11/22/08 00:56	DD	E
1,2-Dichloroethane-d4 (S)	116	%		62-133		SW846 8260B			11/25/08 09:06	MES	F
4-Bromofluorobenzene (S)	97.9	%		79-114		SW846 8260B			11/25/08 09:06	MES	F
Toluene-d8 (S)	108	%		76-127		SW846 8260B			11/25/08 09:06	MES	F
Dibromofluoromethane (S)	104	%		78-116		SW846 8260B			11/25/08 09:06	MES	F

Sample Comments:

The gasoline range organics analysis for this sample was diluted due to the amount of analyte present. The detection limit was raised accordingly.

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected. Reporting limits were adjusted accordingly.

The GCMS volatiles analysis was performed at a dilution due to the level of target compounds.

Anna G Milliken
Laboratory Manager

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34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9764091 Groundwater (11/17/08)

Lab ID: **9764091007** Date Collected: 11/17/2008 08:45 Matrix: Water

Sample ID: **MP-001_20081117_N** Date Received: 11/18/2008 20:00

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	97.2	mg/L		16.3	2.0	SW846 8015D	11/20/08	CMG	11/24/08 13:11	KJH	A1
Gasoline Range Organics	1180	ug/L		500	145	SW846 8015D			11/24/08 11:59	TEH	D
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	108	%		68-117		SW846 8015D			11/24/08 11:59	TEH	D
VOLATILE ORGANICS											
Acetone	ND	ug/L		50.0	20.0	SW846 8260B			11/21/08 03:06	DD	E
tert-Amyl methyl ether	ND	ug/L		10.0	4.0	SW846 8260B			11/21/08 03:06	DD	E
tert-Amyl Alcohol	ND	ug/L		25.0	2.5	SW846 8260B			11/21/08 03:06	DD	E
tert-Amyl Ethylether	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:06	DD	E
Benzene	19.3	ug/L		5.0	2.0	SW846 8260B			11/21/08 03:06	DD	E
Bromochloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:06	DD	E
Bromodichloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:06	DD	E
Bromoform	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:06	DD	E
Bromomethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:06	DD	E
2-Butanone	ND	ug/L		50.0	15.0	SW846 8260B			11/21/08 03:06	DD	E
tert.- Butyl Alcohol	171	ug/L		50.0	15.0	SW846 8260B			11/21/08 03:06	DD	E
Carbon Disulfide	ND	ug/L		5.0	0.50	SW846 8260B			11/21/08 03:06	DD	E
Carbon Tetrachloride	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:06	DD	E
Chlorobenzene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:06	DD	E
Chlorodibromomethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:06	DD	E
Chloroethane	ND	ug/L		5.0	1.5	SW846 8260B			11/21/08 03:06	DD	E
Chloroform	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:06	DD	E
Chloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:06	DD	E
1,2-Dibromo-3-chloropropane	ND	ug/L		35.0	12.0	SW846 8260B			11/21/08 03:06	DD	E
1,2-Dibromoethane	ND	ug/L		5.0	1.5	SW846 8260B			11/21/08 03:06	DD	E
1,1-Dichloroethane	ND	ug/L		5.0	0.50	SW846 8260B			11/21/08 03:06	DD	E
1,2-Dichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:06	DD	E
1,1-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:06	DD	E
cis-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:06	DD	E
trans-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:06	DD	E
1,2-Dichloropropane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:06	DD	E
cis-1,3-Dichloropropene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:06	DD	E
trans-1,3-Dichloropropene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:06	DD	E
Diisopropyl ether	ND	ug/L		5.0	0.50	SW846 8260B			11/21/08 03:06	DD	E
Ethyl tert-butyl ether	ND	ug/L		5.0	0.50	SW846 8260B			11/21/08 03:06	DD	E
Ethylbenzene	ND	ug/L		5.0	1.5	SW846 8260B			11/21/08 03:06	DD	E
2-Hexanone	ND	ug/L		25.0	3.5	SW846 8260B			11/21/08 03:06	DD	E
Methyl t-Butyl Ether	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:06	DD	E
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		25.0	6.5	SW846 8260B			11/21/08 03:06	DD	E
Methylene Chloride	ND	ug/L		5.0	0.50	SW846 8260B			11/21/08 03:06	DD	E
Styrene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:06	DD	E
1,1,2,2-Tetrachloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:06	DD	E

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ANALYTICAL RESULTS

Workorder: 9764091 Groundwater (11/17/08)

Lab ID: **9764091007** Date Collected: 11/17/2008 08:45 Matrix: Water

Sample ID: **MP-001_20081117_N** Date Received: 11/18/2008 20:00

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Tetrachloroethene	ND	ug/L		5.0	2.0	SW846 8260B			11/21/08 03:06	DD	E
Toluene	38.7	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:06	DD	E
Total Xylenes	15.1	ug/L		15.0	2.0	SW846 8260B			11/21/08 03:06	DD	E
1,1,1-Trichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:06	DD	E
1,1,2-Trichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:06	DD	E
Trichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:06	DD	E
Vinyl Chloride	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:06	DD	E
o-Xylene	5.7	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:06	DD	E
mp-Xylene	9.4J	ug/L		10.0	1.5	SW846 8260B			11/21/08 03:06	DD	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	107	%		62-133		SW846 8260B			11/21/08 03:06	DD	E
4-Bromofluorobenzene (S)	98.4	%		79-114		SW846 8260B			11/21/08 03:06	DD	E
Dibromofluoromethane (S)	104	%		78-116		SW846 8260B			11/21/08 03:06	DD	E
Toluene-d8 (S)	113	%		76-127		SW846 8260B			11/21/08 03:06	DD	E

Sample Comments:

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected. Reporting limits were adjusted accordingly. Surrogate recovery could not be evaluated as a result of the dilution.

The gasoline range organics analysis for this sample was diluted due to the sample matrix. The detection limit was raised accordingly.

The reporting limits for GCMS volatile analytes were raised due to the dilution of the sample caused by the level of non-target compounds.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9764091 Groundwater (11/17/08)

Lab ID: **9764091008** Date Collected: 11/17/2008 10:35 Matrix: Water

Sample ID: **MP-002_20081117_N** Date Received: 11/18/2008 20:00

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	1.7	mg/L		0.16	0.021	SW846 8015D	11/20/08	CMG	11/22/08 15:33	JJH	A1
Gasoline Range Organics	175J	ug/L		500	145	SW846 8015D			11/19/08 14:04	TEH	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	69.6	%		40-117		SW846 8015D	11/20/08	CMG	11/22/08 15:33	JJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	99.2	%		68-117		SW846 8015D			11/19/08 14:04	TEH	C
VOLATILE ORGANICS											
Acetone	61.1	ug/L		10.0	4.0	SW846 8260B			11/21/08 01:26	DD	E
tert-Amyl methyl ether	ND	ug/L		2.0	0.80	SW846 8260B			11/21/08 01:26	DD	E
tert-Amyl Alcohol	31.3	ug/L		5.0	0.50	SW846 8260B			11/21/08 01:26	DD	E
tert-Amyl Ethylether	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 01:26	DD	E
Benzene	3.1	ug/L		1.0	0.40	SW846 8260B			11/21/08 01:26	DD	E
Bromochloromethane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 01:26	DD	E
Bromodichloromethane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 01:26	DD	E
Bromoform	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 01:26	DD	E
Bromomethane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 01:26	DD	E
2-Butanone	65.4	ug/L		10.0	3.0	SW846 8260B			11/21/08 01:26	DD	E
tert.- Butyl Alcohol	50.8	ug/L		10.0	3.0	SW846 8260B			11/21/08 01:26	DD	E
Carbon Disulfide	ND	ug/L		1.0	0.10	SW846 8260B			11/21/08 01:26	DD	E
Carbon Tetrachloride	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 01:26	DD	E
Chlorobenzene	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 01:26	DD	E
Chlorodibromomethane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 01:26	DD	E
Chloroethane	ND	ug/L		1.0	0.30	SW846 8260B			11/21/08 01:26	DD	E
Chloroform	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 01:26	DD	E
Chloromethane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 01:26	DD	E
1,2-Dibromo-3-chloropropane	ND	ug/L		7.0	2.4	SW846 8260B			11/21/08 01:26	DD	E
1,2-Dibromoethane	ND	ug/L		1.0	0.30	SW846 8260B			11/21/08 01:26	DD	E
1,1-Dichloroethane	ND	ug/L		1.0	0.10	SW846 8260B			11/21/08 01:26	DD	E
1,2-Dichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 01:26	DD	E
1,1-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 01:26	DD	E
cis-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 01:26	DD	E
trans-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 01:26	DD	E
1,2-Dichloropropane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 01:26	DD	E
cis-1,3-Dichloropropene	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 01:26	DD	E
trans-1,3-Dichloropropene	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 01:26	DD	E
Diisopropyl ether	ND	ug/L		1.0	0.10	SW846 8260B			11/21/08 01:26	DD	E
Ethyl tert-butyl ether	ND	ug/L		1.0	0.10	SW846 8260B			11/21/08 01:26	DD	E
Ethylbenzene	ND	ug/L		1.0	0.30	SW846 8260B			11/21/08 01:26	DD	E
2-Hexanone	ND	ug/L		5.0	0.70	SW846 8260B			11/21/08 01:26	DD	E
Methyl t-Butyl Ether	0.67J	ug/L		1.0	0.20	SW846 8260B			11/21/08 01:26	DD	E
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		5.0	1.3	SW846 8260B			11/21/08 01:26	DD	E

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ANALYTICAL RESULTS

Workorder: 9764091 Groundwater (11/17/08)

Lab ID: **9764091008** Date Collected: 11/17/2008 10:35 Matrix: Water

Sample ID: **MP-002_20081117_N** Date Received: 11/18/2008 20:00

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	ND	ug/L		1.0	0.10	SW846 8260B			11/21/08 01:26	DD	E
Styrene	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 01:26	DD	E
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 01:26	DD	E
Tetrachloroethene	ND	ug/L		1.0	0.40	SW846 8260B			11/21/08 01:26	DD	E
Toluene	9.8	ug/L		1.0	0.20	SW846 8260B			11/21/08 01:26	DD	E
Total Xylenes	2.4J	ug/L		3.0	0.40	SW846 8260B			11/21/08 01:26	DD	E
1,1,1-Trichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 01:26	DD	E
1,1,2-Trichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 01:26	DD	E
Trichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 01:26	DD	E
Vinyl Chloride	ND	ug/L		1.0	0.20	SW846 8260B			11/21/08 01:26	DD	E
o-Xylene	0.98J	ug/L		1.0	0.20	SW846 8260B			11/21/08 01:26	DD	E
mp-Xylene	1.4J	ug/L		2.0	0.30	SW846 8260B			11/21/08 01:26	DD	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	115	%		62-133		SW846 8260B			11/21/08 01:26	DD	E
4-Bromofluorobenzene (S)	103	%		79-114		SW846 8260B			11/21/08 01:26	DD	E
Dibromofluoromethane (S)	109	%		78-116		SW846 8260B			11/21/08 01:26	DD	E
Toluene-d8 (S)	111	%		76-127		SW846 8260B			11/21/08 01:26	DD	E

Sample Comments:

The gasoline range organics analysis for this sample was diluted due to the sample matrix. The detection limit was raised accordingly.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9764091 Groundwater (11/17/08)

Lab ID: **9764091009** Date Collected: 11/17/2008 00:00 Matrix: Water

Sample ID: **Duplicate-001_20081117_FD** Date Received: 11/18/2008 20:00

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	5.7	mg/L		1.6	0.20	SW846 8015D	11/20/08	CMG	11/22/08 16:35	JJH	A1
Gasoline Range Organics	30900	ug/L		2000	581	SW846 8015D			11/19/08 17:00	TEH	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	80.9	%		40-117		SW846 8015D	11/20/08	CMG	11/22/08 16:35	JJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	109	%		68-117		SW846 8015D			11/19/08 17:00	TEH	C
VOLATILE ORGANICS											
Acetone	70.1	ug/L		50.0	20.0	SW846 8260B			11/21/08 03:39	DD	E
tert-Amyl methyl ether	ND	ug/L		10.0	4.0	SW846 8260B			11/21/08 03:39	DD	E
tert-Amyl Alcohol	306	ug/L		25.0	2.5	SW846 8260B			11/21/08 03:39	DD	E
tert-Amyl Ethylether	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:39	DD	E
Benzene	13.5	ug/L		5.0	2.0	SW846 8260B			11/21/08 03:39	DD	E
Bromochloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:39	DD	E
Bromodichloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:39	DD	E
Bromoform	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:39	DD	E
Bromomethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:39	DD	E
2-Butanone	ND	ug/L		50.0	15.0	SW846 8260B			11/21/08 03:39	DD	E
tert.- Butyl Alcohol	ND	ug/L		50.0	15.0	SW846 8260B			11/21/08 03:39	DD	E
Carbon Disulfide	ND	ug/L		5.0	0.50	SW846 8260B			11/21/08 03:39	DD	E
Carbon Tetrachloride	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:39	DD	E
Chlorobenzene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:39	DD	E
Chlorodibromomethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:39	DD	E
Chloroethane	ND	ug/L		5.0	1.5	SW846 8260B			11/21/08 03:39	DD	E
Chloroform	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:39	DD	E
Chloromethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:39	DD	E
1,2-Dibromo-3-chloropropane	ND	ug/L		35.0	12.0	SW846 8260B			11/21/08 03:39	DD	E
1,2-Dibromoethane	ND	ug/L		5.0	1.5	SW846 8260B			11/21/08 03:39	DD	E
1,1-Dichloroethane	ND	ug/L		5.0	0.50	SW846 8260B			11/21/08 03:39	DD	E
1,2-Dichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:39	DD	E
1,1-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:39	DD	E
cis-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:39	DD	E
trans-1,2-Dichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:39	DD	E
1,2-Dichloropropane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:39	DD	E
cis-1,3-Dichloropropene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:39	DD	E
trans-1,3-Dichloropropene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:39	DD	E
Diisopropyl ether	ND	ug/L		5.0	0.50	SW846 8260B			11/21/08 03:39	DD	E
Ethyl tert-butyl ether	ND	ug/L		5.0	0.50	SW846 8260B			11/21/08 03:39	DD	E
Ethylbenzene	1410	ug/L		50.0	15.0	SW846 8260B			11/22/08 00:01	DD	E
2-Hexanone	20.8J	ug/L		25.0	3.5	SW846 8260B			11/21/08 03:39	DD	E
Methyl t-Butyl Ether	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:39	DD	E
4-Methyl-2-Pentanone(MIBK)	66.1	ug/L		25.0	6.5	SW846 8260B			11/21/08 03:39	DD	E

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ANALYTICAL RESULTS

Workorder: 9764091 Groundwater (11/17/08)

Lab ID: **9764091009** Date Collected: 11/17/2008 00:00 Matrix: Water

Sample ID: **Duplicate-001_20081117_FD** Date Received: 11/18/2008 20:00

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	0.95J	ug/L		5.0	0.50	SW846 8260B			11/21/08 03:39	DD	E
Styrene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:39	DD	E
1,1,2,2-Tetrachloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:39	DD	E
Tetrachloroethene	ND	ug/L		5.0	2.0	SW846 8260B			11/21/08 03:39	DD	E
Toluene	3040	ug/L		50.0	10.0	SW846 8260B			11/22/08 00:01	DD	E
Total Xylenes	5580	ug/L		150	20.0	SW846 8260B			11/22/08 00:01	DD	E
1,1,1-Trichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:39	DD	E
1,1,2-Trichloroethane	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:39	DD	E
Trichloroethene	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:39	DD	E
Vinyl Chloride	ND	ug/L		5.0	1.0	SW846 8260B			11/21/08 03:39	DD	E
o-Xylene	1740	ug/L		50.0	10.0	SW846 8260B			11/22/08 00:01	DD	E
mp-Xylene	3840	ug/L		100	15.0	SW846 8260B			11/22/08 00:01	DD	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	108	%		62-133		SW846 8260B			11/21/08 03:39	DD	E
4-Bromofluorobenzene (S)	96.7	%		79-114		SW846 8260B			11/21/08 03:39	DD	E
Toluene-d8 (S)	92.4	%		76-127		SW846 8260B			11/21/08 03:39	DD	E
Dibromofluoromethane (S)	101	%		78-116		SW846 8260B			11/21/08 03:39	DD	E
1,2-Dichloroethane-d4 (S)	91.5	%		62-133		SW846 8260B			11/22/08 00:01	DD	E
Toluene-d8 (S)	94.8	%		76-127		SW846 8260B			11/22/08 00:01	DD	E
4-Bromofluorobenzene (S)	88.2	%		79-114		SW846 8260B			11/22/08 00:01	DD	E
Dibromofluoromethane (S)	89.9	%		78-116		SW846 8260B			11/22/08 00:01	DD	E

Sample Comments:

The gasoline range organics analysis for this sample was diluted due to the amount of analyte present. The detection limit was raised accordingly.

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected. Reporting limits were adjusted accordingly.

The GCMS volatiles analysis was performed at a dilution due to the level of target compounds.

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9764091 Groundwater (11/17/08)

Lab ID: **9764091010** Date Collected: 11/17/2008 12:00 Matrix: Water

Sample ID: **Field Blank_20081117_FB** Date Received: 11/18/2008 20:00

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PETROLEUM HC's											
Diesel Range Organics C10-C28	0.25	mg/L		0.17	0.021	SW846 8015D	11/20/08	CMG	11/22/08 17:37	JJH	A1
Gasoline Range Organics	ND	ug/L		100	29.1	SW846 8015D			11/19/08 11:17	TEH	C
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
o-Terphenyl (S)	88.1	%		40-117		SW846 8015D	11/20/08	CMG	11/22/08 17:37	JJH	A1
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
a,a,a-Trifluorotoluene (S)	111	%		68-117		SW846 8015D			11/19/08 11:17	TEH	C
VOLATILE ORGANICS											
Acetone	ND	ug/L		10.0	4.0	SW846 8260B			11/20/08 23:46	DD	E
tert-Amyl methyl ether	ND	ug/L		2.0	0.80	SW846 8260B			11/20/08 23:46	DD	E
tert-Amyl Alcohol	ND	ug/L		5.0	0.50	SW846 8260B			11/20/08 23:46	DD	E
tert-Amyl Ethylether	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:46	DD	E
Benzene	ND	ug/L		1.0	0.40	SW846 8260B			11/20/08 23:46	DD	E
Bromochloromethane	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:46	DD	E
Bromodichloromethane	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:46	DD	E
Bromoform	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:46	DD	E
Bromomethane	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:46	DD	E
2-Butanone	ND	ug/L		10.0	3.0	SW846 8260B			11/20/08 23:46	DD	E
tert.- Butyl Alcohol	ND	ug/L		10.0	3.0	SW846 8260B			11/20/08 23:46	DD	E
Carbon Disulfide	ND	ug/L		1.0	0.10	SW846 8260B			11/20/08 23:46	DD	E
Carbon Tetrachloride	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:46	DD	E
Chlorobenzene	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:46	DD	E
Chlorodibromomethane	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:46	DD	E
Chloroethane	ND	ug/L		1.0	0.30	SW846 8260B			11/20/08 23:46	DD	E
Chloroform	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:46	DD	E
Chloromethane	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:46	DD	E
1,2-Dibromo-3-chloropropane	ND	ug/L		7.0	2.4	SW846 8260B			11/20/08 23:46	DD	E
1,2-Dibromoethane	ND	ug/L		1.0	0.30	SW846 8260B			11/20/08 23:46	DD	E
1,1-Dichloroethane	ND	ug/L		1.0	0.10	SW846 8260B			11/20/08 23:46	DD	E
1,2-Dichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:46	DD	E
1,1-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:46	DD	E
cis-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:46	DD	E
trans-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:46	DD	E
1,2-Dichloropropane	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:46	DD	E
cis-1,3-Dichloropropene	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:46	DD	E
trans-1,3-Dichloropropene	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:46	DD	E
Diisopropyl ether	ND	ug/L		1.0	0.10	SW846 8260B			11/20/08 23:46	DD	E
Ethyl tert-butyl ether	ND	ug/L		1.0	0.10	SW846 8260B			11/20/08 23:46	DD	E
Ethylbenzene	ND	ug/L		1.0	0.30	SW846 8260B			11/20/08 23:46	DD	E
2-Hexanone	ND	ug/L		5.0	0.70	SW846 8260B			11/20/08 23:46	DD	E
Methyl t-Butyl Ether	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:46	DD	E
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		5.0	1.3	SW846 8260B			11/20/08 23:46	DD	E

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ANALYTICAL RESULTS

Workorder: 9764091 Groundwater (11/17/08)

Lab ID: **9764091010** Date Collected: 11/17/2008 12:00 Matrix: Water

Sample ID: **Field Blank_20081117_FB** Date Received: 11/18/2008 20:00

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Methylene Chloride	ND	ug/L		1.0	0.10	SW846 8260B			11/20/08 23:46	DD	E
Styrene	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:46	DD	E
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:46	DD	E
Tetrachloroethene	ND	ug/L		1.0	0.40	SW846 8260B			11/20/08 23:46	DD	E
Toluene	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:46	DD	E
Total Xylenes	ND	ug/L		3.0	0.40	SW846 8260B			11/20/08 23:46	DD	E
1,1,1-Trichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:46	DD	E
1,1,2-Trichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:46	DD	E
Trichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:46	DD	E
Vinyl Chloride	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:46	DD	E
o-Xylene	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:46	DD	E
mp-Xylene	ND	ug/L		2.0	0.30	SW846 8260B			11/20/08 23:46	DD	E
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	115	%		62-133		SW846 8260B			11/20/08 23:46	DD	E
4-Bromofluorobenzene (S)	104	%		79-114		SW846 8260B			11/20/08 23:46	DD	E
Dibromofluoromethane (S)	104	%		78-116		SW846 8260B			11/20/08 23:46	DD	E
Toluene-d8 (S)	110	%		76-127		SW846 8260B			11/20/08 23:46	DD	E

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9764091 Groundwater (11/17/08)

Lab ID: **9764091011** Date Collected: 11/18/2008 20:00 Matrix: Water

Sample ID: **Trip Blank_20081118_TB** Date Received: 11/18/2008 20:00

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		10.0	4.0	SW846 8260B			11/20/08 23:13	DD	A
tert-Amyl methyl ether	ND	ug/L		2.0	0.80	SW846 8260B			11/20/08 23:13	DD	A
tert-Amyl Alcohol	ND	ug/L		5.0	0.50	SW846 8260B			11/20/08 23:13	DD	A
tert-Amyl Ethylether	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:13	DD	A
Benzene	ND	ug/L		1.0	0.40	SW846 8260B			11/20/08 23:13	DD	A
Bromochloromethane	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:13	DD	A
Bromodichloromethane	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:13	DD	A
Bromoform	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:13	DD	A
Bromomethane	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:13	DD	A
2-Butanone	ND	ug/L		10.0	3.0	SW846 8260B			11/20/08 23:13	DD	A
tert.- Butyl Alcohol	ND	ug/L		10.0	3.0	SW846 8260B			11/20/08 23:13	DD	A
Carbon Disulfide	ND	ug/L		1.0	0.10	SW846 8260B			11/20/08 23:13	DD	A
Carbon Tetrachloride	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:13	DD	A
Chlorobenzene	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:13	DD	A
Chlorodibromomethane	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:13	DD	A
Chloroethane	ND	ug/L		1.0	0.30	SW846 8260B			11/20/08 23:13	DD	A
Chloroform	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:13	DD	A
Chloromethane	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:13	DD	A
1,2-Dibromo-3-chloropropane	ND	ug/L		7.0	2.4	SW846 8260B			11/20/08 23:13	DD	A
1,2-Dibromoethane	ND	ug/L		1.0	0.30	SW846 8260B			11/20/08 23:13	DD	A
1,1-Dichloroethane	ND	ug/L		1.0	0.10	SW846 8260B			11/20/08 23:13	DD	A
1,2-Dichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:13	DD	A
1,1-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:13	DD	A
cis-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:13	DD	A
trans-1,2-Dichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:13	DD	A
1,2-Dichloropropane	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:13	DD	A
cis-1,3-Dichloropropene	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:13	DD	A
trans-1,3-Dichloropropene	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:13	DD	A
Diisopropyl ether	ND	ug/L		1.0	0.10	SW846 8260B			11/20/08 23:13	DD	A
Ethyl tert-butyl ether	ND	ug/L		1.0	0.10	SW846 8260B			11/20/08 23:13	DD	A
Ethylbenzene	ND	ug/L		1.0	0.30	SW846 8260B			11/20/08 23:13	DD	A
2-Hexanone	ND	ug/L		5.0	0.70	SW846 8260B			11/20/08 23:13	DD	A
Methyl t-Butyl Ether	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:13	DD	A
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		5.0	1.3	SW846 8260B			11/20/08 23:13	DD	A
Methylene Chloride	ND	ug/L		1.0	0.10	SW846 8260B			11/20/08 23:13	DD	A
Styrene	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:13	DD	A
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:13	DD	A
Tetrachloroethene	ND	ug/L		1.0	0.40	SW846 8260B			11/20/08 23:13	DD	A
Toluene	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:13	DD	A
Total Xylenes	ND	ug/L		3.0	0.40	SW846 8260B			11/20/08 23:13	DD	A
1,1,1-Trichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:13	DD	A
1,1,2-Trichloroethane	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:13	DD	A
Trichloroethene	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:13	DD	A
Vinyl Chloride	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:13	DD	A

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ANALYTICAL RESULTS

Workorder: 9764091 Groundwater (11/17/08)

Lab ID: **9764091011** Date Collected: 11/18/2008 20:00 Matrix: Water

Sample ID: **Trip Blank_20081118_TB** Date Received: 11/18/2008 20:00

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
o-Xylene	ND	ug/L		1.0	0.20	SW846 8260B			11/20/08 23:13	DD	A
mp-Xylene	ND	ug/L		2.0	0.30	SW846 8260B			11/20/08 23:13	DD	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	114	%		62-133		SW846 8260B			11/20/08 23:13	DD	A
4-Bromofluorobenzene (S)	101	%		79-114		SW846 8260B			11/20/08 23:13	DD	A
Dibromofluoromethane (S)	108	%		78-116		SW846 8260B			11/20/08 23:13	DD	A
Toluene-d8 (S)	111	%		76-127		SW846 8260B			11/20/08 23:13	DD	A

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS QUALIFIERS\FLAGS

Workorder: 9764091 Groundwater (11/17/08)

PARAMETER QUALIFIERS\FLAGS

[1] This compound was recovered above quality control criteria in the matrix spike of this sample. The LCS had acceptable recoveries, satisfying method criteria.

[2] This compound was recovered above quality control criteria in the matrix spike and matrix spike duplicate of this sample. The LCS had acceptable recoveries, satisfying method criteria.

[3] The surrogate recovery was outside of the established control limits.

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT/ SAMPLER. (INSTRUCTIONS ON THE BACK)

Courier:

Tracking #:

9764091

Co. Name: R.E.P.S.G., Inc.

Contact (Report to): Mkuczynski@reposg.com Phone: 215-729-3230

Address: 6901 Kingsessing Ave. Phila. PA 19142

Bill to (if different than Report to): Same PO#:

Project Name/#: Calvert City ALSI Quote #:

TAT: [X] Normal-Standard TAT is 10-12 business days. Date Required: 11/25/08

[ ] Rush-Subject to ALSI approval and surcharges. Approved By: SB

Email? [X] Y mkuczynski@reposg.com

Fax? [ ] Y No.:

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	TPH-DRO	TPH-GRO	VOCs-8260B	Container Type	Container Size	Preservative
1 MW-001		11/17	13:45		WG	2	2	2	AG	1L	HCl
2 MW-002		11/17	14:30		WG	2	2	2	VOA	40ML	HCl
3 MW-003		11/17	10:00		WG	2	2	2	VOA	40ML	HCl
4 MW-005		11/17	13:00		WG	2	2	2			
5 MW-006		11/17	15:30		WG	2	2	2			
6 MW-007		11/17	11:25		WG	2	2	2			
7 ~~MP-001~~ MP-001		11/17	8:45		WG	2	2	2			
8 ~~MP-002~~ MP-002		11/17	10:35		WG	2	2	2			

ANALYSES/METHOD REQUESTED

Enter Number of Containers Per Analysis

(completed by Sample Receiver)

Performed In: Client HERE

Cooler Temp: 2

Therm. ID: T1023559

No. of Coolers:

Notes:

	Correct containers?	Correct sample volume?	Correct preservation?	Headspace/Volatiles?	Circle appropriate Y or N.
	Y	Y	Y	Y	Y
	N	N	N	N	N

	Custody seals Present?	(if present) Seals intact?	Received on ice?	COC/Labels complete/accurate?	Container in good condition?
	N	N	N	N	N
	Y	Y	Y	Y	Y

SAMPLED BY (Please Print): J. Crooks

LOGGED BY (signature): [signature] DATE 11/19 TIME 0000

REVIEWED BY (signature): [signature] DATE 11/20/08 TIME 1440

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 [signature]	11-18	1120	2 Ron Hodges	11-18	1120
3 Ron Hodges	11-18	1800	4 VM	11/18	1800
5 VM	11/18	2000	6 R. Salvatin	11/18/08	2000
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] other

EDDs Required? [X] If yes, format type: EQUIS

SDWA Forms? yes [ ] yes [ ] yes [ ] yes [ ]

State Samples Collected In? MD [X] NJ [ ] NY [ ] PA [ ] Other

DOD Criteria Required?

ALSI FIELD SERVICES

[X] Pickup [ ] Labor [ ] Composite Sampling [ ] Rental Equipment [ ] Other:

* G=Grab; C=Composite

** Matrix: Al=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

*** Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY

Rev 6/07

Report ID: 97640091

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT/ SAMPLER. INSTRUCTIONS ON THE BACK.

Courier:

Tracking #:

97640091

Co. Name: R.E.P.S.G., Inc.

Contact (Report to): MKuczynski Phone: 215-729-3220

Address: 6901 Kingsessing Ave. Phila. PA 19142

Bill to (if different than Report to): Same PO#:

Project Name/#: Calvert City ALSI Quote #:

TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALSI approval and surcharges. Date Required: Approved By:

Email? [X] -Y MKuczynski@repsg.com

Fax? [ ] -Y No.:

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	***Container Type	***Container Size	*** Preservative	TPH-DRO	TPH-GRO	VOCs-8260B	Enter Number of Containers Per Analysis
1 Duplicate - 001		11/17	-		WG	AG	VOA	VOA	2	2	2	
2 Field Blank		11/17	12:00		DI	AG	VOA	VOA	2	2	2	
3 Trip Blank	11/20/08	11/17	-	G	DI		VOA	VOA			2	
4	* date changed to date	11/16/08	2000									
5	and time received.											
6												
7												
8												

Receipt Information (completed by Sample Receiving)

Performed by:

Cooler Temp: 2

Therm. ID: 51023559

No. of Coolers:

Notes:

	Circle appropriate Y or N.
Correct containers?	Y
Correct sample volume?	Y
Correct preservation?	Y
Headspace/Volatiles?	N
COC/Labels complete/accurate?	Y
Custody seals Present?	N
(if present) Seals intact?	N
Received on Ice?	Y
Containter in good condition?	Y

SAMPLED BY (Please Print): J. Crooks

LOGGED BY(signature): DATE: 11/19 TIME: 0800

REVIEWED BY(signature): EBrez DATE: 11/20/08 TIME: 1442

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1	11-18	1120	2 Ron Hodges	11-18	1120
3 Ron Hodges	11-18	1800	4 VM	11/18	1800
5 VM	11/18	2000	6	11/18/08	2000
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] other

EDDs Required? [X] If yes, format type: EQuIS

DOD Criteria Required?

SDWA Forms? yes [ ] yes [ ] yes [ ] yes [ ]

State Samples Collected In? MD [X] NJ [ ] NY [ ] PA [ ] Other

ALSI FIELD SERVICES: [X] Pickup [ ] Labor [ ] Composite Sampling [ ] Rental Equipment [ ] Other:

* G=Grab; C=Composite

**Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY

***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

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Certificate of Analysis

Project Name:	**MDE STANDARDS - WATER**	Workorder:	**9765243**
Purchase Order:	**2664**	Workorder ID:	**Calvert Citgo/5977.130**

Mr. Mark Kuczynski
REPSG
6901 Kingsessing Ave., Ste 201
PO Box 5377
Philadelphia, PA 19142

December 3, 2008

Dear Mr. Kuczynski,

Enclosed are the analytical results for samples received by the laboratory on Tuesday, November 25, 2008

ALSI is a National Environmental Laboratory Accreditation Conference (NELAC) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAC.

If you have any questions regarding this certificate of analysis, please contact Anna Milliken (Project Coordinator) or Anna G Milliken (Laboratory Manager) at (717) 944-5541.

Please visit us at www.analyticallab.com for a listing of ALSI's NELAC accreditations and Scope of Work, as well as other links to Water Quality documentation on the internet.

NOTE: ALSI has changed the report generation tool and while we have tried to retain the existing format, you will notice some changes in the laboratory report. Please feel free to contact ALSI in case you have any questions.

Analytical Laboratory Services, Inc.

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Anna G Milliken
Laboratory Manager

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SAMPLE SUMMARY

Workorder: 9765243 Calvert Citgo/5977.130 Discard Date: 12/17/2008

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
9765243001	DW-001_2008112408_N	Water	11/24/08 11:30	11/25/08 19:45	Adam Chorney
9765243002	DW-002_2008112408_N	Water	11/24/08 09:10	11/25/08 19:45	Adam Chorney
9765243003	DW-003_2008112408_N	Water	11/24/08 11:05	11/25/08 19:45	Adam Chorney
9765243004	DW-004_2008112408_N	Water	11/24/08 08:35	11/25/08 19:45	Adam Chorney
9765243005	DW-005_2008112408_N	Water	11/24/08 09:00	11/25/08 19:45	Adam Chorney
9765243006	DW-006_2008112408_N	Water	11/24/08 09:52	11/25/08 19:45	Adam Chorney
9765243007	DW-007_2008112408_N	Water	11/24/08 09:25	11/25/08 19:45	Adam Chorney

Workorder Comments:

Notes

-- Samples collected by ALSI personnel are done so in accordance with the procedures set forth in the ALSI Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

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ANALYTICAL RESULTS

Workorder: 9765243 Calvert Citgo/5977.130

Lab ID: **9765243001** Date Collected: 11/24/2008 11:30 Matrix: Water

Sample ID: **DW-001_2008112408_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			11/28/08 14:58	MES	A
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			11/28/08 14:58	MES	A
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
tert-Amyl Alcohol	ND	ug/L		4.0	2.0	EPA 524.2			11/28/08 14:58	MES	A
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 14:58	MES	A
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 14:58	MES	A
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 14:58	MES	A
2-Butanone	ND	ug/L		2.5	1.0	EPA 524.2			11/28/08 14:58	MES	A
tert.- Butyl Alcohol	ND	ug/L		4.0	1.7	EPA 524.2			11/28/08 14:58	MES	A
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 14:58	MES	A
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 14:58	MES	A
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			11/28/08 14:58	MES	A
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 14:58	MES	A
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			11/28/08 14:58	MES	A
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 14:58	MES	A
Chloroform	1.0	ug/L		0.50	0.10	EPA 524.2			11/28/08 14:58	MES	A
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 14:58	MES	A
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 14:58	MES	A
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 14:58	MES	A
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			11/28/08 14:58	MES	A
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			11/28/08 14:58	MES	A
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 14:58	MES	A
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 14:58	MES	A
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A

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ANALYTICAL RESULTS

Workorder: 9765243 Calvert Citgo/5977.130

Lab ID: **9765243001** Date Collected: 11/24/2008 11:30 Matrix: Water

Sample ID: **DW-001_2008112408_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 14:58	MES	A
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			11/28/08 14:58	MES	A
Diisopropyl ether	1.9	ug/L		0.50	0.10	EPA 524.2			11/28/08 14:58	MES	A
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			11/28/08 14:58	MES	A
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 14:58	MES	A
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 14:58	MES	A
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 14:58	MES	A
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			11/28/08 14:58	MES	A
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			11/28/08 14:58	MES	A
Iodomethane	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 14:58	MES	A
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			11/28/08 14:58	MES	A
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 14:58	MES	A
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 14:58	MES	A
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			11/28/08 14:58	MES	A
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			11/28/08 14:58	MES	A
Methyl t-Butyl Ether	18.1	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			11/28/08 14:58	MES	A
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 14:58	MES	A
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			11/28/08 14:58	MES	A
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			11/28/08 14:58	MES	A
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			11/28/08 14:58	MES	A
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 14:58	MES	A
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 14:58	MES	A
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
Tetrahydrofuran	ND	ug/L		3.0	1.3	EPA 524.2			11/28/08 14:58	MES	A
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 14:58	MES	A
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			11/28/08 14:58	MES	A
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 14:58	MES	A
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 14:58	MES	A
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 14:58	MES	A
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 14:58	MES	A

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ANALYTICAL RESULTS

Workorder: 9765243 Calvert Citgo/5977.130

Lab ID: **9765243001** Date Collected: 11/24/2008 11:30 Matrix: Water

Sample ID: **DW-001_2008112408_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 14:58	MES	A
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 14:58	MES	A
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 14:58	MES	A
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			11/28/08 14:58	MES	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	92.7	%		70-130		EPA 524.2			11/28/08 14:58	MES	A
4-Bromofluorobenzene (S)	84.2	%		70-130		EPA 524.2			11/28/08 14:58	MES	A

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9765243 Calvert Citgo/5977.130

Lab ID: **9765243002** Date Collected: 11/24/2008 09:10 Matrix: Water

Sample ID: **DW-002_2008112408_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			11/28/08 15:24	MES	A
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			11/28/08 15:24	MES	A
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
tert-Amyl Alcohol	ND	ug/L		4.0	2.0	EPA 524.2			11/28/08 15:24	MES	A
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:24	MES	A
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:24	MES	A
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 15:24	MES	A
2-Butanone	ND	ug/L		2.5	1.0	EPA 524.2			11/28/08 15:24	MES	A
tert.- Butyl Alcohol	ND	ug/L		4.0	1.7	EPA 524.2			11/28/08 15:24	MES	A
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:24	MES	A
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:24	MES	A
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			11/28/08 15:24	MES	A
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:24	MES	A
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			11/28/08 15:24	MES	A
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:24	MES	A
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:24	MES	A
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:24	MES	A
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 15:24	MES	A
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 15:24	MES	A
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			11/28/08 15:24	MES	A
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			11/28/08 15:24	MES	A
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 15:24	MES	A
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:24	MES	A
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A

ANALYTICAL RESULTS

Workorder: 9765243 Calvert Citgo/5977.130

Lab ID: **9765243002** Date Collected: 11/24/2008 09:10 Matrix: Water

Sample ID: **DW-002_2008112408_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:24	MES	A
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			11/28/08 15:24	MES	A
Diisopropyl ether	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:24	MES	A
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			11/28/08 15:24	MES	A
Ethyl Ether	0.27J	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:24	MES	A
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:24	MES	A
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:24	MES	A
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			11/28/08 15:24	MES	A
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			11/28/08 15:24	MES	A
Iodomethane	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 15:24	MES	A
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			11/28/08 15:24	MES	A
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:24	MES	A
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:24	MES	A
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			11/28/08 15:24	MES	A
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			11/28/08 15:24	MES	A
Methyl t-Butyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			11/28/08 15:24	MES	A
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 15:24	MES	A
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			11/28/08 15:24	MES	A
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			11/28/08 15:24	MES	A
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			11/28/08 15:24	MES	A
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:24	MES	A
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:24	MES	A
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
Tetrahydrofuran	ND	ug/L		3.0	1.3	EPA 524.2			11/28/08 15:24	MES	A
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:24	MES	A
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			11/28/08 15:24	MES	A
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:24	MES	A
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:24	MES	A
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:24	MES	A
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:24	MES	A

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ANALYTICAL RESULTS

Workorder: 9765243 Calvert Citgo/5977.130

Lab ID: **9765243002** Date Collected: 11/24/2008 09:10 Matrix: Water

Sample ID: **DW-002_2008112408_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:24	MES	A
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:24	MES	A
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:24	MES	A
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			11/28/08 15:24	MES	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	88.7	%		70-130		EPA 524.2			11/28/08 15:24	MES	A
4-Bromofluorobenzene (S)	80.3	%		70-130		EPA 524.2			11/28/08 15:24	MES	A

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9765243 Calvert Citgo/5977.130

Lab ID: **9765243003** Date Collected: 11/24/2008 11:05 Matrix: Water

Sample ID: **DW-003_2008112408_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			11/28/08 15:50	MES	A
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			11/28/08 15:50	MES	A
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
tert-Amyl Alcohol	ND	ug/L		4.0	2.0	EPA 524.2			11/28/08 15:50	MES	A
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:50	MES	A
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:50	MES	A
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 15:50	MES	A
2-Butanone	ND	ug/L		2.5	1.0	EPA 524.2			11/28/08 15:50	MES	A
tert.- Butyl Alcohol	ND	ug/L		4.0	1.7	EPA 524.2			11/28/08 15:50	MES	A
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:50	MES	A
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:50	MES	A
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			11/28/08 15:50	MES	A
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:50	MES	A
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			11/28/08 15:50	MES	A
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:50	MES	A
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:50	MES	A
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:50	MES	A
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 15:50	MES	A
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 15:50	MES	A
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			11/28/08 15:50	MES	A
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			11/28/08 15:50	MES	A
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 15:50	MES	A
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:50	MES	A
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A

ANALYTICAL RESULTS

Workorder: 9765243 Calvert Citgo/5977.130

Lab ID: **9765243003** Date Collected: 11/24/2008 11:05 Matrix: Water

Sample ID: **DW-003_2008112408_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:50	MES	A
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			11/28/08 15:50	MES	A
Diisopropyl ether	0.25J	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:50	MES	A
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			11/28/08 15:50	MES	A
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:50	MES	A
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:50	MES	A
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:50	MES	A
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			11/28/08 15:50	MES	A
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			11/28/08 15:50	MES	A
Iodomethane	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 15:50	MES	A
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			11/28/08 15:50	MES	A
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:50	MES	A
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:50	MES	A
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			11/28/08 15:50	MES	A
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			11/28/08 15:50	MES	A
Methyl t-Butyl Ether	0.49J	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			11/28/08 15:50	MES	A
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 15:50	MES	A
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			11/28/08 15:50	MES	A
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			11/28/08 15:50	MES	A
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			11/28/08 15:50	MES	A
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:50	MES	A
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:50	MES	A
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
Tetrahydrofuran	ND	ug/L		3.0	1.3	EPA 524.2			11/28/08 15:50	MES	A
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:50	MES	A
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			11/28/08 15:50	MES	A
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:50	MES	A
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:50	MES	A
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:50	MES	A
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:50	MES	A

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ANALYTICAL RESULTS

Workorder: 9765243 Calvert Citgo/5977.130

Lab ID: **9765243003** Date Collected: 11/24/2008 11:05 Matrix: Water

Sample ID: **DW-003_2008112408_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:50	MES	A
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 15:50	MES	A
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 15:50	MES	A
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			11/28/08 15:50	MES	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	89.6	%		70-130		EPA 524.2			11/28/08 15:50	MES	A
4-Bromofluorobenzene (S)	82.2	%		70-130		EPA 524.2			11/28/08 15:50	MES	A

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9765243 Calvert Citgo/5977.130

Lab ID: **9765243004** Date Collected: 11/24/2008 08:35 Matrix: Water

Sample ID: **DW-004_2008112408_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			11/28/08 16:16	MES	A
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			11/28/08 16:16	MES	A
tert-Amyl methyl ether	0.79	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
tert-Amyl Alcohol	56.3	ug/L		4.0	2.0	EPA 524.2			11/28/08 16:16	MES	A
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:16	MES	A
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:16	MES	A
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 16:16	MES	A
2-Butanone	ND	ug/L		2.5	1.0	EPA 524.2			11/28/08 16:16	MES	A
tert.- Butyl Alcohol	1500	ug/L		80.0	34.0	EPA 524.2			12/3/08 06:32	MES	B
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:16	MES	A
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:16	MES	A
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			11/28/08 16:16	MES	A
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:16	MES	A
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			11/28/08 16:16	MES	A
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:16	MES	A
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:16	MES	A
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:16	MES	A
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 16:16	MES	A
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 16:16	MES	A
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			11/28/08 16:16	MES	A
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			11/28/08 16:16	MES	A
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
1,3-Dichlorobenzene	0.34J	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
1,4-Dichlorobenzene	0.23J	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
1,2-Dichloroethane	5.5	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 16:16	MES	A
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:16	MES	A
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A

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ANALYTICAL RESULTS

Workorder: 9765243 Calvert Citgo/5977.130

Lab ID: **9765243004** Date Collected: 11/24/2008 08:35 Matrix: Water

Sample ID: **DW-004_2008112408_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:16	MES	A
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			11/28/08 16:16	MES	A
Diisopropyl ether	3.8	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:16	MES	A
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			11/28/08 16:16	MES	A
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:16	MES	A
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:16	MES	A
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:16	MES	A
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			11/28/08 16:16	MES	A
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			11/28/08 16:16	MES	A
Iodomethane	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 16:16	MES	A
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			11/28/08 16:16	MES	A
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:16	MES	A
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:16	MES	A
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			11/28/08 16:16	MES	A
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			11/28/08 16:16	MES	A
Methyl t-Butyl Ether	216	ug/L		10.0	4.0	EPA 524.2			12/3/08 06:32	MES	B
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			11/28/08 16:16	MES	A
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 16:16	MES	A
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			11/28/08 16:16	MES	A
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			11/28/08 16:16	MES	A
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			11/28/08 16:16	MES	A
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:16	MES	A
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:16	MES	A
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
Tetrahydrofuran	ND	ug/L		3.0	1.3	EPA 524.2			11/28/08 16:16	MES	A
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:16	MES	A
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			11/28/08 16:16	MES	A
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:16	MES	A
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:16	MES	A
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:16	MES	A
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:16	MES	A

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ANALYTICAL RESULTS

Workorder: 9765243 Calvert Citgo/5977.130

Lab ID: **9765243004** Date Collected: 11/24/2008 08:35 Matrix: Water

Sample ID: **DW-004_2008112408_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:16	MES	A
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:16	MES	A
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:16	MES	A
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			11/28/08 16:16	MES	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	89.9	%		70-130		EPA 524.2			11/28/08 16:16	MES	A
4-Bromofluorobenzene (S)	80.4	%		70-130		EPA 524.2			11/28/08 16:16	MES	A
1,2-Dichlorobenzene-d4 (S)	79.6	%		70-130		EPA 524.2			12/3/08 06:32	MES	B
4-Bromofluorobenzene (S)	78.1	%		70-130		EPA 524.2			12/3/08 06:32	MES	B

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9765243 Calvert Citgo/5977.130

Lab ID: **9765243005** Date Collected: 11/24/2008 09:00 Matrix: Water

Sample ID: **DW-005_2008112408_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			11/28/08 16:43	MES	A
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			11/28/08 16:43	MES	A
tert-Amyl methyl ether	1.8	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
tert-Amyl Alcohol	35.9	ug/L		4.0	2.0	EPA 524.2			11/28/08 16:43	MES	A
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:43	MES	A
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:43	MES	A
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 16:43	MES	A
2-Butanone	ND	ug/L		2.5	1.0	EPA 524.2			11/28/08 16:43	MES	A
tert.- Butyl Alcohol	554	ug/L		80.0	34.0	EPA 524.2			12/3/08 06:06	MES	B
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:43	MES	A
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:43	MES	A
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			11/28/08 16:43	MES	A
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:43	MES	A
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			11/28/08 16:43	MES	A
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:43	MES	A
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:43	MES	A
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:43	MES	A
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 16:43	MES	A
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 16:43	MES	A
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			11/28/08 16:43	MES	A
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			11/28/08 16:43	MES	A
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
1,4-Dichlorobenzene	0.23J	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
1,2-Dichloroethane	3.6	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 16:43	MES	A
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:43	MES	A
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A

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ANALYTICAL RESULTS

Workorder: 9765243 Calvert Citgo/5977.130

Lab ID: **9765243005** Date Collected: 11/24/2008 09:00 Matrix: Water

Sample ID: **DW-005_2008112408_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:43	MES	A
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			11/28/08 16:43	MES	A
Diisopropyl ether	3.5	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:43	MES	A
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			11/28/08 16:43	MES	A
Ethyl Ether	0.26J	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:43	MES	A
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:43	MES	A
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:43	MES	A
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			11/28/08 16:43	MES	A
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			11/28/08 16:43	MES	A
Iodomethane	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 16:43	MES	A
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			11/28/08 16:43	MES	A
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:43	MES	A
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:43	MES	A
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			11/28/08 16:43	MES	A
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			11/28/08 16:43	MES	A
Methyl t-Butyl Ether	277	ug/L		10.0	4.0	EPA 524.2			12/3/08 06:06	MES	B
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			11/28/08 16:43	MES	A
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 16:43	MES	A
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			11/28/08 16:43	MES	A
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			11/28/08 16:43	MES	A
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			11/28/08 16:43	MES	A
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:43	MES	A
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:43	MES	A
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
Tetrahydrofuran	ND	ug/L		3.0	1.3	EPA 524.2			11/28/08 16:43	MES	A
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:43	MES	A
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			11/28/08 16:43	MES	A
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:43	MES	A
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:43	MES	A
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:43	MES	A
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:43	MES	A

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ANALYTICAL RESULTS

Workorder: 9765243 Calvert Citgo/5977.130

Lab ID: **9765243005** Date Collected: 11/24/2008 09:00 Matrix: Water

Sample ID: **DW-005_2008112408_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:43	MES	A
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 16:43	MES	A
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 16:43	MES	A
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			11/28/08 16:43	MES	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	89.7	%		70-130		EPA 524.2			11/28/08 16:43	MES	A
4-Bromofluorobenzene (S)	82.1	%		70-130		EPA 524.2			11/28/08 16:43	MES	A
1,2-Dichlorobenzene-d4 (S)	83.2	%		70-130		EPA 524.2			12/3/08 06:06	MES	B
4-Bromofluorobenzene (S)	80.7	%		70-130		EPA 524.2			12/3/08 06:06	MES	B

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9765243 Calvert Citgo/5977.130

Lab ID: **9765243006** Date Collected: 11/24/2008 09:52 Matrix: Water

Sample ID: **DW-006_2008112408_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			11/28/08 17:09	MES	A
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			11/28/08 17:09	MES	A
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
tert-Amyl Alcohol	ND	ug/L		4.0	2.0	EPA 524.2			11/28/08 17:09	MES	A
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:09	MES	A
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:09	MES	A
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 17:09	MES	A
2-Butanone	ND	ug/L		2.5	1.0	EPA 524.2			11/28/08 17:09	MES	A
tert.- Butyl Alcohol	ND	ug/L		4.0	1.7	EPA 524.2			11/28/08 17:09	MES	A
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:09	MES	A
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:09	MES	A
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			11/28/08 17:09	MES	A
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:09	MES	A
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			11/28/08 17:09	MES	A
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:09	MES	A
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:09	MES	A
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:09	MES	A
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 17:09	MES	A
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 17:09	MES	A
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			11/28/08 17:09	MES	A
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			11/28/08 17:09	MES	A
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 17:09	MES	A
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:09	MES	A
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A

ANALYTICAL RESULTS

Workorder: 9765243 Calvert Citgo/5977.130

Lab ID: **9765243006** Date Collected: 11/24/2008 09:52 Matrix: Water

Sample ID: **DW-006_2008112408_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:09	MES	A
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			11/28/08 17:09	MES	A
Diisopropyl ether	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:09	MES	A
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			11/28/08 17:09	MES	A
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:09	MES	A
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:09	MES	A
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:09	MES	A
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			11/28/08 17:09	MES	A
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			11/28/08 17:09	MES	A
Iodomethane	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 17:09	MES	A
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			11/28/08 17:09	MES	A
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:09	MES	A
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:09	MES	A
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			11/28/08 17:09	MES	A
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			11/28/08 17:09	MES	A
Methyl t-Butyl Ether	0.33J	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			11/28/08 17:09	MES	A
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 17:09	MES	A
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			11/28/08 17:09	MES	A
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			11/28/08 17:09	MES	A
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			11/28/08 17:09	MES	A
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:09	MES	A
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:09	MES	A
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
Tetrahydrofuran	ND	ug/L		3.0	1.3	EPA 524.2			11/28/08 17:09	MES	A
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:09	MES	A
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			11/28/08 17:09	MES	A
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:09	MES	A
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:09	MES	A
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:09	MES	A
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:09	MES	A

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ANALYTICAL RESULTS

Workorder: 9765243 Calvert Citgo/5977.130

Lab ID: **9765243006** Date Collected: 11/24/2008 09:52 Matrix: Water

Sample ID: **DW-006_2008112408_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:09	MES	A
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:09	MES	A
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:09	MES	A
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			11/28/08 17:09	MES	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	91.5	%		70-130		EPA 524.2			11/28/08 17:09	MES	A
4-Bromofluorobenzene (S)	85.3	%		70-130		EPA 524.2			11/28/08 17:09	MES	A

Sample Comments:

Anna G Milliken
Laboratory Manager

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ANALYTICAL RESULTS

Workorder: 9765243 Calvert Citgo/5977.130

Lab ID: **9765243007** Date Collected: 11/24/2008 09:25 Matrix: Water

Sample ID: **DW-007_2008112408_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/L		5.0	2.3	EPA 524.2			11/28/08 17:35	MES	A
Acrylonitrile	ND	ug/L		2.5	0.40	EPA 524.2			11/28/08 17:35	MES	A
tert-Amyl methyl ether	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
tert-Amyl Alcohol	ND	ug/L		4.0	2.0	EPA 524.2			11/28/08 17:35	MES	A
tert-Amyl Ethylether	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
Benzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:35	MES	A
Bromobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
Bromochloromethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
Bromodichloromethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
Bromoform	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:35	MES	A
Bromomethane	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 17:35	MES	A
2-Butanone	ND	ug/L		2.5	1.0	EPA 524.2			11/28/08 17:35	MES	A
tert.- Butyl Alcohol	ND	ug/L		4.0	1.7	EPA 524.2			11/28/08 17:35	MES	A
n-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:35	MES	A
tert-Butylbenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
sec-Butylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:35	MES	A
Carbon Disulfide	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
Carbon Tetrachloride	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
Chloroacetonitrile	ND	ug/L		2.5	1.0	EPA 524.2			11/28/08 17:35	MES	A
Chlorobenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:35	MES	A
1-Chlorobutane	ND	ug/L		1.0	0.50	EPA 524.2			11/28/08 17:35	MES	A
Chlorodibromomethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
Chloroethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:35	MES	A
Chloroform	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:35	MES	A
Chloromethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:35	MES	A
3-Chloro-1-propene	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 17:35	MES	A
o-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
p-Chlorotoluene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
1,2-Dibromo-3-chloropropane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
1,2-Dibromoethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
Dibromomethane	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 17:35	MES	A
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	0.40	EPA 524.2			11/28/08 17:35	MES	A
1,1-Dichloro-2-Propanone	ND	ug/L		4.0	1.6	EPA 524.2			11/28/08 17:35	MES	A
1,2-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
1,3-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
1,4-Dichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
Dichlorodifluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
1,1-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
1,2-Dichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
1,1-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
cis-1,2-Dichloroethene	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 17:35	MES	A
trans-1,2-Dichloroethene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
Dichlorofluoromethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
1,3-Dichloropropane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:35	MES	A
2,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A

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ANALYTICAL RESULTS

Workorder: 9765243 Calvert Citgo/5977.130

Lab ID: **9765243007** Date Collected: 11/24/2008 09:25 Matrix: Water

Sample ID: **DW-007_2008112408_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
1,1-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
cis-1,3-Dichloropropene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:35	MES	A
trans-1,3-Dichloropropene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
1,3-Dichloropropene, Total	ND	ug/L		1.0	0.30	EPA 524.2			11/28/08 17:35	MES	A
Diisopropyl ether	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:35	MES	A
1,4-Dioxane	ND	ug/L		4.0	1.6	EPA 524.2			11/28/08 17:35	MES	A
Ethyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
Ethyl Methacrylate	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:35	MES	A
Ethyl tert-butyl ether	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:35	MES	A
Ethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:35	MES	A
Hexachlorobutadiene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
Hexachloroethane	ND	ug/L		3.0	1.4	EPA 524.2			11/28/08 17:35	MES	A
Hexane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
2-Hexanone	ND	ug/L		2.5	0.30	EPA 524.2			11/28/08 17:35	MES	A
Iodomethane	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 17:35	MES	A
Isopropyl Alcohol	ND	ug/L		25.0	11.0	EPA 524.2			11/28/08 17:35	MES	A
Isopropylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:35	MES	A
p-Isopropyltoluene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:35	MES	A
Methacrylonitrile	ND	ug/L		1.0	0.30	EPA 524.2			11/28/08 17:35	MES	A
Methyl methacrylate	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
Methyl acrylate	ND	ug/L		1.0	0.30	EPA 524.2			11/28/08 17:35	MES	A
Methyl t-Butyl Ether	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
4-Methyl-2-Pentanone(MIBK)	ND	ug/L		2.5	0.50	EPA 524.2			11/28/08 17:35	MES	A
Methylene Chloride	ND	ug/L		0.50	0.30	EPA 524.2			11/28/08 17:35	MES	A
Naphthalene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
Nitrobenzene	ND	ug/L		5.0	2.0	EPA 524.2			11/28/08 17:35	MES	A
2-Nitropropane	ND	ug/L		3.0	1.4	EPA 524.2			11/28/08 17:35	MES	A
Pentachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
Propionitrile	ND	ug/L		2.5	0.60	EPA 524.2			11/28/08 17:35	MES	A
n-Propylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:35	MES	A
Styrene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
1,1,1,2-Tetrachloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
1,1,2,2-Tetrachloroethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:35	MES	A
Tetrachloroethene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
Tetrahydrofuran	ND	ug/L		3.0	1.3	EPA 524.2			11/28/08 17:35	MES	A
Toluene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:35	MES	A
Total Xylenes	ND	ug/L		1.5	0.30	EPA 524.2			11/28/08 17:35	MES	A
1,2,3-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
1,2,4-Trichlorobenzene	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
1,1,1-Trichloroethane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
1,1,2-Trichloroethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:35	MES	A
Trichloroethene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:35	MES	A
Trichlorofluoromethane	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:35	MES	A
1,2,3-Trichloropropane	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
1,2,4-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:35	MES	A

ANALYTICAL LABORATORY SERVICES, INC.
www.analyticallab.com
NELAP Accredited
PA 22-293 NJ PA010
ACCREDITED IN ACCORDANCE WITH nelac
34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9765243 Calvert Citgo/5977.130

Lab ID: **9765243007** Date Collected: 11/24/2008 09:25 Matrix: Water

Sample ID: **DW-007_2008112408_N** Date Received: 11/25/2008 19:45

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,3,5-Trimethylbenzene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:35	MES	A
Vinyl Acetate	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
Vinyl Chloride	ND	ug/L		0.50	0.20	EPA 524.2			11/28/08 17:35	MES	A
o-Xylene	ND	ug/L		0.50	0.10	EPA 524.2			11/28/08 17:35	MES	A
mp-Xylene	ND	ug/L		1.0	0.20	EPA 524.2			11/28/08 17:35	MES	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichlorobenzene-d4 (S)	89.5	%		70-130		EPA 524.2			11/28/08 17:35	MES	A
4-Bromofluorobenzene (S)	82.2	%		70-130		EPA 524.2			11/28/08 17:35	MES	A

Sample Comments:

Anna G Milliken
Laboratory Manager

Analytical Laboratory Services, Inc.
Environmental • Industrial Hygiene • Field Services
34 Dogwood Lane • Middletown, PA 17057 • 717.944.5541 • Fax: 717.944.1430

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Courier:

Tracking #:

9765243

Co. Name: R.E.P.S.G., Inc.

Contact (Report to): RFeingold Phone: 215-729-3220

Address: 6901 kingsessing Ave. Phila. PA 19142

Bill to (if different than Report to): Same as above PO#: 26604

Project Name/#: Calvert Citgo / 5977.130 ALSI Quote #:

TAT: [X] Normal-Standard TAT is 10-12 business days. Date Required: 12/02/08
[ ] Rush-Subject to ALSI approval and surcharges. Approved By:

Email? [X] -Y RFeingold@repsg.com

Fax? [ ] -Y No.:

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	Full Suite Drinking water VOCs by method 524.2, MTBE, TBA	Total # of bottles
1 DW-001		11/24/08	11:30	G	WG	X	2
2 DW-002		11/24/08	9:10	G	WG	X	2
3 DW-003		11/24/08	11:05	G	WG	X	2
4 DW-004		11/24/08	8:35	G	WG	X	2
5 DW-005		11/24/08	9:00	G	WG	X	2
6 DW-006		11/24/08	9:52	G	WG	X	2
7 DW-007		11/24/08	9:25	G	WG	X	2
8							

***Container Type: VOAs
***Container Size: 40ml
***Preservative: Ascorbic Acid / HCl

ANALYSES/METHOD REQUESTED

Enter Number of Containers Per Analysis

Receipt Information (completed by Sample Receiving)
Performed by: INITIAL DATE
Cooler Temp: 3
Therm. ID: 562355
No. of Coolers:
Notes:

	Correct containers?	Correct sample volume?	Correct preservation?	Headspace/Volatiles?	Circle appropriate Y or N.
	N	N	N	Y	
	N	N	N	N	N
	Y	Y	Y	Y	Y

Custody seals Present? (if present) Seals intact? Received on ice? COC/Labels complete/accurate? Container in good condition?

SAMPLED BY (Please Print): A. Clancy

LOGGED BY(signature): DATE 11/26/08 TIME 1627

REVIEWED BY(signature): DATE 11/26/08 TIME 1641

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1	11/25	1250	2	11/25	1250
3	11/25	1800	4 VM	11/25	1800
5 VM	11/25	1945	6 VM	11/26	1645
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] other

EDDs Required? [X] If yes, format type: EQUIS

DOD Criteria Required?

SDWA Forms? yes / yes / yes / yes

State Samples Collected In? MD [X] NJ [ ] NY [ ] PA [ ] Other

ALSI FIELD SERVICES
[X] Pickup
[ ] Labor
[ ] Composite Sampling
[ ] Rental Equipment
[ ] Other:

* G=Grab; C=Composite
** Matrix: Al=Air; DW=Drinking Water; GW=Groundwater; Oil=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
*** Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY

Rev 6/07

ATTACHMENT 6: MDE COORESPONDANCE & PRIOR REPORTING

file copy

AEC
Advanced Environmental Concepts, Inc.

5292 Enterprise Street, Suite C Eldersburg, Maryland 21784 (410) 795-5955

Monitoring Well Gauging And Sampling Report

Calvert Country Store
2815 North East Rd
North East, MD 21901

MDE CASE# 1992-2616-CE

Prepared for:
Pragnesh Bhanustrasad L. Patel
2815 North East Rd
North East, MD 21901

September 8, 2008

TABLE OF CONTENTS

INTRODUCTION

Purpose

The purpose of this Monitoring Well Sampling Event was to satisfy requirements of The Maryland Department of the Environment's (MDE's) Oil Control Program.

Scope of Services

Advanced Environmental Concepts, Inc. (AEC) is providing a scope of service which consists of the sampling of six (6) Monitoring Wells (MWs) on site. All samples were to be analyzed for Volatile Organic Chemicals (VOCs). Additionally, groundwater flow direction was to be calculated.

Limitations

The scope of work is limited to the activities and results contained in this report. Industry standard hydrogeologic investigative procedures and protocol were used in order to complete the scope of work. The results are limited to the locations and data discussed in this report. Subsurface conditions may have changed as a function of time. No other warranty expressed or implied is made.

GROUNDWATER SAMPLING ACTVITIES

Monitoring Well Sampling Activities

On August 14, 2008 AEC personnel arrived on site to complete the scope of work which included the gauging and sampling of six (6) MWs located on site.

Depth to groundwater was recorded in each MW with the use of an electronic oil/water interface probe. The MWs were then purged with the use of a submersible pump. A representative groundwater sample was then collected with a disposable polyethylene bailer. Depth to groundwater levels ranged from 16.67 to 17.90 feet BGS. MW locations are shown on the site map located in Appendix A.

The groundwater samples collected from the MWs on site were analyzed for VOCs using EPA method 8260, and Total Petroleum Hydrocarbons-Gasoline Range Organics (TPH-GRO) and Total Petroleum Hydrocarbons-Diesel Range Organics (TPH-DRO) by EPA method 8015.

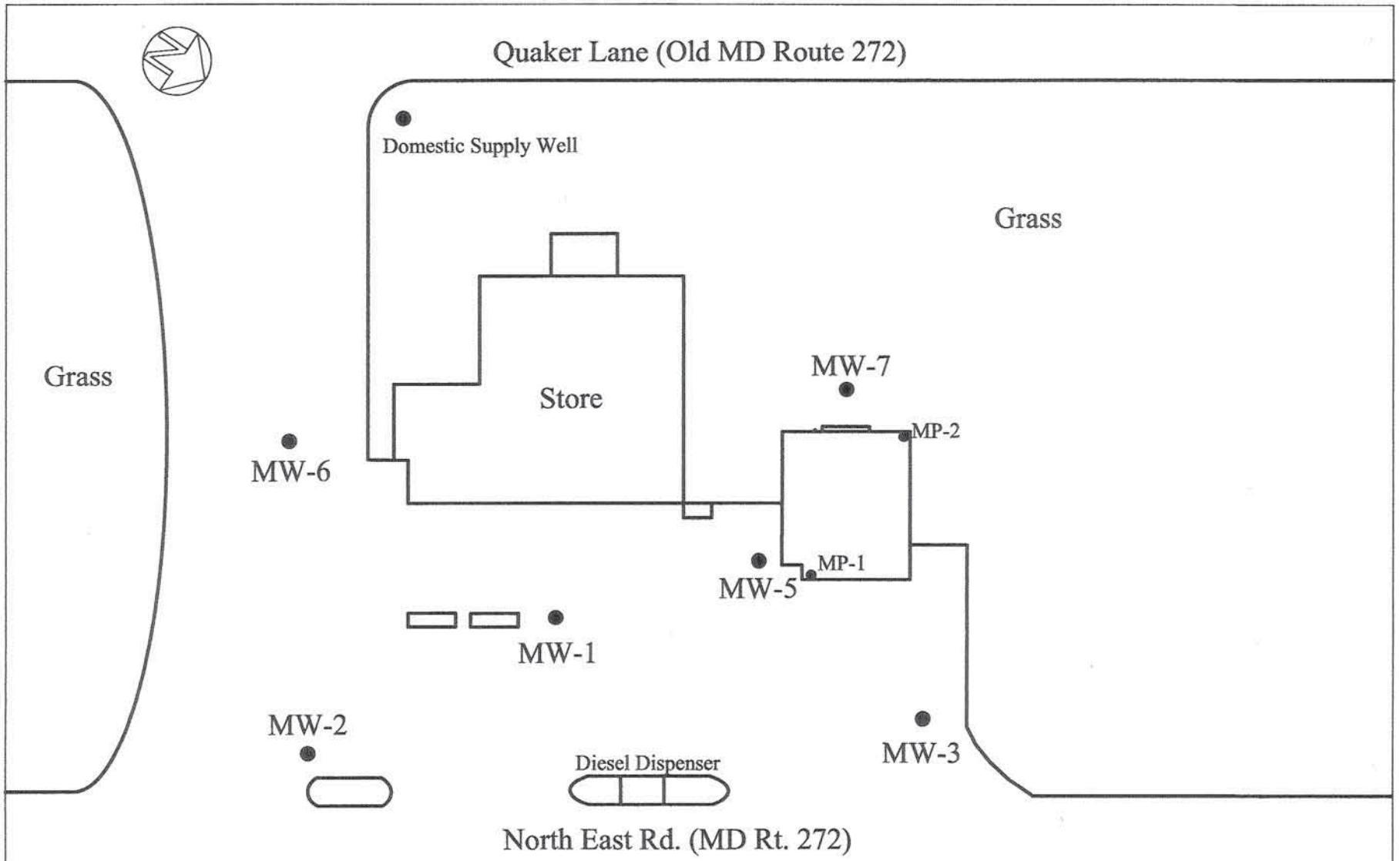
Domestic Supply Well Sampling Activities

On 8/14/08 a sample from the domestic supply well (DSW) that services the site was collected and submitted for chemical analysis. The DSW sample was collected by an MDE certified domestic supply sampler. The DSW sample was delivered on ice with a chain of custody record to Caliber Analytical Services for analysis by EPA Method 524.2 for VOCs in drinking water.

Domestic Supply Well Sampling Results

A sample from the DSW that services the site was collected and submitted for chemical analysis as a part of this sampling event. The DSW was analyzed for VOCs using EPA method 524.2. Method detectable concentrations of VOCs were observed in the sample collected from the sites DSW. MTBE was observed at 49.2 ug/L, 1,2-Dichloroethane at 5.2 ug/L and Diisopropyl ether (DIPE) 5.6 ugL. A Report of Analysis and Chain of Custody can be found in Appendix C. A quick reference analytical table is available in Appendix B.

APPENDICES



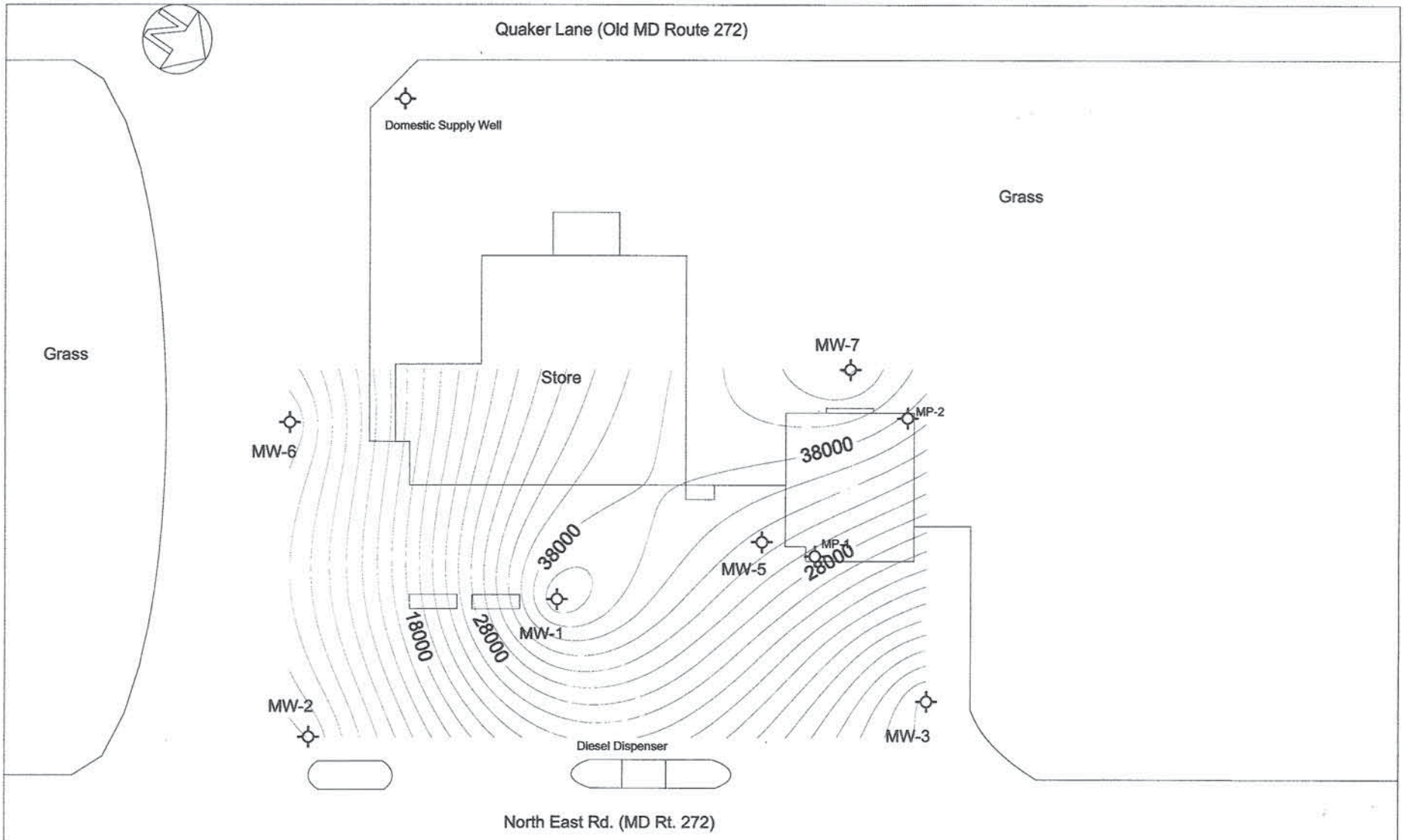
AEC
Advanced Environmental Concepts, Inc.

Site Drawing For:
Calvert Country Store
2815 North East Rd
North East, MD 21901

Date	3/13/08
Scale	1"=30ft
Drawing #	0546

30 0 15 30
Scale in Feet

Calvert Country Store BTEX Isoconcentration Contour Map



AEC
Advanced Environmental Concepts, Inc.

Site Drawing For:

Calvert Country Store
2815 North East Rd
North East, MD 21901

Date	9/8/2008
Scale	1"=30ft
Drawing #	0546

30 0 15 30

Scale In Feet

APPENDIX B

Tables

APPENDIX C

Report of Analysis and Chain of Custody

ADVANCED ENVIRONMENTAL CONCEPTS, INC.

Laboratory Services *5292 Enterprise Street Suite C, Eldersburg, MD 21784 Phone 410-795-5955 Fax 410-795-9459*

Certificate of Analysis

Sample Identification:	**MW-1**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**water**	**Client Identification:**	**PRAGNESH PATEL**
Sample Date:	**8/14/2008**	**Client Telephone:**	
Date Received:	**8/20/2008**	**Client Fax:**	
Extraction Date:	**8/25/2008**	**Analyst:**	**WA**
Analysis Date:	**8/25/2008**	**Lab File:**	**82508.D16**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
m&p-Xylene	5	ug/L	7320	EPA 8260
Bromoform	5	ug/L	ND	EPA 8260
Styrene	5	ug/L	ND	EPA 8260
o-Xylene	5	ug/L	2000	EPA 8260
1,1,2,2-Tetrachloroethane	5	ug/L	ND	EPA 8260
1,2,3-Trichloropropane	5	ug/L	ND	EPA 8260
Isopropylbenzene	5	ug/L	69.6	EPA 8260
Bromobenzene	5	ug/L	ND	EPA 8260
n-Propylbenzene	5	ug/L	156	EPA 8260
2-Chlorotoluene	5	ug/L	ND	EPA 8260
4-Chlorotoluene	5	ug/L	ND	EPA 8260
1,3,5-Trimethylbenzene	5	ug/L	358	EPA 8260
tert-Butylbenzene	5	ug/L	ND	EPA 8260
1,2,4-Trimethylbenzene	5	ug/L	1480	EPA 8260
sec-Butylbenzene	5	ug/L	ND	EPA 8260
1,3-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,4-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,2-Dichlorobenzene	5	ug/L	ND	EPA 8260
p-iso-Propyltoluene	5	ug/L	ND	EPA 8260
n-Butylbenzene	5	ug/L	ND	EPA 8260
1,2-Dibromo-3-chloropropane	5	ug/L	ND	EPA 8260
1,2,4-Trichlorobenzene	5	ug/L	ND	EPA 8260
Naphthalene	5	ug/L	198	EPA 8260
Hexachlorobutadiene	5	ug/L	ND	EPA 8260
1,2,3-Trichlorobenzene	5	ug/L	ND	EPA 8260
TPH GRO	100	ug/L	55640	EPA 8015B
TPH DRO	500	ug/L	ND	EPA 8015B
SURROGATE SPIKE				
1,2-Dichloroethane-d4		%	89	EPA 8260
Dibromofluoromethane		%	101	EPA 8260
TFT		%	99	EPA 8015B
Toluene-d8		%	95	EPA 8260
Bromofluorobenzene		%	97	EPA 8260

ADVANCED ENVIRONMENTAL CONCEPTS, INC.

Laboratory Services *5292 Enterprise Street Suite C, Eldersburg, MD 21784 Phone 410-795-5955 Fax 410-795-9459*

Certificate of Analysis

Sample Identification:	**MW-2**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**water**	**Client Identification:**	**PRAGNESH PATEL**
Sample Date:	**8/14/2008**	**Client Telephone:**	
Date Received:	**8/20/2008**	**Client Fax:**	
Extraction Date:	**8/25/2008**	**Analyst:**	**WA**
Analysis Date:	**8/25/2008**	**Lab File:**	**82508.D14**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
m&p-Xylene	5	ug/L	ND	EPA 8260
Bromoform	5	ug/L	ND	EPA 8260
Styrene	5	ug/L	ND	EPA 8260
o-Xylene	5	ug/L	ND	EPA 8260
1,1,2,2-Tetrachloroethane	5	ug/L	ND	EPA 8260
1,2,3-Trichloropropane	5	ug/L	ND	EPA 8260
Isopropylbenzene	5	ug/L	ND	EPA 8260
Bromobenzene	5	ug/L	ND	EPA 8260
n-Propylbenzene	5	ug/L	ND	EPA 8260
2-Chlorotoluene	5	ug/L	ND	EPA 8260
4-Chlorotoluene	5	ug/L	ND	EPA 8260
1,3,5-Trimethylbenzene	5	ug/L	ND	EPA 8260
tert-Butylbenzene	5	ug/L	ND	EPA 8260
1,2,4-Trimethylbenzene	5	ug/L	ND	EPA 8260
sec-Butylbenzene	5	ug/L	ND	EPA 8260
1,3-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,4-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,2-Dichlorobenzene	5	ug/L	ND	EPA 8260
p-iso-Propyltoluene	5	ug/L	ND	EPA 8260
n-Butylbenzene	5	ug/L	ND	EPA 8260
1,2-Dibromo-3-chloropropane	5	ug/L	ND	EPA 8260
1,2,4-Trichlorobenzene	5	ug/L	ND	EPA 8260
Naphthalene	5	ug/L	ND	EPA 8260
Hexachlorobutadiene	5	ug/L	ND	EPA 8260
1,2,3-Trichlorobenzene	5	ug/L	ND	EPA 8260
TPH GRO	100	ug/L	159	EPA 8015B
TPH DRO	500	ug/L	ND	EPA 8015B

SURROGATE SPIKE

1,2-Dichloroethane-d4	%	92	EPA 8260
Dibromofluoromethane	%	106	EPA 8260
TFT	%	102	EPA 8015B
Toluene-d8	%	97	EPA 8260
Bromofluorobenzene	%	96	EPA 8260

ADVANCED ENVIRONMENTAL CONCEPTS, INC.

Laboratory Services *5292 Enterprise Street Suite C, Eldersburg, MD 21784 Phone 410-795-5955 Fax 410-795-9459*

Certificate of Analysis

Sample Identification:	**MW-3**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**water**	**Client Identification:**	**PRAGNESH PATEL**
Sample Date:	**8/14/2008**	**Client Telephone:**	
Date Received:	**8/20/2008**	**Client Fax:**	
Extraction Date:	**8/25/2008**	**Analyst:**	**WA**
Analysis Date:	**8/25/2008**	**Lab File:**	**82508.D17**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
m&p-Xylene	5	ug/L	1840	EPA 8260
Bromoform	5	ug/L	ND	EPA 8260
Styrene	5	ug/L	ND	EPA 8260
o-Xylene	5	ug/L	720	EPA 8260
1,1,2,2-Tetrachloroethane	5	ug/L	ND	EPA 8260
1,2,3-Trichloropropane	5	ug/L	ND	EPA 8260
Isopropylbenzene	5	ug/L	ND	EPA 8260
Bromobenzene	5	ug/L	ND	EPA 8260
n-Propylbenzene	5	ug/L	ND	EPA 8260
2-Chlorotoluene	5	ug/L	ND	EPA 8260
4-Chlorotoluene	5	ug/L	ND	EPA 8260
1,3,5-Trimethylbenzene	5	ug/L	104	EPA 8260
tert-Butylbenzene	5	ug/L	ND	EPA 8260
1,2,4-Trimethylbenzene	5	ug/L	440	EPA 8260
sec-Butylbenzene	5	ug/L	ND	EPA 8260
1,3-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,4-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,2-Dichlorobenzene	5	ug/L	ND	EPA 8260
p-iso-Propyltoluene	5	ug/L	ND	EPA 8260
n-Butylbenzene	5	ug/L	ND	EPA 8260
1,2-Dibromo-3-chloropropane	5	ug/L	ND	EPA 8260
1,2,4-Trichlorobenzene	5	ug/L	ND	EPA 8260
Naphthalene	5	ug/L	78.4	EPA 8260
Hexachlorobutadiene	5	ug/L	ND	EPA 8260
1,2,3-Trichlorobenzene	5	ug/L	ND	EPA 8260
TPH GRO	100	ug/L	9840	EPA 8015B
TPH DRO	500	ug/L	ND	EPA 8015B
SURROGATE SPIKE				
1,2-Dichloroethane-d4		%	91	EPA 8260
Dibromofluoromethane		%	105	EPA 8260
TFT		%	104	EPA 8015B
Toluene-d8		%	98	EPA 8260
Bromofluorobenzene		%	96	EPA 8260

ADVANCED ENVIRONMENTAL CONCEPTS, INC.

Laboratory Services *5292 Enterprise Street Suite C, Eldersburg, MD 21784 Phone 410-795-5955 Fax 410-795-9459*

Certificate of Analysis

Sample Identification:	**MW-5**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**water**	**Client Identification:**	**PRAGNESH PATEL**
Sample Date:	**8/14/2008**	**Client Telephone:**	
Date Received:	**8/20/2008**	**Client Fax:**	
Extraction Date:	**8/25/2008**	**Analyst:**	**WA**
Analysis Date:	**8/25/2008**	**Lab File:**	**82508.D18**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
m&p-Xylene	5	ug/L	9680	EPA 8260
Bromoform	5	ug/L	ND	EPA 8260
Styrene	5	ug/L	ND	EPA 8260
o-Xylene	5	ug/L	4160	EPA 8260
1,1,2,2-Tetrachloroethane	5	ug/L	ND	EPA 8260
1,2,3-Trichloropropane	5	ug/L	ND	EPA 8260
Isopropylbenzene	5	ug/L	104	EPA 8260
Bromobenzene	5	ug/L	ND	EPA 8260
n-Propylbenzene	5	ug/L	212	EPA 8260
2-Chlorotoluene	5	ug/L	ND	EPA 8260
4-Chlorotoluene	5	ug/L	ND	EPA 8260
1,3,5-Trimethylbenzene	5	ug/L	528	EPA 8260
tert-Butylbenzene	5	ug/L	ND	EPA 8260
1,2,4-Trimethylbenzene	5	ug/L	2080	EPA 8260
sec-Butylbenzene	5	ug/L	ND	EPA 8260
1,3-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,4-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,2-Dichlorobenzene	5	ug/L	ND	EPA 8260
p-iso-Propyltoluene	5	ug/L	ND	EPA 8260
n-Butylbenzene	5	ug/L	ND	EPA 8260
1,2-Dibromo-3-chloropropane	5	ug/L	ND	EPA 8260
1,2,4-Trichlorobenzene	5	ug/L	ND	EPA 8260
Naphthalene	5	ug/L	304	EPA 8260
Hexachlorobutadiene	5	ug/L	ND	EPA 8260
1,2,3-Trichlorobenzene	5	ug/L	ND	EPA 8260
TPH GRO	100	ug/L	84200	EPA 8015B
TPH DRO	500	ug/L	ND	EPA 8015B
SURROGATE SPIKE				
1,2-Dichloroethane-d4		%	89	EPA 8260
Dibromofluoromethane		%	105	EPA 8260
TFT		%	101	EPA 8015B
Toluene-d8		%	96	EPA 8260
Bromofluorobenzene		%	97	EPA 8260

ADVANCED ENVIRONMENTAL CONCEPTS, INC.

Laboratory Services *5292 Enterprise Street Suite C, Eldersburg, MD 21784 Phone 410-795-5955 Fax 410-795-9459*

Certificate of Analysis

Sample Identification:	**MW-6**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**water**	**Client Identification:**	**PRAGNESH PATEL**
Sample Date:	**8/14/2008**	**Client Telephone:**	
Date Received:	**8/20/2008**	**Client Fax:**	
Extraction Date:	**8/25/2008**	**Analyst:**	**WA**
Analysis Date:	**8/25/2008**	**Lab File:**	**82508.D15**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
m&p-Xylene	5	ug/L	16.9	EPA 8260
Bromoform	5	ug/L	ND	EPA 8260
Styrene	5	ug/L	ND	EPA 8260
o-Xylene	5	ug/L	5.24	EPA 8260
1,1,2,2-Tetrachloroethane	5	ug/L	ND	EPA 8260
1,2,3-Trichloropropane	5	ug/L	ND	EPA 8260
Isopropylbenzene	5	ug/L	ND	EPA 8260
Bromobenzene	5	ug/L	ND	EPA 8260
n-Propylbenzene	5	ug/L	ND	EPA 8260
2-Chlorotoluene	5	ug/L	ND	EPA 8260
4-Chlorotoluene	5	ug/L	ND	EPA 8260
1,3,5-Trimethylbenzene	5	ug/L	ND	EPA 8260
tert-Butylbenzene	5	ug/L	ND	EPA 8260
1,2,4-Trimethylbenzene	5	ug/L	ND	EPA 8260
sec-Butylbenzene	5	ug/L	ND	EPA 8260
1,3-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,4-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,2-Dichlorobenzene	5	ug/L	ND	EPA 8260
p-iso-Propyltoluene	5	ug/L	ND	EPA 8260
n-Butylbenzene	5	ug/L	ND	EPA 8260
1,2-Dibromo-3-chloropropane	5	ug/L	ND	EPA 8260
1,2,4-Trichlorobenzene	5	ug/L	ND	EPA 8260
Naphthalene	5	ug/L	ND	EPA 8260
Hexachlorobutadiene	5	ug/L	ND	EPA 8260
1,2,3-Trichlorobenzene	5	ug/L	ND	EPA 8260
TPH GRO	100	ug/L	121	EPA 8015B
TPH DRO	500	ug/L	ND	EPA 8015B

SURROGATE SPIKE

1,2-Dichloroethane-d4	%	93	EPA 8260
Dibromofluoromethane	%	110	EPA 8260
TFT	%	102	EPA 8015B
Toluene-d8	%	96	EPA 8260
Bromofluorobenzene	%	99	EPA 8260

ADVANCED ENVIRONMENTAL CONCEPTS, INC.

Laboratory Services *5292 Enterprise Street Suite C, Eldersburg, MD 21784 Phone 410-795-5955 Fax 410-795-9459*

Certificate of Analysis

Sample Identification:	**MW-7**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**water**	**Client Identification:**	**PRAGNESH PATEL**
Sample Date:	**8/14/2008**	**Client Telephone:**	
Date Received:	**8/20/2008**	**Client Fax:**	
Extraction Date:	**8/25/2008**	**Analyst:**	**WA**
Analysis Date:	**8/25/2008**	**Lab File:**	**82508.D19**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
m&p-Xylene	5	ug/L	6400	EPA 8260
Bromoform	5	ug/L	ND	EPA 8260
Styrene	5	ug/L	ND	EPA 8260
o-Xylene	5	ug/L	2880	EPA 8260
1,1,2,2-Tetrachloroethane	5	ug/L	ND	EPA 8260
1,2,3-Trichloropropane	5	ug/L	ND	EPA 8260
Isopropylbenzene	5	ug/L	ND	EPA 8260
Bromobenzene	5	ug/L	ND	EPA 8260
n-Propylbenzene	5	ug/L	ND	EPA 8260
2-Chlorotoluene	5	ug/L	ND	EPA 8260
4-Chlorotoluene	5	ug/L	ND	EPA 8260
1,3,5-Trimethylbenzene	5	ug/L	304	EPA 8260
tert-Butylbenzene	5	ug/L	ND	EPA 8260
1,2,4-Trimethylbenzene	5	ug/L	1170	EPA 8260
sec-Butylbenzene	5	ug/L	ND	EPA 8260
1,3-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,4-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,2-Dichlorobenzene	5	ug/L	ND	EPA 8260
p-iso-Propyltoluene	5	ug/L	ND	EPA 8260
n-Butylbenzene	5	ug/L	ND	EPA 8260
1,2-Dibromo-3-chloropropane	5	ug/L	ND	EPA 8260
1,2,4-Trichlorobenzene	5	ug/L	ND	EPA 8260
Naphthalene	5	ug/L	157	EPA 8260
Hexachlorobutadiene	5	ug/L	ND	EPA 8260
1,2,3-Trichlorobenzene	5	ug/L	ND	EPA 8260
TPH GRO	100	ug/L	59100	EPA 8015B
TPH DRO	500	ug/L	ND	EPA 8015B
SURROGATE SPIKE				
1,2-Dichloroethane-d4		%	91	EPA 8260
Dibromofluoromethane		%	107	EPA 8260
TFT		%	102	EPA 8015B
Toluene-d8		%	97	EPA 8260
Bromofluorobenzene		%	96	EPA 8260

CALIBER ANALYTICAL SERVICES

Certificate of Analysis

Advanced Environmental Concepts
5292 Enterprise St.
Eldersburg, MD 21784

Date Received: 08/20/08 12:22
Date Sampled: 08/14/08 0:00
Date Issued: 08/27/08 11:05

Project: Calvert Citgo
Site Location: North East, MD

SDG Number: 08082003

	Result	Unit	LLQ	MCL	Method	Prepared	Analyzed	Init.
Field Sample ID: DSW Calvert Citgo			**Matrix: Water**				**Lab ID: 08082003-01**	
Volatile Organic Compounds								
Benzene	ND	ug/L	0.5	5	EPA 524.2	08/25/08	08/25/08 18:34	JKL
Bromobenzene	ND	ug/L	0.5		EPA 524.2	08/25/08	08/25/08 18:34	JKL
Bromochloromethane	ND	ug/L	0.5		EPA 524.2	08/25/08	08/25/08 18:34	JKL
Bromodichloromethane	ND	ug/L	0.5		EPA 524.2	08/25/08	08/25/08 18:34	JKL
Bromoform	ND	ug/L	0.5		EPA 524.2	08/25/08	08/25/08 18:34	JKL
Bromomethane	ND	ug/L	0.5		EPA 524.2	08/25/08	08/25/08 18:34	JKL
n-Butylbenzene	ND	ug/L	0.5		EPA 524.2	08/25/08	08/25/08 18:34	JKL
sec-Butylbenzene	ND	ug/L	0.5		EPA 524.2	08/25/08	08/25/08 18:34	JKL
tert-Butylbenzene	ND	ug/L	0.5		EPA 524.2	08/25/08	08/25/08 18:34	JKL
Carbon tetrachloride	ND	ug/L	0.5	5	EPA 524.2	08/25/08	08/25/08 18:34	JKL
Chlorobenzene	ND	ug/L	0.5	100	EPA 524.2	08/25/08	08/25/08 18:34	JKL
Chloroethane	ND	ug/L	0.5		EPA 524.2	08/25/08	08/25/08 18:34	JKL
Chloroform	ND	ug/L	0.5		EPA 524.2	08/25/08	08/25/08 18:34	JKL
Chloromethane	ND	ug/L	0.5		EPA 524.2	08/25/08	08/25/08 18:34	JKL
2-Chlorotoluene	ND	ug/L	0.5		EPA 524.2	08/25/08	08/25/08 18:34	JKL
4-Chlorotoluene	ND	ug/L	0.5		EPA 524.2	08/25/08	08/25/08 18:34	JKL
Dibromochloromethane	ND	ug/L	0.5		EPA 524.2	08/25/08	08/25/08 18:34	JKL
1,2-Dibromo-3-chloropropane	ND	ug/L	0.5		EPA 524.2	08/25/08	08/25/08 18:34	JKL
1,2-Dibromoethane	ND	ug/L	0.5		EPA 524.2	08/25/08	08/25/08 18:34	JKL
Dibromomethane	ND	ug/L	0.5		EPA 524.2	08/25/08	08/25/08 18:34	JKL
1,2-Dichlorobenzene	ND	ug/L	0.5	600	EPA 524.2	08/25/08	08/25/08 18:34	JKL
1,3-Dichlorobenzene	ND	ug/L	0.5		EPA 524.2	08/25/08	08/25/08 18:34	JKL
1,4-Dichlorobenzene	ND	ug/L	0.5	75	EPA 524.2	08/25/08	08/25/08 18:34	JKL
Dichlorodifluoromethane	ND	ug/L	0.5		EPA 524.2	08/25/08	08/25/08 18:34	JKL
1,1-Dichloroethane	ND	ug/L	0.5		EPA 524.2	08/25/08	08/25/08 18:34	JKL
1,2-Dichloroethane	**5.2**	ug/L	0.5	5	EPA 524.2	08/25/08	08/25/08 18:34	JKL
1,1-Dichloroethene	ND	ug/L	0.5	7	EPA 524.2	08/25/08	08/25/08 18:34	JKL
cis-1,2-Dichloroethene	ND	ug/L	0.5	70	EPA 524.2	08/25/08	08/25/08 18:34	JKL
trans-1,2-Dichloroethene	ND	ug/L	0.5	100	EPA 524.2	08/25/08	08/25/08 18:34	JKL
1,2-Dichloropropane	ND	ug/L	0.5	5	EPA 524.2	08/25/08	08/25/08 18:34	JKL
1,3-Dichloropropane	ND	ug/L	0.5		EPA 524.2	08/25/08	08/25/08 18:34	JKL
2,2-Dichloropropane	ND	ug/L	0.5		EPA 524.2	08/25/08	08/25/08 18:34	JKL
1,1-Dichloropropene	ND	ug/L	0.5		EPA 524.2	08/25/08	08/25/08 18:34	JKL
cis-1,3-Dichloropropene	ND	ug/L	0.5		EPA 524.2	08/25/08	08/25/08 18:34	JKL
trans-1,3-Dichloropropene	ND	ug/L	0.5		EPA 524.2	08/25/08	08/25/08 18:34	JKL
Ethylbenzene	ND	ug/L	0.5	700	EPA 524.2	08/25/08	08/25/08 18:34	JKL
Isopropylbenzene	ND	ug/L	0.5		EPA 524.2	08/25/08	08/25/08 18:34	JKL
p-Isopropyltoluene	ND	ug/L	0.5		EPA 524.2	08/25/08	08/25/08 18:34	JKL
Methylene chloride	ND	ug/L	0.5	5	EPA 524.2	08/25/08	08/25/08 18:34	JKL

8851 Orchard Tree Lane Towson, Maryland 21286
tel: 410.825.1151 fax: 410.825.2126 www.caslabs.net

Advanced Environmental Concepts, Inc.
5292 Enterprise St., Suite C
Eldersburg, MD 21784

Fax: 410-795-9459
Phone: 410-795-5955
www.aecenviro.com

Chain of Custody Record

08082003

Customer	Email Address:	preservative	HCl						
Contact:	Project Name: Calvert Cliffs	# of Containers	Analysis						
Phone:	Project Number:		8270-2						
Fax:	Location: North East, MD								

AEC ID #	pH	Date	Time	Water	Soil	Sample ID								
		8-14-08		X		DSW	2	X						

Relinquished by:	Date	Time:	Received by:	Date:	Time:
Stephanie Bramble	8-14-08	1900		8/20/08	48
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

Special Instructions:	Custody Seal	Receipt Temperature	Turn Around Time

AEC
Advanced Environmental Concepts, Inc.

5292 Enterprise St Suite C Eldersburg, MD 21784 (410) 795-5955

Title:

Report of Monitoring Well Installation, Redevelopment, Gauging & Sampling

Project Site:

Calvert Country Store
2815 North East Rd
North East, MD 21901

MDE CASE# 1992-2616-CE

Prepared for:

Pragnesh Bhanustrasad L. Patel
2815 North East Rd
North East, MD 21901

March 24, 2008

Table of Contents

	03/12/08	16.24			398.82
MW-7	02/07/08	NA	29.25	416.34	NA
	03/12/08	15.59			400.75

Groundwater Flow Calculation
On March 12, 2008 depth to groundwater and "top of casing" elevation measurements were recorded from each MW located on site. The average elevation above mean seal level, 420 ft, was used as the "height of the instrument" in the top of casing elevation calculation. These measurements were then used to create groundwater elevation contours. Groundwater elevation contours depict groundwater flow to be in the easterly direction. A groundwater elevation contour map can be found in Attachment A.

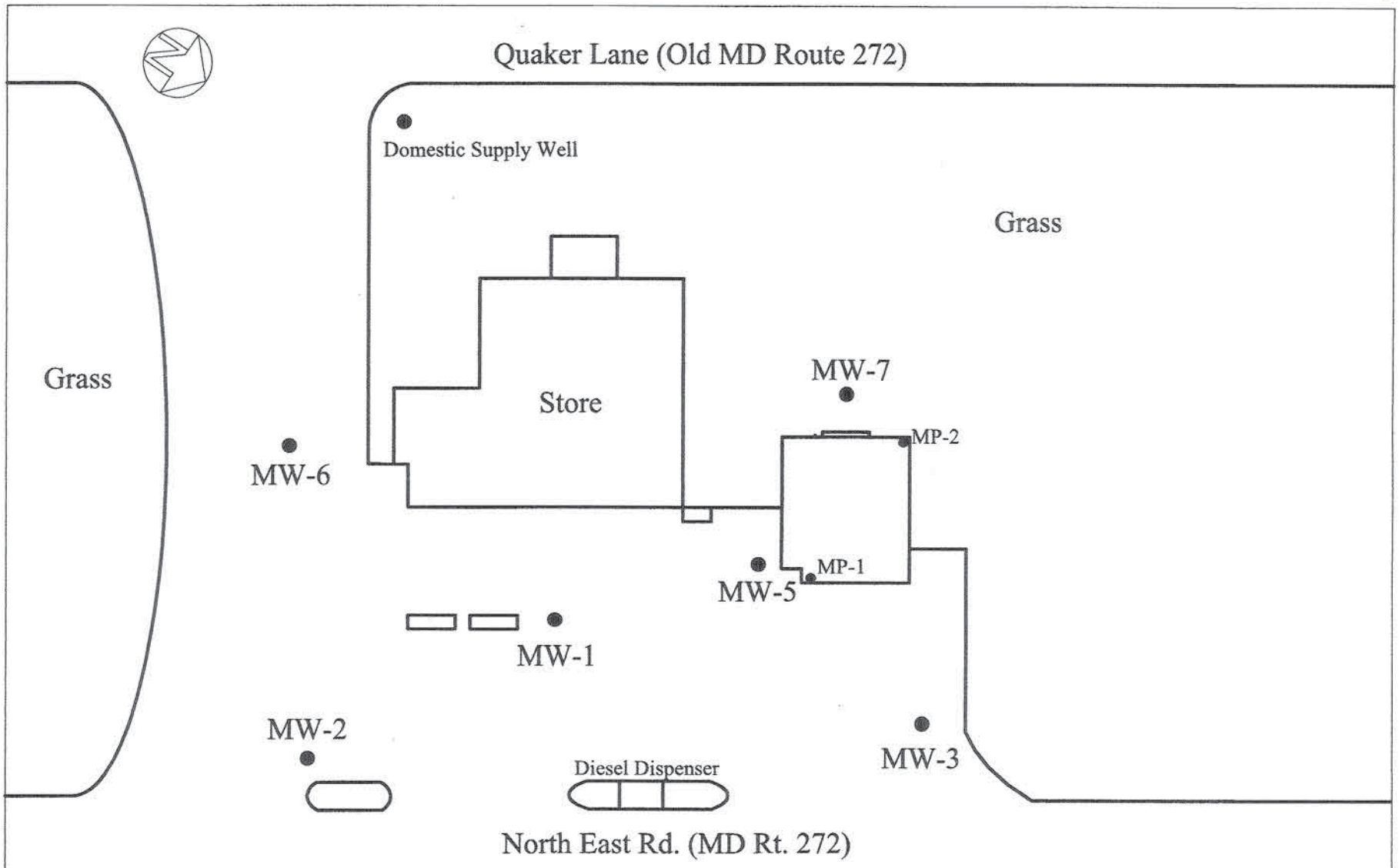
Monitoring Well Sampling Results
The groundwater samples collected from the site's MW's were analyzed for Volatile Organic Compounds (VOC's) by EPA Method 8260. Elevated levels of VOC and petroleum hydrocarbon contamination were observed in all of the groundwater samples collected with the exception of MW-2. Concentrations in excess of the MDE Groundwater Cleanup Standards were observed for the following compounds in at least one (1) of the groundwater samples collected during the 03/12/08 sampling event;

- Methyl-tertiary-Butyl-Ether (MtBE)
- 1,2-Dicholorethane (1,2-DCE)
- Benzene
- Toluene
- Tetrachloroethane (PCE)
- Ethyl benzene
- Xylenes (total)
- Isopropyl benzene
- Naphthalene

Quick Reference Analytical tables can be found in Attachment B. A full Report of Analysis and Chain of Custody can be found in Attachment C.

Domestic Supply Well Sampling Results
A domestic supply well sample was collected from the site's domestic during the 3/12/08 sampling event. The domestic supply well sample was sent to Caliber Analytical Services to be analyzed for VOCs by EPA Method 524.2. Elevated levels of VOC contaminants were not detected in the domestic supply well sample with the exception of Methyl-tertiary-Butyl-Ether (MtBE) at 9.1 micrograms per liter (ug/L), Chloromethane at .9 ug/L, 1,2-Dichloroethane at .6 ug/L and Diisopropyl ether (DIPE) at 1.4 ug/L. These concentrations do not exceed the EPA Maximum Contaminant Levels (MCLs) for drinking water or the MDE Groundwater Cleanup Standards. A full Report of Analysis and Chain of Custody can be found in Attachment C.

Limitations
The scope of work is limited to the activities and results contained in this report. Industry standard hydrogeologic investigative procedures and protocol were used in order to complete the scope of work. No other warranty expressed or implied is made.



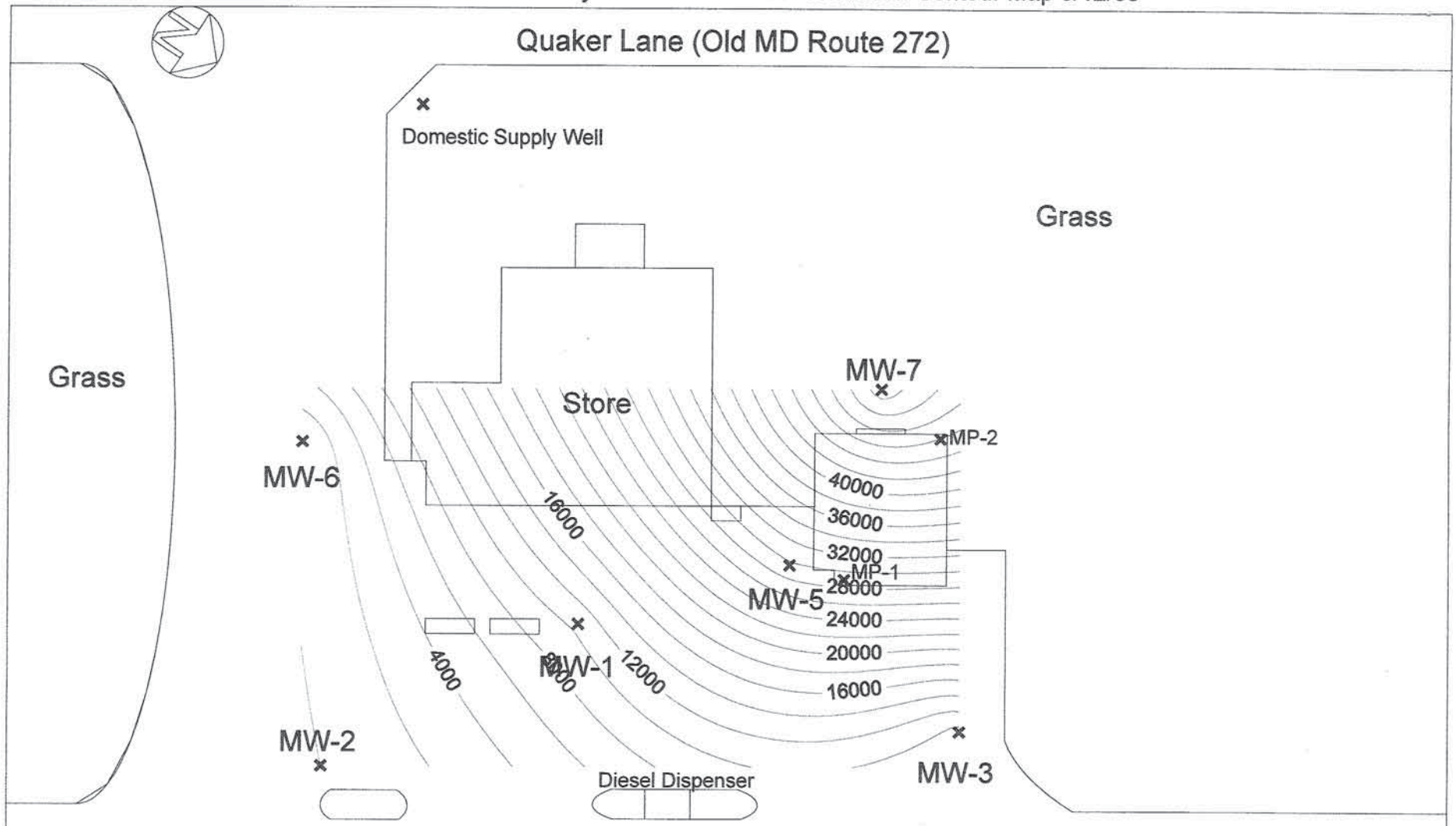
AEC
Advanced Environmental Concepts, Inc.

Site Drawing For:
Calvert Country Store
2815 North East Rd
North East, MD 21901

Date	3/13/08
Scale	1"=30ft
Drawing #	0546

30 0 15 30
Scale in Feet

Calvert Country Store BTEX Isoconcentration Contour Map 3/12/08



AEC
Advanced Environmental Concepts, Inc.

Site Drawing For:
Calvert Country Store
2815 North East Rd
North East, MD 21901

Date	3/13/08
Scale	1"=30ft
Drawing #	0546

30 0 15 30

Scale in Feet

Attachment B

Quick Reference Analytical Tables

Attachment C

Report of Analysis and Chain of Custody

ADVANCED ENVIRONMENTAL CONCEPTS, INC.

Laboratory Services 5292 Enterprise Street Suite C, Eldersburg, MD 21784 Phone 410-795-5955 Fax 410-795-9459

Certificate of Analysis

Sample Identification:	**MP-1**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**Water**	**Client Identification:**	**PATEL**
Sample Date:	**3/12/2008**	**Client Telephone:**	
Date Received:	**3/13/2008**	**Client Fax:**	
Extraction Date:	**3/13/2008**	**Analyst:**	**MM**
Analysis Date:	**3/13/2008**	**Lab File:**	**31308.D24**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
m&p-Xylene	5	ug/L	266	EPA 8260
Bromoform	5	ug/L	ND	EPA 8260
Styrene	5	ug/L	ND	EPA 8260
o-Xylene	5	ug/L	121	EPA 8260
1,1,2,2-Tetrachloroethane	5	ug/L	ND	EPA 8260
1,2,3-Trichloropropane	5	ug/L	ND	EPA 8260
Isopropylbenzene	5	ug/L	ND	EPA 8260
Bromobenzene	5	ug/L	ND	EPA 8260
n-Propylbenzene	5	ug/L	ND	EPA 8260
2-Chlorotoluene	5	ug/L	ND	EPA 8260
4-Chlorotoluene	5	ug/L	ND	EPA 8260
1,3,5-Trimethylbenzene	5	ug/L	5.34	EPA 8260
tert-Butylbenzene	5	ug/L	ND	EPA 8260
1,2,4-Trimethylbenzene	5	ug/L	11.6	EPA 8260
sec-Butylbenzene	5	ug/L	ND	EPA 8260
1,3-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,4-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,2-Dichlorobenzene	5	ug/L	ND	EPA 8260
p-iso-Propyltoluene	5	ug/L	ND	EPA 8260
n-Butylbenzene	5	ug/L	ND	EPA 8260
1,2-Dibromo-3-chloropropane	5	ug/L	ND	EPA 8260
1,2,4-Trichlorobenzene	5	ug/L	ND	EPA 8260
Naphthalene	5	ug/L	ND	EPA 8260
Hexachlorobutadiene	5	ug/L	ND	EPA 8260
1,2,3-Trichlorobenzene	5	ug/L	ND	EPA 8260

SURROGATE SPIKE

1,2-Dichloroethane-d4	%	103	EPA 8260
Dibromofluoromethane	%	101	EPA 8260
TFT	%	98	EPA 8015B
Toluene-d8	%	94	EPA 8260
Bromofluorobenzene	%	102	EPA 8260

ADVANCED ENVIRONMENTAL CONCEPTS, INC.

Laboratory Services 5292 Enterprise Street Suite C, Eldersburg, MD 21784 Phone 410-795-5955 Fax 410-795-9459

Certificate of Analysis

Sample Identification:	**MP-2**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**Water**	**Client Identification:**	**PATEL**
Sample Date:	**3/12/2008**	**Client Telephone:**	
Date Received:	**3/13/2008**	**Client Fax:**	
Extraction Date:	**3/13/2008**	**Analyst:**	**MM**
Analysis Date:	**3/13/2008**	**Lab File:**	**31308.D25**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
m&p-Xylene	5	ug/L	17.1	EPA 8260
Bromoform	5	ug/L	ND	EPA 8260
Styrene	5	ug/L	ND	EPA 8260
o-Xylene	5	ug/L	10.1	EPA 8260
1,1,2,2-Tetrachloroethane	5	ug/L	ND	EPA 8260
1,2,3-Trichloropropane	5	ug/L	ND	EPA 8260
Isopropylbenzene	5	ug/L	ND	EPA 8260
Bromobenzene	5	ug/L	ND	EPA 8260
n-Propylbenzene	5	ug/L	ND	EPA 8260
2-Chlorotoluene	5	ug/L	ND	EPA 8260
4-Chlorotoluene	5	ug/L	ND	EPA 8260
1,3,5-Trimethylbenzene	5	ug/L	ND	EPA 8260
tert-Butylbenzene	5	ug/L	ND	EPA 8260
1,2,4-Trimethylbenzene	5	ug/L	ND	EPA 8260
sec-Butylbenzene	5	ug/L	ND	EPA 8260
1,3-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,4-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,2-Dichlorobenzene	5	ug/L	ND	EPA 8260
p-iso-Propyltoluene	5	ug/L	ND	EPA 8260
n-Butylbenzene	5	ug/L	ND	EPA 8260
1,2-Dibromo-3-chloropropane	5	ug/L	ND	EPA 8260
1,2,4-Trichlorobenzene	5	ug/L	ND	EPA 8260
Naphthalene	5	ug/L	ND	EPA 8260
Hexachlorobutadiene	5	ug/L	ND	EPA 8260
1,2,3-Trichlorobenzene	5	ug/L	ND	EPA 8260

SURROGATE SPIKE

1,2-Dichloroethane-d4	%	108	EPA 8260
Dibromofluoromethane	%	106	EPA 8260
TFT	%	98	EPA 8015B
Toluene-d8	%	94	EPA 8260
Bromofluorobenzene	%	102	EPA 8260

ADVANCED ENVIRONMENTAL CONCEPTS, INC.

Laboratory Services 5292 Enterprise Street Suite C, Eldersburg, MD 21784 Phone 410-795-5955 Fax 410-795-9459

Certificate of Analysis

Sample Identification:	**MW-1**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**Water**	**Client Identification:**	**PATEL**
Sample Date:	**3/12/2008**	**Client Telephone:**	
Date Received:	**3/13/2008**	**Client Fax:**	
Extraction Date:	**3/13/2008**	**Analyst:**	**MM**
Analysis Date:	**3/13/2008**	**Lab File:**	**31308.D28**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
m&p-Xylene	5	ug/L	1960	EPA 8260
Bromoform	5	ug/L	ND	EPA 8260
Styrene	5	ug/L	ND	EPA 8260
o-Xylene	5	ug/L	360	EPA 8260
1,1,2,2-Tetrachloroethane	5	ug/L	ND	EPA 8260
1,2,3-Trichloropropane	5	ug/L	ND	EPA 8260
Isopropylbenzene	5	ug/L	41.7	EPA 8260
Bromobenzene	5	ug/L	ND	EPA 8260
n-Propylbenzene	5	ug/L	62.1	EPA 8260
2-Chlorotoluene	5	ug/L	ND	EPA 8260
4-Chlorotoluene	5	ug/L	ND	EPA 8260
1,3,5-Trimethylbenzene	5	ug/L	135	EPA 8260
tert-Butylbenzene	5	ug/L	ND	EPA 8260
1,2,4-Trimethylbenzene	5	ug/L	600	EPA 8260
sec-Butylbenzene	5	ug/L	ND	EPA 8260
1,3-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,4-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,2-Dichlorobenzene	5	ug/L	ND	EPA 8260
p-iso-Propyltoluene	5	ug/L	ND	EPA 8260
n-Butylbenzene	5	ug/L	12.2	EPA 8260
1,2-Dibromo-3-chloropropane	5	ug/L	ND	EPA 8260
1,2,4-Trichlorobenzene	5	ug/L	ND	EPA 8260
Naphthalene	5	ug/L	348	EPA 8260
Hexachlorobutadiene	5	ug/L	ND	EPA 8260
1,2,3-Trichlorobenzene	5	ug/L	ND	EPA 8260

SURROGATE SPIKE

1,2-Dichloroethane-d4	%	102	EPA 8260
Dibromofluoromethane	%	97	EPA 8260
TFT	%	93	EPA 8015B
Toluene-d8	%	92	EPA 8260
Bromofluorobenzene	%	105	EPA 8260

ADVANCED ENVIRONMENTAL CONCEPTS, INC.

Laboratory Services 5292 Enterprise Street Suite C, Eldersburg, MD 21784 Phone 410-795-5955 Fax 410-795-9459

Certificate of Analysis

Sample Identification:	**MW-2**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**Water**	**Client Identification:**	**PATEL**
Sample Date:	**3/12/2008**	**Client Telephone:**	
Date Received:	**3/13/2008**	**Client Fax:**	
Extraction Date:	**3/13/2008**	**Analyst:**	**MM**
Analysis Date:	**3/13/2008**	**Lab File:**	**31308.D29**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
m&p-Xylene	5	ug/L	ND	EPA 8260
Bromoform	5	ug/L	ND	EPA 8260
Styrene	5	ug/L	ND	EPA 8260
o-Xylene	5	ug/L	ND	EPA 8260
1,1,2,2-Tetrachloroethane	5	ug/L	ND	EPA 8260
1,2,3-Trichloropropane	5	ug/L	ND	EPA 8260
Isopropylbenzene	5	ug/L	ND	EPA 8260
Bromobenzene	5	ug/L	ND	EPA 8260
n-Propylbenzene	5	ug/L	ND	EPA 8260
2-Chlorotoluene	5	ug/L	ND	EPA 8260
4-Chlorotoluene	5	ug/L	ND	EPA 8260
1,3,5-Trimethylbenzene	5	ug/L	ND	EPA 8260
tert-Butylbenzene	5	ug/L	ND	EPA 8260
1,2,4-Trimethylbenzene	5	ug/L	ND	EPA 8260
sec-Butylbenzene	5	ug/L	ND	EPA 8260
1,3-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,4-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,2-Dichlorobenzene	5	ug/L	ND	EPA 8260
p-iso-Propyltoluene	5	ug/L	ND	EPA 8260
n-Butylbenzene	5	ug/L	ND	EPA 8260
1,2-Dibromo-3-chloropropane	5	ug/L	ND	EPA 8260
1,2,4-Trichlorobenzene	5	ug/L	ND	EPA 8260
Naphthalene	5	ug/L	ND	EPA 8260
Hexachlorobutadiene	5	ug/L	ND	EPA 8260
1,2,3-Trichlorobenzene	5	ug/L	ND	EPA 8260

SURROGATE SPIKE

1,2-Dichloroethane-d4	%	103	EPA 8260
Dibromofluoromethane	%	105	EPA 8260
TFT	%	97	EPA 8015B
Toluene-d8	%	96	EPA 8260
Bromofluorobenzene	%	99	EPA 8260

ADVANCED ENVIRONMENTAL CONCEPTS, INC.

Laboratory Services 5292 Enterprise Street Suite C, Eldersburg, MD 21784 Phone 410-795-5955 Fax 410-795-9459

Certificate of Analysis

Sample Identification:	**MW-3**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**Water**	**Client Identification:**	**PATEL**
Sample Date:	**3/12/2008**	**Client Telephone:**	
Date Received:	**3/13/2008**	**Client Fax:**	
Extraction Date:	**3/13/2008**	**Analyst:**	**MM**
Analysis Date:	**3/13/2008**	**Lab File:**	**31308.D30**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
m&p-Xylene	5	ug/L	3000	EPA 8260
Bromoform	5	ug/L	ND	EPA 8260
Styrene	5	ug/L	7.82	EPA 8260
o-Xylene	5	ug/L	1320	EPA 8260
1,1,2,2-Tetrachloroethane	5	ug/L	ND	EPA 8260
1,2,3-Trichloropropane	5	ug/L	ND	EPA 8260
Isopropylbenzene	5	ug/L	44.3	EPA 8260
Bromobenzene	5	ug/L	ND	EPA 8260
n-Propylbenzene	5	ug/L	82.9	EPA 8260
2-Chlorotoluene	5	ug/L	ND	EPA 8260
4-Chlorotoluene	5	ug/L	ND	EPA 8260
1,3,5-Trimethylbenzene	5	ug/L	205	EPA 8260
tert-Butylbenzene	5	ug/L	ND	EPA 8260
1,2,4-Trimethylbenzene	5	ug/L	840	EPA 8260
sec-Butylbenzene	5	ug/L	ND	EPA 8260
1,3-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,4-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,2-Dichlorobenzene	5	ug/L	ND	EPA 8260
p-iso-Propyltoluene	5	ug/L	ND	EPA 8260
n-Butylbenzene	5	ug/L	15.6	EPA 8260
1,2-Dibromo-3-chloropropane	5	ug/L	ND	EPA 8260
1,2,4-Trichlorobenzene	5	ug/L	ND	EPA 8260
Naphthalene	5	ug/L	520	EPA 8260
Hexachlorobutadiene	5	ug/L	ND	EPA 8260
1,2,3-Trichlorobenzene	5	ug/L	ND	EPA 8260

SURROGATE SPIKE

1,2-Dichloroethane-d4	%	99	EPA 8260
Dibromofluoromethane	%	101	EPA 8260
TFT	%	97	EPA 8015B
Toluene-d8	%	95	EPA 8260
Bromofluorobenzene	%	104	EPA 8260

ADVANCED ENVIRONMENTAL CONCEPTS, INC.

Laboratory Services 5292 Enterprise Street Suite C, Eldersburg, MD 21784 Phone 410-795-5955 Fax 410-795-9459

Certificate of Analysis

Sample Identification:	**MW-5**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**Water**	**Client Identification:**	**PATEL**
Sample Date:	**3/12/2008**	**Client Telephone:**	
Date Received:	**3/13/2008**	**Client Fax:**	
Extraction Date:	**3/13/2008**	**Analyst:**	**MM**
Analysis Date:	**3/13/2008**	**Lab File:**	**31308.D31**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
m&p-Xylene	5	ug/L	7200	EPA 8260
Bromoform	5	ug/L	ND	EPA 8260
Styrene	5	ug/L	17.7	EPA 8260
o-Xylene	5	ug/L	3040	EPA 8260
1,1,2,2-Tetrachloroethane	5	ug/L	ND	EPA 8260
1,2,3-Trichloropropane	5	ug/L	ND	EPA 8260
Isopropylbenzene	5	ug/L	151	EPA 8260
Bromobenzene	5	ug/L	ND	EPA 8260
n-Propylbenzene	5	ug/L	242	EPA 8260
2-Chlorotoluene	5	ug/L	ND	EPA 8260
4-Chlorotoluene	5	ug/L	ND	EPA 8260
1,3,5-Trimethylbenzene	5	ug/L	500	EPA 8260
tert-Butylbenzene	5	ug/L	ND	EPA 8260
1,2,4-Trimethylbenzene	5	ug/L	1960	EPA 8260
sec-Butylbenzene	5	ug/L	ND	EPA 8260
1,3-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,4-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,2-Dichlorobenzene	5	ug/L	ND	EPA 8260
p-iso-Propyltoluene	5	ug/L	5.85	EPA 8260
n-Butylbenzene	5	ug/L	43.1	EPA 8260
1,2-Dibromo-3-chloropropane	5	ug/L	ND	EPA 8260
1,2,4-Trichlorobenzene	5	ug/L	ND	EPA 8260
Naphthalene	5	ug/L	840	EPA 8260
Hexachlorobutadiene	5	ug/L	ND	EPA 8260
1,2,3-Trichlorobenzene	5	ug/L	ND	EPA 8260

SURROGATE SPIKE

1,2-Dichloroethane-d4	%	95	EPA 8260
Dibromofluoromethane	%	97	EPA 8260
TFT	%	102	EPA 8015B
Toluene-d8	%	97	EPA 8260
Bromofluorobenzene	%	107	EPA 8260

ADVANCED ENVIRONMENTAL CONCEPTS, INC.

Laboratory Services 5292 Enterprise Street Suite C, Eldersburg, MD 21784 Phone 410-795-5955 Fax 410-795-9459

Certificate of Analysis

Sample Identification:	**MW-6**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**Water**	**Client Identification:**	**PATEL**
Sample Date:	**3/12/2008**	**Client Telephone:**	
Date Received:	**3/13/2008**	**Client Fax:**	
Extraction Date:	**3/13/2008**	**Analyst:**	**MM**
Analysis Date:	**3/13/2008**	**Lab File:**	**31308.D32**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
m&p-Xylene	5	ug/L	ND	EPA 8260
Bromoform	5	ug/L	ND	EPA 8260
Styrene	5	ug/L	ND	EPA 8260
o-Xylene	5	ug/L	ND	EPA 8260
1,1,2,2-Tetrachloroethane	5	ug/L	ND	EPA 8260
1,2,3-Trichloropropane	5	ug/L	ND	EPA 8260
Isopropylbenzene	5	ug/L	ND	EPA 8260
Bromobenzene	5	ug/L	ND	EPA 8260
n-Propylbenzene	5	ug/L	ND	EPA 8260
2-Chlorotoluene	5	ug/L	ND	EPA 8260
4-Chlorotoluene	5	ug/L	ND	EPA 8260
1,3,5-Trimethylbenzene	5	ug/L	ND	EPA 8260
tert-Butylbenzene	5	ug/L	ND	EPA 8260
1,2,4-Trimethylbenzene	5	ug/L	ND	EPA 8260
sec-Butylbenzene	5	ug/L	ND	EPA 8260
1,3-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,4-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,2-Dichlorobenzene	5	ug/L	ND	EPA 8260
p-iso-Propyltoluene	5	ug/L	ND	EPA 8260
n-Butylbenzene	5	ug/L	ND	EPA 8260
1,2-Dibromo-3-chloropropane	5	ug/L	ND	EPA 8260
1,2,4-Trichlorobenzene	5	ug/L	ND	EPA 8260
Naphthalene	5	ug/L	5.72	EPA 8260
Hexachlorobutadiene	5	ug/L	ND	EPA 8260
1,2,3-Trichlorobenzene	5	ug/L	ND	EPA 8260

SURROGATE SPIKE

1,2-Dichloroethane-d4	%	93	EPA 8260
Dibromofluoromethane	%	95	EPA 8260
TFT	%	99	EPA 8015B
Toluene-d8	%	97	EPA 8260
Bromofluorobenzene	%	102	EPA 8260

ADVANCED ENVIRONMENTAL CONCEPTS, INC.

Laboratory Services 5292 Enterprise Street Suite C, Eldersburg, MD 21784 Phone 410-795-5955 Fax 410-795-9459

Certificate of Analysis

Sample Identification:	**MW-7**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**Water**	**Client Identification:**	**PATEL**
Sample Date:	**3/12/2008**	**Client Telephone:**	
Date Received:	**3/13/2008**	**Client Fax:**	
Extraction Date:	**3/13/2008**	**Analyst:**	**MM**
Analysis Date:	**3/13/2008**	**Lab File:**	**31308.D33**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
m&p-Xylene	5	ug/L	8800	EPA 8260
Bromoform	5	ug/L	ND	EPA 8260
Styrene	5	ug/L	27.2	EPA 8260
o-Xylene	5	ug/L	4160	EPA 8260
1,1,2,2-Tetrachloroethane	5	ug/L	ND	EPA 8260
1,2,3-Trichloropropane	5	ug/L	ND	EPA 8260
Isopropylbenzene	5	ug/L	112	EPA 8260
Bromobenzene	5	ug/L	ND	EPA 8260
n-Propylbenzene	5	ug/L	225	EPA 8260
2-Chlorotoluene	5	ug/L	ND	EPA 8260
4-Chlorotoluene	5	ug/L	ND	EPA 8260
1,3,5-Trimethylbenzene	5	ug/L	440	EPA 8260
tert-Butylbenzene	5	ug/L	ND	EPA 8260
1,2,4-Trimethylbenzene	5	ug/L	1680	EPA 8260
sec-Butylbenzene	5	ug/L	ND	EPA 8260
1,3-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,4-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,2-Dichlorobenzene	5	ug/L	ND	EPA 8260
p-iso-Propyltoluene	5	ug/L	5.67	EPA 8260
n-Butylbenzene	5	ug/L	35.1	EPA 8260
1,2-Dibromo-3-chloropropane	5	ug/L	ND	EPA 8260
1,2,4-Trichlorobenzene	5	ug/L	ND	EPA 8260
Naphthalene	5	ug/L	800	EPA 8260
Hexachlorobutadiene	5	ug/L	ND	EPA 8260
1,2,3-Trichlorobenzene	5	ug/L	ND	EPA 8260

SURROGATE SPIKE

1,2-Dichloroethane-d4	%	95	EPA 8260
Dibromofluoromethane	%	96	EPA 8260
TFT	%	103	EPA 8015B
Toluene-d8	%	85	EPA 8260
Bromofluorobenzene	%	111	EPA 8260

ADVANCED ENVIRONMENTAL CONCEPTS, INC.

Laboratory Services 5292 Enterprise Street Suite C, Eldersburg, MD 21784 Phone 410-795-5955 Fax 410-795-9459

Certificate of Analysis

Sample Identification:	**DOMESTIC SUPPLY**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**Water**	**Client Identification:**	**PATEL**
Sample Date:	**3/12/2008**	**Client Telephone:**	
Date Received:	**3/13/2008**	**Client Fax:**	
Extraction Date:	**na**	**Analyst:**	**MM**
Analysis Date:	**3/13/2008**	**Lab File:**	**31308.D23**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
m&p-Xylene	0.5	ug/L	ND	EPA 524.2
Bromoform	0.5	ug/L	ND	EPA 524.2
Styrene	0.5	ug/L	ND	EPA 524.2
o-Xylene	0.5	ug/L	ND	EPA 524.2
1,1,2,2-Tetrachloroethene	0.5	ug/L	ND	EPA 524.2
1,2,3-Trichloropropane	0.5	ug/L	ND	EPA 524.2
Isopropylbenzene	0.5	ug/L	ND	EPA 524.2
Bromobenzene	0.5	ug/L	ND	EPA 524.2
n-Propylbenzene	0.5	ug/L	ND	EPA 524.2
2-Chlorotoluene	0.5	ug/L	ND	EPA 524.2
4-Chlorotoluene	0.5	ug/L	ND	EPA 524.2
1,3,5-Trimethylbenzene	0.5	ug/L	ND	EPA 524.2
tert-Butylbenzene	0.5	ug/L	ND	EPA 524.2
1,2,4-Trimethylbenzene	0.5	ug/L	ND	EPA 524.2
sec-Butylbenzene	0.5	ug/L	ND	EPA 524.2
1,3-Dichlorobenzene	0.5	ug/L	ND	EPA 524.2
1,4-Dichlorobenzene	0.5	ug/L	ND	EPA 524.2
1,2-Dichlorobenzene	0.5	ug/L	ND	EPA 524.2
p-iso-Propyltoluene	0.5	ug/L	ND	EPA 524.2
n-Butylbenzene	0.5	ug/L	ND	EPA 524.2
1,2-Dibromo-3-chloropropane	0.5	ug/L	ND	EPA 524.2
1,2,4-Trichlorobenzene	0.5	ug/L	ND	EPA 524.2
Naphthalene	0.5	ug/L	ND	EPA 524.2
Hexachlorobutadiene	0.5	ug/L	ND	EPA 524.2
1,2,3-Trichlorobenzene	0.5	ug/L	ND	EPA 524.2

SURROGATE SPIKE

1,2-Dichloroethane-d4	%	119	EPA 524.2
Dibromofluoromethane	%	113	EPA 524.2
Toluene-d8	%	96	EPA 524.2
Bromofluorobenzene	%	98	EPA 524.2

CALIBER ANALYTICAL SERVICES

Certificate of Analysis

Advanced Environmental Concepts
5292 Enterprise St.
Eldersburg, MD 21784

Date Received: 03/13/08 15:45
Date Sampled: 03/12/08 0:00
Date Issued: 03/20/08 14:39

Project: Calvert Citgo
Site Location: 2815 North East Rd.

SDG Number: 08031305

	Result	Unit	LLQ		MCL	Method	Prepared	Analyzed	Init.
Field Sample ID: Domestic Supply			**Matrix: Water**					**Lab ID: 08031305-01**	
Volatile Organic Compounds									
Benzene	ND	ug/L	0.5		5	EPA 524.2	03/19/08	03/19/08 14:38	JKL
Bromobenzene	ND	ug/L	0.5			EPA 524.2	03/19/08	03/19/08 14:38	JKL
Bromochloromethane	ND	ug/L	0.5			EPA 524.2	03/19/08	03/19/08 14:38	JKL
Bromodichloromethane	ND	ug/L	0.5			EPA 524.2	03/19/08	03/19/08 14:38	JKL
Bromoform	ND	ug/L	0.5			EPA 524.2	03/19/08	03/19/08 14:38	JKL
Bromomethane	ND	ug/L	0.5			EPA 524.2	03/19/08	03/19/08 14:38	JKL
n-Butylbenzene	ND	ug/L	0.5			EPA 524.2	03/19/08	03/19/08 14:38	JKL
sec-Butylbenzene	ND	ug/L	0.5			EPA 524.2	03/19/08	03/19/08 14:38	JKL
tert-Butylbenzene	ND	ug/L	0.5			EPA 524.2	03/19/08	03/19/08 14:38	JKL
Carbon tetrachloride	ND	ug/L	0.5		5	EPA 524.2	03/19/08	03/19/08 14:38	JKL
Chlorobenzene	ND	ug/L	0.5		100	EPA 524.2	03/19/08	03/19/08 14:38	JKL
Chloroethane	ND	ug/L	0.5			EPA 524.2	03/19/08	03/19/08 14:38	JKL
Chloroform	ND	ug/L	0.5			EPA 524.2	03/19/08	03/19/08 14:38	JKL
Chloromethane	**0.9**	ug/L	0.5			EPA 524.2	03/19/08	03/19/08 14:38	JKL
2-Chlorotoluene	ND	ug/L	0.5			EPA 524.2	03/19/08	03/19/08 14:38	JKL
4-Chlorotoluene	ND	ug/L	0.5			EPA 524.2	03/19/08	03/19/08 14:38	JKL
Dibromochloromethane	ND	ug/L	0.5			EPA 524.2	03/19/08	03/19/08 14:38	JKL
1,2-Dibromo-3-chloropropane	ND	ug/L	0.5			EPA 524.2	03/19/08	03/19/08 14:38	JKL
1,2-Dibromoethane	ND	ug/L	0.5			EPA 524.2	03/19/08	03/19/08 14:38	JKL
Dibromomethane	ND	ug/L	0.5			EPA 524.2	03/19/08	03/19/08 14:38	JKL
1,2-Dichlorobenzene	ND	ug/L	0.5		600	EPA 524.2	03/19/08	03/19/08 14:38	JKL
1,3-Dichlorobenzene	ND	ug/L	0.5			EPA 524.2	03/19/08	03/19/08 14:38	JKL
1,4-Dichlorobenzene	ND	ug/L	0.5		75	EPA 524.2	03/19/08	03/19/08 14:38	JKL
Dichlorodifluoromethane	ND	ug/L	0.5			EPA 524.2	03/19/08	03/19/08 14:38	JKL
1,1-Dichloroethane	ND	ug/L	0.5			EPA 524.2	03/19/08	03/19/08 14:38	JKL
1,2-Dichloroethane	**0.6**	ug/L	0.5		5	EPA 524.2	03/19/08	03/19/08 14:38	JKL
1,1-Dichloroethene	ND	ug/L	0.5		7	EPA 524.2	03/19/08	03/19/08 14:38	JKL
cis-1,2-Dichloroethene	ND	ug/L	0.5		70	EPA 524.2	03/19/08	03/19/08 14:38	JKL
trans-1,2-Dichloroethene	ND	ug/L	0.5		100	EPA 524.2	03/19/08	03/19/08 14:38	JKL
1,2-Dichloropropane	ND	ug/L	0.5		5	EPA 524.2	03/19/08	03/19/08 14:38	JKL
1,3-Dichloropropane	ND	ug/L	0.5			EPA 524.2	03/19/08	03/19/08 14:38	JKL
2,2-Dichloropropane	ND	ug/L	0.5			EPA 524.2	03/19/08	03/19/08 14:38	JKL
1,1-Dichloropropene	ND	ug/L	0.5			EPA 524.2	03/19/08	03/19/08 14:38	JKL
cis-1,3-Dichloropropene	ND	ug/L	0.5			EPA 524.2	03/19/08	03/19/08 14:38	JKL
trans-1,3-Dichloropropene	ND	ug/L	0.5			EPA 524.2	03/19/08	03/19/08 14:38	JKL
Ethylbenzene	ND	ug/L	0.5		700	EPA 524.2	03/19/08	03/19/08 14:38	JKL
Isopropylbenzene	ND	ug/L	0.5			EPA 524.2	03/19/08	03/19/08 14:38	JKL
p-Isopropyltoluene	ND	ug/L	0.5			EPA 524.2	03/19/08	03/19/08 14:38	JKL
Methylene chloride	ND	ug/L	0.5		5	EPA 524.2	03/19/08	03/19/08 14:38	JKL
Methyl t-butyl ether (MTBE)	**9.1**	ug/L	0.5	*	20	EPA 524.2	03/19/08	03/19/08 14:38	JKL

Advanced Environmental Concepts, Inc.
5292 Enterprise St., Suite C
Eldersburg, MD 21784

Fax: 410-795-9459
Phone: 410-795-5955
www.aecenviro.com

Chain of Custody Record

08031305

Customer: Calvert Citgo	Email Address:	preservative: HCL							
Contact:	Project Name:	# of Containers	Analysis						
Phone:	Project Number:		524.2						
Fax:	Location: 2815 North East Rd North East, MD								

AEC ID #	pH	Date	Time	Water	Soil	Sample ID	# of Containers	524.2						
		3/12/08		X		Domestic Supply	2							

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Wayne Cole	3/13/08	11:00	Matt Cohen	3/13/08	1130
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

Special Instructions:	Custody Seal	Receipt Temperature	Turn Around Time

FRANKLIN ENGINEERING, INC.
71 ACADEMY ROAD
BALA CYNWYD, PA. 19004

610-664-6540 Fax 610-664-3315

joe@franklinengr.com

Date: 7/28/2008

To: Mr. Jerry Naples 215-729-1557 (8 sheets incl. cover)

From: Joe Graci

Subject: Calvert Citgo and Princeton Fuel

Please review the attached letter from MDE for Calvert and update your proposal based upon their letter. Send the updated proposal to me as a word doc and I will add what I have to do to coordinate the project and forward it to Haab.

Also attached is the deed for the Phase II at Princeton Fuel. Please provide a proposal for doing both the Phase I & II but don't mention the Phase I, just put it in as part of the Phase II report. You should cost out soil and groundwater samples. They had leaded gas, heating oil and kero at the site.

Sincerely yours,

Joe Graci

MARYLAND DEPARTMENT OF THE ENVIRONMENT

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

Martin O'Malley
Governor

Anthony G. Brown
Lieutenant Governor

Shari T. Wilson
Acting Secretary

Robert M. Summers, Ph.D.
Deputy Secretary

July 9, 2008

CERTIFIED MAIL

Mr. Chandrakant K. Patel (Current Owner/Operator)
Mr. Pragnesh Patel
Calvert Country Store
2815 North East Road
North East MD 21901

Mr. Kenneth D. Thomas (Former Owner and Operator)
Alger Fuel, Inc./Alger Oil Company, Inc./Country Stores, Inc.
559 Sylmar Road
Rising Sun MD 21911

RE: NOTICE OF VIOLATION NV-OCP-2004-038-ADDENDUM
IMPLEMENTATION OF APPROVED WORK PLAN
Case No. 1992-2616-CE
Calvert Citgo (Former Alger Country Store)
2815 North East Road, North East
Facility No. 5678

Dear Messrs. Patel and Thomas:

The Oil Control Program (OCP) recently completed a review of the case file for the above-referenced property located in Cecil County. A preliminary environmental assessment report prepared by Geomatrix, Inc. dated August 12, 1991 detected dissolved phase petroleum hydrocarbons in the network of six installed monitoring wells. In October 1992, 3/4-inch of liquid phase hydrocarbons (LPH) was detected in monitoring well MW-5. Subsequent gauging of on-site monitoring wells revealed up to 6 inches of LPH in MW-5. Based on the presence of LPH, the Department required the recovery of petroleum product through manual bailing.

On August 14, 2003, MDE-OCP again found 1/2-inch of LPH within the monitoring well network. The Department required the submittal of a *Corrective Action Plan.* On October 8, 2003, four direct push soil borings were advanced as part of a supplemental subsurface investigation. The investigation revealed LPH in boring B-2 at a depth of 17 feet.

Based on the continued presence of LPH and the location of this active service station in a high-risk groundwater use area, the Department issued letters on January 5, 2004; May 13, 2004; November 22, 2004; and September 7, 2005 (*see attached*) requiring the prompt cleanup of petroleum products released into the subsurface. On December 7, 2005, the Department approved the *Hydrogeologic Investigation/Work Plan - October 7, 2005* contingent upon modifications (*see enclosed approval letter).* To date, the Department has not received the results of this approved *Hydrogeologic Investigation.*

In March 2008, the Department was on-site to witness the collection of groundwater samples from the recently re-developed monitoring well network. Split samples were collected from monitoring wells MW5 and MW6. Sampling results revealed the presence of petroleum contamination in monitoring wells MW1, MW3, MW5, and MW7.

The aforementioned findings constitute violations of Maryland law, specifically Code of Maryland Regulations (COMAR) 26.10.02.01C and 26.10.09.01B. These regulations provide that oil may not be discharged into, near, or in an area likely to pollute waters of the State and that the responsibility for the prompt control, containment, and removal of any released regulated substance shall be with the person(s) responsible for the discharge, the owner of the property, the owner of the regulated substance, the owner/operator of the storage system, and the person in charge of the facility.

According to the Department's administrative records, both Alger Oil, Inc. and Country Stores, Inc. either owned and/or operated the retail gasoline facility located at 2815 North East Road, North East, Cecil County, Maryland. Therefore, the Department herby considers both Alger Oil, Inc. and Country Stores, Inc. as parties responsible for the prompt and thorough remediation of all subsurface contamination at the subject location. Based on the presence of both dissolved phase and liquid phase hydrocarbons in the groundwater, the location of this site in a high-risk groundwater use area, and the aforementioned violations, the Department requires both Alger Oil, Inc. and Country Stores, Inc. to foster a working relationship to complete the following:

Site Conceptual Model and Corrective Action:

1) No later than September 30, 2008, implement the *Hydrogeologic Investigation/Work Plan - October 7, 2005,* contingent upon modifications as approved on December 7, 2005 to assess the vertical and lateral extent of petroleum contamination in soils and groundwater associated with the Calvert Citgo site. Consideration must also be given to the migration of LPH and/or dissolved phase petroleum off-site, via groundwater and other preferential subsurface pathways (*See Enclosed Approval Letter).*

2) Both the *Site Conceptual Model (SCM)* and the approved *Supplemental Work Plan* are important building blocks for preparing a *Corrective Action Plan (CAP)* and implementing practical and cost-effective remedial technologies, such as extraction method(s) for groundwater contaminants. The Department considers the most cost-effective and time-effective approach would be to develop a detailed *SCM* first and identify data gaps for purposes of conducting future site investigation and remedial actions.

   Develop a SCM to evaluate the total extent of petroleum contamination. A SCM is the compilation of all currently known and/or available data for the site, which is used to predict the source, fate, and transport of contaminants of concern. The SCM is normally created at the beginning of any site investigation and continually refined with the acquisition of data until resolution/closure. It is understood that new data may change predictions as a normal result of the process. A comprehensive and detailed SCM for this site must address the following issues:

   a. Source(s) of petroleum contamination;
   b. Any features and pathways, surface and/or subsurface, that may have influenced the transport of groundwater and contaminants;
   c. Fate and transport (known and/or predicted) of contaminants;
   d. Proposal for supplemental data to fill in gaps to further prove and/or refine the SCM.

Future Sampling and Groundwater Monitoring:

3) Beginning in August 2008, collect samples from all monitoring wells and tank field monitoring pipes not actively exhibiting LPH on a quarterly basis **(every three months)**. All samples must be analyzed for full-suite volatile organic compounds (VOCs), including fuel oxygenates, using EPA Method 8260 and for total petroleum hydrocarbons/diesel and gasoline-range organics (TPH/DRO and TPH/GRO) using EPA Method 8015B. In March 2008, the Department was on-site to witness the collection of groundwater samples from the recently re-developed monitoring well network. Split samples were collected from monitoring wells MW-5 and MW-6 *(results enclosed).*

4) Beginning in August 2008, continue quarterly (**every three months**) sampling of the on-site drinking water supply well. All samples must be analyzed for full suite VOCs, including fuel oxygenates, using EPA Method 524.2 and for TPH/DRO and TPH/GRO using EPA Method 8015B. If a carbon filtration system is present, all samples must be collected from the system pre-, mid-, and post-filtration. In March 2008, the Department collected samples from your drinking water supply well *(results enclosed).*

5) Based on local, federal, and State well surveys, identify all drinking water wells (i.e. domestic, non-community/community water supply, agricultural), within a half-mile radius of the property and plot on a U.S. Geological Survey topographic map or scaled street map. Annotate on this map the 500 feet, 1,000 feet, and 0.5 mile radii. Provide a written summary on the depths of these wells, screen depths, and their current status. Review well completion reports for these wells and evaluate whether on-site conditions could potentially impact any off-site drinking water wells in the area. Written documentation must be provided of your findings and the list of persons contacted.

6) No later than August 30, 2008, sample the following addresses to ensure that petroleum contamination has not migrated off-site and impacted these sensitive receptors: 64 Quaker Lane; 2770, 2780, 2794, 2802, 2825, and 2826 North East Road; and the parcel located at Map 11, Grid, 12, Parcel 263, Lot 4 (which currently is not assigned a physical 911 mailing address). These drinking water well samples must be analyzed for full-suite VOCs, including fuel oxygenates, using EPA Method 524.2. If a granular activated carbon (GAC) filtration system is present, samples must be collected pre-filtration.

7) To avoid any confusion with area residents receiving Calvert Citgo's written request for *Water Well Sampling Access*, please provide a copy of the proposed letter that will be sent to all property owners earmarked for the sampling program. This *Water Well Sampling Access* letter must be reviewed and approved by the Department prior to mailing. Upon approval of a *Water Well Sampling Access* letter, schedule and conduct initial sampling of the potable wells located at the addresses referenced above. After the sampling results have been obtained, provide a copy to each homeowner sampled, the Cecil County Health Department, and the MDE-OCP.

Compliance Issues:

In accordance with COMAR 26.10.02.03-3A and 26.10.02.03-4A(3), any service station operating a gasoline underground storage tank with greater than 2,000-gallons storage capacity and equipped with Stage II vapor recovery in an area serviced by drinking water wells must conduct the following to ensure continued UST compliance:

8) Annual enhanced helium testing must be conducted on the gasoline UST systems. The helium test must have a detection limit of 5 parts per million (ppm) or less. All repairs and/or system corrections made to the system before, during, and/or after the test must be logged and reported to the Oil Control Program within twenty (20) *days of completion of the test.*

9) The Department issued a *Notice to Correct Deficiencies* letter in April 2007 requiring the correction of deficiencies identified during the February 17, 2007 *Third Party Compliance Inspection*. Inspections conducted by Departmental personnel in July, September, and December 2007 revealed outstanding compliance deficiencies at this location. *For questions regarding these compliance issues, please contact the Compliance Division at 410-537-3442.*

Based on the results of the *Hydrogeologic Investigation/Work Plan* and the *Site Conceptual Model*, the Department may require the submittal of a Corrective Action Plan (CAP) to mitigate any potential current and future risks to on-site and/or off-site receptors. Please note that all information, data, reports or plans generated for this site must be submitted to the Oil Control Program for review by dates specified and/or agreed upon with the Department. Failure to perform the advised actions may result in enforcement proceedings that could include the issuance of civil penalties and other legal sanctions.

Notify the Oil Control Program at least five (5) working days prior to the start of any fieldwork associated with this project. When submitting documentation to the Oil Control Program, please provide four (4) hard copies and one copy on a compact disc (CD) for updating the Oil Control Program's *Remediation Sites* list on the MDE website. For all questions concerning this case, please contact the case manager, Mrs. Susan Bull, at 410-537-3499 or via email: sbull@mde.state.md.us.

Sincerely,

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

SB

Enclosures: January 5, 2004 - *Notice of Violation NV-2004-038*
May 13, 2004 - Modification requirements letter
November 22, 2004 - *Notice of Violation NV-2004-038*, reissued to include current owners
September 7, 2005 - *Notice of Violation NV-2004-038 Addendum*
December 7, 2005 - *Hydrogeologic Investigation Approval Letter*
March 12, 2008 - Drinking water well sampling results
March 12, 2008 - Sampling results MW-5 and MW-6

cc: Mr. James A. Johnson (Semmes, Bowen & Semmes)
Mr. Charles Smyser (Cecil County Health Department)
Mr. Thomas L. Walter
Mr. Herbert M. Meade
Mr. Horacio Tablada

This Indenture, *MADE THE*

day of *in the year of*

our Lord one thousand nine hundred and seventy-five

Between PRINCETON FUEL OIL COMPANY, a New Jersey corporation, party

of the first part, and

PRINCETON FUEL OIL COMPANY, INC., a New Jersey corporation, party
220 Alexander Street, Princeton, New Jersey 08540

of the second part;

Witnesseth, *That the said party of the first part, for and in consideration of*

the sum of Two Hundred Thirty-Two Thousand Dollars ($232,000)

lawful money of the United States of America,

COUNTY OF MERCER
CONSIDERATION 232,000.
REALTY TRANSFER FEE 812.00
DATE 10-2-15 BY R.C.

well and truly paid by the said party of the second part to the said party of the first part, at and before the ensealing and delivery of these presents, the receipt whereof is hereby acknowledged has *granted, bargained, sold, aliened, enfeoffed, released, conveyed and confirmed and by these presents* does *grant, bargain, sell, alien, enfeoff, release, convey and confirm, unto the said party of the second part,* its successors *and assigns,*

ALL THAT CERTAIN TRACT OR PARCEL OF LAND in the Township of Princeton, County of Mercer, State of New Jersey, bounded and described as follows, to wit:

BEGINNING at a point in the easterly line of Alexander Street said point bears South 10 degrees 00 minutes East, 1309.20 feet from the point of intersection of said line with the southerly line of University Place and running,

thence (1) Along lands now or formerly of Le Roy A. Skillman, et ux North 80 degrees 09 minutes East, 129.87 feet to a point;

thence (2) Along lands of the United N.J.R.R. and Canal Company South 10 degrees 14 minutes 30 seconds East, 83.36 feet to a point;

thence (3) Along lands now or formerly of Robert C. Miller, South 80 degrees 45 minutes West, 130.24 feet to a point;

thence (4) Along the aforesaid line of Alexander Street North 10 minutes West, 82.00 feet to the point an

thence (4) Along the aforesaid line of Alexander Street North 10 degrees 00 minutes West, 82.00 feet to the point and place of BEGINNING. [2]

SHOWN on a plan entitled "Plan of Property of John F. Hoff, Jr. to be conveyed to Princeton Fuel Oil Company, Princeton Township, Mercer County, New Jersey Surveyed and Drawn by Van Note-Harvey Associates, Civil Engineers and Land Surveyors, Princeton, N. J. Scale 1" = 10 feet, September 29, 1964."

VOL 2000 PAGE 500

ACCORDING to a description by Van Note-Harvey Associates, Princeton, N. J.

BEING the same premises which Margaret H. Woodruff, et al, by Deed dated October 16, 1964 and recorded November 6, 1964 in Book 1719, Page 520 granted and conveyed unto the said Princeton Fuel Oil Company, in fee.

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

September 24, 2008

Mr. Chandrakant K. Patel (Current Owner/Operator)
Mr. Pragnesh Patel
Calvert Country Store
2815 North East Road
North East MD 21901

Mr. Kenneth D. Thomas (Former Owner and Operator)
Alger Fuel, Inc./Alger Oil Company, Inc./Country Stores Inc.
559 Sylmar Road
Rising Sun MD 21911

RE: FINAL RESPONSE FOR IMPLEMENTATION OF APPROVED WORK PLAN
Case No. 1992-2616-CE
Notice of Violation NV-2004-038-*Addendum*
Calvert Citgo (Former Alger Country Store)
2815 North East Road, North East
Facility No. 5678

Dear Messrs. Patel and Thomas:

The Maryland Department of the Environment (MDE), Oil Control Program (OCP) recently completed a review of the *Response letter - August 22, 2008,* including the request for off-site sampling access letter and quality assurance/quality control (QA/QC) questions for the above-referenced property located in Cecil County. The Department understands that React Environmental was retained by representatives of Alger Oil to conduct the work required in the MDE-OCP's July 9, 2008 directive letter. On September 22, 2008, the MDE-OCP was notified that sampling of the on-site supply well detected methyl tertiary-butyl ether (MTBE) above the State's action level of 20 parts per billion (ppb) and that the current owner will be installing a granular activated carbon (GAC) filtrations system (see enclosed fact sheet for information on GAC systems).

Regarding questions 1 through 5 in your *August 22, 2008 letter*, the Department accepts sampling data from Encore samplers. Please note that QA/QC procedures, in accordance with standard industry protocol, apply to the collection of all soil, groundwater, and drinking water samples. These procedures must be described in the *Supplemental Subsurface Investigation Report.* If you require additional site-specific information, the case file is available through the Public Information Act (PIA) and you will need to contact the PIA coordinator, Ms. Marie Stephens at 410-537-3422 (email: mstephens@mde.state.md.us).

The Department hereby approves the draft *Water Well Access Request Letter* for immediate mailing to the following addresses: 64 Quaker Lane; 2770, 2780, 2794, 2802, 2825, and 2826 North East Road, and the parcel located at Map 11, Grid 12, Parcel 263, Lot 4 (currently not assigned a physical 911 mailing address). These drinking water samples must be analyzed for full-suite volatile organic compounds (VOCs), including fuel oxygenates, using EPA Method 524.2. If a granular activated carbon (GAC) filtration system is present, samples must be collected pre-filtration. The Department anticipates receiving copies of the letters mailed to adjacent property owners no later than October 24, 2008.

The Department hereby approves the proposed advancement of twelve (12) additional direct push borings contingent upon the following modifications:

1) Relocate proposed boring (B-003) to a location north of the active underground storage tank (UST) field (between the UST field and the property boundary).

2) Soil and groundwater samples must be collected from each boring location.

3) Advance 2-inch-diameter piezometers for the collection of soil and groundwater samples. All samples collected from temporary borings must be analyzed for full suite VOCs, including fuel oxygenates, using EPA Method 8260 and for TPH/DRO and TPH/GRO using EPA Method 8015B.

4) Beginning in November 2008, collect samples from all monitoring wells and tank field monitoring pipes not actively exhibiting LPH on a quarterly basis **(every three months)**. All samples must be analyzed for full suite VOCs, including fuel oxygenates, using EPA Method 8260 and for TPH/DRO and TPH/GRO using EPA method 8015B.

5) The Department anticipates receiving the results of the *Supplemental Subsurface Investigation* no later than December 15, 2008.

Notify the Oil Control Program at least five (5) working days prior to the start of any fieldwork associated with this project. When submitting documentation to the Oil Control Program, please provide a total of four (4) hard copies and one copy on a compact disc (CD) for updating the Oil Control Program's *Remediation Sites* list on the MDE website. For all questions concerning this case, please contact the case manager, Mrs. Susan Bull, at 410-537-3499 or via email: sbull@mde.state.md.us.

Sincerely,

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

SRB/nln
Enclosure
cc: Mr. James A. Johnson (Semmes, Bowen & Semmes)
Ms. Brenda McPhail (React Environmental Professional Services Group, Inc.)
Mr. Charles Smyser (Cecil County Health Department)
Mr. Thomas L. Walter
Mr. Herbert M. Meade
Mr. Horacio Tablada

MDE

MARYLAND DEPARTMENT OF THE ENVIRONMENT
1800 Washington Boulevard • Baltimore Maryland • 21230-1719
1-800-633-6101 • http://www.mde.state.md.us

FACT SHEET

Granular Activated Carbon (GAC) Filtration Systems at Petroleum Contaminated Properties

What is Granular Activated Carbon (GAC)?

Activated carbon is made from materials such as petroleum coke, bituminous coal, lignite, wood products, coconut shell, or peanut shells. Activation is achieved in a process where steam and high temperature contacts with the material, producing a carbon substance with many small pores. The activated carbon is crushed to produce a granular or pulverized product. Small pores in the granular activated carbon (GAC) increase the surface area of the material, allowing certain compounds/ contaminants attracted to the carbon to be adsorbed onto the carbon. The efficiency of the adsorption process is influenced by the characteristics of the carbon and the contaminant, as well as the amount of water pumped through the filter.

Different types of carbon remove different contaminants, and no one type of carbon removes all contaminants. Activated carbon filters will not remove microbial contaminants, calcium, magnesium, fluoride, nitrate, and many other compounds that are highly soluble in water. However, most carbon compounds, such as those found in gasoline and oil, are removed effectively.

Recommended GAC System

Point-of-Entry (POE) System. A system that treats all water by being connected to the supply line as it enters the home. This system is recommended for most petroleum contaminant situations. This system usually consists of two 2-cubic-foot fiberglass-reinforced GAC filters, 12 -inch diameter by 48-inch height, piped in series with sampling ports installed before the first filter, in-between the two filters, and after the two filters. Once the POE system is installed, a sampling schedule will be set up to collect samples pre-, mid-, and post-filtration. The schedule of sampling is based on the level of contamination and amount of water used in the home. The sampling frequency will be adjusted as a filter history is developed.

Some drawbacks for a home using a GAC unit include pressure decline, staining of water fixtures, and change in taste. These items can normally be addressed through the proper choice of carbon material and system service. We recommend changing or servicing the filters at least once a year to avoid bacteria buildup and ensure proper water pressure is maintained in the home. We further recommend the use of virgin coconut shell carbon as a filter medium.

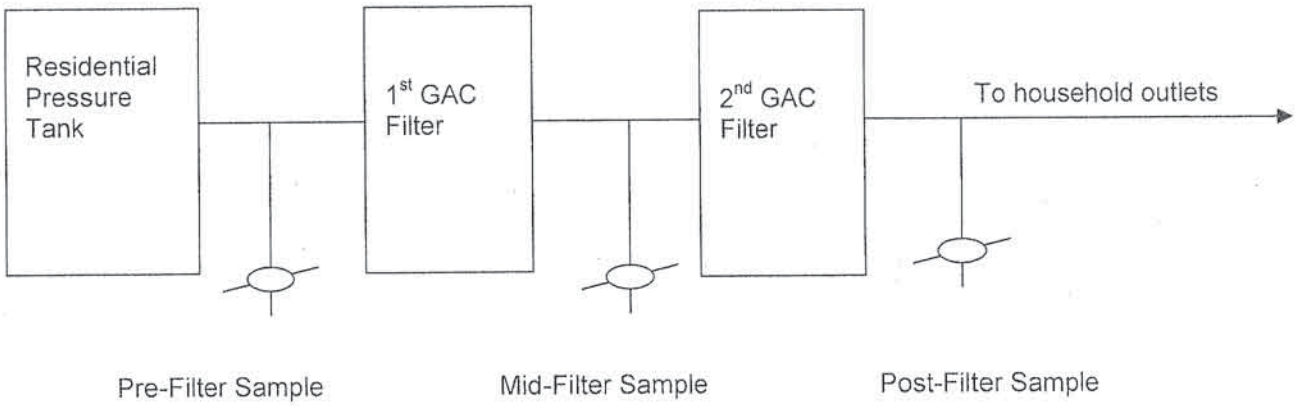
Criteria for GAC System Installation

A drinking water well is sampled using EPA Method 524.2 and petroleum concentrations are detected above the federal and State Safe Drinking Water Standard). The Maryland Department of the Environment's Oil Control Program reserves the right to request another confirmatory sample to verify contaminant levels. The maximum contaminant level for benzene, toluene, ethylbenzene, and xylene (BTEX) and the State's action level for methyl tertiary-butyl ether (MTBE), chemicals commonly

detected as a result of petroleum impact are:

- 5 ppb for benzene
- 1,000 ppb for toluene
- 700 ppb for ethylbenzene
- 10,000 ppb for xylene
- 20 ppb for MTBE

Schematic Diagram of a Typical Point of Entry GAC System



Please note that for non-community supply wells, a permit application must be submitted to the Water Management Administration for the installation and final design of a GAC system.

Disclaimer:

The intent of this fact sheet is to provide information to the reader. To fully understand the subject, the reader should research additional sources of information. MDE makes no claims to the accuracy of this information and accepts no liability regarding the use or interpretation of this document.

ATTACHMENT 7: OFF-SITE DRINKING WATER WELL PERMITS

Cecil County Health Department

John M. Byers Health Center
401 Bow Street
Elkton, Maryland 21921-5501

STEPHANIE GARRITY, M.S.
HEALTH OFFICER

FACSIMILE COVER SHEET

DATE: 1-6-10 **NO. PAGES (including cover):** 3

TO: Brenda

FAX #: _____ **PHONE #:** _____

FROM: pat mundell

PHONE #: 410-996-5160 **FAX #:** 410-996-5153

COMMENTS:

2794 + 2802 Northeast Rd

Confidentiality Statement

WARNING: Unauthorized interception of this telephonic communication could be a violation of Federal and State Law. The documents accompanying this telecopy transmission may contain confidential information which is legally privileged: the information is intended only for the use of the recipient. You are hereby notified that any disclosure, copying, distribution or the taking of any action in reliance on the contents of this telecopied information is strictly prohibited. If you have received this telecopy in error, please immediately notify sender by telephone to arrange for the return of the original documents to us.

C1 0911 (MDE USE ONLY)

1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-8 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT

FILL IN THIS FORM COMPLETELY
PLEASE TYPE

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

COUNTY NUMBER: Robert McMillan Sub file

ST/CO USE ONLY — DATE Received (MM DD YY)

DATE WELL COMPLETED (MM DD YY): 03 24 06

Depth of Well: 250 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL": CE - 95 - 1499

OWNER: R T A Builders (last name) (first name) — Bjur North East

STREET OR RFD: 5607 Telegraph Rd. TOWN: Elkton, MD 21921

SUBDIVISION: McMillan Property II SECTION: LOT: 1

WELL LOG

Not required for driven wells

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

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
Brown sandy clay soil	0	12	
Light Brown Clay	12	45	
Layers of Brown Weathered Sand Rock + White Quartz	45	84	✓
Hard Gray Granite	84	250	✓
Water Bearing at 80 ft., 125 ft. + 230 ft.			

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED: YES [Y] NO [N] — N circled

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

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

DRILLERS LIC. NO.: MWD047

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

LIC. NO. D

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

GROUTING RECORD

WELL HAS BEEN GROUTED (Circle Appropriate Box): yes [Y] no [N] — Y circled

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

NO. OF BAGS: 28 NO. OF POUNDS: 2632

GALLONS OF WATER: 168

DEPTH OF GROUT SEAL (to nearest foot): from 0 ft. (TOP) to 87 ft. (BOTTOM) (enter 0 if from surface)

CASING RECORD

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

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)	Total depth of main casing (nearest foot)
PL	6	87

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

SCREEN RECORD

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

C2 — DEPTH (nearest ft.)

Type		
HO	87	250

SLOT SIZE 1 ___ 2 ___

DIAMETER OF SCREEN ___ (NEAREST INCH)

GRAVEL PACK from ___ to ___

IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

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

C3 PUMPING TEST

HOURS PUMPED (nearest hour): 3

PUMPING RATE (gal. per min.): 10

METHOD USED TO MEASURE PUMPING RATE: Bucket

WATER LEVEL (distance from land surface)

BEFORE PUMPING: 17 ft.

WHEN PUMPING: 115 ft.

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

PUMP INSTALLED

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

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

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

CAPACITY: GALLONS PER MINUTE (to nearest gallon)

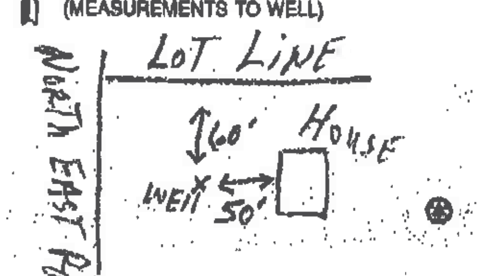
PUMP HORSE POWER

PUMP COLUMN LENGTH (nearest ft.)

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

LOCATION OF WELL ON LOT

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



COUNTY: [initials]

C 1 0315 (MDE USE ONLY)
(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

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

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

COUNTY NUMBER H1075

ST/CO USE ONLY
DATE Received MM DD YY

DATE WELL COMPLETED: MM 03 DD 17 YY 86

Depth of Well: 200 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL": CE - 95 - 1470

OWNER McMILLAN (last name) W. T. (first name) 2744 NORTH EAST
STREET OR RFD 1051 CALVERT RD. TOWN RISING SUN MD. 21911
SUBDIVISION McMILLAN SECTION LOT 2

WELL LOG
Not required for driven wells

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

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
BROWN SANDY CLAY SOIL	0	25	
BROWN CLAY	25	40	
BROWN WEATHERED SAND ROCK	40	65	
HARD GRAY GRANITE	65	200	✓
WATER BEARING AT 100 FT., 130 FT & 180 FT.			

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED: yes [Y] no [N]

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

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

DRILLERS LIC. NO. MWD 047
DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)
LIC. NO. ___ D ___

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

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box): yes [Y] no [N]
TYPE OF GROUTING MATERIAL (Circle one)
CEMENT [C M] BENTONITE CLAY [B C]
NO. OF BAGS 25 NO. OF POUNDS 2350
GALLONS OF WATER 150
DEPTH OF GROUT SEAL (to nearest foot)
from 0 (TOP) ft. to 70 (BOTTOM) ft.
(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below:
[S T] STEEL [C O] CONCRETE [P L] PLASTIC [O T] OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)	Total depth of main casing (nearest foot)
PL	6	70

EACH CASING — OTHER CASING (if used)

diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole insert appropriate code below:
[S T] STEEL [B R] BRASS [H O] OPEN HOLE [P L] PLASTIC [O T] OTHER

EACH SCREEN — DEPTH (nearest ft.)

	from	to
1	40	70
2	200	
3		

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

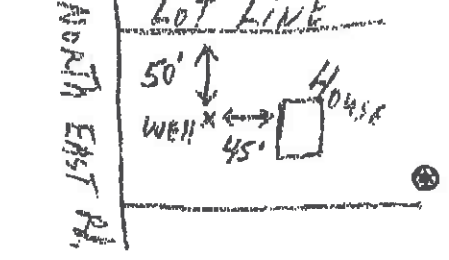
GRAVEL PACK: from ___ to ___
IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

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

PUMPING TEST
HOURS PUMPED (nearest hour) 3
PUMPING RATE (gal. per min.) 10
METHOD USED TO MEASURE PUMPING RATE BUCKET
WATER LEVEL (distance from land surface)
BEFORE PUMPING 18 ft.
WHEN PUMPING 95 ft.
TYPE OF PUMP USED (for test)
[A] air [P] piston [T] turbine [C] centrifugal [R] rotary [O] other (describe below) [J] jet [S] submersible

PUMP INSTALLED
DRILLER INSTALLED PUMP (CIRCLE) (YES or NO): YES / NO
IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.
TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. ___
CAPACITY: GALLONS PER MINUTE (to nearest gallon) ___
PUMP HORSE POWER ___
PUMP COLUMN LENGTH (nearest ft.) ___
CASING HEIGHT (circle appropriate box and enter casing height): [+] above / [−] below LAND SURFACE 1 (nearest foot)

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



DENV-CR00 COUNTY PCS

WELL INFORMATION FORM

Please complete this form by writing the answer in the space provided next to the question or by circling the most appropriate answer.

1. Date: 01 Oct 2008
2. Name: ED Dedrick
   Address: 64 Quaker Lane North East, MD
   Block: _____ Lot: _____ [North west side of property @ 2815 NE Rd MDE case # 1982-2616-CE
   Telephone #: (410) 658 - 5927
3. Is this home/business connected to the public water supple system? Yes (No)
4. Is there a well on the property that is still operational? (Yes) / No
5. Identify resident relationship to the owner of the well? (please circle)
   (a. Self) b. Tenant c. Relative d. Other_____
6. What is the name and address of the owner of the well, if different than the resident?
   Name: _____
   Address: _____
   Telephone #: (____) _____ - _____
7. Number of people who live or work at this location on a regular basis: _____
   a. Use of well water:
      Drinking? (Yes) / No
      Bathing? (Yes) / No
      Washing clothes? (Yes) / No
      Law/garden? (Yes) / No
      Other _____
8. Date (month/year) well was installed: 1970s/1980s P-e'87
9. Does this well supply water for any other residences? Yes (No)
   If Yes, how many? _____
10. Has this well ever been previously tested? (Yes) / No (If No, skip to question 11)
    a. Is the well tested regularly? Yes (No) If Yes, how often? _____
    b. When was the well most recently tested? 1987

c. What was the well tested for? (please circle)

(i. Bacteria) ii. Volatile Organics

iii. Metals iv. Other: Nitrates

11. Have any problems with the water been noticed? (Yes) / No If Yes, what kinds?

a. Odor b. Taste c. Color (d. Staining) e. Other: eats copper, aluminum

* 12. Specific Well Construction details:

Depth of the well (feet): 110' Length of casing (feet): unk

Length of screen or open borehole (feet): unk Well casing diameter (inches): 8 inches

13. Is there a water treatment system on the well? ~~Yes / No~~ Yes

a. If Yes, What type of treatment?

Softener	Yes / No
Iron Removal	Yes / No
Turbidity Removal	Yes / No
pH Adjustment	Yes / No
Disinfection	Yes / No
Chlorinators	Yes / No
Acid Neutralizers	Yes / No

Other: Sediment filter - 5 micron

b. Approximately when (month/year) was the above system installed? _____

c. Does the outside spigot bypass the treatment system? Yes (No)

d. Briefly describe the history/results of any previous water sampling events:

_____

_____

_____

* Second well Depth 29' Casing: 29'

Screen: None diameter 48"

foot valve pipe + No pump

5 feet of sediment in bottom measured in 2004 or 2005

WELL INFORMATION FORM

Please complete this form by writing the answer in the space provided next to the question or by circling the most appropriate answer.

1. Date: 10/2/08
2. Name: Melissa Davisson
   Address: 2780 NorthEast Rd. NorthEast, MD 21901
   Block: _____ Lot: _____
   Telephone #: (410) 658 - 0543
3. Is this home/business connected to the public water supple system? Yes (No)
4. Is there a well on the property that is still operational? (Yes) / No
5. Identify resident relationship to the owner of the well? (please circle)
   (a. Self) b. Tenant c. Relative d. Other_____
6. What is the name and address of the owner of the well, if different than the resident?
   Name: _____
   Address: _____
   Telephone #: (____) _____ - _____
7. Number of people who live or work at this location on a regular basis: 6
   a. Use of well water:
      Drinking? (Yes) / No
      Bathing? (Yes) No
      Washing clothes? (Yes) No
      Law/garden? (Yes) / No
      Other _____
8. Date (month/year) well was installed: unknow, purchased house in 05 - brand new.
9. Does this well supply water for any other residences? Yes (No)
   If Yes, how many? _____
10. Has this well ever been previously tested? Yes (No) (If No, skip to question 11)
    a. Is the well tested regularly? Yes / No If Yes, how often? _____
    b. When was the well most recently tested? _____

c. What was the well tested for? (please circle)

i. Bacteria ii. Volatile Organics

iii. Metals iv. Other: _____

11. Have any problems with the water been noticed? (Yes) / No If Yes, what kinds?

a. Odor b. Taste c. Color d. Staining e. Other: lots of Sediment

12. Specific Well Construction details: unknown.

Depth of the well (feet): _____ Length of casing (feet): _____

Length of screen or open borehole (feet): _____ Well casing diameter (inches): _____

13. Is there a water treatment system on the well? Yes (No)

a. If Yes, What type of treatment?

Softener	Yes / No
Iron Removal	Yes / No
Turbidity Removal	Yes / No
pH Adjustment	Yes / No
Disinfection	Yes / No
Chlorinators	Yes / No
Acid Neutralizers	Yes / No
Other: _____	

b. Approximately when (month/year) was the above system installed? _____

c. Does the outside spigot bypass the treatment system? Yes / No

d. Briefly describe the history/results of any previous water sampling events:

_____

_____

_____

WELL INFORMATION FORM

Please complete this form by writing the answer in the space provided next to the question or by circling the most appropriate answer.

1. Date: October 8, 2008
2. Name: JOHN & SHARAN O'BRIEN
   Address: 2794 NORTH EAST ROAD, NORTH EAST, MD 21901
   Block: _____ Lot: _____
   Telephone #: (410) 658-2443
3. Is this home/business connected to the public water supple system? Yes / (No)
4. Is there a well on the property that is still operational? (Yes) / No
5. Identify resident relationship to the owner of the well? (please circle)
   (a. Self) b. Tenant c. Relative d. Other_____
6. What is the name and address of the owner of the well, if different than the resident?
   Name: _____
   Address: _____
   Telephone #: (___) ____ - _____
7. Number of people who live or work at this location on a regular basis: 4
   a. Use of well water: Drinking? (Yes) No
   Bathing? (Yes) No
   Washing clothes? (Yes) No
   Law/garden? (Yes) No
   Other _____
8. Date (month/year) well was installed: 03/2006
9. Does this well supply water for any other residences? Yes / (No)
   If Yes, how many? _____
10. Has this well ever been previously tested? (Yes) No (If No, skip to question 11)
    a. Is the well tested regularly? Yes / (No) If Yes, how often? _____
    b. When was the well most recently tested? 03/2008

c. What was the well tested for? (please circle)

(i. Bacteria) (ii. Volatile Organics)
(iii. Metals) (iv. Other: pH)

11. Have any problems with the water been noticed? Yes (No) If Yes, what kinds?

a. Odor b. Taste c. Color d. Staining e. Other: _____

12. Specific Well Construction details:

Depth of the well (feet): 200 Length of casing (feet): 70

Length of screen or open borehole (feet): 10 Well casing diameter (inches): 6

13. Is there a water treatment system on the well? Yes (No)

a. If Yes, What type of treatment?

Softener	Yes / No
Iron Removal	Yes / No
Turbidity Removal	Yes / No
pH Adjustment	Yes / No
Disinfection	Yes / No
Chlorinators	Yes / No
Acid Neutralizers	Yes / No
Other: _____	

b. Approximately when (month/year) was the above system installed? NO

c. Does the outside spigot bypass the treatment system? Yes (No)

d. Briefly describe the history/results of any previous water sampling events:

WELL WAS SAMPLED TO ENSURE ALL PARAMETERS WERE WITHIN SPECIFICATIONS PRIOR TO OUR PURCHASE OF THIS HOUSE AND PROPERTY IN MARCH OF 2008.

WELL INFORMATION FORM

Please complete this form by writing the answer in the space provided next to the question or by circling the most appropriate answer.

1. Date: 11/5/08
2. Name: David L. Ginski

   Address: 2802 North East Road, North East, MD 21901

   Block: _____ Lot: _____

   Telephone #: (410) 658 - 7728
3. Is this home/business connected to the public water supple system? Yes / (No)
4. Is there a well on the property that is still operational? (Yes) / No
5. Identify resident relationship to the owner of the well? (please circle)

   (a. Self) b. Tenant c. Relative d. Other_____
6. What is the name and address of the owner of the well, if different than the resident?

   Name: N/A

   Address: _____

   Telephone #: (___) ____ - _____
7. Number of people who live or work at this location on a regular basis: 4

   a. Use of well water:
   - Drinking? (Yes) / No
   - Bathing? (Yes) / No
   - Washing clothes? (Yes) / No
   - Law/garden? (Yes) / No
   - Other _____
8. Date (month/year) well was installed: 2006
9. Does this well supply water for any other residences? Yes / (No)

   If Yes, how many? _____
10. Has this well ever been previously tested? (Yes) / No (If No, skip to question 11)

    a. Is the well tested regularly? (Yes) / No If Yes, how often? Annually

    b. When was the well most recently tested? 2008

c. What was the well tested for? (please circle)

i. Bacteria ii. Volatile Organics

iii. Metals iv. Other: Petroleum

11. Have any problems with the water been noticed? Yes (No) If Yes, what kinds?

a. Odor b. Taste c. Color d. Staining e. Other: _____

12. Specific Well Construction details:

Depth of the well (feet): ? Length of casing (feet): ?

Length of screen or open borehole (feet): ? Well casing diameter (inches): ?

13. Is there a water treatment system on the well? Yes / (No)

a. If Yes, What type of treatment?

Softener	Yes / No
Iron Removal	Yes / No
Turbidity Removal	Yes / No
pH Adjustment	Yes / No
Disinfection	Yes / No
Chlorinators	Yes / No
Acid Neutralizers	Yes / No
Other: _____	

b. Approximately when (month/year) was the above system installed? N/A

c. Does the outside spigot bypass the treatment system? Yes / No

d. Briefly describe the history/results of any previous water sampling events:

? _____

_____

_____

WELL INFORMATION FORM

Please complete this form by writing the answer in the space provided next to the question or by circling the most appropriate answer.

1. Date: 9-30-08
2. Name: John FORD
   Address: 8825 NORTH EAST RD NORTH EAST MD 21901
   Block: _____ Lot: _____
   Telephone #: (410) 658 3100
3. Is this home/business connected to the public water supple system? Yes / (No)
4. Is there a well on the property that is still operational? (Yes) / No
5. Identify resident relationship to the owner of the well? (please circle)
   a. Self (b. Tenant) c. Relative d. Other_____
6. What is the name and address of the owner of the well, if different than the resident?
   Name: Rich Deverell
   Address: PO Box 186 Elkton MD 21922
   Telephone #: (___) _____ - _____
7. Number of people who live or work at this location on a regular basis: _____
   a. Use of well water:
      Drinking? (Yes) / No
      Bathing? Yes / (No)
      Washing clothes? Yes / (No)
      Law/garden? (Yes) / No
      Other _____
8. Date (month/year) well was installed: UNKNOWN
9. Does this well supply water for any other residences? (Yes) / No
   If Yes, how many? _____
10. Has this well ever been previously tested? UNKNOWN Yes / No (If No, skip to question 11)
    a. Is the well tested regularly? Yes / No If Yes, how often? UNKNOWN
    b. When was the well most recently tested? UNKNOWN

c. What was the well tested for? (please circle)

i. Bacteria ii. Volatile Organics

iii. Metals iv. Other: _____

11. Have any problems with the water been noticed? Yes / No If Yes, what kinds?

a. Odor b. Taste c. Color d. Staining e. Other: _____

12. Specific Well Construction details: UNKNOWN

Depth of the well (feet): _____ Length of casing (feet): _____

Length of screen or open borehole (feet): _____ Well casing diameter (inches): _____

13. Is there a water treatment system on the well? Yes / No UNKNOWN

a. If Yes, What type of treatment?

Softener	Yes / No
Iron Removal	Yes / No
Turbidity Removal	Yes / No
pH Adjustment	Yes / No
Disinfection	Yes / No
Chlorinators	Yes / No
Acid Neutralizers	Yes / No
Other: _____	

b. Approximately when (month/year) was the above system installed? UNKNOWN

c. Does the outside spigot bypass the treatment system? Yes / No

d. Briefly describe the history/results of any previous water sampling events:

_____

_____

_____

5977.130.01
B. MacPhail

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

December 19, 2008

Mr. Chandrakant K. Patel (Current Owner/Operator)
Mr. Pragnesh Patel
Calvert Country Store
2815 North East Road
North East MD 21901

Mr. Kenneth D. Thomas (Former Owner and Operator)
Alger Fuel, Inc./Alger Oil Company, Inc./Country Stores Inc.
559 Sylmar Road
Rising Sun MD 21911

RE: Requirement to Install Granular Activated Carbon (GAC) Filtration Systems
Case No. 1992-2616-CE; Notice of Violation NV-2004-038-*Addendum*
Calvert Citgo (Former Alger Country Store)
2815 North East Road, North East
Cecil County, Maryland
Facility No. 5678

Dear Messrs. Patel and Thomas:

On December 17, 2008, the Oil Control Program received results of the required off-site drinking water well sampling survey conducted in the vicinity of the above-referenced property. In November 2008, required off-site drinking water well samples were collected from all adjacent commercial and residential drinking water wells. All samples collected were below regulatory standards, with the exception of two samples that revealed the presence of methyl tertiary-butyl ether (MTBE) above the State's action level of 20 parts per billion (ppb) at 2794 North East Road (216 ppb) and 2802 North East Road (277 ppb).

The Department determined that Calvert Citgo (Former Alger Country Store) is the likely source of the MTBE impact. Based on the aforementioned findings, the Department hereby requires the following:

Request for GAC Filtration System and Monitoring:

1) No later than December 31, 2008, install and maintain a granular activated carbon (GAC) filtration system on the private drinking water wells located at 2794 and 2802 North East Road (*see enclosed fact sheet*).

2) No later than January 16, 2009, collect samples from the newly installed GAC systems. Samples must be collected pre-, mid-, and post-filtration. All samples collected must be analyzed for full-suite volatile organic compounds (VOCs), including fuel oxygenates, using EPA Method 524.2. Submit copies of all sample results to the property owner, the Cecil County Health Department, and the case manager, Mrs. Susan Bull.

3) No later than February 13, 2008, and on a **monthly** basis for three months, collect samples from the GAC system (pre-, mid-, and post-filtration) and analyze for full-suite VOCs, including fuel oxygenates, using EPA Method 524.2. Submit copies of all sample results to the property owner, the Cecil County Health Department, and the case manager. The Oil Control Program will evaluate these sampling results and determine an appropriate future sampling frequency for the GAC system.

Responsibility for GAC Filtration System:

Please note that if Calvert Citgo (Former Alger Country Store) fails to complete installation of the GAC filtration systems by December 31, 2008, the Department will assume control of mitigating impact to these off-site private wells. The Department has determined that environmental conditions at 2794 and 2802 North East Road warrant the installation, future sampling, and proper maintenance and operation of a GAC filtration system. Under Section § 4-405(c) of the Environment Article, Annotated Code of Maryland, the Department shall assume control of any discharge or spill situation when it determines that the responsible party is not acting promptly to remove the spill or is not undertaking removal or mitigation in a manner appropriate to control or rectify the conditions constituting the emergency or hazard involved.

Cost Recovery:

Pursuant to Sections 4-408 and §411(f) of the Environment Article, Annotated Code of Maryland, the cost of labor, equipment, operation, materials, and any other costs incurred in containment, cleanup, removal, and restoration work resulting from the discharge of oil, petroleum products and their by-products shall be reimbursed to the State by the person responsible for the discharge. As a potential responsible party (PRP) as defined under COMAR 26.10.02, Calvert Citgo (Former Alger Country Store) may be subject to legal sanctions by the Department for assuming the cost of installing the GAC filtration systems.

Your continued cooperation with this groundwater investigation is greatly appreciated. If you have any questions, please contact me at 410-537-3442 (email: hmeade@mde.state.md.us) or the case manager, Mrs. Susan Bull, at 410-537-3499 (email: sbull@mde.state.md.us).

Sincerely,

Herbert M. Meade, Administrator
Oil Control Program

SRB/nln
Enclosure
cc: Mr. and Mrs. O'Brien (Resident – 2794 North East Road)
Mr. David Ginski (Resident – 2802 North East Road)
Mr. James A. Johnson (Semmes, Bowen & Semmes)
Ms. Brenda McPhail (React Environmental Professional Services Group, Inc.)
Mr. Charles Smyser (Cecil County Health Department)
Mr. Thomas L. Walter
Mr. Herbert M. Meade
Mr. Horacio Tablada

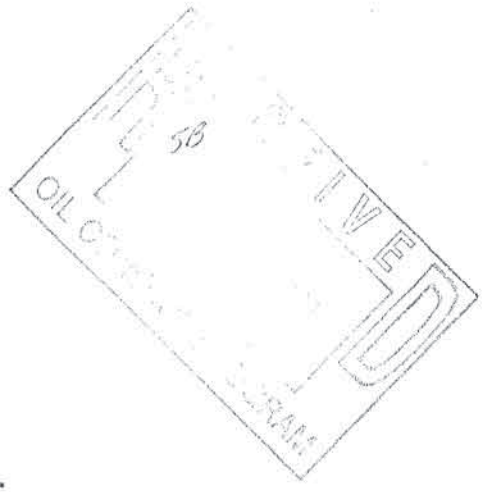
file copy

AEC

Advanced Environmental Concepts, Inc.

5292 Enterprise Street, Suite C Eldersburg, Maryland 21784 (410) 795-5955

Monitoring Well Gauging And Sampling Report



Calvert Country Store
2815 North East Rd
North East, MD 21901

MDE CASE# 1992-2616-CE

Prepared for:
Pragnesh Bhanustrasad L. Patel
2815 North East Rd
North East, MD 21901

December 30, 2008

Prepared by:

Stephanie Bramble

Staff Scientist
Advanced Environmental Concepts, Inc
702 Naylor Mill Rd
Salisbury, MD 21801
Office: 410-548-4011
Fax: 410-548-1510

Reviewed by:

Name: Joshua P. Winters

Company: Advanced Environmental Concepts, Inc.

Address: 5292 Enterprise Street, Suite C

City/State/Zip: Eldersburg, Maryland 21784

TABLE OF CONTENTS

INTRODUCTION

Purpose
The purpose of this Monitoring Well Sampling Event was to satisfy requirements of The Maryland Department of the Environment's (MDE's) Oil Control Program.

Scope of Services
Advanced Environmental Concepts, Inc. (AEC) is providing a scope of service which consists of the sampling of six (6) Monitoring Wells (MWs) on site. All samples were to be analyzed for Volatile Organic Chemicals (VOCs) and Total Petroleum Hydrocarbons (TPH). Additionally, groundwater flow direction was to be calculated.

Limitations
The scope of work is limited to the activities and results contained in this report. Industry standard hydrogeologic investigative procedures and protocol were used in order to complete the scope of work. The results are limited to the locations and data discussed in this report. Subsurface conditions may have changed as a function of time. No other warranty expressed or implied is made.

GROUNDWATER SAMPLING ACTVITIES

Monitoring Well Sampling Activities
On December 30, 2008 AEC personnel arrived on site to complete the scope of work which included the gauging and sampling of six (6) MWs located on site.

Depth to groundwater was recorded in each MW with the use of an electronic oil/water interface probe. The MWs were then purged with the use of a submersible pump. A representative groundwater sample was then collected with a disposable polyethylene bailer. Depth to groundwater levels ranged from 15.22 to 17.57 feet BGS. MW locations are shown on the site map located in Appendix A.

The groundwater samples collected from the MWs were then transported the laboratory on ice with a chain of custody record where they were to be analyzed for VOCs using EPA method 8260, and Total Petroleum Hydrocarbons-Gasoline Range Organics (TPH-GRO) and Total Petroleum Hydrocarbons-Diesel Range Organics (TPH-DRO) by EPA method 8015.

Monitoring pipes located in the underground storage tank (UST) field were gauged and found be dry.

Domestic Supply Well Sampling Activities
On December 30, 2008 a sample from the domestic supply well (DSW) that services the site was collected and submitted for chemical analysis. The DSW sample was collected by an MDE certified domestic supply sampler. The DSW sample was delivered on ice with a chain of custody record to Caliber Analytical Services for analysis by EPA Method 524.2 for VOCs in drinking water.

EVALUATION AND PRESENTATION OF RESULTS

Groundwater Flow Calculation

The average elevation above mean seal level, 420 ft, was used as the "height of the instrument" in the top of casing elevation calculation. These measurements were then used to create groundwater elevation contours. Groundwater elevation contours depict groundwater flow to be in a southeasterly direction. A groundwater elevation contour map can be found in Attachment A.

Historical Groundwater Gauging Measurements
Calvert Citgo

Monitoring Well #	Date	Depth To Groundwater (ft)	Total Depth	Top of Casing Elevation (ft)	Groundwater Elevation (ft)
MW-1	2/7/2008	17.09	28.3	415.03	397.94
	3/12/2008	15.89			399.14
	8/14/2008	17.29			397.74
	12/30/2008	**17.28**			**397.75**
MW-2	2/7/2008	16.15	32.14	414.08	397.92
	3/12/2008	16.76			397.32
	8/14/2008	17.36			396.72
	12/30/2008	**17.04**			**397.04**
MW-3	2/7/2008	13.91	31.25	414.78	400.67
	3/12/2008	13.61			401.17
	8/14/2008	16.67			398.11
	12/30/2008	**15.22**			**399.56**
MW-5	2/7/2008	17.00	30.00	415.46	398.46
	3/12/2008	15.68			399.78
	8/14/2008	17.90			397.56
	12/30/2008	**17.09**			**398.37**
MW-6	2/7/2008	17.34	30.42	415.06	397.72
	03/12/08	16.24			398.82
	8/14/2008	17.85			397.21
	12/30/2008	**17.57**			**397.49**
MW-7	02/07/08	NA	29.25	416.34	NA
	03/12/08	15.59			400.75
	8/14/2008	17.62			398.72
	12/30/2008	**16.18**			**400.16**

Analytical Data

Monitoring Well Sampling Results

Detectable concentrations of dissolved phase petroleum hydrocarbons were observed in the groundwater samples collected from MW-1, MW-2, MW-3, MW-5 and MW-7. No detectable concentrations of dissolved phase petroleum hydrocarbons were observed in the sample collected from MW-6. MW-5 and MW-7 contained the highest concentrations of BTEX and TPH-GRO. MW-5 contained 41,230 ug/L of total BTEX and 57,600 of ug/L TPH-GRO. MW-7 contained 43,032 of ug/L total BTEX and 55,400 ug/L of TPH-GRO. Levels of BTEX and TPH-GRO contamination have decreased in MW-1, MW-2, MW-3, MW-6 and MW-7. A quick reference analytical table is available in Appendix B. Contaminant Isoconcentration Maps are available in Appendix A. A Report of Analysis and Chain of Custody can be found in Appendix C.

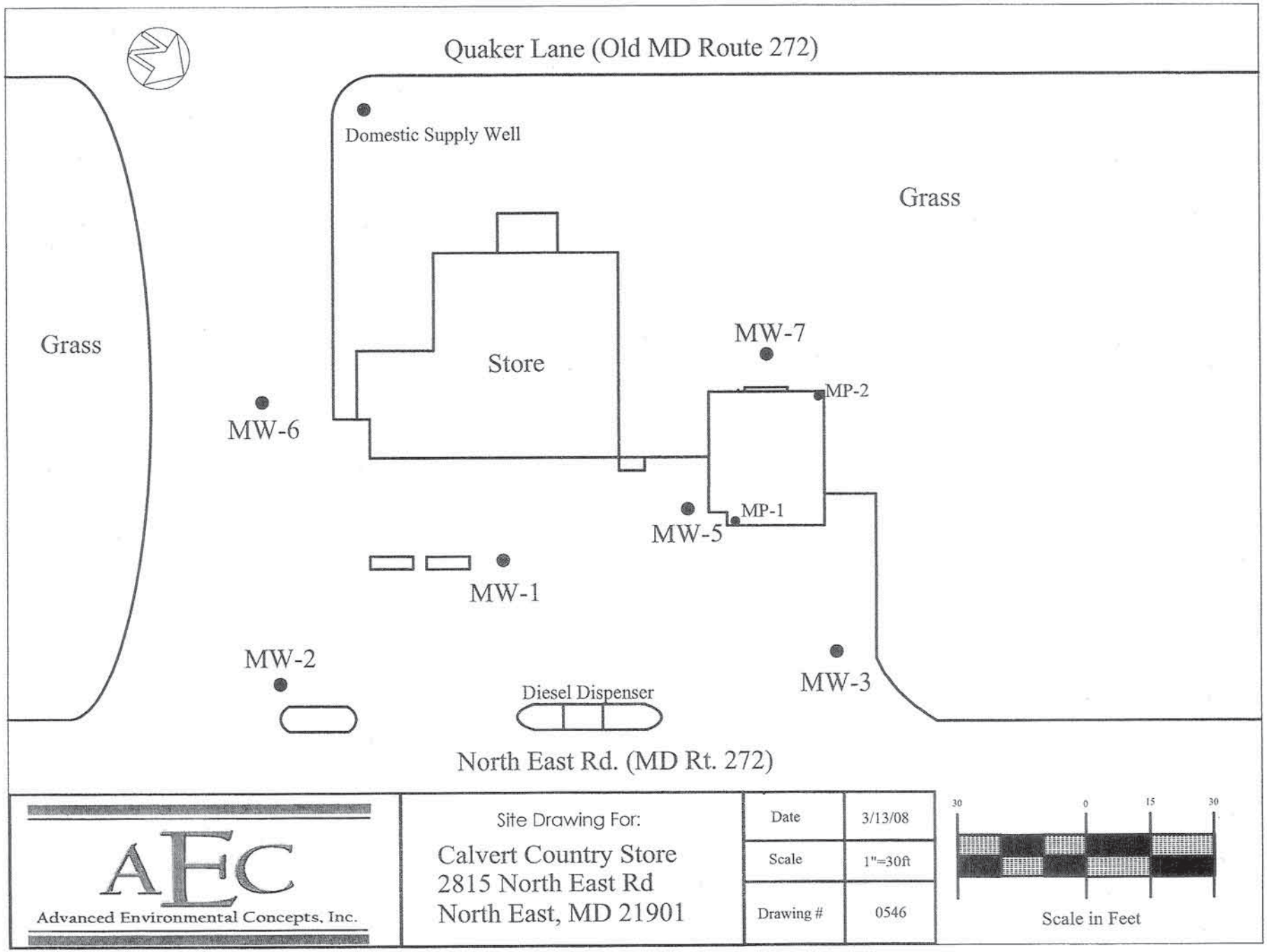
Domestic Supply Well Sampling Results

A granular activated carbon (GAC) unit is in service at the site and is used to treat groundwater from DSW prior use. The pre-treatment sample collected from the DSW was found to contain elevated levels of VOCs. The post treatment sample collected from the DSW was found to be non-detect for VOCs. The DSW was analyzed for VOCs using EPA method 524.2. Method detectable concentrations of VOCs were not observed in the sample collected from the sites DSW. A Report of Analysis and Chain of Custody can be found in Appendix C. A quick reference analytical table is available in Appendix B.

APPENDICES

APPENDIX A

Figures and Drawing

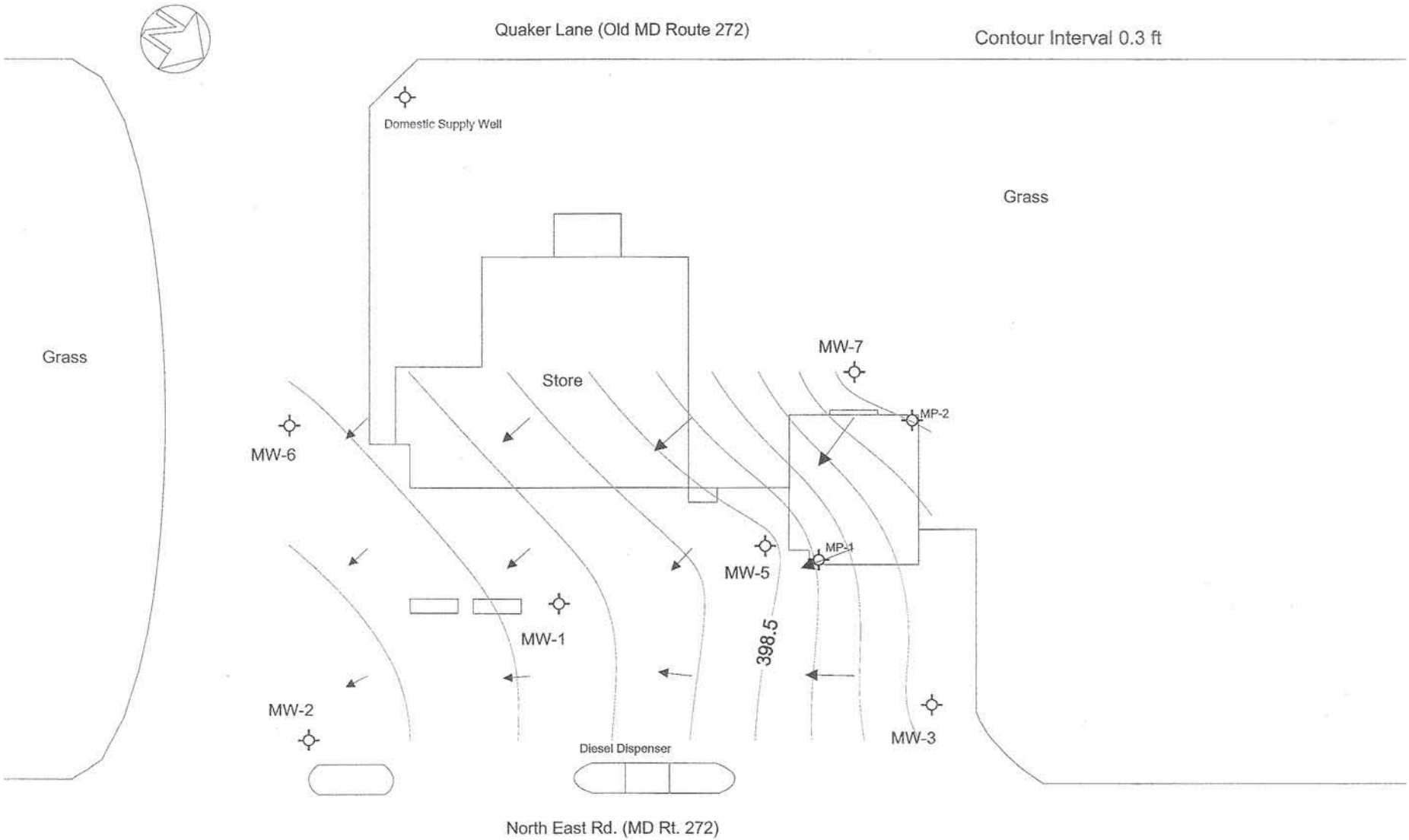


AEC
Advanced Environmental Concepts, Inc.

Site Drawing For:
Calvert Country Store
2815 North East Rd
North East, MD 21901

Date	3/13/08
Scale	1"=30ft
Drawing #	0546

30 0 15 30
Scale in Feet



AEC
Advanced Environmental Concepts, Inc.

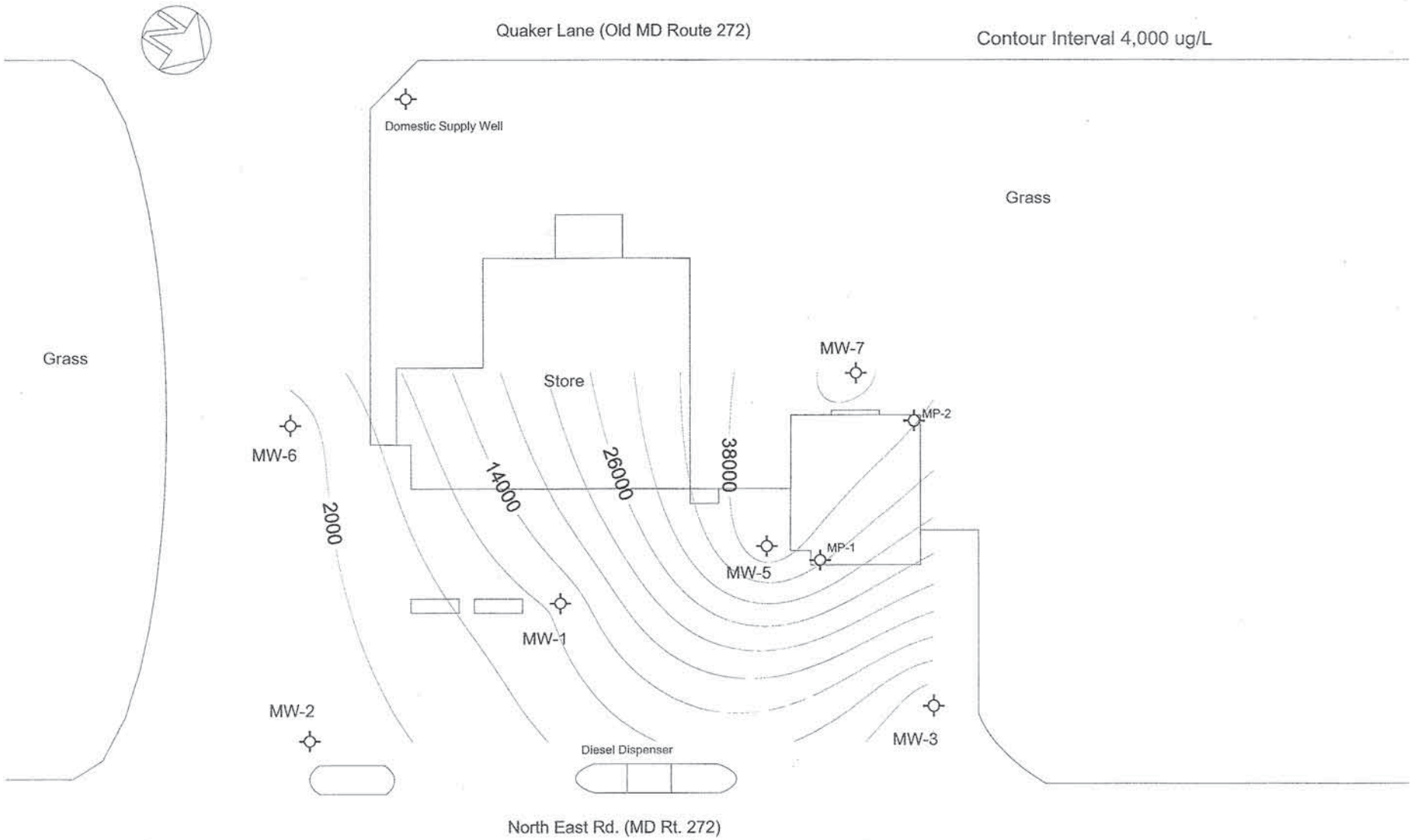
Site Drawing For:

Groundwater Contour Map
Calvert Country Store
2815 North East Rd
North East, MD 21901

Date	12/30/2008
Scale	1"=30ft
Drawing #	0546

30 0 15 30

Scale in Feet



AEC
Advanced Environmental Concepts, Inc.

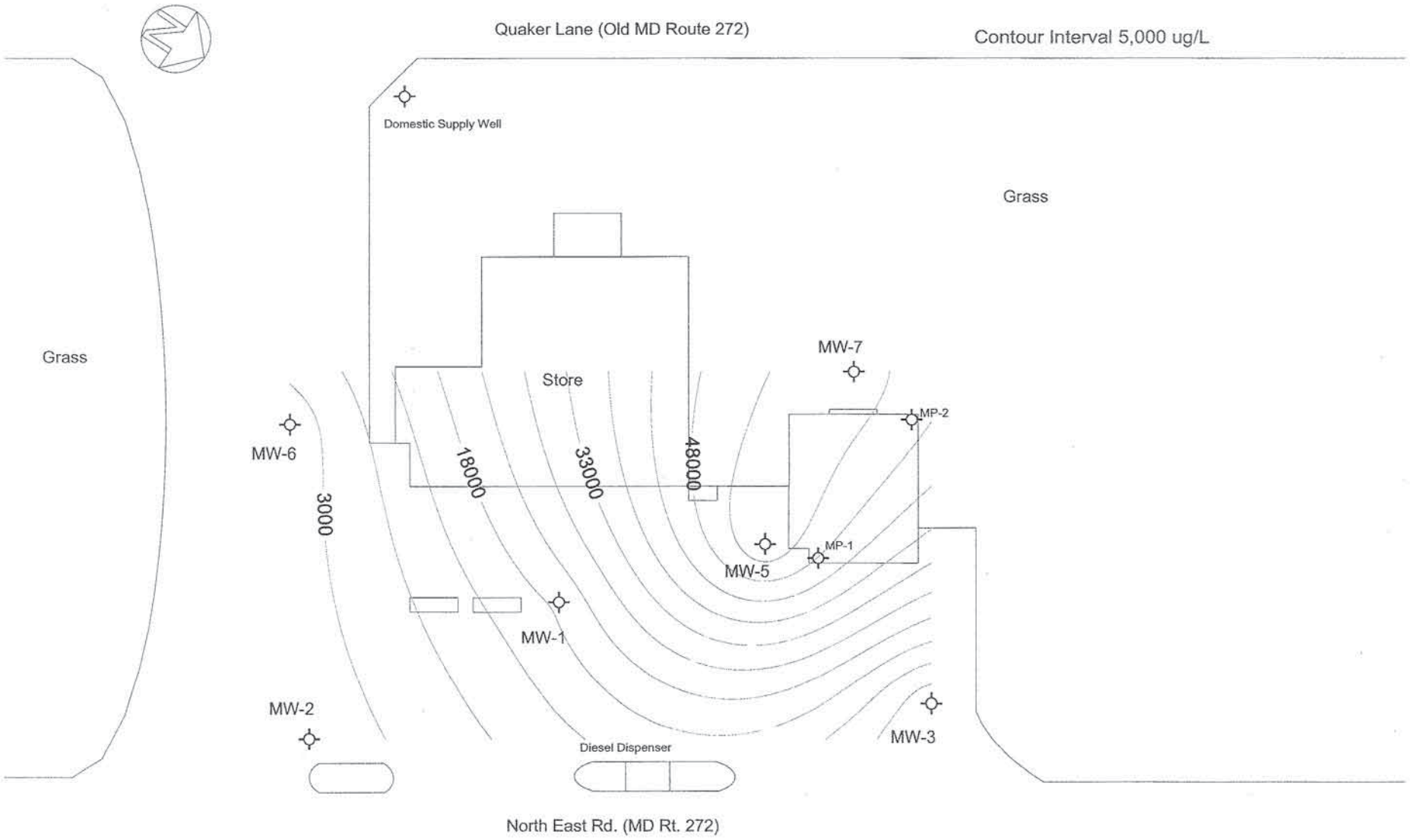
Site Drawing For:

BTEX Isoconcentration Map
Calvert Country Store
2815 North East Rd
North East, MD 21901

Date	12/30/2008
Scale	1"=30ft
Drawing #	0546

30 0 15 30

Scale in Feet



AEC
Advanced Environmental Concepts, Inc.

Site Drawing For:

TPH-GRO Isoconcentration Map
Calvert Country Store
2815 North East Rd
North East, MD 21901

Date	12/30/2008
Scale	1"=30ft
Drawing #	0546

30 0 15 30

Scale In Feet

APPENDIX B

Tables

Quick Reference Analytical Table
Calvert Citgo
2815 North East Road, North East, Maryland
Water Sample Data

Sample ID	Date	DTGW	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	MTBE	Naphthalene	TPH GRO
MW-1	3/21/2008	15.89	5840	1720	560	2320	10440	ND	348	N/A
	8/14/2008	17.29	16120	14280	2120	9320	41840	ND	198	55640
	12/30/2008	**17.28**	**7440**	**92.1**	**880**	**2429.6**	**10842**	**ND**	**201**	**18920**
MW-2	3/21/2008	16.76	ND	ND	ND	ND	ND	ND	ND	N/A
	8/14/2008	17.36	6.76	21.9	14.4	ND	43	11.4	ND	159
	12/30/2008	**17.04**	**9.37**	**ND**	**ND**	**ND**	**9**	**17.1**	**ND**	**ND**
MW-3	3/21/2008	13.61	27.7	3920	1020	4320	9288	7.74	520	N/A
	8/14/2008	16.67	17.6	2160	508	2560	5246	ND	78.4	9840
	12/30/2008	**15.22**	**5.61**	**800**	**216**	**1166**	**2188**	**ND**	**76.1**	**3520**
MW-5	3/21/2008	15.68	215	17200	1920	10240	29575	31.7	840	N/A
	8/14/2008	17.90	576	18520	2800	11140	33036	ND	304	84200
	12/30/2008	**17.09**	**1360**	**27840**	**1630**	**10400**	**41230**	**ND**	**344**	**57600**
MW-6	3/21/2008	16.24	ND	ND	ND	ND	ND	5.34	5.72	N/A
	8/14/2008	17.85	ND	28.1	ND	22.14	50	ND	ND	121
	12/30/2008	**17.57**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
MW-7	3/21/2008	15.59	1350	36000	2560	112	40022	ND	800	N/A
	8/14/2008	17.62	1180	32160	1760	9280	44380	ND	157	59100
	12/30/2008	**16.18**	**952**	**29600**	**1840**	**10640**	**43032**	**ND**	**320**	**55400**
DSW	3/21/2008	N/A	ND	ND	ND	ND	ND	9.1	ND	N/A
	8/14/2008	N/A	ND	ND	ND	ND	ND	49.2	ND	ND
	12/30/2008									
	Pre	**NA**	**ND**	**ND**	**ND**	**ND**	**ND**	**87.1**	**ND**	**ND**
	Post	**N/A**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

ND- Non Detectable

N/A- Not Applicable

Concentrations Represented in ug/L- micro grams per liter

APPENDIX C

Report of Analysis and Chain of Custody

ADVANCED ENVIRONMENTAL CONCEPTS, INC.

Laboratory Services 5292 Enterprise Street Suite C, Eldersburg, MD 21784 Phone 410-795-5955 Fax 410-795-9459

Certificate of Analysis

Sample Identification:	**MW-1**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**water**	**Client Identification:**	**PRAGNESH PATEL**
Sample Date:	**12/30/2008**	**Client Telephone:**	
Date Received:	**1/7/2008**	**Client Fax:**	
Extraction Date:	**1/7/2008**	**Analyst:**	**MM**
Analysis Date:	**1/11/2009**	**Lab File:**	**11109.D39**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
Dichlorodifluoromethane	5	ug/L	ND	EPA 8260
Chloromethane	5	ug/L	ND	EPA 8260
Vinyl Chloride	5	ug/L	ND	EPA 8260
Bromomethane	5	ug/L	ND	EPA 8260
Chloroethane	5	ug/L	ND	EPA 8260
Trichlorofluoromethane	5	ug/L	ND	EPA 8260
1,1-Dichloroethene	5	ug/L	ND	EPA 8260
tert-Butyl Alcohol (TBA)	50	ug/L	ND	EPA 8260
Methylene Chloride	5	ug/L	ND	EPA 8260
trans-1,2-Dichloroethene	5	ug/L	ND	EPA 8260
Methyl tert-Butyl Ether (MtBE)	5	ug/L	ND	EPA 8260
1,1-Dichloroethane	5	ug/L	ND	EPA 8260
Diisopropyl Ether (DIPE)	5	ug/L	ND	EPA 8260
cis-1,2-Dichloroethene	5	ug/L	ND	EPA 8260
Bromochloromethane	5	ug/L	ND	EPA 8260
Chloroform	5	ug/L	ND	EPA 8260
2,2-Dichloropropane	5	ug/L	ND	EPA 8260
Ethyl tert-Butyl Ether (EtBE)	5	ug/L	ND	EPA 8260
1,2-Dichloroethane	5	ug/L	ND	EPA 8260
tert-Amyl Alcohol (TAA)	50	ug/L	3730	EPA 8260
1,1,1-Trichloroethane	5	ug/L	ND	EPA 8260
1,1-Dichloropropene	5	ug/L	ND	EPA 8260
Carbon tetrachloride	5	ug/L	ND	EPA 8260
Benzene	5	ug/L	7440	EPA 8260
tert-Amyl Methyl Ether (TAME)	5	ug/L	ND	EPA 8260
Dibromomethane	5	ug/L	ND	EPA 8260
1,2-Dichloropropane	5	ug/L	ND	EPA 8260
Trichloroethene	5	ug/L	ND	EPA 8260
Bromodichloromethane	5	ug/L	ND	EPA 8260
tert-Amyl Ethyl Ether (TAEE)	5	ug/L	ND	EPA 8260
cis-1,3-Dichloropropene	5	ug/L	ND	EPA 8260
trans-1,3-Dichloropropene	5	ug/L	ND	EPA 8260
1,1,2-Trichloroethane	5	ug/L	ND	EPA 8260
Toluene	5	ug/L	92.1	EPA 8260
1,3-Dichloropropane	5	ug/L	ND	EPA 8260
Dibromochloromethane	5	ug/L	ND	EPA 8260
1,2-Dibromomethane	5	ug/L	ND	EPA 8260
Tetrachloroethene	5	ug/L	ND	EPA 8260
1,1,1,2-Tetrachloroethene	5	ug/L	ND	EPA 8260
Chlorobenzene	5	ug/L	ND	EPA 8260
Ethylbenzene	5	ug/L	880	EPA 8260

ADVANCED ENVIRONMENTAL CONCEPTS, INC.

Laboratory Services 5292 Enterprise Street Suite C, Eldersburg, MD 21784 Phone 410-795-5955 Fax 410-795-9459

Certificate of Analysis

Sample Identification:	**MW-1**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**water**	**Client Identification:**	**PRAGNESH PATEL**
Sample Date:	**12/30/2008**	**Client Telephone:**	
Date Received:	**1/7/2008**	**Client Fax:**	
Extraction Date:	**1/7/2008**	**Analyst:**	**MM**
Analysis Date:	**1/11/2009**	**Lab File:**	**11109.D39**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
m&p-Xylene	5	ug/L	2360	EPA 8260
Bromoform	5	ug/L	ND	EPA 8260
Styrene	5	ug/L	ND	EPA 8260
o-Xylene	5	ug/L	69.6	EPA 8260
1,1,2,2-Tetrachloroethane	5	ug/L	ND	EPA 8260
1,2,3-Trichloropropane	5	ug/L	ND	EPA 8260
Isopropylbenzene	5	ug/L	38.4	EPA 8260
Bromobenzene	5	ug/L	ND	EPA 8260
n-Propylbenzene	5	ug/L	78.4	EPA 8260
2-Chlorotoluene	5	ug/L	ND	EPA 8260
4-Chlorotoluene	5	ug/L	ND	EPA 8260
1,3,5-Trimethylbenzene	5	ug/L	124	EPA 8260
tert-Butylbenzene	5	ug/L	ND	EPA 8260
1,2,4-Trimethylbenzene	5	ug/L	680	EPA 8260
sec-Butylbenzene	5	ug/L	ND	EPA 8260
1,3-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,4-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,2-Dichlorobenzene	5	ug/L	ND	EPA 8260
p-iso-Propyltoluene	5	ug/L	ND	EPA 8260
n-Butylbenzene	5	ug/L	ND	EPA 8260
1,2-Dibromo-3-chloropropane	5	ug/L	ND	EPA 8260
1,2,4-Trichlorobenzene	5	ug/L	ND	EPA 8260
Naphthalene	5	ug/L	201	EPA 8260
Hexachlorobutadiene	5	ug/L	ND	EPA 8260
1,2,3-Trichlorobenzene	5	ug/L	ND	EPA 8260
TPH GRO	100	ug/L	18920	EPA 8015B
TPH DRO	500	ug/L	ND	EPA 8015B

SURROGATE SPIKE

1,2-Dichloroethane-d4	%	100	EPA 8260
Dibromofluoromethane	%	102	EPA 8260
TFT	%	103	EPA 8015B
Toluene-d8	%	98	EPA 8260
Bromofluorobenzene	%	97	EPA 8260

ADVANCED ENVIRONMENTAL CONCEPTS, INC.

Laboratory Services 5292 Enterprise Street Suite C, Eldersburg, MD 21784 Phone 410-795-5955 Fax 410-795-9459

Certificate of Analysis

Sample Identification:	MW-2	**Project Identification:**	CALVERT CITGO
MATRIX:	water	**Client Identification:**	PRAGNESH PATEL
Sample Date:	12/30/2008	**Client Telephone:**	
Date Received:	1/7/2008	**Client Fax:**	
Extraction Date:	1/7/2008	**Analyst:**	MM
Analysis Date:	1/11/2009	**Lab File:**	11109.D41

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
Dichlorodifluoromethane	5	ug/L	ND	EPA 8260
Chloromethane	5	ug/L	ND	EPA 8260
Vinyl Chloride	5	ug/L	ND	EPA 8260
Bromomethane	5	ug/L	ND	EPA 8260
Chloroethane	5	ug/L	ND	EPA 8260
Trichlorofluoromethane	5	ug/L	ND	EPA 8260
1,1-Dichloroethene	5	ug/L	ND	EPA 8260
tert-Butyl Alcohol (TBA)	50	ug/L	ND	EPA 8260
Methylene Chloride	5	ug/L	ND	EPA 8260
trans-1,2-Dichloroethene	5	ug/L	ND	EPA 8260
Methyl tert-Butyl Ether (MtBE)	5	ug/L	17.1	EPA 8260
1,1-Dichloroethane	5	ug/L	ND	EPA 8260
Diisopropyl Ether (DIPE)	5	ug/L	ND	EPA 8260
cis-1,2-Dichloroethene	5	ug/L	ND	EPA 8260
Bromochloromethane	5	ug/L	ND	EPA 8260
Chloroform	5	ug/L	ND	EPA 8260
2,2-Dichloropropane	5	ug/L	ND	EPA 8260
Ethyl tert-Butyl Ether (EtBE)	5	ug/L	ND	EPA 8260
1,2-Dichloroethane	5	ug/L	ND	EPA 8260
tert-Amyl Alcohol (TAA)	50	ug/L	ND	EPA 8260
1,1,1-Trichloroethane	5	ug/L	ND	EPA 8260
1,1-Dichloropropene	5	ug/L	ND	EPA 8260
Carbon tetrachloride	5	ug/L	ND	EPA 8260
Benzene	5	ug/L	9.37	EPA 8260
tert-Amyl Methyl Ether (TAME)	5	ug/L	ND	EPA 8260
Dibromomethane	5	ug/L	ND	EPA 8260
1,2-Dichloropropane	5	ug/L	ND	EPA 8260
Trichloroethene	5	ug/L	ND	EPA 8260
Bromodichloromethane	5	ug/L	ND	EPA 8260
tert-Amyl Ethyl Ether (TAEE)	5	ug/L	ND	EPA 8260
cis-1,3-Dichloropropene	5	ug/L	ND	EPA 8260
trans-1,3-Dichloropropene	5	ug/L	ND	EPA 8260
1,1,2-Trichloroethane	5	ug/L	ND	EPA 8260
Toluene	5	ug/L	ND	EPA 8260
1,3-Dichloropropane	5	ug/L	ND	EPA 8260
Dibromochloromethane	5	ug/L	ND	EPA 8260
1,2-Dibromomethane	5	ug/L	ND	EPA 8260
Tetrachloroethene	5	ug/L	ND	EPA 8260
1,1,1,2-Tetrachloroethene	5	ug/L	ND	EPA 8260
Chlorobenzene	5	ug/L	ND	EPA 8260
Ethylbenzene	5	ug/L	ND	EPA 8260

ADVANCED ENVIRONMENTAL CONCEPTS, INC.

Laboratory Services 5292 Enterprise Street Suite C, Eldersburg, MD 21784 Phone 410-795-5955 Fax 410-795-9459

Certificate of Analysis

Sample Identification:	**MW-2**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**water**	**Client Identification:**	**PRAGNESH PATEL**
Sample Date:	**12/30/2008**	**Client Telephone:**	
Date Received:	**1/7/2008**	**Client Fax:**	
Extraction Date:	**1/7/2008**	**Analyst:**	**MM**
Analysis Date:	**1/11/2009**	**Lab File:**	**11109.D41**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
m&p-Xylene	5	ug/L	ND	EPA 8260
Bromoform	5	ug/L	ND	EPA 8260
Styrene	5	ug/L	ND	EPA 8260
o-Xylene	5	ug/L	ND	EPA 8260
1,1,2,2-Tetrachloroethane	5	ug/L	ND	EPA 8260
1,2,3-Trichloropropane	5	ug/L	ND	EPA 8260
Isopropylbenzene	5	ug/L	ND	EPA 8260
Bromobenzene	5	ug/L	ND	EPA 8260
n-Propylbenzene	5	ug/L	ND	EPA 8260
2-Chlorotoluene	5	ug/L	ND	EPA 8260
4-Chlorotoluene	5	ug/L	ND	EPA 8260
1,3,5-Trimethylbenzene	5	ug/L	ND	EPA 8260
tert-Butylbenzene	5	ug/L	ND	EPA 8260
1,2,4-Trimethylbenzene	5	ug/L	ND	EPA 8260
sec-Butylbenzene	5	ug/L	ND	EPA 8260
1,3-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,4-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,2-Dichlorobenzene	5	ug/L	ND	EPA 8260
p-iso-Propyltoluene	5	ug/L	ND	EPA 8260
n-Butylbenzene	5	ug/L	ND	EPA 8260
1,2-Dibromo-3-chloropropane	5	ug/L	ND	EPA 8260
1,2,4-Trichlorobenzene	5	ug/L	ND	EPA 8260
Naphthalene	5	ug/L	ND	EPA 8260
Hexachlorobutadiene	5	ug/L	ND	EPA 8260
1,2,3-Trichlorobenzene	5	ug/L	ND	EPA 8260
TPH GRO	100	ug/L	ND	EPA 8015B
TPH DRO	500	ug/L	ND	EPA 8015B

SURROGATE SPIKE

1,2-Dichloroethane-d4	%	101	EPA 8260
Dibromofluoromethane	%	104	EPA 8260
TFT	%	103	EPA 8015B
Toluene-d8	%	99	EPA 8260
Bromofluorobenzene	%	97	EPA 8260

ADVANCED ENVIRONMENTAL CONCEPTS, INC.

Laboratory Services 5292 Enterprise Street Suite C, Eldersburg, MD 21784 Phone 410-795-5955 Fax 410-795-9459

Certificate of Analysis

Sample Identification:	**MW-3**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**water**	**Client Identification:**	**PRAGNESH PATEL**
Sample Date:	**12/30/2008**	**Client Telephone:**	
Date Received:	**1/7/2008**	**Client Fax:**	
Extraction Date:	**1/7/2008**	**Analyst:**	**MM**
Analysis Date:	**1/11/2009**	**Lab File:**	**11109.D37**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
Dichlorodifluoromethane	5	ug/L	ND	EPA 8260
Chloromethane	5	ug/L	ND	EPA 8260
Vinyl Chloride	5	ug/L	ND	EPA 8260
Bromomethane	5	ug/L	ND	EPA 8260
Chloroethane	5	ug/L	ND	EPA 8260
Trichlorofluoromethane	5	ug/L	ND	EPA 8260
1,1-Dichloroethene	5	ug/L	ND	EPA 8260
tert-Butyl Alcohol (TBA)	50	ug/L	ND	EPA 8260
Methylene Chloride	5	ug/L	ND	EPA 8260
trans-1,2-Dichloroethene	5	ug/L	ND	EPA 8260
Methyl tert-Butyl Ether (MtBE)	5	ug/L	ND	EPA 8260
1,1-Dichloroethane	5	ug/L	ND	EPA 8260
Diisopropyl Ether (DIPE)	5	ug/L	ND	EPA 8260
cis-1,2-Dichloroethene	5	ug/L	ND	EPA 8260
Bromochloromethane	5	ug/L	ND	EPA 8260
Chloroform	5	ug/L	ND	EPA 8260
2,2-Dichloropropane	5	ug/L	ND	EPA 8260
Ethyl tert-Butyl Ether (EtBE)	5	ug/L	ND	EPA 8260
1,2-Dichloroethane	5	ug/L	ND	EPA 8260
tert-Amyl Alcohol (TAA)	50	ug/L	ND	EPA 8260
1,1,1-Trichloroethane	5	ug/L	ND	EPA 8260
1,1-Dichloropropene	5	ug/L	ND	EPA 8260
Carbon tetrachloride	5	ug/L	ND	EPA 8260
Benzene	5	ug/L	5.61	EPA 8260
tert-Amyl Methyl Ether (TAME)	5	ug/L	ND	EPA 8260
Dibromomethane	5	ug/L	ND	EPA 8260
1,2-Dichloropropane	5	ug/L	ND	EPA 8260
Trichloroethene	5	ug/L	ND	EPA 8260
Bromodichloromethane	5	ug/L	ND	EPA 8260
tert-Amyl Ethyl Ether (TAEE)	5	ug/L	ND	EPA 8260
cis-1,3-Dichloropropene	5	ug/L	ND	EPA 8260
trans-1,3-Dichloropropene	5	ug/L	ND	EPA 8260
1,1,2-Trichloroethane	5	ug/L	ND	EPA 8260
Toluene	5	ug/L	800	EPA 8260
1,3-Dichloropropane	5	ug/L	ND	EPA 8260
Dibromochloromethane	5	ug/L	ND	EPA 8260
1,2-Dibromomethane	5	ug/L	ND	EPA 8260
Tetrachloroethene	5	ug/L	ND	EPA 8260
1,1,1,2-Tetrachloroethene	5	ug/L	ND	EPA 8260
Chlorobenzene	5	ug/L	ND	EPA 8260
Ethylbenzene	5	ug/L	216	EPA 8260

ADVANCED ENVIRONMENTAL CONCEPTS, INC.

Laboratory Services 5292 Enterprise Street Suite C, Eldersburg, MD 21784 Phone 410-795-5955 Fax 410-795-9459

Certificate of Analysis

Sample Identification:	MW-3	**Project Identification:**	CALVERT CITGO
MATRIX:	water	**Client Identification:**	PRAGNESH PATEL
Sample Date:	12/30/2008	**Client Telephone:**	
Date Received:	1/7/2008	**Client Fax:**	
Extraction Date:	1/7/2008	**Analyst:**	MM
Analysis Date:	1/11/2009	**Lab File:**	11109.D37

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
m&p-Xylene	5	ug/L	840	EPA 8260
Bromoform	5	ug/L	ND	EPA 8260
Styrene	5	ug/L	ND	EPA 8260
o-Xylene	5	ug/L	326	EPA 8260
1,1,2,2-Tetrachloroethane	5	ug/L	ND	EPA 8260
1,2,3-Trichloropropane	5	ug/L	ND	EPA 8260
Isopropylbenzene	5	ug/L	ND	EPA 8260
Bromobenzene	5	ug/L	ND	EPA 8260
n-Propylbenzene	5	ug/L	ND	EPA 8260
2-Chlorotoluene	5	ug/L	ND	EPA 8260
4-Chlorotoluene	5	ug/L	ND	EPA 8260
1,3,5-Trimethylbenzene	5	ug/L	48.2	EPA 8260
tert-Butylbenzene	5	ug/L	ND	EPA 8260
1,2,4-Trimethylbenzene	5	ug/L	184	EPA 8260
sec-Butylbenzene	5	ug/L	ND	EPA 8260
1,3-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,4-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,2-Dichlorobenzene	5	ug/L	ND	EPA 8260
p-iso-Propyltoluene	5	ug/L	ND	EPA 8260
n-Butylbenzene	5	ug/L	ND	EPA 8260
1,2-Dibromo-3-chloropropane	5	ug/L	ND	EPA 8260
1,2,4-Trichlorobenzene	5	ug/L	ND	EPA 8260
Naphthalene	5	ug/L	76.1	EPA 8260
Hexachlorobutadiene	5	ug/L	ND	EPA 8260
1,2,3-Trichlorobenzene	5	ug/L	ND	EPA 8260
TPH GRO	100	ug/L	3520	EPA 8015B
TPH DRO	500	ug/L	ND	EPA 8015B
SURROGATE SPIKE				
1,2-Dichloroethane-d4		%	102	EPA 8260
Dibromofluoromethane		%	104	EPA 8260
TFT		%	103	EPA 8015B
Toluene-d8		%	98	EPA 8260
Bromofluorobenzene		%	95	EPA 8260

ADVANCED ENVIRONMENTAL CONCEPTS, INC.

Laboratory Services 5292 Enterprise Street Suite C, Eldersburg, MD 21784 Phone 410-795-5955 Fax 410-795-9459

Certificate of Analysis

Sample Identification:	**MW-5**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**water**	**Client Identification:**	**PRAGNESH PATEL**
Sample Date:	**12/30/2008**	**Client Telephone:**	
Date Received:	**1/7/2008**	**Client Fax:**	
Extraction Date:	**1/7/2008**	**Analyst:**	**MM**
Analysis Date:	**1/11/2009**	**Lab File:**	**11109.D38**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
Dichlorodifluoromethane	5	ug/L	ND	EPA 8260
Chloromethane	5	ug/L	ND	EPA 8260
Vinyl Chloride	5	ug/L	ND	EPA 8260
Bromomethane	5	ug/L	ND	EPA 8260
Chloroethane	5	ug/L	ND	EPA 8260
Trichlorofluoromethane	5	ug/L	ND	EPA 8260
1,1-Dichloroethene	5	ug/L	ND	EPA 8260
tert-Butyl Alcohol (TBA)	50	ug/L	ND	EPA 8260
Methylene Chloride	5	ug/L	ND	EPA 8260
trans-1,2-Dichloroethene	5	ug/L	ND	EPA 8260
Methyl tert-Butyl Ether (MtBE)	5	ug/L	ND	EPA 8260
1,1-Dichloroethane	5	ug/L	ND	EPA 8260
Diisopropyl Ether (DIPE)	5	ug/L	ND	EPA 8260
cis-1,2-Dichloroethene	5	ug/L	ND	EPA 8260
Bromochloromethane	5	ug/L	ND	EPA 8260
Chloroform	5	ug/L	ND	EPA 8260
2,2-Dichloropropane	5	ug/L	ND	EPA 8260
Ethyl tert-Butyl Ether (EtBE)	5	ug/L	ND	EPA 8260
1,2-Dichloroethane	5	ug/L	ND	EPA 8260
tert-Amyl Alcohol (TAA)	50	ug/L	ND	EPA 8260
1,1,1-Trichloroethane	5	ug/L	ND	EPA 8260
1,1-Dichloropropene	5	ug/L	ND	EPA 8260
Carbon tetrachloride	5	ug/L	ND	EPA 8260
Benzene	5	ug/L	1360	EPA 8260
tert-Amyl Methyl Ether (TAME)	5	ug/L	ND	EPA 8260
Dibromomethane	5	ug/L	ND	EPA 8260
1,2-Dichloropropane	5	ug/L	ND	EPA 8260
Trichloroethene	5	ug/L	ND	EPA 8260
Bromodichloromethane	5	ug/L	ND	EPA 8260
tert-Amyl Ethyl Ether (TAEE)	5	ug/L	ND	EPA 8260
cis-1,3-Dichloropropene	5	ug/L	ND	EPA 8260
trans-1,3-Dichloropropene	5	ug/L	ND	EPA 8260
1,1,2-Trichloroethane	5	ug/L	ND	EPA 8260
Toluene	5	ug/L	27840	EPA 8260
1,3-Dichloropropane	5	ug/L	ND	EPA 8260
Dibromochloromethane	5	ug/L	ND	EPA 8260
1,2-Dibromomethane	5	ug/L	ND	EPA 8260
Tetrachloroethene	5	ug/L	ND	EPA 8260
1,1,1,2-Tetrachloroethene	5	ug/L	ND	EPA 8260
Chlorobenzene	5	ug/L	ND	EPA 8260
Ethylbenzene	5	ug/L	1630	EPA 8260

ADVANCED ENVIRONMENTAL CONCEPTS, INC.

Laboratory Services 5292 Enterprise Street Suite C, Eldersburg, MD 21784 Phone 410-795-5955 Fax 410-795-9459

Certificate of Analysis

Sample Identification:	**MW-5**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**water**	**Client Identification:**	**PRAGNESH PATEL**
Sample Date:	**12/30/2008**	**Client Telephone:**	
Date Received:	**1/7/2008**	**Client Fax:**	
Extraction Date:	**1/7/2008**	**Analyst:**	**MM**
Analysis Date:	**1/11/2009**	**Lab File:**	**11109.D38**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
m&p-Xylene	5	ug/L	6960	EPA 8260
Bromoform	5	ug/L	ND	EPA 8260
Styrene	5	ug/L	ND	EPA 8260
o-Xylene	5	ug/L	3440	EPA 8260
1,1,2,2-Tetrachloroethane	5	ug/L	ND	EPA 8260
1,2,3-Trichloropropane	5	ug/L	ND	EPA 8260
Isopropylbenzene	5	ug/L	78.4	EPA 8260
Bromobenzene	5	ug/L	ND	EPA 8260
n-Propylbenzene	5	ug/L	134	EPA 8260
2-Chlorotoluene	5	ug/L	ND	EPA 8260
4-Chlorotoluene	5	ug/L	ND	EPA 8260
1,3,5-Trimethylbenzene	5	ug/L	344	EPA 8260
tert-Butylbenzene	5	ug/L	ND	EPA 8260
1,2,4-Trimethylbenzene	5	ug/L	1200	EPA 8260
sec-Butylbenzene	5	ug/L	ND	EPA 8260
1,3-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,4-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,2-Dichlorobenzene	5	ug/L	ND	EPA 8260
p-iso-Propyltoluene	5	ug/L	ND	EPA 8260
n-Butylbenzene	5	ug/L	49.6	EPA 8260
1,2-Dibromo-3-chloropropane	5	ug/L	ND	EPA 8260
1,2,4-Trichlorobenzene	5	ug/L	ND	EPA 8260
Naphthalene	5	ug/L	344	EPA 8260
Hexachlorobutadiene	5	ug/L	ND	EPA 8260
1,2,3-Trichlorobenzene	5	ug/L	ND	EPA 8260
TPH GRO	100	ug/L	57600	EPA 8015B
TPH DRO	500	ug/L	ND	EPA 8015B

SURROGATE SPIKE

1,2-Dichloroethane-d4	%	102	EPA 8260
Dibromofluoromethane	%	104	EPA 8260
TFT	%	102	EPA 8015B
Toluene-d8	%	97	EPA 8260
Bromofluorobenzene	%	95	EPA 8260

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Certificate of Analysis

Sample Identification:	**MW-6**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**water**	**Client Identification:**	**PRAGNESH PATEL**
Sample Date:	**12/30/2008**	**Client Telephone:**	
Date Received:	**1/7/2008**	**Client Fax:**	
Extraction Date:	**1/7/2008**	**Analyst:**	**MM**
Analysis Date:	**1/11/2009**	**Lab File:**	**11109.D42**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
Dichlorodifluoromethane	5	ug/L	ND	EPA 8260
Chloromethane	5	ug/L	ND	EPA 8260
Vinyl Chloride	5	ug/L	ND	EPA 8260
Bromomethane	5	ug/L	ND	EPA 8260
Chloroethane	5	ug/L	ND	EPA 8260
Trichlorofluoromethane	5	ug/L	ND	EPA 8260
1,1-Dichloroethene	5	ug/L	ND	EPA 8260
tert-Butyl Alcohol (TBA)	50	ug/L	ND	EPA 8260
Methylene Chloride	5	ug/L	ND	EPA 8260
trans-1,2-Dichloroethene	5	ug/L	ND	EPA 8260
Methyl tert-Butyl Ether (MtBE)	5	ug/L	ND	EPA 8260
1,1-Dichloroethane	5	ug/L	ND	EPA 8260
Diisopropyl Ether (DIPE)	5	ug/L	ND	EPA 8260
cis-1,2-Dichloroethene	5	ug/L	ND	EPA 8260
Bromochloromethane	5	ug/L	ND	EPA 8260
Chloroform	5	ug/L	ND	EPA 8260
2,2-Dichloropropane	5	ug/L	ND	EPA 8260
Ethyl tert-Butyl Ether (EtBE)	5	ug/L	ND	EPA 8260
1,2-Dichloroethane	5	ug/L	ND	EPA 8260
tert-Amyl Alcohol (TAA)	50	ug/L	ND	EPA 8260
1,1,1-Trichloroethane	5	ug/L	ND	EPA 8260
1,1-Dichloropropene	5	ug/L	ND	EPA 8260
Carbon tetrachloride	5	ug/L	ND	EPA 8260
Benzene	5	ug/L	ND	EPA 8260
tert-Amyl Methyl Ether (TAME)	5	ug/L	ND	EPA 8260
Dibromomethane	5	ug/L	ND	EPA 8260
1,2-Dichloropropane	5	ug/L	ND	EPA 8260
Trichloroethene	5	ug/L	ND	EPA 8260
Bromodichloromethane	5	ug/L	ND	EPA 8260
tert-Amyl Ethyl Ether (TAEE)	5	ug/L	ND	EPA 8260
cis-1,3-Dichloropropene	5	ug/L	ND	EPA 8260
trans-1,3-Dichloropropene	5	ug/L	ND	EPA 8260
1,1,2-Trichloroethane	5	ug/L	ND	EPA 8260
Toluene	5	ug/L	ND	EPA 8260
1,3-Dichloropropane	5	ug/L	ND	EPA 8260
Dibromochloromethane	5	ug/L	ND	EPA 8260
1,2-Dibromomethane	5	ug/L	ND	EPA 8260
Tetrachloroethene	5	ug/L	15.2	EPA 8260
1,1,1,2-Tetrachloroethene	5	ug/L	ND	EPA 8260
Chlorobenzene	5	ug/L	ND	EPA 8260
Ethylbenzene	5	ug/L	ND	EPA 8260

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Certificate of Analysis

Sample Identification:	**MW-6**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**water**	**Client Identification:**	**PRAGNESH PATEL**
Sample Date:	**12/30/2008**	**Client Telephone:**	
Date Received:	**1/7/2008**	**Client Fax:**	
Extraction Date:	**1/7/2008**	**Analyst:**	**MM**
Analysis Date:	**1/11/2009**	**Lab File:**	**11109.D42**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
m&p-Xylene	5	ug/L	ND	EPA 8260
Bromoform	5	ug/L	ND	EPA 8260
Styrene	5	ug/L	ND	EPA 8260
o-Xylene	5	ug/L	ND	EPA 8260
1,1,2,2-Tetrachloroethane	5	ug/L	ND	EPA 8260
1,2,3-Trichloropropane	5	ug/L	ND	EPA 8260
Isopropylbenzene	5	ug/L	ND	EPA 8260
Bromobenzene	5	ug/L	ND	EPA 8260
n-Propylbenzene	5	ug/L	ND	EPA 8260
2-Chlorotoluene	5	ug/L	ND	EPA 8260
4-Chlorotoluene	5	ug/L	ND	EPA 8260
1,3,5-Trimethylbenzene	5	ug/L	ND	EPA 8260
tert-Butylbenzene	5	ug/L	ND	EPA 8260
1,2,4-Trimethylbenzene	5	ug/L	ND	EPA 8260
sec-Butylbenzene	5	ug/L	ND	EPA 8260
1,3-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,4-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,2-Dichlorobenzene	5	ug/L	ND	EPA 8260
p-iso-Propyltoluene	5	ug/L	ND	EPA 8260
n-Butylbenzene	5	ug/L	ND	EPA 8260
1,2-Dibromo-3-chloropropane	5	ug/L	ND	EPA 8260
1,2,4-Trichlorobenzene	5	ug/L	ND	EPA 8260
Naphthalene	5	ug/L	ND	EPA 8260
Hexachlorobutadiene	5	ug/L	ND	EPA 8260
1,2,3-Trichlorobenzene	5	ug/L	ND	EPA 8260
TPH GRO	100	ug/L	ND	EPA 8015B
TPH DRO	500	ug/L	ND	EPA 8015B

SURROGATE SPIKE

1,2-Dichloroethane-d4	%	102	EPA 8260
Dibromofluoromethane	%	104	EPA 8260
TFT	%	103	EPA 8015B
Toluene-d8	%	98	EPA 8260
Bromofluorobenzene	%	96	EPA 8260

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Certificate of Analysis

Sample Identification:	**MW-7**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**water**	**Client Identification:**	**PRAGNESH PATEL**
Sample Date:	**12/30/2008**	**Client Telephone:**	
Date Received:	**1/7/2008**	**Client Fax:**	
Extraction Date:	**1/7/2008**	**Analyst:**	**MM**
Analysis Date:	**1/11/2009**	**Lab File:**	**11109.D36**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
Dichlorodifluoromethane	5	ug/L	ND	EPA 8260
Chloromethane	5	ug/L	ND	EPA 8260
Vinyl Chloride	5	ug/L	ND	EPA 8260
Bromomethane	5	ug/L	ND	EPA 8260
Chloroethane	5	ug/L	ND	EPA 8260
Trichlorofluoromethane	5	ug/L	ND	EPA 8260
1,1-Dichloroethene	5	ug/L	ND	EPA 8260
tert-Butyl Alcohol (TBA)	50	ug/L	ND	EPA 8260
Methylene Chloride	5	ug/L	ND	EPA 8260
trans-1,2-Dichloroethene	5	ug/L	ND	EPA 8260
Methyl tert-Butyl Ether (MtBE)	5	ug/L	ND	EPA 8260
1,1-Dichloroethane	5	ug/L	ND	EPA 8260
Diisopropyl Ether (DIPE)	5	ug/L	ND	EPA 8260
cis-1,2-Dichloroethene	5	ug/L	ND	EPA 8260
Bromochloromethane	5	ug/L	ND	EPA 8260
Chloroform	5	ug/L	ND	EPA 8260
2,2-Dichloropropane	5	ug/L	ND	EPA 8260
Ethyl tert-Butyl Ether (EtBE)	5	ug/L	ND	EPA 8260
1,2-Dichloroethane	5	ug/L	ND	EPA 8260
tert-Amyl Alcohol (TAA)	50	ug/L	ND	EPA 8260
1,1,1-Trichloroethane	5	ug/L	ND	EPA 8260
1,1-Dichloropropene	5	ug/L	ND	EPA 8260
Carbon tetrachloride	5	ug/L	ND	EPA 8260
Benzene	5	ug/L	952	EPA 8260
tert-Amyl Methyl Ether (TAME)	5	ug/L	ND	EPA 8260
Dibromomethane	5	ug/L	ND	EPA 8260
1,2-Dichloropropane	5	ug/L	ND	EPA 8260
Trichloroethene	5	ug/L	ND	EPA 8260
Bromodichloromethane	5	ug/L	ND	EPA 8260
tert-Amyl Ethyl Ether (TAEE)	5	ug/L	ND	EPA 8260
cis-1,3-Dichloropropene	5	ug/L	ND	EPA 8260
trans-1,3-Dichloropropene	5	ug/L	ND	EPA 8260
1,1,2-Trichloroethane	5	ug/L	ND	EPA 8260
Toluene	5	ug/L	29600	EPA 8260
1,3-Dichloropropane	5	ug/L	ND	EPA 8260
Dibromochloromethane	5	ug/L	ND	EPA 8260
1,2-Dibromomethane	5	ug/L	ND	EPA 8260
Tetrachloroethene	5	ug/L	ND	EPA 8260
1,1,1,2-Tetrachloroethene	5	ug/L	ND	EPA 8260
Chlorobenzene	5	ug/L	ND	EPA 8260
Ethylbenzene	5	ug/L	1840	EPA 8260

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Certificate of Analysis

Sample Identification:	**MW-7**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**water**	**Client Identification:**	**PRAGNESH PATEL**
Sample Date:	**12/30/2008**	**Client Telephone:**	
Date Received:	**1/7/2008**	**Client Fax:**	
Extraction Date:	**1/7/2008**	**Analyst:**	**MM**
Analysis Date:	**1/11/2009**	**Lab File:**	**11109.D36**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
m&p-Xylene	5	ug/L	7280	EPA 8260
Bromoform	5	ug/L	ND	EPA 8260
Styrene	5	ug/L	ND	EPA 8260
o-Xylene	5	ug/L	3360	EPA 8260
1,1,2,2-Tetrachloroethane	5	ug/L	ND	EPA 8260
1,2,3-Trichloropropane	5	ug/L	ND	EPA 8260
Isopropylbenzene	5	ug/L	66.4	EPA 8260
Bromobenzene	5	ug/L	ND	EPA 8260
n-Propylbenzene	5	ug/L	138	EPA 8260
2-Chlorotoluene	5	ug/L	ND	EPA 8260
4-Chlorotoluene	5	ug/L	ND	EPA 8260
1,3,5-Trimethylbenzene	5	ug/L	320	EPA 8260
tert-Butylbenzene	5	ug/L	ND	EPA 8260
1,2,4-Trimethylbenzene	5	ug/L	1280	EPA 8260
sec-Butylbenzene	5	ug/L	ND	EPA 8260
1,3-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,4-Dichlorobenzene	5	ug/L	ND	EPA 8260
1,2-Dichlorobenzene	5	ug/L	ND	EPA 8260
p-iso-Propyltoluene	5	ug/L	ND	EPA 8260
n-Butylbenzene	5	ug/L	ND	EPA 8260
1,2-Dibromo-3-chloropropane	5	ug/L	ND	EPA 8260
1,2,4-Trichlorobenzene	5	ug/L	ND	EPA 8260
Naphthalene	5	ug/L	320	EPA 8260
Hexachlorobutadiene	5	ug/L	ND	EPA 8260
1,2,3-Trichlorobenzene	5	ug/L	ND	EPA 8260
TPH GRO	100	ug/L	55400	EPA 8015B
TPH DRO	500	ug/L	ND	EPA 8015B

SURROGATE SPIKE

1,2-Dichloroethane-d4	%	102	EPA 8260
Dibromofluoromethane	%	103	EPA 8260
TFT	%	103	EPA 8015B
Toluene-d8	%	98	EPA 8260
Bromofluorobenzene	%	96	EPA 8260

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Certificate of Analysis

Sample Identification:	**MID- DSW**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**water**	**Client Identification:**	**PRAGNESH PATEL**
Sample Date:	**12/30/2008**	**Client Telephone:**	
Date Received:	**1/7/2009**	**Client Fax:**	
Extraction Date:	**na**	**Analyst:**	**MM**
Analysis Date:	**1/11/2009**	**Lab File:**	**11109.D34**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
Dichlorodifluoromethane	0.5	ug/L	ND	EPA 524.2
Chloromethane	0.5	ug/L	ND	EPA 524.2
Vinyl Chloride	0.5	ug/L	ND	EPA 524.2
Bromomethane	0.5	ug/L	ND	EPA 524.2
Chloroethane	0.5	ug/L	ND	EPA 524.2
Trichlorofluoromethane	0.5	ug/L	ND	EPA 524.2
1,1-Dichloroethene	0.5	ug/L	ND	EPA 524.2
tert-Butyl Alcohol (TBA)	10	ug/L	ND	EPA 524.2
Methylene Chloride	0.5	ug/L	ND	EPA 524.2
trans-1,2-Dichloroethene	0.5	ug/L	ND	EPA 524.2
Methyl tert-Butyl Ether (MtBE)	0.5	ug/L	ND	EPA 524.2
1,1-Dichloroethane	0.5	ug/L	ND	EPA 524.2
Diisopropyl Ether (DIPE)	0.5	ug/L	ND	EPA 524.2
cis-1,2-Dichloroethene	0.5	ug/L	ND	EPA 524.2
Bromochloromethane	0.5	ug/L	ND	EPA 524.2
Chloroform	0.5	ug/L	ND	EPA 524.2
2,2-Dichloropropane	0.5	ug/L	ND	EPA 524.2
Ethyl tert-Butyl Ether (EtBE)	0.5	ug/L	ND	EPA 524.2
1,2-Dichloroethane	0.5	ug/L	ND	EPA 524.2
tert-Amyl Alcohol (TAA)	10	ug/L	ND	EPA 524.2
1,1,1-Trichloroethane	0.5	ug/L	ND	EPA 524.2
1,1-Dichloropropene	0.5	ug/L	ND	EPA 524.2
Carbon tetrachloride	0.5	ug/L	ND	EPA 524.2
Benzene	0.5	ug/L	ND	EPA 524.2
tert-Amyl Methyl Ether (TAME)	0.5	ug/L	ND	EPA 524.2
Dibromomethane	0.5	ug/L	ND	EPA 524.2
1,2-Dichloropropane	0.5	ug/L	ND	EPA 524.2
Trichloroethene	0.5	ug/L	ND	EPA 524.2
Bromodichloromethane	0.5	ug/L	ND	EPA 524.2
tert-Amyl Ethyl Ether (TAEE)	0.5	ug/L	ND	EPA 524.2
cis-1,3-Dichloropropene	0.5	ug/L	ND	EPA 524.2
trans-1,3-Dichloropropene	0.5	ug/L	ND	EPA 524.2
1,1,2-Trichloroethane	0.5	ug/L	ND	EPA 524.2
Toluene	0.5	ug/L	ND	EPA 524.2
1,3-Dichloropropane	0.5	ug/L	ND	EPA 524.2
Dibromochloromethane	0.5	ug/L	ND	EPA 524.2
1,2-Dibromomethane	0.5	ug/L	ND	EPA 524.2
Tetrachloroethene	0.5	ug/L	ND	EPA 524.2
1,1,1,2-Tetrachloroethene	0.5	ug/L	ND	EPA 524.2
Chlorobenzene	0.5	ug/L	ND	EPA 524.2
Ethylbenzene	0.5	ug/L	ND	EPA 524.2

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Certificate of Analysis

Sample Identification:	**MID- DSW**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**water**	**Client Identification:**	**PRAGNESH PATEL**
Sample Date:	**12/30/2008**	**Client Telephone:**	
Date Received:	**1/7/2009**	**Client Fax:**	
Extraction Date:	**na**	**Analyst:**	**MM**
Analysis Date:	**1/11/2009**	**Lab File:**	**11109.D34**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
m&p-Xylene	0.5	ug/L	ND	EPA 524.2
Bromoform	0.5	ug/L	ND	EPA 524.2
Styrene	0.5	ug/L	ND	EPA 524.2
o-Xylene	0.5	ug/L	ND	EPA 524.2
1,1,2,2-Tetrachloroethene	0.5	ug/L	ND	EPA 524.2
1,2,3-Trichloropropane	0.5	ug/L	ND	EPA 524.2
Isopropylbenzene	0.5	ug/L	ND	EPA 524.2
Bromobenzene	0.5	ug/L	ND	EPA 524.2
n-Propylbenzene	0.5	ug/L	ND	EPA 524.2
2-Chlorotoluene	0.5	ug/L	ND	EPA 524.2
4-Chlorotoluene	0.5	ug/L	ND	EPA 524.2
1,3,5-Trimethylbenzene	0.5	ug/L	ND	EPA 524.2
tert-Butylbenzene	0.5	ug/L	ND	EPA 524.2
1,2,4-Trimethylbenzene	0.5	ug/L	ND	EPA 524.2
sec-Butylbenzene	0.5	ug/L	ND	EPA 524.2
1,3-Dichlorobenzene	0.5	ug/L	ND	EPA 524.2
1,4-Dichlorobenzene	0.5	ug/L	ND	EPA 524.2
1,2-Dichlorobenzene	0.5	ug/L	ND	EPA 524.2
p-iso-Propyltoluene	0.5	ug/L	ND	EPA 524.2
n-Butylbenzene	0.5	ug/L	ND	EPA 524.2
1,2-Dibromo-3-chloropropane	0.5	ug/L	ND	EPA 524.2
1,2,4-Trichlorobenzene	0.5	ug/L	ND	EPA 524.2
Naphthalene	0.5	ug/L	ND	EPA 524.2
Hexachlorobutadiene	0.5	ug/L	ND	EPA 524.2
1,2,3-Trichlorobenzene	0.5	ug/L	ND	EPA 524.2

SURROGATE SPIKE

1,2-Dichloroethane-d4	%	102	EPA 524.2
Dibromofluoromethane	%	103	EPA 524.2
Toluene-d8	%	98	EPA 524.2
Bromofluorobenzene	%	96	EPA 524.2

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Certificate of Analysis

Sample Identification:	**PRE-DSW**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**water**	**Client Identification:**	**PRAGNESH PATEL**
Sample Date:	**12/30/2008**	**Client Telephone:**	
Date Received:	**1/7/2009**	**Client Fax:**	
Extraction Date:	**na**	**Analyst:**	**MM**
Analysis Date:	**1/11/2009**	**Lab File:**	**11109.D33**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
Dichlorodifluoromethane	0.5	ug/L	ND	EPA 524.2
Chloromethane	0.5	ug/L	ND	EPA 524.2
Vinyl Chloride	0.5	ug/L	ND	EPA 524.2
Bromomethane	0.5	ug/L	ND	EPA 524.2
Chloroethane	0.5	ug/L	ND	EPA 524.2
Trichlorofluoromethane	0.5	ug/L	ND	EPA 524.2
1,1-Dichloroethene	0.5	ug/L	ND	EPA 524.2
tert-Butyl Alcohol (TBA)	10	ug/L	261	EPA 524.2
Methylene Chloride	0.5	ug/L	ND	EPA 524.2
trans-1,2-Dichloroethene	0.5	ug/L	ND	EPA 524.2
Methyl tert-Butyl Ether (MtBE)	0.5	ug/L	83.7	EPA 524.2
1,1-Dichloroethane	0.5	ug/L	ND	EPA 524.2
Diisopropyl Ether (DIPE)	0.5	ug/L	6.99	EPA 524.2
cis-1,2-Dichloroethene	0.5	ug/L	ND	EPA 524.2
Bromochloromethane	0.5	ug/L	ND	EPA 524.2
Chloroform	0.5	ug/L	ND	EPA 524.2
2,2-Dichloropropane	0.5	ug/L	ND	EPA 524.2
Ethyl tert-Butyl Ether (EtBE)	0.5	ug/L	ND	EPA 524.2
1,2-Dichloroethane	0.5	ug/L	3.88	EPA 524.2
tert-Amyl Alcohol (TAA)	10	ug/L	ND	EPA 524.2
1,1,1-Trichloroethane	0.5	ug/L	ND	EPA 524.2
1,1-Dichloropropene	0.5	ug/L	ND	EPA 524.2
Carbon tetrachloride	0.5	ug/L	ND	EPA 524.2
Benzene	0.5	ug/L	ND	EPA 524.2
tert-Amyl Methyl Ether (TAME)	0.5	ug/L	ND	EPA 524.2
Dibromomethane	0.5	ug/L	ND	EPA 524.2
1,2-Dichloropropane	0.5	ug/L	ND	EPA 524.2
Trichloroethene	0.5	ug/L	ND	EPA 524.2
Bromodichloromethane	0.5	ug/L	ND	EPA 524.2
tert-Amyl Ethyl Ether (TAEE)	0.5	ug/L	ND	EPA 524.2
cis-1,3-Dichloropropene	0.5	ug/L	ND	EPA 524.2
trans-1,3-Dichloropropene	0.5	ug/L	ND	EPA 524.2
1,1,2-Trichloroethane	0.5	ug/L	ND	EPA 524.2
Toluene	0.5	ug/L	ND	EPA 524.2
1,3-Dichloropropane	0.5	ug/L	ND	EPA 524.2
Dibromochloromethane	0.5	ug/L	ND	EPA 524.2
1,2-Dibromomethane	0.5	ug/L	ND	EPA 524.2
Tetrachloroethene	0.5	ug/L	ND	EPA 524.2
1,1,1,2-Tetrachloroethene	0.5	ug/L	ND	EPA 524.2
Chlorobenzene	0.5	ug/L	ND	EPA 524.2
Ethylbenzene	0.5	ug/L	ND	EPA 524.2

ADVANCED ENVIRONMENTAL CONCEPTS, INC.

Laboratory Services 5292 Enterprise Street Suite C, Eldersburg, MD 21784 Phone 410-795-5955 Fax 410-795-9459

Certificate of Analysis

Sample Identification:	**PRE-DSW**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**water**	**Client Identification:**	**PRAGNESH PATEL**
Sample Date:	**12/30/2008**	**Client Telephone:**	
Date Received:	**1/7/2009**	**Client Fax:**	
Extraction Date:	**na**	**Analyst:**	**MM**
Analysis Date:	**1/11/2009**	**Lab File:**	**11109.D33**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
m&p-Xylene	0.5	ug/L	ND	EPA 524.2
Bromoform	0.5	ug/L	ND	EPA 524.2
Styrene	0.5	ug/L	ND	EPA 524.2
o-Xylene	0.5	ug/L	ND	EPA 524.2
1,1,2,2-Tetrachloroethene	0.5	ug/L	ND	EPA 524.2
1,2,3-Trichloropropane	0.5	ug/L	ND	EPA 524.2
Isopropylbenzene	0.5	ug/L	ND	EPA 524.2
Bromobenzene	0.5	ug/L	ND	EPA 524.2
n-Propylbenzene	0.5	ug/L	ND	EPA 524.2
2-Chlorotoluene	0.5	ug/L	ND	EPA 524.2
4-Chlorotoluene	0.5	ug/L	ND	EPA 524.2
1,3,5-Trimethylbenzene	0.5	ug/L	ND	EPA 524.2
tert-Butylbenzene	0.5	ug/L	ND	EPA 524.2
1,2,4-Trimethylbenzene	0.5	ug/L	ND	EPA 524.2
sec-Butylbenzene	0.5	ug/L	ND	EPA 524.2
1,3-Dichlorobenzene	0.5	ug/L	ND	EPA 524.2
1,4-Dichlorobenzene	0.5	ug/L	ND	EPA 524.2
1,2-Dichlorobenzene	0.5	ug/L	ND	EPA 524.2
p-iso-Propyltoluene	0.5	ug/L	ND	EPA 524.2
n-Butylbenzene	0.5	ug/L	ND	EPA 524.2
1,2-Dibromo-3-chloropropane	0.5	ug/L	ND	EPA 524.2
1,2,4-Trichlorobenzene	0.5	ug/L	ND	EPA 524.2
Naphthalene	0.5	ug/L	ND	EPA 524.2
Hexachlorobutadiene	0.5	ug/L	ND	EPA 524.2
1,2,3-Trichlorobenzene	0.5	ug/L	ND	EPA 524.2

SURROGATE SPIKE

1,2-Dichloroethane-d4	%	102	EPA 524.2
Dibromofluoromethane	%	103	EPA 524.2
Toluene-d8	%	99	EPA 524.2
Bromofluorobenzene	%	98	EPA 524.2

ADVANCED ENVIRONMENTAL CONCEPTS, INC.

Laboratory Services 5292 Enterprise Street Suite C, Eldersburg, MD 21784 Phone 410-795-5955 Fax 410-795-9459

Certificate of Analysis

Sample Identification:	**POST-DSW**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**water**	**Client Identification:**	**PRAGNESH PATEL**
Sample Date:	**12/30/2008**	**Client Telephone:**	
Date Received:	**1/7/2009**	**Client Fax:**	
Extraction Date:	**na**	**Analyst:**	**MM**
Analysis Date:	**1/11/2009**	**Lab File:**	**11109.D35**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
Dichlorodifluoromethane	0.5	ug/L	ND	EPA 524.2
Chloromethane	0.5	ug/L	ND	EPA 524.2
Vinyl Chloride	0.5	ug/L	ND	EPA 524.2
Bromomethane	0.5	ug/L	ND	EPA 524.2
Chloroethane	0.5	ug/L	ND	EPA 524.2
Trichlorofluoromethane	0.5	ug/L	ND	EPA 524.2
1,1-Dichloroethene	0.5	ug/L	ND	EPA 524.2
tert-Butyl Alcohol (TBA)	10	ug/L	ND	EPA 524.2
Methylene Chloride	0.5	ug/L	ND	EPA 524.2
trans-1,2-Dichloroethene	0.5	ug/L	ND	EPA 524.2
Methyl tert-Butyl Ether (MtBE)	0.5	ug/L	ND	EPA 524.2
1,1-Dichloroethane	0.5	ug/L	ND	EPA 524.2
Diisopropyl Ether (DIPE)	0.5	ug/L	ND	EPA 524.2
cis-1,2-Dichloroethene	0.5	ug/L	ND	EPA 524.2
Bromochloromethane	0.5	ug/L	ND	EPA 524.2
Chloroform	0.5	ug/L	ND	EPA 524.2
2,2-Dichloropropane	0.5	ug/L	ND	EPA 524.2
Ethyl tert-Butyl Ether (EtBE)	0.5	ug/L	ND	EPA 524.2
1,2-Dichloroethane	0.5	ug/L	ND	EPA 524.2
tert-Amyl Alcohol (TAA)	10	ug/L	ND	EPA 524.2
1,1,1-Trichloroethane	0.5	ug/L	ND	EPA 524.2
1,1-Dichloropropene	0.5	ug/L	ND	EPA 524.2
Carbon tetrachloride	0.5	ug/L	ND	EPA 524.2
Benzene	0.5	ug/L	ND	EPA 524.2
tert-Amyl Methyl Ether (TAME)	0.5	ug/L	ND	EPA 524.2
Dibromomethane	0.5	ug/L	ND	EPA 524.2
1,2-Dichloropropane	0.5	ug/L	ND	EPA 524.2
Trichloroethene	0.5	ug/L	ND	EPA 524.2
Bromodichloromethane	0.5	ug/L	ND	EPA 524.2
tert-Amyl Ethyl Ether (TAEE)	0.5	ug/L	ND	EPA 524.2
cis-1,3-Dichloropropene	0.5	ug/L	ND	EPA 524.2
trans-1,3-Dichloropropene	0.5	ug/L	ND	EPA 524.2
1,1,2-Trichloroethane	0.5	ug/L	ND	EPA 524.2
Toluene	0.5	ug/L	ND	EPA 524.2
1,3-Dichloropropane	0.5	ug/L	ND	EPA 524.2
Dibromochloromethane	0.5	ug/L	ND	EPA 524.2
1,2-Dibromomethane	0.5	ug/L	ND	EPA 524.2
Tetrachloroethene	0.5	ug/L	ND	EPA 524.2
1,1,1,2-Tetrachloroethene	0.5	ug/L	ND	EPA 524.2
Chlorobenzene	0.5	ug/L	ND	EPA 524.2
Ethylbenzene	0.5	ug/L	ND	EPA 524.2

ADVANCED ENVIRONMENTAL CONCEPTS, INC.

Laboratory Services 5292 Enterprise Street Suite C, Eldersburg, MD 21784 Phone 410-795-5955 Fax 410-795-9459

Certificate of Analysis

Sample Identification:	**POST-DSW**	**Project Identification:**	**CALVERT CITGO**
MATRIX:	**water**	**Client Identification:**	**PRAGNESH PATEL**
Sample Date:	**12/30/2008**	**Client Telephone:**	
Date Received:	**1/7/2009**	**Client Fax:**	
Extraction Date:	**na**	**Analyst:**	**MM**
Analysis Date:	**1/11/2009**	**Lab File:**	**11109.D35**

COMPOUND	DETECTION LIMIT	TEST UNIT	TEST VALUE	METHOD
m&p-Xylene	0.5	ug/L	ND	EPA 524.2
Bromoform	0.5	ug/L	ND	EPA 524.2
Styrene	0.5	ug/L	ND	EPA 524.2
o-Xylene	0.5	ug/L	ND	EPA 524.2
1,1,2,2-Tetrachloroethene	0.5	ug/L	ND	EPA 524.2
1,2,3-Trichloropropane	0.5	ug/L	ND	EPA 524.2
Isopropylbenzene	0.5	ug/L	ND	EPA 524.2
Bromobenzene	0.5	ug/L	ND	EPA 524.2
n-Propylbenzene	0.5	ug/L	ND	EPA 524.2
2-Chlorotoluene	0.5	ug/L	ND	EPA 524.2
4-Chlorotoluene	0.5	ug/L	ND	EPA 524.2
1,3,5-Trimethylbenzene	0.5	ug/L	ND	EPA 524.2
tert-Butylbenzene	0.5	ug/L	ND	EPA 524.2
1,2,4-Trimethylbenzene	0.5	ug/L	ND	EPA 524.2
sec-Butylbenzene	0.5	ug/L	ND	EPA 524.2
1,3-Dichlorobenzene	0.5	ug/L	ND	EPA 524.2
1,4-Dichlorobenzene	0.5	ug/L	ND	EPA 524.2
1,2-Dichlorobenzene	0.5	ug/L	ND	EPA 524.2
p-iso-Propyltoluene	0.5	ug/L	ND	EPA 524.2
n-Butylbenzene	0.5	ug/L	ND	EPA 524.2
1,2-Dibromo-3-chloropropane	0.5	ug/L	ND	EPA 524.2
1,2,4-Trichlorobenzene	0.5	ug/L	ND	EPA 524.2
Naphthalene	0.5	ug/L	ND	EPA 524.2
Hexachlorobutadiene	0.5	ug/L	ND	EPA 524.2
1,2,3-Trichlorobenzene	0.5	ug/L	ND	EPA 524.2

SURROGATE SPIKE

1,2-Dichloroethane-d4	%	103	EPA 524.2
Dibromofluoromethane	%	105	EPA 524.2
Toluene-d8	%	98	EPA 524.2
Bromofluorobenzene	%	98	EPA 524.2

Advanced Environmental Concepts, Inc.
5292 Enterprise St., Suite C
Eldersburg, MD 21784

Fax: 410-795-9459
Phone: 410-795-5955
www.aecenviro.com

Chain of Custody Record

SDG# 011109A

Customer: Pragnesh Patel	Email Address:	preservative	HCl / HCl / HCl
Contact:	Project Name: Calvert Citgo	# of Containers	Analysis: 8260 Volatiles / 8015 DRO GRO / 524.2
Phone:	Project Number:		
Fax:	Location: 2815 North East Rd, North East MD, 21901		

AEC ID #	pH	Date	Time	Water	Soil	Sample ID	# of Containers	8260 Volatiles	8015 DRO GRO	524.2	
		12/30/08	1110	X		MW 7	2	X	X		40
			1135			MW 3	2	X	X		40
			1200			MW 5	2	X	X		40
			1215			MW 1	2	X	X		40
			1250			MW 2	2	X	X		
			1310			MW 6	2	X	X		
			1320			Pre-DSW	2			X	
			1330			Mid-DSW	2			X	
			1340			Post-DSW	4			X	

Relinquished by: Dragnesh Pate	Date: 12/30/08	Time: 1600	Received by:	Date: 1/7/09	Time: 12:06
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

Special Instructions:	Custody Seal	Receipt Temperature	Turn Around Time

CALIBER ANALYTICAL SERVICES

Certificate of Analysis

Advanced Environmental Concepts
5292 Enterprise St.
Eldersburg, MD 21784

Date Received: 01/07/09 14:00
Date Sampled: 12/30/08 13:40
Date Issued: 01/14/09 11:59

Project: Calvert Citgo
Site Location: 2815 N. East Rd. NE, MD

SDG Number: 09010701

	Result	Unit	LLQ	MCL	Method	Prepared	Analyzed	Init.
Field Sample ID: Post-DSW			Matrix: Water				Lab ID: 09010701-01	
Volatile Organic Compounds								
Benzene	ND	ug/L	0.5	5	EPA 524.2	01/08/09	01/08/09 15:28	JKL
Bromobenzene	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
Bromochloromethane	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
Bromodichloromethane	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
Bromoform	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
Bromomethane	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
n-Butylbenzene	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
sec-Butylbenzene	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
tert-Butylbenzene	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
Carbon tetrachloride	ND	ug/L	0.5	5	EPA 524.2	01/08/09	01/08/09 15:28	JKL
Chlorobenzene	ND	ug/L	0.5	100	EPA 524.2	01/08/09	01/08/09 15:28	JKL
Chloroethane	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
Chloroform	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
Chloromethane	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
2-Chlorotoluene	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
4-Chlorotoluene	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
Dibromochloromethane	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
1,2-Dibromo-3-chloropropane	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
1,2-Dibromoethane	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
Dibromomethane	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
1,2-Dichlorobenzene	ND	ug/L	0.5	600	EPA 524.2	01/08/09	01/08/09 15:28	JKL
1,3-Dichlorobenzene	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
1,4-Dichlorobenzene	ND	ug/L	0.5	75	EPA 524.2	01/08/09	01/08/09 15:28	JKL
Dichlorodifluoromethane	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
1,1-Dichloroethane	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
1,2-Dichloroethane	ND	ug/L	0.5	5	EPA 524.2	01/08/09	01/08/09 15:28	JKL
1,1-Dichloroethene	ND	ug/L	0.5	7	EPA 524.2	01/08/09	01/08/09 15:28	JKL
cis-1,2-Dichloroethene	ND	ug/L	0.5	70	EPA 524.2	01/08/09	01/08/09 15:28	JKL
trans-1,2-Dichloroethene	ND	ug/L	0.5	100	EPA 524.2	01/08/09	01/08/09 15:28	JKL
1,2-Dichloropropane	ND	ug/L	0.5	5	EPA 524.2	01/08/09	01/08/09 15:28	JKL
1,3-Dichloropropane	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
2,2-Dichloropropane	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
1,1-Dichloropropene	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
cis-1,3-Dichloropropene	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
trans-1,3-Dichloropropene	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
Ethylbenzene	ND	ug/L	0.5	700	EPA 524.2	01/08/09	01/08/09 15:28	JKL
Isopropylbenzene	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
p-Isopropyltoluene	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
Methylene chloride	ND	ug/L	0.5	5	EPA 524.2	01/08/09	01/08/09 15:28	JKL

8851 Orchard Tree Lane Towson, Maryland 21286
tel: 410.825.1151 fax: 410.825.2126 www.caslabs.net

CALIBER ANALYTICAL SERVICES

Certificate of Analysis

Advanced Environmental Concepts
5292 Enterprise St.
Eldersburg, MD 21784

Date Received: 01/07/09 14:00
Date Sampled: 12/30/08 13:40
Date Issued: 01/14/09 11:59

Project: Calvert Citgo
Site Location: 2815 N. East Rd. NE, MD

SDG Number: 09010701

	Result	Unit	LLQ	MCL	Method	Prepared	Analyzed	Init.
Field Sample ID: Post-DSW			Matrix: Water				Lab ID: 09010701-01	
Volatile Organic Compounds								
Methyl t-butyl ether (MTBE)	ND	ug/L	0.5	* 20	EPA 524.2	01/08/09	01/08/09 15:28	JKL
Naphthalene	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
n-Propylbenzene	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
Styrene	ND	ug/L	0.5	100	EPA 524.2	01/08/09	01/08/09 15:28	JKL
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
Tetrachloroethene	ND	ug/L	0.5	5	EPA 524.2	01/08/09	01/08/09 15:28	JKL
Toluene	ND	ug/L	0.5	1000	EPA 524.2	01/08/09	01/08/09 15:28	JKL
1,2,3-Trichlorobenzene	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
1,2,4-Trichlorobenzene	ND	ug/L	0.5	70	EPA 524.2	01/08/09	01/08/09 15:28	JKL
1,1,1-Trichloroethane	ND	ug/L	0.5	200	EPA 524.2	01/08/09	01/08/09 15:28	JKL
1,1,2-Trichloroethane	ND	ug/L	0.5	5	EPA 524.2	01/08/09	01/08/09 15:28	JKL
Trichloroethene	ND	ug/L	0.5	5	EPA 524.2	01/08/09	01/08/09 15:28	JKL
Trichlorofluoromethane	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
1,2,3-Trichloropropane	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
1,2,4-Trimethylbenzene	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
1,3,5-Trimethylbenzene	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
Vinyl chloride	ND	ug/L	0.5	2	EPA 524.2	01/08/09	01/08/09 15:28	JKL
m&p-Xylene	ND	ug/L	1	7500	EPA 524.2	01/08/09	01/08/09 15:28	JKL
o-Xylene	ND	ug/L	0.5	2500	EPA 524.2	01/08/09	01/08/09 15:28	JKL
tert-Butanol (TBA)	ND	ug/L	5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
Ethyl t-butyl ether (ETBE)	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
Diisopropyl ether (DIPE)	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
tert-Amyl methyl ether (TAME)	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
tert-Amyl alcohol (TAA)	ND	ug/L	5		EPA 524.2	01/08/09	01/08/09 15:28	JKL
tert-Amyl ethyl ether (TAEE)	ND	ug/L	0.5		EPA 524.2	01/08/09	01/08/09 15:28	JKL

Approved by: Matt Cohen
QC Chemist

Notes/Qualifiers:

LLQ- Lowest Level of Quantitation

MCL - Maximum Contaminant Level. The highest level of a contaminant that is allowed in drinking water. MCLs are associated with regulated compounds. They are enforceable standards.

* - Methyl t-butyl ether (MTBE) limit based on MDE guidance document. It is not federally promulgated or enforceable.

ND - Not Detected at a concentration greater than or equal to the LLQ.

The above analyses performed by Maryland State Certified Water Quality Laboratory #320.

8851 Orchard Tree Lane Towson, Maryland 21286
tel: 410.825.1151 fax: 410.825.2126 www.caslabs.net

0901070?

Chain of Custody Record

Advanced Environmental Concepts, Inc.
5292 Enterprise St., Suite C
Eldersburg, MD 21784

Fax: 410-795-9459
Phone: 410-795-5955
www.aecenviro.com

Customer AEC			Email Address:					preservative											
Contact:			Project Name: Calvert Citgo					# of Containers	Analysis										
Phone:			Project Number:																
Fax:			Location: 2815 N. East Rd NE, MD						524.2										
AEC ID #	pH	Date	Time	Water	Soil	Sample ID													
		12/30/08	1340	X		POST - DSW		2	X										

Relinquished by: W/K	Date 1/7/09	Time:	Received by:	Date: 1/7/09	Time: 1400
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

Special Instructions:	Custody Seal	Receipt Temperature	Turn Around Time

Facility Summary for Facility ID #5678

Owner Name and Address: B.L. Patel, C.K. Patel, Pragnesh Patel
2815 Northeast Road North East, MD 21901
Pragnesh Patel (410) 658-3687

Owner Type: Commercial

Facility ID	County	Location Name	Location Street Address	Location City	Zip
5678	Cecil	Country Store	2815 Northeast Road	North East	21901

Tank ID / Status / Closure Status	Date Installed / Age (yr) / Closure Date	Product / Capacity / Compartment	Tank Mat'l of Contruction / Secondary Option	Piping Material / Secondary Option / Piping Type	Primary - Tank Release Detection / Primary - Piping Release Detection / Sec - Interstitial Monitoring Tank/Piping	CP / Over / Mnfd	RD / Spill / EG	FR / B/HO
6	2/1/1997	Gasohol	Composite (Steel w/ FRP)	Flexible Plastic	M	Yes	Yes	Yes
Currently In Use		8,000	Double-Walled	Double-Walled	IM	Yes	Yes	
				Pressurized	No/No	No	No	No
7	2/1/1997	Gasohol	Composite (Steel w/ FRP)	Flexible Plastic	M	Yes	Yes	Yes
Currently In Use		12,000	Double-Walled	Double-Walled	I	Yes	Yes	
				Pressurized	No/No	No	No	No
8	2/1/1997	Kero/Diesel	Composite (Steel w/ FRP)	Flexible Plastic	M	Yes	Yes	Yes
Currently In Use		12,000	Double-Walled	Double-Walled	IQ	Yes	Yes	
		6,000/6,000		Pressurized	No/No	No	No	No
1	6/1/1980	Gasoline	Asphalt Coated or Bare Steel	Bare or Galvanized Steel	R	No	No	Yes
Permanently Out Of Use		4,000	None	None	R	No	No	
Tank removed from ground	2/11/1997			Not Listed	No/No	No	No	No
2	6/1/1980	Gasoline	Asphalt Coated or Bare Steel	Bare or Galvanized Steel	R	No	No	Yes
Permanently Out Of Use		4,000	None	None	R	No	No	
Tank removed from ground	2/11/1997			Not Listed	No/No	No	No	No

Tank/Piping Release Detection Codes

A	Manual Tank Gauging	**B**	Tank Tightness Testing	**C**	Inventory Control	**D**	ATG/Auto Line LD	**E**	ATG 0.2 GPH Test	**F**	Safe Suction
G	Gravity Feed	**H**	Elect ALLD Testing 0.2 GPH	**I**	Line Tightness Annual	**J**	Line Tightness Every 2 Yrs.	**K**	Vapor monitoring	**L**	Groundwater monitoring
M	Inventory SIR	**N**	Interstit. Dbl-wall Monitor	**O**	Interstit. Sec. Con. Monitor	**P**	Other method	**Q**	Deferred	**R**	Not listed
N/A	Heating Oil/Emergency Generator										

Tank/Piping Codes

CP	Corrosion Protection Met	**Over**	Overfill Protected	**Mnfd**	Manifold	**FR**	Financial Responsibility Met
RD	Release Detection Met	**Spill**	Spill Protected	**EG**	Emergency Power Generation	**B/HO**	Bulk Heating Oil

Report Generation Date: 3/5/2010

Facility Summary for Facility ID #5678

Owner Name and Address: B.L. Patel, C.K. Patel, Pragnesh Patel
2815 Northeast Road North East, MD 21901
Pragnesh Patel (410) 658-3687

Owner Type: Commercial

Facility ID	County	Location Name	Location Street Address	Location City	Zip
5678	Cecil	Country Store	2815 Northeast Road	North East	21901

Tank ID / Status / Closure Status	Date Installed / Age (yr) / Closure Date	Product / Capacity / Compartment	Tank Mat'l of Contruction / Secondary Option	Piping Material / Secondary Option / Piping Type	Primary - Tank Release Detection / Primary - Piping Release Detection / Sec - Interstitial Monitoring Tank/Piping	CP / Over / Mnfd	RD / Spill / EG	FR / B/HO
3	6/1/1980	Gasoline	Asphalt Coated or Bare Steel	Bare or Galvanized Steel	R	No	No	Yes
Permanently Out Of Use		4,000	None	None	R	No	No	
Tank removed from ground	2/11/1997			Not Listed	No/No	No	No	No
4	6/1/1980	Gasoline	Asphalt Coated or Bare Steel	Bare or Galvanized Steel	R	No	No	Yes
Permanently Out Of Use		4,000	None	None	R	No	No	
Tank removed from ground	2/11/1997			Not Listed	No/No	No	No	No
5	6/1/1980	Gasoline	Asphalt Coated or Bare Steel	Bare or Galvanized Steel	R	No	No	Yes
Permanently Out Of Use		4,000	None	None	R	No	No	
Tank removed from ground	2/11/1997			Not Listed	No/No	No	No	No

Total Tanks: 8

Tank/Piping Release Detection Codes

A	Manual Tank Gauging	**B**	Tank Tightness Testing	**C**	Inventory Control	**D**	ATG/Auto Line LD	**E**	ATG 0.2 GPH Test	**F**	Safe Suction
G	Gravity Feed	**H**	Elect ALLD Testing 0.2 GPH	**I**	Line Tightness Annual	**J**	Line Tightness Every 2 Yrs.	**K**	Vapor monitoring	**L**	Groundwater monitoring
M	Inventory SIR	**N**	Interstit. Dbl-wall Monitor	**O**	Interstit. Sec. Con. Monitor	**P**	Other method	**Q**	Deferred	**R**	Not listed
N/A	Heating Oil/Emergency Generator										

Tank/Piping Codes

CP	Corrosion Protection Met	**Over**	Overfill Protected	**Mnfd**	Manifold	**FR**	Financial Responsibility Met
RD	Release Detection Met	**Spill**	Spill Protected	**EG**	Emergency Power Generation	**B/HO**	Bulk Heating Oil

Report Generation Date: 3/5/2010

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

October 22, 2009

Mr. Chandrakant K. Patel (Current Owner/Operator)
Mr. Pragnesh Patel
Calvert Country Store
2815 North East Road
North East MD 21901

Mr. Kenneth D. Thomas (Former Owner/Operator)
Country Stores Inc.
559 Sylmar Road
Rising Sun MD 21911

Mr. Chris Haab
Country Stores - Representing Alger Oil
2314 Market Street
Philadelphia PA 19103

RE: SITE STATUS LETTER
Case No. 1992-2616-CE
Notice of Violation NV-2004-038-Addendum
Calvert Citgo (Former Alger Country Store)
2815 North East Road, North East
Cecil County, Maryland
Facility No. 5678

Dear Sirs:

On September 29, 2009, representatives of the Maryland Department of the Environment's Oil Control Program (MDE-OCP) and the Office of the Attorney General (OAG) met with the documented responsible parties for site remediation at the above-referenced property. The case history was reviewed and future site directives were discussed.

Brief History

A preliminary environmental assessment report, dated August 12, 1991, documented elevated levels of dissolved phase petroleum hydrocarbons in the network of four installed monitoring wells. Based on the sampling results, two additional monitoring wells were installed. In October 1992, 0.75-inch of liquid phase hydrocarbons (LPH) was detected in monitoring well MW-5. Subsequent gauging of on-site monitoring wells revealed up to 6 inches of LPH in MW-5. Based on the presence of LPH, the Department required the recovery of petroleum product through manual bailing.

On August 14, 2003, MDE-OCP again found 0.5-inch of LPH in the monitoring well network. The Department required the submittal of a *Corrective Action Plan* (*CAP*). Supplemental subsurface investigations conducted in October 2003 (revealed LPH in boring B-2 at a depth of 17 feet), in March 2008, and in November 2008 resulted in the collection of additional subsurface characterization data that further documented the extent of petroleum contamination on-site and off-site.

Based on the continued presence of LPH and the location of this active service station in a high risk groundwater use area, the Department has continued to issue requirements to clean up the petroleum products released into the subsurface. To date, manual hand bailing of the monitoring well network has resulted in minimal recovery of LPH. The aforementioned findings constitute violations of Maryland law, specifically Code of Maryland Regulations (COMAR) 26.10.02.01C and 26.10.09.01B. These regulations provide that oil may not be discharged into, near, or in an area likely to pollute waters of the State and that the responsibility for the prompt control, containment, and removal of any released regulated substance shall be with the person(s) responsible for the discharge, the owner of the property, the owner of the regulated substance, the owner/operator of the storage system, and the person in charge of the facility.

Based on the continued presence of both dissolved phase and liquid phase hydrocarbons in the groundwater, the responsible parties have agreed to enter into a *Consent Agreement* with the Department that will formalize the steps to final site characterization; ensure prompt remedial technology selection; ensure timely *CAP* implementation; and govern long-term groundwater monitoring on-site and off-site. As discussed during the September 29, 2009 meeting, the Department's OAG will draft the *Consent Agreement* and circulate this document to the responsible parties for final agreement. In the interim, the MDE-OCP will continue to work with the designated environmental consultant(s) to ensure timely movement toward environmental clean-up goals.

Summary of Environmental Clean-up Goals:

1. **No later than November 6, 2009,** provide the Department written documentation as to which environmental consultant will be representing the responsible parties.

2. Notify the Oil Control Program at least five (5) working days prior to the start of any fieldwork associated with this project.

Site Conceptual Model:

3. The *Site Conceptual Model* (*SCM*) needs to reflect all of the subsurface work completed to date. No later than December 7, 2009 submit for the Department's approval a *Subsurface Investigation Work Plan* that shall identify the data gaps and propose work to fill in the data gaps.

    a. MDE has identified data gaps in the shallow zone (5 to 22 feet below ground surface): contamination was documented in these areas, but the monitoring well screens were set at 18 feet. Include a proposal to fill these data gaps;

    b. During numerous investigations, LPH were documented between the tank field and Northeast Road. Data gaps must be filled in this area including, at a minimum, the installation of a monitoring/recovery well in this area;

    c. Petroleum contamination has been documented in the private residences located at 2794 and 2802 Northeast Road. The *Subsurface Investigation Work Plan* must address how the contamination got there (i.e.: What fractures control the flow within these wells and have they been adversely impacted, or is this shallow contamination being drawn through the subsurface?).

4. No later than April 15, 2010, submit for the Department's approval a revised *SCM* that presents:

   a. The results of the approved *Subsurface Investigation Work Plan;*

   b. An evaluation of the vertical and horizontal extent of petroleum contamination;

   c. A prediction of the fate and transport of contaminants of concern.

   d. Include with the revised *SCM*, a feasibility study based on the information derived from the *SCM* that will best remediate documented subsurface contamination. Based on what has been presented to date, the Department understands that a stepped approach (i.e., groundwater pump-and-treat; soil vapor extraction; dual phase extraction) may be necessary to move this case toward closure.

Corrective Action:

5. Within 30 days of approval of the *SCM*, design and submit a *Corrective Action Plan* (*CAP*) for the Department's approval.

6. Within 30 days of approval, implement the approved *CAP*.

Future Sampling and Groundwater Monitoring:

7. Continue to collect samples from all monitoring wells and tank field monitoring pipes not actively exhibiting LPH quarterly **(every three months)**. All samples must be analyzed for full-suite volatile organic compounds (VOCs), including fuel oxygenates, using EPA Method 8260 and for total petroleum hydrocarbons/diesel and gasoline-range organics (TPH/DRO and TPH/GRO) using EPA Method 8015B.

8. Continue to sample quarterly (**every three months**) the on-site drinking water supply well (pre-, mid-, and post-filtration). All samples must be analyzed for full suite VOCs, including fuel oxygenates, using EPA Method 524.2 and for TPH/DRO and TPH/GRO using EPA Method 8015B.

9. Continue to sample the granular activated carbon (GAC) filtration systems retrofitted to the private drinking water wells located at 2794 and 2802 Northeast Road on a quarterly **(every three months)** schedule. Samples must be collected pre-, mid-, and post-filtration. All samples must be analyzed for full suite VOCs, including fuel oxygenates, using EPA Method 524.2 and for TPH/DRO and TPH/GRO using EPA Method 8015B.

10. Following sampling, provide a copy of the sampling results to each resident, the Cecil County Health Department, and the Oil Control Program.

Compliance Issues:

The Department's *Notice of Violation NV-OCP-2004-038-Addendum*, dated July 9, 2008, requested a status update of the requirements of COMAR 26.10.02.03-3A and 26.10.02.03-4A(3) for any service station operating a gasoline underground storage tank (UST) system with greater than 2,000-gallons storage capacity and equipped with Stage II vapor recovery in an area served by drinking water wells. No later than November 6, 2009, provide the Department with an update of the following compliance requirements:

11. Annual enhanced helium testing must be conducted on the gasoline UST systems. The helium test must have a detection limit of 5 parts per million (ppm) or less. All repairs and/or system corrections made before, during, and/or after the test must be logged and reported to the Oil Control Program within twenty (20) days of completion of the test.

12. Annual testing of all containment sumps and spill catchment basins must be conducted in accordance with the Maryland Containment System Testing Protocol or test method approved by the Department. Submit a copy of the test report to the Oil Control Program within twenty (20) days of completion of the test.

All information, data, reports, or plans generated for this site must be submitted to the Oil Control Program for review by dates specified and/or agreed upon with the Department. Failure to perform the advised actions may result in enforcement proceedings that could include the issuance of civil penalties and other legal sanctions.

When submitting documentation to the Oil Control Program, please provide four hard copies and one copy on a compact disc (CD) for updating the Oil Control Program's *Remediation Sites* list on the MDE website. If you have any questions, please contact the case manager, Mr. Chadwick Widney at 410-537-3385 (email: cwidney@mde.state.md.us) or me at 410-537-3499 (email: sbull@mde.state.md.us).

Sincerely,

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

SRB/nln

cc: Ms. Brenda MacPhail (React Environmental)
James A. Johnson, Esquire (Semmes, Bowen & Semmes)
Robert Valliant Jones, Esquire (Law Offices of Robert Valliant Jones)
Mr. Charles Smyser (Cecil County Health Department)
Priscilla Carroll, Esquire (MDE)
Mr. Christopher H. Ralston
Mr. Herbert M. Meade
Mr. Horacio Tablada

ATTACHMENT 6: CARBON FILTRATION SYSTEM INFORMATION

MDE

MARYLAND DEPARTMENT OF THE ENVIRONMENT
1800 Washington Boulevard • Baltimore Maryland • 21230-1719
1-800-633-6101 • http://www.mde.state.md.us

FACT SHEET

Granular Activated Carbon (GAC) Filtration Systems at Petroleum Contaminated Properties

What is Granular Activated Carbon (GAC)?

Activated carbon is made from materials such as petroleum coke, bituminous coal, lignite, wood products, coconut shell, or peanut shells. Activation is achieved in a process where steam and high temperature contacts with the material, producing a carbon substance with many small pores. The activated carbon is crushed to produce a granular or pulverized product. Small pores in the granular activated carbon (GAC) increase the surface area of the material, allowing certain compounds/ contaminants attracted to the carbon to be adsorbed onto the carbon. The efficiency of the adsorption process is influenced by the characteristics of the carbon and the contaminant, as well as the amount of water pumped through the filter.

Different types of carbon remove different contaminants, and no one type of carbon removes all contaminants. Activated carbon filters will not remove microbial contaminants, calcium, magnesium, fluoride, nitrate, and many other compounds that are highly soluble in water. However, most carbon compounds, such as those found in gasoline and oil, are removed effectively.

Recommended GAC System

Point-of-Entry (POE) System. A system that treats all water by being connected to the supply line as it enters the home. This system is recommended for most petroleum contaminant situations. This system usually consists of two 2-cubic-foot fiberglass-reinforced GAC filters, 12 -inch diameter by 48-inch height, piped in series with sampling ports installed before the first filter, in-between the two filters, and after the two filters. Once the POE system is installed, a sampling schedule will be set up to collect samples pre-, mid-, and post-filtration. The schedule of sampling is based on the level of contamination and amount of water used in the home. The sampling frequency will be adjusted as a filter history is developed.

Some drawbacks for a home using a GAC unit include pressure decline, staining of water fixtures, and change in taste. These items can normally be addressed through the proper choice of carbon material and system service. We recommend changing or servicing the filters at least once a year to avoid bacteria buildup and ensure proper water pressure is maintained in the home. We further recommend the use of virgin coconut shell carbon as a filter medium.

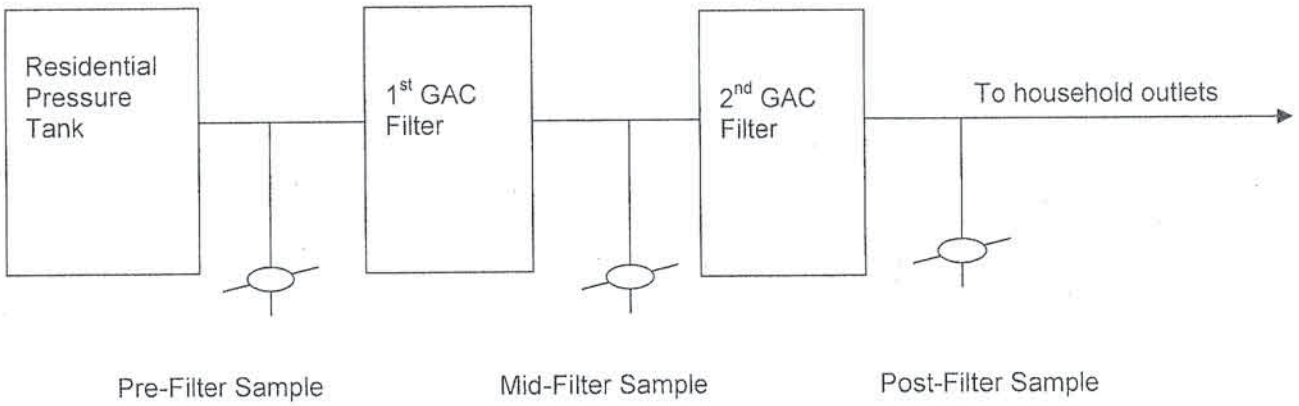
Criteria for GAC System Installation

A drinking water well is sampled using EPA Method 524.2 and petroleum concentrations are detected above the federal and State Safe Drinking Water Standard). The Maryland Department of the Environment's Oil Control Program reserves the right to request another confirmatory sample to verify contaminant levels. The maximum contaminant level for benzene, toluene, ethylbenzene, and xylene (BTEX) and the State's action level for methyl tertiary-butyl ether (MTBE), chemicals commonly

detected as a result of petroleum impact are:

- 5 ppb for benzene
- 1,000 ppb for toluene
- 700 ppb for ethylbenzene
- 10,000 ppb for xylene
- 20 ppb for MTBE

Schematic Diagram of a Typical Point of Entry GAC System



Please note that for non-community supply wells, a permit application must be submitted to the Water Management Administration for the installation and final design of a GAC system.

Disclaimer:

The intent of this fact sheet is to provide information to the reader. To fully understand the subject, the reader should research additional sources of information. MDE makes no claims to the accuracy of this information and accepts no liability regarding the use or interpretation of this document.

ATTACHMENT 7: OFF-SITE DRINKING WATER WELL PERMITS

Cecil County Health Department

John M. Byers Health Center
401 Bow Street
Elkton, Maryland 21921-5501

STEPHANIE GARRITY, M.S.
HEALTH OFFICER

FACSIMILE COVER SHEET

DATE: 1-6-10 **NO. PAGES (including cover):** 3

TO: Brenda

FAX #: _____ **PHONE #:** _____

FROM: pat mundell

PHONE #: 410-996-5160 **FAX #:** 410-996-5153

COMMENTS:

2794 + 2802 Northeast Rd

Confidentiality Statement

WARNING: Unauthorized interception of this telephonic communication could be a violation of Federal and State Law. The documents accompanying this telecopy transmission may contain confidential information which is legally privileged: the information is intended only for the use of the recipient. You are hereby notified that any disclosure, copying, distribution or the taking of any action in reliance on the contents of this telecopied information is strictly prohibited. If you have received this telecopy in error, please immediately notify sender by telephone to arrange for the return of the original documents to us.

C 1 0911 (MDE USE ONLY)

1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-8 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT

FILL IN THIS FORM COMPLETELY
PLEASE TYPE

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

COUNTY NUMBER: Robert McMillan Sub file

ST/CO USE ONLY DATE Received MM DD YY

DATE WELL COMPLETED: 03 24 06

Depth of Well: 250 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL": CE - 95 - 1499

OWNER: R T A Builders

STREET OR RFD: 5607 Telegraph Rd. TOWN: Elkton, MD 21921

SUBDIVISION: McMillan Property II SECTION: LOT: 1

WELL LOG
Not required for driven wells

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

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
Brown sandy clay soil	0	12	
Light Brown Clay	12	45	
Layers of Brown Weathered sand Rock & white quartz	45	84	✓
Hard Gray Granite	84	250	✓
Water Bearing at 80 FT., 125 FT. & 230 FT.			

NUMBER OF UNSUCCESSFUL WELLS: 0

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

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

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

DRILLERS LIC. NO.: MWD 047

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

LIC. NO. D

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

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

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

NO. OF BAGS: 28 NO. OF POUNDS: 2632

GALLONS OF WATER: 168

DEPTH OF GROUT SEAL (to nearest foot) from 0 ft. (TOP) to 87 ft. (BOTTOM) (enter 0 if from surface)

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

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)	Total depth of main casing (nearest foot)
PL	6	87

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

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

C 2 — DEPTH (nearest ft.)

EACH SCREEN		
HO	87	250

SLOT SIZE 1 — 2 —

DIAMETER OF SCREEN — (NEAREST INCH)

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

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

TELESCOPE CASING — LOG INDICATOR — OTHER DATA

C 3

PUMPING TEST
HOURS PUMPED (nearest hour): 3

PUMPING RATE (gal. per min.): 10

METHOD USED TO MEASURE PUMPING RATE: Bucket

WATER LEVEL (distance from land surface)

BEFORE PUMPING: 17 ft.

WHEN PUMPING: 115 ft.

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

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

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

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

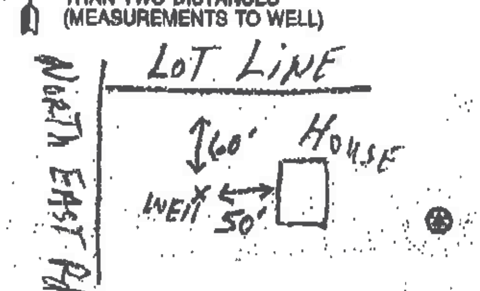
CAPACITY: GALLONS PER MINUTE (to nearest gallon)

PUMP HORSE POWER

PUMP COLUMN LENGTH (nearest ft.)

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

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



COUNTY

(DENV. CROU)

C 1 0315 (MDE USE ONLY)
(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

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

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

COUNTY NUMBER H1075

ST/CO USE ONLY
DATE Received MM DD YY

DATE WELL COMPLETED: MM 03 DD 17 YY 86

Depth of Well: 200 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL": CE - 95 - 1470

OWNER McMILLAN (last name) W. T. (first name) 2744 NORTH EAST
STREET OR RFD 1051 CALVERT RD. TOWN RISING SUN MD. 21911
SUBDIVISION McMILLAN SECTION LOT 2

WELL LOG
Not required for driven wells

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

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
BROWN SANDY CLAY SOIL	0	25	
BROWN CLAY	25	40	
BROWN WEATHERED SAND ROCK	40	65	
HARD GRAY GRANITE	65	200	✓
WATER BEARING AT 100 FT., 130 FT & 180 FT.			

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED: yes [Y] no [N]

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

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

DRILLERS LIC. NO. MWD 047
DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)
LIC. NO. ___ D ___

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

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box): yes [Y] no [N]
TYPE OF GROUTING MATERIAL (Circle one)
CEMENT [C M] BENTONITE CLAY [B C]
NO. OF BAGS 25 NO. OF POUNDS 2350
GALLONS OF WATER 150
DEPTH OF GROUT SEAL (to nearest foot)
from 0 (TOP) ft. to 70 (BOTTOM) ft.
(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below:
[S T] STEEL [C O] CONCRETE [P L] PLASTIC [O T] OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)	Total depth of main casing (nearest foot)
PL	6	70

EACH CASING — OTHER CASING (if used)

diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole insert appropriate code below:
[S T] STEEL [B R] BRASS [H O] OPEN HOLE [P L] PLASTIC [O T] OTHER

EACH SCREEN — DEPTH (nearest ft.)

	from	to
1	40	70
2	200	
3		

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

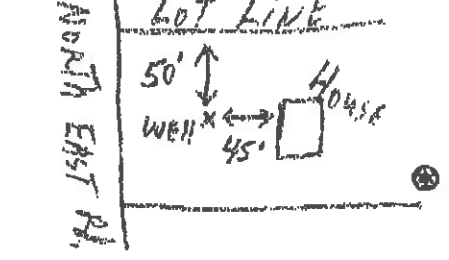
GRAVEL PACK: from ___ to ___
IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

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

PUMPING TEST
HOURS PUMPED (nearest hour) 3
PUMPING RATE (gal. per min.) 10
METHOD USED TO MEASURE PUMPING RATE BUCKET
WATER LEVEL (distance from land surface)
BEFORE PUMPING 18 ft.
WHEN PUMPING 95 ft.
TYPE OF PUMP USED (for test)
[A] air [P] piston [T] turbine [C] centrifugal [R] rotary [O] other (describe below) [J] jet [S] submersible

PUMP INSTALLED
DRILLER INSTALLED PUMP (CIRCLE) (YES or NO): YES / NO
IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.
TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. ___
CAPACITY: GALLONS PER MINUTE (to nearest gallon) ___
PUMP HORSE POWER ___
PUMP COLUMN LENGTH (nearest ft.) ___
CASING HEIGHT (circle appropriate box and enter casing height): [+] above / [−] below LAND SURFACE 1 (nearest foot)

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



DENV-CR00 COUNTY PCS

ATTACHMENT 8: J&E SL-SCREEN AND GW-SCREEN MODEL RESULTS

ATTACHMENT 8: J&E SL-SCREEN AND GW-SCREEN MODEL RESULTS

Model Input Parameters

Input Value	Value	Units	Description
Benzene Soil Concentration	1550.00	µg/m^3	Highest measured concentration during the most recent (2008-2009) investigation
Benzene Groundwater Concentration	14400.00	µg/L	
1,2-dichloroethane Soil Concentration	79.60	µg/m^3	
1,2-dichloroethane Groundwater Concentration	27.10	µg/L	
1,2-dibromoethane Soil Concentration	91.60	µg/L	
1,2-dibromoethane Groundwater Concentration	265.00	µg/L	
112-trichloroethane Soil Concentration	219.00	µg/m^3	
Ethylbenzne Groundwater Concentration	2540.00	µg/L	
Tetrachloroethylene Groundwater Concentration	15.70	µg/L	
Toluene Groundwater Concentration	34500.00	µg/L	
Acetone Groundwater Concentration	2110.00	µg/L	
Methyl ethyl ketone Groundwater Concentration	1320.00	µg/L	
Methyl tert butyl ether Groundwater Concentration	11900.00	µg/L	
Depth Below Grade to Bottom of Enclosed Space Floor (L_F)	200.00	cm	Default for basement construction- most conservative value
Depth Below Grade to Top of Contamination	soil: 365, GW: 400	cm	Site Specific to sample location and groundwater depth
Average Soil Temperature (T_S)	10	ºC	Default model value
Vadose Zone Soil Type	SIC	unitless	Determined from site-specific geotechnical testing, soils at the Site are classified as silty clay, in accordance with U.S. Department of Agriculture classification codes.
Vadose Zone Soil Dry Bulk Density (ρbA)	1.38	g/m3	Soil type-dependent value
Vadose Zone Soil Total Porosity (nV)	1.321	unitless	Soil type-dependent value
Vadose Zone Soil Water-filled Porosity (θwV)	0.216	cm3/cm3	Soil type-dependent value

Exposure Assumptions

Input Value	Value	Units	Source
Averaging time for carcinogens	70	years	All values are default values as determined by the EPA Risk Assessment Guidance for Superfund, Volume 1: Human Health Evaluation Manual and the Johnson and Ettinger User's Guide for Evaluating Subsurface Vapor Intrusion into Buildings
Averaging Time for noncarcinogens (nonres*)	25	years	
Averaging time for noncarcinogens (res)	30	years	
Exposure Duration (nonres*)	25	years	
Exposure duration (res)	30	years	
Exposure Frequency (nonres*)	250	days per year	
Exposure Frequency (res)	350	days per year	
Target Risk for Carcinogens	0.000001	unitless	
Target Hazard Quotient for noncarcinogens	1	unitless	

*Default values for soil screening models utilized the non-residential exposure parameters since all potential receptors to soil vapor impacts would be on-Site and current Site use is non-residential. All groundwater screening models utilized residential exposure parameters since off-Site receptors to groundwater vapors are a possibility.

Quantification of Baseline Soil and Groundwater Inhalation Risk

Baseline Soil and Groundwater Risk to Vapor Intrusion							
		Soil		Groundwater		Soil plus Groundwater	
Compound	*Matrix*	*Carcinogen*	*Noncarcinogenic*	*Carcinogen*	*Noncarcinogenic*	*Carcinogen*	*Noncarcinogenic*
1,1,2-Trichloroethane	Soil	6.20E-06	7.80E-02	NA	NA	6.20E-06	7.80E-02
Benzene	Soil, Groundwater	**1.20E-04**	**1.50E+00**	**8.40E-05**	8.40E-01	**2.04E-04**	**2.34E+00**
1,2-Dichloroethane	Soil, Groundwater	7.20E-06	NA	2.40E-07	NA	7.44E-06	NA
1,2-Dibromoethane	Soil, Groundwater*	**1.50E-05**	**9.40E-01**	9.90E-06	5.20E-01	**2.49E-05**	**1.46E+00**
MTBE	Groundwater*	NA	NA	NA	4.20E-03	NA	4.20E-03
Tetrachloroethene	Groundwater	NA	NA	1.20E-07	8.20E-05	1.20E-07	8.20E-05
Toluene	Groundwater	NA	NA	NA	1.50E-01	NA	1.50E-01
Ethylbenzene	Groundwater	NA	NA	NA	4.10E-03	NA	4.10E-03
Methyl ethyl ketone	Groundwater*	NA	NA	NA	2.80E-03	NA	2.80E-03
Acetone	Groundwater*	NA	NA	NA	4.40E-03	NA	4.40E-03
TOTAL		**1.48E-04**	**2.52E+00**	**9.43E-05**	**1.53E+00**	**2.43E-04**	**4.04E+00**
TARGET RISK		1.0E-06	1	1.0E-06	1	1.0E-06	1

COMMENT 1: **Bold** values indicate the calculated risk level exceeds the maximum

COMMENT 2: Risk values calculated using the J&E soil and groundwater spreadsheets ("SL-SCREEN.XLS" and "GW-SCREEN.XLS)", the exposure assumptions are listed in the EPA User's Guide for Evaluating Vapor Intrusion Into Buildings and the inhalation risk formulas published in the EPA Risk Assessment Guidance for Superfund. The J&E model assumed a "Silty Clay" soil type. The J&E model used the highest soil-gas concentrations reported among sample collection events conducted in November 2008.

*Concentration used for compound taken from temporary well point.

Input Screen – Baseline Soil Characterization, Benzene J&E Model

SL-SCREEN Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED SOIL CONCENTRATION (enter "X" in "YES" box)

YES

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL SOIL CONCENTRATION (enter "X" in "YES" box and initial soil conc. below)

YES X

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial soil conc., C_R (µg/kg)	Chemical
71432	1.55E+03	Benzene

MORE

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Depth below grade to top of contamination, L_t (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
200	365	10	SIC		

MORE

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Vadose zone soil organic carbon fraction, f_{oc}^V (unitless)	ENTER Average vapor flow rate into bldg. (Leave blank to calcula Q_{soil} (L/m)
SIC	1.38	1.321	0.216	0.002	

MORE

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)
70	25	25	250	1.0E-06	1

Used to calculate risk-based soil concentration.

END

Output Screen – Baseline Soil Characterization Benzene J&E Model

RISK-BASED SOIL CONCENTRATION CALCULATIONS:

INCREMENTAL RISK CALCULATIONS:

Indoor exposure soil conc., carcinogen (μg/kg)	Indoor exposure soil conc., noncarcinogen (μg/kg)	Risk-based indoor exposure soil conc., (μg/kg)	Soil saturation conc., C_{sat} (μg/kg)	Final indoor exposure soil conc., (μg/kg)	Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	NA	NA	6.56E+05	NA	1.2E-04	1.5E+00

MESSAGE SUMMARY BELOW:

Input Screen – Baseline Soil Characterization, 1,2-Dichloroethane J&E Model

SL-SCREEN Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED SOIL CONCENTRATION (enter "X" in "YES" box)

YES [ ]

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL SOIL CONCENTRATION (enter "X" in "YES" box and initial soil conc. below)

YES [X]

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial soil conc., C_R (µg/kg)	Chemical
107062	7.96E+01	1,2-Dichloroethane

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Depth below grade to top of contamination, L_t (cm)	ENTER Average soil temperature, T_S (^oC)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
200	365	10	SIC		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Vadose zone soil organic carbon fraction, f_{oc}^V (unitless)	ENTER Average vapor flow rate into bldg. (Leave blank to calcula Q_{soil} (L/m)
SIC	1.38	1.321	0.216	0.002	

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)
70	25	25	250	1.0E-06	1
				Used to calculate risk-based soil concentration.	

END

Output Screen – Baseline Soil Characterization, 1,2-Dichloroethane J&E Model

RISK-BASED SOIL CONCENTRATION CALCULATIONS:

INCREMENTAL RISK CALCULATIONS:

Indoor exposure soil conc., carcinogen (μg/kg)	Indoor exposure soil conc., noncarcinogen (μg/kg)	Risk-based indoor exposure soil conc., (μg/kg)	Soil saturation conc., C_{sat} (μg/kg)	Final indoor exposure soil conc., (μg/kg)	Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	NA	NA	1.76E+06	NA	7.2E-06	NA

MESSAGE SUMMARY BELOW:

Input Screen – Baseline Soil Characterization, 1,1,2-Trichloroethane J&E Model

SL-SCREEN Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED SOIL CONCENTRATION (enter "X" in "YES" box)

YES [ ]

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL SOIL CONCENTRATION (enter "X" in "YES" box and initial soil conc. below)

YES [X]

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial soil conc., C_R (µg/kg)	Chemical
79005	2.19E+02	1,1,2-Trichloroethane

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Depth below grade to top of contamination, L_t (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
200	365	10	SIC		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Vadose zone soil organic carbon fraction, f_{oc}^V (unitless)	ENTER Average vapor flow rate into bldg. (Leave blank to calcula Q_{soil} (L/m)
SIC	1.38	1.321	0.216	0.002	

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)
70	25	25	250	1.0E-06	1
				Used to calculate risk-based soil concentration.	

END

Output Screen – Baseline Soil Characterization, 1,1,2-Trichloroethane J&E Model

RISK-BASED SOIL CONCENTRATION CALCULATIONS:

Indoor exposure soil conc., carcinogen (μg/kg)	Indoor exposure soil conc., noncarcinogen (μg/kg)	Risk-based indoor exposure soil conc., (μg/kg)	Soil saturation conc., C_{sat} (μg/kg)	Final indoor exposure soil conc., (μg/kg)
NA	NA	NA	1.19E+06	NA

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
6.2E-06	7.8E-02

MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based soil concentration is based on a route-to-route extrapolation.

END

Input Screen – Baseline Soil Characterization, 1,2-Dibromoethane J&E Model

SL-SCREEN Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED SOIL CONCENTRATION (enter "X" in "YES" box)

YES [ ]

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL SOIL CONCENTRATION (enter "X" in "YES" box and initial soil conc. below)

YES [X]

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial soil conc., C_R (µg/kg)	Chemical
106934	9.16E+01	1,2-Dibromoethane (ethylene dibromide)

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Depth below grade to top of contamination, L_t (cm)	ENTER Average soil temperature, T_S (^oC)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
200	365	10	SIC		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Vadose zone soil organic carbon fraction, f_{oc}^V (unitless)	ENTER Average vapor flow rate into bldg. (Leave blank to calcula Q_{soil} (L/m)
SIC	1.38	1.321	0.216	0.002	

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)
70	25	25	250	1.0E-06	1
				Used to calculate risk-based soil concentration.	

END

Output Screen – Baseline Soil Characterization, 1,2-Dibromoethane J&E Model

RISK-BASED SOIL CONCENTRATION CALCULATIONS:

INCREMENTAL RISK CALCULATIONS:

Indoor exposure soil conc., carcinogen (μg/kg)	Indoor exposure soil conc., noncarcinogen (μg/kg)	Risk-based indoor exposure soil conc., (μg/kg)	Soil saturation conc., C_{sat} (μg/kg)	Final indoor exposure soil conc., (μg/kg)	Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	NA	NA	9.06E+05	NA	1.5E-05	9.4E-01

MESSAGE SUMMARY BELOW:

Input Screen – Baseline Groundwater Characterization, Benzene J&E Model

GW-SCREEN Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES [ ]

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION (enter "X" in "YES" box and initial groundwater conc. below)

YES [X]

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_W (μg/L)	Chemical
71432	1.44E+04	Benzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to water table, L_{WT} (cm)	ENTER SCS soil type directly above water table	ENTER Average soil/ groundwater temperature, T_S (^oC)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
200	400	SIC	10	

MORE ↓

ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)		ENTER User-defined vandose zone soil vapor permeability, k_v (cm^2)	ENTER Vadose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^V (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)
SIC	OR		SIC	1.38	1.321	0.216

MORE ↓

ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)	ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
1.0E-06	1	70	30	30	350

Used to calculate risk-based groundwater concentration.

Output Screen – Baseline Groundwater Characterization, Benzene J&E Model

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

Indoor exposure groundwater conc., carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (µg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (µg/L)	Final indoor exposure groundwater conc., (µg/L)
NA	NA	NA	1.79E+06	NA

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
8.4E-05	8.4E-01

MESSAGE SUMMARY BELOW:

Input Screen – Baseline Groundwater Characterization, 1,2-Dichloroethane J&E Model

GW-SCREEN Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES [ ]

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION (enter "X" in "YES" box and initial groundwater conc. below)

YES [X]

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_W ($\mu g/L$)	Chemical
107062	2.71E+01	1,2-Dichloroethane

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to water table, L_{WT} (cm)	ENTER SCS soil type directly above water table	ENTER Average soil/ groundwater temperature, T_S (^oC)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
200	400	SIC	10	

MORE ↓

ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vandose zone soil vapor permeability, k_v (cm^2)	ENTER Vadose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^V (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)
SIC				1.38	1.321	0.216

MORE ↓

ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)	ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
1.0E-06	1	70	30	30	350

Used to calculate risk-based groundwater concentration.

Output Screen – Baseline Groundwater Characterization, 1,2-Dichloroethane J&E Model

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

INCREMENTAL RISK CALCULATIONS:

Indoor exposure groundwater conc., carcinogen (μg/L)	Indoor exposure groundwater conc., noncarcinogen (μg/L)	Risk-based indoor exposure groundwater conc., (μg/L)	Pure component water solubility, S (μg/L)	Final indoor exposure groundwater conc., (μg/L)	Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	NA	NA	8.52E+06	NA	2.4E-07	NA

MESSAGE SUMMARY BELOW:

Input Screen – Baseline Groundwater Characterization, Ethylbenzene J&E Model

GW-SCREEN Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES [ ]

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION (enter "X" in "YES" box and initial groundwater conc. below)

YES [X]

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_W (μg/L)	Chemical
100414	2.54E+03	Ethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to water table, L_{WT} (cm)	ENTER SCS soil type directly above water table	ENTER Average soil/ groundwater temperature, T_S (^oC)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
200	400	SIC	10	

MORE ↓

ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vandose zone soil vapor permeability, k_v (cm^2)	ENTER Vadose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^V (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)
SIC			SIC	1.38	1.321	0.216

MORE ↓

ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)	ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
1.0E-06	1	70	30	30	350
Used to calculate risk-based					

Output Screen – Baseline Groundwater Characterization, Ethylbenzene J&E Model

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

INCREMENTAL RISK CALCULATIONS:

Indoor exposure groundwater conc., carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (µg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (µg/L)	Final indoor exposure groundwater conc., (µg/L)	Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	NA	NA	1.69E+05	NA	NA	4.1E-03

MESSAGE SUMMARY BELOW:

Input Screen – Baseline Groundwater Characterization, PCE J&E Model

GW-SCREEN Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES [ ]

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION
(enter "X" in "YES" box and initial groundwater conc. below)

YES [X]

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_W (μg/L)	Chemical
127184	1.57E+01	Tetrachloroethylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to water table, L_{WT} (cm)	ENTER SCS soil type directly above water table	ENTER Average soil/ groundwater temperature, T_S (^oC)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
200	400	SIC	10	

MORE ↓

ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vandose zone soil vapor permeability, k_v (cm^2)	ENTER Vadose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^V (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)
SIC			SIC	1.38	1.321	0.216

MORE ↓

ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)	ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
1.0E-06	1	70	30	30	350
Used to calculate risk-based					

Output Screen – Baseline Groundwater Characterization, PCE J&E Model

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

INCREMENTAL RISK CALCULATIONS:

Indoor exposure groundwater conc., carcinogen (μg/L)	Indoor exposure groundwater conc., noncarcinogen (μg/L)	Risk-based indoor exposure groundwater conc., (μg/L)	Pure component water solubility, S (μg/L)	Final indoor exposure groundwater conc., (μg/L)	Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	NA	NA	2.00E+05	NA	1.2E-07	8.2E-05

MESSAGE SUMMARY BELOW:

Input Screen – Baseline Groundwater Characterization, Toluene J&E Model

GW-SCREEN Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION (enter "X" in "YES" box and initial groundwater conc. below)

YES: X

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_W ($\mu g/L$)	Chemical
108883	3.45E+04	Toluene

MORE

ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to water table, L_{WT} (cm)	ENTER SCS soil type directly above water table	ENTER Average soil/ groundwater temperature, T_S (^oC)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
200	400	SIC	10	

MORE

ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vandose zone soil vapor permeability, k_v (cm^2)	ENTER Vadose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^V (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)
SIC			SIC	1.38	1.321	0.216

MORE

ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)	ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
1.0E-06	1	70	30	30	350

Used to calculate risk-based groundwater concentration.

Output Screen – Baseline Groundwater Characterization, Toluene J&E Model

Indoor exposure groundwater conc., carcinogen (μg/L)	Indoor exposure groundwater conc., noncarcinogen (μg/L)	Risk-based indoor exposure groundwater conc., (μg/L)	Pure component water solubility, S (μg/L)	Final indoor exposure groundwater conc., (μg/L)	Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	NA	NA	5.26E+05	NA	NA	1.5E-01

MESSAGE SUMMARY BELOW:

Input Screen – Baseline Groundwater Characterization, Acetone J&E Model

GW-SCREEN Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES [ ]

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION (enter "X" in "YES" box and initial groundwater conc. below)

YES [X]

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_W ($\mu g/L$)	Chemical
67641	2.11E+03	Acetone

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to water table, L_{WT} (cm)	ENTER SCS soil type directly above water table	ENTER Average soil/ groundwater temperature, T_S (^oC)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
200	400	SIC	10	

MORE ↓

ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vandose zone soil vapor permeability, k_v (cm^2)	ENTER Vadose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^V (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)
SIC				1.38	1.321	0.216

MORE ↓

ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)	ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
1.0E-06	1	70	30	30	350

Used to calculate risk-based groundwater concentration.

Output Screen – Baseline Groundwater Characterization, Acetone J&E Model

Indoor exposure groundwater conc., carcinogen (μg/L)	Indoor exposure groundwater conc., noncarcinogen (μg/L)	Risk-based indoor exposure groundwater conc., (μg/L)	Pure component water solubility, S (μg/L)	Final indoor exposure groundwater conc., (μg/L)	Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	NA	NA	1.00E+09	NA	NA	7.6E-04

MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based groundwater concentration is based on a route-to-route extrapolation.

Input Screen – Baseline Groundwater Characterization, 1,2-Dibromoethane J&E Model

GW-SCREEN Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES [ ]

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION (enter "X" in "YES" box and initial groundwater conc. below)

YES [X]

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_W ($\mu g/L$)	Chemical
106934	2.65E+02	1,2-Dibromoethane (ethylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to water table, L_{WT} (cm)	ENTER SCS soil type directly above water table	ENTER Average soil/ groundwater temperature, T_S (^oC)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
200	400	SIC	10	

MORE ↓

ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vandose zone soil vapor permeability, k_v (cm^2)	ENTER Vadose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^V (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)
SIC				1.38	1.321	0.216

MORE ↓

ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)	ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
1.0E-06	1	70	30	30	350

Used to calculate risk-based groundwater concentration.

Output Screen – Baseline Groundwater Characterization, 1,2-Dibromoethane J&E Model

Indoor exposure groundwater conc., carcinogen (μg/L)	Indoor exposure groundwater conc., noncarcinogen (μg/L)	Risk-based indoor exposure groundwater conc., (μg/L)	Pure component water solubility, S (μg/L)	Final indoor exposure groundwater conc., (μg/L)	Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	NA	NA	4.18E+06	NA	9.9E-06	5.2E-01

MESSAGE SUMMARY BELOW:

Input Screen – Baseline Groundwater Characterization, MEK J&E Model

GW-SCREEN Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES [ ]

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION (enter "X" in "YES" box and initial groundwater conc. below)

YES [X]

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_W ($\mu g/L$)	Chemical
78933	1.32E+03	Methylethylketone (2-butanone)

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to water table, L_{WT} (cm)	ENTER SCS soil type directly above water table	ENTER Average soil/ groundwater temperature, T_S (^oC)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
200	400	SIC	10	

MORE ↓

ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vandose zone soil vapor permeability, k_v (cm^2)	ENTER Vadose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^V (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)
SIC				1.38	1.321	0.216

MORE ↓

ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)	ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
1.0E-06	1	70	30	30	350

Used to calculate risk-based groundwater concentration.

Output Screen – Baseline Groundwater Characterization, MEK J&E Model

Indoor exposure groundwater conc., carcinogen (μg/L)	Indoor exposure groundwater conc., noncarcinogen (μg/L)	Risk-based indoor exposure groundwater conc., (μg/L)	Pure component water solubility, S (μg/L)	Final indoor exposure groundwater conc., (μg/L)	Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	NA	NA	2.23E+08	NA	NA	3.0E-05

MESSAGE SUMMARY BELOW:

Input Screen – Baseline Groundwater Characterization, MTBE J&E Model

GW-SCREEN Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES [ ]

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION (enter "X" in "YES" box and initial groundwater conc. below)

YES [X]

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_W ($\mu g/L$)	Chemical
1634044	1.19E+04	MTBE

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to water table, L_{WT} (cm)	ENTER SCS soil type directly above water table	ENTER Average soil/ groundwater temperature, T_S (^oC)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
200	400	SIC	10	

MORE ↓

ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vandose zone soil vapor permeability, k_v (cm^2)	ENTER Vadose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^V (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)
SIC			SIC	1.38	1.321	0.216

MORE ↓

ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)	ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
1.0E-06	1	70	30	30	350

Used to calculate risk-based groundwater concentration.

Output Screen – Baseline Groundwater Characterization, MTBE J&E Model

Indoor exposure groundwater conc., carcinogen (μg/L)	Indoor exposure groundwater conc., noncarcinogen (μg/L)	Risk-based indoor exposure groundwater conc., (μg/L)	Pure component water solubility, S (μg/L)	Final indoor exposure groundwater conc., (μg/L)	Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	NA	NA	5.10E+07	NA	NA	2.8E-03

MESSAGE SUMMARY BELOW: