

Revised Corrective Action Plan

Monrovia BP/Former Green Valley Citgo
MDE Case #2005-0834-FR
MDE Facility ID #11836
11791 Fingerboard Road
Monrovia, Maryland

Prepared for:

Carroll Independent Fuels Company
2700 Loch Raven Road
Baltimore, Maryland 21218

Prepared by:



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January 31, 2014

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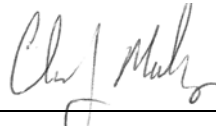
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1.0 INTRODUCTION

Groundwater & Environmental Services, Inc. (GES), on behalf of Carroll Independent Fuels Company (CIFC), respectfully submits this *Revised Corrective Action Plan (CAP)* for the Monrovia BP/Former Green Valley Citgo Station located at 11791 Fingerboard Road in Monrovia, Maryland (the Site). This Revised CAP has been completed to fulfill the requirements set forth in the Maryland Department of the Environment – Oil Control Program’s (MDE-OCP) correspondence dated October 18, 2013. A copy of this letter is attached in **Appendix A – MDE Correspondence**.

This Revised CAP document will provide the following:

- an update to the existing Conceptual Site Model (CSM)
- discussion of the current state of the dissolved-phase hydrocarbon plume based on results of completed remedial activities
- a plan to mitigate current and future risks to on-site and off-site receptors
- a waste treatment and disposal plan
- a determination regarding additional pilot testing to support the proposed remedy
- proposal of cleanup goals and remedial endpoints based on site specific conditions and the associated risk to human health and the environment

2.0 FACILITY INFORMATION

2.1 Site and Surrounding Area Description

The Site is located in the northeastern section of a 5.2-acre parcel southwest of the intersection of Fingerboard Road and Lynn Burke Road in Monrovia, Frederick County, Maryland. The Site is currently an active BP Station attached to the end of an L-shaped shopping plaza, known as the Green Valley Plaza (GVP), and is located in a mixed commercial and residential area. The Site consists of landscaped areas, a paved parking lot, a convenience store, and a canopy housing five multi-product dispenser (MPD) islands. The current underground storage tank (UST) system is comprised of two 10,000-gallon gasoline USTs, one 10,000-gallon diesel UST and one 4,000-gallon diesel UST in a common tank field. The tanks are constructed of composite steel and were installed in August 2008. A **Site Map** illustrating the tank field and dispenser island locations is included as **Figure 1**.

A dry cleaning establishment (Green Valley Cleaners) conducting onsite dry cleaning is located within the GVP. Another commercial property, the Green Valley Shopping Center (GVSC), is located adjacent to the Site to the east, which consists of one shopping plaza building and three ancillary buildings including an Allstate Insurance office, a 7-11 convenience store and an auto repair facility. GVP is bordered to the north by Fingerboard Road (Maryland Route 80) followed by residential properties, to the west by Greenridge Drive followed by residential properties, and to the south by Rosewood Road followed by residential properties.

2.2 Sensitive Receptors

The Site is located in a High Risk Groundwater Use Area (HRGUA) served by private potable supply wells. In 2007, Environmental Alliance (Alliance) conducted a drinking water well survey which identified 79 possible potable wells within a 0.5 mile radius of the Site. Further information regarding this survey can be



reviewed in the April 30, 2007 Alliance correspondence titled *Drinking Water Well Survey*. All residences in the currently defined study area for the case are served by private potable supply wells.

The nearest surface water body is Fahrney Branch, located approximately 2,400 feet to the south. There is a child care facility known as Green Valley Branch YMCA currently located in the GVP. The only onsite basement structure noted for the GVP is a room housing pump equipment for the water supply wells. The onsite GVP water supply is classified as a non-transient, non-community system and served by five (5) supply wells. The adjacent GVSC water supply is also classified as a non-transient, non-community system served by two supply wells. (A separate supply well, FR734918, serves a single office space at the GVSC, and is restricted to non-potable use only.) The locations of area potable wells in the study area are illustrated on a **Local Area Map** as **Figure 2**.

2.3 Utilities

Although not all utilities have recently been field-verified, onsite below grade utilities include electric, storm sewer, and water lines running from potable wells to the GVP building. Overhead electrical and telephone lines are located along the north side of Fingerboard Road and extend onto the Site. A comprehensive Surface Drain Evaluation was performed by Alliance in 2007. According to the Alliance evaluation, storm water draining from the canopy, UST field and parking lot areas, on the west side of the GVP building, flows west toward a surface discharge location across from Greenridge Road. Storm water east of the GVP building (backside) merges with water collected from the GVSC lot at a collection basin. This rip-rap basin drains to a surface discharge across Rosewood Road between Rye Lane and Farm Lane. Upon review of the **Figure 2 - Local Area Map**, it also appears that surrounding residential developments, such as those along Farm Lane, are constructed to channel storm water via surface ditches to the south toward Fahrney Branch. The storm sewer lines are shown on the **Site Map** attached as **Figure 1**. Residential surface water drainage features in relation to surface topography can be reviewed on the **Local Area Map** as **Figure 2**.

2.4 Chronology of Events

A comprehensive summary of the Site history is included in Quarterly Monitoring Reports prepared for this case and is attached as **Appendix B**. The most recent events affecting Site remediation include MDE-OCP correspondence dated July 31, 2012, which required CIFIC to shut down the in-situ chemical oxidation (ISCO) remediation system pending further review of the presence of hexavalent chromium in groundwater at the Site. Subsequently, the ISCO system was shut down on August 1, 2012.

On August 1, 2012 CIFIC was instructed by the MDE-OCP to conduct an investigation regarding the occurrence of select metals including chromium and lead in both monitoring wells and potable supply wells for the project. A summary of this investigation and the conclusions drawn from the results were presented in the *Supplemental Chromium and Lead Investigation Summary* document submitted to the MDE-OCP on September 28, 2012 by GES. As a result, continued sampling for metals was required at several monitoring and potable wells. This supplemental sampling and analysis is expected to be discontinued after the First Quarter 2014 monitoring period.

2.5 Monitoring Well Network

Nineteen monitoring wells (MW-1, MW-2, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-14S, MW-14D, MW-15D, MW-16, MW-17, and MW-18S/MW-18D), two soil vapor monitoring points (SV-1 and SV-2), one soil vapor extraction point (VE-1) and seven injection wells (IW-1S/IW-1D, IW-2S/IW-2D, IW-3S/IW-3D, and IW-4) are currently located on the Site. Monitoring wells MW-18S and MW-18D are nested in a single borehole, and each injection well pair is nested in a single borehole. One monitoring well (MW-3), one soil vapor monitoring point (SV-3), and two tank field monitoring wells (TF-1 and TF-2) that formerly existed at the Site have been abandoned.



No new wells have been constructed since the submission of the *ISCO System Comprehensive Summary Report* on September 28, 2012. Therefore, reference to the Site boring and well construction logs for all monitoring wells, soil vapor monitoring points, soil vapor extraction wells and injection wells can be reviewed from this previously submitted document. The locations of these wells are shown on the **Site Map** attached as **Figure 1**. Well construction details for the wells are included in **Table 1 – Monitoring Well Construction Details**.

2.6 ISCO Wells

Between November 16 and 18, 2010, three injection well pairs were installed in increasing depths which include IW-1S/1D screened at approximately 63 to 67 feet below grade (fbg) and 69 to 73 fbg, IW-2S/2D screened at approximately 87 to 91 fbg and 99 to 103 fbg, and IW-3S/3D screened at approximately 123 to 127 fbg and 130 to 134 fbg. Injection well IW-4 was installed between May 21 and 29, 2012 and screened from approximately 85 to 89 fbg. The injection wells are constructed as GES-patented Max-Ox points. Soil vapor extraction (SVE) well VE-1 was installed November 18, 2010 to a depth of approximately 28 fbg and screened from 8 to 28 fbg.

2.7 Potable Supply Wells

Currently, thirty-six (36) area potable wells are included in the Green Valley study area. Routine sampling of these 36 wells has occurred since 2006. Residential water samples are analyzed for full suite volatile organic compounds (VOCs), including oxygenates, via EPA method 524.2. As noted in the October 18, 2013 MDE directive, six (6) of the residential wells in the study area have had historic detections of methyl tert-butyl ether (MTBE) exceeding the 20 micrograms per liter ($\mu\text{g/L}$) MDE Action Level and are therefore treated with granular activated carbon (GAC) filtration systems. These six GAC systems are currently maintained by CIFIC. The six residential GAC filtered supply wells are required to be sampled quarterly, however, sampling for three of the residential systems (3990, 3992, and 3994 Farm Lane) typically occurs monthly to evaluate GAC performance. An additional fourteen (14) residential potable wells, which are not GAC filtered, are sampled on a quarterly basis. The remaining nine (9) residential potable wells are sampled on a semi-annual frequency.

As identified in Section 2.2, a total of eight (8) wells comprise the GVSC and GVP supply systems. GAC filtration is also applied to the blended influent of the GVP drinking water system (5 wells) which is also sampled on a quarterly basis. The adjacent GVSC water supply system is not GAC filtered and is maintained by the property owner. Two of the GVP supply wells and the three GVSC supply wells are individually sampled on a quarterly basis. The remaining three GVP supply wells, which are located approximately 450 feet west of the UST field, are sampled on an annual basis. This sampling schedule and the most recent sampling results were submitted to the MDE-OCF in the *Third Quarter 2013 Monitoring Report, Monrovia BP/Former Green Valley Citgo – November 15, 2013*.

3.0 ANALYTICAL DATA

Analytical data have been collected for both subsurface soil and groundwater at the Site. The following sections summarize historical and current soil and groundwater quality.

3.1 Soil Sampling Results

A total of 44 soil samples have been collected for laboratory analysis in several phases during soil boring investigations, installations of soil vapor monitoring points, and UST system replacement activities. All of these soil samples were collected under supervision of Environmental Alliance. A **Historical Soil Analytical Data Summary** is included as **Table 2**. Soil samples were collected during the following activities:



- Ten soil samples were collected when ten soil borings (GP-1 through GP-10) were advanced on September 14 and 15, 2005 as part of the initial subsurface investigation.
- Six soil samples were collected when soil vapor monitoring points SV-1, SV-2 and SV-3 were installed around the tank field on May 31 and June 1, 2007 in preparation for SVE testing. Soil boring SB-1 was also advanced on June 1, 2007, and one soil sample was collected.
- Twenty-seven (27) soil samples were collected between July 16 and 28, 2008 when USTs, dispensers and product lines were removed from the Site.

Soil samples collected during soil boring activities and soil vapor monitoring point installation were screened in the field using a photoionization detector (PID) to detect VOCs. During the 2005 soil boring event, the soil sample from the interval with the highest PID response at each boring was submitted for laboratory analysis. PID readings during the 2005 soil boring event ranged from 0.0 parts per million (ppm) to 1,428 ppm (GP-3, 8-11 fbg). During the 2007 vapor monitoring point installation and soil boring event, one sample was submitted from soil vapor monitoring point SV-1, three samples were submitted from soil vapor monitoring point SV-2, two samples were submitted from soil vapor monitoring point SV-3, and one sample was submitted from soil boring SB-1. PID responses ranged from 0.0 ppm to 55.0 ppm (SV-3, 15-17 fbg).

During UST system removal in 2008, one soil sample was collected from beneath each dispenser island at a depth of approximately 4 fbg, one sample was collected from beneath piping runs at a depth of approximately 4 fbg at 20-foot intervals, and soil samples were collected from beneath the USTs and the sidewalls of the UST excavation. Elevated PID responses in the field indicated petroleum impact beneath the product piping between the dispensers. Soil in this area was over-excavated to a depth at which elevated PID readings were no longer observed. Confirmation soil samples were collected at the deepest extent of the excavation in this area (Alliance, August 22, 2008).

None of the soil samples collected at the Site during the three subsurface events noted above contained any concentrations of compounds of concern (COCs) that exceeded the MDE's Generic Numeric Non-Residential Cleanup Standard for Soil (June 2008). Benzene, toluene, and ethylbenzene were not detected in any of the soil samples collected. The highest concentration of total xylenes detected in soil at the Site was 4 micrograms per kilogram ($\mu\text{g}/\text{kg}$) in the sample collected from soil boring GP-8 at a depth of 14 to 16 fbg on September 15, 2005. The highest concentration of MTBE and tert-butyl alcohol (TBA) detected in soil at the Site were 160 $\mu\text{g}/\text{kg}$ and 4,800 $\mu\text{g}/\text{kg}$, respectively, in the sample collected from soil vapor point SV-3 at a depth of 10 to 12 fbg on June 1, 2007. The highest concentration of total petroleum hydrocarbons-diesel range organics (TPH-DRO) detected in soil at the Site was 110 milligrams per kilogram (mg/kg) in the sample collected from soil boring GP-1 at a depth of 11 to 14 fbg on September 14, 2005. The highest concentration of total petroleum hydrocarbons-gasoline range organics (TPH-GRO) detected in soil at the Site was 0.7 mg/kg in the sample collected from the location PIPE-2 during UST removal activities on July 16, 2008. These results suggest there is no existing source for groundwater impacts in the soil horizons sampled.

3.2 Groundwater Sampling Results

Groundwater samples have been collected from monitoring wells MW-1 through MW-4 since February 2006, and on a quarterly basis since August 2008. Monitoring well MW-3 was abandoned in May 2008 prior to UST system removal. Additional monitoring wells have been added to the quarterly sampling schedule as they have been installed. In conjunction with the groundwater sampling events, groundwater elevation data for all wells has been collected on a quarterly basis. Groundwater samples have historically been analyzed for VOCs plus fuel oxygenates via Environmental Protection Agency (EPA) Method 8260, and for TPH-GRO and TPH-DRO via EPA Method 8015B.



On October 13, 2010, GES submitted correspondence titled *Proposed Groundwater and Potable Well Sampling Program* to the MDE-OCP, proposing low-flow sampling methods and the collection of field measurements to replace the current purge-and-sample method for groundwater sampling. Field method water quality indicator parameters were proposed to be recorded during sampling to demonstrate appropriate geochemical stabilization criteria to include pH, conductivity, temperature, oxidation-reduction potential (ORP) and dissolved oxygen (DO). The MDE approved this change to the sampling program in correspondence dated November 18, 2010 included in **Appendix A**.

On July 1, 2011, GES submitted a *CAP Implementation Plan* which proposed the addition of several analytical and field measurement parameters to support the approved ISCO remediation to occur at the Site. Field parameters included the in-well/downhole measurements of VOC headspace (via PID), headspace lower explosive limit (LEL), headspace oxygen percentage (O₂%), DO, temperature, ORP, conductivity and pH at select monitoring wells. Additional analytical parameters included total organic carbon (TOC), chemical oxygen demand (COD), dissolved and total iron, dissolved and total chromium, total dissolved solids (TDS), and total suspended solids (TSS) were also instituted for select monitoring and potable wells. Several field parameters including headspace VOC, LEL, and O₂% were halted in August 2012 with the cessation of ISCO remediation activities. Analytical testing for iron, TOC, COD, TSS and TDS ended by October 2012. Downhole field measurements continue to be collected at select monitoring wells during quarterly sampling events.

On August 1, 2012, CIFC was instructed by the MDE-OCP to conduct an investigation regarding the occurrence of select metals including chromium and lead in both monitoring wells and potable supply wells for the project. A summary of this investigation and the conclusions drawn from the results were presented in the *Supplemental Chromium and Lead Investigation Summary* document submitted to the MDE-OCP on September 28, 2012. However, some additional chromium, lead and iron sampling was conducted through the fourth quarter of 2013 on select monitoring and potable wells through both written and verbal requests received from the MDE-OCP.

The most recent quarterly groundwater sampling (fourth quarter 2013) occurred over several days from October 17 to the 24, 2013. Monthly potable well sample collections occurred on November 15 and 16, 2013 and December 23, 2013. Metals collection for select wells occurred on December 18, 2013. Historic VOC and TPH analytical groundwater data for the monitoring wells, which include water level gauging measurements, can be found in **Table 3 – Historical Monitoring Well Analytical Data- VOCs and TPH Parameters**. Historic metal and ISCO analytical groundwater data for monitoring wells can be found in **Table 4 - Historical Monitoring Well Analytical Data Summary- ISCO and Metals Parameters**. Historic downhole field parameters measurements can be found in **Table 5 – Historical Monitoring Well Field Parameters Data Summary**. A **Groundwater Elevation Contour Map**, generated from gauging data collected on October 17, 2013, is presented as **Figure 3**. Analytical data from the groundwater sampling is presented graphically as **Figure 4 – Groundwater Analytical Map – Fourth Quarter 2013**.

Dissolved MTBE and TPH-GRO have historically been identified as the primary COCs at the Site. The highest concentrations of dissolved MTBE have been observed in monitoring wells MW-3 (prior to its abandonment), MW-7, MW-10, MW-13, MW-14D, MW-15D, and MW-17. The peak historic MTBE concentration of 86,000 µg/L was observed in monitoring well MW-7 on June 12, 2008. During the most recent groundwater sampling event in the fourth quarter of 2013, the highest concentration of dissolved MTBE was observed in MW-18S at 814 µg/L on October 23, 2013.

The highest concentrations of TPH-GRO have been observed in monitoring wells MW-3 (prior to its abandonment), MW-7, MW-13, MW-17, MW-18S and MW-18D. The peak historic TPH-GRO



concentration of 130,000 µg/L was observed in monitoring well MW-7 on June 12, 2008. During the most recent groundwater sampling event in the fourth quarter of 2013, the highest concentration of TPH-GRO was observed in monitoring well MW-18S at 677 µg/L on October 23, 2013.

Elevated concentrations of dissolved benzene, toluene, ethylbenzene and xylenes (BTEX) have not been historically observed in many Site monitoring wells. During the fourth quarter 2013 groundwater sampling event, dissolved BTEX was not detected in any Site monitoring wells. The highest historic dissolved benzene concentrations at the Site had been observed in monitoring well MW-3, prior to its abandonment, at 77 µg/L.

Monitoring Well MW-18S Anomalies

Monitoring well MW-18S has demonstrated anomalous results for a number of analytical and field parameters since it was installed in November 2010. Compared with other monitoring wells, MW-18S has particularly high levels of TDS, pH, conductivity, and low ORP. The high level of TDS includes concentrations of hexavalent chromium and total chromium that are significantly different from other site monitoring wells, which are discussed in detail in the *Supplemental Chromium and Lead Investigation Summary*. Hydraulic (slug) testing at monitoring well MW-18S (conducted August 2012) also demonstrated low hydraulic conductivity relative to other site wells, suggesting poor hydraulic connection to the aquifer. Poor recharge is also observed during groundwater sampling events. Because of the anomalous results in MW-18S, it is proposed to replace monitoring well MW-18S with a nearby well with approximately the same screen interval. GES, on behalf of CIFC, plans to submit a well replacement work plan for MW-18S to the MDE-OCP in the near future.

3.3 Potable Supply Well Sampling Results

The historic peak concentration of MTBE observed at GVP was 970 µg/L in well FR-94-1233 on January 23, 2008. During the most recent sampling of the GVP wells during the fourth quarter 2013, dissolved MTBE was not detected in four of the five GVP potable wells with well FR-94-1281 demonstrating an MTBE at concentration of 1.53 µg/L. This value is below the MDE's current MTBE action level of 20 µg/L. As previously noted, all individual groundwater contributions from GVP wells are blended to a common GAC treatment system before distribution to the GVP tenants.

The historic peak MTBE concentration in an area residential potable well was observed at 3997 Farm Lane, with a concentration of 3,680 µg/L on April 8, 2009. The highest MTBE concentration observed during the fourth quarter 2013 in a residential potable well was 333 µg/L at 3990 Farm Lane on November 15, 2013. As previously noted, six residential potable wells within the study area, which have been historically impacted by MTBE, are currently treated via individual GAC Point-of-Entry-Treatment (POET) systems. These residential GAC POET locations include 3923 Rosewood Road (Rose), 3990 Farm Lane (Farm), 3992 Farm, 3994 Farm, 3996 Farm and 3997 Farm.

Dissolved MTBE has not historically been detected in any of the GVSC supply wells above the MDE's MTBE action level standard. Analytical results of the POET system sampling, GVSC supply well sampling, and residential sampling can be found in **Table 6 – Green Valley Plaza Supply Well and POET System Analytical Data Summary**, **Table 7 – Green Valley Shopping Center Supply Well Analytical Data Summary**, **Table 8 – Residential Potable Well Analytical Data Summary– VOC and TPH Parameters**, and **Table 9 – Residential Potable Well Analytical Data Summary – ISCO and Metals Parameters**.



4.0 HISTORIC REMEDIAL ACTIVITIES

In July 2008, the UST system, including USTs, dispenser islands and product lines, was removed. Soil samples were collected beneath the dispenser islands, beneath product piping, and at the bottom and sides of the UST excavation. Elevated PID readings were observed in soil beneath piping between the dispensers under the canopy. Impacted soil in this area was over-excavated to an approximate depth of 8 fbg, until elevated PID responses were no longer observed. Approximately 1,100 tons of soil, approximately 523.5 tons of which were identified as petroleum-impacted, were excavated and removed from the Site for off-site treatment.

Six feasibility tests have since been conducted at the Site to assess the appropriateness of various remediation technologies. An SVE feasibility test was conducted in June 2007 by Alliance, a second SVE feasibility test was conducted in January 2009 by Alliance, a groundwater extraction feasibility test was conducted by Alliance in October 2009, a groundwater infiltration (percolation) test was conducted by Alliance in December 2009, and an ISCO pilot test was conducted in November and December 2010 by GES.

The SVE tests indicated that soil was effectively remediated during UST excavation activities. Very limited adsorbed-phase mass appeared to remain at the site. The groundwater extraction testing demonstrated that groundwater extraction may be a viable technology to mitigate migration of COCs at the Site and remediate impacted groundwater. The ISCO testing and subsequent injection well redevelopment indicated that a primarily gas-based oxidation technology could be used to remediate groundwater via injection down to 100 fbg in the testing area, but insufficient fluid conductivity exists below this depth in the injection area for deeper injection.

An extended ISCO field pilot-scale remediation was proposed in the 2011 CAP for implementation within the area of greatest groundwater impact at this Site. GES' patented HypeAir-EX[®] technology was the selected treatment for the pilot test. The HypeAir-EX process uses ozone injection along with low-flow hydrogen peroxide injection. Ozone both directly oxidizes organic compounds and reacts with hydrogen peroxide to create hydroxyl radicals that also oxidize organics. Air injection is also utilized in conjunction with hydrogen peroxide and ozone injection to aid in dispersing the chemicals and to provide additional oxygen for enhanced biodegradation of hydrocarbons. This advanced oxidation technology provides several advantages at this site over other ISCO methods, including its effectiveness at MTBE sites where MTBE and TBA are present, its ability to create hydroxyl radicals with or without iron present, and its ability to significantly increase DO concentrations in the vicinity of the injection zone(s). The ISCO system operation at the Site is further discussed below.

4.1 ISCO System Operation

As outlined in the March 15, 2011 CAP and July 1, 2011 CAP *Implementation Plan*, an ISCO system was the proposed method of remediation for the "source area," or area of greatest groundwater impact at the Site. The remedial goal for the targeted ISCO remediation, as stated in the CAP, was to achieve a 90% or greater reduction in MTBE concentrations in monitoring wells MW-15D, MW-18S, and MW-18D and provide increased downgradient DO concentrations in the groundwater.

The ISCO system began its first operation period on September 14, 2011, which continued until November 11, 2011. Following this ISCO system operation period, a second ISCO system operation period was conducted, which began on February 20, 2012. The second operation period was ended at the direction of the MDE on August 1, 2012. The ISCO system operation initially began via utilization of injection wells IW-1S, IW-1D, and IW-2S, with the fourth injection well (IW-4) being brought online on



June 5, 2012. These injection points were chosen based upon pilot testing results indicating sufficient fluid flow characteristics existed at these locations.

The ISCO system utilized was capable of injecting up to 5 lbs/day of ozone with ambient air and up to 14 gallons of hydrogen peroxide per day. The system was designed so that all four injection points could be used for both ozone injection and hydrogen peroxide injection (though not simultaneously at the same well). Ozone was the primary oxidizer and hydrogen peroxide was periodically injected for a specified duration. The ISCO system consisted of a PulseOx[®] P-500 trailer (by APTwater, Inc.). During ozone (O₃) and air injection, the air injected contained elevated oxygen levels because the ozone generator (which converts oxygen from oxygen generators to ozone) converts a percentage of the oxygen to ozone (output stream approximately 95% oxygen, 5% ozone). During normal operation ozone and air injection occurred cyclically in each of the injection wells in 20 minute intervals. For the injection of hydrogen peroxide, dedicated events were conducted periodically where the system was switched to inject hydrogen peroxide into an individual well or wells.

The total mass of ozone and volume of hydrogen peroxide injected over the entire period of ISCO system operation (September 14, 2011 through August 1, 2012) is presented below:

Injection Well	Total Mass of Ozone Injected	Total Volume of Hydrogen Peroxide Injected
	(pounds)	(gallons)
IW-1S	162	47.1
IW-1D	155	47.1
IW-2S	162	32.7
IW-4	36	37.9
Total	515	164.8

In addition to the ISCO system, a SVE system was used to mitigate fugitive emissions that could occur as a result of the air injection and advanced oxidation process. The SVE system was interlocked with the ISCO system, so that the ISCO system would not operate if the SVE system was not operating. Vapor extraction well VE-1 was used for continuous vapor extraction. The estimated cumulative hydrocarbon recovery was 6.9 pounds.

5.0 CONTAMINANT AND GROUNDWATER QUALITY TRENDS

During ISCO system operation, significant reductions in contaminant concentrations occurred (e.g., MTBE, TPH-GRO, and TBA), which are described in greater detail in correspondence titled *ISCO System Comprehensive Summary Report and Update to the Conceptual Site Model (CSM)* submitted to the MDE-OCF in November 2012. Also described in that report are the changes to groundwater quality parameters (i.e., DO and ORP) and headspace readings (i.e., pressure influence, VOC concentrations, and oxygen concentrations) during ISCO system operation. These changes demonstrated that the ISCO system influenced nearly all of the impacted monitoring wells onsite, including those monitoring wells downgradient and behind (south of) the GVP building.

While direct oxidation was likely the dominant factor in the contaminant reductions observed in monitoring wells closer to the injection wells (such as monitoring well MW-13 or monitoring well MW-7 once injection well IW-4 was brought online), the contaminant reductions occurring farther from the



ISCO system injection wells were likely attributed to the combination of stimulation of microorganisms by the ISCO system (e.g., through increased levels of DO and ORP) and ongoing natural attenuation processes such as advection and dispersion.

In accordance with this model, contaminant concentrations have continued to reduce since the ISCO system was shut down. In addition, groundwater conditions at the Site have continued to demonstrate an environment suitable for aerobic degradation. DO levels, while they are not elevated as during ISCO system operation, have remained at levels sufficient for aerobic biodegradation. Likewise, ORP levels have largely remained over 100 millivolts (mV) throughout the site, with levels significantly over +100 mV in some areas. Contaminant and groundwater quality trends are further described in the sections below.

5.1 Monitoring Well Contaminant Concentration Reductions

The contaminant concentration trends for the nine monitoring wells that exhibited MTBE concentrations over 20 µg/L prior to ISCO system operation are discussed below. In addition, graphs that depict individual monitoring well changes over time for MTBE, TBA and TPH-GRO are shown in **Appendix C**.

MTBE

The table presented below shows a comparison of MTBE concentrations prior to ISCO system operation, at the completion of ISCO system operation, and at present (fourth quarter 2013). The table also presents the reduction in concentration as a percentage that occurred during ISCO system operation, since ISCO system operation ceased and overall since the start of ISCO system operation.

Location	MTBE					
	Concentration (µg/L)			Reduction (%)		
	Baseline Sampling (July 2011)	Post ISCO Operation (Aug 2012)	Current Concentration (Oct 2013)	During ISCO Operation (July 2011-Aug 2012)	Since ISCO Operation (Aug 2012-Oct 2013)	Overall Reduction (July 2011-Oct 2013)
MW-17	7,750	3,380	117	56%	97%	98%
MW-18S	4,740	731	814	85%	-11%	83%
MW-7	2,530	18	7	99%	61%	99.7%
MW-14D	2,060	2,360	360	-15%	85%	83%
MW-13	1,680	52	21	97%	60%	99%
MW-10	1,540	7	5	>99%	29%	99.7%
MW-14S	703	22	7	97%	68%	99%
MW-15D	450	<2	27	>99%	-1250%	94%
MW-18D	49	525	169	-967%	68%	-245%

Table Notes:

- For non-detect values, the reporting limit was used for the reduction percentage calculation, so the minimum reduction is shown.
- All concentrations are rounded to the nearest µg/L and data qualifiers have been omitted from this table.

The table above shows that MTBE concentrations significantly reduced during ISCO system operation and concentrations have continued to decline since the system was shut down. At the two monitoring wells that still had MTBE concentrations over 1,000 µg/L when the ISCO system was shut down (MW-17 and MW-14D), reductions of 97% and 85% have since been observed. The overall reductions since the ISCO system started are now greater than 98% in five of the nine monitoring wells. Only monitoring wells MW-18S, MW-18D, and MW-14D show overall reductions less than 94%.



Monitoring well MW-18S has shown an overall MTBE reduction of 83% since the ISCO system started. This well has anomalous water quality readings that suggest it does not communicate well with and is not representative of the surrounding aquifer. In addition, biological activity is likely limited where there is high pH.

Monitoring well MW-18D has shown an overall increase in concentration since the ISCO system started. However, this well exhibited a significant decrease in concentrations just before the start of the ISCO system, with the MTBE concentration reducing to 49 µg/L (i.e., the baseline concentration used in the table above). Compared to the historic maximum MTBE concentration in this well (15,300 µg/L), the current concentration (169 µg/L) represents a 99% reduction.

Monitoring well MW-14D has shown an overall MTBE reduction of 83% since the ISCO system started. This well is screened from 201 to 221 feet bgs, which is a deeper zone that has been observed to have limited transmissivity. Correspondingly, concentration reduction did not occur as quickly in this well as in other wells, but the MTBE concentration has exhibited a consistent decreasing trend since August 2012.

A Mann-Kendall Test for Trend was applied to the nine monitoring well locations presented in the table above through use of the (GSI Environmental) Monitoring and Remediation Optimization Systems MAROS module (see Section 9.1 for further discussion regarding application of the MAROS software). The remaining network monitoring wells were excluded from the analysis because they had a high percentage of non-detect data. Confidence of trend was determined using an alpha of 0.05, or a 95% confidence interval. The results indicate that decreasing trends exist in dissolved MTBE concentrations detected in monitoring wells MW-7, MW-10, MW-13, MW-14D, MW-14S, MW-15D, MW-17, and MW-18S. No trend was determined to be statistically significant in MW-18D, and the MTBE concentrations are not considered to be stable in this well.

TPH-GRO

The table presented below shows a comparison of TPH-GRO concentrations prior to ISCO system operation, at the completion of ISCO system operation, and at present (fourth quarter 2013). The table also presents the reduction in concentration as a percentage that 1) occurred during ISCO system operation, 2) since ISCO system operation ceased and 3) overall since the start of ISCO system operation.

Location	TPH-GRO					
	Concentration (µg/L)			Reduction (%)		
	Baseline Sampling (July 2011)	Post ISCO Operation (Aug 2012)	Current Concentration (Oct 2013)	During ISCO Operation (July 2011-Aug 2012)	Since ISCO Operation (Aug 2012-Oct 2013)	Overall Reduction (July 2011-Oct 2013)
MW-17	1,530	<100	184	>93%	-84%	88%
MW-18S	1,270	<100	677	>92%	-577%	47%
MW-7	951	<100	<100	>89%	-	>89%
MW-14D	844	<100	511	>88%	-411%	39%
MW-13	731	<100	<100	>86%	-	>86%
MW-10	644	<100	<100	>84%	-	>84%
MW-14S	432	<100	<100	>77%	-	>77%
MW-15D	374	<100	<100	>73%	-	>73%
MW-18D	<100	<100	170	-	-70%	-70%



Table Notes:

- For non-detect values, the reporting limit was used for the reduction percentage calculation, so the minimum reduction is shown.
- All concentrations are rounded to the nearest µg/L and data qualifiers have been omitted from this table.

The table above shows that TPH-GRO concentrations were significantly reduced during ISCO system operation. Immediately following system shut down, TPH-GRO concentrations in all wells with historic concentrations of the constituent were non-detect. Recent results indicate that GRO has slightly rebounded in wells MW-14D, MW-17 and MW-18S. Overall, GRO concentrations at these wells have reduced approximately 39%, 88% and 47%, respectively from corresponding baseline concentrations measured in July 2011. The TPH-GRO concentration in well MW-18D rebounded somewhat recently after a period of non-detections occurring from July 2012 to January 2013. Long term, TPH-GRO at MW-18D has reduced 88% from the historic maximum concentration of 1,420 µg/L, which occurred in November 2010 (shortly after the well was installed). The current presence of TPH-GRO in wells MW-17, MW-18S, MW-14D and MW-18D correlate with the four highest MTBE values obtained during the most recent October 2013 sampling event.

TBA

Tertiary butyl alcohol (TBA) is a native constituent of oxygenated gasoline but may also occur as a breakdown product of MTBE, generated through aerobic or anaerobic biodegradation processes. TBA, like MTBE, is a recalcitrant groundwater contaminant and may migrate significant distances from a petroleum source zone. As noted, detection and trend of TBA may also provide insight on the biodegradation processes affecting MTBE in a groundwater plume. Currently, TBA does not have an assigned cleanup limit with the State of Maryland or with the USEPA.

The table presented below shows a comparison of TBA concentrations prior to ISCO system operation, at the completion of ISCO system operation, and at present (fourth quarter 2013). The table also presents the reduction in TBA concentration as a percentage that occurred during ISCO system operation, since ISCO system operation ceased and overall since the start of ISCO system operation.

Location	TBA					
	Concentration (µg/L)			Reduction (%)		
	Baseline Sampling (July 2011)	Post ISCO Operation (Aug 2012)	Current Concentration (Oct 2013)	During ISCO Operation (July 2011-Aug 2012)	Since ISCO Operation (Aug 2012-Oct 2013)	Overall Reduction (July 2011-Oct 2013)
MW-17	8,500	196	28	98%	86%	99.7%
MW-14D	2,910	480	7	84%	99%	99.8%
MW-7	1,280	<10	<5	>99%	-	>99%
MW-18S	1,160	<10	<10	>99%	-	>99%
MW-10	467	<5	<5	>99%	-	>99%
MW-14S	280	<10	<5	>96%	-	>98%
MW-13	79	<10	<5	>87%	-	>94%
MW-15D	45	<10	<10	>78%	-	>78%
MW-18D	35	136	59	-289%	57%	-69%

Table Notes:

- For non-detect values, the reporting limit was used for the reduction percentage calculation, so the minimum reduction is shown.
- All concentrations are rounded to the nearest µg/L and data qualifiers have been omitted from this table.



The table above indicates that TBA concentrations were significantly affected by ISCO system operation. Immediately following system shut down, TBA concentrations in six of nine monitoring wells with historic concentrations of the constituent were non-detect. Detections of TBA have not reoccurred at these six particular wells to date. TBA remains at three wells, including MW-17, MW-14D and MW-18D. Concentrations at MW-14D and MW-17 have reduced greater than 99% from their corresponding baseline concentrations measured July 2011. TBA concentrations at MW-18D have increased from the baseline value of 35 µg/L. Long term, however, TBA at MW-18D has reduced greater than 99% from the historic maximum concentration of 14,200 µg/L, which occurred in November 2010 (shortly after the well was installed). Again, these findings may be related to the limited hydraulic conductivity of the aquifer at depth.

Upon review of the historic concentration trend graphs presented in **Appendix C**, MTBE and TBA have generally trended “in tandem” (i.e., share a proportional relationship) at wells with historical detections of the constituents. And as previously noted, these trends (for MTBE) are noted as statistically significant declining trends with the exception of MW-18D.

5.2 Potable Well Contaminant Concentration Trends

The contaminant concentration trends for the six potable wells with GAC POET systems are discussed below. Graphs that depict the changes over time at these wells for MTBE and TBA are shown in **Appendix D**. In addition, a table is presented below that shows a comparison of MTBE concentrations prior to ISCO system operation, at the completion of ISCO system operation, and at present. The table also presents the reduction in concentration as a percentage that occurred during ISCO system operation, since ISCO system operation ceased and overall since the start of ISCO system operation.

Location	MTBE					
	Concentration (µg/L)			Reduction (%)		
	Baseline Sampling (July 2011)	Post ISCO Operation (Aug 2012)	Current Concentration (Oct 2013)	During ISCO Operation (July 2011-Aug 2012)	Since ISCO Operation (Aug 2012-Oct 2013)	Overall Reduction (July 2011-Oct 2013)
3990 Farm	1920	749	324	61%	57%	83%
3992 Farm	778	316	145	59%	54%	81%
3994 Farm	745	284	104	62%	63%	86%
3996 Farm	18	103	29	-472%	72%	-61%
3997 Farm	34	2	<0.5	94%	>75%	>99%
3923 Rose	11	1	0.5	91%	50%	95%

Table Notes:

- For non-detect values, the reporting limit was used for the reduction percentage calculation, so the minimum reduction is shown.
- All concentrations are rounded to the nearest µg/L (except for the current 3923 Rose concentration) and data qualifiers have been omitted from this table.

The table above shows that MTBE concentrations significantly reduced over the ISCO system operation period and concentrations have continued to decline at a similar rate since the system was shut down. Three of the potable wells had baseline concentrations greater than 700 µg/L, while the remaining three had baseline concentrations less than 40 µg/L. The three potable wells with higher MTBE concentrations have reduced between 81% and 86% since the start of ISCO system operation, including reductions of between 54% and 63% since ISCO system operation ceased. Currently there are four potable wells with



MTBE concentrations that exceed the MDE Action Level of 20 µg/L, which include the maximum MTBE concentration of 324 µg/L for 3990 Farm Lane.

A Mann-Kendall Test for Trend was applied (via the MAROS module) to five of the six potable wells. (The potable well at 3997 Farm Lane was excluded from the analysis because of a high percentage of non-detect data.) Confidence of trend was determined using an alpha of 0.05, or a 95% confidence interval, and results indicate that decreasing trends exist for dissolved MTBE concentrations in all five potable wells. A summary of the MAROS evaluation, including the calculated Mann Kendall Trend analyses, is attached as **Appendix E**.

5.3 Dissolved Oxygen (DO) Trends

Individual monitoring well changes in DO and ORP over time are depicted in graphs shown in **Appendix C**. A DO contour map comparing baseline DO readings to the maximum DO reading observed at each well during ISCO system operation is shown as **Figure 5**. A DO contour map of current DO readings (October 2013) is shown as **Figure 6**. A historical summary of downhole field parameter measurements is presented as **Table 8**.

Of the historically impacted monitoring wells (including MW-7, MW-8, MW-10, MW-13, MW-14S, MW-14D, MW-15D, MW-16, MW-17, MW-18S, and MW-18D), all except MW-17 reached DO concentrations above saturation during ISCO system operation. These elevated DO concentrations demonstrate a secondary influence of the ISCO system. Since the ISCO system was shut down, the average DO concentration has been over 4.6 milligrams per liter (mg/L) in all noted monitoring wells except MW-14D, MW-17, and MW-18D. The average DO concentrations in monitoring wells MW-14D, MW-17, MW-18D have been 1.2, 1.9, and 2.5 mg/L, respectively, since the ISCO system was shut down. Lower oxygen readings are expected in the deeper wells (MW-14D and MW-18D) where infiltration is limited and indirect and where limited groundwater flux is postulated. The low DO in MW-17 may be a result of biological activity as significant COC degradation has been noted subsequent to ISCO system cessation.

Monitoring well MW-17 (located in the downgradient area on the back side of the GVP property) has historically contained some of the highest contaminant concentrations, and the DO concentration has been generally lower in this well. However, several elevated DO concentrations were observed during ISCO system operation, including exceeding 6 mg/L toward the end of the first ISCO system operation period. The elevated DO present at the end of the first operation period appears to have been gradually consumed over the following months, with DO levels gradually declining to less than 0.5 mg/L; a decline that can likely be attributed to biological activity. This decline in DO levels also correlates with the decline in contaminant concentrations in this well. Contaminant concentrations have since greatly reduced in this well, and in recent months the DO concentration has rebounded somewhat, averaging 2.7 mg/L over the last four events in 2013.

Similarly, at monitoring well MW-7, reduced DO concentrations have been observed, but several elevated DO concentrations were observed during ISCO system operation. The DO concentration was 5.9 mg/L at the end of the first ISCO system operation period, but the DO gradually reduced while the system was not operating to a low of 0.73 mg/L just prior to the second ISCO system operation period. This reduction in DO concentration can likely be attributed to biological activity. Following the significant contaminant reductions that occurred during the second ISCO system operational period, the DO concentration has rebounded and is currently at 6.7 mg/L. COC data trends discussed previously suggest there is little organic material remaining in MW-7 to stimulate aerobic degradation and consume oxygen, explaining the rebound and persistence of DO post-ISCO.



Overall, the current DO Contour map presented as **Figure 6** shows a clear increase in DO concentrations relative to the baseline condition presented on **Figure 5**. **Figure 5** compares baseline DO readings with the maximum DO readings observed during ISCO system operation. As is the case with the baseline contour map, current zones of reduced DO concentrations correspond with areas of highest MTBE concentration. However, the current DO contour map does not show zones of significantly depleted oxygen as in the baseline contour map. The current map does not show any wells with DO less than 2 mg/L, whereas the baseline map that shows four wells with less than 2 mg/L. All of the contour maps show that background wells outside the impacted zone contain elevated DO. Current DO values obtained from all wells within the monitoring well network indicated an aerobic environment. Operation of the ISCO system has significantly reduced contaminant mass, which has allowed DO levels to rebound. The high DO concentrations in the non-impacted background wells demonstrate that atmospheric oxygen is readily available to the water table in this area through precipitation recharge.

5.4 Oxidation-Reduction Potential (ORP) Monitoring

Prior to, during and since ISCO system operation, ORP values have been positive at all monitoring wells onsite with the exception of monitoring wells MW-18S and MW-18D, which show anomalous readings for multiple groundwater quality parameters including pH and TSS. Positive ORP indicates oxidizing conditions exist in the subsurface and the potential for aerobic hydrocarbon biodegradation exists.

During ISCO system operation, six (6) monitoring wells (MW-10, MW-13, MW-14S, MW-14D, MW-16, and MW-17) generally showed increasing ORP trends (each reaching approximately 400 mV or higher) until the end of May 2012 when the ORP values declined toward baseline levels, even as the system continued to operate. In most of these monitoring well locations, the ORP appears to have somewhat of an inverse relationship with DO, where the ORP is lower when the DO is elevated, and vice versa. Increased microbial activity when the DO is elevated can cause the ORP to shift downward, and could be a factor in this relationship.

Currently ORP values in the zone of impact range from 130 to 376 mV, with the exception of monitoring well MW-18S, which has an ORP reading of -147 mV. Monitoring wells outside the zone of impact (considered to be background wells) have historically exhibited elevated ORP levels (i.e., over 200 mV), and these wells continue to exhibit similar readings. These generally high ORP values combined with the DO levels discussed above suggest that suitable geochemical conditions exist for the occurrence of aerobic biodegradation of constituents found within the contaminate plume.

6.0 CONCEPTUAL SITE MODEL

6.1 Topography

The Site is located approximately 660 feet above mean sea level (MSL) along the northeast to southwest trending ridge along the Fingerboard Road corridor. The Site topography itself is relatively flat, but the surrounding land slopes gently toward the west, south and east away from GVP. The Site is approximately 75% paved with impervious surface material. A component of intercepted precipitation collected on the GVP lot is directed and discharged via the GVP storm water system. Regional drainage is dendritic in nature and is interpreted to flow to the south from the Site to a tributary of Fahrney Branch.

6.2 Geology

The Site is situated within the Westminster Terrain of the Central Piedmont Physiographic province of the eastern United States. Based on the *2007 USGS Geologic Map of Frederick 30' x 60' Quadrangle, Maryland, Virginia and West Virginia*, the Site is mapped within the metasilstone facies of the



paleozoic-aged Marburg Formation. A Geologic Map which demonstrates the Site's location within an excerpt from the 2007 USGS geologic map is reproduced as **Appendix F**.

The underlying bedrock is imprinted with a distinct structural pattern imparted by forces related to ancient tectonic events associated with the development of the Appalachian Mountain chain. This structural fabric includes regional scale faults, pervasive, small-scale mineral alignments defined as foliation and related smaller-scale fractures and post-tectonic joints and fractures. This bedrock, in the Maryland Piedmont province, is typically overlain by a thick cover of highly altered, former bedrock either defined as saprolite or weathered rock. This saprolite is the "weathered-in-place" product of the underlying parent rock and generally retains the same structural features of the parent rock including foliations, fractures and joint sets. Some researchers have distinguished the difference between saprolite and weathered rock by the degree of in-situ chemical alteration, i.e. saprolite is completely altered and has no remaining parent mineralogy (other than relict, chemically resistant quartzite) while weathered bedrock retains floating "core stones" of parent rock (>10% corestones) within a less chemically altered matrix of both original and secondary minerals.

Review of excavation and boring records particular to the Site indicate that the subsurface is characterized by an extensive zone of highly structured saprolite and weathered rock overburden which gradually transitions to competent fractured bedrock. Photographs taken during the tank field excavation and replacement events of 2008 demonstrate highly inclined foliation traces imparted within the soils along the tank pit walls.

Lithologic descriptions of the overburden generally note an initial shallow red, orange, brown-tan clay matrix interspersed with quartzite and parent rock fragments (sometimes micaceous, other times shale to phyllitic). With increasing depth, shallow clay-rich matrix soils transition to sandy and/or micaceous silts with the continuing presence of parent rock fragments. Minor zones of quartz (quartzite) are noted to occur throughout the weathered bedrock overburden. The orange to brown silt color observed in the overburden matrix is associated with a well-drained lithology demonstrating oxidation of the native, iron rich mineralogy.

6.3 Hydrogeology

As previously mentioned, dissolved MTBE in groundwater is suspected to transport beneath the former Green Valley Citgo property within saturated soil matrix pore space and also in secondary structural features of the weathered rock overburden. This saprolite/weathered zone contains greater primary pore space than underlying crystalline bedrock which it communicates hydraulically through a shared network of structural features. Due to the significant hydrologic boundary encountered at the competent bedrock interface (due to the limited primary permeability in the crystalline rock) groundwater may accumulate and thus form a zone of higher potential transport in this transition zone. At this interface, groundwater will also have the ability to penetrate downward through fractures and places of weakness inherent to the rock body. Movement of water in the competent rock zone of this aquifer system would be significantly reduced from those flows found in the shallower, saturated saprolite/weathered rock portion of this conceptualized integrated aquifer system. The dimensions of the aquifer begin at depths to first water ranging from approximately 42 to 65 feet bgs. Based on recent onsite rock coring activities (May 2012) the bedrock interface may exist as deep as 85 feet bgs. Evidence of water found at more substantial depths in deeper bedrock are limited to discretely screened monitoring wells such as MW-14D and MW-18D, with screened intervals of 201-221 feet bgs and 120-130 feet bgs, respectively. Geophysical evidence and field sampling logs suggest limited groundwater production from these deep rock zones.

Groundwater flow through saprolite/weathered rock is strongly influenced by the structural attributes of the parent rock fabric and by potentiometric head. Head relationships in water table aquifers typically



mirror site topography. Thus, groundwater flows in defined zones and patterns. Extensive investigation in the Monrovia area has yielded much data to define the structural fabric of the aquifer – thereby providing a framework for groundwater flow and migration of dissolved phase MTBE from the former Green Valley Citgo site. Analysis of geologic maps and geophysical data generated during imaging of six monitoring and two supply wells at the Monrovia site demonstrate a clear and consistent orientation of bedrock structure with an average strike of N28°E and a steep dip to the southeast. MTBE detections related to the former Green Valley Citgo station demonstrate a marked distribution along structural orientation toward the southwest.

Depths to “bedrock” as determined via the common air rotary drilling techniques employed at the Site, have been reported to occur between 39 to 85 feet bgs. Previous interpretations of the Site’s subsurface have stated that water existed extensively within the fractured, competent bedrock zone. This interpretation has recently been revised with the installation of ISCO injection well IW-4 in 2012. The borehole for well IW-4 was installed and characterized via mud rotary drilling and rock coring techniques, respectively. At this location fractured, but competent bedrock was verified to begin at approximately 85 feet bgs. Observations of fracture surface oxidation within the first 10 feet of competent rock core indicate a limited penetration of transmissive fractures. The observation of transmissive features in the core sample dissipated with successively deeper core samples. Hydraulic testing attempted within the cored intervals demonstrated limited hydraulic conductivity in the upper fractured zone and negligible production capability within deeper core intervals.

Upon a re-evaluation of drilling logs, it is noted that soft zones are common in the deep monitoring well installation record before approximately 75-90 feet bgs. These soft zones are typically associated with brown-orange colored cuttings interspersed with grey material which is an indication of a weathered, but not competent rock zone. Logs of wells installed more recently, including MW-14D, MW-15D, MW-16, MW-17, MW-18D and IW-2 and IW-3, make note of competent rock at depths greater than 75 feet bgs. Thus, it is now interpreted that a significant portion of the water table beneath the Site exists in the saprolite/weathered bedrock zone. While the saturated saprolite/weathered rock zone is structurally tied to the underlying fractured competent bedrock, groundwater flow in the rock zone is considerably less transmissive.

Historical depths to groundwater (DTW) within the study area monitoring well network (excluding wells MW-14D and MW-18D) typically range from 32.83 feet bgs (MW-12, March 2011) to 69.05 feet bgs (MW-18S, November 2010). (Note: Inclusion of historical minimum and maximum DTW values for MW-14D and MW-18D are problematic due to the wells’ slow recharge characteristics.) Recent groundwater levels collected at the Site (October 2013) range from approximately 37.07 feet bgs (MW-12) to 62.79 feet bgs (MW-18S).

In consideration of the revised depth to competent bedrock, and the known range of groundwater depth for the Site, it is prudent to review the vertical placement of screen intervals for the current monitoring well network. A table summarizing well construction is presented as **Table 1**. Upon review of the well construction table, it is noted that a majority of the wells are installed with relatively large screen intervals (between 19.5 to 88 feet in length). Wells screened within more isolated zones include MW-14D (interval 201 to 221 feet bgs) and MW-18D (interval 120 to 130 feet bgs). Thus, the majority of wells, excluding MW-14D and MW-18D, are screened in the weathered bedrock zone or straddle the weathered bedrock and the competent bedrock zones.

Historical groundwater elevation contour maps generated for the project have demonstrated a generally consistent groundwater flow path moving from the northwest to the southeast. Significant gradient differences exist between peripheral wells (MW-1, MW-12, MW-11) in comparison to the bulk of wells comprising the monitoring well network central and to the southeast, which exist in an area demonstrating a



shallower hydraulic gradient. Calculations from the October 21, 2013 shallow groundwater elevation dataset demonstrate a hydraulic gradient of 0.01 feet per foot (ft/ft) from MW-2 to MW-9 and a hydraulic gradient of 0.02 feet/ft from MW-8 to MW-9. Due to the existence of active water supply wells both on site and off site, the effects of large volume pumping may influence the direction of groundwater flow however the effects of localized pumping are generally not evident.

While deeper wells exist within the monitoring well network (MW-14D, MW-15D, MW-18D), historical practice has been to exclude these wells from the groundwater elevation maps. The exclusion of MW-14D, MW-15D and MW-18D is based on their deeper constructed screen intervals. Upon review of historic groundwater levels for the network, it is noticed that MW-14D and MW-15D typically vary little in comparison with groundwater elevation levels at surrounding “shallow” monitoring wells. Well MW-18D, conversely, demonstrates more significant deviations from surrounding monitoring well groundwater elevations. This is believed to be due to its poor connection to the productive structures of the formation, as evidenced with its slow recharge characteristics. Poor recharge is also experienced with well MW-18S, the nested counterpart of well MW-18D. With this reasoning, deep well groundwater contour maps are not produced for the project as it has been demonstrated that communication exists between shallow and deeper regions of the aquifer without an overall driving vertical gradient condition. This communication is likely due to the high angle inclination of the weathered-to-competent bedrock fabric features. Historical liquid level data for the Site are summarized in **Table 3 - Historical Monitoring Well Analytical Data Summary – VOC and TPH Parameters**.

Over the case history of the Site, several hydraulic testing events have been performed including long and short term pump tests in 2009, and several slug testing events conducted between 2010 and 2012. In summary, calculated groundwater hydraulic conductivity (K) values for wells at the Site have ranged four orders of magnitude from 1.93E-03 to 1.20E+01 feet per day (ft/day). During the 72 hour pump test event of 2009, observation of an elliptical drawdown pattern was noted along the established preferential strike direction running approximately N28°E (mean of fractures). Recent slug tests for wells MW-1, MW-7, MW-8, MW-10, MW-17 and MW-18S conducted August 2012 confirmed a narrow, productive trend aligned along the identified preferential strike direction. Wells MW-17, MW-10 and MW-7, which exist in the downgradient area of the on-site monitoring well network, demonstrated the highest relative K values during these tests. Slug testing performed at MW-18S demonstrated an expectantly low K value of 1.25E-02 feet/day. A modified Lugeon falling head test conducted in the IW-4 borehole in May 2012 was calculated with a relatively low hydraulic conductivity value of 1.82E-02 feet/day.

6.4 Soil Vapor

The presence of soil vapor has since been mitigated at the Site through 1) the removal of MTBE from gasoline formulations in mid 2006, 2) the excavation of impacted soils during UST replacement and upgrade activities in 2008, 3) verification of reduced soil vapor through SVE pilot testing occurring after 2008 and 4) the negligible VOCs recovered via vapor phase during the 9 month period of ISCO operation (Section 4.1). The current MTBE “source” area is considered to consist of residual dissolved MTBE in groundwater, which exists primarily within the saturated saprolite/weathered rock overburden at the Site.

6.5 Preferential Pathways

Several preferential pathway evaluations have been conducted around the tank field and canopy area (former source zone) and have been summarized in previous reports (Alliance 2007, 2008). These evaluations focused on the identification of shallow, man-made subsurface structures which would enhance or short-circuit the passage of petroleum impacted liquids or vapors to on-site or off-site receptors. In summary, it was determined that no evidence of impact conveyed by identified preferential pathways including the site storm water drainage system had occurred at the time of inspection.



Furthermore, the surface drainage inlets for the on-site storm water system were modified in 2008 to further mitigate the potential for impacted surface waters to leave the Site

In regard to potential vapor migration pathways, the current risk hazard to immediate receptors including occupants of the GVP building is considered minimal. Around 2008, SVE recovery piping was installed within the tank field as a contingency. No known vapor intrusion instances or petroleum odor complaints have been reported in any buildings in the Site area. No intrusion was observed during the extensive monitoring required by MDE during the ISCO activities. Negligible VOC were recovered upon months of SVE operation during ISCO at the vapor extraction well VE-1. Furthermore, the extensive depth to water precludes any reasonable likelihood of petroleum vapor migration to near surface receptors.

6.6 Groundwater Plume Characteristics

Current guidance documentation as provided by USEPA, API, and several state regulatory agencies promote the characterization of plume behavior as a primary line of evidence in regard to evaluating receptor risk and meeting defined cleanup goals. Plume behavior evaluation considers the contaminant concentration trends of identified source area wells, wells downgradient within the plume body and the concentration trends of “sentinel” wells located downgradient and at the periphery of the plume.

According to New Jersey Department of Environmental Protection (NJDEP) guidance, plume behavior has been described as those characteristics which indicate if a plume is expanding, stable or shrinking:

- An expanding plume is identified by increasing concentration trends along the contaminant path over time or if a sentinel well at the periphery of the plume boundary demonstrates impact above groundwater standards.
- A stable plume is identified when constituent concentrations along the contaminant path remain the same over time and sentinel wells remain below groundwater standards.
- A shrinking plume is identified by decreasing concentration trends over time along the contaminant path and sentinel wells at the periphery of the plume remain below groundwater standards.

Figure 7 and **Figure 8** present MTBE concentration distribution at the Site for the August 2012 (ISCO cessation) and October 2013 (current) sample periods, respectively. Upon review of the Figures 7 and 8, and in consideration of the statistically significant reductions noted for MTBE at the majority of monitoring and potable supply wells within the plume (Section 5.0), it can be concluded that the current MTBE plume at the Site is shrinking. Only monitoring well MW-18D, located near the source zone, exhibited a trend that was inconclusive during statistical analysis.

The predominant pathway existing for the passage of MTBE to identified risk receptors (via potable water supply wells) would be the migration of dissolved phase MTBE as it moves both horizontally and vertically through the underlying saprolite/weathered bedrock aquifer system. However, this exposure pathway is currently considered incomplete due to the installation and maintenance of GAC POET systems at the six historically impacted potable well locations in contact with the delineated MTBE plume.

7.0 CLEANUP GOALS AND ENDPOINTS

The cleanup goal for the Site is for all potable supply wells to meet and sustain MDE Groundwater Cleanup Standards, including the MTBE Action Level of 20 µg/L. If future groundwater quality data



collected from monitoring and/or potable wells indicates that the MTBE plume is not stable or decreasing, then a revised remedial plan will be evaluated for the Site.

8.0 REMEDIAL TECHNOLOGY EVALUATION

The media of concern at the site is groundwater within the integrated saprolite/weathered rock/crystalline bedrock aquifer system. MTBE is the primary COC and is present in groundwater from the area south of the UST field extending beneath the shopping center building toward the residential area south of Rosewood Road. The potable groundwater in this residential area is a sensitive receptor and the driver for site remediation. Activated carbon POET systems have been installed at six residences as noted previously. The historic sampling data indicates the POET systems are functioning properly and are able to provide water that meets MDE cleanup standards to the properties served.

Various dissolved-phase remediation technologies were screened to determine the most appropriate method to remediate the dissolved-phase hydrocarbon compounds that are present in the subsurface. Remedial technologies selected for consideration were based on the results of the site characterization activities completed to date. The potential remedial technologies and site-specific factors associated with each are discussed below.

8.1 Monitored Natural Attenuation

Natural attenuation relies upon natural subsurface processes to reduce contaminant concentrations to acceptable levels. As stated in Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action, and Underground Storage Tank Sites (OSWER Directive 9200.4-17P, 1999), “the *natural attenuation processes* that are at work in such a remediation approach include a variety of physical, chemical, or biological processes that, under favorable conditions, act without human intervention to reduce the mass, toxicity, mobility, volume, or concentration of contaminants in soil or groundwater. These in-situ processes include biodegradation; dispersion; dilution; sorption; volatilization; radioactive decay; and chemical or biological stabilization, transformation, or destruction of contaminants.” (p. 3)

In OSWER Directive 9200.4-17P, it is stated that “the most important considerations regarding the suitability of MNA as a remedy include: whether the contaminants are likely to be effectively addressed by natural attenuation processes, the stability of the groundwater contaminant plume and its potential for migration, and the potential for unacceptable risks to human health or environmental resources by the contamination”. The contaminants at the Site, including MTBE, are known to naturally attenuate. “Aerobic biodegradation of MTBE is well demonstrated in lab and controlled field experiments.... MTBE can be mineralized or cometabolized by a variety of organisms under aerobic conditions” (Rasa et al., 2011). DO and ORP levels suggest that conditions exist for aerobic biodegradation and the reductions in DO previously discussed demonstrate indirectly that biological degradation is occurring at the Site. Contaminant trends since the ISCO system was shut down demonstrate natural attenuation is occurring. In terms of the groundwater contaminant plume, historical groundwater analytical data demonstrate a clear trend of decreasing contaminant mass and concentrations over time. The potential for unacceptable risks to human health or environmental resources has been mitigated through the installation of properly functioning POET systems on all impacted drinking water receptors. Finally, a monitoring program is in place to identify any additional drinking water wells (“sentinels”) that may become impacted.

Monitored natural attenuation (MNA) is considered a viable remedial alternative for this Site. When the CAP for this Site was initially completed, MNA had been deemed a viable approach, but it was not initially desirable due to the extended time period for MNA to be effective. It was stated that MNA would be considered following contaminant concentration reduction by an aggressive, active remediation



technology. Now that active remediation has significantly reduced contaminant concentrations, the time period for MNA to be effective has been greatly reduced and MNA has become a desirable remedy.

8.2 Biosparge/Aerobic Bioremediation

Biosparge relies on indigenous microorganisms to reduce contaminant levels and involves the delivery of compressed air into wells screened below the water table and at a low flow rate (i.e., compared with air sparging). Air bubbles travel upward and outward in the aquifer, resulting in increased DO levels for microorganisms. The basic requirements for aerobic degradation include a food source (petroleum), oxygen, and major nutrients (i.e., phosphorous and nitrogen). For a sufficiently permeable soil matrix, this technology is appropriate for remediating groundwater at slightly elevated petroleum concentrations. Based on the radius of influence and elevated oxygen levels achieved during ISCO system operation, the matrix is considered sufficiently permeable to effectively transport oxygen throughout the on-site area of impact. Based on the current VOC concentrations observed at this site, along with the absence of significant impacts in the vadose zone, aerobic bioremediation is viable as a stand-alone remedy. However, DO levels at the site are currently adequate for aerobic bioremediation, so the additional benefit of biosparge is considered insufficient to warrant the implementation of this technology. Biosparge may become a viable alternative at a later date if oxygen levels are depleted and do not recover naturally.

8.3 In-Situ Chemical Oxidation via Ozone and Hydrogen Peroxide

ISCO via ozone and hydrogen peroxide injection is previously described in **Section 4** of this document. This technology has been successfully implemented at the site. Significant contaminant reductions were achieved during ISCO system operation through a combination of direct oxidation, stimulation of microorganisms by the ISCO system (e.g., through increased levels of DO and ORP), and natural attenuation. A “permanent” ISCO system was installed at the site for extended operation periods, but ISCO can also be implemented through short-term injection events using a mobile ISCO system. ISCO continues to be a viable technology to reduce contaminant concentrations on site. However, contaminant concentrations have continued to decline since the ISCO system was shut down and DO concentrations are currently sufficient for aerobic degradation, so the installation and operation of an ISCO system would not have the relative benefits of past ISCO system operation. If a more aggressive approach were to become necessary, short-term ISCO events using a mobile system could be utilized to address isolated areas of impact and increase DO concentrations.

8.4 Groundwater Pump & Treat (P&T)

Conventional P&T systems use pneumatic or electric submersible pumps to extract fluids from recovery wells. P&T is a practical remedial technology to gain hydraulic control and to retard downgradient migration of dissolved-phase hydrocarbons (DPH). P&T as a stand-alone remediation technology may lead to many years of system operation and maintenance before cleanup standards are achieved. P&T is considered a potentially viable technology at this site, but would likely be much less efficient than other technologies considering the large area and the thickness of the water column. Furthermore, concerns over water quantity availability to the GVP, GVSC and downgradient private supply water wells limit the reasonable use of P&T. In addition, the current stable/decreasing plume status would significantly limit additional benefit from P&T remediation.

9.0 PROPOSED CORRECTIVE ACTION

MNA is the proposed remedial approach for the Site. Given the historical groundwater analytical data, which demonstrates a clear trend of decreasing contaminant mass and concentrations over time, the remaining contaminant mass is likely to be effectively addressed by natural attenuation processes. In addition, the potential for unacceptable risks to human health or environmental resources has been



mitigated through the installation of POET systems on all impacted drinking water receptors and a monitoring program that will identify any future drinking water well that may become impacted. The following section notes the plan for implementation of an MNA program at the Site.

9.1 MNA Implementation

Monitoring Parameters

GES proposes that groundwater samples collected from all monitoring wells be analyzed for full-suite VOCs via EPA Method 8260 and TPH-GRO via EPA Method 8015B. It is proposed to discontinue the groundwater analysis of TPH-DRO at the monitoring wells. GES reviewed the historical groundwater analytical data for TPH-DRO, and it is noted that TPH-DRO concentrations in monitoring wells are typically below method detection limits. Monitoring wells where TPH-DRO concentrations have been detected are at low levels and show decreasing TPH-DRO concentration trends.

In addition to VOCs, it is proposed that the following parameters be monitored during routine monitoring well sampling events.

Parameter	Purpose
DO	Primary electron acceptor for aerobic microbial respiration
ORP	ORP influences and is influenced by biological processes
pH	Biological processes are pH-sensitive
Temperature	Metabolism rates for microorganisms depend on temperature
Conductivity	Water quality parameter used to verify groundwater is representative of the larger groundwater system
Headspace VOC concentration	Indicator of the soil gas VOC concentration or methane production from anaerobic processes
Nitrate (NO_3^{-1})	Secondary electron acceptor for microbial respiration if oxygen is depleted

In monitoring wells that exhibit DO concentrations less than 1 mg/L, it is proposed that the following parameters also be monitored:

Parameter	Purpose
Ferrous Iron (Fe^{2+})	Indicator of anaerobic biodegradation processes
Sulfate (SO_4^{2-})	Substrate for anaerobic microbial respiration

Monitoring Frequency

GES applied the Monitoring and Remediation Optimization System (MAROS) software to evaluate the efficacy of the current monitoring well and potable water supply well sampling program. The MAROS software was developed in 1998 by GSI Environmental Inc. in conjunction with the University of Houston (UH), with funding from the Air Force Center for Engineering and the Environment (AFCEE) (GSI, 2012). MAROS has been endorsed by the USEPA and provides a statistical review of groundwater monitoring data with the goal of improving the efficiency of monitoring networks. Statistical modules exist for individual well analyses, plume analyses, spatial optimization, and sampling frequency optimization.



The objective of this analysis was to determine which monitoring wells and which potable wells should remain in the sampling program. This was achieved by determining if the mean contaminant concentration at a given monitoring well is below the MDE Action Level with statistical significance.

GES proposes that the monitoring wells and potable wells shown below be monitored on a quarterly basis. This list of wells includes both monitoring wells and potable wells that currently or recently have contained MTBE impacts, monitoring wells that can be used as background wells for MNA evaluation, and sentinel monitoring and potable wells to ensure the plume is not expanding and no new potable wells become impacted.

- Monitoring wells MW-1, MW-2, MW-7, MW-8, MW-9, MW-10, MW-11, MW-13, MW-14S, MW-14D, MW-15D, MW-16, MW-17, and MW-18D
- Supply wells 3740 Blueberry Court, 3923 Rosewood Road, 3990 Farm Lane, 3992 Farm Lane, 3994 Farm Lane, 3995 Farm Lane, 3996 Farm Lane, 3997 Farm Lane, 3998 Farm Lane, GVP-FR941233, and GVP-FR941281.

Based on the enclosed MAROS evaluation report, GES proposes the following monitoring and potable wells be removed from the sampling program because the mean dissolved MTBE concentration in these wells is less than the MDE Action Level for MTBE of 20 µg/L or MTBE has not been detected at these locations:

- Monitoring wells MW-4, MW-5, MW-6, and MW-12
- Supply wells 3737 Blueberry Court, 3739 Blueberry Court, 3829 Greenridge Drive, 3833 Greenridge Drive, 3835 Greenridge Drive, 3837 Greenridge Drive, 3979 Farm Lane, 3981 Farm Lane, 3983 Farm Lane, 3984 Farm Lane, 3984A Farm Lane, 3985 Farm Lane, 3987 Farm Lane, 3989 Farm Lane, 3991 Farm Lane, 3993 Farm Lane, 3992 Rye Lane, 3994 Rye Lane, 3996 Rye Lane, 3998 Rye Lane, GVP-FR815955, GVP-FR881366, GVP-FR881394, GVSC-FR731687, GVSC-FR734918, and GVSC-FR736674.

The monitoring wells proposed for removal from the sampling program are presented on **Figure 9**. The potable wells proposed for removal from the sampling program are presented on **Figure 10**.

9.2 Reporting

While it is proposed to continue quarterly reporting of analytical data and activities performed in the period, GES proposes that the groundwater trends, the selected remedy, the proposed monitoring parameters and the proposed monitoring frequency be evaluated annually (within the fourth quarter report). The purpose of this annual evaluation is as follows:

- To report on the trends of individual wells and whether they continue to suggest the plume is shrinking;
- To evaluate the need for additional remedial measures;
- To evaluate the need to add or remove potable and/or monitoring wells from the routine monitoring program;
- To evaluate the need to add or remove MNA parameters from the monitoring program; and
- To provide an avenue to reduce the monitoring network as the plume continues to shrink but closure has not yet been attained.



9.3 Contingency Remedy

In the event that MNA fails to adequately address the site contaminants as anticipated, contingency remedies for this site include biosparge and short-term ISCO injection events. As stated in OSWER Directive 9200.4-17P, “a contingency remedy is a cleanup technology or approach...that functions as a ‘backup’ remedy in the event that the ‘selected’ remedy fails to perform as anticipated” (1999). If it is shown that both contaminant trends are not decreasing at an acceptable rate and DO concentrations are consistently at levels not sufficient for aerobic biodegradation, a biosparge system can be implemented at the site. If a more aggressive approach were to become necessary to address isolated areas of elevated impacts, short-term ISCO injection events can be utilized. Because of this, the injection wells used for the ISCO system will not be abandoned so they remain for potential future use as biosparge injection wells or ISCO injection wells.

9.4 Waste Handling

Any waste water produced during future groundwater sampling, well development or remedial activities shall be containerized in properly labelled drums, stored in a secure on-site area and ultimately disposed of at an approved waste handling facility. Any soil waste produced during future soil excavation, construction or well installation events shall be field screened for segregation and analyzed for appropriate waste characterization parameters. Any soil deemed impacted will be containerized in properly labelled drums, stored in a secure on-site area and ultimately disposed of at an approved waste handling facility. All disposed waste would be accounted for with accompanying waste manifest documentation.



10.0 REFERENCES

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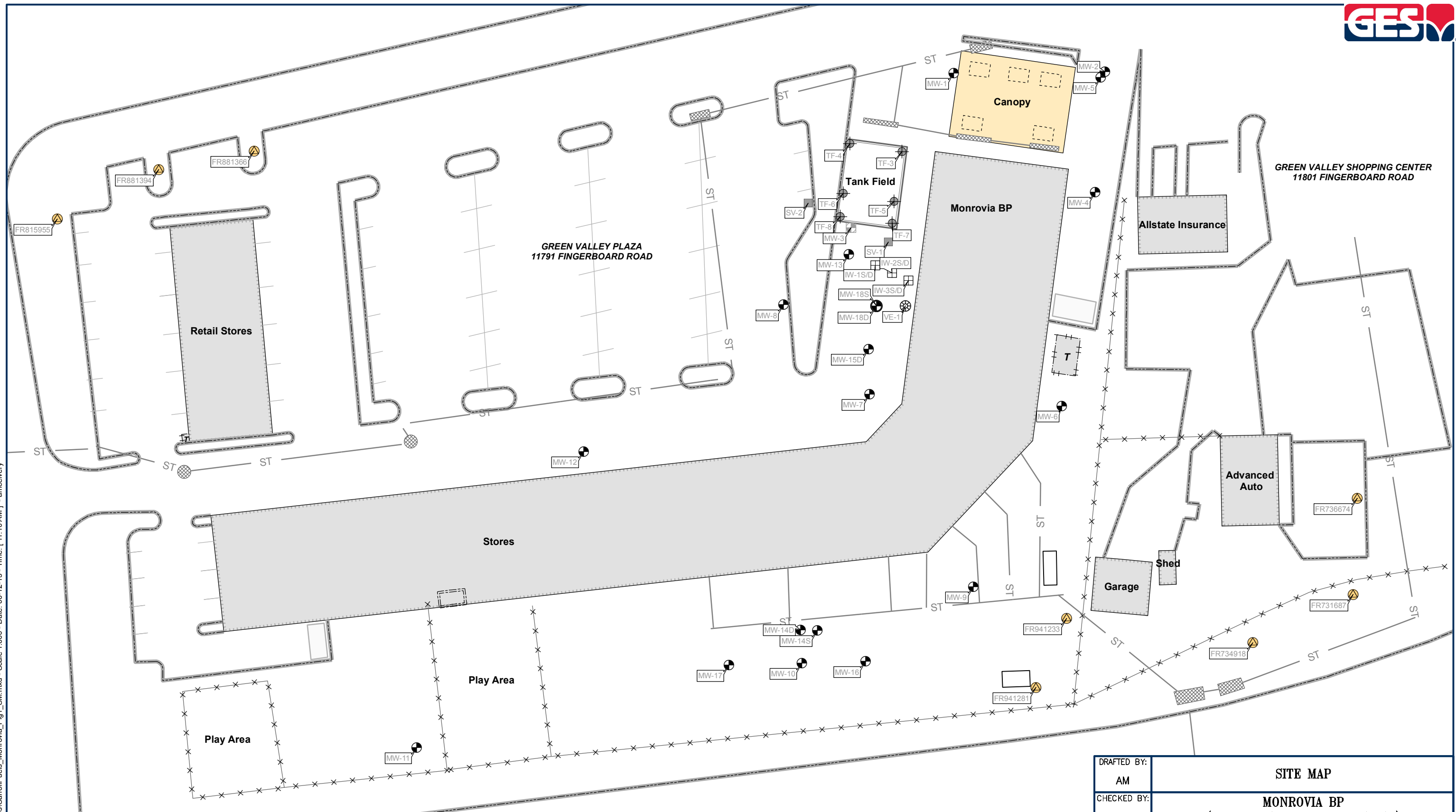
USEPA, 1999, OSWER Directive 9200.4-17P *Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action, and Underground Storage Tank Sites*, United States Environmental Protection Agency, Office of Solid Waste and Emergency Response, Washington, D.C.

USEPA, 2004, *Performance Monitoring of MNA Remedies for VOCs in Ground Water*, United States Environmental Protection Agency National Risk Laboratory, Cincinnati, OH

USGS, 2007 *Geologic Map of the Frederick 30' × 60' Quadrangle, Maryland, Virginia, and West Virginia*, Southwick et al., United States US Department of the Interior, US Geological Survey, Reston, VA

FIGURES

P:\CarrollFuels\Monrovia\GIS\Map\CarrollFuels_Monrovia_Fig1_SM.mxd - Scale 1:600 - Date: 06-12-13 - Time: [11:10 AM] - amcelvey



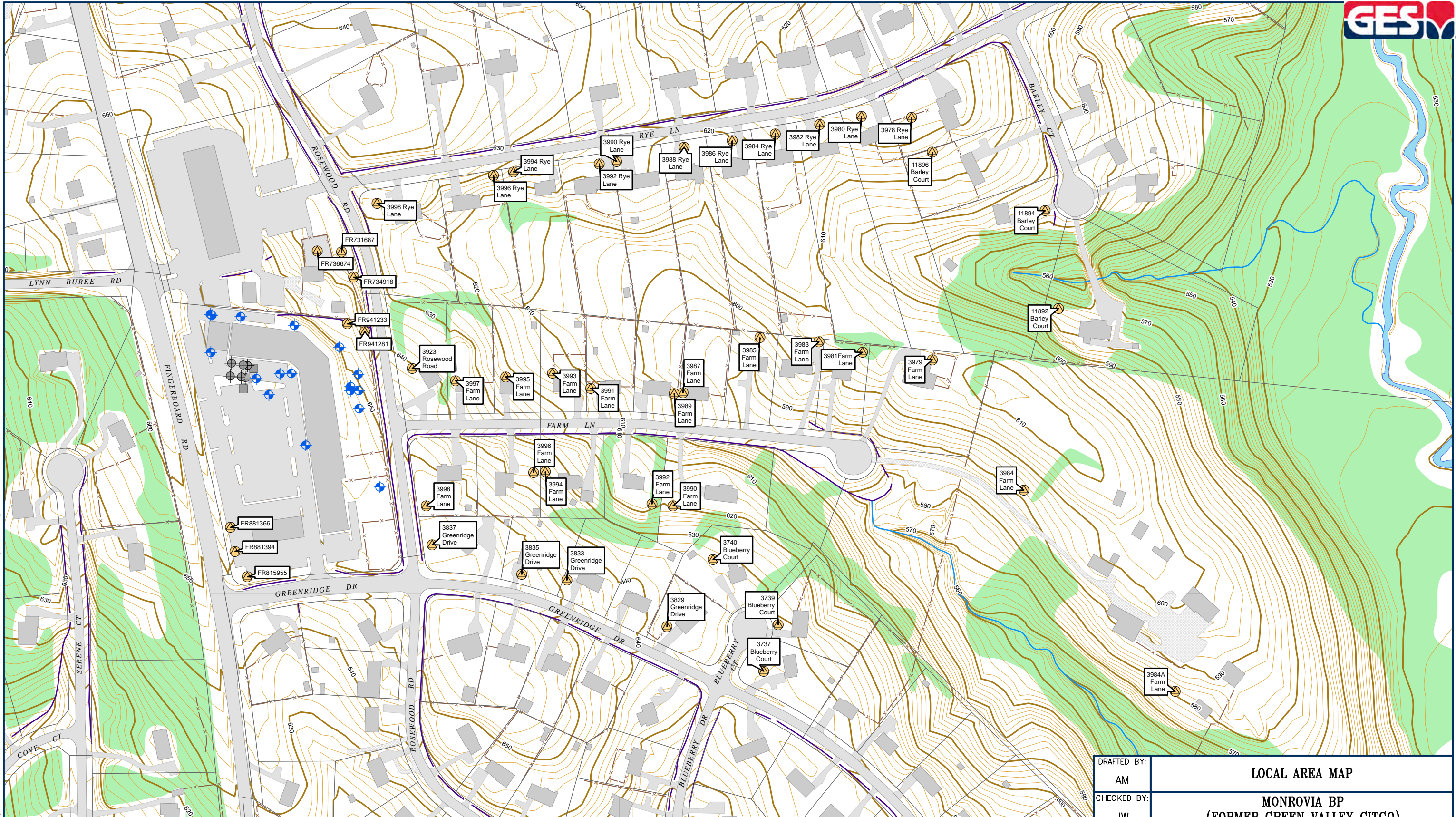
GREEN VALLEY SHOPPING CENTER
11801 FINGERBOARD ROAD

GREEN VALLEY PLAZA
11791 FINGERBOARD ROAD

DRAFTED BY: AM	SITE MAP MONROVIA BP (FORMER GREEN VALLEY CITGO) 11791 FINGERBOARD ROAD MONROVIA, MARYLAND		
CHECKED BY: JW			
REVIEWED BY: GR			
NORTH 	Groundwater & Environmental Services, Inc. 1350 BLAIR DR, SUITE A, ODENTON MD 21113		
	SCALE IN FEET 	DATE 6-12-13	FIGURE 1

Source:
NAIP aerial photograph for Frederick Co.
Based on GIS data provided by
Environmental Alliance, Inc.

Legend					
	Abandoned Well		Abandoned Soil Vapor Point		Curbing
	Monitoring Well		Injection Well		Fence
	Potable Well		Nested Obs Well		Parking
	Tank Field Well		SVE Well		Storm Sewer
	Building		Canopy		Dispenser
	Catch Basin		Dumpster		Propane AST
	Tank Field		Transformer		Pump Room Door



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Legend

- ⊕ Abandoned Well ⊕ Tank Field Well — Topographic Contour (10 ft) ■ Building ~ Stream ■ Wooded Area
- ⊕ Monitoring Well ■ Abandoned Soil Vapor Point - Intermediate Contour (2 ft) ■ Paved Road/Drive — Ditch
- ⊕ Potable Well -x-x Fence □ Property Boundary ■ Unpaved Drive Water Body

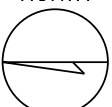
Source: Frederick County GIS

DRAFTED BY:
AM

CHECKED BY:
JW

REVIEWED BY:
GR


NORTH



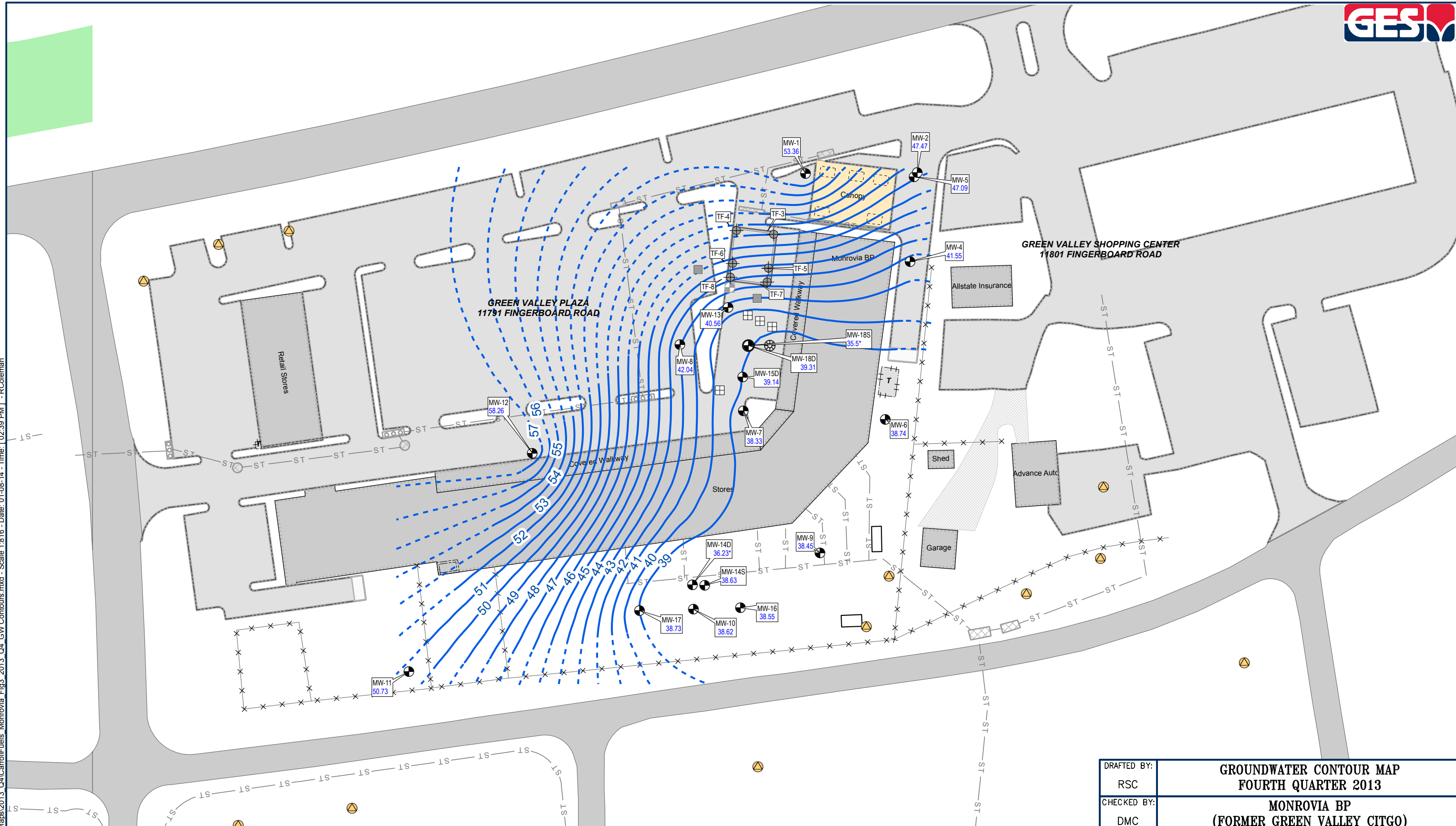
LOCAL AREA MAP

**MONROVIA BP
(FORMER GREEN VALLEY CITGO)
11791 FINGERBOARD ROAD
MONROVIA, MARYLAND**

Groundwater & Environmental Services, Inc.
1350 BLAIR DR, SUITE A, ODENTON MD 21113

SCALE IN FEET	DATE	FIGURE
 0 200	1-28-14	2

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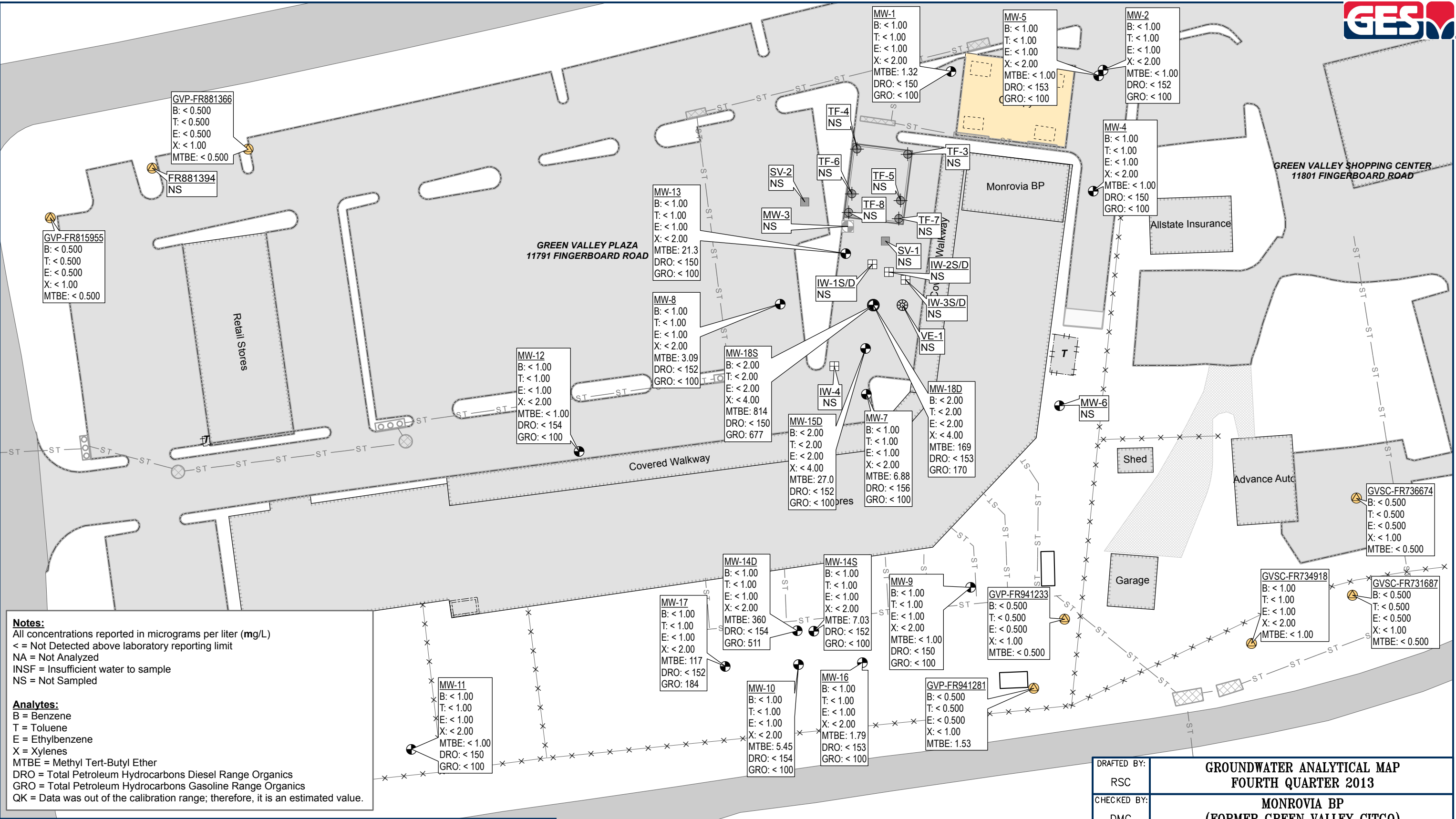


Legend			
Abandoned Well	Abandoned Soil Vapor Point	Fence	Building
Monitoring Well	Injection Well	Storm Sewer	Canopy
Potable Well	Nested Obs Well	Curb Catch Basin	Dispenser
Tank Field Well	Vapor Extraction Well	Catch Basin	Tank Field
Propane AST	Pump Room	Transformer	Groundwater Contour
Dumpster	Interpolated Contour	48.58 Groundwater Elevation	40.67 Groundwater Elevation
			Not Used for Contouring

Source:
NAIP aerial photograph for Frederick Co. Based on GIS data provided by Environmental Alliance, Inc.

DRAFTED BY: RSC	GROUNDWATER CONTOUR MAP FOURTH QUARTER 2013	
CHECKED BY: DMC	MONROVIA BP (FORMER GREEN VALLEY CITGO) 11791 FINGERBOARD ROAD MONROVIA, MARYLAND	
REVIEWED BY: GR	Groundwater & Environmental Services, Inc. 1350 BLAIR DRIVE, SUITE A, ODENTON, MD 21113	
NORTH 	SCALE IN FEET 	DATE 1-08-14
		FIGURE 3

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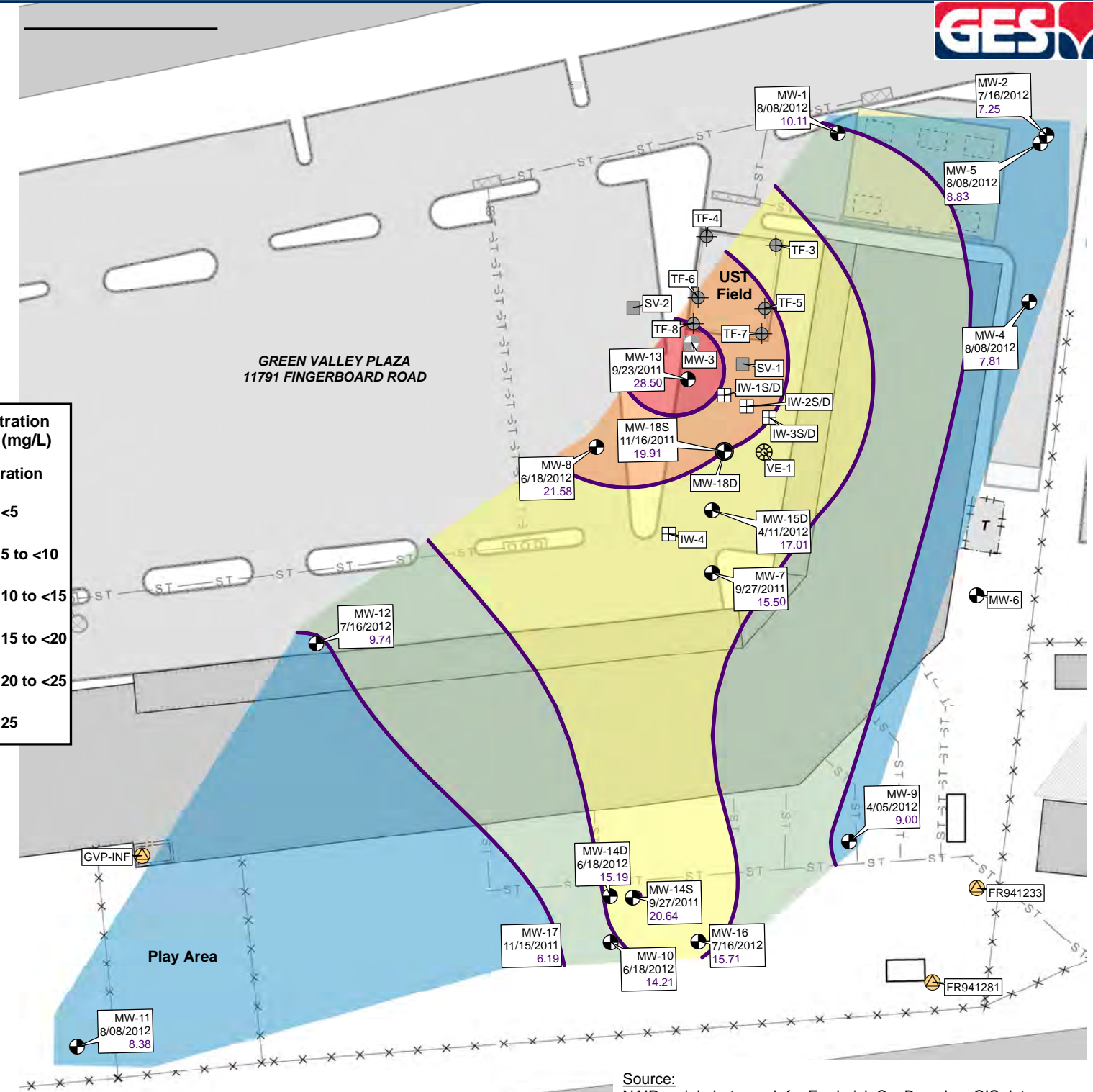
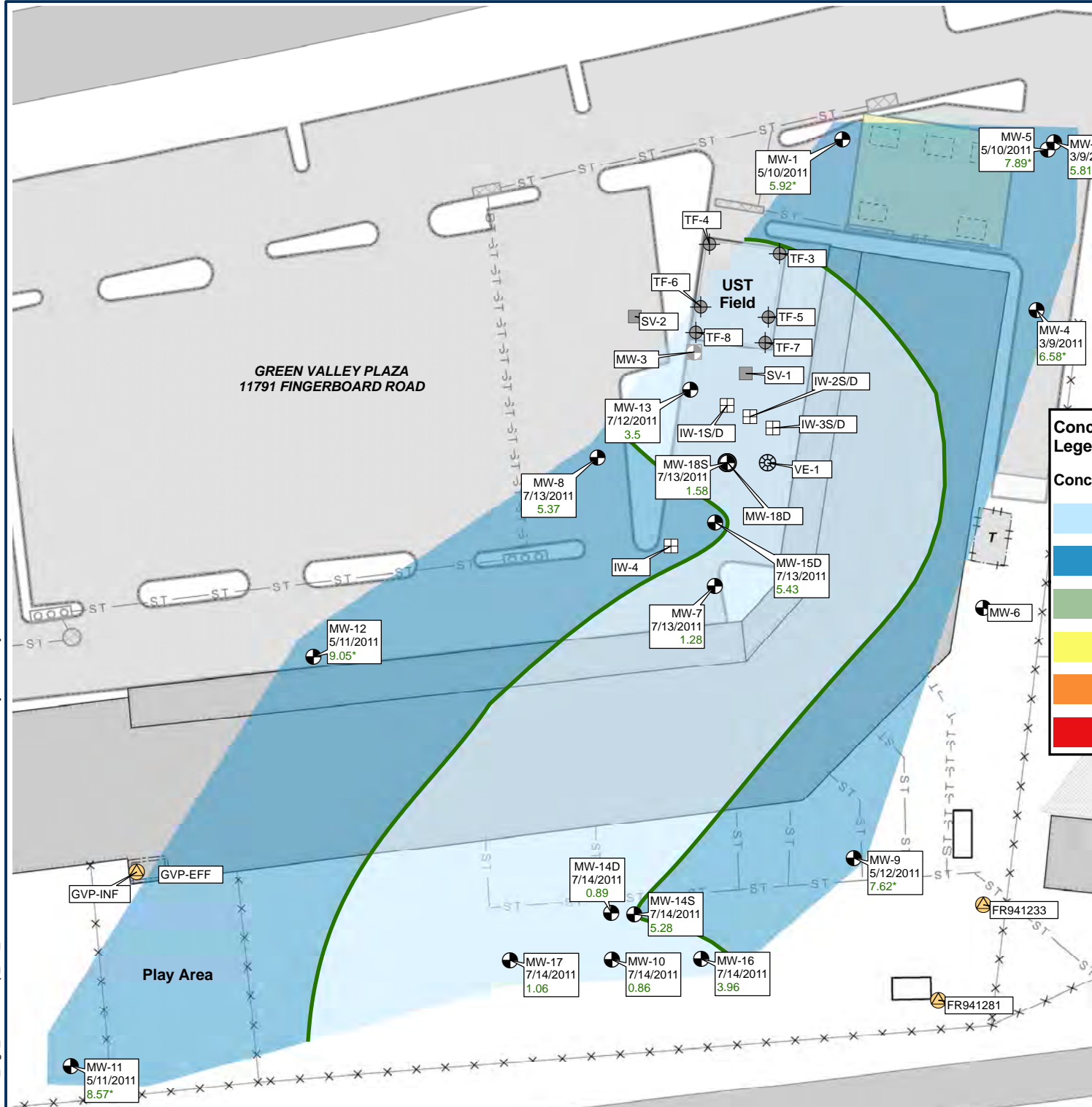
Notes:
 All concentrations reported in micrograms per liter (mg/L)
 < = Not Detected above laboratory reporting limit
 NA = Not Analyzed
 INSF = Insufficient water to sample
 NS = Not Sampled

Analytes:
 B = Benzene
 T = Toluene
 E = Ethylbenzene
 X = Xylenes
 MTBE = Methyl Tert-Butyl Ether
 DRO = Total Petroleum Hydrocarbons Diesel Range Organics
 GRO = Total Petroleum Hydrocarbons Gasoline Range Organics
 QK = Data was out of the calibration range; therefore, it is an estimated value.

Legend			
	Abandoned Well		Abandoned Soil Vapor Point
	Monitoring Well		Injection Well
	Potable Well		Nestled Obs Well
	Tank Field Well		Vapor Extraction Well
	Fence		Storm Sewer
	Building		Curb Catch Basin
	Canopy		Catch Basin
	Propane AST		Dispenser
	Pump Room		Tank Field
	Transformer		Dumpster

DRAFTED BY: RSC	GROUNDWATER ANALYTICAL MAP FOURTH QUARTER 2013	
CHECKED BY: DMC	MONROVIA BP (FORMER GREEN VALLEY CITGO) 11791 FINGERBOARD ROAD MONROVIA, MARYLAND	
REVIEWED BY:	Groundwater & Environmental Services, Inc. 1350 BLAIR DRIVE, SUITE A, ODENTON, MD 21113	
NORTH 	SCALE IN FEET 	DATE 12-24-13
		FIGURE 4

Source:
 NAIP aerial photograph for Frederick Co.
 Based on GIS data provided by
 Environmental Alliance, Inc.



Baseline

Note:
1. Contour Interval: 2.0
2. MW-18D Removed from data to generate contours.

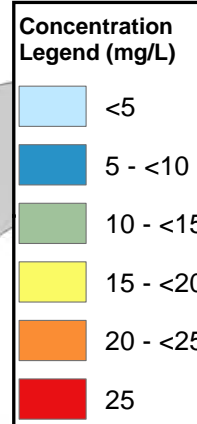
Maximum

Note:
1. Contour Interval: 2.0
2. MW-18D Removed from data to generate contours.

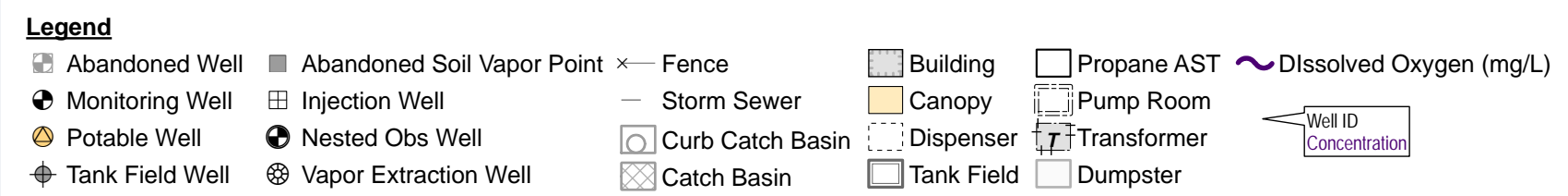
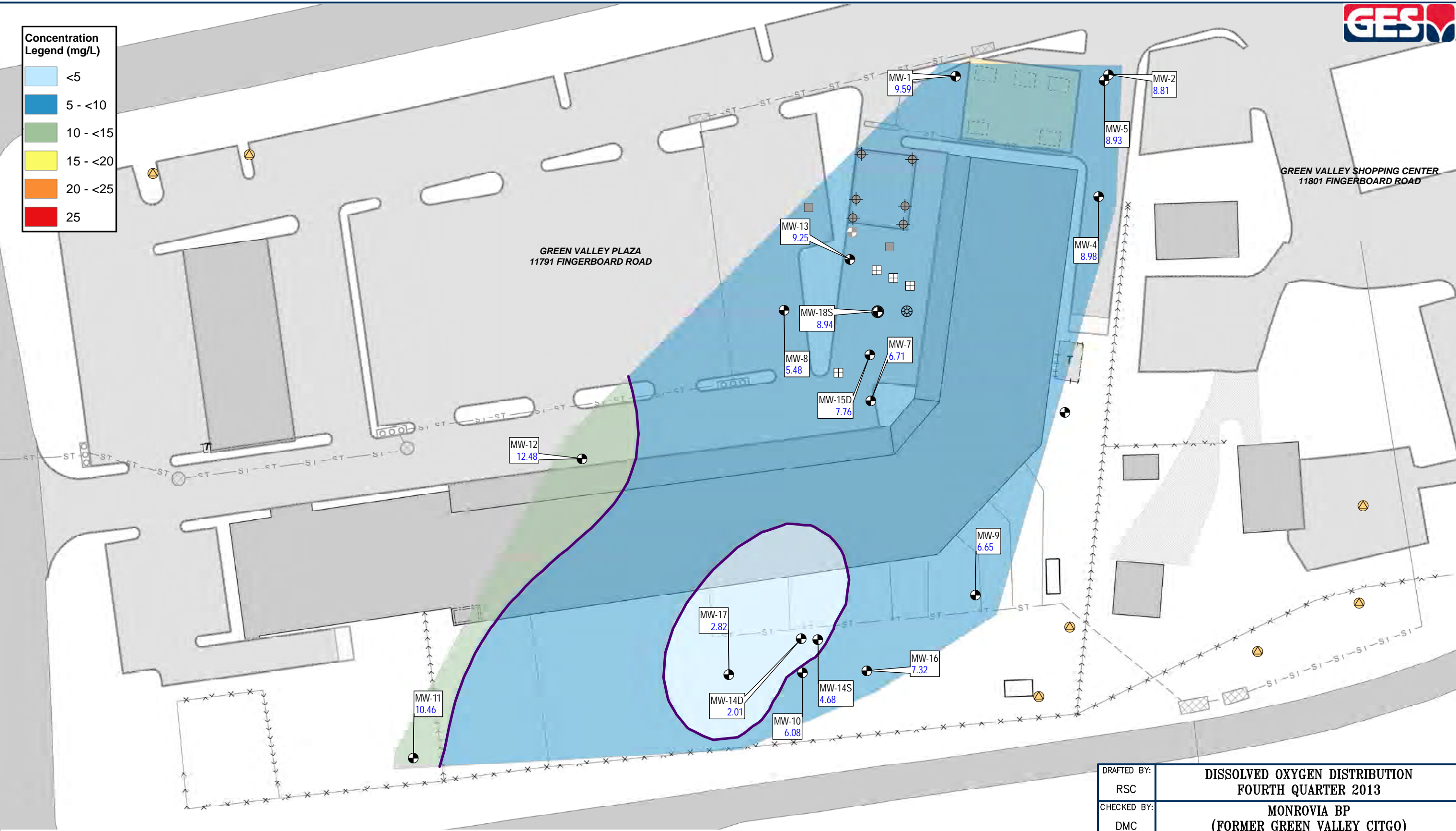
Source:
NAIP aerial photograph for Frederick Co. Based on GIS data provided by Environmental Alliance, Inc.

	Abandoned Well		Abandoned Soil Vapor Point		Fence		Building		Propane AST		Baseline Dissolved Oxygen (mg/L)
	Monitoring Well		Injection Well		Storm Sewer		Canopy		Pump Room		Max Dissolved Oxygen (mg/L)
	Potable Well		Nested Obs Well		Curb Catch Basin		Dispenser		Transformer	*	Not measured in July 2011, previous measurements used for contouring
	Tank Field Well		Vapor Extraction Well		Catch Basin		Tank Field		Dumpster	Well ID	Well ID
										Observation Date	Observation Date
										Baseline	Max

DRAFTED BY: AM	DISSOLVED OXYGEN DISTRIBUTION - ISCO SYSTEM BASELINE AND MAXIMUM	
CHECKED BY: JW	MONROVIA BP (FORMER GREEN VALLEY CITGO)	
REVIEWED BY: GR	11791 FINGERBOARD ROAD MONROVIA, MARYLAND	
NORTH	Groundwater & Environmental Services, Inc. 1350 BLAIR DR, SUITE A, ODENTON, MD 21113	
SCALE IN FEET 	DATE 1-28-14	FIGURE 5

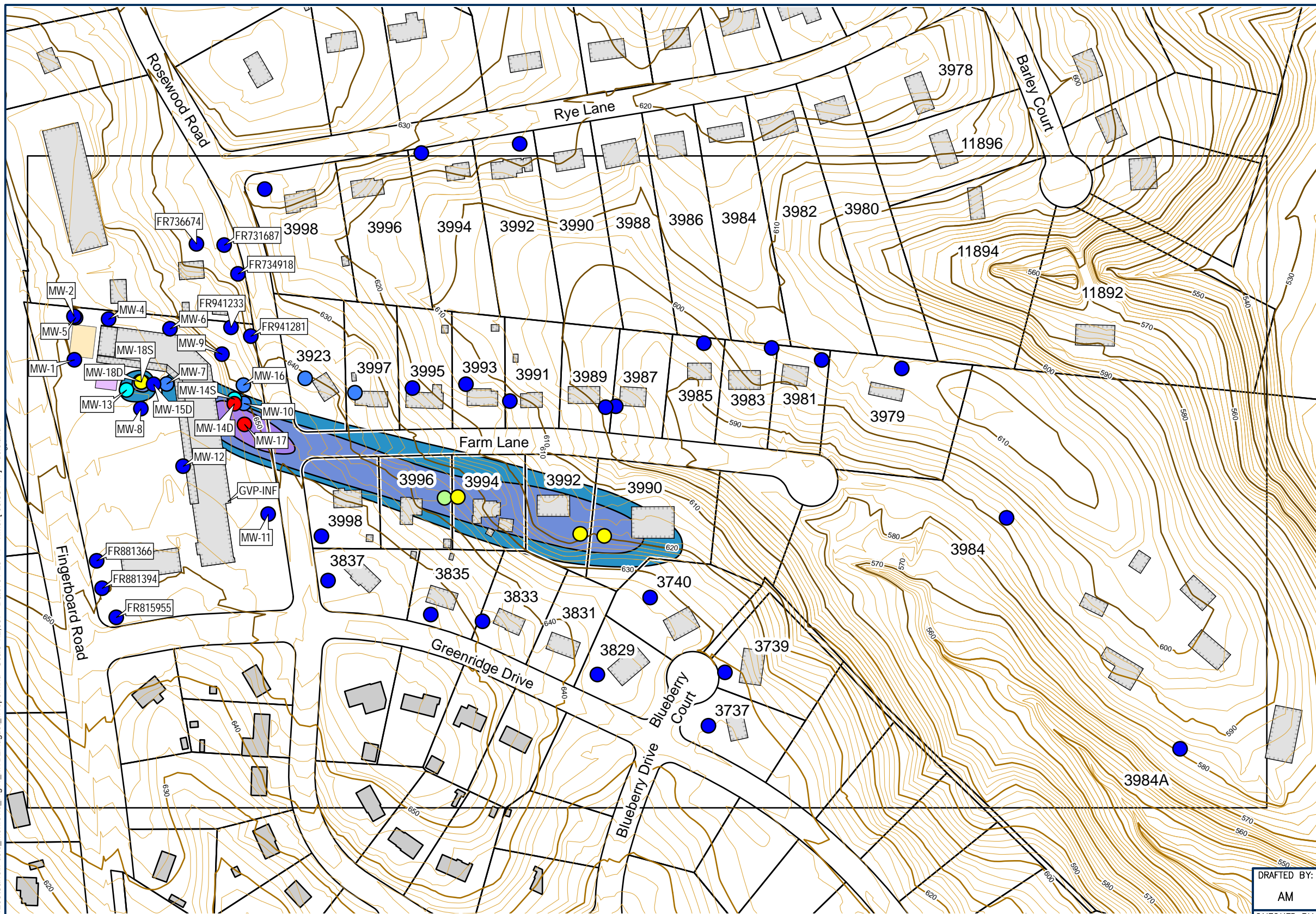


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Source:
NAIP aerial photograph for Frederick Co. Based on GIS data provided by Environmental Alliance, Inc.

DRAFTED BY: RSC	DISSOLVED OXYGEN DISTRIBUTION FOURTH QUARTER 2013		
CHECKED BY: DMC	MONROVIA BP (FORMER GREEN VALLEY CITGO) 11791 FINGERBOARD ROAD MONROVIA, MARYLAND		
REVIEWED BY: GR	Groundwater & Environmental Services, Inc. 1350 BLAIR DRIVE, SUITE A, ODENTON, MD 21113		
NORTH	SCALE IN FEET 	DATE 1-13-14	FIGURE 6



- Legend**
- Building
 - Canopy
 - Tank Field
 - Index Contour
 - Intermediate Contour

- MTBE Concentration**
Influent
- 2,000 to 4,000 ppb
 - 1,000 to 2,000 ppb
 - 200 to 1,000 ppb
 - 100 to 200 ppb
 - 20 to 100 ppb
 - ND to 20 ppb
 - ND

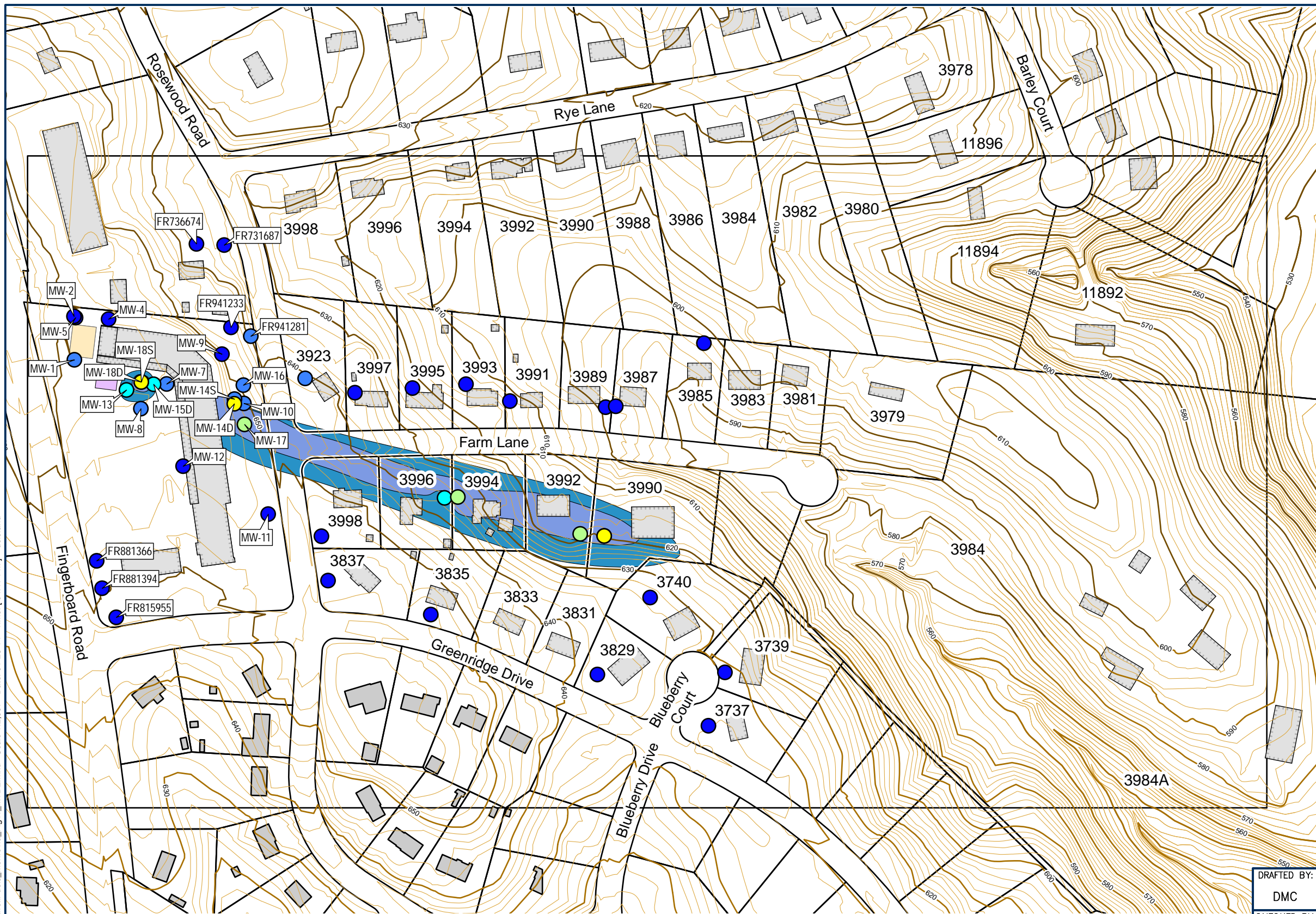
- MTBE Concentration**
MTBE - Methyl Tertiary Butyl Ether
- 20 to <100 ppb
 - 100 to <1,000 ppb
 - 1,000 to <10,000 ppb

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Source:
NAIP aerial photograph for Frederick Co. Based on GIS data provided by Environmental Alliance, Inc.

Note:
1. Point Of Use Samples all Non-Detect
2. The maximum measured concentration between MW-18S and MW-18D is plotted on the figure, see analytical results table for individual concentration values

DRAFTED BY: AM	MTBE DISTRIBUTION - AUGUST 2012	
CHECKED BY: JW		
REVIEWED BY: GR		
NORTH	MONROVIA BP (FORMER GREEN VALLEY CITGO) 11791 FINGERBOARD ROAD MONROVIA, MARYLAND	
 SCALE IN FEET 	Groundwater & Environmental Services, Inc. 1350 BLAIR DR, SUITE A, ODENTON, MD 21113	DATE 1-28-14
	FIGURE 7	



Legend

- Building
- Canopy
- Tank Field
- Index Contour
- Intermediate Contour

MTBE Concentration
Influent

- 2,000 to 4,000 ppb
- 1,000 to 2,000 ppb
- 200 to 1,000 ppb
- 100 to 200 ppb
- 20 to 100 ppb
- ND to 20 ppb
- ND

MTBE Concentration
MTBE - Methyl Tertiary Butyl Ether

- 20 to <100 ppb
- 100 to <1,000 ppb

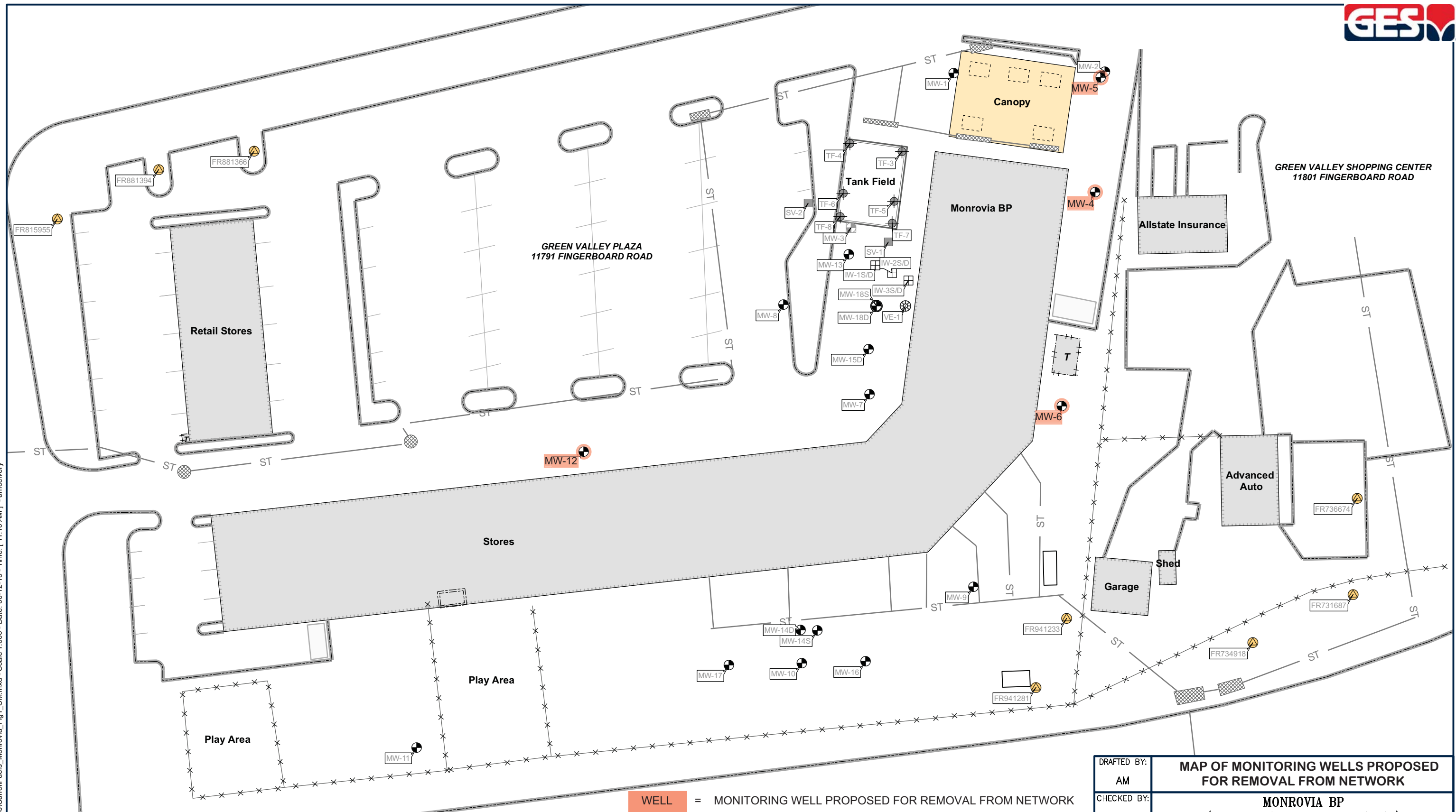
P:\Carroll\Fuels\Monrovia\MD\GIS\Maps\Carroll\Fuels_Monrovia_Fig11_MTBE.mxd - Scale 1:2,387 - Date: 01-28-14 - Time: [04:17 PM] - dcleland

Source:
NAIP aerial photograph for Frederick Co. Based on GIS data provided by Environmental Alliance, Inc.

- Note:**
- Point Of Use Samples all Non-Detect
 - The maximum measured concentration between MW-18S and MW-18D is plotted on the figure, see analytical results table for individual concentration values
 - When multiple sampling events were performed during the quarter, the first sample was used.

DRAFTED BY: DMC	MTBE DISTRIBUTION - 4TH QUARTER 2013		
CHECKED BY: DR			
REVIEWED BY: GR			
NORTH	Groundwater & Environmental Services, Inc. 1350 BLAIR DR, SUITE A, ODENTON, MD 21113		
	SCALE IN FEET 	DATE 1-28-14	FIGURE 8

P:\CarrollFuels\Monrovia\GIS\Map\Fuels_Monrovia_Fig1_SM.mxd - Scale 1:600 - Date: 06-12-13 - Time: [11:10 AM] - amcelvey



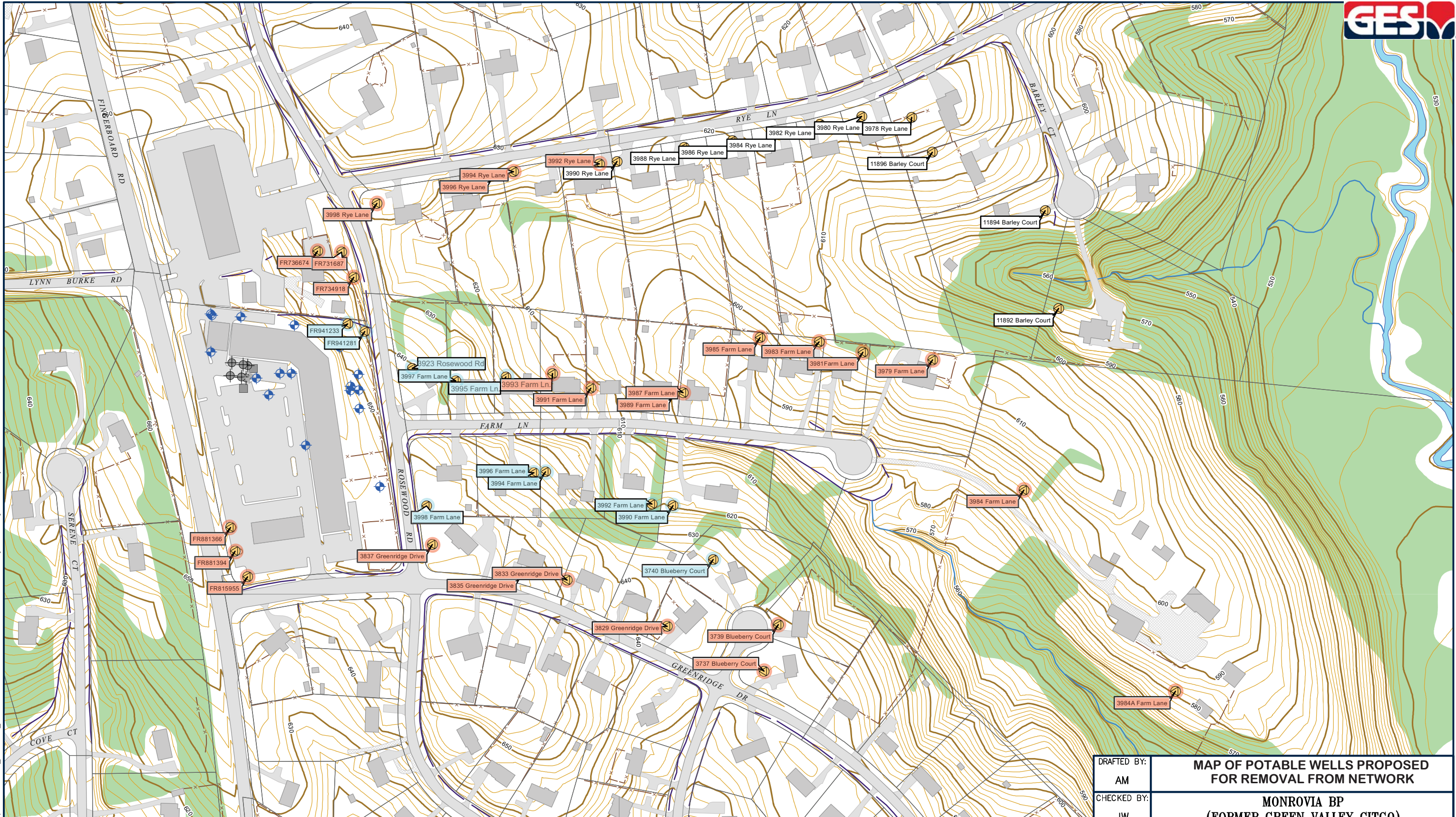
WELL = MONITORING WELL PROPOSED FOR REMOVAL FROM NETWORK

Legend					
	Abandoned Well		Abandoned Soil Vapor Point		Curbing
	Monitoring Well		Injection Well		Fence
	Potable Well		Nesting Obs Well		Parking
	Tank Field Well		SVE Well		Storm Sewer
	Building		Canopy		Dispenser
	Catch Basin		Dumpster		Tank Field
	Propane AST		Pump Room Door		Transformer

Source:
NAIP aerial photograph for Frederick Co.
Based on GIS data provided by
Environmental Alliance, Inc.

DRAFTED BY: AM	MAP OF MONITORING WELLS PROPOSED FOR REMOVAL FROM NETWORK	
CHECKED BY: JW	MONROVIA BP (FORMER GREEN VALLEY CITGO) 11791 FINGERBOARD ROAD MONROVIA, MARYLAND	
REVIEWED BY: GR	Groundwater & Environmental Services, Inc. 1350 BLAIR DR, SUITE A, ODENTON MD 21113	
NORTH 	SCALE IN FEET 	DATE 01-20-14
		FIGURE 9

P:\CarrollFuels\Monrovia\GIS\Map\CarrollFuels_Monrovia_LAM.mxd - Scale 1:2,400 - Date: 06-12-13 - Time: [11:08 AM] - amcelvey



Legend

	Abandoned Well		Tank Field Well		Topographic Contour (10 ft)		Building		Stream		Wooded Area
	Monitoring Well		Abandoned Soil Vapor Point		Intermediate Contour (2 ft)		Paved Road/Drive		Ditch		
	Potable Well		Fence		Property Boundary		Unpaved Drive		Water Body		

ADDRESS = WELL PROPOSED FOR REMOVAL FROM NETWORK
ADDRESS = WELL TO REMAIN WITHIN NETWORK

Source: Frederick County GIS

DRAFTED BY: AM	MAP OF POTABLE WELLS PROPOSED FOR REMOVAL FROM NETWORK	
CHECKED BY: JW		
REVIEWED BY: GR	MONROVIA BP (FORMER GREEN VALLEY CITGO) 11791 FINGERBOARD ROAD MONROVIA, MARYLAND	
NORTH	Groundwater & Environmental Services, Inc. 1350 BLAIR DR, SUITE A, ODENTON MD 21113	
	SCALE IN FEET 	DATE 01-20-14
		FIGURE 10

TABLES

Table 1

MONITORING WELL CONSTRUCTION DETAILS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Road
Monrovia, MD

Well I.D.	Well Permit #	Date Well Drilled	Date Well Installed	Well Diameter (inches)	TOC Elevation	Date of Last Survey	Total Depth of Well (from Ground Surface)	DTB of Steel Casing (feet)	TOS from Ground Surface	BOS from Ground Surface	COMMENTS
MW-1	FR-94-5045	2/7/06	2/7/2006	2	99.19	2/27/2006	61.5	--	40	61.5	
MW-2	FR-94-5046	2/7/06	2/7/2006	2	99.47	2/27/2006	61.5	--	40	61.5	
MW-3	FR-94-5047	2/7/06	2/7/2006	2	99.16	2/27/2006	81.5	--	40	64	Drilled to 81.5 feet, backfilled and set at 64 feet; well abandoned 5/15/08
MW-4	FR-94-5048	2/7/06	2/7/2006	2	97.84	2/27/2006	61.5	--	40	61.5	
MW-5	FR-95-0982	5/12/08	2/23/2009	4	99.60	3/18/2009	70	14	40	70	
MW-6	FR-95-0983	5/12/08	2/23/2009	4	98.09	3/18/2009	59.5	14	40	59.5	boring caved to 59.5 feet
MW-7	FR-95-0984	5/12/08	2/24/2009	4	97.66	3/18/2009	80	19.5	53	80	
MW-8	FR-95-0985	5/12/08	2/23/2009	4	97.93	3/18/2009	70	15	45	70	
MW-9	FR-95-1216	2/26/09	3/11/2009	4	88.48	3/18/2009	78	10	48	78	
MW-10	FR-95-1217	2/26/09	3/11/2009	4	91.64	3/18/2009	80	10	40	80	
MW-11	FR-95-1219	2/27/09	3/11/2009	4	94.28	3/18/2009	77	10	47	77	
MW-12	FR-95-1218	3/2/09	3/12/2009	4	95.33	3/18/2009	84	10	44	82	
MW-13	FR-95-1215	3/2/09	3/12/2009	4	98.11	3/18/2009	84	10	49	84	
MW-14S	FR-95-1599	7/20/10	7/22/2010	4	91.21	7/22/2010	100	11.0	40	100	
MW-14D	FR-95-1418	9/24/09	7/22/2010	4	92.07	7/22/2010	221	10.5	201	221	
MW-15D	FR-95-1419	9/28/09	7/19/2010	4	97.67	7/22/2010	133.5	10	45.5	133.5	
MW-16	FR-95-1420	9/25/09	7/20/2010	4	89.78	7/22/2010	121	9.75	35.5	121	
MW-17	FR-95-1421	9/25/09	7/20/2010	4	92.84	7/22/2010	121	10.5	35	121	
MW-18S	FR-95-1674	11/17/10	11/17/2010	2	98.29	1/4/2011	70	--	45	70	MW-18S and MW-18D nested in one borehole
MW-18D			11/18/2010	2	98.31	1/4/2011	130	--	120	130	
VE-1	FR-95-1673	11/19/10	11/17/2010	4	98.40	1/4/2011	25	--	5	25	
IW-1S	FR-95-1672	11/18/10	11/18/2010	0.60	98.52	1/4/2011	67	--	63	67	IW-1S and IW-1D nested in one borehole - stainless steel screen and casing
IW-1D			11/19/2010	0.60	98.60	1/4/2011	73	--	69	73	
IW-2S	FR-95-1671	11/18/10	11/18/2010	0.60	98.63	1/4/2011	91	--	87	91	IW-2S and IW-2D nested in one borehole - stainless steel screen and casing
IW-2D			11/19/2010	0.60	98.71	1/4/2011	103	--	99	103	
IW-3S	FR-95-1670	11/18/10	11/18/2010	0.60	98.51	1/4/2011	127	--	123	127	IW-3S and IW-3D nested in one borehole - stainless steel screen and casing
IW-3D			11/19/2010	0.60	98.62	1/4/2011	134	--	130	134	
IW-4	FR-95-2019	5/30/12	5/30/12	0.75	NA	NA	92	--	85	89	

Notes:

TOS - Top of screen
TOC - Top of casing

BOS - Bottom of screen
U - Unknown

Table 2

HISTORICAL SOIL ANALYTICAL DATA SUMMARY

MONROVIA BP / FORMER GREEN VALLEY CITGO
11791 FINGERBOARD ROAD
MONROVIA, MARYLAND

Soil Sample ID	Date	Depth (ft)	Benzene (µg/kg)	Toluene (µg/kg)	Ethylbenzene (µg/kg)	Total Xylenes (µg/kg)	MTBE (µg/kg)	tert-Butyl Alcohol (µg/kg)	tert-amyl methyl ether (µg/kg)	ethyl tert-butyl ether (µg/kg)	Diisopropyl ether (µg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)
MDE Non-Residential Clean-up Standard for Soil (June 2008)			52,000	8,200,000	10,000,000	20,000,000	720,000	NA	NA	NA	NA	620	620
GP-1	09/14/05	11 - 14	< 0.5	< 1	< 1	< 1	13	680	< 1	< 1	< 1	110	< 0.2
GP-2	09/14/05	8 - 11	< 0.6	< 1	< 1	< 1	0.9 J	200	< 1	< 1	< 1	8.7 J	< 0.2
GP-3	09/14/05	8 - 11	< 0.6	< 1	< 1	< 1	20	< 22	< 1	< 1	< 1	66	< 0.2
GP-4	09/14/05	6 - 8	< 0.5	< 1	< 1	< 1	< 0.5	< 21	-	-	-	< 4.2	< 0.2
GP-5	09/14/05	8 - 11	< 0.5	< 1	< 1	< 1	2 J	< 22	-	-	-	< 4.3	< 0.2
GP-6	09/15/05	11 - 14	< 0.5	2 J	< 1	2 J	< 0.5	< 22	< 1	< 1	< 1	43	0.5 J
GP-7	09/15/05	11 - 14	< 0.6	< 1	< 1	< 1	< 0.6	< 22	< 1	< 1	< 1	< 4.4	< 0.2
GP-8	09/15/05	14 - 16	< 0.5	< 1	< 1	4 J	2 J	< 22	-	-	-	15	< 0.2
GP-9	09/15/05	19 - 20	< 0.5	< 1	< 1	< 1	2 J	< 22	-	-	-	24	< 0.2
GP-10	09/15/05	12 - 13	< 0.5	< 1	< 1	1 J	0.6 J	< 21	-	-	-	24	< 0.2
SB-1	06/01/07	15 - 17	< 0.5	< 1	< 1	< 1	< 0.5	< 21	< 1	< 1	< 1	5.4 J	< 0.2
SV-1	05/31/07	24.5	< 0.5	< 1	< 1	< 1	< 0.5	< 21	< 1	< 1	< 1	< 4.2	< 0.2
SV-2	05/31/07	20	< 0.5	< 1	< 1	< 1	24	41 J	< 1	< 1	< 1	-	< 0.2

Table 2

HISTORICAL SOIL ANALYTICAL DATA SUMMARY

MONROVIA BP / FORMER GREEN VALLEY CITGO
11791 FINGERBOARD ROAD
MONROVIA, MARYLAND

Soil Sample ID	Date	Depth (ft)	Benzene (µg/kg)	Toluene (µg/kg)	Ethylbenzene (µg/kg)	Total Xylenes (µg/kg)	MTBE (µg/kg)	tert-Butyl Alcohol (µg/kg)	tert-amyl methyl ether (µg/kg)	ethyl tert-butyl ether (µg/kg)	Diisopropyl ether (µg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)
MDE Non-Residential Clean-up Standard for Soil (June 2008)			52,000	8,200,000	10,000,000	20,000,000	720,000	NA	NA	NA	NA	620	620
SV-2	05/31/07	25	-	-	-	-	-	-	-	-	-	< 4.2	-
SV-2	05/31/07	30	< 0.5	< 1	< 1	< 1	15	1,900	< 1	< 1	< 1	-	< 0.2
SV-3	06/01/07	10 - 12	< 0.5	< 1	< 1	< 1	160	4,800	< 1	< 1	< 1	< 4.4	< 0.2
SV-3	06/01/07	15 - 17	< 0.6	< 1	< 1	< 1	73	200	< 1	< 1	< 1	< 4.4	< 0.2
DISP-1	07/16/08	4	< 0.6	< 1	< 1	< 1	< 0.6	< 24	< 1	< 1	< 1	< 4.4	< 0.2
DISP-2	07/16/08	4	< 0.5	< 1	< 1	< 1	< 0.5	< 22	< 1	< 1	< 1	< 4.7	0.4 J
DISP-3	07/16/08	4	< 0.6	< 1	< 1	< 1	< 0.6	< 25	< 1	< 1	< 1	< 4.6	< 0.2
DISP-4	07/16/08	4	< 0.5	< 1	< 1	< 1	< 0.5	< 20	< 1	< 1	< 1	< 4.3	< 0.2
DISP-5	07/16/08	4	< 0.6	< 1	< 1	< 1	< 0.6	< 23	< 1	< 1	< 1	52	0.3 J
PIPE-1	07/16/08	4	< 0.5	< 1	< 1	3 J	< 0.5	< 20	< 1	< 1	< 1	10 J	0.3 J
PIPE-2	07/16/08	4	< 0.6	< 1	< 1	< 1	< 0.6	< 25	< 1	< 1	< 1	8.0 J	0.7 J
PIPE-3	07/16/08	4	< 0.5	< 1	< 1	< 1	< 0.5	< 20	< 1	< 1	< 1	4.9 J	< 0.2
PIPE-4	07/16/08	4	< 0.6	< 1	< 1	< 1	< 0.6	< 24	< 1	< 1	< 1	< 4.7	< 0.2

Table 2

HISTORICAL SOIL ANALYTICAL DATA SUMMARY

MONROVIA BP / FORMER GREEN VALLEY CITGO
 11791 FINGERBOARD ROAD
 MONROVIA, MARYLAND

Soil Sample ID	Date	Depth (ft)	Benzene (µg/kg)	Toluene (µg/kg)	Ethylbenzene (µg/kg)	Total Xylenes (µg/kg)	MTBE (µg/kg)	tert-Butyl Alcohol (µg/kg)	tert-amyl methyl ether (µg/kg)	ethyl tert-butyl ether (µg/kg)	Diisopropyl ether (µg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)
MDE Non-Residential Clean-up Standard for Soil (June 2008)			52,000	8,200,000	10,000,000	20,000,000	720,000	NA	NA	NA	NA	620	620
PIPE-5	07/16/08	4	< 0.6	< 1	< 1	< 1	< 0.6	< 24	< 1	< 1	< 1	6.4 J	< 0.2
LINE-6	07/28/08	4	< 0.5	< 1	< 1	< 1	< 0.5	< 21	< 1	< 1	< 1	9.2 J	< 0.2
LINE-7	07/28/08	4	< 0.5	< 1	< 1	< 1	< 0.5	< 20	< 1	< 1	< 1	< 4.3	< 0.2
LINE-8	07/28/08	4	< 0.6	< 1	< 1	< 1	< 0.6	< 23	< 1	< 1	< 1	< 4.4	< 0.2
DUST-04	07/21/08	11	< 0.6	< 1	< 1	< 1	< 0.6	< 22	< 1	< 1	< 1	6.6 J	< 0.2
TF-BOTTOM	07/22/08	15	< 0.5	< 1	< 1	< 1	< 0.5	< 22	< 1	< 1	< 1	5.2 J	< 0.2
TF-SE	07/22/08	15	< 0.6	< 1	< 1	< 1	< 0.6	1,100	< 1	< 1	< 1	8.3 J	< 0.2
TF-SW	07/22/08	15	< 0.5	< 1	< 1	< 1	< 0.5	< 21	< 1	< 1	< 1	< 4.2	< 0.2
TF-NE	07/28/08	15	< 0.6	< 1	< 1	< 1	< 0.6	< 22	< 1	< 1	< 1	< 4.4	< 0.2
TF-NW	07/28/08	15	< 0.5	< 1	< 1	< 1	< 0.5	< 21	< 1	< 1	< 1	< 4.3	< 0.2
TF-NORTH	07/21/08	5	< 0.7	< 1	< 1	< 1	< 0.7	< 27	< 1	< 1	< 1	< 5.3	< 0.3
TF-SOUTH	07/22/08	5	< 0.6	< 1	< 1	< 1	< 0.6	< 24	< 1	< 1	< 1	4.6 J	< 0.2
TF-WEST	07/24/08	5	< 0.6	< 1	< 1	< 1	< 0.6	< 23	< 1	< 1	< 1	32	< 0.2

Table 2

HISTORICAL SOIL ANALYTICAL DATA SUMMARY

MONROVIA BP / FORMER GREEN VALLEY CITGO
 11791 FINGERBOARD ROAD
 MONROVIA, MARYLAND

Soil Sample ID	Date	Depth (ft)	Benzene (µg/kg)	Toluene (µg/kg)	Ethylbenzene (µg/kg)	Total Xylenes (µg/kg)	MTBE (µg/kg)	tert-Butyl Alcohol (µg/kg)	tert-amyl methyl ether (µg/kg)	ethyl tert-butyl ether (µg/kg)	Diisopropyl ether (µg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)
MDE Non-Residential Clean-up Standard for Soil (June 2008)			52,000	8,200,000	10,000,000	20,000,000	720,000	NA	NA	NA	NA	620	620
TF-EAST	07/24/08	5	< 0.5	< 1	< 1	< 1	< 0.5	< 22	< 1	< 1	< 1	7.2 J	< 0.2
LINE1-PEX-BOTTOM	07/21/08	8	< 0.5	< 1	< 1	< 1	< 0.5	< 21	< 1	< 1	< 1	< 4.3	< 0.2
LINE1-PEX-EAST	07/21/08	8	< 0.5	< 1	< 1	< 1	< 0.5	< 21	< 1	< 1	< 1	< 4.2	< 0.2
LINE1-PEX-NORTH	07/21/08	8	< 0.6	< 1	< 1	< 1	< 0.6	< 22	< 1	< 1	< 1	< 4.3	< 0.2
LINE1-PEX-SOUTH	07/21/08	8	< 0.6	< 1	< 1	< 1	< 0.6	< 23	< 1	< 1	< 1	5.9 J	< 0.2

- = Not Analyzed
- <# = Less than the method detection limit of #
- J = Estimated Value
- ft = Feet
- µg/kg = Micrograms per kilogram
- mg/kg = Milligrams/kilogram
- MTBE = Methyl tertiary butyl ether
- NA = Not applicable
- TPH-DRO = Total Petroleum Hydrocarbons - Diesel Range Organics
- TPH-GRO = Total Petroleum Hydrocarbons - Gasoline Range Organics



Table 3

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)
GW Clean-up Standards*							5	1,000	700	10,000	NA	20	66	0.65	NA	NA	100	80	NA	NA	NA	NA	47	47
IW-1D	12/15/2010	GRAB	98.60	NR	-	-	<2	<2	<2	<4.00	<10	9,520	<2	<2	22,900	<2	<2	<2	50.2	<2	-	100	-	-
	03/10/2011	-	98.60	61.04	73.50	37.56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/10/2011	-	98.60	52.50	73.50	46.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/12/2011	-	98.60	60.27	69.44	38.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/18/2011	-	98.60	52.38	72.43	46.22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/13/2012	-	98.60	57.85	42.45	40.75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/03/2012	-	98.60	60.88	-	37.72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/14/2013	-	98.60	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/22/2013	-	98.60	58.92	-	39.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IW-1S	12/15/2010	GRAB	98.5	NR	-	-	<2	<2	<2	<4	<10	13,500	<2	<2	23,600	<2	<2	<2	110	<2	-	199	-	-
	03/10/2011	-	98.5	61.30	66.30	37.22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/10/2011	-	98.5	52.56	66.30	45.96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/12/2011	-	98.5	60.45	62.32	38.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/18/2011	GRAB	98.5	NR	-	-	<2	<2	<2	<4	<10	166	<2	<2	1,190	<2	<2	19.7	<2	<2	<10	<2	-	-
	01/13/2012	-	98.5	57.85	66.32	40.67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/03/2012	-	98.5	60.70	-	37.82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/14/2013	-	98.5	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/22/2013	-	98.5	58.64	-	39.88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IW-2D	12/15/2010	GRAB	98.7	NR	-	-	<2	<2	<2	<4	<10	38,900	<2	<2	85,900	<2	<2	<2	112	<2	-	675	-	-
	03/10/2011	-	98.7	61.70	103.93	37.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/10/2011	-	98.7	51.38	100.50	47.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/12/2011	-	98.7	57.74	103.91	40.97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/18/2011	GRAB	98.7	NR	-	-	<2	<2	<2	<4	<10	44,300	<2	<2	83,700	<2	<2	<2	162	<2	2,720	688	-	-
	01/13/2012	-	98.7	52.55	104.05	46.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/03/2012	-	98.7	57.18	103.29	41.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/16/2012	-	98.7	55.25	103.90	43.46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/03/2012	-	98.7	58.01	-	40.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/14/2013	-	98.7	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04/22/2013	-	98.7	56.03	-	42.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
IW-2S	12/15/2010	GRAB	98.6	NR	-	-	<2	<2	<2	<4	<10	1,820	<2	<2	4,270	<2	<2	<2	6.42	<2	-	23.7	-	-
	03/10/2011	-	98.6	58.40	87.26	40.23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/10/2011	-	98.6	51.22	91.15	47.41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/12/2011	-	98.6	59.30	87.24	39.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/18/2011	GRAB	98.6	NR	-	-	<2	<2	<2	<4	<10	904	<2	<2	1,440	<2	<2	5.58	25.7	<2	400	81.2	-	-
	01/13/2012	-	98.6	55.15	91.25	43.48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)
GW Clean-up Standards*							5	1,000	700	10,000	NA	20	66	0.65	NA	NA	100	80	NA	NA	NA	NA	47	47
IW-2S (cont.)	10/03/2012	-	98.6	60.15	-	38.48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/14/2013	-	98.6	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/22/2013	-	98.6	58.63	-	40.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IW-3D	12/15/2010	-	98.6	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/10/2011	-	98.6	55.79	130.75	42.83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/10/2011	-	98.6	49.30	130.70	49.32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/12/2011	-	98.6	56.50	130.65	42.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/18/2011	GRAB	98.6	NR	-	-	<2	<2	<2	<4	<10	986	<2	<2	1,990	<2	<2	<2	4.98	<2	<10	17.7	-	-
	01/13/2012	-	98.6	51.90	130.76	46.72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/03/2012	-	98.6	55.20	133.82	43.42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/16/2012	-	98.6	53.20	133.83	45.42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/03/2012	-	98.6	56.05	-	42.57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/14/2013	-	98.6	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/22/2013	-	98.6	54.24	-	44.38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	IW-3S	12/15/2010	GRAB	98.5	NR	-	-	<2	<2	<2	<4	<10	6,020	<2	<2	15,700	<2	<2	<2	23.2	<2	-	102	-
03/10/2011		-	98.5	58.42	123.8	40.09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05/10/2011		-	98.5	49.90	127.74	48.61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07/12/2011		-	98.5	56.71	127.52	41.80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/18/2011		GRAB	98.5	NR	-	-	<2	<2	<2	<4	<10	8,480	<2	<2	9,280	<2	<2	<2	27.9	<2	<10	88.3	-	-
01/13/2012		-	98.5	52.40	123.85	46.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04/03/2012		-	98.5	54.90	123.75	43.61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07/16/2012		-	98.5	53.48	127.55	45.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10/03/2012		-	98.5	56.96	-	41.55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01/14/2013		-	98.5	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04/22/2013		-	98.5	55.30	-	43.21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1 (61.5) {2} [40-61.5]	02/27/2006	NR	99.2	45.50	-	53.69	<0.5	1	<0.8	<0.8	1	16	-	-	15	-	-	<0.8	0.8	<0.8	-	<0.8	1,100	77
	09/19/2006	NR	99.2	47.44	-	51.75	1	<0.7	<0.8	<0.8	1	14	-	-	39	-	-	<0.8	3	<0.8	-	1	7,900	150
	04/19/2007	NR	99.2	41.83	-	57.36	<0.5	<0.7	<0.8	<0.8	<2.8	9	-	-	<10	-	-	<0.8	1	<0.8	-	<0.8	160	33
	08/08/2007	NR	99.2	51.63	-	47.56	1	<0.7	<0.8	<0.8	1	31	-	-	54	-	-	<0.8	6	<0.8	-	1	2,400	220
	10/10/2007	NR	99.2	54.35	-	44.84	1	<0.7	<0.8	<0.8	1	35	-	-	46	-	-	<0.8	7	<0.8	-	2	1,200	210
	01/16/2008	NR	99.2	50.50	-	48.69	2	<0.7	<0.8	<0.8	2	59	-	-	97	-	-	<0.8	16	<0.8	-	2	1,500	1,000
	04/15/2008	NR	99.2	47.54	-	51.65	0.9	<0.7	<0.8	<0.8	0.9	28	-	-	76	-	-	<0.8	6	<0.8	-	1	630	770
	06/12/2008	NR	99.2	43.98	-	55.21	<0.5	<0.7	<0.8	<0.8	<2.8	9	-	-	11	-	-	<0.8	2	<0.8	-	<0.8	780	110
	10/21/2008	NR	99.2	49.50	-	49.69	<0.5	<0.7	<0.8	<0.8	<2.8	17	-	-	<10	-	-	<0.8	3	<0.8	-	<0.8	-	65
	01/30/2009	NR	99.2	48.61	-	50.58	<1.00	<1.00	<1.00	<2.00	<5.00	12.6	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	3.33	<1.00	<5.00	<1.00	<300	60.5

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)		
GW Clean-up Standards*							5	1,000	700	10,000	NA	20	66	0.65	NA	NA	100	80	NA	NA	NA	NA	47	47		
MW-2 (cont.)	10/02/2009	NR	99.5	57.18	-	42.29	<1.00	<1.00	<1.00	<2.00	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	1.08	144	293	
	01/15/2010	NR	99.5	45.09	-	54.38	<2.00	<2.00	<2.00	<4.00	<10.0	<2.00	<2.00	<2.00	<10.0	<2.00	<2.00	<2.00	<2.00	<2.00	<10.0	<2.00	<300	<100		
	04/16/2010	NR	99.5	46.23	-	53.24	<1.00	<1.00	<1.00	<2.00	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<300	<100		
	07/19/2010	-	99.5	60.09	-	39.38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	09/20/2010	NR	99.5	NR	-	-	<2.00	<2.00	<2.00	<4.00	<10.0	<2.00	<2.00	<2.00	<10.0	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<10.0	<2.00	-	-	
	12/08/2010	GRAB	99.5	60.18	60.60	39.29	<2	<2	<2	<4	<10	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	-	-	
	03/09/2011	P&S	99.5	52.77	60.55	46.70	<1.00	<1.00	<1.00	<2.00	<5.00	<1.00	-	-	<5.00	-	-	-	<1.00	<1.00	<1.00	<1.00	<1.00	<150	<100	
	05/10/2011	P&S	99.5	44.20	60.55	55.27	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	209	<100	
	07/12/2011	GRAB	99.5	57.47	60.57	42.00	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	188	<100	
	10/18/2011	P&S	99.5	47.60	60.58	51.87	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	200	<100	
	01/11/2012	P&S	99.5	48.40	60.50	51.07	<2	<2	<2	<4	<10	4.38	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<2	405	<100	
	02/16/2012	-	99.5	53.27	-	46.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/03/2012	GRAB	99.5	52.59	60.58	46.88	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	161	<100	
	07/16/2012	GRAB	99.5	58.80	60.52	40.67	<2	<2	<2	<4	<10	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<2	<150	<100	
	08/08/2012	GRAB	99.5	51.50	-	47.97	<1.00	<1.00	<1.00	<2.00	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	-	-	
	09/05/2012	-	99.5	53.33	-	46.14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/03/2012	-	99.5	58.42	-	41.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/04/2012	P&S	99.5	58.44	60.55	41.03	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<150	<100	
	01/14/2013	-	99.5	55.88	-	43.59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/16/2013	P&S	99.5	55.88	60.57	43.59	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<151	<100	
04/22/2013	-	99.5	53.31	-	46.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
04/24/2013	P&S	99.5	53.25	60.56	46.22	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<153	<100		
07/22/2013	-	99.5	56.96	-	42.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
07/23/2013	P&S	99.5	57.11	-	42.36	<1.00	<1.00	<1.00	<2.00	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<152	<100		
10/21/2013	-	99.5	52.00	-	42.37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10/22/2013	P&S	99.5	51.87	60.77	42.38	<1.00	<1.00	<1.00	<2.00	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<152	<100		
MW-3	02/27/2006	NR	NR	54.24	-	-	6	3	<0.8	1	10	22,000	-	-	10,000	-	-	<0.8	160	<0.8	-	330	7,600	23,000		
	09/19/2006	NR	NR	55.93	-	-	66	<35	<40	<40	66	59,000	-	-	41,000	-	-	<40	550	<40	-	920	8,100	82,000		
	04/19/2007	NR	NR	51.23	-	-	41	<35	<40	<40	41	66,000	-	-	57,000	-	-	<40	400	<40	-	570	940	66,000		
	08/08/2007	NR	NR	57.85	-	-	77	<70	<80	<80	77	47,000	-	-	17,000	-	-	<80	410	<80	-	450	-	60,000		
	10/10/2007	NR	NR	59.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	01/16/2008	NR	NR	56.41	-	-	77	<70	<80	<80	77	78,000	-	-	39,000	-	-	<80	640	<80	-	710	1,900	110,000		
04/15/2008	NR	NR	55.40	-	-	<50	<70	<80	<80	<280	71,000	-	-	45,000	-	-	<80	320	<80	-	420	1,300	78,000			
MW-4 (61.5) {2} [40-61.5]	02/27/2006	NR	97.8	51.51	-	46.33	<0.5	<0.7	<0.8	<0.8	<2.8	3	-	-	<10	-	-	<0.8	<0.8	<0.8	-	<0.8	170	89		
	09/19/2006	NR	97.8	55.11	-	42.73	<0.5	<0.7	<0.8	<0.8	<2.8	3	-	-	<10	-	-	<0.8	<0.8	<0.8	-	<0.8	5,700	100		
	04/19/2007	NR	97.8	50.43	-	47.41	<0.5	<0.7	<0.8	<0.8	<2.8	1	-	-	<10	-	-	<0.8	<0.8	<0.8	-	<0.8	130	<20		
	08/08/2007	NR	97.8	57.41	-	40.43	<0.5	<0.7	<0.8	<0.8	<2.8	4	-	-	<10	-	-	<0.8	<0.8	<0.8	-	<0.8	<30	<20		
	10/10/2007	NR	97.8	59.45	-	38.39	<0.5	<0.7	<0.8	<0.8	<2.8	2	-	-	<10	-	-	<0.8	<0.8	<0.8	-	<0.8	840	<20		

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	
GW Clean-up Standards*							5	1,000	700	10,000	NA	20	66	0.65	NA	NA	100	80	NA	NA	NA	NA	47	47	
MW-5 (cont.)	07/20/2010	NR	99.60	62.10	-	37.50	<1.00	<1.00	<1.00	<2.00	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	
	12/08/2010	GRAB	99.60	63.31	70.65	36.29	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	-	<1	<300	
	03/09/2011	LF (68)	99.60	52.80	70.60	46.80	<1.00	<1.00	<1.00	<2.00	<5.00	<1.00	-	-	<5.00	-	-	-	<1.00	<1.00	<1.00	<1.00	<1.00	<150	<100
	05/10/2011	LF (68)	99.60	44.17	70.60	55.43	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<150	<100
	07/12/2011	LF (68)	99.60	57.82	70.61	41.78	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<167	<100
	10/18/2011	LF (68)	99.60	48.00	78.60	51.60	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<150	<100
	01/12/2012	LF (68)	99.60	48.88	70.0	50.72	<2	<2	<2	<4	<10	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<2	<155	<100
	02/16/2012	-	99.60	53.70	-	45.90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/03/2012	LF (68)	99.60	53.07	70.76	46.53	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<157	<100
	07/16/2012	LF (68)	99.60	50.33	72.52	49.27	<2	<2	<2	<4	<10	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<2	<150	<100
	08/08/2012	LF (68)	99.60	51.83	-	47.77	<2	<2	<2	<4	<10	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<2	-	-
	09/05/2012	-	99.60	53.72	-	45.88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/03/2012	-	99.60	58.70	-	40.90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/04/2012	LF (68)	99.60	58.64	-	40.96	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<152	<100
	01/14/2013	-	99.60	56.29	-	43.31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/15/2013	LF (68)	99.60	56.34	-	43.26	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<150	<100
	04/22/2013	-	99.60	53.75	-	45.85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/24/2013	LF (68)	99.60	53.65	-	45.95	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<153	<100
	07/22/2013	-	99.60	57.32	-	42.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/24/2013	LF (68)	99.60	57.62	-	41.98	<1.00	<1.00	<1.00	<2.00	<5.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<152	<100
10/21/2013	-	99.60	52.51	-	47.09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10/22/2013	LF (68)	99.60	52.58	-	47.02	<1.00	<1.00	<1.00	<2.00	<5.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<153	<100	
MW-6 (60) {4} [40-60]	06/12/2008	NR	98.1	55.22	-	42.87	<0.5	<0.7	<0.8	<0.8	<2.8	0.9	-	-	<10	-	-	<0.8	<0.8	<0.8	-	<0.8	47	<20	
	10/21/2008	-	98.1	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	01/30/2009	-	98.1	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	04/09/2009	-	98.1	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	07/23/2009	-	98.1	58.85	-	39.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	10/01/2009	-	98.1	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	01/18/2010	NR	98.1	53.20	-	44.89	<2.00	<2.00	<2.00	<4.00	<10.0	<2.00	<2.00	<2.00	<10.0	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<10.0	<2.00	<300	<100
	04/14/2010	NR	98.1	54.63	-	43.46	<1.00	<1.00	<1.00	<2.00	<5.00	2.7	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<300	<100
	07/19/2010	-	98.1	58.85	-	39.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/08/2010	GRAB	98.1	58.95	59.45	39.14	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	-	<1	-	<100
	03/09/2011	-	98.1	59.14	59.40	38.95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/10/2011	P&S	98.1	54.15	70.60	43.94	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<150	<100
	07/12/2011	-	98.1	DRY	-	59.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/18/2011	P&S	98.1	55.51	59.45	42.58	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<150	<100
	01/11/2012	GRAB	98.1	55.85	59.35	42.24	<2	<2	<2	<4	<10	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<2	<150	<100
	02/16/2012	-	98.1	58.85	-	39.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04/03/2012	-	98.1	58.94	59.48	39.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	
GW Clean-up Standards*							5	1,000	700	10,000	NA	20	66	0.65	NA	NA	100	80	NA	NA	NA	NA	47	47	
MW-6 (cont.)	07/16/2012	GRAB	98.1	58.51	59.40	39.58	<2	<2	<2	<4	<10	<2	<2	<2	<10	<2	<2	<2	<2	<2	<10	<2	-	<100	
	08/08/2012	GRAB	98.1	58.45	-	39.64	<1.00	<1.00	<1.00	<2.00	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	-	-	
	09/05/2012	-	98.1	58.92	-	39.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	10/03/2012	GRAB	98.1	58.95	59.40	39.14	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	-	-
	01/14/2013	-	98.1	58.97	-	39.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/18/2013	GRAB	98.1	58.96	59.50	39.13	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	-	-
	04/22/2013	-	98.1	58.89	-	39.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/25/2013	-	98.1	58.89	59.45	39.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07/22/2013	-	98.1	59.31	-	38.78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-7 (DUP)	08/09/2012	-	-	-	-	-	<2	<2	<2	<4	<10	25	<2	<2	<10	<2	<2	<2	35	<2	<10	<2	-	-	
	07/25/2013	-	-	-	-	-	<2.00	<2.00	<2.00	<4.00	<10.0	11.6	<2.00	<2.00	<10.0	<2.00	<2.00	2.74	12.5	<2.00	<10.0	<2.00	-	-	
MW-7 (80) {4} [53-80]	06/12/2008	NR	97.7	54.79	-	42.87	52	<35	<40	<40	52	86,000	-	-	81,000	-	-	<40	530	<40	-	2,300	530	130,000	
	10/21/2008	-	97.7	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	01/30/2009	-	97.7	62.99	-	34.67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	04/09/2009	NR	97.7	64.64	-	33.02	11.5	<2.00	<2.00	2.48	14.0	24,900	<2.00	<2.00	22,400	<2.00	<2.00	<2.00	204	<2.00	1,320	490	<300	<100	
	07/23/2009	NR	97.7	59.17	-	38.49	<5.00	<5.00	<5.00	<10.00	<25.0	27,800	<5.00	<5.00	29,600	<5.00	<5.00	<5.00	474	9.2	1,790	636	<300	1,380	
	10/02/2009	NR	97.7	61.33	-	36.33	1.34	<1.00	<1.00	1.02	2.36	11,800	<1.00	<1.00	8,490	<1.00	<1.00	<1.00	76.3	<1.00	388	191	57.4	1,200	
	01/15/2010	NR	97.7	51.89	-	45.77	<5.00	<5.00	<5.00	<10.00	<25.0	17,400	<5.00	<5.00	24,000	<5.00	<5.00	<5.00	348	6.9	1,480	414	<300	234	
	04/16/2010	NR	97.7	53.54	-	44.12	<2.00	<2.00	<2.00	<4.00	<10.0	14,700	<2.00	<2.00	8,440	<2.00	<2.00	<2.00	181	3	838	308	<300	1,080	
	07/20/2010	NR	97.7	63.56	-	34.10	2.52	<2.00	<2.00	<4.00	2.52	10,600	<2.00	<2.00	10,300	<2.00	<2.00	<2.00	144	<2.00	937	344	<300	1,010	
	11/23/2010	P&S	97.7	63.97	79.8	33.69	<2	<2	<2	<4	<10	14,000	<2	<2	14,000	<2	<2	<2	122	<2	-	233	232	1,190	
	11/30/2010	-	97.7	64.22	-	33.44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/01/2010	-	97.7	64.22	-	33.44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/08/2010	-	97.7	64.18	-	33.48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/09/2011	-	97.7	61.68	81.06	35.98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/10/2011	LF (69)	97.7	60.99	81.06	36.67	<2.00	<2.00	<2.00	<4.00	<	5,530	-	-	5,560	-	-	-	118	<2.00	-	158	<150	855	
	05/10/2011	-	97.7	52.33	81.06	45.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/11/2011	LF (69)	97.7	52.40	81.06	45.26	<2	<2	<2	<4	<10	5,690	<2	<2	1,070	<2	<2	<2	49.3	<2	97	73.3	<150	974	
	07/12/2011	-	97.7	60.32	80.71	37.34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/13/2011	LF (69)	97.7	60.38	80.71	37.28	<2	<2	<2	<4	<10	2,530	<2	<2	1,280	<2	<2	<2	57	<2	93.3	73.9	<150	951	
	09/14/2011	-	97.7	52.93	-	44.73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	09/27/2011	LF (69)	97.7	53.59	-	44.07	<2	<2	<2	<4	<10	1,850	<2	<2	469	<2	<2	<2	34.6	<2	<10	44.5	<150	814	
10/18/2011	F	97.7	53.85	80.00	43.81	<2	<2	<2	<4	<10	3,540	<2	<2	334	<2	<2	<2	75.3	<2	<10	70.2	<158	441		
11/16/2011	LF (69)	97.7	55.14	-	42.52	<2	<2	<2	<4	<10	3,700	<2	<2	661	<2	<2	<2	120	<2	<10	73.4	<150	809		
12/08/2011	-	97.7	53.38	-	44.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
01/11/2012	LF (69)	97.7	54.76	80.00	42.90	<2	<2	<2	<4	<10	2,400	<2	<2	929	<2	<2	<2	67.6	<2	91.4	91.3	<159	660		

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)
GW Clean-up Standards*							5	1,000	700	10,000	NA	20	66	0.65	NA	NA	100	80	NA	NA	NA	NA	47	47
MW-7 (cont.)	02/16/2012	-	97.7	57.81	-	39.85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	02/21/2012	-	97.7	58.23	-	39.43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	02/28/2012	-	97.7	58.90	-	38.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/05/2012	-	97.7	58.77	-	38.89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/28/2012	-	97.7	58.62	-	39.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/03/2012	LF (69)	97.7	58.90	79.80	38.76	<2	<2	<2	<4	<10	6,400 QK	<2	<2	1,250	<2	<2	104	<2	<10	119	181	280	
	04/26/2012	-	97.7	60.07	-	37.59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/07/2012	-	97.7	60.88	-	36.78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/21/2012	-	97.7	61.40	-	36.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/24/2012	-	97.7	61.43	-	36.23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/04/2012	-	97.7	57.95	-	39.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/13/2012	LF (69)	97.7	56.92	79.55	40.74	<2	<2	<2	<4	<10	467 QK	<2	<2	<10	<2	<2	42.7	<2	<10	2.44	<154	111	
	06/18/2012	-	97.7	57.00	-	40.66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/06/2012	-	97.7	58.04	-	39.62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/11/2012	-	97.7	56.92	79.68	40.74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/16/2012	-	97.7	56.66	79.55	41.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/17/2012	LF (69)	97.7	56.71	82.15	40.95	<2	<2	<2	<4	<10	54.1	<2	<2	<10	<2	<2	31.1	<2	<10	<2	<156	<100	
	08/09/2012	LF (69)	97.7	57.12	-	40.54	<2	<2	<2	<4	<10	17.6	<2	<2	<10	<2	<2	36.7	<2	<10	<2	-	-	-
	09/05/2012	-	97.7	57.93	-	39.73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/03/2012	-	97.7	60.42	-	37.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/08/2012	LF (69)	97.7	60.35	-	37.31	<1	<1	<1	<2	<5	23.9	<1	<1	<5	<1	<1	10.7	<1	<5	<1	<150	<100	
	01/14/2013	-	97.7	60.72	-	36.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/17/2013	LF (69)	97.7	60.72	-	36.94	<1	<1	<1	<2	<5	12.1	<1	<1	<5	<1	<1	1.61	12.4	<1	<5	<1	<150	<100
	04/22/2013	-	97.7	58.38	-	39.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/25/2013	LF (69)	97.7	58.53	-	39.13	<1	<1	<1	<2	<5	24.7	<1	<1	<5	<1	<1	2.01	10.3	<1	<5	<1	<153	<100
	07/22/2013	-	97.7	60.22	-	37.44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/25/2013	LF (69)	97.7	60.56	-	37.10	<1.00	<1.00	<1.00	<2.00	<5.00	5.82	<1.00	<1.00	<5.00	<1.00	<1.00	1.17	6.61	<1.00	<5.00	<1.00	<152	<100
	10/21/2013	-	97.7	59.33	-	38.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/24/2013	LF (69)	97.7	59.35	79.85	38.31	<1.00	<1.00	<1.00	<2.00	<5.00	6.88	<1.00	<1.00	<5.00	<1.00	<1.00	7.65	<1.00	<5.00	<1.00	<156	<100	
MW-8 (70) {4} [45-70]	06/12/2008	NR	97.9	53.19	-	44.74	<0.5	12	<0.8	<0.8	12	720	-	-	78	-	-	<0.8	23	<0.8	-	11	2,500	1,200
	10/21/2008	NR	97.9	59.80	-	38.13	<0.5	<0.7	<0.8	<0.8	<2.8	270	-	-	<10	-	-	<0.8	10	<0.8	-	<0.8	46	260
	01/30/2009	NR	97.9	59.15	-	38.78	<1.00	<1.00	<1.00	<2.00	<5.00	33.6	<1.00	<1.00	<5.00	<1.00	<1.00	7.37	<1.00	<5.00	<1.00	140	57.7	
	04/09/2009	NR	97.9	62.23	-	35.70	<1.00	<1.00	<1.00	<2.00	<5.00	63.4	<1.00	<1.00	<5.00	<1.00	<1.00	8.63	<1.00	<5.00	<1.00	<300	<100	
	07/23/2009	NR	97.9	56.25	-	41.68	<2.00	<2.00	<2.00	<4.00	<10.0	57.4	<2.00	<2.00	<10.0	<2.00	<2.00	44.5	<2.00	<10.0	<2.00	<300	80.2	
	10/01/2009	NR	97.9	57.72	-	40.21	<1.00	<1.00	<1.00	<2.00	<5.00	172	<1.00	<1.00	9.84	<1.00	<1.00	15.9	<1.00	<5.00	<1.00	43.1	255	
	01/15/2010	NR	97.9	50.62	-	47.31	<2.00	<2.00	<2.00	<4.00	<10.0	432	<2.00	<2.00	51.1	<2.00	<2.00	29.8	<2.00	<10.0	<2.00	<300	<100	
	04/14/2010	NR	97.9	51.97	-	45.96	<2.00	<2.00	<2.00	<4.00	<10.0	23	<2.00	<2.00	<10.0	<2.00	<2.00	37.1	<2.00	<10.0	<2.00	<300	101	
	07/20/2010	NR	97.9	61.62	-	36.31	<2.00	<2.00	<2.00	<4.00	<10.0	110	<2.00	<2.00	<50.0	<2.00	<2.00	60.2	<2.00	196	78.1	422	<100	
	11/23/2010	P&S	97.9	61.94	68.50	35.99	<1	<1	<1	<2	<5	7.98	<1	<1	<5	<1	<1	4.73	<1	-	<1	<273	<100	

Table 3

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)
GW Clean-up Standards*							5	1,000	700	10,000	NA	20	66	0.65	NA	NA	100	80	NA	NA	NA	NA	47	47
MW-8 (cont.)	12/08/2010	-	97.9	62.22	-	35.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/09/2011	-	97.9	59.56	69.40	38.37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/11/2011	LF (66)	97.9	56.62	69.40	41.31	<1.00	<1.00	<1.00	<2.00	<5.00	3.06	-	-	<5.00	-	-	-	<1.00	<1.00	-	<1.00	<158	<100
	05/10/2011	-	97.9	49.97	69.40	47.96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/11/2011	LF (66)	97.9	50.08	-	47.85	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	5.63	<1	<5	<1	<150	<100
	07/12/2011	LF (66)	97.9	57.57	69.44	40.36	<1	<1	<1	<2	<5	1.34	<1	<1	<5	<1	<1	<1	4.18	<1	<5	<1	<152	<100
	07/13/2011	-	97.9	57.57	-	40.36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	09/14/2011	-	97.9	48.10	-	49.83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	09/27/2011	LF (66)	97.9	51.38	-	46.55	<1	<1	<1	<2	<5	15.4	<1	<1	<5	<1	<1	<1	2.8	<1	<5	<1	-	<100
	10/18/2011	LF (66)	97.9	50.62	70.00	47.31	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	3.77	<1	<5	<1	<161	<100
	11/16/2011	LF (66)	97.9	53.08	-	44.85	<1	<1	<1	<2	<5	3.48	<1	<1	<5	<1	<1	<1	4.28	<1	<5	<1	<150	<100
	12/08/2011	-	97.9	51.01	-	46.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/11/2012	LF (66)	97.9	52.89	70.00	45.04	<1	<1	<1	<2	<5	2.44	<1	<1	<5	<1	<1	<1	4.39	<1	<5	<1	<156	<100
	02/16/2012	-	97.9	56.43	-	41.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	02/28/2012	-	97.9	57.57	-	40.36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/28/2012	-	97.9	56.91	-	41.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/03/2012	LF (66)	97.9	57.06	69.40	40.87	<1	<1	<1	<2	<5	1.23	<1	<1	<5	<1	<1	<1	1.6	<1	<5	<1	<156	<100
	04/26/2012	-	97.9	58.51	-	39.42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/07/2012	-	97.9	59.41	-	38.52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/21/2012	-	97.9	59.11	-	38.82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/24/2012	-	97.9	58.86	-	39.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/04/2012	-	97.9	52.43	-	45.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/13/2012	LF (66)	97.9	54.13	69.40	43.80	<1	<1	<1	<2	<5	4.37	<1	<1	<5	<1	<1	<1	7.74	<1	<5	<1	<158	<100
	06/18/2012	-	97.9	54.67	-	43.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/06/2012	-	97.9	55.38	-	42.55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/16/2012	-	97.9	53.60	69.42	44.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/17/2012	LF (66)	97.9	53.81	70.85	44.12	<2	<2	<2	<4	<10	<2	<2	<2	<10	<2	<2	<2	9.5	<2	<10	<2	<150	<100
	08/08/2012	LF (66)	97.9	45.85	-	52.08	<2	<2	<2	<4	<10	<2	<2	<2	<10	<2	<2	<2	6.62	<2	<10	<2	-	-
	09/05/2012	-	97.9	56.09	-	41.84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/03/2012	-	97.9	59.03	-	38.90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/08/2012	LF (66)	97.9	58.55	-	39.38	<1	<1	<1	<2	<5	1.12	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<150	<100
	01/14/2013	-	97.9	59.40	-	38.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/15/2013	LF (66)	97.9	59.35	-	38.58	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<150	<100
	04/22/2013	-	97.9	56.80	-	41.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/24/2013	LF (66)	97.9	56.81	-	41.12	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	1.35	<1	<5	<1	<154	<100
	07/22/2013	-	97.9	58.95	-	38.98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/24/2013	LF (66)	97.9	59.18	-	38.75	<1.00	<1.00	<1.00	<2.00	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<153	<100
	10/21/2013	-	97.9	55.89	-	42.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/23/2013	LF (66)	97.9	56.35	68.5	41.58	<1.00	<1.00	<1.00	<2.00	<5.00	3.09	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<152	<100

Table 3

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)
GW Clean-up Standards*							5	1,000	700	10,000	NA	20	66	0.65	NA	NA	100	80	NA	NA	NA	NA	47	47
MW-10 (cont.)	12/08/2010	-	91.6	57.72	-	33.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/09/2011	-	91.6	55.38	79.95	36.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/14/2011	LF (68)	91.6	51.36	79.95	40.28	<2.00	<2.00	<2.00	<4.00	<10.0	478	-	-	160	-	-	-	6.16	<2.00	-	12.2	<158	263
	05/10/2011	-	91.6	45.79	79.95	45.85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/12/2011	LF (68)	91.6	45.90	-	45.74	<1	<1	<1	<2	<5	265	<1	<1	32.4	<1	<1	<1	7.86	<1	<5	4.65	<150	289
	07/12/2011	-	91.6	53.68	79.90	37.96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/14/2011	LF (68)	91.6	53.84	79.90	37.80	<1	<1	<1	<2	<5	1,540	<1	<1	467	<1	<1	<1	13.6	<1	45.6	26.1	<156	644
	09/15/2011	-	91.6	47.11	-	44.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	09/27/2011	LF (68)	91.6	46.81	-	44.83	<2	<2	<2	<4	<10	1,650	<2	<2	228	<2	<2	<2	25.7	<2	<10	33.4	-	644
	10/19/2011	LF (68)	91.6	47.08	-	44.56	<1	<1	<1	<2	<5	437	<1	<1	<5	<1	<1	<1	11.6	<1	<5	7.26	<150	282
	11/15/2011	LF (68)	91.6	48.09	-	43.55	<2	<2	<2	<4	<10	97	<2	<2	<10	<2	<2	<2	3.28	<2	<10	<2	<150	<100
	12/08/2011	-	91.6	46.27	-	45.37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/11/2012	LF (68)	91.6	47.76	80.00	43.88	<2	<2	<2	<4	<10	7.18	<2	<2	<10	<2	<2	<2	<2	<2	<10	<2	<157	<100
	02/16/2012	-	91.6	50.80	-	40.84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	02/28/2012	-	91.6	52.01	-	39.63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/28/2012	-	91.6	51.78	-	39.86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/03/2012	-	91.6	51.96	-	39.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/04/2012	LF (68)	91.6	52.84	80.11	38.80	<1	<1	<1	<2	<5	7.44	<1	<1	<5	<1	<1	<1	3.56	<1	<5	<1	<150	<100
	04/26/2012	-	91.6	53.28	-	38.36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/07/2012	-	91.6	54.06	-	37.58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/21/2012	-	91.6	54.88	-	36.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/04/2012	-	91.6	52.30	-	39.34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/13/2012	-	91.6	50.27	70.58	41.37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/14/2012	LF (68)	91.6	50.30	-	41.34	<1	<1	<1	<2	<5	58.6	<1	<1	<5	<1	<1	<1	4.45	<1	<5	1.02	<156	<100
	06/18/2012	-	91.6	50.25	-	41.39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/06/2012	-	91.6	51.41	-	40.23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/16/2012	LF (68)	91.6	50.05	79.95	41.59	<2	<2	<2	<4	<10	153	<2	<2	<10	<2	<2	<2	10	<2	<10	<2	<154	<100
	08/07/2012	LF (68)	91.6	50.02	-	41.62	<1	<1	<1	<2	<5	6.64	<1	<1	<5	<1	<1	<1	3.67	<1	<5	<1	-	-
	09/05/2012	-	91.6	50.93	-	40.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/03/2012	LF (68)	91.6	53.64	70.57	38.00	<1	<1	<1	<2	<5	17.7	<1	<1	<5	<1	<1	<1	2.55	<1	<5	<1	<150	<100
	01/14/2013	LF (68)	91.6	53.78	80.00	37.86	<1	<1	<1	<2	<5	11.1	<1	<1	<5	<1	<1	<1	2.14	<1	<5	<1	<154	<100
	04/22/2013	-	91.6	51.55	-	40.09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/23/2013	LF (68)	91.6	51.61	-	40.03	<1	<1	<1	<2	<5	10.2	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<152	<100
	07/22/2013	LF (68)	91.6	53.32	-	38.32	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<152	<100
	10/21/2013	LF (68)	91.6	53.02	-	38.62	<1.00	<1.00	<1.00	<2.00	<5.00	5.45	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	2.80	<1.00	<5.00	<1.00	<154	<100
MW-11 (77) {4} [47-77]	04/09/2009	NR	94.3	48.75	-	45.53	<1.00	<1.00	<1.00	<2.00	<5.00	1.2	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<300	<100
	07/23/2009	NR	94.3	47.56	-	46.72	<2.00	<2.00	<2.00	<4.00	<10.0	<2.00	<2.00	<2.00	<10.0	<2.00	<2.00	<2.00	<2.00	<2.00	<10.0	<2.00	<300	<100
	10/02/2009	NR	94.3	46.72	-	47.56	<1.00	<1.00	<1.00	<2.00	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	39.4	48.6

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	
GW Clean-up Standards*							5	1,000	700	10,000	NA	20	66	0.65	NA	NA	100	80	NA	NA	NA	NA	47	47	
MW-12 (cont.)	05/11/2011	LF (64)	95.3	36.48	-	58.85	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<150	<100
	07/12/2011	-	95.3	41.51	81.17	53.82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/13/2011	LF (64)	95.3	41.82	81.17	53.51	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<152	<100
	10/19/2011	LF (64)	95.3	36.53	-	58.80	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<150	<100
	01/11/2012	LF (64)	95.3	39.11	84.00	56.22	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<156	<100
	02/16/2012	-	95.3	44.15	-	51.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/03/2012	-	95.3	43.04	-	52.29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/04/2012	LF (64)	95.3	43.03	81.25	52.30	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<152	<100
	07/16/2012	LF (64)	95.3	35.69	81.45	59.64	<2	<2	<2	<4	<10	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<2	<150	<100
	07/17/2012	-	95.3	39.72	-	55.61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08/08/2012	LF (64)	95.3	39.78	-	55.55	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	-	-
	09/05/2012	-	95.3	41.88	-	53.45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/03/2012	-	95.3	41.79	-	53.54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/04/2012	LF (64)	95.3	38.84	-	56.49	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<156	<100
	01/14/2013	-	95.3	44.59	-	50.74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/15/2013	LF (64)	95.3	44.65	-	50.68	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<152	<100
	04/22/2013	-	95.3	41.63	-	53.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/24/2013	LF (64)	95.3	42.03	-	53.30	<2	<2	<2	<4	<10	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<2	<152	<100
	07/22/2013	-	95.3	44.75	-	50.58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07/23/2013	LF (64)	95.3	44.88	-	50.45	<1.00	<1.00	<1.00	<2.00	<5.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<152	<100	
10/21/2013	-	95.3	37.07	-	58.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10/22/2013	LF (64)	95.3	39.97	-	55.36	<1.00	<1.00	<1.00	<2.00	<5.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<154	<100	
MW-13 (DUP)	10/03/2012	-	-	-	-	-	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	-	-	
	10/08/2012	-	-	-	-	-	<1	<1	<1	<2	<5	17.7	<1	<1	<5	<1	<1	<1	2.85	<1	<5	<1	-	-	
	01/16/2013	-	-	-	-	-	<1	<1	<1	<2	<5	4.24	<1	<1	<5	<1	<1	<1	2.23	<1	<5	<1	-	<100	
	04/15/2013	-	-	-	-	-	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	-	-	
	04/25/2013	-	-	-	-	-	<1	<1	<1	<2	<5	8.28	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<154	<100	
MW-13 (84) {4} [49-84]	04/09/2009	NR	98.1	62.20	-	35.91	<2.00	<2.00	<2.00	<4.00	<10.0	37,000	<2.00	<2.00	6,590	<2.00	<2.00	<2.00	307	<2.00	281	233	<300	966	
	07/23/2009	NR	98.1	57.92	-	40.19	<5.00	<5.00	<5.00	<10.00	<25.0	14,100	<5.00	<5.00	22,500	<5.00	<5.00	<5.00	268	7.9	1,110	252	<300	1,280	
	10/02/2009	NR	98.1	59.18	-	38.93	<1.00	<1.00	<1.00	<2.00	<5.00	43,400	<1.00	<1.00	32,400	<1.00	<1.00	<1.00	309	<1.00	1,910	312	64.3	1,460	
	01/15/2010	NR	98.1	50.72	-	47.39	<5.00	<5.00	<5.00	<10.00	<25.0	5,080	<5.00	<5.00	1,530	<5.00	<5.00	<5.00	169	<5.00	<25.0	76.8	<300	109	
	04/16/2010	NR	98.1	52.71	-	45.40	<2.00	<2.00	<2.00	<4.00	<10.0	3,080	<2.00	<2.00	849	<2.00	<2.00	<2.00	98.6	<2.00	<10.0	37.6	<300	526	
	07/20/2010	NR	98.1	62.12	-	35.99	<2.00	<2.00	<2.00	<4.00	<10.0	12,800	<2.00	<2.00	2,890	<2.00	<2.00	<2.00	174	3.16	229	144	320	1,050	
	11/23/2010	LF (73)	98.1	62.35	84.00	35.76	<2	<2	<2	<4	<10	7,730	<2	<2	785	<2	<2	<2	103	<2	-	37.2	<158	921	
	11/30/2010	-	98.1	62.76	-	35.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	12/01/2010	-	98.1	63.15	-	34.96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	12/08/2010	-	98.1	62.41	-	35.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	03/09/2011	-	98.1	57.67	83.78	40.44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
 11791 Fingerboard Rd
 Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	
GW Clean-up Standards*							5	1,000	700	10,000	NA	20	66	0.65	NA	NA	100	80	NA	NA	NA	NA	47	47	
MW-13 (cont.)	03/10/2011	LF (73)	98.1	57.00	83.78	41.11	<2.00	<2.00	<2.00	<4.00	<10.0	3,660	-	-	536	-	-	-	62.0	<2.00	-	22.7	<150	580	
	05/10/2011	-	98.1	50.50	83.78	47.61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	05/11/2011	LF (73)	98.1	50.68	-	47.43	<1	<1	<1	<2	<5	34.8	<1	<1	<5	<1	<1	<1	7.23	<1	<5	<1	<150	<100	
	07/12/2011	LF (73)	98.1	58.60	83.75	39.51	<1	<1	<1	<2	<5	1,680 MS	<1	<1	79.3	<1	<1	<1	24.3	<1	<5	8.92	<158	731	
	09/15/2011	-	98.1	49.59	-	48.52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	09/20/2011	-	98.1	51.34	-	46.77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	09/27/2011	LF (73)	98.1	52.05	-	46.06	<2	<2	<2	<4	<10	70.2	<2	<2	<10	<2	<2	<2	5.24	<2	<10	<2	<150	114	
	10/18/2011	LF (73)	98.1	51.93	84.00	46.18	<1	<1	<1	<2	<5	8.89	<1	1.21	<5	<1	<1	<1	<1	<1	<1	<5	<1	<153	<100
	11/16/2011	LF (73)	98.1	54.08	-	44.03	<1	<1	<1	<2	<5	105	<1	<1	<5	<1	<1	1.48	5.88	<1	<5	<1	<150	<100	
	12/08/2011	-	98.1	51.60	-	46.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	01/12/2012	LF (73)	98.1	53.65	-	44.46	<1	<1	<1	<2	<5	32.6	<1	<1	<5	<1	<1	<1	3.44	<1	<5	<1	<168	<100	
	02/16/2012	-	98.1	57.05	-	41.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	02/21/2012	-	98.1	57.73	-	40.38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	02/28/2012	-	98.1	57.65	-	40.46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	03/05/2012	-	98.1	57.96	-	40.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	03/28/2012	-	98.1	56.94	-	41.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	04/03/2012	LF (73)	98.1	58.00	83.61	40.11	2.52	4.72	<2	6	13	107	<2	25.4	<10	5.1	<2	<2	<2	<2	<10	<2	<150	<100	
	04/11/2012	-	98.1	58.23	-	39.88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	04/26/2012	-	98.1	58.87	-	39.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	05/07/2012	-	98.1	60.16	-	37.95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	05/21/2012	-	98.1	59.25	-	38.86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	06/04/2012	-	98.1	53.14	-	44.97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	06/13/2012	LF (73)	98.1	55.15	86.62	42.96	<2	<2	<2	<4	<10	116	<2	<2	<10	<2	<2	<2	2.52	<2	<10	<2	<153	<100	
	06/18/2012	-	98.1	55.73	-	42.38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	07/06/2012	-	98.1	56.50	-	41.61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	07/16/2012	-	98.1	54.75	83.65	43.36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	07/17/2012	LF (73)	98.1	54.91	-	43.20	<2	<2	<2	<4	<10	108	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<2	<154	<100
	08/08/2012	LF (73)	98.1	55.76	-	42.35	<2	<2	<2	<4	<10	52	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<2	-	-
09/05/2012	-	98.1	56.74	-	41.37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
10/03/2012	-	98.1	59.05	-	39.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
10/08/2012	LF (73)	98.1	59.29	86.65	38.82	<2	<2	<2	<4	<10	23.5	<2	<2	<10	<2	<2	<2	4.72	<2	<10	<2	<150	<100		
01/14/2013	-	98.1	59.83	-	38.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
01/16/2013	LF (73)	98.1	59.61	-	38.50	<1	<1	<1	<2	<5	5.69	<1	<1	<5	<1	<1	1.03	2.71	<1	<5	<1	<150	<100		
04/22/2013	-	98.1	57.41	-	40.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
04/25/2013	LF (73)	98.1	57.55	-	40.56	<1	<1	<1	<2	<5	9.15	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<152	<100	
07/22/2013	-	98.1	59.55	-	38.56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
07/24/2013	LF (73)	98.1	59.78	-	38.33	<1.00	<1.00	<1.00	<2.00	<5.00	2.41	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<152	<100	
10/21/2013	-	98.1	57.55	-	40.56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
10/23/2013	LF (73)	98.1	57.68	-	40.43	<1.00	<1.00	<1.00	<2.00	<5.00	21.3	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	1.03	<1.00	<5.00	<1.00	<150	<100		



Table 3

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)
GW Clean-up Standards*							5	1,000	700	10,000	NA	20	66	0.65	NA	NA	100	80	NA	NA	NA	NA	47	47
MW-14D (221) {4} [201-221]	10/01/2009	NR	92.1	55.36	-	36.71	<1.00	<1.00	<1.00	<2.00	<5.00	7,860	<1.00	<1.00	4,740	<1.00	<1.00	<1.00	39.9	<1.00	300	167	36.9	1,110
	01/18/2010	NR	92.1	45.54	-	46.53	<2.00	<2.00	<2.00	<4.00	<10.0	1,080	<2.00	<2.00	416	<2.00	<2.00	<2.00	11.5	<2.00	32.7	30.6	<300	<100
	04/16/2010	NR	92.1	47.06	-	45.01	<2.00	<2.00	<2.00	<4.00	<10.0	133	<2.00	<2.00	<10.0	<2.00	<2.00	<2.00	<2.00	<2.00	<10.0	<2.00	<300	107
	07/22/2010	NR	92.1	57.19	-	34.88	<1.00	<1.00	<1.00	<2.00	<5.00	3,150	<1.00	<1.00	1,970	<1.00	<1.00	<1.00	22.4	<1.00	136	56.7	<300	768
	11/23/2010	LF (212)	92.1	63.15	221.00	28.92	<2	<2	<2	<4	<10	3,860	<2	<2	2,670	<2	<2	<2	29.2	<2	-	78.4	<600	750
	11/30/2010	-	92.1	65.25	-	26.82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/08/2010	-	92.1	63.68	-	28.39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/09/2011	-	92.1	61.60	221.80	30.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/14/2011	LF (212)	92.1	58.06	221.8	34.01	<2.00	<2.00	<2.00	<4.00	<10.0	3,070	-	-	2,100	-	-	-	24.9	<2.00	-	81.8	<158	657
	05/10/2011	-	92.1	46.88	221.80	45.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/12/2011	LF (212)	92.1	46.74	-	45.33	<1	<1	<1	<2	<5	2,490	<1	<1	1,080	<1	4.96	<1	22.6	<1	152	65.5	<150	1,020
	07/12/2011	-	92.1	57.01	221.80	35.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/14/2011	LF (212)	92.1	57.03	221.80	35.04	<2	<2	<2	<4	<10	2,060	<2	<2	2,910	<2	5.38	<2	32.3	<2	186	93.3	<150	844
	09/14/2011	-	92.1	56.80	-	35.27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	09/27/2011	LF (212)	92.1	49.22	-	42.85	<2	<2	<2	<4	<10	3,270	<2	<2	906	<2	<2	<2	31.4	<2	59.2	65.3	<150	813
	10/19/2011	LF (212)	92.1	48.85	221.00	43.22	<2	<2	<2	<4	<10	2,930	<2	<2	731	<2	<2	<2	23.8	<2	<10	53.6	<169	461
	11/15/2011	LF (212)	92.1	48.15	-	43.92	<2	<2	<2	<4	<10	2,600	<2	<2	312	<2	<2	<2	19	<2	19.6	26.5	<150	694
	12/08/2011	-	92.1	45.95	-	46.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/11/2012	LF (212)	92.1	46.61	221.0	45.46	<2	<2	<2	<4	<10	3,260	<2	<2	376	<2	<2	<2	19.7	<2	27	40.1	<171	508
	02/16/2012	-	92.1	49.74	-	42.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	02/28/2012	-	92.1	51.59	-	40.48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/28/2012	-	92.1	51.70	-	40.37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/03/2012	-	92.1	51.67	-	40.40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/05/2012	LF (212)	92.1	51.68	-	40.39	<2	<2	<2	<4	<10	1,320 QK	<2	<2	588	<2	<2	<2	26.9	<2	41.1	46.3	<150	161
	04/26/2012	-	92.1	53.35	-	38.72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/07/2012	-	92.1	55.28	-	36.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/21/2012	-	92.1	60.39	-	31.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/04/2012	-	92.1	56.88	-	35.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/13/2012	-	92.1	50.27	-	41.80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/14/2012	LF (212)	92.1	52.05	-	40.02	<2	<2	<2	<4	<10	1,410 QK	<2	<2	519	<2	<2	<2	21	<2	24.7	45.2	<158	294
06/18/2012	LF (212)	92.1	56.18	-	35.89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
07/06/2012	-	92.1	51.57	-	40.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
07/11/2012	-	92.1	51.25	-	40.82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
07/16/2012	-	92.1	81.80	234.39	10.27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
07/18/2012	LF(212)	92.1	75.65	-	16.42	<2	<2	<2	<4	<10	1,500	<2	<2	542	<2	2.08	<2	13.7	<2	<10	31.4	<150	<100	
08/07/2012	LF (212)	92.1	53.40	-	38.67	<2	<2	<2	<4	<10	2,360	<2	<2	480	<2	<2	<2	18.9	<2	<10	43.5	-	-	
09/05/2012	-	92.1	51.19	-	40.88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10/03/2012	-	92.1	52.85	-	39.22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	
GW Clean-up Standards*							5	1,000	700	10,000	NA	20	66	0.65	NA	NA	100	80	NA	NA	NA	NA	47	47	
MW-14D (cont.)	10/08/2012	LF (212)	92.1	53.00	-	39.07	<2	<2	<2	<4	<10	1,990	<2	<2	182	<2	<2	<2	11.4	<2	<10	25.8	<150	<100	
	01/14/2013	-	92.1	54.78	-	37.29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	01/18/2013	LF (212)	92.1	54.73	-	37.34	<2	<2	<2	<4	<10	1,220	<2	<2	62.2 VH	<2	<2	<2	12.6	<2	<10	18.2	<152	<100	
	04/22/2013	-	92.1	51.40	-	40.67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	04/23/2013	LF (212)	92.1	52.53	-	39.54	<1	<1	<1	<2	<5	861 QK	<1	<1	29.4	<1	<1	<1	7.25	<1	<5	11.5	<153	491	
	07/22/2013	-	92.1	54.34	-	37.73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/23/2013	LF (212)	92.1	54.37	-	37.70	<2.00	<2.00	<2.00	<4.00	<10.0	498	<2.00	<2.00	<10.0	<2.00	<2.00	<2.00	<2.00	6.90	<2.00	<10.0	5.78	<153	436
	10/21/2013	-	92.1	55.85	-	36.22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/24/2013	LF (212)	92.1	55.05	-	37.02	<1.00	<1.00	<1.00	<2.00	<5.00	360	<1.00	<1.00	6.94	<1.00	<1.00	<1.00	6.88	<1.00	<5.00	1.37	<154	511	
MW-14S (100) {4} [40-100]	07/22/2010	-	91.2	56.35	-	34.86	<1.00	<1.00	<1.00	<2.00	<5.00	53.4	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	1.15	<1.00	<5.00	1.18	<300	<100	
	11/23/2010	LF (78)	91.2	57.03	100.00	34.18	<1	<1	<1	<2	<5	5,690	<1	<1	4,300	<1	<1	<1	40.2	<1	-	89.6	<167	850	
	12/08/2010	-	91.2	57.30	-	33.91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	03/09/2011	-	91.2	54.90	99.82	36.31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	03/14/2011	LF (78)	91.2	50.86	99.82	40.35	<2.00	<2.00	<2.00	<4.00	<10.0	224	-	-	<10.0	-	-	-	3.32	<2.00	-	4.26	<158	113	
	05/10/2011	-	91.2	45.33	99.82	45.88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	05/12/2011	LF (78)	91.2	45.44	-	45.77	<1	<1	<1	<2	<5	1,180	<1	<1	525	<1	<1	<1	15.1	<1	49	32.5	<150	830	
	07/12/2011	-	91.2	53.28	99.82	37.93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	07/14/2011	LF (78)	91.2	53.42	99.82	37.79	<2	<2	<2	<4	<10	703	<2	<2	280 V4	<2	<2	<2	15.5	<2	<10	15.8	<150	432	
	09/14/2011	-	91.2	46.68	-	44.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	09/27/2011	LF (78)	91.2	46.38	-	44.83	<2	<2	<2	4	4	2,790	<2	<2	987	4.02	<2	<2	41.6	<2	56.4	63.6	<150	858	
	10/19/2011	LF (78)	91.2	46.71	-	44.50	<2	<2	<2	<4	<10	2,870	<2	<2	826	<2	<2	<2	34.4	<2	<10	56.6	<150	416	
	11/15/2011	LF (78)	91.2	47.62	-	43.59	<2	<2	<2	<4	<10	1,890	<2	<2	396	<2	<2	<2	29.6	<2	<10	34.9	<150	642	
	12/08/2011	-	91.2	45.81	-	45.40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	01/11/2012	LF (78)	91.2	47.31	100.00	43.90	<1	<1	<1	<2	<5	555	<1	<1	24.3	<1	<1	<1	7.83	<1	<5	7.72	<165	332	
	02/16/2012	-	91.2	50.36	-	40.85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	02/28/2012	-	91.2	51.59	-	39.62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	03/28/2012	-	91.2	51.37	-	39.84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	04/03/2012	-	91.2	51.50	-	39.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	04/05/2012	LF (78)	91.2	51.51	-	39.70	<2	<2	<2	<4	<10	132	<2	<2	<10	<2	<2	<2	9.3	<2	<10	<2	<150	<100	
	04/26/2012	-	91.2	52.86	-	38.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	05/07/2012	-	91.2	53.62	-	37.59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	05/21/2012	-	91.2	54.47	-	36.74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	06/04/2012	-	91.2	51.85	-	39.36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	06/13/2012	-	91.2	49.81	101.06	41.40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	06/14/2012	LF (78)	91.2	49.45	-	41.76	<2	<2	<2	<4	<10	26.7	<2	<2	<10	<2	<2	<2	6.22	<2	<10	<2	<154	<100	
	06/18/2012	-	91.2	49.83	-	41.38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	07/06/2012	-	91.2	50.99	-	40.22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	07/11/2012	-	91.2	50.48	-	40.73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	07/16/2012	LF (78)	91.2	49.66	103.55	41.55	<2	<2	<2	<4	<10	71.7	<2	<2	<10	<2	<2	<2	6.96	<2	<10	<2	<150	<100	

Table 3

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	
GW Clean-up Standards*							5	1,000	700	10,000	NA	20	66	0.65	NA	NA	100	80	NA	NA	NA	NA	47	47	
MW-14S (cont.)	08/07/2012	LF (78)	91.2	49.60	-	41.61	<2	<2	<2	<4	<10	21.9	<2	<2	<10	<2	<2	<2	<2	<2	<10	<2	-	-	
	09/05/2012	-	91.2	50.50	-	40.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	10/03/2012	LF (78)	91.2	53.18	-	38.03	<1	<1	<1	<2	<5	3.39	<1	<1	<5	<1	<1	<1	1.32	<1	<5	<1	<152	<100	
	01/14/2013	LF (78)	91.2	53.38	100.00	37.83	<1	<1	<1	<2	<5	1.94	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<150	<100
	04/22/2013	-	91.2	51.12	-	40.09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	04/23/2013	LF (78)	91.2	51.18	-	40.03	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<153	<100
	07/22/2013	LF (78)	91.2	52.90	-	38.31	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<152	<100
	10/21/2013	LF (78)	91.2	52.58	-	38.63	<1.00	<1.00	<1.00	<2.00	<5.00	7.03	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	2.89	<1.00	<5.00	<1.00	<152	<100
MW-15D (134) {4} [46-134]	10/01/2009	NR	97.7	59.95	-	37.72	<2.00	<2.00	<2.00	<4.00	<10.0	10,600	<2.00	<2.00	9,890	<2.00	<2.00	<2.00	125	2.04	635	234	53	1,160	
	01/18/2010	NR	97.7	50.81	-	46.86	<2.00	<2.00	<2.00	<4.00	<10.0	6,520	<2.00	<2.00	2,910	<2.00	<2.00	<2.00	91.9	<2.00	188	100	<300	102	
	04/14/2010	NR	97.7	52.48	-	45.19	<2.00	<2.00	<2.00	2.74	2,74	23,800	<2.00	<2.00	14,100	<2.00	<2.00	<2.00	204	2.64	1,200	579	<300	1,450	
	07/20/2010	NR	97.7	62.36	-	35.31	3.88	5.96	<2.00	3.98	13.82	7,390	<2.00	2.1	4,140	<2.00	<2.00	<2.00	51.6	<2.00	111	43.3	574	652	
	11/23/2010	LF (97)	97.7	63.41	134.00	34.26	<2	<2	<2	<4	<10	2,820	<2	<2	1,590	<2	<2	<2	32.5	<2	-	18.6	<158	669	
	11/30/2010	-	97.7	63.67	-	34.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	12/01/2010	-	97.7	63.72	-	33.95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	12/08/2010	-	97.7	63.59	-	34.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	03/09/2011	-	97.7	60.68	132.40	36.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	03/11/2011	LF (97)	97.7	59.25	132.40	38.42	<2.00	<2.00	<2.00	<4.00	<10.0	2,900	-	-	669	-	-	-	-	32.8	<2.00	-	21.6	<158	600
	05/10/2011	-	97.7	51.59	132.40	46.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	05/11/2011	LF (97)	97.7	51.77	-	45.90	<2	<2	<2	<4	<10	517	<2	<2	<10	<2	<2	<2	15.7	<2	<10	2.82	<150	302	
	07/12/2011	-	97.7	59.70	132.40	37.97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	07/13/2011	LF (97)	97.7	59.83	132.40	37.84	<1	<1	<1	<2	<5	450	<1	<1	44.8	<1	<1	<1	9.22	<1	<5	2.43	<150	374	
	09/14/2011	-	97.7	51.62	-	46.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	09/20/2011	-	97.7	52.05	-	45.62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	09/27/2011	LF (97)	97.7	53.09	-	44.58	<2	<2	<2	<4	<10	119	<2	<2	30.5	<2	<2	<2	2.76	<2	<10	<2	<150	159	
	10/18/2011	LF (97)	97.7	53.17	133.50	44.50	<2	<2	<2	<4	<10	192	<2	<2	<10	<2	<2	<2	5.32	<2	<10	4	<158	107	
	11/16/2011	LF (97)	97.7	54.66	-	43.01	<2	<2	<2	<4	<10	49.6	<2	<2	12.1	<2	<2	<2	4.52	<2	<10	<2	<150	<100	
	12/08/2011	-	97.7	52.65	-	45.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	01/11/2012	LF (97)	97.7	54.30	133.5	43.37	<1	<1	<1	<2	<5	382	<1	<1	97.1	<1	<1	<1	5.42	<1	<5	3.91	<164	207	
	02/16/2012	-	97.7	57.41	-	40.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	02/21/2012	-	97.7	57.68	-	39.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	02/28/2012	-	97.7	58.53	-	39.14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	03/05/2012	-	97.7	58.23	-	39.44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	03/23/2012	-	97.7	58.14	-	39.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	03/28/2012	-	97.7	58.05	-	39.62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
04/03/2012	LF (97)	97.7	58.30	111.12	39.37	<2	<2	<2	<4	<10	4,240 QK	<2	<2	357	<2	<2	<2	74.6	<2	<10	86.8	<153	213		
04/11/2012	-	97.7	58.74	-	38.93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
04/26/2012	-	97.7	59.52	-	38.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

Table 3

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)
GW Clean-up Standards*							5	1,000	700	10,000	NA	20	66	0.65	NA	NA	100	80	NA	NA	NA	NA	47	47
MW-15D (cont.)	04/30/2012	-	97.7	59.88	-	37.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/07/2012	-	97.7	60.33	-	37.34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/15/2012	-	97.7	60.74	-	36.93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/21/2012	-	97.7	60.67	-	37.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/24/2012	-	97.7	60.68	-	36.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/29/2012	-	97.7	60.28	-	37.39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/04/2012	-	97.7	56.33	-	41.34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/13/2012	LF (97)	97.7	56.18	113.31	41.49	<2	<2	<2	<4	<10	18.6	<2	<2	<10	<2	<2	5.26	<2	<10	<2	<152	<100	
	06/18/2012	-	97.7	56.26	-	41.41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/28/2012	-	97.7	57.20	-	40.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/06/2012	-	97.7	57.28	-	40.39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/09/2012	-	97.7	57.58	-	40.09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/11/2012	-	97.7	55.65	-	42.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/16/2012	-	97.7	55.86	-	41.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/17/2012	LF (97)	97.7	55.93	-	41.74	<2	<2	<2	<4	<10	32.7	<2	<2	<10	<2	<2	14.8	<2	<10	<2	<158	<100	
	07/23/2012	-	97.7	55.25	-	42.42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08/09/2012	LF (97)	97.7	56.56	-	41.11	<2	<2	<2	<4	<10	<2	<2	<2	<10	<2	<2	<2	<2	<2	<10	<2	-	-
	09/05/2012	-	97.7	57.25	-	40.42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/03/2012	-	97.7	59.85	-	37.82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/08/2012	LF (97)	97.7	59.79	-	37.88	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<150	<100
	01/14/2013	-	97.7	60.21	-	37.46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/18/2013	LF (97)	97.7	60.14	-	37.53	<2	<2	<2	<4	<10	38.3	<2	<2	<10	<2	<2	3.56	<2	<10	<2	<150	<100	
	04/22/2013	-	97.7	57.89	-	39.78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/25/2013	LF (97)	97.7	58.00	-	39.67	<2	<2	<2	5	5	32.3	<2	<2	<10	2.7	<2	<2	<2	<2	<10	<2	<156	<100
	07/22/2013	-	97.7	59.80	-	37.87	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/24/2013	LF (97)	97.7	60.01	-	37.66	<2.00	<2.00	<2.00	<4.00	<10.0	19.3	<2.00	<2.00	<10.0	<2.00	<2.00	<2.00	<2.00	<2.00	<10.0	<2.00	<150	<100
	10/21/2013	-	97.7	58.53	-	39.14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/24/2013	LF (97)	97.7	58.05	-	39.62	<2.00	<2.00	<2.00	<4.00	<10.0	27.0	<2.00	<2.00	<10.0	<2.00	<2.00	<2.00	<2.00	<2.00	<10.0	<2.00	<152	<100
MW-16 (DUP)	11/23/2010	-	-	-	-	-	<1.00	<1.00	<1.00	<2.00	<5.00	263	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	7.83	<1.00	<5.00	1.67	-	-
MW-16 (121) {4} [36-121]	10/01/2009	NR	89.8	53.13	-	36.65	<1.00	<1.00	<1.00	<2.00	<5.00	160	<1.00	<1.00	67.4	<1.00	<1.00	<1.00	2.46	<1.00	<5.00	2.3	55.9	176
	01/18/2010	NR	89.8	43.20	-	46.58	<2.00	<2.00	<2.00	<4.00	<10.0	<2.00	<2.00	<10.0	<2.00	<2.00	<2.00	<2.00	<2.00	<10.0	<2.00	<300	<100	
	04/15/2010	NR	89.8	44.68	-	45.10	<1.00	<1.00	<1.00	<2.00	<5.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<300	<100	
	07/21/2010	NR	89.8	54.83	-	34.95	<1.00	<1.00	<1.00	<2.00	<5.00	17.8	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	384	<100
	11/23/2010	LF (83)	89.8	55.68	121.00	34.10	<1	<1	<1	<2	<5	136	<1	<1	50.6	<1	<1	<1	7.95	<1	1.81	<150	150	
	12/08/2010	-	89.8	55.96	-	33.82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/09/2011	-	89.8	53.31	120.63	36.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/14/2011	LF (83)	89.8	49.30	120.63	40.48	<1.00	<1.00	<1.00	<2.00	<5.00	<1.00	-	-	<5.00	-	-	-	<1.00	<1.00	-	<1.00	<158	<100
	05/10/2011	-	89.8	43.97	120.63	45.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	
GW Clean-up Standards*							5	1,000	700	10,000	NA	20	66	0.65	NA	NA	100	80	NA	NA	NA	NA	47	47	
MW-16 (cont.)	05/12/2011	LF (83)	89.8	44.08	-	45.70	<1	<1	<1	<2	<5	4.96	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	<150	<100	
	07/12/2011	-	89.8	51.93	120.63	37.85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	07/14/2011	LF (83)	89.8	52.10	120.63	37.68	<1	<1	<1	<2	<5	6.27	<1	<1	<5	<1	<1	<1	1.06	<1	<5	<1	<150	<100	
	09/14/2011	-	89.8	45.30	-	44.48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	09/27/2011	LF (83)	89.8	44.97	-	44.81	<1	<1	<1	<2	<5	1.38	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<150	<100
	10/19/2011	LF (83)	89.8	45.28	121.00	44.50	<1	<1	<1	<2	<5	1.24	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<163	<100
	11/15/2011	LF (83)	89.8	46.23	-	43.55	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<150	<100
	12/08/2011	-	89.8	44.35	-	45.43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/12/2012	LF (83)	89.8	45.90	121.0	43.88	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<156	<100
	02/16/2012	-	89.8	48.97	-	40.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	02/28/2012	-	89.8	50.25	-	39.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/28/2012	-	89.8	49.96	-	39.82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/03/2012	-	89.8	50.15	-	39.63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/04/2012	LF (83)	89.8	50.05	125.10	39.73	<1	<1	<1	<2	<5	1.87	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<156	<100
	04/26/2012	-	89.8	51.53	-	38.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/07/2012	-	89.8	52.28	-	37.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/21/2012	-	89.8	53.18	-	36.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/04/2012	-	89.8	50.50	-	39.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/13/2012	-	89.8	48.45	121.43	41.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/14/2012	LF (83)	89.8	48.49	-	41.29	<1	<1	<1	<2	<5	1.94	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<153	<100
	06/18/2012	-	89.8	48.43	-	41.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/06/2012	-	89.8	49.61	-	40.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/16/2012	LF (83)	89.8	48.32	127.21	41.46	<2	<2	<2	<4	<10	3.5	<2	<2	<10	<2	<2	<2	<2	<2	<2	<10	<2	<159	<100
08/06/2012	LF (83)	89.8	48.17	-	41.61	<1.00	<1.00	<1.00	<2.00	<5.00	2.15	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	-	-	
09/05/2012	-	89.8	49.12	-	40.66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10/03/2012	LF (83)	89.8	51.81	-	37.97	<1	<1	<1	<2	<5	1.47	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<150	<100	
01/14/2013	LF (83)	89.8	51.98	121.00	37.80	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<156	<100	
04/22/2013	-	89.8	49.80	-	39.98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
04/23/2013	LF (83)	89.8	49.89	-	39.89	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<152	<100	
07/22/2013	LF (83)	89.8	51.51	-	38.27	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<150	<100	
10/21/2013	LF (83)	89.8	51.23	-	38.55	<1.00	<1.00	<1.00	<2.00	<5.00	1.79	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<153	<100	
MW-17 (121) {4} [35-121]	10/01/2009	NR	92.8	55.73	-	37.11	7.38	<2.00	<2.00	8.44	15.82	31,000	<2.00	<2.00	25,800	<2.00	<2.00	<2.00	202	4.24	1,980	591	<150	1,710	
	01/18/2010	NR	92.8	45.92	-	46.92	<5.00	<5.00	<5.00	<10.00	<25.0	11,600	<5.00	<5.00	14,600	<5.00	<5.00	<5.00	217	<5.00	1,970	354	<300	164	
	04/15/2010	NR	92.8	47.45	-	45.39	<2.00	<2.00	<2.00	<4.00	<10.0	6,460	<2.00	<2.00	3,890	<2.00	<2.00	<2.00	61	<2.00	278	166	<300	654	
	07/22/2010	NR	92.8	57.54	-	35.30	<2.00	<2.00	<2.00	<4.00	<10.0	11,100	<2.00	<2.00	9,640	<2.00	<2.00	<2.00	136	2.86	903	291	<300	1,150	
	11/23/2010	LF (68)	92.8	58.54	121.00	34.30	<2	<2	<2	<4	<10	13,500	<2	<2	11,800	<2	<2	<2	117	<2	-	251	<167	1,150	
	11/30/2010	-	92.8	58.72	-	34.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	12/08/2010	-	92.8	58.78	-	34.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)
GW Clean-up Standards*							5	1,000	700	10,000	NA	20	66	0.65	NA	NA	100	80	NA	NA	NA	NA	47	47
MW-17 (cont.)	03/09/2011	-	92.8	56.63	120.16	36.21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/14/2011	LF (68)	92.8	52.58	120.16	40.26	<2.00	<2.00	<2.00	<4.00	<10.0	10,900	-	-	8,690	-	-	-	84.6	<2.00	-	250	<158	1,190
	05/10/2011	-	92.8	46.87	120.16	45.97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/12/2011	LF (68)	92.8	47.00	-	45.84	<1	<1	<1	<2	<5	8,940	<1	<1	4,760	<1	<1	<1	78.3	<1	312	198	<155	1,500
	07/12/2011	-	92.8	54.75	120.16	38.09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/14/2011	LF (68)	92.8	54.90	120.16	37.94	<2	<2	<2	<4	<10	7,750	<2	<2	8,500	<2	<2	<2	151	<2	542	400	<150	1,530
	09/14/2011	-	92.8	48.17	-	44.67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	09/27/2011	LF (68)	92.8	47.94	-	44.90	<2	<2	<2	<4	<10	10,500	<2	<2	7,620	<2	<2	<2	148	<2	331	444	<150	1,500
	10/19/2011	LF (68)	92.8	48.22	121.00	44.62	<2	<2	<2	<4	<10	13,300	<2	<2	6,090	<2	<2	<2	124	<2	329	287	<158	760
	11/15/2011	LF (68)	92.8	49.22	-	43.62	<2	<2	<2	<4	<10	9,740	<2	<2	3,020	<2	<2	<2	152	2.86	238	299	<150	1,180
	12/08/2011	-	92.8	47.49	-	45.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/11/2012	LF (68)	92.8	48.93	121.00	43.91	<2	<2	<2	<4	<10	10,700	<2	<2	3,840	<2	<2	<2	62.2	<2	198	158	<169	887
	02/16/2012	-	92.8	51.95	-	40.89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	02/28/2012	-	92.8	53.12	-	39.72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/28/2012	-	92.8	52.91	-	39.93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/03/2012	-	92.8	53.10	-	39.74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/04/2012	LF (68)	92.8	53.05	-	39.79	<2	<2	<2	<4	<10	2,010 QK	<2	<2	3,560	<2	<2	<2	87.3	<2	230	172	<154	233
	04/26/2012	-	92.8	54.37	-	38.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/07/2012	-	92.8	55.14	-	37.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/21/2012	-	92.8	55.90	-	36.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/04/2012	-	92.8	53.33	-	39.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/13/2012	-	92.8	54.40	119.90	38.44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/14/2012	LF (68)	92.8	52.40	-	40.44	<2	<2	<2	<4	<10	1,900 QK	<2	<2	2,050	<2	<2	<2	74.3	<2	115	153	<160	380
	06/18/2012	-	92.8	51.37	-	41.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/06/2012	-	92.8	52.20	-	40.64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/11/2012	-	92.8	51.96	-	40.88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/16/2012	-	92.8	51.13	-	41.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/31/2012	LF (68)	92.8	50.81	-	42.03	<2	<2	<2	<4	<10	3,410	<2	<2	456	<2	<2	<2	45.2	<2	<10	70.3	<150	<100
	08/07/2012	LF (68)	92.8	51.18	-	41.66	<1	<1	<1	<2	<5	3,380	<1	<1	196	<1	<1	<1	30.1	<1	<5	42.1	-	-
	09/05/2012	-	92.8	52.05	-	40.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/03/2012	-	92.8	54.51	-	38.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/04/2012	LF (68)	92.8	54.71	-	38.13	<5	<5	<5	<10	<25	1,620 QK	<5	<5	795	<5	<5	<5	30.4	<5	<25	35	<153	<100
	01/14/2013	LF (68)	92.8	45.95	121.00	46.89	<1	<1	<1	<2	<5	1,350	<1	<1	299	<1	<1	1.15	20	<1	5.64	19.6	<150	<100
	04/22/2013	-	92.8	52.63	-	40.21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/23/2013	LF (68)	92.8	52.65	-	40.19	<1	<1	<1	<2	<5	171 QK	<1	<1	49.5	<1	<1	<1	5.33	<1	<5	3.84	<153	259
	07/22/2013	-	92.8	54.45	-	38.39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/23/2013	LF (68)	92.8	54.32	-	38.52	<1.00	<1.00	<1.00	<2.00	<5.00	94.5	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	9.94	<1.00	<5.00	<1.00	<152	156
	10/21/2013	-	92.8	54.11	-	38.73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/24/2013	LF (68)	92.8	53.97	-	38.87	<1.00	<1.00	<1.00	<2.00	<5.00	117	<1.00	<1.00	28.4	<1.00	<1.00	<1.00	11.9	<1.00	<5.00	2.19	<152	184

Table 3

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	
GW Clean-up Standards*							5	1,000	700	10,000	NA	20	66	0.65	NA	NA	100	80	NA	NA	NA	NA	47	47	
MW-18D	11/23/2010	LF (125)	98.3	73.75	130.57	24.56	<2	<2	<2	<4	<10	15,300	<2	<2	14,200	<2	<2	<2	138	<2	-	354	389	1,420	
(130) {2} [120-130]	11/30/2010	-	98.3	#####	-	-2.61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	12/01/2010	-	98.3	98.12	-	0.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	12/08/2010	LF (125)	98.3	84.72	130.57	13.59	<2	<2	<2	<4	<10	9,480	<2	<2	9,600	<2	<2	<2	34.3	<2	-	123	<300	1,050	
	03/09/2011	-	98.3	10.30	130.45	88.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	03/10/2011	LF (125)	98.3	18.15	130.45	80.16	<2.00	<2.00	<2.00	<4.00	<10.0	659	-	-	514	-	-	-	7.94	<2.00	-	29.2	<150	419	
	05/10/2011	LF (125)	98.3	40.93	130.45	57.38	<2	<2	<2	<4	<10	166	<2	<2	119	<2	<2	<2	<2	<2	<10	3.78	252	130	
	07/12/2011	-	98.3	54.70	130.45	43.61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	07/13/2011	LF (125)	98.3	54.75	130.45	43.56	<2	<2	<2	<4	<10	49.2	<2	<2	34.7	<2	<2	<2	<2	<2	<10	<2	315	<100	
	09/14/2011	-	98.3	57.25	-	41.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	09/20/2011	-	98.3	55.33	-	42.98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	09/27/2011	LF (125)	98.3	51.15	-	47.16	<1	<1	<1	<2	<5	50.3	<1	<1	24.1	<1	1.05	<1	<1	<1	<1	<5	1.39	327	106
	10/18/2011	LF (125)	98.3	60.00	130.00	38.31	<1	<1	<1	<2	<5	115	<1	<1	77.7	<1	<1	<1	<1	<1	<1	<5	2.86	<357	102
	11/16/2011	LF (125)	98.3	59.90	-	38.41	<2	<2	<2	<4	<10	470	<2	<2	600	<2	<2	<2	6.6	<2	<10	<2	<150	364	
	12/08/2011	-	98.3	62.28	-	36.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	01/11/2012	LF (125)	98.3	53.84	130.00	44.47	<2	<2	<2	<4	<10	433	<2	<2	433	<2	<2	<2	3.46	<2	<10	10	<165	326	
	02/16/2012	-	98.3	56.55	-	41.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	02/21/2012	-	98.3	56.07	-	42.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	02/28/2012	-	98.3	55.26	-	43.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	03/05/2012	-	98.3	57.43	-	40.88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	03/23/2012	-	98.3	54.88	-	43.43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	03/28/2012	-	98.3	54.90	-	43.41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	04/03/2012	LF (127)	98.3	NR	-	-	<1	<1	<1	<2	<5	664 QK	<1	<1	373	<1	1.28	<1	3.84	<1	24.8	10.9	261	<100	
	04/04/2012	-	98.3	54.94	132.09	43.37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	04/11/2012	-	98.3	67.52	-	30.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	04/26/2012	-	98.3	62.54	-	35.77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	04/30/2012	-	98.3	61.57	-	36.74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	05/07/2012	-	98.3	60.50	-	37.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	05/15/2012	-	98.3	59.77	-	38.54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	05/21/2012	-	98.3	59.10	-	39.21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	05/24/2012	-	98.3	58.28	-	40.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	05/29/2012	-	98.3	57.34	-	40.97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	06/04/2012	-	98.3	55.75	-	42.56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	06/13/2012	-	98.3	55.35	132.20	42.96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	06/15/2012	LF (125)	98.3	54.27	-	44.04	<2	<2	<2	<4	<10	386 QK	<2	<2	289	<2	<2	<2	2.88	<2	<10	8.08	<159	141	
	06/18/2012	LF (125)	98.3	70.05	-	28.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	06/28/2012	-	98.3	64.30	-	34.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	07/06/2012	-	98.3	61.37	-	36.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)
GW Clean-up Standards*							5	1,000	700	10,000	NA	20	66	0.65	NA	NA	100	80	NA	NA	NA	NA	47	47
MW-18D (cont.)	07/09/2012	-	98.3	60.05	-	38.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/11/2012	-	98.3	59.30	-	39.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/16/2012	-	98.3	90.40	-	7.91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/18/2012	LF(125)	98.3	87.45	-	10.86	<2	<2	<2	<4	<10	295	<2	<2	243	<2	<2	<2	<2	<2	<10	6.46	<150	<100
	07/23/2012	-	98.3	92.55	-	5.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08/09/2012	LF (125)	98.3	71.68	-	26.63	<2	<2	<2	<4	<10	525 VH	<2	<2	136	<2	<2	<2	<2	<2	<10	9.84	-	-
	09/05/2012	-	98.3	63.55	-	34.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/03/2012	-	98.3	57.30	-	41.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/08/2012	LF (125)	98.3	57.11	-	41.20	<1	<1	<1	<2	<5	162 QK	<1	<1	56.7	<1	<1	<1	<1	<1	<5	1.82	<150	<100
	01/14/2013	-	98.3	53.35	-	44.96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/17/2013	LF (125)	98.3	52.68	-	45.63	<2	<2	<2	<4	<10	337	<2	<2	188	<2	<2	<2	3.32	<2	<10	6.26	<151	<100
	04/22/2013	-	98.3	54.33	-	43.98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/25/2013	LF (125)	98.3	54.45	-	43.86	<1	<1	<1	<2	<5	159	<1	<1	82.3	<1	<1	<1	1.65	<1	<5	3.14	<150	225
	07/22/2013	-	98.3	60.31	-	38.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/25/2013	LF (125)	98.3	59.90	-	38.41	<2.00	<2.00	<2.00	<4.00	<10.0	144	<2.00	<2.00	70.0	<2.00	<2.00	<2.00	<2.00	<2.00	<10.0	2.70	163	225
	10/21/2013	-	98.3	59.00	-	39.31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/23/2013	LF (125)	98.3	62.25	-	36.06	<2.00	<2.00	<2.00	<4.00	<10.0	169	<2.00	<2.00	58.7	<2.00	<2.00	<2.00	<2.00	<2.00	<10.0	2.78	<153	170
MW-18S (70) {2} [45-70]	11/23/2010	GRAB	98.3	69.05	-	29.24	<2	106	<2	<4	106	17,100	<2	<2	16,500	<2	<2	160	<2	-	385	984	1,540	-
	11/30/2010	-	98.3	64.28	-	34.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/01/2010	-	98.3	64.34	-	33.95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/08/2010	P&S	98.3	64.25	70.26	34.04	<2	129	<2	<4	129	21,200	<2	<2	24,200	<2	<2	<2	163	<2	-	545	621	1,740
	03/09/2011	-	98.3	61.49	70.28	36.80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/10/2011	LF (68)	98.3	60.81	70.28	37.48	<2.00	28.3	<2.00	<4.00	28.3	3,660	-	-	1,540	-	-	-	81.1	<2.00	-	156	<150	755
	05/10/2011	LF (68)	98.3	52.33	70.28	45.96	<2	8.68	<2	<4	9	7,040	<2	<2	1,600	<2	<2	<2	87.8	<2	102	189	184	1,270
	07/12/2011	-	98.3	60.37	70.28	37.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/13/2011	LF (68)	98.3	60.48	70.28	37.81	<2	4.68	<2	<4	5	4,740	<2	<2	1,160	<2	<2	<2	89.5	<2	76.8	226	207	1,270
	09/14/2011	-	98.3	52.86	-	45.43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	09/20/2011	-	98.3	52.95	-	45.34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	09/27/2011	LF (68)	98.3	53.71	-	44.58	<2	<2	<2	<4	<10	9,660	<2	<2	471	<2	<2	<2	106	<2	<10	526	189	1,760
	10/18/2011	LF (68)	98.3	53.88	70.00	44.41	<2	<2	<2	<4	<10	15,300	<2	<2	1,130	<2	<2	<2	198	<2	<10	585	<168	877
	11/16/2011	LF (68)	98.3	55.34	-	42.95	<2	<2	<2	<4	<10	7,160	<2	<2	477	<2	<2	<2	93.6	<2	<10	218	<150	992
	12/08/2011	-	98.3	53.24	-	45.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/12/2012	LF (68)	98.3	55.10	70.00	43.19	<2	<2	<2	<4	<10	6,220	<2	<2	242	<2	<2	<2	76.7	<2	<10	162	<174	905
	02/16/2012	-	98.3	57.98	-	40.31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	02/21/2012	-	98.3	58.39	-	39.90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	02/28/2012	-	98.3	59.08	-	39.21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/05/2012	-	98.3	58.88	-	39.41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/23/2012	-	98.3	58.75	-	39.54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/28/2012	-	98.3	58.66	-	39.63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)
GW Clean-up Standards*							5	1,000	700	10,000	NA	20	66	0.65	NA	NA	100	80	NA	NA	NA	NA	47	47
MW-18S (cont.)	04/03/2012	LF (68)	98.3	59.05	70.25	39.24	<2	<2	<2	<4	<10	3,030 QK	<2	<2	365	<2	<2	4.04	80.5	<2	<10	70.2	<155	202
	04/11/2012	-	98.3	59.38	-	38.91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/26/2012	-	98.3	60.18	-	38.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/30/2012	-	98.3	60.65	-	37.64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/07/2012	-	98.3	61.12	-	37.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/15/2012	-	98.3	61.52	-	36.77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/21/2012	-	98.3	61.43	-	36.86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/24/2012	-	98.3	60.55	-	37.74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/29/2012	-	98.3	60.99	-	37.30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/04/2012	-	98.3	57.00	-	41.29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/13/2012	-	98.3	56.95	70.55	41.34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/15/2012	LF (68)	98.3	56.43	-	41.86	<2	<2	<2	<4	<10	754 QK	<2	<2	<10	<2	<2	7.12	<2	<10	18.7	<156	270	
	06/18/2012	-	98.3	56.97	-	41.32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/28/2012	-	98.3	57.93	-	40.36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/06/2012	-	98.3	57.84	-	40.45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/09/2012	-	98.3	58.13	-	40.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/11/2012	-	98.3	56.08	70.26	42.21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/16/2012	-	98.3	56.50	70.25	41.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/17/2012	LF (68)	98.3	56.52	70.20	41.77	<2	<2	<2	<4	<10	1,390	<2	<2	<10	<2	<2	10.1	<2	<10	30.2	<158	<100	
	07/23/2012	-	98.3	55.99	-	42.30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08/09/2012	LF (68)	98.3	57.06	-	41.23	<2	<2	<2	<4	<10	731 VH	<2	<2	<10	<2	<2	8.84	<2	<10	17.6	-	-	
	09/05/2012	-	98.3	57.87	-	40.42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	10/03/2012	-	98.3	60.46	-	37.83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	10/08/2012	LF (68)	98.3	60.37	-	37.92	<2	<2	<2	<4	<10	118	<2	<2	32.1	<2	<2	<2	<2	<10	<2	<152	<100	
	01/14/2013	-	98.3	60.84	-	37.45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	01/17/2013	LF (68)	98.3	60.13	70.61	38.16	<2	<2	<2	<4	<10	167	<2	<2	39.8	<2	<2	5.8	<2	<10	11.4	<153	<100	
	04/22/2013	-	98.3	58.47	-	39.82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	04/25/2013	LF (68)	98.3	58.58	-	39.71	<2	3.08	2.28	13.42	19	214	<2	<2	<10	4.88	<2	<2	3.06	<2	<10	3.76	<153	188
	07/22/2013	-	98.3	60.39	-	37.90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	07/25/2013	LF (68)	98.3	60.71	-	37.58	<2.00	<2.00	<2.00	<4.00	<10.0	31.6	<2.00	<2.00	<10.0	<2.00	<2.00	<2.00	<2.00	<2.00	<10.0	<2.00	<152	<100
	10/21/2013	-	98.3	62.79	-	35.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	10/23/2013	LF (68)	98.3	59.04	-	39.25	<2.00	<2.00	<2.00	<4.00	<10.0	814	<2.00	<2.00	<10.0	<2.00	<2.00	15.1	<2.00	<10.0	15.8	<150	677	
RINSATE	08/09/2012	-	-	-	-	-	<2	<2	<2	<4	<10	<2	<2	<2	<10	<2	<2	<2	<2	<2	<10	<2	-	-
	10/03/2012	-	-	-	-	-	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	-	-
	01/16/2013	-	-	-	-	-	<1	<1	<1	<2	<5	<1	<1	<1	<5	<1	<1	<1	<1	<1	<5	<1	-	<100
SV-1	03/09/2011	-	NR	28.80	28.85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/10/2011	-	NR	28.78	28.85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/12/2011	-	NR	28.78	28.86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)
GW Clean-up Standards*							5	1,000	700	10,000	NA	20	66	0.65	NA	NA	100	80	NA	NA	NA	NA	47	47
SV-1 (cont.)	10/18/2011	-	NR	28.83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/13/2012	-	NR	28.77	28.85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/03/2012	-	NR	28.80	38.90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/16/2012	-	NR	28.78	28.85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/03/2012	-	NR	28.80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/14/2013	-	NR	DRY	28.90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/22/2013	-	NR	28.78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/22/2013	-	NR	28.78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SV-2	03/09/2011	-	NR	33.25	33.52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/10/2011	-	NR	33.27	33.52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/12/2011	-	NR	33.28	33.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/18/2011	-	NR	33.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/13/2012	-	NR	33.28	33.69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/03/2012	-	NR	33.30	33.74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/16/2012	-	NR	33.27	33.69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/03/2012	-	NR	33.30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/14/2013	-	NR	33.34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/22/2013	-	NR	33.30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07/22/2013	-	NR	33.30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TF-3	10/21/2008	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/30/2009	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/09/2009	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/23/2009	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/01/2009	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/15/2010	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/13/2010	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/19/2010	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/01/2010	-	NR	NR	14.31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/08/2010	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/09/2011	-	NR	DRY	14.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/10/2011	-	NR	DRY	14.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/12/2011	-	NR	DRY	14.32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/13/2012	-	NR	DRY	14.31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/03/2012	-	NR	DRY	14.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07/16/2012	-	NR	DRY	14.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10/03/2012	-	NR	DRY	14.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
 11791 Fingerboard Rd
 Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	
GW Clean-up Standards*							5	1,000	700	10,000	NA	20	66	0.65	NA	NA	100	80	NA	NA	NA	NA	47	47	
TF-3 (cont.)	01/14/2013	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	04/22/2013	-	NR	DRY	14.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TF-4	10/21/2008	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	01/30/2009	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	04/09/2009	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	07/23/2009	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	10/01/2009	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	01/15/2010	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	04/13/2010	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	07/19/2010	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/01/2010	-	NR	NR	14.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/08/2010	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/09/2011	-	NR	DRY	14.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/10/2011	-	NR	DRY	14.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/12/2011	-	NR	DRY	14.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/13/2012	-	NR	DRY	13.95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/03/2012	-	NR	DRY	14.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/16/2012	-	NR	DRY	14.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/03/2012	-	NR	DRY	14.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01/14/2013	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
04/22/2013	-	NR	DRY	14.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TF-5	10/21/2008	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	01/30/2009	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	04/09/2009	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	07/23/2009	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	10/01/2009	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	01/15/2010	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	04/13/2010	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	07/19/2010	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	12/01/2010	-	NR	NR	14.22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	12/08/2010	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	03/09/2011	-	NR	DRY	14.21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	05/10/2011	-	NR	14.21	14.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	07/12/2011	-	NR	14.23	14.30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
01/13/2012	-	NR	14.13	14.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
04/03/2012	-	NR	14.25	14.37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		



Table 3

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
 11791 Fingerboard Rd
 Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)
GW Clean-up Standards*							5	1,000	700	10,000	NA	20	66	0.65	NA	NA	100	80	NA	NA	NA	NA	47	47
TF-5 (cont.)	07/16/2012	-	NR	14.27	14.30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/03/2012	-	NR	14.23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/14/2013	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/22/2013	-	NR	DRY	14.30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-6	10/21/2008	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/30/2009	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/09/2009	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/23/2009	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/01/2009	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/15/2010	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/13/2010	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/19/2010	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/01/2010	-	NR	NR	13.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/08/2010	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/09/2011	-	NR	DRY	13.58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/10/2011	-	NR	DRY	13.58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/12/2011	-	NR	DRY	13.58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/13/2012	-	NR	DRY	13.59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/03/2012	-	NR	DRY	13.59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/16/2012	-	NR	DRY	13.69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10/03/2012	-	NR	DRY	13.59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
01/14/2013	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
04/22/2013	-	NR	DRY	13.59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TF-7	10/21/2008	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	01/30/2009	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	04/09/2009	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	07/23/2009	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	10/01/2009	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	01/15/2010	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	04/13/2010	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	07/19/2010	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	12/01/2010	-	NR	NR	12.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	12/08/2010	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	03/09/2011	-	NR	DRY	12.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
05/10/2011	-	NR	DRY	12.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
07/12/2011	-	NR	DRY	12.14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		



Table 3

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)
GW Clean-up Standards*							5	1,000	700	10,000	NA	20	66	0.65	NA	NA	100	80	NA	NA	NA	NA	47	47
TF-7 (cont.)	01/13/2012	-	NR	DRY	12.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/03/2012	-	NR	DRY	12.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/16/2012	-	NR	DRY	12.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/03/2012	-	NR	DRY	12.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/14/2013	-	NR	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/22/2013	-	NR	DRY	12.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF-8	10/21/2008	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/30/2009	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/09/2009	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/23/2009	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/01/2009	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/15/2010	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/13/2010	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/19/2010	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/01/2010	-	NR	DRY	11.26	11.55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/08/2010	-	NR	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/09/2011	-	NR	DRY	11.28	11.55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/10/2011	-	NR	DRY	11.30	11.55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/12/2011	-	NR	DRY	11.31	11.58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/13/2012	-	NR	DRY	11.33	11.57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/03/2012	-	NR	DRY	11.35	11.58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/16/2012	-	NR	DRY	11.35	11.56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/03/2012	-	NR	DRY	11.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01/14/2013	-	NR	DRY	11.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
04/22/2013	-	NR	DRY	11.37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
07/22/2013	-	NR	DRY	11.36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
VE-1	03/09/2011	-	98.40	DRY	28.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/10/2011	-	98.40	DRY	28.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/12/2011	-	98.40	DRY	28.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/13/2012	-	98.40	DRY	28.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/03/2012	-	98.40	DRY	23.07	28.40	75.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/16/2012	-	98.40	DRY	28.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/03/2012	-	98.40	DRY	28.30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Sample Method	Top of Casing (ft)	Depth to Water (ft)	Depth to Bottom (Measured Depth) (ft)	GW Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)
GW Clean-up Standards*							5	1,000	700	10,000	NA	20	66	0.65	NA	NA	100	80	NA	NA	NA	NA	47	47
VE-1 (cont.)	01/14/2013	-	98.40	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/22/2013	-	98.40	DRY	28.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

* GW Clean-up Standards are the Maryland Department of the Environment (MDE) Groundwater Clean-up Standards for Type I and II Aquifers, except for TPH-GRO and TPH-DRO, which are Residential Clean-up Standards for Groundwater.

(##) = Depth to bottom of well (ft)

{##} = Length of the Screened Interval (ft)

{##} = Well Diameter (in)

LF (##) = Low Flow (Depth that the sample was taken at)

<# = Less than the method detection limit

µg/L = Micrograms/Liter

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

DRY = No water for sampling

GRAB = Grab sample method

L10 = This sample was analyzed at a dilution due to the matrix. Reporting limits were adjusted accordingly.

LF = Low Flow sample method

MS = The spike recovery was outside acceptance limits for the Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) due to sample matrix interferences. The batch was accepted based on acceptable Continuous

MTBE = Methyl Tertiary Butyl Ether

NA = Not Available or Not Analyzed for that specific compound

NR = Not recorded

P&S = Purge & Sample method

QK = This result was above the calibration range; therefore it is an estimated value.

TPH = Total Petroleum Hydrocarbons

TPH-DRO = Total Petroleum Hydrocarbons - Diesel Range Organics

TPH-GRO = Total Petroleum Hydrocarbons - Gasoline Range Organics

V4 = Check standard was outside the Quality Control (QC) range. Data accepted based on acceptable Laboratory Control Sampling (LCS).

VH = LCS value was outside the QC range. Data accepted based on acceptable check standard.

VOC = Volatile Organic Compounds

Table 4

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- ISCO PARAMETERS

Carroll - Monrovia - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Top of Casing (ft)	Chromium (µg/L)	Chromium, Dissolved (µg/L)	Chromium (hexavalent) (µg/L)	Iron (µg/L)	Iron, Dissolved (µg/L)	Lead (µg/L)	Lead, Dissolved (µg/L)	Sulfate (µg/L)	Chemical Oxygen Demand (mg/L)	TOC (µg/L)	TDS (µg/L)	TSS (µg/L)
GW Clean-up Standards*			100	100	NA	2,600	2,600	15	15	NA	NA	NA	NA	NA
MW-1 (61.5) {2} [40-61.5]	08/08/2012	99.19	<1.0	<1.0	<0.020	351	42.2	1.9	<1.0	-	<15	1,480.00	342,000	15,000
	10/04/2012	99.19	<1.0	<1.0	<0.020	179	106	2.5	1.7	-	-	-	-	-
	01/15/2013	99.19	<1.0	<1.0	<0.020	-	-	3.1	2.5	-	-	-	-	-
	04/24/2013	99.19	<1.0	<1.0	<0.03	-	-	1.8	1.1	-	-	-	-	-
	10/22/2013	99.19	<1.0	<1.0	<0.03	-	-	0.79	1.3	-	-	-	-	-
MW-2 (61.5) {2} [40-61.5]	08/08/2012	99.47	14.0	<1.0	0.058	13,600	16.2	35.8	<1.0	-	<15.0	<500	520,000	218,000
	10/04/2012	99.47	21.1	<1.0	0.044	11,800	21.3	27.0	<1.0	-	-	-	-	-
	01/16/2013	99.47	15.0	<1.0	-	-	-	21.0	<1.0	-	-	-	-	-
	01/18/2013	99.47	-	-	0.039	-	-	-	-	-	-	-	-	-
	04/24/2013	99.47	5.3	<1.0	0.031	-	-	15.0	<0.5	-	-	-	-	-
	10/22/2013	99.47	<10.0	3.5	0.064	-	-	21.0	<0.5	-	-	-	-	-
MW-4 (61.5) {2} [40-61.5]	08/08/2012	97.84	3.7	<1.0	0.096	3,290	4.6	2.0	<1.0	-	<15.0	<500	376,000	17,000.0
	10/03/2012	97.84	1.9	<1.0	0.048	2,870	9.5	1.3	<1.0	-	-	-	-	-
	01/16/2013	97.84	<1.0	<1.0	-	-	-	<1.0	<1.0	-	-	-	-	-
	01/18/2013	97.84	-	-	0.052	-	-	-	-	-	-	-	-	-
	04/24/2013	97.84	4.0	<1.0	0.049	-	-	2.0	<0.5	-	-	-	-	-
	10/22/2013	97.84	1.7	<1.0	0.058	-	-	0.8	<0.5	-	-	-	-	-
MW-5 (70) {4} [40-70]	08/08/2012	99.60	<1.0	<1.0	0.044	351	8.8	<1.0	<1.0	-	<15	<500	560,000	14,000
	10/04/2012	99.60	<1.0	<1.0	<0.020	479	13.4	2.3	1.9	-	-	-	-	-
	01/15/2013	99.60	<1.0	<1.0	-	-	-	4.1	3.5	-	-	-	-	-
	01/25/2013	99.60	-	-	<0.020	-	-	-	-	-	-	-	-	-
	04/24/2013	99.60	<1.0	<1.0	<0.03	-	-	1.6	1.4	-	-	-	-	-
	10/22/2013	99.60	<5.0	<1.0	<0.03	-	-	<2.5	2.8	-	-	-	-	-
MW-6 (60) {4} [40-60]	08/08/2012	98.09	55.9	<1.0	0.191	76,800	2.0	99.1	<1.0	-	-	-	-	-
	04/25/2013	98.09	1.2	1.0	0.61	-	-	1.1	0.80	-	-	-	-	-
MW-7 (DUP)	08/09/2012	-	<1.0	<1.0	0.166	104	2.5	<1.0	<1.0	-	<15	<500	282,000	24,000
MW-7 (80) {4} [53-80]	11/23/2010	97.66	14.6	-	-	15,000 B3 L12	<20	-	-	<10000	60.4	8,340.00	142,000	312,000
	07/13/2011	97.66	<1	-	-	<20	<20	-	-	-	20.4	1,430.00 S4	314,000	<4000
	09/27/2011	97.66	1.14 B3	-	-	76.6	<20	-	-	-	17.1	815.000	318,000	5,000
	10/18/2011	97.66	<1	-	-	56.7 D1 L12	<20	-	-	-	<15	724.000	244,000	<4000
	11/16/2011	97.66	<1	-	-	24.1	<20	-	-	-	<15	908.000	316,000	<4000

Table 4

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- ISCO PARAMETERS

Carroll - Monrovia - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Top of Casing (ft)	Chromium (µg/L)	Chromium, Dissolved (µg/L)	Chromium (hexavalent) (µg/L)	Iron (µg/L)	Iron, Dissolved (µg/L)	Lead (µg/L)	Lead, Dissolved (µg/L)	Sulfate (µg/L)	Chemical Oxygen Demand (mg/L)	TOC (µg/L)	TDS (µg/L)	TSS (µg/L)
GW Clean-up Standards*			100	100	NA	2,600	2,600	15	15	NA	NA	NA	NA	NA
MW-7 (cont.)	04/03/2012	97.66	<1	-	-	206.000	<20	-	-	-	15.2	1,170.00	288,000	<4000
	06/13/2012	97.66	<1	-	-	24.5	<20	-	-	-	<15	<500	344,000	<4000
	07/17/2012	97.66	1.43	-	-	2,930.00	<20	-	-	-	<15	<500	169,000	52,000
	08/09/2012	97.66	<1.0	<1.0	0.148	313	12.3	<1.0	<1.0	-	<15	<500	276,000	31,000
	10/08/2012	97.66	<1.0	<1.0	0.269	29.9	1.2	<1.0	<1.0	-	-	-	310,000	<4000
	01/17/2013	97.66	4.0	<1.0	0.507	-	-	4.6	<1.0	-	-	-	-	-
	10/24/2013	97.66	1.3	<1.0	0.69	-	-	1.0	0.55	-	-	-	-	-
MW-8 (70) {4} [45-70]	11/23/2010	97.93	125.000	-	-	33,700.0 B3 L12	<20	-	-	<10000	<15	1,160.00	212,000	1,070,000
	04/03/2012	97.93	<1	-	-	107.000	<20	-	-	-	<15	628.000	134,000	<4000
	06/13/2012	97.93	<1	-	-	155.000	45.7 LA	-	-	-	<15	547.000	88,000	<4000
	07/17/2012	97.93	<1	-	-	153.000	<20	-	-	-	<15	<500	74,000 QA	<4000
	08/08/2012	97.93	<1.0	<1.0	<0.020	80.8	7.7	1.7	1.7	-	<15	<500	170,000	<4000
	10/08/2012	97.93	<1.0	<1.0	<0.020	49.5	5.8	1.8	1.7	-	-	-	-	-
	01/15/2013	97.93	<1.0	<1.0	-	-	-	2.1	1.6	-	-	-	-	-
	01/25/2013	97.93	-	-	<0.020	-	-	-	-	-	-	-	-	-
	04/24/2013	97.93	<1.0	<1.0	<0.03	-	-	1.5	1.5	-	-	-	-	-
	10/23/2013	97.93	<1.0	<1.0	0.03	-	-	0.6	<0.5	-	-	-	-	-
MW-9 (78) {4} [48-78]	08/06/2012	88.48	<1.0	<1.0	0.034	33.7	9.1	<1.0	<1.0	-	<15.0	<500	296,000	<4000
	10/03/2012	88.48	<1.0	<1.0	<0.020	26.6	6.7	<1.0	1.0	-	-	-	-	-
	01/16/2013	88.48	<1.0	<1.0	-	-	-	2.0	1.9	-	-	-	-	-
	01/28/2013	88.48	-	-	<0.020	-	-	-	-	-	-	-	-	-
	04/23/2013	88.48	<1.0	<1.0	<0.030	-	-	0.7	0.63	-	-	-	-	-
	10/21/2013	88.48	7.3	4.1	<0.030	-	-	3.4	3.7	-	-	-	-	-
MW-10 (80) {4} [40-80]	11/23/2010	91.64	<1	-	-	55.9 B3 L12	<20	-	-	<10000	<15	2,130.00	261,000	<4000
	04/04/2012	91.64	1.58	-	-	110.00	<20	-	-	-	<15	<500	440,000	9,000
	06/14/2012	91.64	2.83	-	-	2,860.00	393.000 LA	-	-	-	<15	<500	460,000	43,000
	07/16/2012	91.64	1.06	-	-	531.000	<20	-	-	-	<15	<500	502,000	19,000
	08/07/2012	91.64	<1.0	<1.0	<0.020	136	10.2	<1.0	<1.0	-	<15	<500	554,000	<4000
	10/03/2012	91.64	<1.0	<1.0	<0.020	299	5.5	1.4	1.0	-	-	-	-	-
	01/14/2013	91.64	2.8	<1.0	<0.020	-	-	3.6	1.0	-	-	-	-	-
	04/23/2013	91.64	<1.0	<1.0	<0.030	-	-	0.83	0.88	-	-	-	-	-
	10/21/2013	91.64	12	4.3	<0.030	-	-	2.5	2.6	-	-	-	-	-

Table 4

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- ISCO PARAMETERS

Carroll - Monrovia - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Top of Casing (ft)	Chromium (µg/L)	Chromium, Dissolved (µg/L)	Chromium (hexavalent) (µg/L)	Iron (µg/L)	Iron, Dissolved (µg/L)	Lead (µg/L)	Lead, Dissolved (µg/L)	Sulfate (µg/L)	Chemical Oxygen Demand (mg/L)	TOC (µg/L)	TDS (µg/L)	TSS (µg/L)
GW Clean-up Standards*			100	100	NA	2,600	2,600	15	15	NA	NA	NA	NA	NA
MW-11 (77) {4} [47-77]	08/08/2012	94.28	<1.0	<1.0	0.044	132	6.9	<1.0	<1.0	-	<15	<500	154,000	<4000
	10/04/2012	94.28	1.9	<1.0	0.026	2,450	59.5	1.4	<1.0	-	-	-	-	-
	01/15/2013	94.28	<1.0	<1.0	0.025	-	-	<1.0	<1.0	-	-	-	-	-
	04/23/2013	94.28	<1.0 M1	<1.0	<0.030	-	-	<0.5	<0.5 M1	-	-	-	-	-
	10/22/2013	94.28	2.0	1.9	<0.030	-	-	3.3	<0.5	-	-	-	-	-
MW-12 (82) {4} [44-82]	08/08/2012	95.33	<1.0	<1.0	0.084	116	119	1.4	1.3	-	<15	<500	322,000	<4000
	10/04/2012	95.33	<1.0	<1.0	0.068	49.1	10.0	1.3	1.2	-	-	-	-	-
	01/15/2013	95.33	<1.0	<1.0	0.057	-	-	1.9	1.4	-	-	-	-	-
	04/24/2013	95.33	<1.0	<1.0	0.066	-	-	0.52	<0.5	-	-	-	-	-
	10/22/2013	95.33	4.8	2.7	0.084	-	-	0.97	0.83	-	-	-	-	-
MW-13 (84) {4} [49-84]	11/23/2010	98.11	<1	-	-	26.6 B3 L12	<20	-	-	<10000	23.4	1,340.00	332,000	<4000
	09/27/2011	98.11	2.49 B3	-	-	196.000	<20	-	-	-	<15	<500	352,000	4,000
	10/18/2011	98.11	2.91 L12	-	-	377.000 L12	<20	-	-	-	<15	<500	314,000	16,000
	11/16/2011	98.11	3.13	-	<20	136.000	<20	-	-	-	<15	<500	232,000	6,000
	01/12/2012	98.11	-	-	<20	-	-	-	-	-	-	-	-	-
	04/03/2012	98.11	2.98	-	<20	310.00	<20	-	-	-	<15	<500	328,000	<4000
	06/13/2012	98.11	2.41	-	<20	57.000	<20	-	-	-	<15	<500	382,000	<4000
	07/17/2012	98.11	<1	-	<20	22.3	<20	-	-	-	<15	<500	229,000	<4000
	08/08/2012	98.11	<1.0	<1.0	0.596	242	9.3	<1.0	<1.0	-	<15	<500	368,000	<4000
	10/08/2012	98.11	<1.0	<1.0	0.297	27.4	41.6	1.2	1.1	-	-	-	394,000	4,000
	01/16/2013	98.11	<1.0	<1.0	0.131	-	-	1.4	1.5	-	-	-	-	-
	04/25/2013	98.11	<1.0	<1.0	0.11	-	-	1.2	1.2	-	-	-	-	-
	10/23/2013	98.11	9.2	2.9	0.06	-	-	1.5	1.5	-	-	-	-	-
MW-14D (221) {4} [201-221]	11/23/2010	92.07	8.68	-	-	279.000 B3 L12	<20	-	-	148,000	29.3	3,210.00	599,000	49,000.0
	07/14/2011	92.07	1.39 L12	-	-	171.000	<20	-	-	-	<15	2,650.00	402,000	20,000
	09/27/2011	92.07	1.04 B3	-	-	68.6	<20	-	-	-	15.1	2,210.00	412,000	6,000
	10/19/2011	92.07	<1	-	-	92.2 L12	<20	-	-	-	<15	1,440.00	364,000	<4000
	11/15/2011	92.07	1.48	-	-	67.6	<20	-	-	-	<15	1,360.00 D1	362,000	6,000
	04/05/2012	92.07	1.17	-	-	74.8	<20	-	-	-	<15	1,560.00	354,000	11,000
	06/14/2012	92.07	<1	-	-	128.000	<20	-	-	-	<15	1,340.00	364,000	<4000
	07/18/2012	92.07	<1	-	-	144.000	<20	-	-	-	<15	2,520.00 QA	378,000	12,000
	08/07/2012	92.07	<1.0	<1.0	<0.020	78.2	33.4	<1.0	<1.0	-	<15	1,060.00	312,000	5,000
	10/08/2012	92.07	<1.0	<1.0	<0.020	13.6	<1.0	<1.0	<1.0	-	-	-	-	-

Table 4

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- ISCO PARAMETERS

Carroll - Monrovia - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Top of Casing (ft)	Chromium (µg/L)	Chromium, Dissolved (µg/L)	Chromium (hexavalent) (µg/L)	Iron (µg/L)	Iron, Dissolved (µg/L)	Lead (µg/L)	Lead, Dissolved (µg/L)	Sulfate (µg/L)	Chemical Oxygen Demand (mg/L)	TOC (µg/L)	TDS (µg/L)	TSS (µg/L)
GW Clean-up Standards*			100	100	NA	2,600	2,600	15	15	NA	NA	NA	NA	NA
MW-14D (cont.)	01/18/2013	92.07	<1	<1	<0.020	-	-	<1	<1	-	-	-	-	-
	04/23/2013	92.07	<1.0	<1.0	<0.030	-	-	<0.5	<0.5	-	-	-	-	-
	10/24/2013	92.07	2.3	1.6	<0.030	-	-	<0.5	<0.5	-	-	-	-	-
MW-14S (100) {4} [40-100]	11/23/2010	91.21	2.65	-	-	572.000 B3 L12	<20	-	-	<10000	21.4	1,840.00	378,000	24,000.0
	07/14/2011	91.21	<1	-	-	415.000	<20	-	-	-	<15	<500	614,000	12,000
	09/27/2011	91.21	<1	-	-	94.9	<20	-	-	-	<15	788.000	454,000	7,000
	10/19/2011	91.21	<1	-	-	533.000 L12	52.7 L12	-	-	-	<15	636.000	514,000	15,000
	11/15/2011	91.21	<1	-	-	74.4	<20	-	-	-	<15	<500	492,000	6,000
	04/05/2012	91.21	1.92	-	-	675.000	<20	-	-	-	<15	<500	520,000	62,000
	06/14/2012	91.21	<1	-	-	1,170.00	<20	-	-	-	<15	<500	472,000	50,000
	07/16/2012	91.21	<1	-	-	2,200.0	<20	-	-	-	<15	<500	608,000	106,000
	08/07/2012	91.21	<1.0	<1.0	0.022	225	7.8	1.1	<1.0	-	<15	1,340.00	640,000	<4000
	10/03/2012	91.21	<1.0	<1.0	<0.020	126	3.4	<1.0	<1.0	-	-	-	-	-
	01/14/2013	91.21	<1.0	<1.0	-	-	-	1.8	1.6	-	-	-	-	-
	01/28/2013	91.21	-	-	0.02	-	-	-	-	-	-	-	-	-
	04/23/2013	91.21	<1.0	<1.0	<0.030	-	-	<0.5	<0.5	-	-	-	-	-
	10/21/2013	91.21	1.4	<1.0	<0.030	-	-	0.63	0.5	-	-	-	-	-
	MW-15D (134) {4} [46-134]	11/23/2010	97.67	1.57	-	-	865.000 B3 L12	43.8	-	-	<10000	17.1	1,230.00	267,000
07/13/2011		97.67	<1	-	-	<20	<20	-	-	-	<15	<500	376,000	<4000
09/27/2011		97.67	<1	-	-	82.4	<20	-	-	-	<15	<500	318,000	8,000
10/18/2011		97.67	<1	-	-	190.000 L12	<20	-	-	-	<15	547.000	312,000	17,000
11/16/2011		97.67	1.46	-	-	351.000	<20	-	-	-	<15	<500	234,000	11,000
04/03/2012		97.67	1.34	-	-	32.000	<20	-	-	-	<15	505.000	314,000	<4000
06/13/2012		97.67	<1	-	-	250.00	<20	-	-	-	<15	<500	326,000	10,000 QA
07/17/2012		97.67	<1	-	-	102.000	<20	-	-	-	<15	<500	169,000	<4000
08/09/2012		97.67	<1.0	<1.0	0.072	292	7.2	<1.0	<1.0	-	<15	<500	410,000	15,000
10/08/2012		97.67	<1.0	<1.0	0.043	124	92.2	<1.0	<1.0	-	-	-	-	-
01/18/2013		97.67	<1	<1	0.094	-	-	<1	<1	-	-	-	-	-
04/25/2013		97.67	<1.0	<1.0	0.11	-	-	<0.5	<0.5	-	-	-	-	-
10/24/2013		97.67	4.3	2.5	0.084	-	-	<0.5	<0.5	-	-	-	-	-
MW-16 (121) {4} [36-121]	11/23/2010	89.78	1.11	-	-	964.000 B3 L12	<20	-	-	<10000	<15	<500	369,000	64,000.0
	07/14/2011	89.78	<1	-	-	77.8	<20	-	-	-	<15	<500	368,000	<4000

Table 4

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- ISCO PARAMETERS

Carroll - Monrovia - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Top of Casing (ft)	Chromium (µg/L)	Chromium, Dissolved (µg/L)	Chromium (hexavalent) (µg/L)	Iron (µg/L)	Iron, Dissolved (µg/L)	Lead (µg/L)	Lead, Dissolved (µg/L)	Sulfate (µg/L)	Chemical Oxygen Demand (mg/L)	TOC (µg/L)	TDS (µg/L)	TSS (µg/L)
GW Clean-up Standards*			100	100	NA	2,600	2,600	15	15	NA	NA	NA	NA	NA
MW-16 (cont.)	09/27/2011	89.78	2.56 B3	-	-	141.000	<20	-	-	-	<15	<500	292,000	9,000
	10/19/2011	89.78	<1	-	-	101.000 L12	<20	-	-	-	<15	<500	358,000	6,000
	11/15/2011	89.78	<1	-	-	40.4	<20	-	-	-	<15	<500	192,000	6,000
	01/12/2012	89.78	-	-	<20	-	-	-	-	-	-	-	-	-
	04/04/2012	89.78	1.7	-	<20	87.3	<20	-	-	-	<15	<500	358,000	14,000
	06/14/2012	89.78	<1	-	<20	74.6	<20	-	-	-	<15	<500	372,000	7,000
	07/16/2012	89.78	<1	-	<20	41.8	<20	-	-	-	<15	<500	452,000	<4000
	08/06/2012	89.78	<1.0	<1.0	0.035	24.0	6.0	<1.0	<1.0	-	<15.0	<500	456,000	4,000.00
	10/03/2012	89.78	<1.0	<1.0	<0.020	21.1	7.8	1.7	1.7	-	-	-	370,000	5,000
	01/14/2013	89.78	<1.0	<1.0	-	-	-	5.0	5.2	-	-	-	-	-
	01/28/2013	89.78	-	-	<0.020	-	-	-	-	-	-	-	-	-
	04/23/2013	89.78	<1.0	<1.0	<0.030	-	-	<0.5	<0.5	-	-	-	-	-
10/21/2013	89.78	<5.0	<1.0	<0.030	-	-	3.1	1.4	-	-	-	-	-	
MW-17 (121) {4} [35-121]	11/23/2010	92.84	1.24	-	-	570.00 B3 L12	<20	-	-	<10000	65.4	5,470.00	371,000	17,000.0
	07/14/2011	92.84	<1	-	-	149.000	<20	-	-	-	38.9	3,740.00	376,000	17,000
	09/27/2011	92.84	2.14 B3	-	-	280.00	<20	-	-	-	40.3	3,180.00	304,000	12,000
	10/19/2011	92.84	<1	-	-	104.000 L12	<20	-	-	-	36.2	2,770.00	354,000	5,000
	11/15/2011	92.84	1.03	-	-	<20	<20	-	-	-	28.4	2,550.00	332,000	<4000
	04/04/2012	92.84	1.36	-	-	82.000	<20	-	-	-	16.6	1,800.0	420,000	8,000
	06/14/2012	92.84	<1	-	-	264.000	<20	-	-	-	<15	1,120.00	458,000	10,000
	07/31/2012	92.84	-	-	-	41.000	<20	-	-	-	<15	806.000	460,000	8,000
	08/07/2012	92.84	<1.0	<1.0	<0.020	20.3	36.1	<1.0	<1.0	-	<15	716.000	400,000	5,000
	10/04/2012	92.84	<1.0	<1.0	<0.020	704	90.4	<1.0	<1.0	-	-	-	396,000	35,000
	01/14/2013	92.84	<1.0	<1.0	<0.020	-	-	<1.0	<1.0	-	-	-	-	-
	04/23/2013	92.84	<1.0	<1.0	<0.030	-	-	<0.5	<0.5	-	-	-	-	-
10/24/2013	92.84	<1.0	<1.0	<0.030	-	-	<0.5	<0.5	-	-	-	-	-	
MW-18D (130) {2} [120-130]	11/23/2010	98.31	23.6	-	-	15,900.0 B3 L12	33.9	-	-	45,900.0	87.7	10,800.0	448,000	1,310,000
	12/08/2010	98.31	8.5	-	-	4,460.00	<20	-	-	53,500.0	38.1	7,690.00	352,000	202,000
	07/13/2011	98.31	6.04	-	-	7,140.00	57.3	-	-	-	22.8	6,400.0	262,000	102,000
	09/27/2011	98.31	4.88 B3 D1	-	-	762.000 D1 MS	73.9 B3	-	-	-	27.9	6,330.00	298,000	14,000
	10/18/2011	98.31	<1	-	-	782.000 L12	26.9 L12	-	-	-	32.5	5,780.00	522,000	36,000
	11/16/2011	98.31	<1	-	-	328.000	20.2	-	-	-	<15	3,440.00	632,000 D1	21,000
	04/03/2012	98.31	2.69	-	<20	1,630.00	<20	-	-	-	17.2	2,580.00	864,000	222,000

Table 4

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- ISCO PARAMETERS

Carroll - Monrovia - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Top of Casing (ft)	Chromium (µg/L)	Chromium, Dissolved (µg/L)	Chromium (hexavalent) (µg/L)	Iron (µg/L)	Iron, Dissolved (µg/L)	Lead (µg/L)	Lead, Dissolved (µg/L)	Sulfate (µg/L)	Chemical Oxygen Demand (mg/L)	TOC (µg/L)	TDS (µg/L)	TSS (µg/L)
GW Clean-up Standards*			100	100	NA	2,600	2,600	15	15	NA	NA	NA	NA	NA
MW-18D (cont.)	06/15/2012	98.31	<1	-	<20	1,270.00	<20	-	-	-	<15	2,390.00	610,000	61,000
	07/18/2012	98.31	<1	-	<20	494.000	<20	-	-	-	<15	2,340.00 QA	636,000	41,000
	08/09/2012	98.31	11.6	<1.0	<0.020	10,900	42.1	21.7	<1.0	-	<15	1,940.00	438,000	<4000
	10/08/2012	98.31	2.4	<1.0	<0.020	1,590	169	3.2	<1.0	-	-	-	436,000	22,000
	01/17/2013	98.31	<1.0	<1.0	<0.020	-	-	<1.0	<1.0	-	-	-	-	-
	04/25/2013	98.31	<1.0	<1.0	<0.03	-	-	<0.5	<0.5	-	-	-	-	-
	10/23/2013	98.31	5.3	4.4	<0.03	-	-	0.6	<0.5	-	-	-	-	-
MW-18S (70) {2} [45-70]	11/23/2010	98.29	1,590.00	-	-	497,000	340.00	-	-	<10000	215	50,100.0	2,730,000	3,560,000
	12/08/2010	98.29	71.6	-	-	23,700.0	359.000	-	-	<10000	435	36,500.0	6,390,000	496,000
	07/13/2011	98.29	7.25	-	-	680.00	<20	-	-	-	19.4	3,590.00	1,670,000	47,000
	09/27/2011	98.29	19.1 B3	-	-	315.000	<20	-	-	-	49.1	3,850.00	1,850,000	29,000
	10/18/2011	98.29	21.3 L12	-	-	635.000 L12	<20	-	-	-	41.2	3,220.00	1,450,000	50,000
	11/16/2011	98.29	34.5	-	30.00 S3	240.00	<20	-	-	-	<15	2,540.00	1,120,000	15,000
	01/12/2012	98.29	-	-	40.00	-	-	-	-	-	-	-	-	-
	04/03/2012	98.29	60.6	-	30.00	459.000	<20	-	-	-	<15	1,340.00	736,000	41,000 QA
	06/15/2012	98.29	9.97	-	<20	222.000	<20	-	-	-	<15	1,370.00	1,750,000	24,000
	07/17/2012	98.29	17.6	-	40.00	810.00	<20	-	-	-	<15	955.000	533,000	57,000
	08/09/2012	98.29	77.0	58.4	81.2	360	20.6	3.4	2.1	-	<15	900.0	1,050,000	59,000
	10/08/2012	98.29	11.8	9.6	11.9	300	25.0	12.0	15.1	-	-	-	1,650,000	24,000
	01/17/2013	98.29	10.2	12.2	12.7	-	-	21.8	18.0	-	-	-	-	-
	04/25/2013	98.29	16	11.0 Q3	23	-	-	5.4	7.0 Q3	-	-	-	-	-
	10/23/2013	98.29	52	37	45 H2	-	-	9.7	9.1	-	-	-	-	-
12/18/2013	98.29	10	10	9.7	-	-	4	11.0	-	-	-	-	-	

* GW Clean-up Standards are the Maryland Department of the Environment (MDE) Groundwater Clean-up Standards for Type I and II Aquifers.

(##) = Depth to bottom of well (ft)

[##] = Length of the Screened Interval (ft)

{##} = Well Diameter (in)

<# = Less than the method detection limit of #

µg/L = Micrograms/Liter

B3 = The prep blank associated with this sample had a result greater than the Method Reporting Limit (MRL). Data may be biased high.

D1 = The Relevant Percent Difference (RPD) result exceeded the Quality Control (QC) control limits for the duplicate sample analyzed.

H1 = Sample analysis performed past holding time. Data not acceptable for regulatory compliance.

H2 = Initial analysis within holding time. Reanalysis for the required dilution was past holding time.

ISCO = In-Situ Chemical Oxidation

Table 4

HISTORICAL MONITORING WELL ANALYTICAL DATA SUMMARY- ISCO PARAMETERS

Carroll - Monrovia - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Top of Casing (ft)	Chromium (µg/L)	Chromium, Dissolved (µg/L)	Chromium (hexavalent) (µg/L)	Iron (µg/L)	Iron, Dissolved (µg/L)	Lead (µg/L)	Lead, Dissolved (µg/L)	Sulfate (µg/L)	Chemical Oxygen Demand (mg/L)	TOC (µg/L)	TDS (µg/L)	TSS (µg/L)
GW Clean-up Standards*			100	100	NA	2,600	2,600	15	15	NA	NA	NA	NA	NA

L12 = The prep method Laboratory Control Sampling (LCS) spike recovery was outside acceptance limits. The batch results were accepted based on the acceptable recovery of the other associated QC.

LA = Sample for dissolved metal analysis was filtered at the laboratory.

M1 = Matrix spike recovery was high; the associated blank spike recovery was acceptable.
mg/L = Milligrams/Liter

MS = The spike recovery was outside acceptance limits for the Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) due to sample matrix interferences. The batch was accepted based on acceptable Continuous Calibration Verification (CCV) recovery.

NA = Not Available or Not Analyzed for that specific compound

Q3 = Sample received with improper chemical preservation.

QA = The RPD result exceeded the QC control limits for the duplicate sample analyzed.

S3 = Sample was preserved at the laboratory.

S4 = Sample analysis was performed from non-preserved bottle.

TDS = Total Dissolved Solids

TSS = Total Suspended Solids

TOC = Total Organic Carbons

Table 5

HISTORICAL MONITORING WELL FIELD PARAMETERS DATA SUMMARY

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Dissolved Oxygen (mg/L)	ORP (mV)	Well pH	Specific Conductance (umhos/cm)	Well Temperature (Celsius) (C)	LEL (Head Space) (%)	Ozone (Head Space) (ppm)	Percent Oxygen (Head Space) (%)	Photoionizing Detector Reading (ppm)	Well Pressure / Vacuum (Head Space) (Inches of water)
MW-1 (61.5) {2} [40-61.5]	03/09/2011	4.37	267.1	4.62	193	15.08	-	-	-	-	-
	05/10/2011	5.92	253.2	4.54	447	19.01	-	-	-	-	-
	01/12/2012	8.59	385.4	4.81	443	15.54	-	-	-	-	-
	02/16/2012	7.01	315.8	4.79	508	13.42	-	-	23.1	0.0	0.00
	04/03/2012	7.41	187.7	5.35	528	15.70	-	-	-	-	-
	07/16/2012	8.19	287.9	5.15	514	17.55	-	-	-	-	-
	08/08/2012	10.11	-108.5	9.45	598	12.61	-	-	-	-	-
	09/05/2012	6.22	233.7	5.55	503	15.54	-	-	-	-	-
	10/04/2012	6.30	227.0	5.07	545	16.57	-	-	-	-	-
	01/15/2013	7.78	322.9	5.07	486	15.74	-	-	-	-	-
	04/24/2013	11.49	261.0	4.98	572	16.50	-	-	-	-	-
	07/24/2013	8.31	299.2	4.85	691	16.15	-	-	-	-	-
	10/22/2013	9.59	248.0	5.08	621	15.84	-	-	-	-	-
MW-2 (61.5) {2} [40-61.5]	03/09/2011	5.81	230.5	5.0	1,104	15.50	-	-	-	-	-
	01/11/2012	6.80	259.4	4.96	795	15.67	-	-	-	-	-
	02/16/2012	6.80	321.4	4.74	824	13.47	-	-	16.3	0.0	0.00
	04/03/2012	7.07	283.8	4.83	862	15.78	-	-	-	-	-
	07/16/2012	7.25	260.1	5.12	903	16.60	-	-	-	-	-
	08/08/2012	7.02	244.3	5.23	831	16.15	-	-	-	-	-
	09/05/2012	6.56	228.1	5.24	901	15.59	-	-	-	-	-
	04/24/2013	10.30	261.0	4.91	674	16.77	-	-	-	-	-
	07/23/2013	6.65	289.8	4.80	929	16.28	-	-	-	-	-
	10/22/2013	8.81	247.6	4.46	1,120	15.89	-	-	-	-	-
MW-4 (61.5) {2} [40-61.5]	03/09/2011	6.58	237.9	4.4	545	14.92	-	-	-	-	-
	01/11/2012	7.47	260.8	4.82	475	14.91	-	-	-	-	-
	02/16/2012	7.17	314.4	4.82	642	13.05	-	-	17.0	0.0	0.00
	04/03/2012	5.20	282.3	5.03	672	15.46	-	-	-	-	-
	07/16/2012	4.86	258.4	6.70	660	16.77	-	-	-	-	-
	08/08/2012	7.81	224.9	5.37	640	16.22	-	-	-	-	-
	09/05/2012	7.18	208.5	5.26	628	15.69	-	-	-	-	-
	04/24/2013	10.86	241.6	4.98	590	17.31	-	-	-	-	-
	07/23/2013	6.83	279.2	5.10	822	16.22	-	-	-	-	-
	10/22/2013	8.98	253.2	4.94	805	15.29	-	-	-	-	-
MW-5 (70) {4} [40-70]	03/09/2011	6.91	271	4.43	1,320	16.84	-	-	-	-	-
	05/10/2011	7.89	298.6	4.25	1,296	19.89	-	-	-	-	-
	01/12/2012	6.59	300.6	4.86	687	15.90	-	-	-	-	-
	02/16/2012	5.62	313.4	4.73	668	13.72	-	-	17.4	0.0	0.00
	04/03/2012	4.80	255.6	4.94	1,016	13.50	-	-	-	-	-
	07/16/2012	7.27	187.5	4.92	782	16.33	-	-	-	-	-
	08/08/2012	8.83	-117.2	10.01	1,117	13.50	-	-	-	-	-
	09/05/2012	7.05	232.1	5.18	875	15.57	-	-	-	-	-
	10/04/2012	6.04	198.9	4.86	1,123	15.85	-	-	-	-	-
	01/15/2013	6.82	303.2	5.06	748	15.40	-	-	-	-	-
	04/24/2013	9.40	260.8	4.89	0.680	16.23	-	-	-	-	-
	07/24/2013	6.95	289.8	4.71	1,072	15.15	-	-	-	-	-
10/22/2013	8.93	247.6	4.99	1,074	15.64	-	-	-	-	-	
MW-6 (60) {4} [40-60]	01/11/2012	7.12	243.2	5.06	140	14.04	-	-	-	-	-
	02/16/2012	6.95	294.8	5.61	159	12.22	-	-	16.0	0.0	0.00
	04/03/2012	7.28	271.5	4.94	163	14.95	-	-	-	-	-
	07/16/2012	5.55	208.3	5.45	152	15.40	-	-	-	-	-
	08/08/2012	7.26	187.7	5.92	158	16.05	-	-	-	-	-
	09/05/2012	6.20	232.1	5.34	145	14.90	-	-	-	-	-
	10/03/2012	6.60	-77.6	4.81	100	15.50	-	-	-	-	-
	01/18/2013	7.40	204.2	6.62	119	14.39	-	-	-	-	-
	04/25/2013	5.38	133.8	5.06	198	15.80	-	-	-	-	-

Table 5

HISTORICAL MONITORING WELL FIELD PARAMETERS DATA SUMMARY

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Dissolved Oxygen (mg/L)	ORP (mV)	Well pH	Specific Conductance (umhos/cm)	Well Temperature (Celsius) (C)	LEL (Head Space) (%)	Ozone (Head Space) (ppm)	Percent Oxygen (Head Space) (%)	Photoionizing Detector Reading (ppm)	Well Pressure / Vacuum (Head Space) (Inches of water)
MW-7 (80) {4} [53-80]	11/30/2010	0.7	-50.0	5.6	-	15.3	-	-	-	7.6	-
	12/01/2010	3.37	220.1	6.25	11	14.73	-	-	-	2.8	-
	03/10/2011	1.96	283.7	5.04	440	14.71	-	-	-	-	-
	05/11/2011	2.47	238.1	4.89	430	17.78	-	-	-	-	-
	07/13/2011	1.28	315.8	4.92	570	22.39	-	-	-	-	-
	09/14/2011	2.14	38.79	5.56	361	-	0	0.0	14.6	0.0	2.50
	09/20/2011	-	-	-	-	-	0	0.0	-	0.0	0.00
	09/21/2011	-	-	-	-	-	0	0.0	-	0.0	-
	09/23/2011	1.71	208.8	5.29	366	15.93	0	0.0	16.1	0.0	0.00
	09/27/2011	15.5	105.9	5.26	400	15.95	0	0.0	-	0.0	-
	10/14/2011	1.45	142.8	5.26	491	17.41	0	0.0	-	0.0	0.00
	10/27/2011	3.47	287.6	5.31	392	17.74	0	0.0	-	0.0	1.70
	11/08/2011	3.43	293	5.34	405	17.02	0	0.0	20.9	0.0	0.00
	11/16/2011	5.90	302.9	5.36	409	15.57	0	0.0	20.4	20.0	0.52
	12/08/2011	4.74	154	7.85	457	17.00	-	-	-	-	-
	01/11/2012	2.04	322.8	5.51	462	15.31	-	-	-	-	-
	02/16/2012	1.06	177.3	5.31	505	13.09	-	-	20.9	0.0	0.00
	02/21/2012	0.73	201.5	5.35	502	12.98	-	0	20.9	0	0.00
	02/28/2012	3.31	-	5.20	499	12.87	-	0.00	20.9	0.0	0.00
	03/05/2012	2.84	282.4	5.09	472	12.70	-	0.0	20.9	0.0	0.00
	03/28/2012	1.17	223.7	-	480	13.56	-	0.0	21.6	0.0	0.00
	04/03/2012	11.86	370.6	4.28	4	14.81	-	0.00	21.5	0.0	0.00
	04/26/2012	1.19	346.8	5.19	491	12.96	-	0	21.9	0.4	0.00
	05/07/2012	1.21	241.4	5.31	480	15.54	-	0.00	22.0	0.0	0.00
	05/21/2012	0.72	245.4	5.64	471	15.26	-	0.0	21.3	0.0	0.00
	05/24/2012	3.56	-	-	582	15.71	-	-	-	-	-
	06/04/2012	4.45	246.2	5.58	458	15.57	-	0.0	21.4	0.0	0.00
	06/13/2012	3.87	325.4	5.64	426	15.5	-	-	-	-	-
	06/18/2012	4.27	227.4	5.60	440	15.46	-	0	22.3	0	0
	07/06/2012	3.96	177.6	5.72	452	15.63	-	-	23.8	0.9	-
	07/17/2012	0.01	123.5	5.68	414	15.50	-	-	-	-	-
	07/18/2012	-	-	-	-	-	-	0	21.3	0.4	0
	08/09/2012	5.40	-122.7	13.19	573	12.01	-	-	-	-	-
09/05/2012	4.66	189.1	5.94	457	14.89	-	-	-	-	-	
10/08/2012	3.36	251.6	5.42	606	15.16	-	-	-	-	-	
01/17/2013	4.92	270.1	5.57	562	14.63	-	-	-	-	-	
04/25/2013	5.71	241.5	5.33	577	15.17	-	-	-	-	-	
07/25/2013	5.06	219.6	5.35	704	-	-	-	-	-	-	
10/24/2013	6.71	258.4	5.58	618	15.01	-	-	-	-	-	
MW-8 (70) {4} [45-70]	03/11/2011	12.49	270.4	4.73	317	15.52	-	-	-	-	-
	05/11/2011	7.98	264	4.77	177	18.12	-	-	-	-	-
	07/13/2011	5.37	438.7	3.31	276	21.60	-	-	-	-	-
	09/14/2011	5.94	439.6	4.92	116	-	0	0.0	18.5	0.0	0.02
	09/23/2011	8.37	145.8	6.35	105	16.37	0	0.0	20	0.0	0.00
	09/27/2011	6.30	203.1	6.45	415	16.12	0	0.0	-	0.0	0.01
	10/14/2011	11.92	155.6	5.08	90	17.88	0	0.0	24.3	0.0	0.10
	10/27/2011	12.32	294.6	5.38	57	17.94	0	0.0	25.0	0.0	0.02
	11/08/2011	10.40	343	5.32	84	17.62	0	0.0	20.9	0.0	0.00
	11/16/2011	13.57	313.4	5.29	97	15.90	0	0.0	27.1	0.0	0.00
	12/08/2011	6.89	223.4	5.30	121	17.50	-	-	-	-	-
	01/11/2012	9.94	224.9	6.44	114	6.30	-	-	-	-	-
	02/16/2012	9.08	272.9	4.88	168	13.32	-	-	26.5	0.0	0.00
	02/28/2012	10.20	-	5.21	187	14.10	-	0.00	27.0	0.0	0.02
	03/28/2012	12.13	250.8	-	191	1,420	-	0.0	27.2	0.0	0.06
04/03/2012	4.29	249.7	5.21	331	15.77	-	0.00	23.3	0.0	0.04	
04/26/2012	6.85	360.0	5.00	214	13.54	-	0	26.5	1.0	0.00	

Table 5

HISTORICAL MONITORING WELL FIELD PARAMETERS DATA SUMMARY

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Dissolved Oxygen (mg/L)	ORP (mV)	Well pH	Specific Conductance (umhos/cm)	Well Temperature (Celsius) (C)	LEL (Head Space) (%)	Ozone (Head Space) (ppm)	Percent Oxygen (Head Space) (%)	Photoionizing Detector Reading (ppm)	Well Pressure / Vacuum (Head Space) (Inches of water)
MW-8 (cont.)	05/07/2012	7.47	204.0	5.33	243	15.92	-	0.00	25.3	0.0	0.06
	05/21/2012	1.70	192.8	5.70	373	15.92	-	0.0	26.5	0.0	0.04
	05/24/2012	2.25	-	-	454	15.98	-	-	-	-	-
	06/04/2012	11.44	196.2	5.49	206	16.32	-	0.0	30.0+	0.0	0.04
	06/13/2012	21.12	198.5	5.70	126	15.92	-	-	-	-	-
	06/18/2012	21.58	225.8	5.68	152	16.17	-	0	25.6	0	0.04
	07/06/2012	19.83	145.0	5.65	174	16.14	-	-	25.9	7.0	-
	07/17/2012	0.02	35.2	5.91	451	16.06	-	-	-	-	-
	07/18/2012	-	-	-	-	-	-	0	21.3	0.9	0
	08/08/2012	10.21	339.1	4.70	293	18.72	-	-	-	-	-
	09/05/2012	7.04	199.2	5.63	305	15.42	-	-	-	-	-
	10/08/2012	10.80	194.4	5.25	294	15.56	-	-	-	-	-
	01/15/2013	13.15	320.5	5.08	174	15.86	-	-	-	-	-
	04/24/2013	16.38	241.0	4.97	232	16.28	-	-	-	-	-
	07/24/2013	12.64	261.3	4.76	320	15.29	-	-	-	-	-
10/23/2013	5.48	243.7	5.88	489	15.62	-	-	-	-	-	
MW-9 (78) {4} [48-78]	12/08/2010	2.45	275.0	4.65	532	14.88	-	-	-	-	-
	03/14/2011	6.91	313.9	4.67	131	14.11	-	-	-	-	-
	05/12/2011	7.62	298.2	4.43	279	16.94	-	-	-	-	-
	01/11/2012	7.25	121.5	8.45	91	13.89	-	-	-	-	-
	02/16/2012	6.42	267.0	4.80	263	12.27	-	-	17.4	0.0	0.00
	04/05/2012	9.00	255.7	4.96	349	12.17	-	-	-	-	-
	07/17/2012	0.14	235.0	4.95	447	14.44	-	-	-	-	-
	08/06/2012	5.54	333.6	4.52	570	16.82	-	-	-	-	-
	09/05/2012	6.42	251.5	5.22	436	13.99	-	-	-	-	-
	10/03/2012	7.62	178.8	6.07	41	19.24	-	-	-	-	-
	01/16/2013	6.22	269.9	5.09	464	14.15	-	-	-	-	-
	04/23/2013	7.27	128.1	5.03	411	14.37	-	-	-	-	-
	07/22/2013	6.70	237.8	4.72	615	13.81	-	-	-	-	-
	10/21/2013	6.65	156.1	5.56	592	14.67	-	-	-	-	-
MW-10 (80) {4} [40-80]	11/23/2010	9.13	349.3	5.21	578	16.13	-	-	-	-	-
	03/14/2011	5.88	252.1	4.68	355	13.97	-	-	-	-	-
	05/12/2011	3.54	262	4.63	618	20.01	-	-	-	-	-
	07/14/2011	0.86	327.9	4.43	636	18.12	-	-	-	-	-
	09/15/2011	1.70	490.7	4.63	430	-	0	0.0	17.7	0.0	0.00
	09/27/2011	3.37	327.2	4.70	414	14.87	-	-	-	-	-
	10/14/2011	6.34	322.8	4.79	364	16.17	0	0.0	20.3	0.0	0.00
	10/27/2011	6.77	284.7	5.00	303	16.46	0	0.0	20.1	0.0	0.06
	11/08/2011	10.12	365.4	5.11	297	16.22	0	0.0	20.9	0.0	0.00
	11/15/2011	11.63	309.1	5.03	106	14.14	0	0.0	21.3	53.0	0.50
	12/08/2011	6.77	223	5.78	381	16.02	-	-	-	-	-
	01/11/2012	6.43	290.5	5.09	63	14.56	-	-	-	-	-
	02/16/2012	5.73	231.4	4.76	312	12.50	-	-	18.5	0.0	0.00
	02/28/2012	5.08	-	5.03	551	12.52	-	0.00	19.4	0.0	0.00
	03/28/2012	6.22	307.3	-	90	12.56	-	0.0	18.5	0.0	0.00
	04/03/2012	-	-	-	-	-	-	0.00	18.5	0.0	0.00
	04/04/2012	3.51	272.9	5.05	698	14.62	-	-	-	-	-
	04/26/2012	4.68	332.4	4.97	95	12.49	-	0	18.8	0.0	0.00
	05/07/2012	5.26	456.8	5.48	75	14.74	-	0.00	18.5	0.0	0.00
	05/21/2012	0.56	507.8	5.28	569	14.46	-	0.0	18.1	0.0	0.00
	06/04/2012	5.44	359.0	5.30	238	14.48	-	0.0	19.4	0.0	0.00
	06/14/2012	1.51	201.3	5.37	693	14.53	-	-	-	-	-
	06/18/2012	14.21	231.7	5.65	467	14.68	-	0	20.1	0	0
07/06/2012	6.30	257.8	5.38	525	14.45	-	-	20.5	0.0	-	
07/16/2012	0.24	93.7	5.75	711	14.60	-	-	-	-	-	
07/18/2012	-	-	-	-	-	-	0	20.9	0	0	

Table 5

HISTORICAL MONITORING WELL FIELD PARAMETERS DATA SUMMARY

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Dissolved Oxygen (mg/L)	ORP (mV)	Well pH	Specific Conductance (umhos/cm)	Well Temperature (Celsius) (C)	LEL (Head Space) (%)	Ozone (Head Space) (ppm)	Percent Oxygen (Head Space) (%)	Photoionizing Detector Reading (ppm)	Well Pressure / Vacuum (Head Space) (Inches of water)
MW-10 (cont.)	08/07/2012	4.80	-85.0	8.16	920	11.39	-	-	-	-	-
	09/05/2012	4.28	265.7	5.43	577	14.38	-	-	-	-	-
	10/03/2012	6.02	-140.0	5.07	229	14.97	-	-	-	-	-
	01/14/2013	7.23	286.9	4.76	74	14.69	-	-	-	-	-
	04/23/2013	7.14	86.3	5.49	265	14.85	-	-	-	-	-
	07/22/2013	4.49	401.2	4.88	807	14.10	-	-	-	-	-
	10/21/2013	6.08	357.2	4.82	274	15.04	-	-	-	-	-
MW-11 (77) {4} [47-77]	12/08/2010	7.81	226.5	5.28	279	15.21	-	-	-	-	-
	03/11/2011	8.21	242.5	5.27	237	14.18	-	-	-	-	-
	05/11/2011	8.57	231.5	4.98	249	17.51	-	-	-	-	-
	01/11/2012	7.76	301.7	5.70	210	14.65	-	-	-	-	-
	02/16/2012	7.66	139.0	6.30	220	12.37	-	-	20.2	0.0	-0.80
	04/04/2012	8.33	288.9	5.39	228	12.98	-	-	-	-	-
	07/17/2012	0.39	198.1	5.66	210	14.89	-	-	-	-	-
	08/08/2012	8.38	280.1	5.45	312	17.09	-	-	-	-	-
	09/05/2012	8.01	254.0	5.82	228	14.35	-	-	-	-	-
	10/04/2012	4.82	-31.9	5.56	287	14.90	-	-	-	-	-
	01/15/2013	7.13	196.9	5.78	218	14.52	-	-	-	-	-
	04/23/2013	8.84	86.4	5.46	214	14.89	-	-	-	-	-
	07/23/2013	7.80	255.8	5.35	271	14.47	-	-	-	-	-
10/22/2013	10.46	166.3	5.85	242	14.75	-	-	-	-	-	
MW-12 (82) {4} [44-82]	12/08/2010	8.43	261.5	4.75	470	16.71	-	-	-	-	-
	03/11/2011	17.15	267.3	5.21	509	15.28	-	-	-	-	-
	05/11/2011	9.05	222.2	4.91	549	18.68	-	-	-	-	-
	01/11/2012	8.72	343.6	5.23	431	15.85	-	-	-	-	-
	02/16/2012	8.63	172.8	5.49	519	13.87	-	-	19.7	0.0	0.00
	04/04/2012	9.67	229.8	7.08	516	14.21	-	-	-	-	-
	07/16/2012	9.74	288.1	5.82	298	16.12	-	-	-	-	-
	08/08/2012	8.75	291.4	5.07	551	18.78	-	-	-	-	-
	09/05/2012	9.02	235.2	5.45	413	15.68	-	-	-	-	-
	10/04/2012	6.35	42.5	5.39	492	16.29	-	-	-	-	-
	01/15/2013	8.39	271.6	5.33	426	15.40	-	-	-	-	-
	04/24/2013	10.36	161.4	5.79	386	16.60	-	-	-	-	-
	07/23/2013	9.22	184.6	5.26	413	15.65	-	-	-	-	-
10/22/2013	12.48	219.3	5.73	320	16.14	-	-	-	-	-	
MW-13 (84) {4} [49-84]	11/23/2010	1.70	325.0	5.14	542	18.12	-	-	-	-	-
	11/30/2010	0.7	-45.3	6.1	-	15.4	-	-	-	0.1	-
	12/01/2010	-	-	-	-	-	-	-	-	1.4	-
	03/10/2011	12.10	288.8	4.92	582	14.67	-	-	-	-	-
	03/14/2011	-	-	-	-	14.05	-	-	-	-	-
	05/11/2011	8.57	291.8	4.39	520	21.32	-	-	-	-	-
	05/12/2011	-	-	-	-	17.61	-	-	-	-	-
	07/12/2011	3.50	451.9	3.68	0.714	24.41	-	-	-	-	-
	07/14/2011	-	-	-	-	20.16	-	-	-	-	-
	09/15/2011	12.94	459.9	5.12	13	-	0	0.0	25.4	0.0	1.00
	09/20/2011	15.88	532.7	7.74	402	15.91	0	>1.0	29.9	0.0	1.25
	09/21/2011	-	-	-	-	-	0	0.8	-	0.8	-
	09/23/2011	28.50	251.2	8.60	418	16.00	0	0.24	30.0	0.6	0.80
	09/27/2011	20.52	293.4	5.10	416	15.98	0	0	-	0.2	0.00
	10/04/2011	21.16	180.6	5.47	1,513	15.98	0	0	30.0+	0.0	1.10
	10/14/2011	17.53	629	5.12	643	17.77	0	0	30.0+	0.2	2.30
	10/18/2011	20.73	945.1	5.95	496	17.70	0	0.74	30.0+	0.6	10.20
10/27/2011	15.90	540.1	8.01	490	17.87	0	>1.0	25.0	0.0	0.06	
11/02/2011	19.62	752	6.08	492	17.27	0	>1.0	30.0+	0.2	4.00	
11/08/2011	24.88	911	7.61	495	17.70	0	>1.0	30.0+	0.2	2.30	
11/15/2011	-	-	-	-	-	14.90	-	-	-	-	-

Table 5

HISTORICAL MONITORING WELL FIELD PARAMETERS DATA SUMMARY

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Dissolved Oxygen (mg/L)	ORP (mV)	Well pH	Specific Conductance (umhos/cm)	Well Temperature (Celsius) (C)	LEL (Head Space) (%)	Ozone (Head Space) (ppm)	Percent Oxygen (Head Space) (%)	Photoionizing Detector Reading (ppm)	Well Pressure / Vacuum (Head Space) (Inches of water)
MW-13 (cont.)	11/16/2011	23.46	211	5.96	513	16.42	0	>1.0	24.5	52.1	0.56
	12/08/2011	7.01	224.2	5.04	491	17.33	-	-	-	-	-
	01/12/2012	7.80	170.1	8.08	624	15.48	-	-	-	-	-
	02/16/2012	8.39	274.9	6.11	602	13.57	-	-	26.5	0.0	0.00
	02/21/2012	15.94	650.0	6.39	615	13.25	-	0	27.5	0	1.45
	02/28/2012	18.61	-	6.38	619	13.77	-	0.07	27.9	0.2	1.65
	03/05/2012	18.41	747.0	7.80	580	12.92	-	1.0	28.0	0.4	3.00
	03/28/2012	14.07	409.0	-	615	13.96	-	1.0	27.2	0.9	5.50
	04/03/2012	13.59	836.9	5.26	613	15.76	-	1.00	25.6	2.4	1.6
	04/11/2012	12.55	250.8	6.00	623	13.64	-	1.0	24.7	0.0	0
	04/26/2012	7.19	315.1	5.94	640	13.53	-	0	24.7	0.0	0.00
	05/07/2012	15.36	818.9	7.23	591	16.09	-	0.04	26.3	0.3	1.15
	05/21/2012	5.48	860.0	6.35	573	15.91	-	0.07	27.5	0.3	2.00
	06/04/2012	14.14	349.6	5.65	548	16.09	-	0.0	30.0+	0.8	1.10
	06/13/2012	16.73	308.5	5.30	541	15.96	-	-	-	-	-
	06/18/2012	19.15	245.4	5.46	520	15.93	-	0	19.9	1.0	1.30
	07/06/2012	19.44	237.8	5.89	572	15.85	-	-	26.0	1.1	-
	07/17/2012	8.70	262.3	5.17	539	16.06	-	-	-	-	-
	07/18/2012	-	-	-	-	-	-	0	22.4	1.1	0.46
	08/08/2012	11.82	-88.3	7.00	719	12.92	-	-	-	-	-
	09/05/2012	10.53	247.1	5.23	570	15.36	-	-	-	-	-
10/08/2012	10.89	-8.7	5.22	725	15.63	-	-	-	-	-	
01/16/2013	11.62	293.1	5.10	626	16.12	-	-	-	-	-	
04/25/2013	8.67	159.6	4.95	674	16.10	-	-	-	-	-	
07/24/2013	9.50	300.0	4.83	767	15.33	-	-	-	-	-	
10/23/2013	9.25	161.3	8.33	740	15.77	-	-	-	-	-	
MW-14D (221) {4} [201-221]	11/23/2010	5.02	109.8	11.42	1,063	-	-	-	-	-	-
	11/30/2010	1.4	-69.8	8.7	-	14.5	-	-	-	1.9	-
	03/14/2011	2.01	-33.8	11.12	735	-	-	-	-	-	-
	05/12/2011	2.01	154	11.26	695	-	-	-	-	-	-
	07/14/2011	0.89	300.2	9.50	693	-	-	-	-	-	-
	09/14/2011	1.32	400	7.22	463	-	0	0.0	20.0	0.0	0.00
	09/27/2011	4.80	46.8	9.16	520	15.11	-	-	-	-	-
	10/14/2011	1.19	197	9.28	623	-	0	0.0	20.4	0.0	0.00
	10/27/2011	2.02	129	8.82	494	-	0	-	20.8	0.0	1.72
	11/08/2011	2.86	156.2	8.62	492	-	0	0.0	20.2	0.0	0.00
	11/15/2011	3.39	171.7	9.09	488	14.76	0	0.0	20.9	0.0	0.50
	12/08/2011	7.20	145.7	7.10	480	-	-	-	-	-	-
	01/11/2012	1.94	106.2	8.36	487	14.05	-	-	-	-	-
	02/16/2012	0.71	135.7	7.14	350	-	-	-	20.9	0.0	-0.35
	02/28/2012	1.56	-	6.99	377	12.71	-	0.00	20.9	0.0	0.00
	03/28/2012	0.84	249.0	-	354	12.76	-	0.0	20.9	0.0	0.48
	04/03/2012	-	-	-	-	-	-	0.00	20.9	0.0	-0.20
	04/05/2012	1.38	185.5	7.15	328	12.73	-	-	-	-	-
	04/26/2012	0.95	291.7	6.87	306	12.69	-	0	20.9	0.0	0.00
	05/07/2012	1.93	351.4	7.38	292	14.88	-	0.00	20.9	0.0	-0.52
	05/21/2012	2.11	395.8	7.82	289	14.66	-	0.0	20.9	0.0	2.7 (-)
	06/04/2012	6.60	284.2	7.68	292	14.76	-	0.0	20.9	0.0	1.05
	06/14/2012	3.04	146.9	7.95	326	14.77	-	-	-	-	-
06/18/2012	15.19	220.7	5.98	626	14.62	-	0	20.9	0	0	
07/06/2012	1.15	173.7	7.64	340	14.64	-	-	20.9	0.0	-	
07/18/2012	1.34	91.3	9.46	439	14.47	-	0	20.9	0	0	
08/07/2012	0.55	-173.9	9.00	558	12.29	-	-	-	-	-	
09/05/2012	1.27	173.1	8.49	424	14.43	-	-	-	-	-	
10/08/2012	-0.12	20.8	8.04	544	14.44	-	-	-	-	-	
01/18/2013	0.98	118.3	7.94	416	14.13	-	-	-	-	-	

Table 5

HISTORICAL MONITORING WELL FIELD PARAMETERS DATA SUMMARY

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Dissolved Oxygen (mg/L)	ORP (mV)	Well pH	Specific Conductance (umhos/cm)	Well Temperature (Celsius) (C)	LEL (Head Space) (%)	Ozone (Head Space) (ppm)	Percent Oxygen (Head Space) (%)	Photoionizing Detector Reading (ppm)	Well Pressure / Vacuum (Head Space) (Inches of water)	
MW-14D (cont.)	04/23/2013	1.97	154.6	7.81	372	14.84	-	-	-	-	-	
	07/23/2013	1.52	231.2	7.15	485	14.25	-	-	-	-	-	
	10/21/2013	2.01	198.0	7.13	459	14.47	-	-	-	-	-	
MW-14S (100) {4} [40-100]	11/23/2010	5.43	265.1	5.69	733	16.27	-	-	-	-	-	
	03/14/2011	5.67	283.7	4.76	297	14.06	-	-	-	-	-	
	05/12/2011	5.83	181.9	5.57	728	21.67	-	-	-	-	-	
	07/14/2011	5.28	336.1	5.64	984	30.99	-	-	-	-	-	
	09/14/2011	1.17	419	5.17	419	-	0	0.0	18.1	0.0	0.00	
	09/27/2011	20.64	158.7	5.12	260	14.79	-	-	-	-	-	
	10/14/2011	4.02	290.3	5.17	543	16.34	0	0.0	19.1	0.0	0.00	
	10/27/2011	2.21	254.5	5.39	660	16.52	0	0.0	19.0	0.0	0.20	
	11/08/2011	10.06	365.6	5.07	289	16.41	0	0.0	20.9	0.0	0.00	
	11/15/2011	8.60	257	5.41	239	14.83	0	0.0	20.6	0.0	0.08	
	12/08/2011	10.90	226.1	5.16	87	16.30	-	-	-	-	-	
	01/11/2012	7.55	216.8	5.50	249	14.11	-	-	-	-	-	
	02/16/2012	5.70	249.8	4.91	321	12.72	-	-	17.8	0.0	0.00	
	02/28/2012	5.89	-	5.26	590	12.69	-	0.00	19.4	0.0	0.00	
	03/28/2012	3.28	303.8	-	707	12.86	-	0.0	19.0	0.0	0.00	
	04/03/2012	-	-	-	-	-	-	-	0.00	19.0	0.0	0.00
	04/05/2012	7.32	251.0	5.00	579	12.44	-	-	-	-	-	
	04/26/2012	5.79	328.0	5.27	603	12.64	-	0	19.1	0.0	0.00	
	05/07/2012	5.62	481.2	5.55	563	14.82	-	0.00	18.8	0.0	0.00	
	05/21/2012	1.48	482.3	5.44	648	14.52	-	0.0	18.5	0.0	0.00	
	06/04/2012	6.08	315.3	5.59	450	14.61	-	0.0	19.8	0.0	0.00	
	06/14/2012	4.45	190.9	5.59	697	14.59	-	-	-	-	-	
	06/18/2012	4.78	172.8	7.50	320	14.79	-	0	22.6	0	0	
	07/06/2012	5.20	237.0	5.77	701	14.53	-	-	20.5	0.0	-	
	07/16/2012	0.83	128.6	5.87	798	14.54	-	-	-	-	-	
	07/18/2012	-	-	-	-	-	-	0	20.9	0	0	
08/07/2012	3.70	287.4	5.41	959	18.75	-	-	-	-	-		
09/05/2012	4.46	257.4	5.63	742	14.33	-	-	-	-	-		
10/03/2012	4.67	22.8	4.84	923	14.95	-	-	-	-	-		
01/14/2013	8.01	313.0	5.49	693	14.76	-	-	-	-	-		
04/23/2013	5.83	174.7	5.34	688	14.83	-	-	-	-	-		
07/22/2013	5.03	409.1	-	932	14.16	-	-	-	-	-		
10/24/2013	4.68	375.9	5.11	648	15.10	-	-	-	-	-		
MW-15D (134) {4} [46-134]	11/23/2010	1.59	231.4	6.07	532	17.50	-	-	-	-	-	
	11/30/2010	0.5	-56.0	6.7	-	15.4	-	-	-	4.5	-	
	12/01/2010	2.19	130	7.57	303	14.70	-	-	-	4.7	-	
	03/11/2011	5.30	259.1	5.38	502	14.83	-	-	-	-	-	
	05/11/2011	2.61	180	5.32	511	20.74	-	-	-	-	-	
	07/13/2011	5.43	360.9	5.46	693	31.87	-	-	-	-	-	
	09/14/2011	4.20	31.29	6.68	648	-	0	0.0	20.2	0.0	0.00	
	09/20/2011	7.16	209.0	5.39	367	15.82	0	0.0	14.1	0.0	0.00	
	09/21/2011	-	-	-	-	-	0	0.0	-	0.0	-	
	09/23/2011	6.77	208.4	5.40	378	16.21	0	0.0	-	0.0	0.00	
	09/27/2011	6.30	203.1	6.45	415	16.12	-	0.0	-	-	0.00	
	10/04/2011	8.30	154.0	5.46	436	15.97	0	0.0	-	0.0	0.00	
	10/14/2011	8.43	150.0	5.65	536	17.39	0	0.0	22.2	1.6	0.16	
	10/18/2011	11.46	136.2	5.55	416	17.32	0	0.0	24.8	29.8	0.00	
	10/27/2011	10.64	277.2	5.54	422	17.63	0	0.0	25.5	29.2	0.00	
	11/02/2011	8.74	241.5	5.64	433	17.28	0	0.0	20.9	0.0	0.00	
	11/08/2011	11.39	279.4	5.63	433	17.10	0	0.0	20.9	0.0	0.00	
11/16/2011	14.88	307.8	5.59	450	15.69	0	0.0	20.4	38.0	0.08		
12/08/2011	3.42	119.1	8.80	493	17.09	-	-	-	-	-		
01/11/2012	4.14	338.3	5.42	471	15.41	-	-	-	-	-		

Table 5

HISTORICAL MONITORING WELL FIELD PARAMETERS DATA SUMMARY

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Dissolved Oxygen (mg/L)	ORP (mV)	Well pH	Specific Conductance (umhos/cm)	Well Temperature (Celsius) (C)	LEL (Head Space) (%)	Ozone (Head Space) (ppm)	Percent Oxygen (Head Space) (%)	Photoionizing Detector Reading (ppm)	Well Pressure / Vacuum (Head Space) (Inches of water)	
MW-15D (cont.)	02/16/2012	2.78	164.2	5.54	503	13.38	-	-	23.8	0.0	0.00	
	02/21/2012	2.75	201.9	5.49	497	13.45	-	0	24.8	0	0.00	
	02/28/2012	7.21	-	5.47	500	13.40	-	0.00	27.1	16.4	0.30	
	03/05/2012	8.85	268.0	5.50	503	13.32	-	0.0	27.6	17.4	0.30	
	03/23/2012	8.67	252.8	5.49	514	13.67	-	0.0	30.0	11.2	0.50	
	03/28/2012	9.05	220.6	-	517	13.53	-	0.0	25.7	8.8	0.34	
	04/03/2012	7.71	211.2	5.69	536	15.37	-	0.00	25.6	11.8	0.31	
	04/11/2012	17.01	175.7	7.84	539	13.33	-	0.0	25.4	6.7	0	
	04/26/2012	6.79	341.0	5.80	511	13.37	-	0	24.7	1.4	0.00	
	04/30/2012	4.57	218.8	7.30	526	13.30	-	0	24.3	1.2	0.46	
	05/07/2012	7.93	232.0	5.89	519	15.72	-	0.00	25.9	0.2	0.40	
	05/15/2012	8.90	274.9	5.75	523	15.75	-	0.0	27.3	0.4	0.44	
	05/21/2012	4.98	239.9	6.02	508	15.34	-	0.0	27.7	0.3	0.26	
	05/24/2012	12.16	-	-	631	15.40	-	-	-	-	-	-
	05/29/2012	12.49	144.9	6.35	571	15.63	-	0.0	30.0+	7.1	0.52	
	06/04/2012	11.55	229.1	5.88	426	15.46	-	0.0	30.0+	7.3	0.44	
	06/13/2012	11.54	276.4	6.00	444	15.36	-	-	-	-	-	-
	06/14/2012	-	-	-	-	-	-	0.0	22.3	2.2	0.20	
	06/18/2012	13.72	216.4	6.04	467	15.67	-	0	19.4	3.0	0.20	
	06/28/2012	11.91	-	5.87	500	16.32	-	0.0	-	-	0.18	
	07/06/2012	13.00	180.3	6.07	499	15.58	-	-	23.1	1.6	-	
	07/09/2012	11.62	192.2	7.08	495	15.58	-	0.0	23.8	0.0	0.18	
	07/17/2012	7.42	154.1	6.72	458	14.58	-	-	-	-	-	
	07/18/2012	-	-	-	-	-	-	0	22.0	1.5	0.35	
	07/23/2012	7.83	209.2	6.75	433	15.25	-	0	24.3	1.2	0.20	
	08/09/2012	9.50	-88.2	12.60	664	16.57	-	-	-	-	-	
	09/05/2012	6.70	185.1	6.61	484	15.10	-	-	-	-	-	
	10/08/2012	5.74	-38.4	6.56	611	15.20	-	-	-	-	-	
	01/18/2013	5.98	191.8	6.11	531	14.63	-	-	-	-	-	
	04/25/2013	7.20	257.2	5.48	592	15.80	-	-	-	-	-	
07/24/2013	6.40	289.6	5.27	719	14.90	-	-	-	-	-		
10/24/2013	7.76	171.8	7.38	604	15.59	-	-	-	-	-		
MW-16 (121) {4} [36-121]	11/23/2010	4.43	350.4	5.48	664	16.02	-	-	-	-	-	
	03/14/2011	6.91	296.8	4.70	240	14.12	-	-	-	-	-	
	05/12/2011	8.89	278.2	4.53	442	20.36	-	-	-	-	-	
	07/14/2011	3.96	336	4.51	639	18.72	-	-	-	-	-	
	09/14/2011	7.03	404.3	5.28	116	-	0	0.0	17.9	0.0	0.00	
	09/27/2011	7.69	308.7	5.41	134	14.57	-	-	-	-	-	
	10/14/2011	9.43	296	5.88	221	15.99	0	0.0	18.3	0.0	0.00	
	10/27/2011	8.09	245.7	5.77	169	16.04	0	0.0	19.5	0.0	0.32	
	11/08/2011	12.88	333.5	5.70	191	16.33	0	0.0	20.9	0.0	0.00	
	11/15/2011	13.49	225.1	7.13	105	14.51	0	0.0	20.4	0.3	0.21	
	12/08/2011	10.50	224.7	5.22	353	16.03	-	-	-	-	-	
	01/12/2012	7.73	332.4	5.20	89	14.4	-	-	-	-	-	
	02/16/2012	7.41	214.2	5.38	102	12.42	-	-	18.6	0.0	0.00	
	02/28/2012	8.58	-	5.35	90	12.43	-	0.00	19.1	0.0	0.00	
	03/28/2012	7.56	289.9	-	99	12.45	-	0.0	18.7	0.0	0.00	
	04/03/2012	-	-	-	-	-	-	0.00	19.0	0.0	0.00	
	04/04/2012	6.06	291.6	5.06	546	14.20	-	-	-	-	-	
	04/26/2012	4.99	338.0	5.26	544	12.32	-	0	18.9	0.0	0.00	
	05/07/2012	5.31	502.2	5.70	471	14.66	-	0.00	19.1	0.0	0.00	
	05/21/2012	2.14	519.6	5.21	518	14.37	-	0.0	18.5	0.0	0.00	
06/04/2012	8.14	381.7	5.62	84	14.49	-	0.0	19.2	0.0	0.00		
06/14/2012	8.70	150.2	5.41	363	14.33	-	-	-	-	-		
06/18/2012	11.04	230.0	5.76	103	14.67	-	0	20.5	0	0		
07/06/2012	9.08	250.2	5.40	497	14.25	-	-	20.3	0.0	-		

Table 5

HISTORICAL MONITORING WELL FIELD PARAMETERS DATA SUMMARY

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Dissolved Oxygen (mg/L)	ORP (mV)	Well pH	Specific Conductance (umhos/cm)	Well Temperature (Celsius) (C)	LEL (Head Space) (%)	Ozone (Head Space) (ppm)	Percent Oxygen (Head Space) (%)	Photoionizing Detector Reading (ppm)	Well Pressure / Vacuum (Head Space) (Inches of water)
MW-16 (cont.)	07/16/2012	15.71	246.7	5.25	643	14.38	-	-	-	-	-
	07/18/2012	-	-	-	-	-	-	0	20.3	0	0
	08/06/2012	7.47	-52.9	4.19	844	12.15	-	-	-	-	-
	09/05/2012	6.80	254.9	5.28	576	14.10	-	-	-	-	-
	10/03/2012	8.10	-102.1	5.01	119	14.68	-	-	-	-	-
	01/14/2013	7.15	188.7	4.98	178	14.53	-	-	-	-	-
	04/23/2013	7.08	153.2	4.94	525	14.43	-	-	-	-	-
	07/22/2013	7.06	393.4	-	428	13.99	-	-	-	-	-
	10/21/2013	7.32	344.5	4.93	76	14.75	-	-	-	-	-
	MW-17 (121) {4} [35-121]	11/23/2010	1.15	349.0	5.36	682	16.57	-	-	-	-
11/30/2010		0.8	-70.1	7.2	-	14.1	-	-	-	0.3	-
03/14/2011		5.09	193.3	5.29	541	13.63	-	-	-	-	-
05/12/2011		7.09	204.6	5.12	560	16.59	-	-	-	-	-
07/14/2011		1.06	219.7	5.13	635	17.40	-	-	-	-	-
09/14/2011		0.52	510.8	4.93	459	-	0	0.0	15.2	0.0	0.00
09/27/2011		0.76	266.7	7.58	460	14.62	-	-	-	-	-
10/14/2011		1.18	268	5.46	550	16.50	0	0.0	20.9	0.0	0.00
10/27/2011		2.45	253.4	5.54	530	16.79	0	0.0	20.8	0.0	0.00
11/08/2011		2.84	324	5.50	548	16.54	0	0.0	20.9	0.0	0.00
11/15/2011		6.19	296	5.53	550	14.98	0	0.0	17.9	0.0	0.00
12/08/2011		4.90	200.4	5.98	569	16.41	-	-	-	-	-
01/11/2012		4.25	348.6	5.13	529	14.63	-	-	-	-	-
02/16/2012		0.79	180.6	5.48	575	12.57	-	-	12.6	0.0	0.00
02/28/2012		3.23	-	5.74	612	12.86	-	0.00	17.0	0.0	0.00
03/28/2012		1.52	291.0	-	577	12.72	-	0.0	16.6	0.0	0.00
04/03/2012		-	-	-	-	-	-	0.00	17.8	0.0	0.00
04/04/2012		1.31	271.8	5.41	566	12.95	-	-	-	-	-
04/26/2012		0.85	318.8	5.46	595	12.66	-	0	19.1	0.0	0.00
05/07/2012		0.66	434.4	5.66	580	14.84	-	0.00	18.9	0.0	0.00
05/21/2012		0.41	472.7	5.71	565	14.58	-	0.0	18.8	0.0	0.00
06/04/2012		0.96	315.8	5.78	539	14.55	-	0.0	19.3	0.0	0.00
06/14/2012		0.40	165.1	5.88	543	14.51	-	-	-	-	-
06/18/2012		2.75	224.0	5.88	544	14.71	-	0	20.9	0	0
07/06/2012		0.43	230.0	6.00	570	14.72	-	-	20.0	0.0	-
07/18/2012		-	-	-	-	-	-	0	20.3	0	0
07/31/2012		0.10	144.6	6.31	536	14.57	-	-	-	-	-
08/07/2012		1.20	130.1	5.39	727	17.32	-	-	-	-	-
09/05/2012		0.61	243.7	5.97	563	14.38	-	-	-	-	-
10/04/2012		0.35	-17.5	5.54	707	14.72	-	-	-	-	-
01/14/2013	2.07	263.4	5.62	583	14.69	-	-	-	-	-	
04/23/2013	3.44	120.8	5.50	547	14.95	-	-	-	-	-	
07/23/2013	1.71	268.7	6.63	784	14.27	-	-	-	-	-	
10/24/2013	2.82	185.6	7.41	755	14.55	-	-	-	-	-	
MW-18D (130) {2} [120-130]	11/23/2010	5.29	285.8	7.16	7.80	17.61	-	-	-	-	-
	11/30/2010	6.0	-65.4	10.0	-	14.3	-	-	-	1.0	-
	12/01/2010	6.64	-73	10.80	18	14.29	-	-	-	2.8	-
	12/08/2010	5.32	50.7	7.42	717	14.94	-	-	-	-	-
	03/10/2011	4.92	85.9	10.11	3,566	11.36	-	-	-	-	-
	05/10/2011	3.37	119.4	10.75	884	21.97	-	-	-	-	-
	07/13/2011	1.80	233	9.39	812	20.41	-	-	-	-	-
	09/14/2011	0.99	159	9.99	176	-	0	0.0	20.4	0.0	0.30
	09/20/2011	0.81	68.0	9.78	195	16.08	0	0.0	20.5	0.8	0.38
	09/21/2011	-	-	-	-	-	0	0.0	-	1.0	-
	09/23/2011	1.20	228.8	6.78	170	16.53	0	0.0	20.9	0.0	0.00
	09/27/2011	3.25	159.1	9.46	174	16.04	0	0.0	-	0.0	0.00
10/04/2011	1.00	142.0	7.99	184	15.90	0	0.0	20.9	0.0	0.00	

Table 5

HISTORICAL MONITORING WELL FIELD PARAMETERS DATA SUMMARY

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Dissolved Oxygen (mg/L)	ORP (mV)	Well pH	Specific Conductance (umhos/cm)	Well Temperature (Celsius) (C)	LEL (Head Space) (%)	Ozone (Head Space) (ppm)	Percent Oxygen (Head Space) (%)	Photoionizing Detector Reading (ppm)	Well Pressure / Vacuum (Head Space) (Inches of water)	
MW-18D (cont.)	10/14/2011	1.70	82.6	9.52	255	17.79	0	0.0	20.9	0.4	0.77	
	10/18/2011	2.90	98.8	9.59	215	17.80	0	0.0	20.9	0.8	0.14	
	10/27/2011	5.17	54.4	9.68	332	17.44	0	0.0	24.5	0.0	0.44	
	11/02/2011	5.75	59.0	9.82	348	17.53	0	0.0	20.9	0.0	0.05	
	11/08/2011	5.73	100.6	10.10	367	17.69	0	0.0	20.9	0.0	0.14	
	11/16/2011	5.96	129.1	9.58	353	15.87	0	0.0	20.4	0.0	0.02	
	12/08/2011	4.02	150.8	6.97	370	16.93	-	-	-	-	-	
	01/11/2012	2.38	170.6	7.04	412	15.08	-	-	-	-	-	
	02/16/2012	1.71	-84.3	9.48	452	13.74	-	-	20.9	0.0	0.00	
	02/21/2012	0.55	-125.2	9.32	468	13.81	-	0	20.9	0	0.00	
	02/28/2012	10.92	-	12.70	3,584	13.12	-	0.00	20.9	0.2	0.00	
	03/05/2012	1.66	-105.4	9.35	460	13.68	-	0.0	20.9	0.0	0.20	
	03/23/2012	1.85	69.7	9.52	469	13.94	-	0.0	20.3	1.0	0.0	
	03/28/2012	1.51	37.6	-	469	13.88	-	0.0	20.9	0.0	0.10	
	04/03/2012	-	-	-	-	-	-	-	0.00	20.9	0.5	0.00
	04/04/2012	0.25	-160.7	7.27	467	15.56	-	-	-	-	-	
	04/11/2012	1.67	53.9	9.88	989	13.49	-	0.0	20.9	0.0	0	
	04/26/2012	9.83	136.9	9.83	493	12.58	-	0	20.9	0.0	0.14	
	04/30/2012	1.38	132.4	9.71	493	13.56	-	0	20.9	1.4	0.00	
	05/07/2012	1.08	55.1	9.63	474	15.88	-	0.00	20.9	0.0	0.00	
	05/15/2012	1.13	-18.0	9.67	479	15.87	-	0.0	20.9	0.0	0.14	
	05/21/2012	1.44	39.7	8.86	478	15.94	-	0.0	20.9	0.1	0.22	
	05/24/2012	2.22	-	-	575	15.60	-	-	-	-	-	
	05/29/2012	1.85	87.2	8.55	463	16.04	-	0.0	20.4	2.2	0.00	
	06/04/2012	2.29	116.2	8.97	434	15.85	-	0.0	20.9	0.0	0.00	
	06/14/2012	-	-	-	-	-	-	0.0	20.9	0.4	0	
	06/15/2012	0.69	142.3	8.64	465	16.28	-	-	-	-	-	
	06/18/2012	5.02	110.6	9.32	460	15.43	-	0	20.9	1.0	0.08	
	06/28/2012	2.32	108.6	9.13	465	15.67	-	0.0	-	-	0.62	
	07/06/2012	1.06	85.3	9.16	476	15.40	-	-	20.9	1.2	-	
	07/09/2012	2.41	118.6	9.20	476	15.76	-	0.0	20.9	0.3	0.20	
	07/18/2012	3.32	98.4	8.61	671	15.88	-	0	20.9	1.2	-0.22	
	07/23/2012	0.47	135.0	8.76	672	14.71	-	0	20.9	3.2	0.16	
	08/09/2012	0.67	-95.1	7.66	890	21.45	-	-	-	-	-	
09/05/2012	1.03	-177.1	9.17	672	15.27	-	-	-	-	-		
10/08/2012	0.46	-180.4	7.93	803	16.46	-	-	-	-	-		
01/17/2013	0.40	-188.1	8.19	607	14.98	-	-	-	-	-		
04/25/2013	2.88	238.8	6.96	444	16.55	-	-	-	-	-		
07/25/2013	6.59	306.6	6.64	585	-	-	-	-	-	-		
10/23/2013	5.78	130.4	7.88	606	15.43	-	-	-	-	-		
MW-18S (70) {2} [45-70]	11/30/2010	11.3	-65.2	11.1	-	15.3	-	-	-	12.4	-	
	12/01/2010	11.75	-91.3	12.02	64	11.97	-	-	-	3.5	-	
	03/10/2011	7.03	-100.4	12.99	7,076	14.93	-	-	-	-	-	
	05/10/2011	2.83	101.9	13.21	7,285	22.53	-	-	-	-	-	
	07/13/2011	1.58	300.6	9.02	6,920	22.04	-	-	-	-	-	
	09/14/2011	9.09	73.6	12.50	5,817	-	0	0.0	13.6	0.3	0.00	
	09/20/2011	6.63	-32.8	12.58	5,276	16.12	0	0.0	14.6	180	0.10	
	09/21/2011	-	-	-	-	-	0	0.0	-	56.2	-	
	09/23/2011	5.65	-13.5	12.70	5,252	16.37	0	0.0	17.8	81.5	0.20	
	09/27/2011	10.42	-39.13	12.43	464	16.12	0	0.0	-	0.5	0.00	
	10/04/2011	8.65	-71.9	12.82	5,027	16.06	0	0.0	23.1	17.9	0.00	
	10/14/2011	9.08	41.5	12.87	5,964	17.92	0	0.0	23.3	21.5	0.12	
	10/18/2011	11.97	10.5	12.87	4,105	17.93	0	0.0	26.4	32.4	0.40	
	10/27/2011	13.45	37.6	12.40	1,626	17.88	0	0.0	21.2	0.0	0.00	
11/02/2011	14.41	27.6	12.84	3,201	17.48	0	0.0	20.9	0.0	0.00		
11/08/2011	16.99	9.4	12.71	3,121	17.58	0	0.0	20.9	1.0	0.62		

Table 5

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11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Dissolved Oxygen (mg/L)	ORP (mV)	Well pH	Specific Conductance (umhos/cm)	Well Temperature (Celsius) (C)	LEL (Head Space) (%)	Ozone (Head Space) (ppm)	Percent Oxygen (Head Space) (%)	Photoionizing Detector Reading (ppm)	Well Pressure / Vacuum (Head Space) (Inches of water)
MW-18S (cont.)	11/16/2011	19.91	29.6	12.76	3,727	15.74	0	0.0	24.7	3.46	0.00
	12/08/2011	7.61	76.6	12.94	4,079	17.62	-	-	-	-	-
	01/12/2012	7.31	-115.0	12.39	5,138	15.03	-	-	-	-	-
	02/16/2012	5.11	-41.3	12.66	3,534	13.13	-	-	20.9	0.0	0.00
	02/21/2012	7.40	-37.7	12.64	3,432	13.25	-	0	20.9	0	0.06
	02/28/2012	1.51	-	9.63	463	13.78	-	0.00	20.9	0.0	0.06
	03/05/2012	6.03	-67.6	12.90	5,331	13.13	-	0.0	20.9	0.4	0.00
	03/23/2012	13.03	38.6	11.85	1,565	13.89	-	0.0	20.9	1.9	0.30
	03/28/2012	12.10	29.6	-	1,885	13.70	-	0.0	21.3	1.1	0.12
	04/03/2012	7.92	19.2	12.53	3,009	13.76	-	0.00	21.9	0.9	0.00
	04/11/2012	5.88	-25.9	12.47	1,977	13.59	-	0.0	21.7	0.0	0
	04/26/2012	6.11	60.0	12.64	3,499	13.50	-	0	22.5	0.1	0.00
	04/30/2012	5.79	76.8	12.34	2,697	13.33	-	0	22.1	1.4	0.10
	05/07/2012	6.42	-29.5	12.39	3,595	15.83	-	0.00	22.2	0.0	0.18
	05/15/2012	4.97	-26.9	12.35	5,764	15.78	-	0.0	22.4	0.2	0.20
	05/21/2012	4.29	-78.3	12.43	2,656	15.81	-	0.0	21.8	0.6	0.10
	05/24/2012	11.80	-	-	3,285	15.77	-	-	-	-	-
	05/29/2012	9.80	-43.4	12.50	3,692	16.66	-	0.0	22.8	3.7	0.20
	06/04/2012	15.24	-12.5	12.14	2,451	15.79	-	0.0	21.3	0.0	0.10
	06/14/2012	-	-	-	-	-	-	0.0	20.9	0.8	0
	06/15/2012	19.11	-45.4	12.32	2,011	16.01	-	-	-	-	-
	06/18/2012	17.92	-30.7	12.01	1,859	15.72	-	0	30.0+	1.6	0.12
	06/28/2012	18.23	-47.7	11.88	1,703	16.54	-	0.0	-	-	0.10
	07/06/2012	15.19	-78.7	12.58	3,519	15.86	-	-	21.8	1.4	-
	07/09/2012	16.24	-16.7	12.17	1,801	16.21	-	0.0	21.4	0.9	0.14
	07/17/2012	13.78	45.8	11.78	1,697	17.44	-	-	-	-	-
	07/18/2012	-	-	-	-	-	-	0	20.9	0.6	0.24
	07/23/2012	8.31	-24.8	12.17	1,631	16.53	-	0	20.9	10.4	0.26
	08/09/2012	11.30	66.1	10.94	3,463	18.04	-	-	-	-	-
	09/05/2012	11.16	-48.9	12.71	6,117	15.56	-	-	-	-	-
10/08/2012	9.45	-104.7	12.54	7,086	16.24	-	-	-	-	-	
01/17/2013	9.58	-67.0	12.48	3,450	14.48	-	-	-	-	-	
04/25/2013	10.77	134.6	11.69	1,762	16.32	-	-	-	-	-	
07/25/2013	9.47	-108.1	12.62	5,727	15.29	-	-	-	-	-	
10/23/2013	8.94	-146.6	12.55	7,530	15.84	-	-	-	-	-	
SV-1	10/04/2011	-	-	-	-	-	0	0.00	30.0+	42.8	0.00
	10/14/2011	-	-	-	-	-	0	0.0	28.0	40.4	0.04
	10/18/2011	-	-	-	-	-	0	0.00	30.0+	50.2	0.02
	10/27/2011	-	-	-	-	-	0	0.00	20.8	0.0	0.00
	11/02/2011	-	-	-	-	-	0	0.00	28.6	17.2	0.00
	11/08/2011	-	-	-	-	-	0	0.00	22.5	18.7	0.00
	02/16/2012	-	-	-	-	-	-	-	21.8	0.0	0.00
	02/21/2012	-	-	-	-	-	-	0	25.7	0	0.00
	02/28/2012	-	-	-	-	-	-	-	21.7	0.0	-
	03/05/2012	-	-	-	-	-	-	0.0	26.9	2.0	0.00
	03/28/2012	-	-	-	-	-	-	-	26.7	5.1	0.00
	04/03/2012	-	-	-	-	-	-	0.12	26.6	4.8	0.00
	04/26/2012	-	-	-	-	-	-	0	22.9	0.0	0.00
	05/07/2012	-	-	-	-	-	-	0.00	30.0+	2.4	0.00
	05/21/2012	-	-	-	-	-	-	0.0	30.0+	3.3	0.00
06/04/2012	-	-	-	-	-	-	0.0	30.0+	0.8	0.04	
06/18/2012	-	-	-	-	-	-	0	30.0+	0.7	0	
07/18/2012	-	-	-	-	-	-	0	-	0.6	0	
SV-2	10/04/2011	-	-	-	-	-	0	0.00	22.0	0.0	0.00
	10/14/2011	-	-	-	-	-	0	0.0	30.0+	0.0	0.00

Table 5

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Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Dissolved Oxygen (mg/L)	ORP (mV)	Well pH	Specific Conductance (umhos/cm)	Well Temperature (Celsius) (C)	LEL (Head Space) (%)	Ozone (Head Space) (ppm)	Percent Oxygen (Head Space) (%)	Photoionizing Detector Reading (ppm)	Well Pressure / Vacuum (Head Space) (Inches of water)
SV-2 (cont.)	10/18/2011	-	-	-	-	-	0	0.00	30.0+	0.0	0.00
	10/27/2011	-	-	-	-	-	0	0.02	25.0	0.0	0.00
	11/02/2011	-	-	-	-	-	0	0.00	20.9	0.0	0.00
	11/08/2011	-	-	-	-	-	0	0.00	20.9	0.0	0.00
	02/16/2012	-	-	-	-	-	-	-	21.6	0.0	0.00
	02/21/2012	-	-	-	-	-	-	0	21.5	0	0.00
	02/28/2012	-	-	-	-	-	-	-	26.4	1.5	-
	03/05/2012	-	-	-	-	-	-	0.0	21.9	0.0	0.00
	03/28/2012	-	-	-	-	-	-	-	30.0	0.0	0.00
	04/03/2012	-	-	-	-	-	-	0.00	29.3	0.4	0.00
	04/26/2012	-	-	-	-	-	-	0	26.4	0.0	0.00
	05/07/2012	-	-	-	-	-	-	0.00	30.0+	0.0	0.00
	05/21/2012	-	-	-	-	-	-	0.0	30.0+	0.0	0.00
	06/04/2012	-	-	-	-	-	-	0.0	30.0+	0.2	0.00
	06/18/2012	-	-	-	-	-	-	0	-	0	0
07/18/2012	-	-	-	-	-	-	0	-	2.5	0	
TF-3	12/01/2010	-	-	-	-	-	-	-	-	111	-
TF-4	12/01/2010	-	-	-	-	-	-	-	-	145	-
TF-5	12/01/2010	-	-	-	-	-	-	-	-	0.0	-
	02/16/2012	-	-	-	-	-	-	-	20.5	0.0	0.00
TF-6	12/01/2010	-	-	-	-	-	-	-	-	0.0	-
	02/16/2012	-	-	-	-	-	-	-	20.4	0.0	0.00
TF-7	12/01/2010	-	-	-	-	-	-	-	-	245	-
	02/16/2012	-	-	-	-	-	-	-	20.3	0.0	0.00
TF-8	12/01/2010	-	-	-	-	-	-	-	-	0.0	-
	02/16/2012	-	-	-	-	-	-	-	20.2	0.0	0.00
VE-1	11/30/2010	-	-	-	-	-	-	-	-	0.6	-
	02/16/2012	-	-	-	-	-	-	-	20.9	0.0	0.00

(##) = Depth to bottom of well (ft)
 [##] = Length of the Screened Interval (ft)
 {##} = Well Diameter (in)
 °C = Degrees Celsius
 umhos/cm = Micromhos/Centimeter
 mg/L = Milligrams/Liter
 mV = Millivolts
 ppm = Parts per million

GVP SUPPLY WELL AND POET SYSTEM ANALYTICAL DATA SUMMARY

Carroll - Monrovia MD - Green Valley Citgo
 11791 Fingerboard Rd
 Monrovia, MD

Monitoring Well	Date	CARBON CHANGE	POET Totalizer (gal)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl methyl ether (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	Chromium (µg/L)	Chromium, Dissolved (µg/L)	Chromium (hexavalent) (µg/L)	Iron (µg/L)	Iron, Dissolved (µg/L)	Lead (µg/L)	Lead, Dissolved (µg/L)	Chemical Oxygen Demand (mg/L)	TOC (µg/L)	TDS (µg/L)	TSS (µg/L)	Well pH
GW Clean-up Standards*			NA	5	1,000	700	10,000	NA	20	0.65	NA	NA	NA	NA	47	47	100	100	NA	2,600	2,600	15	15	NA	NA	NA	NA	NA

- B3 = The prep blank associated with this sample had a result greater than the Method Reporting Limit (MRL). Data may be biased high.
- BTEX = Benzene, toluene, ethylbenzene, xylenes
- D1 = The Relevant Percent Difference (RPD) result exceeded the Quality Control (QC) control limits for the duplicate sample analyzed.
- EFF = Effluent sample location
- gal = Gallons
- GVP = Green Valley Plaza
- INF = Influent sample location
- L12 = The prep
- mg/L = Milligrams/Liter
- M1 =Matrix spike recovery was high; the associated blank spike recovery was acceptable.
- MID = Midfluent sample location
- MTBE = Methyl Tertiary Butyl Ether
- NR = Not recorded
- POET = Point of Entry Treatment
- POU = Point-of-use sample location
- QA = The RPD result exceeded the QC control limits for the duplicate sample analyzed.
- NA = Not Available or Not Analyzed for that specific compound
- TDS = Total Dissolved Solids
- TSS = Total Suspended Solids
- TOC = Total Organic Carbons
- TPH-DRO = Total Petroleum Hydrocarbons - Diesel Range Organics
- TPH-GRO = Total Petroleum Hydrocarbons - Gasoline Range Organics
- V8 = LCS value was outside the QC range. Data accepted based on acceptable check standard.



GVSC SUPPLY WELL ANALYTICAL DATA SUMMARY

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Top of Casing (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl methyl ether (µg/L)	tert-amyl alcohol (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	Tetrachloroethene (µg/L)	Tetrahydrofuran (µg/L)	Acetone (µg/L)	Chromium (µg/L)	Chromium, Dissolved (µg/L)	Chromium (hexavalent) (µg/L)	Lead (µg/L)	Lead, Dissolved (µg/L)
GW Clean-up Standards*			5	1,000	700	10,000	NA	20	0.65	NA	NA	NA	NA	NA	47	47	5	NA	550	100	100	NA	15	15
GVSC-FR731687	04/17/2007	-	<0.1	<0.1	<0.1	<0.3	<0.6	1.3	<0.2	<5.0	6.3	<0.1	<0.1	-	<27	<20	1.4	<2.0	<3.0	-	-	-	-	-
	07/18/2007	-	<0.1	<0.1	<0.1	<0.3	<0.6	0.6	<0.2	<5.0	3.6	<0.1	<0.1	-	<28	<20	1.2	<2.0	<3.0	-	-	-	-	-
	10/11/2007	-	<0.1	<0.1	<0.1	<0.3	<0.6	0.5	<0.2	<5.0	3.9	<0.1	<0.1	-	<28	<20	1.3	<2.0	<3.0	-	-	-	-	-
	01/24/2008	-	<0.1	<0.1	<0.1	<0.3	<0.6	0.5	<0.2	<5.0	1.2	<0.1	<0.1	-	<28	<20	0.9	2.8	<3.0	-	-	-	-	-
	04/17/2008	-	<0.1	<0.1	<0.1	<0.3	<0.6	0.5	<0.2	<5.0	4.8	<0.1	<0.1	-	<29	<20	1.3	<2.0	<3.0	-	-	-	-	-
	07/17/2008	-	<0.1	<0.1	<0.1	<0.3	<0.6	7.2	<0.2	<5.0	10	<0.1	<0.1	-	39	23	1	<2.0	<3.0	-	-	-	-	-
	10/16/2008	-	<0.1	<0.1	<0.1	<0.3	<0.6	0.6	<0.2	<5.0	3	<0.1	<0.1	-	37	<20	1	9.2	3.1	-	-	-	-	-
	01/15/2009	-	<0.500	<0.500	<0.500	<0.500	<2.000	<0.500	<0.500	<2.50	1.03	<0.500	<0.500	<2.50	<300	35.2	<0.500	-	-	-	-	-	-	-
	04/10/2009	-	<0.500	<0.500	<0.500	<0.500	<2.000	1.37	<0.500	<2.50	1.19	<0.500	<0.500	<2.50	<300	<100	<0.500	-	-	-	-	-	-	-
	07/16/2009	-	<0.500	<0.500	<0.500	<0.500	<2.000	0.96	<0.500	<2.50	<0.500	<0.500	<0.500	<2.50	<300	<100	<0.500	-	-	-	-	-	-	-
	10/08/2009	-	<0.500	<0.500	<0.500	<0.500	<2.000	1.09	<0.500	<2.50	5.06	<0.500	<0.500	<2.50	60.8	49.5	0.63	-	-	-	-	-	-	-
	12/04/2009	-	<0.500	<0.500	<0.500	<0.500	<2.000	0.51	<0.500	<2.50	5.74	<0.500	<0.500	<2.50	<315	<100	0.82	-	-	-	-	-	-	-
	01/14/2010	-	<0.500	<0.500	<0.500	<0.500	<2.000	<0.500	<0.500	<2.50	5.9	<0.500	<0.500	<2.50	<300	<100	1.11	-	-	-	-	-	-	-
	04/15/2010	-	<0.500	<0.500	<0.500	<0.500	<2.000	<0.500	<0.500	<2.50	3.7	<0.500	<0.500	<2.50	<300	<100	0.99	-	-	-	-	-	-	-
	07/22/2010	-	<0.500	<0.500	<0.500	<0.500	<2.000	<0.500	<0.500	<2.50	1.67	<0.500	<0.500	<2.50	<300	<100	0.89	-	-	-	-	-	-	-
	10/26/2010	-	<0.5	<0.5	<0.5	<1	∅	<0.5	<0.5	<2.5	1.81	<0.5	<0.5	-	-	<100	0.99 V4	-	-	-	-	-	-	-
	01/10/2011	-	<0.5	<0.5	<0.5	<1	∅	<0.5	<0.5	<2.5	1.5	<0.5	<0.5	-	-	-	1.1	-	-	-	-	-	-	-
	04/04/2011	-	<0.5	<0.5	<0.5	<1	∅	<0.5	<0.5	<2.5	1.84	<0.5	<0.5	-	-	-	0.83	-	-	-	-	-	-	-
	07/13/2011	-	<0.5	<0.5	<0.5	<1	∅	<0.5	<0.5	<2.5	1.57	<0.5	<0.5	<2.5	-	-	1.49	-	-	-	-	-	-	-
	10/20/2011	-	<0.5	<0.5	<0.5	<1	∅	<0.5	<0.5	<2.5	1.33	<0.5	<0.5	<2.5	-	-	1.29	-	-	-	-	-	-	-
	01/12/2012	-	<0.5	<0.5	<0.5	<1	∅	<0.5	<0.5	<2.5	0.81	<0.5	<0.5	<2.5	-	-	0.94	-	-	-	-	-	-	-
	04/17/2012	-	<0.5	<0.5	<0.5	<1	∅	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<2.5	-	-	0.78	-	-	-	-	-	-	-
07/18/2012	-	<0.5	<0.5	<0.5	<1	∅	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<2.5	-	-	0.62 VH	-	-	-	-	-	-	-	
08/21/2012	-	<0.5	<0.5	<0.5	<1	∅	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<2.5	-	-	1.48	-	-	4.4	3.6	<0.020	20.6	20.1	
10/18/2012	-	<0.5	<0.5	<0.5	<1	∅	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<2.5	-	-	0.89	-	-	-	-	-	-	-	
01/17/2013	-	<0.5	<0.5	<0.5	<1	∅	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<2.5	-	-	1.43 VH	-	-	-	-	-	-	-	
04/24/2013	-	<0.5	<0.5	<0.5	<1	∅	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<2.5	-	-	1.41	-	-	-	-	-	-	-	
07/23/2013	-	<0.5	<0.5	<0.5	<1	∅	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<2.5	-	-	1.2 BB	-	-	-	-	-	-	-	
10/18/2013	-	<0.500	<0.500	<0.500	<1.00	<2.50	<0.500	<0.500	<2.50	<0.500	<0.500	<0.500	<2.50	-	-	1.17	-	-	-	-	-	-	-	
GVSC-FR731687 (DUP)	08/21/2012	-	<0.5	<0.5	<0.5	<1	∅	<0.5	<0.5	-	-	-	-	-	-	1.42	-	-	-	-	-	-	-	
	10/18/2012	-	<0.5	<0.5	<0.5	<1	∅	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<2.5	-	-	1.17	-	-	-	-	-	-	
GVSC-FR734918	04/05/2007	-	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.2	<5.0	<0.1	<0.1	<0.1	-	<28	<20	0.1	<2.0	<3.0	-	-	-	-	
	07/18/2007	-	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.2	<5.0	<0.1	<0.1	<0.1	-	<28	<20	<0.1	<2.0	<3.0	-	-	-	-	
	10/11/2007	-	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.2	<5.0	<0.1	<0.1	<0.1	-	<28	<20	<0.1	<2.0	<3.0	-	-	-	-	
	01/24/2008	-	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.2	<5.0	<0.1	<0.1	<0.1	-	<29	<20	0.1	<2.0	<3.0	-	-	-	-	

GVSC SUPPLY WELL ANALYTICAL DATA SUMMARY

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Top of Casing (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl methyl ether (µg/L)	tert-amyl alcohol (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	Tetrachloroethene (µg/L)	Tetrahydrofuran (µg/L)	Acetone (µg/L)	Chromium (µg/L)	Chromium, Dissolved (µg/L)	Chromium (hexavalent) (µg/L)	Lead (µg/L)	Lead, Dissolved (µg/L)	
GW Clean-up Standards*			5	1,000	700	10,000	NA	20	0.65	NA	NA	NA	NA	NA	47	47	5	NA	550	100	100	NA	15	15	
GVSC-FR736674 (cont.)	04/15/2010	-	<0.500	<0.500	<0.500	<0.500	<2.000	<0.500	<0.500	<2.50	<0.500	<0.500	<0.500	<2.50	<300	<100	<0.500	-	-	-	-	-	-	-	-
	07/22/2010	-	<0.500	<0.500	<0.500	<0.500	<2.000	<0.500	<0.500	<2.50	<0.500	<0.500	<0.500	<2.50	<300	<100	<0.500	-	-	-	-	-	-	-	-
	10/26/2010	-	<0.5	<0.5	<0.5	<1	∅	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	-	-	<100	<0.5	-	-	-	-	-	-	-	-
	01/10/2011	-	<0.5	<0.5	<0.5	<1	∅	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	-	-	-	<0.5	-	-	-	-	-	-	-	-
	04/04/2011	-	<0.5	<0.5	<0.5	<1	∅	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	-	-	-	<0.5	-	-	-	-	-	-	-	-
	07/13/2011	-	<0.5	<0.5	<0.5	<1	∅	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<2.5	-	-	<0.5	-	-	-	-	-	-	-	-
	10/20/2011	-	<0.5	<0.5	<0.5	<1	∅	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<2.5	-	-	<0.5	-	-	-	-	-	-	-	-
	01/12/2012	-	<0.5	<0.5	<0.5	<1	∅	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<2.5	-	-	<0.5	-	-	-	-	-	-	-	-
	04/17/2012	-	<0.5	<0.5	<0.5	<1	∅	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<2.5	-	-	<0.5	-	-	-	-	-	-	-	-
	07/18/2012	-	<0.5	<0.5	<0.5	<1	∅	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<2.5	-	-	<0.5	-	-	-	-	-	-	-	-
	08/21/2012	-	<0.5	<0.5	<0.5	<1	∅	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<2.5	-	-	<0.5	-	-	<1.0	<1.0	0.025	<1.0	<1.0	
	10/18/2012	-	<0.5	<0.5	<0.5	<1	∅	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<2.5	-	-	<0.5	-	-	-	-	-	-	-	-
	01/17/2013	-	<0.5	<0.5	<0.5	<1	∅	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<2.5	-	-	<0.5	-	-	-	-	-	-	-	-
	04/24/2013	-	<0.5	<0.5	<0.5	<1	∅	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<2.5	-	-	<0.5	-	-	-	-	-	-	-	-
	07/23/2013	-	<0.5	<0.5	<0.5	<1	∅	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<2.5	-	-	<0.5	-	-	-	-	-	-	-	-
10/18/2013	-	<0.500	<0.500	<0.500	<1.00	<2.50	<0.500	<0.500	<2.50	<0.500	<0.500	<0.500	<2.50	-	-	<0.500	-	-	-	-	-	-	-	-	

* GW Clean-up Standards are the Maryland Department of the Environment (MDE) Groundwater Clean-up Standards for Type I and II Aquifers, except for TPH-GRO and TPH-DRO, which are Residential Clean-up Standards for Groundwater.

<# = Less than the method detection limit of #

µg/L = Micrograms/Liter

BB = The method blank result was at or above the MRL (Method Reporting Limit), therefore sample results may be biased high.

GVSC = Green Valley Shopping Center

MTBE = Methyl Tertiary Butyl Ether

NA = Not Available or Not Analyzed for that specific compound

TPH-DRO = Total Petroleum Hydrocarbons - Diesel Range Organics

TPH-GRO = Total Petroleum Hydrocarbons - Gasoline Range Organics

V4 = Check standard was outside the Quality Control (QC) range. Data accepted based on acceptable Laboratory Control Sampling (LCS).

VH = LCS value was outside the QC range. Data accepted based on acceptable check standard.

RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1, 2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH	
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA	
3717-BLUE-INF	07/06/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.1	<0.2	<0.1	<0.3	<2.0	-	
3719-BLUE-INF	07/06/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	3.9	<0.1	0.7	0.1	<0.2	<0.1	<0.3	<2.0	-	
3723-BLUE-INF	07/02/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.3	<0.2	<0.1	<0.3	<2.0	-	
3724-BLUE-INF	05/29/2007	<0.1	<0.1	<0.1	<0.2	<0.5	0.1	-	<0.2	<5.0	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-	-	-	
3725-BLUE-INF	07/02/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.3	<0.2	<0.1	<0.3	<2.0	-	
3726-BLUE-INF	05/24/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.1	<0.2	<0.1	<0.3	<2.0	-	
3727-BLUE-INF	07/02/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.5	0.2	<0.1	<0.3	<2.0	-	
3729-BLUE-INF	05/23/2007	<0.1	0.2	<0.1	<0.3	0.2	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	1.6	<0.2	<0.1	<0.3	<2.0	-	
3731-BLUE-INF	07/02/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.4	<0.2	<0.1	<0.3	<2.0	-	
3732-BLUE-INF	07/02/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
3733-BLUE-INF	07/02/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.2	<0.2	<0.1	<0.3	<2.0	-	
3734-BLUE-INF	05/01/2007	<0.1	<0.1	<0.1	<0.2	<0.5	0.1	-	<0.2	<5	<0.1	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	
3737-BLUE-INF	05/21/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.6	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	10/11/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.7	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	11/14/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.9	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	12/19/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.7	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	01/24/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.5	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	03/12/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.6	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	04/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.4	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	07/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.7	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	10/15/2008	<0.1	<0.1	<0.1	<0.3	<0.6	1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.1	<0.2	<0.1	<0.3	<2.0	-	
	01/14/2009	<0.50	<0.500	<0.50	<0.500	<2.00	0.68	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	04/08/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-
07/16/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-	
10/07/2009	<0.50	<0.500	<0.50	<0.500	<2.00	0.66	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-	

RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
 11791 Fingerboard Rd
 Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1, 2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA
3739-BLUE-INF (cont.)	04/05/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/14/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	10/18/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/13/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/18/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/16/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	10/17/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	7.0
	01/16/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/23/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/23/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
10/17/2013	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-	
3739-BLUE-POU	08/14/2012	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
3740-BLUE-INF	04/26/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.6	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.7	<0.2	<0.1	<0.3	<2.0	-
	10/12/2007	<0.1	1.9	<0.1	<0.3	1.9	0.5	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.7	<0.2	<0.1	<0.3	<2.0	-
	11/14/2007	<0.1	0.3	<0.1	<0.3	0.3	0.5	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.7	<0.2	<0.1	<0.3	<2.0	-
	12/19/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.4	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.7	<0.2	<0.1	<0.3	<2.0	-
	01/23/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.5	<0.2	<0.1	<0.3	<2.0	-
	02/13/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.6	<0.2	<0.1	<0.3	<2.0	-
	03/12/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.5	<0.2	<0.1	<0.3	<2.0	-
	04/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.4	<0.2	<0.1	<0.3	<2.0	-
	07/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.5	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.5	<0.2	<0.1	<0.3	<2.0	-
	10/15/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.4	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.7	<0.2	<0.1	<0.3	<2.0	-
	04/08/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/16/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	10/09/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/13/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	04/16/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/21/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	10/25/2010	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/10/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/05/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/14/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
10/19/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	
01/12/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	
04/18/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	
07/16/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	



Table 8

RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1, 2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA
3740-BLUE-INF (cont.)	08/21/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	10/17/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	5.6
	01/16/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/23/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/23/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	10/17/2013	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
3740-BLUE-POU	08/21/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
3815-GRNR-INF	07/06/2007	<0.1	<0.1	<0.1	<0.3	<0.6	1.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
3816-GRNR-INF	07/06/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.2	<0.2	<0.1	<0.3	<2.0	-
3817-GRNR-INF	07/02/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
3818-GRNR-INF	05/07/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.3	<0.2	<0.1	<0.3	<2.0	-
3819-GRNR-INF	05/31/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	1.4	<0.2	<0.1	0.4	<2.0	-
3820-GRNR-INF	05/09/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.7	<0.2	<0.1	<0.3	<2.0	-
3821-GRNR-INF	05/31/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
3822-GRNR-INF	05/07/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.2	<0.2	<0.1	<0.3	<2.0	-
3823-GRNR-INF	05/09/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.2	<0.2	<0.1	<0.3	<2.0	-
3825-GRNR-INF	05/09/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.1	<0.2	<0.1	<0.3	<2.0	-
3826-GRNR-INF	05/07/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.2	<0.2	<0.1	<0.3	<2.0	-
3828-GRNR-INF	04/24/2007	<0.1	<0.1	<0.1	<0.2	<0.5	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.2	<0.2	<0.1	<0.3	-	-
3829-GRNR-INF	04/24/2007	<0.1	<0.1	<0.1	<0.2	<0.5	0.2	-	<0.2	<5	<0.1	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-
	10/11/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	11/14/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	03/12/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	04/15/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-

RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1,2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA
3829-GRNR-INF (cont.)	10/09/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	04/14/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	10/26/2010	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	02/08/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/04/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	08/19/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	10/19/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/11/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/17/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/17/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	10/18/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/16/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/24/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
07/24/2013	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-	
10/17/2013	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-	
3829-GRNR-POU	08/14/2012	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
3830-GRNR-INF	04/26/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.8	<0.2	<0.1	<0.3	<2.0	-
3831-GRNR-INF	10/09/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.4	<0.2	<0.1	<0.3	<2.0	-
3832-GRNR-INF	04/24/2007	<0.1	<0.1	<0.1	<0.2	<0.5	0.4	-	<0.2	<5	<0.1	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-
3833-GRNR-INF	04/26/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	07/27/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	10/08/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	11/13/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	01/23/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	03/12/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	10/15/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.4	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.1	<0.2	<0.1	<0.3	<2.0	-
	01/15/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	04/08/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/16/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	10/08/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/14/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	04/16/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/20/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-

Table 8

RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1,2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA
3833-GRNR-INF (cont.)	10/28/2010	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/12/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/05/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/12/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/12/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	05/21/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	08/21/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	12/13/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
3833-GRNR-POU	08/21/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
3834-GRNR-INF	04/16/2007	<0.1	<0.1	<0.1	<0.2	<0.5	0.1 J	-	<0.2	<5	<0.1	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-
3835-GRNR-INF	04/16/2007	<0.1	<0.1	<0.1	<0.3	<0.6	1.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	07/27/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.6	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	5.9	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	10/08/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.9	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	11/14/2007	<0.1	<0.1	<0.1	<0.3	<0.6	1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	12/20/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.8	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	04/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.8	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	08/12/2009	<0.50	<0.500	<0.50	<0.500	<2.00	0.81	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	10/09/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/13/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/21/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	11/23/2010	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/11/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/05/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/14/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	10/19/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/13/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/17/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/16/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	08/21/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	10/17/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/25/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/23/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
09/03/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	
10/17/2013	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-	

RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1,2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH	
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA	
3835-GRNR-POU	08/21/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	
3836-GRNR-INF	04/16/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.4	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	11/25/2009	<2.00	<2.00	<2.00	<4.00	<10.0	<2.00	<2.00	<2.00	<10.0	<2.00	<2.00	<10.0	<2.00	-	-	<2.00	<2.00	<2.00	<2.00	<2.00	<10.0	-	-	
	10/17/2012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.7	
3837-GRNR-INF	04/16/2007	<0.1	<0.1	<0.1	<0.3	<0.6	1.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	07/27/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.5	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	3.1	-	
	10/09/2007	<0.1	<0.1	<0.1	<0.3	<0.6	1.5	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	11/14/2007	<0.1	<0.1	<0.1	<0.3	<0.6	1.4	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	12/20/2007	<0.1	<0.1	<0.1	<0.3	<0.6	1.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	01/24/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.9	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	03/12/2008	<0.1	<0.1	<0.1	<0.3	<0.6	1.6	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	0.6	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	04/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	1.6	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	07/17/2008	<0.1	<0.1	<0.1	<0.3	<0.6	1.8	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.1	<0.2	<0.1	<0.3	<2.0	-	
	10/15/2008	<0.1	<0.1	<0.1	<0.3	<0.6	2.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	1.3	0.2	<0.2	<0.1	<0.3	<2.0	-	
	01/14/2009	<0.50	<0.500	<0.50	<0.500	<2.00	1.39	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	04/08/2009	<0.50	<0.500	<0.50	<0.500	<2.00	1.31	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	10/23/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/14/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	04/16/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/22/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	10/25/2010	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/11/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/05/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/13/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	10/19/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/11/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/17/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	-
07/16/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	-	
10/17/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	5.8	
01/17/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	-	
05/23/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	-	
07/23/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	-	
10/18/2013	<0.50	<0.500	<0.50	<1.00	<3	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-	
3837-GRNR-POU	08/14/2012	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-	

RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1, 2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA
3840-GRNR-INF	04/17/2007	<0.1	<0.1	<0.1	<0.2	<0.5	0.2 J	-	<0.2	<5	<0.1	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-
3904-ROSE-INF	07/02/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	4.1	<0.1	<0.4	<0.1	0.3	<0.1	<0.3	<2.0	-
3905-ROSE-INF	06/08/2007	<0.1	0.1	<0.1	<0.3	0.1	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	3.6	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
3906-ROSE-INF	07/02/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	6.4	<0.1	<0.1	-	<0.1	<2.0	4.4	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
3907-ROSE-INF	05/30/2007	<0.1	0.3	<0.1	<0.3	0.3	0.4	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	3.1	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
3908-ROSE-INF	05/23/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	0.5	<0.1	<0.2	<0.1	<0.3	<2.0	-
3909-ROSE-INF	05/23/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.4	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
3913-CHCR-INF	07/06/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
3913-ROSE-INF	06/08/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
3914-ROSE-INF	07/02/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	3.2	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
3915-CHCR-INF	06/18/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.1	<0.2	<0.1	<0.3	<2.0	-
3916-ROSE-INF	06/13/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
3918-ROSE-INF	04/17/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.4	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
3919-CHCR-INF	05/24/2007	<0.1	0.2	<0.1	<0.3	0.2	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
3923-ROSE-INF (DUP)	01/10/2011	<0.50	<0.500	<0.50	<1.00	<2.50	686	-	<0.50	94.7	4.88	<0.500	-	6.34	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/13/2011	<0.5	<0.5	<0.5	<1	<3	11	-	<0.5	<2.5	2.52	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/12/2012	<0.5	<0.5	<0.5	<1	<3	0.95	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/16/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
3923-ROSE-INF	04/06/2007	<0.1	<0.1	<0.1	<0.3	<0.6	170	<0.1	<0.2	<5.0	1.5	<0.1	-	4.9	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	05/21/2007	<0.1	<0.1	<0.1	<0.2	<0.5	4.2	-	<0.2	<5	1.3	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-
	06/13/2007	<0.1	<0.1	<0.1	<0.3	<0.6	76	<0.1	<0.2	<5.0	2.5	<0.1	-	0.5	<2.0	3.4	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	07/18/2007	<2.0	<2.0	<2.0	<6.0	<12.0	1,100	<2.0	<4.0	360	5.7	<2.0	-	27	<40	<60	<2.0	<8.0	<2.0	4.4	<2.0	<6.0	<40	-

RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1, 2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA
3923-ROSE-INF	08/08/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	4.2	<0.1	1.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
(cont.)	09/26/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	13	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	4.5	<0.1	<0.2	<0.1	<0.3	<3.3	-
	10/10/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	31	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	11/14/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	100	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	12/19/2007	<2.5	<2.5	<2.5	<7.5	<15.0	2,600	<2.5	<5.0	1,200	12	<2.5	-	68	<50	<75	<2.5	<10	<2.5	8	<2.5	<7.5	<50	-
	01/23/2008	<2.0	<2.0	<2.0	<6.0	<12.0	2,200	<2.0	<4.0	930	10	<2.0	-	71	<40	<60	<2.0	<8.0	<2.0	4.0	<2.0	<6.0	<40	-
	02/13/2008	<1.0	<1.0	<1.0	<3.0	<6.0	1,300	<1.0	<2.0	520	6.8	<1.0	-	45	<20	<30	<1.0	<4.0	<1.0	<2.0	<1.0	<3.0	<20	-
	03/12/2008	<1.0	<1.0	<1.0	<3.0	<6.0	1,200	<1.0	<2.0	400	5.8	<1.0	-	33	<20	<30	<1.0	<4.0	<1.0	4.7	<1.0	<3.0	<20	-
	04/17/2008	<0.1	<0.1	<0.1	<0.3	<0.6	54	<0.1	<0.2	5.1	1	<0.1	-	0.6	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	05/05/2008	<0.1	<0.1	<0.1	<0.3	<0.6	6.5	<0.1	<0.2	<5.0	0.2	<0.1	-	0.1	<2.0	<10	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	06/18/2008	<0.1	<0.1	<0.1	<0.3	<0.6	7.3	<0.1	<0.2	<5.0	0.5	<0.1	-	<0.1	<2.0	4.3	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	07/16/2008	<0.5	<0.5	<0.5	<1.5	<3.0	320	<0.5	<1.0	32	3.2	<0.5	-	4	<10	<15	<0.5	<2.0	<0.5	<1.0	<0.5	<1.5	<10	-
	08/20/2008	<0.5	<0.5	<0.5	<1.5	<3.0	610	<0.5	<1.0	160	3.9	<0.5	-	16	<10	<15	<0.5	<2.0	<0.5	<1.0	<0.5	<1.5	<10	-
	09/17/2008	<0.5	<0.5	<0.5	<1.5	<3.0	1,000	<0.5	<1.0	420	6.8	<0.5	-	31	<10	<15	<0.5	<2.0	<0.5	<1.0	<0.5	<1.5	<10	-
	10/15/2008	<0.5	<0.5	<0.5	<1.5	<3.0	810	<0.5	<1.0	250	5.4	<0.5	-	24	<10	<15	<0.5	<2.0	<0.5	<1.0	<0.5	4.9	<10	-
	11/19/2008	1	<0.5	<0.5	<1.5	1	2,200	<0.5	<1.0	1,100	15	<0.5	-	65	<10	<15	<0.5	<2.0	<0.5	<1.0	<0.5	<1.5	<10	-
	12/10/2008	<2.0	<2.0	<2.0	<6.0	<12.0	2,300	<2.0	<4.0	1,100	13	<2.0	-	62	<40	<60	<2.0	<8.0	<2.0	<4.0	<2.0	<6.0	<40	-
	12/29/2008	<0.50	<0.500	<0.50	<0.500	<2.00	613	-	99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/14/2009	<0.50	<0.500	<0.50	<0.500	<2.00	642	-	<0.50	121	4.41	<0.500	10.4	10.9	-	-	-	-	-	-	-	<0.50	<0.5	-
	01/30/2009	<0.50	<0.500	<0.50	<0.500	<2.00	631	-	-	149	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	02/11/2009	<0.50	<0.500	<0.50	<0.500	<2.00	503	-	<0.50	55.3	4.39	<0.500	<2.50	8.11	-	-	-	-	-	-	-	<0.50	<0.5	-
	03/18/2009	<0.50	<0.500	<0.50	<0.500	<2.00	1,480	-	<0.50	806	12.8	<0.500	66.8	38.1	-	-	-	-	-	-	-	<0.50	<0.5	-
	04/08/2009	<0.50	<0.500	<0.50	<0.500	<2.00	2,600	-	<0.50	1,190	10.7	<0.500	48.5	40.2	-	-	-	-	-	-	-	<0.50	<0.5	-
	07/15/2009	<0.50	<0.500	<0.50	<0.500	<2.00	48	-	<0.50	16.6	2	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-
	10/07/2009	<0.50	<0.500	<0.50	<0.500	<2.00	1,160	-	<0.50	230	7.44	<0.500	23.3	18.2	-	-	-	-	-	-	-	<0.50	<0.5	-
	01/13/2010	<0.50	<0.500	<0.50	<0.500	<2.00	6.52	-	<0.50	<2.50	0.98	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-
	04/14/2010	<0.50	<0.500	<0.50	<0.500	<2.00	2.24	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-
	07/21/2010	<0.50	<0.500	<0.50	<0.500	<2.00	12.4	-	<0.50	<2.50	2.44	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-
	10/26/2010	<0.5	<0.5	<0.5	<1	<3	14.9	-	<0.5	<2.5	2.73	<0.5	-	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-
	01/10/2011	<0.5	<0.5	<0.5	<1	<3	609	-	<0.5	101	6.68	<0.5	-	8.5	-	-	-	-	-	-	-	<0.5	<0.5	-
	04/05/2011	<0.5	<0.5	<0.5	<1	<3	87.1	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-
	07/13/2011	<0.5	<0.5	<0.5	<1	<3	11.3	-	<0.5	<2.5	2.57	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-
	08/19/2011	<0.5	<0.5	<0.5	<1	<3	20.2	-	<0.5	<2.5	3.3	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-
	09/30/2011	<0.5	<0.5	<0.5	<1	<3	2.81	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-
	10/18/2011	<0.5	<0.5	<0.5	<1	<3	0.86	-	<0.5	<2.5	0.99	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-
	11/16/2011	<0.5	<0.5	<0.5	<1	<3	2.53 V8	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-
	12/08/2011	<0.5	<0.5	<0.5	<1	<3	1.91	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-



Table 8

RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1, 2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA
3923-ROSE-INF (cont.)	01/12/2012	<0.5	<0.5	<0.5	<1	<3	0.99	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/03/2012	<0.5	<0.5	<0.5	<1	<3	0.58	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	06/14/2012	<0.5	<0.5	<0.5	<1	<3	1.06	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/16/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	08/08/2012	<0.50	<0.500	<0.50	<1.00	<2.50	0.950	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	10/04/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	5.5
	01/17/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/23/2013	<0.5	<0.5	<0.5	<1	<3	1.44	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/24/2013	<0.50	<0.500	<0.50	<1.00	<2.50	1.12	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
10/18/2013	<0.50	<0.500	<0.50	<1.00	<2.50	0.510	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-	
3923-ROSE-POU	08/08/2012	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	10/04/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	5.9
	01/17/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/23/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
3927-ROSE-INF	04/06/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	0.1	<0.3	<2.0	-
3928-ROSE-INF	04/16/2007	<0.1	<0.1	<0.1	<0.2	<0.5	<0.1	-	<0.2	<5	<0.1	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-
3930-ROSE-INF	05/30/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
3931-ROSE-INF	05/07/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
3932-ROSE-INF	05/30/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
3933-ROSE-INF	05/24/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
3934-ROSE-INF	07/02/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
3936-ROSE-INF	07/06/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	0.5	<0.1	<0.2	<0.1	<0.3	<2.0	-
3937-ROSE-INF	06/08/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
3939-ROSE-INF	05/24/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	3.8	-
3978-RYEL-INF	05/23/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	0.2	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.1	<0.2	<0.1	<0.3	<2.0	-
	10/09/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	0.2	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.2	<0.2	<0.1	<0.3	7.4	-

RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
 11791 Fingerboard Rd
 Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1, 2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH	
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA	
3978-RYEL-INF (cont.)	01/24/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.1	<0.2	<0.1	<0.3	<2.0	-	
	04/16/2008	<0.1	0.2	<0.1	<0.3	0.2	0.2	<0.1	<0.2	<5.0	0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.1	<0.2	<0.1	<0.3	<2.0	-	
	07/16/2008	<0.1	0.3	<0.1	<0.3	0.3	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.2	<0.2	<0.1	<0.3	<2.0	-	
	10/17/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
3979-FARM-INF	05/03/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	10/11/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	11/14/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	12/19/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	01/24/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	02/13/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	03/12/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	04/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	10/15/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	01/15/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/16/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/13/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/27/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/11/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/12/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/11/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/16/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	-
01/16/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	-	
07/24/2013	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-	
3979-FARM-POU	08/15/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	
3979-RYEL-INF	05/21/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
3980-RYEL-INF	07/06/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	1	<0.2	<0.1	<0.3	<2.0	-	
	04/17/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.8	<0.2	<0.1	<0.3	<2.0	-	
	07/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	1	<0.2	<0.1	<0.3	<2.0	-	
3981-FARM-INF	06/18/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	10/09/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	07/17/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	10/15/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	



RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
 11791 Fingerboard Rd
 Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1, 2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA
3981-FARM-INF (cont.)	01/15/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/17/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/13/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/19/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/17/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/14/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/12/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/16/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/16/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
08/15/2013	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-	
3981-FARM-POU	08/14/2012	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
3981-RYEL-INF	05/21/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.2	<0.2	<0.1	<0.3	<2.0	-
3982-RYEL-INF	05/31/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.4	<0.2	<0.1	<0.3	<2.0	-
	10/08/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.4	<0.2	<0.1	<0.3	<2.0	-
	01/24/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.3	<0.2	<0.1	<0.3	<2.0	-
	04/15/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.4	<0.2	<0.1	<0.3	<2.0	-
	10/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.4	<0.2	<0.1	<0.3	<2.0	-
	07/06/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
3983-FARM-INF	10/09/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.2	<0.2	<0.1	<0.3	<2.0	-
	11/13/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.1	<0.2	<0.1	<0.3	<2.0	-
	12/19/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.6	<0.2	<0.1	<0.3	<2.0	-
	01/23/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	02/13/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	04/16/2008	<0.1	0.4	<0.1	<0.3	0.4	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	0.2	<0.4	1	<0.2	<0.1	<0.3	<2.0	-
	10/15/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	01/15/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/16/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/13/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/21/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/04/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/14/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/11/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/16/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-



RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
 11791 Fingerboard Rd
 Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1, 2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA
3983-FARM-INF (cont.)	08/15/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/17/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/24/2013	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
3983-FARM-POU	08/15/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
3983-RYEL-INF	05/03/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	1.1	<0.2	<0.1	<0.3	<2.0	-
3984A-FARM-INF	10/10/2007	<0.1	0.2	<0.1	<0.3	0.2	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	04/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	07/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.2	<0.2	<0.1	<0.3	<2.0	-
	10/15/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	38	<3.0	<0.1	<0.4	0.1	<0.2	<0.1	<0.3	57	-
	01/14/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/15/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/14/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/19/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/10/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/12/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/12/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/17/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	08/21/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/16/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/23/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
3984A-FARM-POU	08/21/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
3984-FARM-INF	05/11/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	10/10/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	11/14/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	12/19/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	01/25/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	02/20/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	03/12/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	07/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	10/15/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	01/14/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/15/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-



RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
 11791 Fingerboard Rd
 Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1, 2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA
3984-FARM-INF (cont.)	01/14/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/19/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/10/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/12/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/12/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/17/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/16/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/23/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
3984-FARM-POU	08/21/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
3984-RYEL-INF	05/03/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.4	<0.2	<0.1	<0.3	<2.0	-
	10/09/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.4	<0.2	<0.1	<0.3	<2.0	-
	01/24/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.3	<0.2	<0.1	<0.3	<2.0	-
	10/17/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.4	<0.2	<0.1	<0.3	<2.0	-
3985-FARM-INF	05/07/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.1	<0.2	<0.1	<0.3	<2.0	-
	10/08/2007	<0.1	0.1	0.6	3.1	3.8	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	11/13/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	12/19/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	03/12/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.1	<0.2	<0.1	<0.3	<2.0	-
	04/18/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.1	<0.2	<0.1	<0.3	<2.0	-
	10/15/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.1	<0.2	<0.1	<0.3	<2.0	-
	01/15/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	04/08/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/16/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	10/08/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/13/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	04/14/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/20/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	10/27/2010	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/10/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/04/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/12/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	11/14/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/11/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/18/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-



RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
 11791 Fingerboard Rd
 Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1, 2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH	
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA	
3985-FARM-INF (cont.)	08/14/2012	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.50	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-	-
	10/17/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	6.0
	01/17/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	-
	04/25/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	-
	07/24/2013	<0.50	37.6	<0.50	<1.00	37.6	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-	-
	08/15/2013	<0.50	17.3	<0.50	<1.00	17.3	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-	-
	10/17/2013	<0.50	3.89	<0.50	<1.00	3.89	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-	-
3985-FARM-POU	08/14/2012	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-	-
3985-RYEL-INF	05/16/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.2	<0.2	<0.1	<0.3	<2.0	-	-
3986-RYEL-INF	05/07/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.5	<0.2	<0.1	<0.3	<2.0	-	-
	10/09/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	-
	01/25/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	-
	04/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	-
	07/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.2	<0.2	<0.1	<0.3	<2.0	-	-
	10/15/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	-
		10/15/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
3987-FARM-INF	05/07/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	79	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	63	-	-
	07/27/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	2.7	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	-
	10/09/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	4.8	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	2.8	-	-
	11/14/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	-
	01/25/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	-
	02/27/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	-
	03/12/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	-
	04/17/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	2.2	-	-
	10/17/2008	<0.1	0.3	<0.1	<0.3	0.3	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	330	19	0.7	<0.4	1.4	<0.2	<0.1	<0.3	370	-	-
	11/21/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	2,700	100	11	<0.1	0.1	<0.2	<0.1	<0.3	2,600	-	-
	04/10/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-	-
	10/09/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-	-
	01/15/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-	-
	04/16/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-	-
	07/23/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-	-
	10/26/2010	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	-
	01/10/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	-
	04/04/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	-
07/12/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	-	



Table 8

RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
 11791 Fingerboard Rd
 Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1, 2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA
3987-FARM-INF (cont.)	11/14/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/11/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/17/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/16/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	10/17/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	5.9
	01/17/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	05/23/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/23/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	10/18/2013	<0.50	<0.500	<0.50	<1.00	<2.5	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
3987-FARM-POU	08/14/2012	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
3987-RYEL-INF	05/09/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	1	<0.2	<0.1	<0.3	<2.0	-
3988-RYEL-INF	05/03/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	10/10/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	01/23/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	04/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	10/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
3989-FARM-INF (DUP)	03/19/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
3989-FARM-INF	05/07/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	07/27/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	10/12/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	11/19/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	12/19/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	01/23/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	02/20/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	03/12/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	04/18/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	01/30/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	04/10/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/16/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	10/08/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/14/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	04/14/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/27/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-



RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1, 2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA
3989-FARM-INF (cont.)	10/26/2010	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/17/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/05/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/14/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	11/16/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	03/19/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	06/15/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/17/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	08/23/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	10/17/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	5.8
	01/25/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	05/22/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
08/16/2013	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	<0.50	-	-	-	-	-	<0.50	<0.5	-	-	
11/26/2013	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	<0.50	-	-	-	-	-	<0.50	<0.5	-	-	
3989-FARM-POU	08/23/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
3989-RYEL-INF	06/18/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.5	<0.2	<0.1	<0.3	<2.0	-
3990-FARM-INF (DUP)	04/04/2011	<0.5	<0.5	<0.5	<1	<3	2,010	-	<0.5	326	7.73	<0.5	-	22.3	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/12/2011	<0.5	<0.5	<0.5	<1	<3	2,050	-	<0.5	1,920	8.09	<0.5	67 V8	25.8	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/18/2012	<0.5	<0.5	<0.5	<1	<3	622	-	<0.5	273	4.72	<0.5	19.1	9.95	-	-	-	-	-	-	<0.5	<0.5	-	-
3990-FARM-INF	05/01/2007	0.4	ND	ND	0.2	1	1,100	-	ND	590	6.2	ND	-	33	-	-	-	-	-	-	-	-	-	-
	05/16/2007	<0.3	<0.3	<0.3	<0.8	<1.7	770	<0.3	<0.5	440	4.5	<0.3	-	25	33	21	<0.3	<1.0	<0.3	1.4	<0.3	<0.8	35	-
	06/21/2007	<1.0	<1.0	<1.0	<3.0	<6.0	1,100	<1.0	<2.0	590	5.8	<1.0	-	33	<20	<30	<1.0	<4.0	<1.0	<2.0	<1.0	<3.0	<20	-
	07/18/2007	<2.0	<2.0	<2.0	<6.0	<12.0	1,500	<2.0	<4.0	720	5.7	<2.0	-	34	<40	<60	<2.0	<8.0	<2.0	4.9	<2.0	<6.0	<40	-
	08/08/2007	<1.0	<1.0	<1.0	<3.0	<6.0	1,300	<1.0	<2.0	500	5.8	<1.0	-	44	<20	44	<1.0	<4.0	<1.0	2.7	<1.0	<3.0	<20	-
	09/26/2007	<2.0	<2.0	<2.0	<6.0	<12.0	950	<2.0	<4.0	470	4.7	<2.0	-	24	<40	<60	<2.0	<8.0	<2.0	5.1	<2.0	<6.0	<40	-
	10/10/2007	<2.0	<2.0	<2.0	<6.0	<12.0	1,200	<2.0	<4.0	560	5.9	<2.0	-	33	<40	<60	<2.0	<8.0	<2.0	5.2	<2.0	<6.0	<40	-
	11/14/2007	<1.0	<1.0	<1.0	<3.0	<6.0	1,200	<1.0	<2.0	520	6.6	<1.0	-	36	<20	<30	<1.0	<4.0	<1.0	6.6	<1.0	<3.0	<20	-
	12/19/2007	<2.0	<2.0	<2.0	<6.0	<12.0	1,300	<2.0	<4.0	730	6.5	<2.0	-	37	<40	<60	<2.0	<8.0	<2.0	<4.0	<2.0	<6.0	<40	-
	01/23/2008	<1.0	<1.0	<1.0	<3.0	<6.0	1,400	<1.0	<2.0	530	5.4	<1.0	-	40	<20	<30	<1.0	<4.0	<1.0	<2.0	<1.0	<3.0	<20	-
	02/13/2008	<1.0	<1.0	<1.0	<3.0	<6.0	1,400	<1.0	<2.0	610	5.7	<1.0	-	42	<20	<30	<1.0	<4.0	<1.0	2.2	<1.0	<3.0	<20	-
	03/12/2008	<1.0	<1.0	<1.0	<3.0	<6.0	1,400	<1.0	<2.0	510	5.6	<1.0	-	38	<20	<30	<1.0	<4.0	<1.0	5.9	<1.0	<3.0	<20	-
	04/16/2008	<1.0	<1.0	<1.0	<3.0	<6.0	920	<1.0	<2.0	580	5.4	<1.0	-	28	<20	<30	<1.0	<4.0	<1.0	7	<1.0	<3.0	<20	-
	05/21/2008	<1.0	<1.0	<1.0	<3.0	<6.0	920	<1.0	<2.0	610	4.8	<1.0	-	30	<20	62	<1.0	<4.0	<1.0	<2.0	<1.0	<3.0	<20	-
	06/26/2008	<5.0	<5.0	<5.0	<15	<30	1,100	<5.0	<10	540	<5.0	<5.0	-	28	<100	<150	<5.0	<20	<5.0	<10	<5.0	<15	<100	-



Table 8

RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
 11791 Fingerboard Rd
 Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1, 2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH	
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA	
3990-FARM-INF (cont.)	07/16/2008	<1.0	<1.0	<1.0	<3.0	<6.0	1,100	<1.0	<2.0	510	5.6	<1.0	-	29	<20	<30	<1.0	<4.0	<1.0	<2.0	<1.0	<3.0	39	-	
	08/20/2008	<1.0	<1.0	<1.0	<3.0	<6.0	1,100	<1.0	<2.0	520	4.7	<1.0	-	31	<20	<30	<1.0	<4.0	<1.0	<2.0	<1.0	<3.0	46	-	
	09/25/2008	<0.5	<0.5	<0.5	<1.5	<3.0	1,300	<0.5	<1.0	620	6.8	<0.5	-	36	<10	<15	<0.5	<2.0	<0.5	<1.0	<0.5	<1.5	<10	-	
	10/15/2008	<1.0	<1.0	<1.0	<3.0	<6.0	1,200	<1.0	<2.0	450	5.9	<1.0	-	33	<20	<30	<1.0	<4.0	<1.0	<2.0	<1.0	<3.0	<20	-	
	11/19/2008	<1.0	<1.0	<1.0	<3.0	<6.0	1,900	<1.0	<2.0	770	9.3	<1.0	-	45	<20	<30	<1.0	<4.0	<1.0	<2.0	<1.0	<3.0	<20	-	
	12/11/2008	<1.0	<1.0	<1.0	<3.0	<6.0	1,400	<1.0	<2.0	620	7.6	<1.0	-	35	<20	<30	<1.0	<4.0	<1.0	<2.0	<1.0	<3.0	<20	-	
	01/14/2009	0.82	<0.500	<0.50	<0.500	0.82	1,520	-	<0.50	607	8.62	<0.500	89.6	39.7	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	02/11/2009	0.89	<0.500	<0.50	<0.500	0.89	2,090	-	<0.50	838	10.5	<0.500	77.6	43.1	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	03/18/2009	0.77	<0.500	<0.50	<0.500	0.77	1,580	-	<0.50	937	11.7	<0.500	65.7	38.3	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	04/08/2009	0.93	<0.500	<0.50	<0.500	0.93	2,810	-	<0.50	1,100	10.6	<0.500	77	48.3	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/15/2009	0.85	<0.500	<0.50	<0.500	0.85	1,380	-	<0.50	913	12.4	<0.500	102	40.8	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	10/07/2009	0.58	<0.500	<0.50	<0.500	0.58	1,420	-	<0.50	675	9.67	<0.500	80.7	30.1	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/13/2010	0.51	<0.500	<0.50	<0.500	0.51	1,260	-	<0.50	485	7.47	<0.500	53	27.6	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	04/14/2010	<0.50	<0.500	<0.50	<0.500	<2.00	1,050	-	<0.50	483	7.41	<0.500	45	24.4	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/21/2010	<0.50	<0.500	<0.50	<0.500	<2.00	1,770	-	<0.50	350	8.39	<0.500	45.8	22	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	10/26/2010	<0.5	<0.5	<0.5	<1	<3	1,890	-	<0.5	571	8.99	<0.5	-	27.5	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	12/08/2010	<0.5	<0.5	<0.5	<1	<3	2,640	-	<0.5	579	13	<0.5	-	38.4	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/12/2011	<0.5	<0.5	<0.5	<1	<3	4,390	-	<0.5	596	11.1	<0.5	-	30.1	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	02/08/2011	<0.5	<0.5	<0.5	<1	<3	2,870	-	<0.5	500	10.1	<0.5	-	33.8	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/04/2011	<0.5	<0.5	<0.5	<1	<3	2,020	-	<0.5	204	8.38	<0.5	-	24.3	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	05/12/2011	<0.5	<0.5	<0.5	<1	<3	1,350	-	<0.5	319	7.28	<0.5	-	19.4	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	06/07/2011	<0.5	<0.5	<0.5	<1	<3	563	-	<0.5	308	6.38	<0.5	11	7.87	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/12/2011	<0.5	<0.5	<0.5	<1	<3	1,920	-	<0.5	1,830	9.77	<0.5	78.8 V8	31.3	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	08/19/2011	<0.5	<0.5	<0.5	<1	<3	588	-	<0.5	247	5.46	<0.5	34.4	15.6	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	09/27/2011	<0.5	<0.5	<0.5	<1	<3	722	-	<0.5	658	5.16	<0.5	49.1 V8	19	-	-	-	-	-	-	-	<0.5	<0.5	-	-
10/18/2011	<0.5	<0.5	<0.5	<1	<3	526	-	<0.5	262	4.77	<0.5	24.6	13.9	-	-	-	-	-	-	-	<0.5	<0.5	-	-	
11/16/2011	<0.5	<0.5	<0.5	<1	<3	642 V8	-	<0.5	346	5.87	<0.5	17.8	12.3	-	-	-	-	-	-	-	<0.5	<0.5	-	-	
12/08/2011	<0.5	<0.5	<0.5	<1	<3	568	-	<0.5	322	5.38	<0.5	30.4	16.6	-	-	-	-	-	-	-	<0.5	<0.5	-	-	
04/18/2012	<0.5	<0.5	<0.5	<1	<3	554	-	<0.5	84.8 VH	4.75	<0.5	4.35 VH	8.04	-	-	-	-	-	-	-	<0.5	<0.5	-	-	
05/21/2012	<0.5	<0.5	<0.5	<1	<3	430	-	<0.5	102 VH	3.74	<0.5	10.8	7.96	-	-	-	-	-	-	-	<0.5	<0.5	-	-	
06/14/2012	<0.5	<0.5	<0.5	<1	<3	510 QK	-	<0.5	306	4.59	<0.5	26.9	14.4	-	-	-	-	-	-	-	<0.5	<0.5	-	-	
08/06/2012	<0.5	<0.5	<0.5	<1	<3	749	-	<0.5	396	5.01	<0.5	30.3	14.2	-	-	-	-	-	-	-	<0.5	<0.5	-	-	
10/12/2012	<0.5	<0.5	<0.5	<1	<3	555	-	<0.5	223	<0.5	<0.5	20.8	13.6	-	-	-	-	-	-	-	<0.5	<0.5	-	5.6	
01/16/2013	<0.5	<0.5	<0.5	<1	<3	688	-	<0.5	309	5.01	<0.5	25.2	17.6	-	-	-	-	-	-	-	<0.5	<0.5	-	-	
02/21/2013	<0.5	<0.5	<0.5	<1	<3	383 QK	-	<0.5	88.9	3.51	<0.5	6.73	6.89	-	-	-	-	-	-	-	<0.5	<0.5	-	-	
05/23/2013	<0.5	<0.5	<0.5	<1	<3	305 QK	-	<0.5	79.3	3.01	<0.5	4.3	5.91	-	-	-	-	-	-	-	<0.5	<0.5	-	-	

RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
 11791 Fingerboard Rd
 Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1, 2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH	
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA	
3990-FARM-INF (cont.)	06/20/2013	<0.5	<0.5	<0.5	<1	<3	426 QK	-	<0.5	163	3.85	<0.5	14.1	8.36	-	-	-	-	-	-	<0.5	<0.5	-	-	
	07/23/2013	<0.5	<0.5	<0.5	<1	<3	619	-	<0.5	106	3.76	<0.5	6.41	7.01	-	-	-	-	-	-	<0.5	<0.5	-	-	
	10/17/2013	<0.50	<0.500	<0.50	<1.00	<2.50	324	-	<0.5	83.9	3.93	<0.500	6.22	6.50	-	-	-	-	-	-	<0.5	<0.5	-	-	
	11/15/2013	<0.50	<0.500	<0.50	<1.00	<2.50	333	-	<0.5	110	2.93	<0.500	9.36	6.51	-	-	-	-	-	-	<0.5	<0.5	-	-	
3990-FARM-POU	08/06/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	
	10/12/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	6.8	
	01/16/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	
	05/23/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	
3990-RYEL-INF	05/16/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	10/08/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.1	<0.2	<0.1	<0.3	<2.0	-	
	01/23/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	04/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	07/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	10/15/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.1	<0.2	<0.1	<0.3	<2.0	-	
3991-DAIS-INF	05/31/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	3.9	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
3991-FARM-INF	05/09/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	07/27/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	10/11/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	11/19/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	01/24/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	02/13/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	03/12/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	04/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	07/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	10/15/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	01/14/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	04/08/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	04/09/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/16/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	10/07/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/13/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-
04/14/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-	
07/19/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-	
10/25/2010	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	-	
01/10/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	-	



RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
 11791 Fingerboard Rd
 Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1, 2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA
3991-FARM-INF (cont.)	04/04/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/14/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	11/16/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/11/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/18/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/16/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	08/15/2012	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	10/17/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	5.8
	01/16/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/23/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
08/15/2013	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-	
10/17/2013	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-	
3991-FARM-POU	08/15/2012	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
3991-RYEL-INF	05/09/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.2	<0.2	<0.1	<0.3	<2.0	-
3992-DAIS-INF	05/23/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.5	<0.2	<0.1	<0.3	<2.0	-
3992-FARM-INF	05/15/2007	<1.0	<1.0	<1.0	<3.0	<6.0	710	<1.0	<2.0	360	3.6	<1.0	-	22	<20	<30	<1.0	<4.0	<1.0	3.3	<1.0	<3.0	<20	-
	05/30/2007	<1.0	<1.0	<1.0	<3.0	<6.0	630	<1.0	<2.0	330	3	<1.0	-	16	23	<30	<1.0	<4.0	<1.0	<2.0	<1.0	<3.0	29	-
	06/13/2007	<1.0	<1.0	<1.0	<3.0	<6.0	640	<1.0	<2.0	110	3.8	<1.0	-	17	<20	<30	<1.0	<4.0	<1.0	<2.0	<1.0	<3.0	<20	-
	07/18/2007	<1.0	<1.0	<1.0	<3.0	<6.0	930	<1.0	<2.0	440	4.6	<1.0	-	24	<20	<30	<1.0	<4.0	<1.0	3	<1.0	<3.0	<20	-
	08/29/2007	<1.0	<1.0	<1.0	<3.0	<6.0	880	<1.0	<2.0	520	4.7	<1.0	-	25	<20	<30	<1.0	<4.0	<1.0	<2.0	<1.0	<3.0	<20	-
	09/26/2007	<0.1	0.2	<0.1	<0.3	0.2	<0.1	<0.1	<0.2	500	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	0.7	<0.1	<0.2	<0.1	<0.3	<2.0	-
	10/31/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	520	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	11/07/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	8.4	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	12/19/2007	<1.0	<1.0	<1.0	<3.0	<6.0	1,300	<1.0	<2.0	660	6.6	<1.0	-	37	<20	<30	<1.0	<4.0	<1.0	<2.0	<1.0	<3.0	<20	-
	01/16/2008	<1.0	<1.0	<1.0	<3.0	<6.0	1,300	<1.0	<2.0	530	5.6	<1.0	-	43	<20	<30	<1.0	<4.0	<1.0	2.5	<1.0	<3.0	<20	-
	02/13/2008	<1.0	<1.0	<1.0	<3.0	<6.0	1,100	<1.0	<2.0	500	4.5	<1.0	-	30	<20	<30	<1.0	<4.0	<1.0	2.7	<1.0	<3.0	<20	-
	03/12/2008	<1.0	<1.0	<1.0	<3.0	<6.0	1,200	<1.0	<2.0	380	5	<1.0	-	26	<20	<30	<1.0	<4.0	<1.0	6.5	<1.0	<3.0	<20	-
	04/16/2008	<1.0	<1.0	<1.0	<3.0	<6.0	780	<1.0	<2.0	490	4.7	<1.0	-	22	<20	<30	<1.0	<4.0	<1.0	<2.0	<1.0	<3.0	<20	-
	05/05/2008	<1.0	<1.0	<1.0	<3.0	<6.0	850	<1.0	<2.0	390	4.1	<1.0	-	25	<20	<100	<1.0	<4.0	<1.0	<2.0	<1.0	<3.0	<20	-
	06/18/2008	<0.3	<0.3	<0.3	<0.8	<1.7	500	<0.3	<0.5	270	3.3	<0.3	-	15	<5.0	26	<0.3	<1.0	<0.3	<0.5	<0.3	<0.8	<5.0	-
	07/16/2008	<0.5	<0.5	<0.5	<1.5	<3.0	760	<0.5	<1.0	340	4.1	<0.5	-	19	<10	<15	<0.5	<2.0	<0.5	<1.0	<0.5	<1.5	<10	-
08/20/2008	<1.0	<1.0	<1.0	<3.0	<6.0	990	<1.0	<2.0	460	4.3	<1.0	-	25	<20	<30	<1.0	<4.0	<1.0	<2.0	<1.0	<3.0	<20	-	
09/17/2008	<1.0	<1.0	<1.0	<3.0	<6.0	1,000	<1.0	<2.0	1,100	4.2	<1.0	-	24	20	120	2.4	<4.0	16	<2.0	<1.0	<3.0	<20	-	
10/15/2008	<1.0	1.1	<1.0	<3.0	1.1	1,300	<1.0	<2.0	500	6.2	<1.0	-	33	<20	<30	<1.0	<4.0	1.1	<2.0	<1.0	10	<20	-	



RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
 11791 Fingerboard Rd
 Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1, 2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH
		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA
3992-FARM-INF (cont.)	11/05/2008	<0.1	0.1	<0.1	<0.3	0.1	<0.1	<0.1	<0.2	140	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	1	<0.1	<0.2	<0.1	<0.3	<2.0	-
	12/10/2008	<1.0	<1.0	<1.0	<3.0	<6.0	1,400	<1.0	<2.0	900	8.2	<1.0	39	<2.0	37	<1.0	<4.0	<1.0	<2.0	<1.0	<3.0	<2.0	-	
	01/14/2009	0.75	<0.500	<0.50	<0.500	0.75	1,750	-	<0.50	1,230	8.16	<0.500	92.8	31.4	-	-	-	-	-	-	<0.50	<0.5	-	-
	02/11/2009	0.69	<0.500	<0.50	<0.500	0.69	1,710	-	<0.50	930	8.65	<0.500	75.6	31.8	-	-	-	-	-	-	-	<0.50	<0.5	-
	03/18/2009	0.73	<0.500	<0.50	<0.500	0.73	1,460	-	<0.50	906	10.7	<0.500	56	31.3	-	-	-	-	-	-	-	<0.50	<0.5	-
	04/15/2009	0.51	<0.500	<0.50	<0.500	0.51	2,290	-	<0.50	1,230	8.22	<0.500	73.6	35.9	-	-	-	-	-	-	-	<0.50	<0.5	-
	07/15/2009	<0.50	<0.500	<0.50	<0.500	<2.00	1,020	-	<0.50	413	7.07	<0.500	26.4	14.8	-	-	-	-	-	-	-	<0.50	<0.5	-
	10/07/2009	<0.50	<0.500	<0.50	<0.500	<2.00	1,110	-	<0.50	372	6.06	<0.500	31.1	16.8	-	-	-	-	-	-	-	<0.50	<0.5	-
	01/13/2010	<0.50	<0.500	<0.50	<0.500	<2.00	381	-	<0.50	15.6	3.57	<0.500	<2.50	6.5	-	-	-	-	-	-	-	<0.50	<0.5	-
	04/12/2010	<0.50	<0.500	<0.50	<0.500	<2.00	536	-	<0.50	107	3.92	<0.500	6.05	7.87	-	-	-	-	-	-	-	<0.50	<0.5	-
	07/21/2010	<0.50	<0.500	<0.50	<0.500	<2.00	1,280	-	<0.50	98.6	6.58	<0.500	14.3	13	-	-	-	-	-	-	-	<0.50	<0.5	-
	10/27/2010	<0.5	<0.5	<0.5	<1	<3	1,660	-	<0.5	286	8.49	<0.5	-	21.3	-	-	-	-	-	-	-	<0.5	<0.5	-
	11/30/2010	<0.5	<0.5	<0.5	<1	<3	1,370	-	<0.5	436	9.36	<0.5	-	22.3	-	-	-	-	-	-	-	<0.5	<0.5	-
	03/10/2011	<0.5	<0.5	<0.5	<1	<3	1,300	-	<0.5	206	6.55	<0.5	-	21.5	-	-	-	-	-	-	-	<0.5	<0.5	-
	04/04/2011	<0.5	<0.5	<0.5	<1	<3	1,110	-	<0.5	99.6	5.83	<0.5	-	13.4	-	-	-	-	-	-	-	<0.5	<0.5	-
	05/11/2011	<0.5	<0.5	<0.5	<1	<3	500	-	<0.5	18.9	4.8	<0.5	-	6.28	-	-	-	-	-	-	-	<0.5	<0.5	-
	07/26/2011	<0.5	<0.5	<0.5	<1	<3	778	-	<0.5	281	5.5	<0.5	16	13	-	-	-	-	-	-	-	<0.5	<0.5	-
	08/19/2011	<0.5	<0.5	<0.5	<1	<3	649	-	<0.5	168	4.22	<0.5	21.8	9.61	-	-	-	-	-	-	-	<0.5	<0.5	-
	10/18/2011	<0.5	<0.5	<0.5	<1	<3	374	-	<0.5	21.7	3.64	<0.5	<2.5	6.99	-	-	-	-	-	-	-	<0.5	<0.5	-
	11/16/2011	<0.5	<0.5	<0.5	<1	<3	962 V8	-	<0.5	27.1	3.59	<0.5	<2.5	6.45	-	-	-	-	-	-	-	<0.5	<0.5	-
	12/08/2011	<0.5	<0.5	<0.5	<1	<3	285	-	<0.5	14.2	3.83	<0.5	<2.5	6.43	-	-	-	-	-	-	-	<0.5	<0.5	-
	01/25/2012	<0.5	<0.5	<0.5	<1	<3	323	-	<0.5	102	4.75	<0.5	3.84	4.33	-	-	-	-	-	-	-	<0.5	<0.5	-
	04/03/2012	<0.5	<0.5	<0.5	<1	<3	241 QK	-	<0.5	12.4	3.28	<0.5	<2.5	3.3	-	-	-	-	-	-	-	<0.5	2.92	-
	05/21/2012	<0.5	<0.5	<0.5	<1	<3	341	-	<0.5	53.8 VH	3.15	<0.5	4.06	4.86	-	-	-	-	-	-	-	<0.5	<0.5	-
	06/13/2012	<0.5	<0.5	<0.5	<1	<3	323 QK	-	<0.5	129	3.1	<0.5	10.8	7.09	-	-	-	-	-	-	-	<0.5	<0.5	-
	07/23/2012	<0.5	<0.5	<0.5	<1	<3	848	-	<0.5	371	5.78	<0.5	17.3	8.87	-	-	-	-	-	-	-	<0.5	<0.5	-
	08/23/2012	<0.5	<0.5	<0.5	<1	<3	316	-	<0.5	30.4	3.3	<0.5	<2.5	5.17	-	-	-	-	-	-	-	<0.5	<0.5	-
	10/17/2012	<0.5	<0.5	<0.5	<1	<3	817	-	<0.5	21	3.45	<0.5	<2.5	5.87	-	-	-	-	-	-	-	<0.5	<0.5	5.6
	11/14/2012	<0.5	<0.5	<0.5	<1	<3	252 VH	-	<0.5	18.1	4.53 VH	<0.5	<2.5	4.68	-	-	-	-	-	-	-	<0.5	<0.5	-
	12/24/2012	<0.5	<0.5	<0.5	<1	<3	285 QK	-	<0.5	98.5	2.72	<0.5	7.18	6.64	-	-	-	-	-	-	-	<0.5	<0.5	-
01/17/2013	<0.5	<0.5	<0.5	<1	<3	475	-	<0.5	96.4	3.7	<0.5	4.76	10.4	-	-	-	-	-	-	-	<0.5	<0.5	-	
02/20/2013	<0.5	<0.5	<0.5	<1	<3	219 QK	-	<0.5	10.1	3.19 VH	<0.5	<2.5	3.37	-	-	-	-	-	-	-	<0.5	<0.5	-	
03/27/2013	<0.5	<0.5	<0.5	<1	<3	95.9	-	<0.5	9.05	2.04	<0.5	<2.5	1.15	-	-	-	-	-	-	-	<0.5	<0.5	-	
05/23/2013	<0.5	<0.5	<0.5	<1	<3	92.9	-	<0.5	11.2	1.34	<0.5	<2.5	1.08	-	-	-	-	-	-	-	<0.5	<0.5	-	
06/20/2013	<0.5	<0.5	<0.5	<1	<3	133	-	<0.5	<2.5	1.12	<0.5	<2.5	1.99	-	-	-	-	-	-	-	<0.5	<0.5	-	
07/24/2013	<0.5	<0.5	<0.5	<1	<3	343	-	<0.5	9.63	2.38	<0.5	<2.5	1.56	-	-	-	-	-	-	-	<0.5	<0.5	-	



Table 8

RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1, 2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH	
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA	
3992-FARM-INF (cont.)	08/14/2013	<0.50	<0.500	<0.50	<1.00	<2.50	339	-	<0.50	10.0	2.16	<0.500	<2.50	1.67	-	-	-	-	-	-	<0.50	<0.5	-	-	
	09/11/2013	<0.50	<0.500	<0.50	<1.00	<2.51	<0.500	-	<0.50	7.92	<0.50	<0.501	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	
	10/23/2013	<1.00	<1.00	<1.00	<2.00	<5.00	145	-	<0.50	21.0	2.04	<1.00	<5.00	2.88	-	-	-	-	-	-	<0.50	<0.5	-	-	
3992-FARM-POU	08/23/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	
	10/17/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	6.7	
	01/17/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	
	05/23/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	
3992-RYEL-INF	05/09/2007	<0.1	<0.1	<0.1	<0.3	<0.6	1.9	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.1	<0.2	<0.1	<0.3	<2.0	-	
	10/12/2007	<0.1	<0.1	<0.1	<0.3	<0.6	1.4	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.1	<0.2	<0.1	<0.3	<2.0	-	
	01/23/2008	<0.1	<0.1	<0.1	<0.3	<0.6	1.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.1	<0.2	<0.1	<0.3	<2.0	-	
	04/17/2008	<0.1	<0.1	<0.1	<0.3	<0.6	1.9	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	07/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	1.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	2.1	23	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	01/14/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/15/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/13/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/20/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/12/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	2.57	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/13/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/13/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/16/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	08/21/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/16/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/23/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	-
3992-RYEL-POU	08/21/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	
3993-DAIS-INF	05/29/2007	<0.1	<0.1	<0.1	<0.2	<0.5	0.1	-	<0.2	<5	<0.1	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	
3993-FARM-INF	04/24/2007	<0.1	<0.1	<0.1	<0.2	<0.5	0.8	-	<0.2	<5	<0.1	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	
	07/27/2007	<0.1	0.1	<0.1	<0.3	0.1	1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	0.4	<2.0	-	
	10/08/2007	<0.1	0.2	<0.1	<0.3	0.2	0.8	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	11/14/2007	<0.1	0.1	<0.1	<0.3	0.1	0.8	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	12/19/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.7	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	01/24/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.6	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	02/13/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.8	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	03/12/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.6	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	

Table 8

RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1, 2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA
3993-FARM-INF (cont.)	04/16/2008	<0.1	0.1	<0.1	<0.3	0.1	0.5	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	10/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.7	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	01/15/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-
	04/09/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-
	07/17/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-
	10/07/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-
	01/13/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-
	04/16/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-
	07/19/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-
	10/27/2010	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-
	01/10/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-
	04/04/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-
	07/13/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-
	10/19/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-
	01/12/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-
	04/18/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-
07/17/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	
08/16/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	
10/17/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	5.6	
01/17/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	
04/24/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	
07/23/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	-	
10/17/2013	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	
3993-FARM-POU	08/16/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	
3994-DAIS-INF	06/18/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
3994-FARM-INF (DUP)	10/25/2010	<0.50	<0.500	<0.50	<1.00	<2.50	938 V8	-	<0.50	481 V8	5.40 V8	<0.500	-	15.7	-	-	-	-	-	-	-	<0.50	<0.5	-
	04/05/2011	<0.5	<0.5	<0.5	<1	<3	902	-	<0.5	68.1	4.11	<0.5	-	8.03	-	-	-	-	-	-	-	<0.5	<0.5	-
3994-FARM-INF	04/24/2007	<1	<1	<1	<2	<5	480	-	<2	300	3.3	<1	-	17	-	-	-	-	-	-	-	-	-	-
	05/07/2007	<1.0	<1.0	<1.0	<3.0	<6.0	690	<1.0	<2.0	340	3.2	<1.0	-	18	71	<30	<1.0	<4.0	<1.0	4.6	<1.0	<3.0	60	-
	05/16/2007	<0.5	<0.5	<0.5	<1.5	<3.0	1,000	<0.5	<1.0	540	4.6	<0.5	-	28	14	25	<0.5	<2.0	<0.5	2	<0.5	<1.5	12	-
	06/13/2007	<2.0	<2.0	<2.0	<6.0	<12.0	1,200	<2.0	<4.0	560	4.9	<2.0	-	31	<40	<60	<2.0	<8.0	<2.0	<4.0	<2.0	<6.0	<40	-
	07/02/2007	<2.0	<2.0	<2.0	<6.0	<12.0	1,200	<2.0	<4.0	630	4.8	<2.0	-	30	<40	<60	<2.0	<8.0	<2.0	5.9	<2.0	<6.0	<40	-
	08/08/2007	<1.0	<1.0	<1.0	<3.0	<6.0	1,100	<1.0	<2.0	420	4.3	<1.0	-	33	<20	<30	<1.0	<4.0	<1.0	<2.0	<1.0	<3.0	<20	-
	09/26/2007	<2.0	<2.0	<2.0	<6.0	<12.0	1,100	<2.0	<4.0	680	4.6	<2.0	-	27	<40	<60	<2.0	<8.0	<2.0	6.1	<2.0	<6.0	<40	-

RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
 11791 Fingerboard Rd
 Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1, 2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH	
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA	
3994-FARM-INF (cont.)	10/12/2007	<2.0	<2.0	<2.0	<6.0	<12.0	1,100	<2.0	<4.0	590	4.5	<2.0	-	26	<40	<60	<2.0	<8.0	<2.0	5.1	<2.0	<6.0	<40	-	
	11/14/2007	<1.0	<1.0	<1.0	<3.0	<6.0	930	<1.0	<2.0	430	4.6	<1.0	-	25	<20	<30	<1.0	<4.0	<1.0	8.7	<1.0	<3.0	<20	-	
	12/19/2007	<1.0	<1.0	<1.0	<3.0	<6.0	850	<1.0	<2.0	490	4	<1.0	-	23	<20	<30	<1.0	<4.0	<1.0	<2.0	<1.0	<3.0	<20	-	
	01/23/2008	<0.5	<0.5	<0.5	<1.5	<3.0	750	<0.5	<1.0	330	2.7	<0.5	-	20	<10	<15	<0.5	<2.0	<0.5	<1.0	<0.5	<1.5	<10	-	
	02/13/2008	<0.5	<0.5	<0.5	<1.5	<3.0	670	<0.5	<1.0	370	2.7	<0.5	-	19	<10	<15	<0.5	<2.0	<0.5	1.6	<0.5	<1.5	<10	-	
	03/12/2008	<0.5	<0.5	<0.5	<1.5	<3.0	610	<0.5	<1.0	250	2.4	<0.5	-	16	<10	<15	<0.5	<2.0	<0.5	1.4	<0.5	<1.5	<10	-	
	04/16/2008	<1.0	<1.0	<1.0	<3.0	<6.0	360	<1.0	<2.0	260	2	<1.0	-	9.7	<20	<30	<1.0	<4.0	<1.0	5.6	<1.0	<3.0	<20	-	
	05/21/2008	<0.1	<0.1	<0.1	<0.3	<0.6	240	<0.1	<0.2	130	1.7	<0.1	-	6.5	<2.0	14	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
	06/26/2008	<1.0	<1.0	<1.0	<3.0	<6.0	790	<1.0	<2.0	480	4	<1.0	-	21	<20	<30	<1.0	<4.0	<1.0	<2.0	<1.0	<3.0	<20	-	
	07/16/2008	<1.0	<1.0	<1.0	<3.0	<6.0	1,200	<1.0	<2.0	580	5.9	<1.0	-	28	<20	<30	<1.0	<4.0	<1.0	<2.0	<1.0	<3.0	<20	-	
	08/20/2008	<1.0	<1.0	<1.0	<3.0	<6.0	1,100	<1.0	<2.0	640	4.2	<1.0	-	27	<20	<30	<1.0	<4.0	<1.0	<2.0	<1.0	<3.0	<20	-	
	09/17/2008	<1.0	<1.0	<1.0	<3.0	<6.0	920	<1.0	<2.0	710	5.7	<1.0	-	26	<20	<30	<1.0	<4.0	<1.0	<2.0	<1.0	<3.0	<20	-	
	10/15/2008	<1.0	<1.0	<1.0	<3.0	<6.0	1,300	<1.0	<2.0	570	6.2	<1.0	-	33	<20	<30	<1.0	<4.0	<1.0	<2.0	<1.0	11	<20	-	
	11/19/2008	<1.0	<1.0	<1.0	<3.0	<6.0	1,600	<1.0	<2.0	1,200	8.3	<1.0	-	38	<20	<30	<1.0	<4.0	<1.0	<2.0	<1.0	<3.0	<20	-	
	12/11/2008	<1.0	<1.0	<1.0	<3.0	<6.0	1,300	<1.0	<2.0	810	6.4	<1.0	-	28	<20	<30	<1.0	<4.0	<1.0	<2.0	<1.0	<3.0	<20	-	
	01/14/2009	0.62	<0.500	<0.50	<0.500	0.62	1,030	-	<0.50	786	5.5	<0.500	68.7	20.2	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	02/11/2009	0.73	<0.500	<0.50	<0.500	0.73	1,360	-	<0.50	741	7.53	<0.500	65.5	26.9	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	03/18/2009	0.58	<0.500	<0.50	<0.500	0.58	1,100	-	<0.50	768	8.18	<0.500	49.5	22.1	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	04/15/2009	0.56	<0.500	<0.50	<0.500	0.56	1,780	-	<0.50	1,140	5.92	<0.500	60.2	24.8	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/15/2009	<0.50	<0.500	<0.50	<0.500	<2.00	861	-	<0.50	660	8.14	<0.500	65.4	22	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	10/07/2009	<0.50	<0.500	<0.50	<0.500	<2.00	988	-	<0.50	389	4.87	<0.500	37	14.8	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/13/2010	<0.50	<0.500	<0.50	<0.500	<2.00	578	-	<0.50	195	4.08	<0.500	12.8	10.5	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	04/14/2010	<0.50	<0.500	<0.50	<0.500	<2.00	970	-	<0.50	438	7.4	<0.500	29.9	18.5	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/21/2010	<0.50	<0.500	<0.50	<0.500	<2.00	878	-	<0.50	284	8.08	<0.500	39.8	16.5	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	10/25/2010	<0.5	<0.5	<0.5	<1	<3	1,990	-	<0.5	346	6.75	<0.5	-	15.2	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/04/2011	<0.5	<0.5	<0.5	<1	<3	1,320	-	<0.5	522	6.97	<0.5	-	15.7	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/05/2011	<0.5	<0.5	<0.5	<1	<3	932	-	<0.5	59.6	4.5	<0.5	-	8.93	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	05/11/2011	<0.5	<0.5	<0.5	<1	<3	346	-	<0.5	41.4	3.77	<0.5	-	3.5	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	06/07/2011	<0.5	<0.5	<0.5	<1	<3	368	-	<0.5	112	5.09	<0.5	3.78	4.52	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/12/2011	<0.5	<0.5	<0.5	<1	<3	745	-	<0.5	481 V8	5.37	<0.5	24.4 V8	12	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	09/08/2011	<0.5	<0.5	<0.5	<1	<3	607	-	<0.5	248	4.02	<0.5	20	12.2	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	09/27/2011	<0.5	<0.5	<0.5	<1	<3	303	-	<0.5	36.4	2.11	<0.5	<2.5	5.52	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	10/20/2011	<0.5	<0.5	<0.5	<1	<3	328	-	<0.5	35.9	2.34	<0.5	<2.5	5.79	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	12/08/2011	<0.5	<0.5	<0.5	<1	<3	709	-	<0.5	96	3.28	<0.5	7.39	7.41	-	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/13/2012	<0.5	<0.5	<0.5	<1	<3	664	-	<0.5	42.3	3.26	<0.5	<2.5	4.07	-	-	-	-	-	-	-	<0.5	<0.5	-	-
04/03/2012	<0.5	<0.5	<0.5	<1	<3	217 QK	-	<0.5	14.5	2.78	<0.5	<2.5	3.06	-	-	-	-	-	-	-	<0.5	<0.5	-	-	
05/21/2012	<0.5	<0.5	<0.5	<1	<3	256	-	<0.5	73.5 VH	2.37	<0.5	6.94	4.33	-	-	-	-	-	-	-	<0.5	<0.5	-	-	



Table 8

RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1, 2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA
3994-FARM-INF (cont.)	06/18/2012	<0.5	<0.5	<0.5	<1	<3	174 QK	-	<0.5	33.5	1.82	<0.5	<2.5	3.54	-	-	-	-	-	-	<0.5	<0.5	-	-
	08/06/2012	<0.5	<0.5	<0.5	<1	<3	284	-	<0.5	110	3.1	<0.5	<2.5	5.89	-	-	-	-	-	-	<0.5	<0.5	-	-
	09/21/2012	<0.50	<0.500	<0.50	<1.00	<2.50	137 QK	-	<0.50	7.93 VH	1.41 VH	<0.500	<2.50	2.89	-	-	-	-	-	-	<0.50	<0.5	-	-
	10/03/2012	<0.5	<0.5	<0.5	<1	<3	173 QK	-	<0.5	40.2	<0.5	<0.5	<2.5	4.01	-	-	-	-	-	-	<0.5	<0.5	-	5.5
	12/13/2012	<0.5	46.8	<0.5	<1	47	206 QK	-	<0.5	107	2.08	<0.5	8.82	4.57	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/17/2013	<0.5	1.86	<0.5	<1	2	339	-	<0.5	104	2.08	<0.5	7.45	5.52	-	-	-	-	-	-	<0.5	<0.5	-	-
	02/21/2013	<0.5	1.11	<0.5	<1	1	150 QK	-	<0.5	38	2.91 VH	<0.5	<2.5	2.3	-	-	-	-	-	-	<0.5	<0.5	-	-
	03/19/2013	<0.5	<0.5	<0.5	<1	<3	108 QK	-	<0.5	30.8	1.94	<0.5	<2.5	1.88	-	-	-	-	-	-	<0.5	<0.5	-	-
	05/23/2013	<0.5	<0.5	<0.5	<1	<3	112	-	<0.5	28.7	<0.5	<0.5	<2.5	2.16	-	-	-	-	-	-	<0.5	<0.5	-	-
	06/20/2013	<0.5	<0.5	<0.5	<1	<3	110 QK	-	<0.5	16.8	<0.5	<0.5	<2.5	1.87	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/23/2013	<0.5	<0.5	<0.5	<1	<3	269	-	<0.5	41.6	1.78	<0.5	<2.5	2.49	-	-	-	-	-	-	<0.5	<0.5	-	-
	08/15/2013	<0.50	<0.500	<0.50	<1.00	<2.50	296	-	<0.50	19.0	1.50	<0.500	<2.50	1.87	-	-	-	-	-	-	<0.50	<0.5	-	-
	09/11/2013	<0.50	<0.500	<0.50	<1.00	<2.50	232	-	<0.50	27.0	1.15	<0.500	<2.50	1.86	-	-	-	-	-	-	<0.50	<0.5	-	-
	10/17/2013	<0.50	<0.500	<0.50	<1.00	<2.50	104	-	<0.50	18.4	1.20	<0.500	<2.50	1.82	-	-	-	-	-	-	<0.50	<0.5	-	-
3994-FARM-POU	08/06/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	10/03/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	6.2
	01/17/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	05/23/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	05/23/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
3994-RYEL-INF	04/05/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	10/09/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	01/23/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	04/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	07/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	01/15/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/17/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/13/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/21/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/10/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/12/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/11/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/16/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/25/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/24/2013	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
3994-RYEL-POU	08/14/2012	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-

RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1, 2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH	
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA	
3995-DAIS-INF	05/24/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
3995-FARM-INF	04/16/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.4	<0.2	<0.1	<0.3	<2.0	-	
	07/27/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.4	<0.2	<0.1	<0.3	<2.0	-	
	10/12/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.4	<0.2	<0.1	<0.3	<2.0	-	
	11/14/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.4	<0.2	<0.1	<0.3	<2.0	-	
	12/19/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.4	<0.2	<0.1	<0.3	<2.0	-	
	01/24/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.4	<0.2	<0.1	<0.3	<2.0	-	
	02/13/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.4	<0.2	<0.1	<0.3	<2.0	-	
	03/12/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.3	<0.2	<0.1	<0.3	<2.0	-	
	04/14/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	0.2	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.3	<0.2	<0.1	<0.3	3.3	-	
	10/15/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	0.2	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.6	<0.2	<0.1	<0.3	<2.0	-	
	01/14/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	<2.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	04/08/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	<2.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/17/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	<2.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	10/07/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	<2.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/14/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	<2.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	04/14/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	<2.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/27/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	<2.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	10/25/2010	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	<2.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/10/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	<2.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/04/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	<2.5	-	-	-	-	-	-	<0.5	<0.5	-	-
07/26/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	<2.5	-	-	-	-	-	-	<0.5	<0.5	-	-	
10/19/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	<2.5	-	-	-	-	-	-	<0.5	<0.5	-	-	
01/11/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	<2.5	-	-	-	-	-	-	<0.5	<0.5	-	-	
04/18/2012	<0.5	4.32	<0.5	<1	4	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	<2.5	-	-	-	-	-	-	<0.5	<0.5	-	-	
06/20/2012	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	<2.50	-	-	-	-	-	-	<0.50	<0.5	-	-	
07/16/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	<2.5	-	-	-	-	-	-	<0.5	<0.5	-	-	
08/15/2012	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	<2.50	-	-	-	-	-	-	<0.50	<0.5	-	-	
10/17/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	<2.5	-	-	-	-	-	-	<0.5	<0.5	-	5.7	
01/16/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	<2.5	-	-	-	-	-	-	<0.5	<0.5	-	-	
05/22/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	<2.5	-	-	-	-	-	-	<0.5	<0.5	-	-	
07/23/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	<2.5	-	-	-	-	-	-	<0.5	<0.5	-	-	
10/17/2013	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	<2.50	-	-	-	-	-	-	<0.50	<0.5	-	-	
3995-FARM-POU	08/15/2012	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-	

RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1, 2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH	
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA	
3995-RYEL-INF	04/06/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
3996-DAIS-INF	07/02/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-	
3996-FARM-INF (DUP)	10/26/2010	<0.5	<0.5	<0.5	<1	<3	10.5	-	<0.5	<2.5	1.7	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	
	01/17/2013	<0.5	<0.5	<0.5	<1	<3	70.6	-	<0.5	29.4	<0.5	<0.5	<2.5	1.12	-	-	-	-	-	-	<0.5	<0.5	-	-	
	04/24/2013	<0.5	<0.5	<0.5	<1	<3	60.8	-	<0.5	31.6 VC	<0.5	<0.5	<2.5	1.28	-	-	-	-	-	-	<0.5	<0.5	-	-	
	07/23/2013	<0.5	<0.5	<0.5	<1	<3	48.7	-	<0.5	21	0.56	<0.5	<2.5	0.76	-	-	-	-	-	-	<0.5	<0.5	-	-	
3996-FARM-INF	04/16/2007	0.2	<0.1	<0.1	<0.3	0.2	370	<0.1	<0.2	260	2	<0.1	-	12	<2.0	27	<0.1	<0.4	0.1	0.6	0.3	<0.3	<2.0	-	
	05/03/2007	<0.5	<0.5	<0.5	<1.5	<3.0	430	<0.5	<1.0	250	1.9	<0.5	-	12	29	21	<0.5	<2.0	<0.5	1.5	<0.5	<1.5	25	-	
	06/13/2007	<0.5	<0.5	<0.5	<1.5	<3.0	360	<0.5	<1.0	220	1.9	<0.5	-	11	<10	15	<0.5	<2.0	<0.5	1	<0.5	<1.5	<10	-	
	07/18/2007	<1.0	<1.0	<1.0	<3.0	<6.0	390	<1.0	<2.0	230	1.6	<1.0	-	9.3	<20	<30	<1.0	<4.0	<1.0	2.8	<1.0	<3.0	<20	-	
	08/08/2007	<0.4	<0.4	<0.4	<1.2	<2.4	320	<0.4	<0.8	190	1.6	<0.4	-	9.3	<8.0	25	<0.4	<1.6	<0.4	1	<0.4	<1.2	<8.0	-	
	09/27/2007	<0.4	<0.4	<0.4	<1.2	<2.4	330	<0.4	<0.8	220	1.6	<0.4	-	8.6	<8.0	<12	<0.4	<1.6	<0.4	1	<0.4	<1.2	<8.0	-	
	10/12/2007	<0.5	<0.5	<0.5	<1.5	<3.0	250	<0.5	<1.0	180	1.4	<0.5	-	7.6	<10	<15	<0.5	<2.0	<0.5	2.7	<0.5	<1.5	<10	-	
	11/14/2007	<0.3	<0.3	<0.3	<0.8	<1.7	240	<0.3	<0.5	140	1.1	<0.3	-	6.2	<5.0	<7.5	<0.3	<1.0	<0.3	1.4	<0.3	<0.8	<5.0	-	
	12/19/2007	<0.2	<0.2	<0.2	<0.6	<1.2	230	<0.2	<0.4	140	1.3	<0.2	-	6.5	<4.0	7.8	<0.2	<0.8	<0.2	0.4	<0.2	<0.6	4.5	-	
	02/13/2008	0.1	<0.1	<0.1	<0.3	0.1	220	<0.1	<0.2	110	0.9	<0.1	-	5.8	<2.0	12	<0.1	<0.4	<0.1	<0.2	0.2	<0.3	5.9	-	
	03/25/2008	0.1	<0.1	<0.1	<0.3	0.1	160	<0.1	<0.2	100	0.9	<0.1	-	5.3	<2.0	22	<0.1	<0.4	<0.1	0.3	0.2	<0.3	3.5	-	
	04/16/2008	<0.2	<0.2	<0.2	<0.6	<1.2	150	<0.2	<0.4	99	0.8	<0.2	-	4.2	<4.0	8.3	<0.2	<0.8	<0.2	0.7	<0.2	<0.6	4.6	-	
	05/21/2008	0.1	<0.1	<0.1	<0.3	0.1	180	<0.1	<0.2	130	1.1	<0.1	-	6.2	<2.0	54	<0.1	<0.4	<0.1	0.3	0.2	<0.3	6.1	-	
	06/18/2008	<0.3	<0.3	<0.3	<0.8	<1.7	310	<0.3	<0.5	230	1.7	<0.3	-	9	<5.0	100	<0.3	<1.0	<0.3	0.7	<0.3	<0.8	<5.0	-	
	07/23/2008	<0.5	<0.5	<0.5	<1.5	<3.0	350	<0.5	<1.0	220	1.7	<0.5	-	8.4	<10	<15	<0.5	<2.0	<0.5	<1.0	<0.5	<1.5	<10	-	
	08/20/2008	0.3	<0.1	<0.1	<0.3	0.3	380	<0.1	<0.2	240	1.9	<0.1	-	10	3.5	21	<0.1	<0.4	<0.1	<0.2	0.2	<0.3	<2.0	-	
	09/17/2008	<0.5	<0.5	<0.5	<1.5	<3.0	290	<0.5	<1.0	180	1.6	<0.5	-	6.6	<10	<15	<0.5	<2.0	<0.5	<1.0	<0.5	<1.5	<10	-	
	10/15/2008	0.3	<0.3	<0.3	<0.8	0.3	370	<0.3	<0.5	220	1.9	<0.3	-	9.4	<5.0	20	<0.3	<1.0	<0.3	<0.5	<0.3	<0.8	<5.0	-	
	11/19/2008	<0.3	<0.3	<0.3	<0.8	<1.7	360	<0.3	<0.5	260	1.9	<0.3	-	7.9	<5.0	12	<0.3	<1.0	<0.3	<0.5	<0.3	<0.8	<5.0	-	
	12/29/2008	<0.50	<0.500	<0.50	<0.500	<2.00	276	-	-	91.7	1.63	<0.500	3.06	5.23	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/14/2009	<0.50	<0.500	<0.50	<0.500	<2.00	289	-	<0.50	107	1.56	<0.500	7.29	4.97	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/30/2009	<0.50	<0.500	<0.50	<0.500	<2.00	379	-	-	104	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	02/11/2009	<0.50	<0.500	<0.50	<0.500	<2.00	208	-	<0.50	17	1.35	<0.500	<2.50	3.39	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	03/18/2009	<0.50	<0.500	<0.50	<0.500	<2.00	222	-	<0.50	22.3	1.75	<0.500	<2.50	2.66	-	-	-	-	-	-	-	<0.50	<0.5	-	-
04/08/2009	<0.50	<0.500	<0.50	<0.500	<2.00	182	-	<0.50	7.35	1.35	<0.500	<2.50	2	-	-	-	-	-	-	-	<0.50	<0.5	-	-	
07/15/2009	<0.50	<0.500	<0.50	<0.500	<2.00	242	-	<0.50	32.5	2.33	<0.500	<2.50	2.58	-	-	-	-	-	-	-	<0.50	<0.5	-	-	
10/08/2009	<0.50	<0.500	<0.50	<0.500	<2.00	23.7	-	<0.50	<2.50	1.1	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-	
01/14/2010	<0.50	<0.500	<0.50	<0.500	<2.00	38.3	-	<0.50	8.7	2.08	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-	

RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
 11791 Fingerboard Rd
 Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1, 2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA
3996-FARM-INF (cont.)	04/16/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<2.50	<0.50	-	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/21/2010	<0.50	<0.500	<0.50	<0.500	<2.00	29.9	-	<0.50	<2.50	2.3	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	10/26/2010	<0.5	<0.5	<0.5	<1	<3	9.4	-	<0.5	<2.5	1.39	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/10/2011	<0.5	<0.5	<0.5	<1	<3	15	-	<0.5	<2.5	1.61	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/05/2011	<0.5	<0.5	<0.5	<1	<3	12.6	-	<0.5	<2.5	1.36	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/13/2011	<0.5	<0.5	<0.5	<1	<3	18	-	<0.5	<2.5	1.37	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	09/16/2011	<0.5	1.8 V8	<0.5	<1	2	246	-	<0.5	87.8	<0.5	<0.5	<2.5	3.1	-	-	-	-	-	-	<0.5	<0.5	-	-
	09/27/2011	<0.5	<0.5	<0.5	<1	<3	142 L1	-	<0.5	180	1.18	<0.5	12.3 V8	3.4	-	-	-	-	-	-	<0.5	<0.5	-	-
	11/11/2011	<0.5	0.5	<0.5	<1	1	212	-	<0.5	103	<0.5	<0.5	9.27	3.87	-	-	-	-	-	-	<0.5	<0.5	-	-
	12/08/2011	<0.5	<0.5	<0.5	<1	<3	199	-	<0.5	105	1.69	<0.5	11.6	4.29	-	-	-	-	-	-	<0.5	<0.5	-	-
	02/16/2012	<0.5	<0.5	<0.5	<1	<3	192	-	<0.5	39.4 VH	1.26	<0.5	<2.5	2.76	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/04/2012	<0.5	<0.5	<0.5	<1	<3	104	-	<0.5	35.6	1.25	<0.5	<2.5	1.53	-	-	-	-	-	-	<0.5	<0.5	-	-
	06/14/2012	<0.5	<0.5	<0.5	<1	<3	84.8	-	<0.5	48.3	0.89	<0.5	<2.5	1.77	-	-	-	-	-	-	<0.5	<0.5	-	-
	08/08/2012	<0.5	<0.5	<0.5	<1	<3	103	-	<0.5	62.7	1.16	<0.5	<2.5	2.16	-	-	-	-	-	-	<0.5	<0.5	-	-
	10/04/2012	<0.5	<0.5	<0.5	<1	<3	52.6	-	<0.5	29.4	<0.5	<0.5	2.97	0.87	-	-	-	-	-	-	<0.5	<0.5	-	5.6
01/17/2013	<0.5	<0.5	<0.5	<1	<3	68.9	-	<0.5	40	<0.5	<0.5	<2.5	1.52	-	-	-	-	-	-	<0.5	<0.5	-	-	
04/24/2013	<0.5	<0.5	<0.5	<1	<3	61.5	-	<0.5	31.6	<0.5	<0.5	<2.5	0.73	-	-	-	-	-	-	<0.5	<0.5	-	-	
07/23/2013	<0.5	<0.5	<0.5	<1	<3	48.6	-	<0.5	20.4	0.6	<0.5	<2.5	0.79	-	-	-	-	-	-	<0.5	<0.5	-	-	
10/24/2013	<1.00	<1.00	<1.00	<2.00	<5.00	29.3	-	<0.5	13.2	<1.00	<1.00	<5.00	<1.00	-	-	-	-	-	-	<0.5	<0.5	-	-	
3996-FARM-POU	08/08/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	10/04/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	39.2	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	5.5
	01/17/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/24/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
3996-RYEL-INF	04/05/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	10/10/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	04/18/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	10/17/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	07/17/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/14/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/17/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	10/18/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	02/16/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	08/29/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	09/05/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-



RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
 11791 Fingerboard Rd
 Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1,2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA
3996-RYEL-POU	08/29/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
3997-DAIS-INF	05/29/2007	<0.1	<0.1	<0.1	<0.2	<0.5	<0.1	-	<0.2	<5	<0.1	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-
3997-FARM-INF (DUP)	01/12/2011	<0.50	<0.500	<0.50	<1.00	<2.50	1,670	-	<0.50	341	10.1	<0.500	-	27.3	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/11/2012	<0.5	<0.5	<0.5	<1	<3	3.89	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	10/04/2012	<0.5	<0.5	<0.5	<1	<3	1.4	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/17/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
3997-FARM-INF	04/16/2007	<0.1	<0.1	<0.1	<0.3	<0.6	14	<0.1	<0.2	<5.0	1.9	<0.1	-	0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	05/01/2007	<0.1	<0.1	<0.1	<0.2	<0.5	3.7	-	<0.2	<5	0.2	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-
	06/08/2007	<0.1	<0.1	<0.1	<0.3	<0.6	140	<0.1	<0.2	19	2.7	<0.1	-	2.2	<2.0	4.4	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	07/17/2007	<1.0	<1.0	<1.0	<3.0	<6.0	710	<1.0	<2.0	300	5.8	<1.0	-	20	<20	<30	<1.0	<4.0	<1.0	5.7	<1.0	<3.0	<2.0	-
	08/08/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	0.3	<0.1	<0.3	<2.0	-
	09/26/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	340	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	10/10/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	490	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	0.5	<0.1	<0.2	<0.1	<0.3	<2.0	-
	11/14/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	820	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	12/19/2007	1.1	<1.0	<1.0	<3.0	1.1	3,300	<1.0	<2.0	1,500	18	<1.0	-	100	<20	<30	<1.0	<4.0	<1.0	<2.0	<1.0	<3.0	<2.0	-
	01/16/2008	<2.0	<2.0	<2.0	<6.0	<12.0	2,700	<2.0	<4.0	1,000	13	<2.0	-	93	<40	<60	<2.0	<8.0	<2.0	5.2	<2.0	<6.0	<4.0	-
	02/13/2008	<0.5	<0.5	<0.5	<1.5	<3.0	640	<0.5	<1.0	210	4	<0.5	-	18	<10	<15	<0.5	<2.0	<0.5	1.6	<0.5	<1.5	<1.0	-
	03/12/2008	<0.1	<0.1	<0.1	<0.3	<0.6	130	<0.1	<0.2	7.4	1.6	<0.1	-	3.5	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	04/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	110	<0.1	<0.2	24	1.4	<0.1	-	2.3	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	05/21/2008	<0.1	<0.1	<0.1	<0.3	<0.6	130	<0.1	<0.2	18	1.5	<0.1	-	3.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	06/18/2008	<0.1	<0.1	<0.1	<0.3	<0.6	56	<0.1	<0.2	13	0.9	<0.1	-	1	<2.0	3.9	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	07/16/2008	<0.5	<0.5	<0.5	<1.5	<3.0	460	<0.5	<1.0	77	4.2	<0.5	-	8.2	<10	<15	<0.5	<2.0	<0.5	<1.0	<0.5	<1.5	<1.0	-
	08/20/2008	<0.5	<0.5	<0.5	<1.5	<3.0	690	<0.5	<1.0	200	4.8	<0.5	-	20	<10	<15	<0.5	<2.0	<0.5	<1.0	<0.5	<1.5	<1.0	-
	09/17/2008	<0.5	<0.5	<0.5	<1.5	<3.0	1,100	<0.5	<1.0	400	7	<0.5	-	30	<10	<15	<0.5	<2.0	<0.5	<1.0	<0.5	<1.5	<1.0	-
	10/15/2008	<0.5	<0.5	<0.5	<1.5	<3.0	1,100	<0.5	<1.0	400	6.4	<0.5	-	33	<10	<15	<0.5	<2.0	<0.5	<1.0	<0.5	<1.5	<1.0	-
	11/19/2008	0.9	<0.5	<0.5	<1.5	0.9	2,100	<0.5	<1.0	980	14	<0.5	-	63	<10	<15	<0.5	<2.0	<0.5	<1.0	<0.5	<1.5	<1.0	-
	12/10/2008	1.4	<1.0	<1.0	<3.0	1.4	2,800	<1.0	<2.0	1,500	16	<1.0	-	80	<20	<30	<1.0	<4.0	<1.0	<2.0	<1.0	<3.0	<2.0	-
	12/29/2008	<0.50	<0.500	<0.50	<0.500	<2.00	500	-	-	66.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/14/2009	<0.50	<0.500	<0.50	<0.500	<2.00	493	-	<0.50	79.2	3	<0.500	<2.50	8.95	-	-	-	-	-	-	-	<0.50	<0.5	-
	01/30/2009	<0.50	<0.500	<0.50	<0.500	<2.00	426	-	-	61.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	02/11/2009	<0.50	<0.500	<0.50	<0.500	<2.00	1,110	-	<0.50	274	7.7	<0.500	26.4	23.3	-	-	-	-	-	-	-	<0.50	<0.5	-
	03/18/2009	0.89	<0.500	<0.50	<0.500	0.89	2,060	-	<0.50	1,120	17	<0.500	87.1	53.3	-	-	-	-	-	-	-	<0.50	<0.5	-
04/08/2009	0.87	<0.500	<0.50	<0.500	0.87	3,680	-	<0.50	1,700	14.5	<0.500	94.7	61.8	-	-	-	-	-	-	-	<0.50	<0.5	-	
07/15/2009	<0.50	<0.500	<0.50	<0.500	<2.00	136	-	<0.50	21.5	3.04	<0.500	<2.50	1.89	-	-	-	-	-	-	-	<0.50	<0.5	-	



RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1, 2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA
3997-FARM-INF (cont.)	10/07/2009	<0.50	<0.500	<0.50	<0.500	<2.00	608	-	<0.50	93.1	6.49	<0.500	8.45	8.22	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/13/2010	<0.50	<0.500	<0.50	<0.500	<2.00	21.5	-	<0.50	<2.50	1.35	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	04/14/2010	<0.50	<0.500	<0.50	<0.500	<2.00	6.87	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/21/2010	<0.50	<0.500	<0.50	<0.500	<2.00	20.5	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	10/25/2010	<0.5	<0.5	<0.5	<1	<3	60.7	-	<0.5	<2.5	3.07	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/12/2011	<0.5	<0.5	<0.5	<1	<3	2,010	-	<0.5	446	9.18	<0.5	-	21.1	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/04/2011	<0.5	<0.5	<0.5	<1	<3	119	-	<0.5	<2.5	1.83	<0.5	-	1.73	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/12/2011	<0.5	<0.5	<0.5	<1	<3	34.3	-	<0.5	<2.5	3.88	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	08/15/2011	<0.5	<0.5	<0.5	<1	<3	83.5	-	<0.5	<2.5	4.98	<0.5	<2.5	0.76	-	-	-	-	-	-	<0.5	<0.5	-	-
	09/30/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	10/19/2011	<0.5	<0.5	<0.5	<1	<3	7.68	-	<0.5	<2.5	1.15	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	11/16/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	12/08/2011	<0.5	<0.5	<0.5	<1	<3	6.45	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/11/2012	<0.5	<0.5	<0.5	<1	<3	3.62	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/04/2012	<0.5	<0.5	<0.5	<1	<3	1.71	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	06/14/2012	<0.5	<0.5	<0.5	<1	<3	1.07	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/12/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	08/06/2012	<0.5	<0.5	<0.5	<1	<3	2.35	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	10/04/2012	<0.5	<0.5	<0.5	<1	<3	1.33	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	5.4
	01/17/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
04/24/2013	<0.5	<0.5	<0.5	<1	<3	6.05	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-	
07/24/2013	<0.50	<0.500	<0.50	<1.00	<2.50	1.72	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-	
10/17/2013	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-	
3997-FARM-POU	08/06/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	10/04/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	5.8
	01/17/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/24/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
3997-RYEL-INF	04/06/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.4	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
3998-FARM-INF	04/16/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.7	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	07/27/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	10/09/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	11/14/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.4	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	01/25/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	02/13/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	03/12/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-

RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1, 2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH
		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA
3998-FARM-INF (cont.)	04/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	07/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	1.4	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	10/17/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.2	<0.2	<0.1	<0.3	<2.0	-
	01/15/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	04/10/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/17/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	10/09/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/15/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	04/16/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/27/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	10/25/2010	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/10/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/04/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	08/19/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	11/18/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/17/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/17/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	10/17/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	6.0
	01/16/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	04/23/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/23/2013	<0.5	20.3	<0.5	<1	20	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	09/03/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	10/17/2013	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
3998-FARM-POU	08/14/2012	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
3998-RYEL-INF	04/06/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	07/27/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	0.3	<0.3	<2.0	-
	10/08/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	0.8	<0.3	<2.0	-
	01/24/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	0.1	<0.3	<2.0	-
	04/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	07/17/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	10/15/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	0.1	<0.3	<2.0	-
	01/15/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/16/2009	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/13/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	07/22/2010	<0.50	<0.500	<0.50	<0.500	<2.00	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
	01/12/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	-	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-

RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1, 2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA
3998-RYEL-INF (cont.)	07/13/2011	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/11/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/18/2012	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	01/16/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
	07/23/2013	<0.5	<0.5	<0.5	<1	<3	<0.5	-	<0.5	<2.5	<0.5	<0.5	<2.5	<0.5	-	-	-	-	-	-	<0.5	<0.5	-	-
3998-RYEL-POU	08/14/2012	<0.50	<0.500	<0.50	<1.00	<2.50	<0.500	-	<0.50	<2.50	<0.500	<0.500	<2.50	<0.50	-	-	-	-	-	-	<0.50	<0.5	-	-
4002-CORN-INF	07/02/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	3.9	<0.1	<0.4	0.1	<0.2	<0.1	<0.3	<2.0	-
11703-FNGR-INF	07/02/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
11711-FNGR-INF	05/24/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
11711-SRNC-INF	04/16/2007	<0.1	<0.1	<0.1	<0.2	<0.5	<0.1	-	<0.2	<5	<0.1	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-
11712-SRNC-INF	04/16/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.4	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.1	<0.2	<0.1	<0.3	<2.0	-
11713-SRNC-INF	04/06/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	6.9	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
11892-BRLY-INF	05/03/2007	<0.1	0.2	<0.1	<0.3	0.2	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	2.3	<2.0	-
	10/09/2007	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	04/17/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	07/17/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
	10/15/2008	<0.1	<0.1	<0.1	<0.3	<0.6	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	<0.1	<0.2	<0.1	<0.3	<2.0	-
11894-BRLY-INF	05/03/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.6	<0.2	<0.1	<0.3	<2.0	-
	10/09/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.5	<0.2	<0.1	<0.3	<2.0	-
	01/24/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.5	<0.2	<0.1	<0.3	<2.0	-
	04/18/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.6	<0.2	<0.1	<0.3	<2.0	-
	07/24/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.6	<0.2	<0.1	<0.3	<2.0	-
10/15/2008	<0.1	0.1	<0.1	<0.3	0.1	<0.1	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.7	<0.2	<0.1	<0.3	<2.0	-	
11896-BRLY-INF	05/24/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.4	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.4	<0.2	<0.1	<0.3	<2.0	-
	10/08/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.3	<0.2	<0.1	<0.3	<2.0	-
	01/23/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.3	<0.2	<0.1	<0.3	<2.0	-
	04/16/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.2	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	0.4	<0.2	<0.1	<0.3	<2.0	-	

RESIDENTIAL POTABLE WELL ANALYTICAL DATA SUMMARY - VOC & TPH PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

Monitoring Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	Isopropyl Benzene (µg/L)	Naphthalene (µg/L)	tert-Butyl Alcohol (µg/L)	Diisopropyl ether (µg/L)	ethyl tert-butyl ether (µg/L)	tert-amyl alcohol (µg/L)	tert-amyl methyl ether (µg/L)	2-Butanone (MEK) (µg/L)	Acetone (µg/L)	Bromodichloro-methane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1, 2-Dichloroethene (µg/L)	Methylene Chloride (µg/L)	Tetrahydrofuran (µg/L)	Well pH
GW Clean-up Standards*		5	1,000	700	10,000	NA	20	66	0.65	NA	NA	NA	NA	NA	700	550	80	100	80	19	70	5	NA	NA
11896-BRLY-INF (cont.)	07/24/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.4	<0.2	<0.1	<0.3	<2.0	-
	10/17/2008	<0.1	<0.1	<0.1	<0.3	<0.6	0.3	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	3.1	<0.1	2.6	0.4	<0.2	<0.1	<0.3	<2.0	-
11902-FNGR-INF	03/16/2007	<0.5	<0.5	<0.5	<1.0	<2.5	<0.5	-	<0.5	<5.0	-	<0.5	<5.0	<0.5	-	-	-	-	-	-	-	-	-	-
	04/06/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.8	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.7	<0.2	<0.1	<0.3	<2.0	-
11906-FNGR-INF	04/25/2007	<0.1	<0.1	<0.1	<0.3	<0.6	0.4	<0.1	<0.2	<5.0	<0.1	<0.1	-	<0.1	<2.0	<3.0	<0.1	<0.4	0.1	<0.2	<0.1	<0.3	<2.0	-

* GW Clean-up Standards are the Maryland Department of the Environment (MDE) Groundwater Clean-up Standards for Type I and II Aquifers.

INF = Influent sample location

POU = Point-of-use sample location

<# = Less than the method detection limit of #

µg/L = Micrograms/Liter

12G = Laboratory Control Sampling (LCS) value was outside the Quality Control (QC) range. Data accepted based on acceptable check standard.

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

J = Detected between the Method Detection Limit (MDL) and the Reporting Limit (RL); therefore, result is an estimated value.

L1 = This result was above the calibration range; therefore it is an estimated value.

MTBE = Methyl Tertiary Butyl Ether

NA = Not Available or Not Analyzed for that specific compound

ND = Not Detected (# is method detection limit)

QK = This result was above the calibration range; therefore it is an estimated value.

V4 = Check standard was outside the QC range. Data accepted based on acceptable LCS.

V8 = LCS value was outside the QC range. Data accepted based on acceptable check standard.

VH = LCS value was outside the QC range. Data accepted based on acceptable check standard.

VC = Check standard was outside the QC range. Data accepted based on acceptable LCS.

VOC = Volatile Organic Compounds

Table 9

HISTORICAL RESIDENTIAL POTABLE WELL DATA SUMMARY- ISCO AND METALS PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
 11791 Fingerboard RD
 Monrovia, MD

Monitoring Well	Date	Chemical Oxygen Demand (mg/L)	Chromium (µg/L)	Chromium, Dissolved (µg/L)	Chromium (hexavalent) (µg/L)	Iron (µg/L)	Iron, Dissolved (µg/L)	Lead (µg/L)	Lead, Dissolved (µg/L)	TOC (µg/L)	TDS (µg/L)	TSS (µg/L)
GW Clean-up Standards*		NA	100	100	NA	2,600	2,600	15	15	NA	NA	NA
3737-BLUE-POU	08/14/2012	-	<1.0	<1.0	0.031	-	-	<1.0	<1.0	-	-	-
3739-BLUE-POU	08/14/2012	-	<1.0	<1.0	0.025	-	-	<1.0	<1.0	-	-	-
3740-BLUE-INF	08/21/2012	-	<1.0	<1.0	<0.020	-	-	49.3	8.8	-	-	-
3740-BLUE-POU	08/21/2012	-	<1.0	<1.0	<0.020	-	-	<1.0	<1.0	-	-	-
3829-GRNR-POU	08/14/2012	-	<1.0	<1.0	0.108	-	-	<1.0	<1.0	-	-	-
3833-GRNR-INF	08/21/2012	-	<1.0	<1.0	<0.020	-	-	92.2	17.7	-	-	-
3833-GRNR-POU	08/21/2012	-	<1.0	<1.0	<0.020	-	-	1.7	1.3	-	-	-
3835-GRNR-INF	08/21/2012	-	<1.0	<1.0	<0.020	-	-	10.1	5.1	-	-	-
3835-GRNR-POU	08/21/2012	-	<1.0	<1.0	<0.020	-	-	<1.0	<1.0	-	-	-
3837-GRNR-POU	08/14/2012	-	<1.0	<1.0	0.032	-	-	<1.0	<1.0	-	-	-
3923-ROSE-INF	08/19/2011	<15	<1	-	-	<20	<20	-	-	<500	238,000	<4000
	09/30/2011	<15	<1	-	-	40.9	<20	-	-	<500	174,000	<4000
	10/18/2011	<15	<1	-	-	1,970.00 L12	<20	-	-	<500	168,000	<4000
	11/16/2011	<15	<1	-	-	<20	<20	-	-	<500	172,000	4,000
	12/08/2011	<15	1.73 B1 L12	-	-	<20	<20	-	-	<500	176,000	<4000
	01/12/2012	<15	<1	-	-	30.3	<10	-	-	<500	184,000	<4000
	04/03/2012	<15	<1	-	-	21.8	<20	-	-	<500	68,000	<4000
	06/14/2012	<15	<1	-	-	<20	<20	-	-	<500	320,000	<4000
	07/16/2012	<15	<1	-	-	<20	<20	-	-	<500	294,000	<4000
	08/08/2012	<15.0	<1.0	<1.0	<0.020	11.4	7.3	2.4	1.9	<500	224,000	6,000.00
	10/04/2012	-	<1.0	<1.0	<0.020	10.6	10.2	2.0	1.5	-	-	-
	01/17/2013	-	<1.0	<1.0	<0.020	-	-	1.7	1.6	-	-	-
	04/23/2013	-	<1.0	<1.0	<0.030	-	-	1.4	1.3	-	-	-
10/18/2013	-	<1.0	<1.0	<0.030	-	-	3.1	3.1	-	-	-	
3923-ROSE-POU	08/08/2012	<15.0	<1.0	<1.0	<0.020	19.8	18.6	<1.0	<1.0	<500	146,000	<4000
	10/04/2012	-	<1.0	<1.0	<0.020	2.9	7.8	<1.0	<1.0	-	-	-
	01/17/2013	-	<1.0	<1.0	<0.020	-	-	1.4	<1.0	-	-	-
	04/23/2013	-	<1.0	<1.0	<0.030	-	-	6.6	3.3	-	-	-
	10/18/2013	-	<1.0	<1.0	<0.030	-	-	3.5	3.1	-	-	-
3979-FARM-POU	08/15/2012	-	<1.0	<1.0	0.047	-	-	4.1	3.6	-	-	-
3981-FARM-POU	08/14/2012	-	<1	<1	0.072	-	-	1.8	1.6	-	-	-
3983-FARM-INF	08/15/2012	-	<1.0	<1.0	<0.02	-	-	145	5.7	-	-	-
3983-FARM-POU	08/15/2012	-	<1.0	<1.0	<0.02	-	-	1.6	<1.0	-	-	-
3984A-FARM-INF	08/21/2012	-	<1.0	<1.0	0.034	-	-	15.2	1.6	-	-	-
3984A-FARM-POU	08/21/2012	-	<1.0	<1.0	0.032	-	-	<1.0	<1.0	-	-	-
3984-FARM-POU	08/21/2012	-	<1.0	<1.0	0.030	-	-	2.3	1.9	-	-	-
3985-FARM-INF	08/14/2012	-	<1.0	1.0	0.026	-	-	13.8	11.6	-	-	-



Table 9

HISTORICAL RESIDENTIAL POTABLE WELL DATA SUMMARY- ISCO AND METALS PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard RD
Monrovia, MD

Monitoring Well	Date	Chemical Oxygen Demand (mg/L)	Chromium (µg/L)	Chromium, Dissolved (µg/L)	Chromium (hexavalent) (µg/L)	Iron (µg/L)	Iron, Dissolved (µg/L)	Lead (µg/L)	Lead, Dissolved (µg/L)	TOC (µg/L)	TDS (µg/L)	TSS (µg/L)
GW Clean-up Standards*		NA	100	100	NA	2,600	2,600	15	15	NA	NA	NA
3985-FARM-POU	08/14/2012	-	<1.0	<1.0	0.024	-	-	<1.0	<1.0	-	-	-
3987-FARM-POU	08/14/2012	-	<1.0	<1.0	0.029	-	-	<1.0	<1.0	-	-	-
3989-FARM-INF	08/23/2012	-	<1.0	<1.0	<0.020	-	-	43.6	57.5	-	-	-
3989-FARM-POU	08/23/2012	-	<1.0	<1.0	<0.020	-	-	<1.0	<1.0	-	-	-
3990-FARM-INF	08/19/2011	<15	<1	-	-	56.8	56.000	-	-	925.000	246,000	<4000
	09/27/2011	<15	<1	-	-	58.8	49.000 B3 IS2	-	-	804.000	224,000	<4000
	10/18/2011	<15	<1	-	-	78.1 L12	45.7 L12	-	-	1,020.00	212,000	<4000
	11/16/2011	<15	<1	-	-	<20	<20	-	-	759.000	206,000	<4000
	12/08/2011	<15	1.01 B1 D1 L12	-	-	40.9	30.6 S2	-	-	771.000	268,000	<4000
	04/18/2012	<15	<1	-	-	50.9	52.1	-	-	811.000	276,000	<4000
	05/21/2012	<15	<1	-	-	32.8	28.2	-	-	656.000	184,000	<4000
	06/14/2012	<15	<1	-	-	61.9	58.000 LA	-	-	863.000	330,000	<4000
	08/06/2012	<15	<1.0	<1.0	<0.020	54.8	53.8	<1.0	<1.0	767.000	290,000	<4000
	10/12/2012	-	<1.0	<1.0	<0.020	71.7	73.2	<1.0	<1.0	-	-	-
	01/16/2013	-	<1	<1	-	-	-	<1	<1	-	-	-
	02/21/2013	-	-	-	<0.020	-	-	-	-	-	-	-
05/23/2013	-	<1.0	<1.0	<0.030	-	-	4.3	<0.5	-	-	-	
10/18/2013	-	<1.0	<1.0	<0.030	-	-	<0.5	<0.5	-	-	-	
3990-FARM-POU	08/06/2012	<15	<1.0	<1.0	<0.020	71.7	34.2	<1.0	<1.0	<500	464,000	<4000
	10/12/2012	-	<1.0	<1.0	<0.020	11.2	11.5	<1.0	<1.0	-	-	-
	01/16/2013	-	<1	<1	-	-	-	<1	<1	-	-	-
	02/21/2013	-	-	-	<0.020	-	-	-	-	-	-	-
	05/23/2013	-	<1.0	<1.0	<0.030	-	-	<0.5	<0.5	-	-	-
	10/18/2013	-	<1.0	<1.0	<0.030	-	-	<0.5	<0.5	-	-	-
3991-FARM-INF	08/15/2012	-	<1.0	<1.0	0.046	-	-	14.1	8.2	-	-	-
3991-FARM-POU	08/15/2012	-	<1.0	<1.0	0.083	-	-	<1.0	<1.0	-	-	-
3992-FARM-INF (DUP)	08/23/2012	<15	-	-	-	-	-	-	-	527	266,000	<4000
3992-FARM-INF	08/19/2011	<15	<1	-	-	415.000	431.000	-	-	769.000	258,000	<4000
	10/18/2011	<15	<1	-	-	27.7 L12	<20	-	-	620.00	212,000	<4000
	11/16/2011	<15	1.08	-	-	31.7	<20	-	-	523.000 D1	246,000	<4000
	12/08/2011	<15	<1	-	-	<20	<20	-	-	<500	252,000	<4000
	01/25/2012	<15	<1	-	-	<20	<200	-	-	565.000 11A	100,000	6,000
	04/03/2012	<15	<1	-	-	68.2	<20	-	-	<500	182,000	<4000
	05/21/2012	<15	<1	-	-	31.2	<20	-	-	616.000 QA	284,000	<4000
	06/13/2012	<15	<1	-	-	34.6	<20	-	-	711.000	294,000	<4000
	07/23/2012	<15	<1	-	-	<20	<20	-	-	673.000	302,000	<4000
	08/23/2012	<15	<1.0	<1.0	<0.020	10.3	9.2	<1.0	<1.0	<500	266,000	<4000
	10/17/2012	-	<1.0	<1.0	<0.020	26.6	57.2	<1.0	<1.0	-	-	-
	01/17/2013	-	<1.0	<1.0	-	-	-	<1.0	<1.0	-	-	-
	02/20/2013	-	-	-	<0.020	-	-	-	-	-	-	-
	05/23/2013	-	<1.0	<1.0	<0.030	-	-	3.8	2.8	-	-	-
10/23/2013	-	3.9	<1.0	<0.030	-	-	14	8.7	-	-	-	

Table 9

HISTORICAL RESIDENTIAL POTABLE WELL DATA SUMMARY- ISCO AND METALS PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
11791 Fingerboard RD
Monrovia, MD

Monitoring Well	Date	Chemical Oxygen Demand (mg/L)	Chromium (µg/L)	Chromium, Dissolved (µg/L)	Chromium (hexavalent) (µg/L)	Iron (µg/L)	Iron, Dissolved (µg/L)	Lead (µg/L)	Lead, Dissolved (µg/L)	TOC (µg/L)	TDS (µg/L)	TSS (µg/L)
GW Clean-up Standards*		NA	100	100	NA	2,600	2,600	15	15	NA	NA	NA
3992-FARM-POU	08/23/2012	<15	<1.0	<1.0	<0.020	88.3	89.7	<1.0	<1.0	<500	394,000	<4000
	10/17/2012	-	<1.0	<1.0	<0.020	15.1	18.1	<1.0	<1.0	-	-	-
	01/17/2013	-	<1.0	<1.0	-	-	-	<1.0	<1.0	-	-	-
	02/20/2013	-	-	-	<0.020	-	-	-	-	-	-	-
	05/23/2013	-	<1.0	<1.0	<0.030	-	-	<0.5	<0.5	-	-	-
	10/23/2013	-	<1.0	<1.0	<0.030	-	-	<0.5	<0.5	-	-	-
3992-RYEL-INF	08/21/2012	-	<1.0	<1.0	<0.020	-	-	9.5	4.3	-	-	-
3992-RYEL-POU	08/21/2012	-	<1.0	<1.0	<0.020	-	-	<1.0	<1.0	-	-	-
3993-FARM-INF	08/16/2012	-	1.2	<1.0	<0.02	-	-	25.2	9.2	-	-	-
3993-FARM-POU	08/16/2012	-	<1.0	<1.0	<0.02	-	-	<1.0	<1.0	-	-	-
3994-FARM-INF	09/08/2011	<15	<1	-	-	<20	<20	-	-	936.000	254,000	<4000
	09/27/2011	<15	<1	-	-	23.5	20.7	-	-	740.00	278,000	<4000
	10/20/2011	<15	<1	-	-	<20	<20	-	-	643.000	236,000	<4000
	12/08/2011	<15	<1	-	-	<20	<20	-	-	<500	272,000	<4000
	01/13/2012	<15	<1	-	-	<20	<10	-	-	771.000	276,000	<4000
	04/03/2012	<15	<1	-	-	<20	<20	-	-	683.000	236,000	<4000
	05/21/2012	<15	<1	-	-	<20	<20	-	-	843.000	340,000	<4000
	06/18/2012	<15	<1	-	-	<20	<20	-	-	810.00 QA	264,000	7,000
	08/06/2012	<15	<1.0	<1.0	<0.020	17.5	16.9	<1.0	<1.0	685.000 QA	284,000	<4000
	10/03/2012	-	2.7	1.9	0.100	124	13.0	7.0	2.5	-	-	-
	01/17/2013	-	<1.0	<1.0	-	-	-	<1.0	<1.0	-	-	-
	02/21/2013	-	-	-	<0.020	-	-	-	-	-	-	-
	05/23/2013	-	<1.0	<1.0	<0.030	-	-	<0.5	<0.5	-	-	-
	10/18/2013	-	<1.0	<1.0	<0.030	-	-	<0.5	<0.5	-	-	-
3994-FARM-POU	08/06/2012	<15	<1.0	<1.0	<0.020	7.3	4.8	<1.0	<1.0	<500	420,000	<4000
	10/03/2012	-	<1.0	<1.0	<0.020	240	168	<1.0	<1.0	-	-	-
	01/17/2013	-	<1.0	<1.0	-	-	-	<1.0	<1.0	-	-	-
	02/21/2013	-	-	-	<0.020	-	-	-	-	-	-	-
	05/23/2013	-	<1.0	<1.0	<0.030	-	-	<0.5	<0.5	-	-	-
	10/18/2013	-	<1.0	<1.0	<0.030	-	-	<0.5	<0.5	-	-	-
3994-RYEL-POU	08/14/2012	-	<1.0	<1.0	0.038	-	-	<1.0	<1.0	-	-	-
3995-FARM-INF	08/15/2012	-	<1	<1	0.063	-	-	21.6	8.5	-	-	-
3995-FARM-POU	08/15/2012	-	<1	<1	0.031	-	-	<1.0	<1.0	-	-	-
3996-FARM-INF	09/16/2011	<15	<1	-	-	89.5	108.000	-	-	725.000	300,000	58,000
	09/27/2011	<15	1.56 B3	-	-	80.4	55.4 B3	-	-	682.000	270,000	<4000
	11/11/2011	<15	<1	-	-	27.7	20.2	-	-	910.00	282,000	<4000
	12/08/2011	<15	1.19 B1 L12	-	-	25.5	<20	-	-	744.000	290,000	11,000
	02/16/2012	<15	<1	-	-	114.000	<20	-	-	858.000 QA	282,000	6,000
	04/04/2012	<15	<1	-	-	30.9	<20	-	-	852.000	256,000	<4000
	06/14/2012	<15	<1	-	-	<20	<20	-	-	731.000	318,000	<4000
	08/08/2012	<15	<1.0	<1.0	<0.020	19.7	8.2	<1.0	<1.0	711.000	290,000	6,000
	10/04/2012	-	<1.0	<1.0	<0.020	35.9	20.4	1.0	1.1	-	-	-
	01/17/2013	-	<1	<1	-	-	-	<1	<1	-	-	-
	02/21/2013	-	-	-	<0.020	-	-	-	-	-	-	-
	04/24/2013	-	<1.0	<1.0	<0.03	-	-	0.54	1.4	-	-	-
	10/24/2013	-	<1.0	<1.0	<0.030	-	-	0.55	<0.5	-	-	-

Table 9

HISTORICAL RESIDENTIAL POTABLE WELL DATA SUMMARY- ISCO AND METALS PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
 11791 Fingerboard RD
 Monrovia, MD

Monitoring Well	Date	Chemical Oxygen Demand (mg/L)	Chromium (µg/L)	Chromium, Dissolved (µg/L)	Chromium (hexavalent) (µg/L)	Iron (µg/L)	Iron, Dissolved (µg/L)	Lead (µg/L)	Lead, Dissolved (µg/L)	TOC (µg/L)	TDS (µg/L)	TSS (µg/L)
GW Clean-up Standards*		NA	100	100	NA	2,600	2,600	15	15	NA	NA	NA
3996-FARM-POU	08/08/2012	<15	1.0	<1.0	<0.020	107	91.8	4.9	2.8	<500	306,000	<4000
	10/04/2012	-	<1.0	<1.0	<0.020	25.7	21.7	3.4	2.9	-	-	-
	01/17/2013	-	<1	<1	-	-	-	<1	<1	-	-	-
	02/21/2013	-	-	-	<0.020	-	-	-	-	-	-	-
	04/24/2013	-	<1.0	1.2	<0.03	-	-	1.2	1.2	-	-	-
	10/24/2013	-	5.9	5.9	<0.030	-	-	1.3	1	-	-	-
3996-RYEL-POU	08/29/2012	-	<1.0	<1.0	<0.020	23.9	2.7	2.6	2.2	-	-	-
3997-FARM-INF (DUP)	10/04/2012	-	2.2	1.8	0.098	46.9	12.6	6.3	2.8	-	-	-
	01/17/2013	-	1.9	1.4	0.060	-	-	4.4	5.3	-	-	-
3997-FARM-INF	08/15/2011	<15	<1	-	-	20.7 B3	20.7	-	-	<500	192,000	5,000
	09/30/2011	<15	<1	-	-	22.1	23.9	-	-	<500	184,000	<4000
	10/19/2011	<15	3.82 L12	-	-	26.7 L12	<20	-	-	<500	192,000	<4000
	11/16/2011	<15	1.57	-	-	<20	<20	-	-	<500	198,000	6,000
	12/08/2011	<15	5.19 B1 L12	-	-	82.6	<20	-	-	<500	158,000	15,000
	01/11/2012	<15	7.07	-	-	44.1	<10	-	-	<500	158,000	<4000
	04/04/2012	<15	2.75	-	-	<20	<20	-	-	<500	212,000	<4000
	06/14/2012	<15	2.25	-	-	<20	<20	-	-	<500	256,000	<4000
	07/12/2012	<15	<1	-	-	<20	<20	-	-	<500	270,000 HA	<4000
	08/06/2012	<15	1.8	1.2	0.069	16.4	13.1	1.8	1.8	<500	264,000	7,000
	10/04/2012	-	11.8	<1.0	<0.020	52.4	10.5	<1.0	<1.0	-	-	-
	01/17/2013	-	1.8	1.6	-	-	-	4.7	4.6	-	-	-
	02/21/2013	-	-	-	0.126	-	-	-	-	-	-	-
	04/24/2013	-	2.5	<1.0	0.11	-	-	2.0	1.1	-	-	-
10/18/2013	-	<1.0	<1.0	<0.030	-	-	<0.5	<0.5	-	-	-	
3997-FARM-POU	08/06/2012	<15	<1.0	<1.0	<0.020	24.2	55.1	2.4	2.7	<500	258,000	<4000
	10/04/2012	-	<1.0	<1.0	<0.020	53.5	56.8	-	<1.0	-	-	-
	01/17/2013	-	-	<1.0	-	-	-	<1.0	<1.0	-	-	-
	02/21/2013	-	-	-	<0.020	-	-	-	-	-	-	-
	04/24/2013	-	<1.0	<1.0	<0.03	-	-	<0.5	<0.5	-	-	-
	10/18/2013	-	<1.0	<1.0	<0.030	-	-	<0.5	<0.5	-	-	-
3998-FARM-POU	08/14/2012	-	<1.0	<1.0	0.02	-	-	<1.0	<1.0	-	-	-
3998-RYEL-POU	08/14/2012	-	<1.0	<1.0	0.027	-	-	<1.0	<1.0	-	-	-

* GW Cleanup Standards are the Maryland Department of the Environment (MDE) Groundwater Clean-up Standards for Type I and II Aquifers.
 INF = Influent sample location
 POU = Point-of-use sample location
 <# = Less than the method detection limit of #
 µg/L = Micrograms/Liter
 11A = The Relevant Percent Difference (RPD) result exceeded the Quality Control (QC) control limits for the duplicate sample
 B1 = Blank results were above the Method Detection Limit (MDL), therefore sample results may be biased high.
 B3 = The prep blank associated with this sample had a result greater than the Method Reporting Limit (MRL). Data may be biased
 D1 = The RPD result exceeded the QC control limits for the duplicate sample analyzed.
 HA = This sample was received beyond the EPA recommended holding time.
 IS2 = Internal standard recovery was outside of acceptable range due to possible matrix interference.
 L12 = The prep method Laboratory Control Sampling (LCS) spike recovery was outside acceptance limits. The batch results were
 LA = Sample for dissolved metal analysis was filtered at the laboratory.
 NA = Not Available or Not Analyzed for that specific compound
 QA = The RPD result exceeded the QC control limits for the duplicate sample analyzed.



Table 9

HISTORICAL RESIDENTIAL POTABLE WELL DATA SUMMARY- ISCO AND METALS PARAMETERS

Carroll - Monrovia MD - Green Valley Citgo
 11791 Fingerboard RD
 Monrovia, MD

Monitoring Well	Date	Chemical Oxygen Demand (mg/L)	Chromium (µg/L)	Chromium, Dissolved (µg/L)	Chromium (hexavalent) (µg/L)	Iron (µg/L)	Iron, Dissolved (µg/L)	Lead (µg/L)	Lead, Dissolved (µg/L)	TOC (µg/L)	TDS (µg/L)	TSS (µg/L)
GW Clean-up Standards*		NA	100	100	NA	2,600	2,600	15	15	NA	NA	NA

S2 = Sample for dissolved metal analysis was filtered at the laboratory.
 TDS = Total Dissolved Solids
 TSS = Total Suspended Solids
 TOC = Total Organic Carbons



APPENDIX A

Maryland Department of the Environment Correspondence



MARYLAND DEPARTMENT OF THE ENVIRONMENT

Oil Control Program, Suite 620, 1800 Washington Blvd., Baltimore MD 21230-1719

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Martin O'Malley
Governor

Shari T. Wilson
Secretary

Anthony G. Brown
Lieutenant Governor

Robert M. Summers, Ph.D.
Deputy Secretary

November 18, 2010

Mr. Herbert M. Meade
Environmental, Health and Safety Director
Carroll Independent Fuel Company
2700 Loch Raven Boulevard
Baltimore MD 21208

Mr. Arshad M. Ranjha and
Mr. Saquib Iqbal Khan
Mr. Znafar
Saaba Corporation
2926 Summit Circle
Ellicott City MD 21207

Mr. Kiran M. Dewan, Resident Agent
1657 Whitehead Court
Baltimore MD 21207

Mr. Samir Andrawos and
Timbercrest LP
P.O. Box 369
Damascus MD 20872

Ms. Jennifer Andrawos, Resident Agent
25133 Silver Crest Drive
Gaithersburg MD 20882

RE: WORK PLAN APPROVAL
Case No. 2005-0834-FR
Notice of Violation NV-2007-069
Green Valley Citgo
11791 Fingerboard Road, Monrovia
Frederick County, Maryland
Facility I.D. No. 11836

Dear Messrs. Meade, Ranjha, Khan, Znafar, and Dewan, and Mr. and Ms Andrawos:

The Oil Control Program recently completed a review of the case file for the above-referenced property, including the *Groundwater Sampling Report - August 31, 2010* and the *In-Situ Chemical Oxidation Pilot Test Work Plan - September 9, 2010*. In June 2010, the Department required the submittal of a *Corrective Action Plan (CAP)* to address the elevated concentrations of methyl tertiary-butyl ether (MTBE) remaining in the on-site monitoring well network and several off-site private drinking water supply wells. In July 2010, groundwater sampling detected MTBE up to 12,800 parts per billion (ppb) in the vicinity of the active underground storage tank (UST) field. In addition, pre-filtration samples collected from the impacted off-site private drinking water wells detected MTBE up to 1,770 ppb.

In September 2010, the Department was notified by the Carroll Independent Fuel Company (CIFC) of their intent to evaluate in-situ chemical oxidation (ISCO) as a possible remedial technology. The *Chemical Oxidation Pilot Test Work Plan* proposes to inject hydrogen peroxide and ozone at three distinct subsurface intervals, in an area to the south of the active tank field, during a two-day pilot test. The proposed ISCO pilot test activities include the installation of three nested injection wells (IW-1, IW-2, IW-3), a nested observation well (MW-18N), and a vapor extraction well (VE-1). In addition, eleven existing on-site monitoring wells will be used to evaluate the aquifer for changes in groundwater chemistry and elevation. Prior to the start of pilot test activities, groundwater samples will be collected from the five identified monitoring wells (MW-7, MW-14D, MW-15D, MW-17, and MW-18N) in the vicinity of the study area. Post-injection samples will also be collected from the same five monitoring wells after one week and after four weeks following the oxidant injections. To minimize the potential for vapor migration, pilot test activities will include hourly vapor monitoring using the above five monitoring wells. Additionally, vapor monitoring will be conducted within the occupied areas of the Green Valley Plaza building.

The Department understands that should changing site conditions warrant, pilot testing activities will cease and the contingency plans, including groundwater extraction, vapor extraction, and increased vapor monitoring, will be enacted to further ensure that pilot testing activities do not pose a threat to human health or the environment.

In October 2010, the Department received the *Proposed Groundwater and Potable Well Sampling Program - October 13, 2010*. The *Sampling Program* proposes to use U.S. EPA approved low flow sampling procedures when collecting samples from the monitoring well network. In addition, the *Sampling Program* proposes to eliminate total petroleum hydrocarbons/diesel-range organics from the list of required analytes.

Based our review of the data submitted thus far, the Department hereby approves the *In-Situ Chemical Oxidation Pilot Test Work Plan - September 9, 2010* for immediate implementation, contingent upon the following modifications.

- 1) The Department requires the addition of monitoring wells MW-8, MW-10, MW-13, MW-14S, and MW-16 to the list of monitoring wells (MW-7, MW-14D, MW-15D, MW-17, and MW-18N) at which samples will be collected as part of the baseline and post-pilot test groundwater sampling plans. The Department reserves the right to require additional groundwater sampling and vapor monitoring as deemed necessary.
- 2) All wastewater generated as a result of pilot test activities will be containerized for off-site disposal at an approved facility.
- 3) The Department anticipates receiving a complete report evaluating the results of approved pilot test activities and submission of the *Corrective Action Plan* no later than January 31, 2011.
- 4) The Department approves the collection of samples from the monitoring well network in accordance with U.S. EPA approved low flow sampling techniques and as proposed in the *Sampling Program - October 13, 2010*.

- 5) Continue **quarterly (every three months)** sampling of the monitoring well network, including the newly constructed monitoring well MW-18N. All samples collected 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. The Department will review the request to eliminate TPH/DRO from the list of required analyses pending an evaluation of the low flow sampling data and pilot testing activities.
- 6) Continue sampling of the granular activated carbon (GAC) filtration system installed on the transient non-community supply wells serving the Green Valley Plaza, as directed in the Department's correspondence dated June 17, 2010. Additionally, continue sampling supply wells FR-88-1366, FR-88-1394, and FR-81-5955 on an annual basis. All samples collected from the transient non-community supply wells must be analyzed for full-suite VOCs, including fuel oxygenates, using EPA Method 524.2. The Department does not require analyses for TPH/DRO and TPH/GRO for samples collected from the transient non-community supply wells.
- 7) Continue sampling the three transient non-community supply wells serving the Green Valley Shopping Center on a **quarterly (every three months)** basis. All samples collected from the transient non-community supply wells must be analyzed for full-suite VOCs, including fuel oxygenates, using EPA Method 524.2. The Department does not require analyses for TPH/DRO and TPH/GRO for samples collected from the transient non-community supply wells.
- 8) Continue **quarterly (every three months)** sampling of the private drinking water supply wells where point-of-entry treatment systems have been installed:
 - 3990, 3992, 3994, 3996, and 3997 Farm Lane; and
 - 3923 Rosewood Road.
- 8) Continue **quarterly (every three months)** sampling of the private drinking water supply wells at:
 - 3985, 3987, 3989, 3991, 3993, 3995, and 3998 Farm Lane;
 - 3829, 3833, 3835, and 3837 Green Ridge Drive; and
 - 3737, 3739, and 3740 Blueberry Court.
- 9) Continue **semi-annual (every six months)** sampling of the private drinking water supply wells at:
 - 3979, 3981, 3983, and 3984 Farm Lane; and
 - 3992, 3994, 3996, and 3998 Rye Lane.
- 10) All samples collected from the above off-site private drinking water supply wells must be analyzed for full-suite VOCs, including fuel oxygenates, using EPA Method 524.2. Provide a copy of the sampling results to the property owner, the Frederick County Health Department (Attn: George Keller), and the MDE-Oil Control Program (Attn: Jim Richmond).

Messrs. Meade, Ranjha, Khan, Znafar, and Dewan, and Mr. and Ms Andrawos
Case No. 2005-0834-FR
Page Four

Notify the Oil Control Program at least five (5) working days prior to starting pilot test activities so we can be on-site to observe field activities. When submitting documentation to the Oil Control Program, provide two hard copies and a digital copy on a labeled 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. Jim Richmond, at 410-537 3337 (email: jrichmond@mde.state.md.us) or me at 410-537-3499 (email: sbull@mde.state.md.us).

Sincerely,

A handwritten signature in black ink, appearing to read "S. Bull", with the word "FOR" written in smaller letters to the right of the signature.

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

JWR/nln

cc: Mr. Steven M. Slatnick (Groundwater and Environmental Services, Inc.)
Mr. Norman B. Handler (Resident Agent)
Robert S. Bassman, Esquire (Bassman, Mitchell & Alfano)
Dwight W. Stone, Esquire (Whiteford, Taylor, Preston)
Mr. Christopher J. Miceli (VERTEX)
Mr. George Keller (Frederick County Health Dept.)
Mr. John Grace (MDE-Water Supply Program)
Ms. Priscilla Carroll, Esquire
Mr. Christopher H. Ralston
Mr. Thomas L. Walter
Mr. Horacio Tablada


MARYLAND DEPARTMENT OF THE ENVIRONMENT

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 Martin O'Malley
 Governor

 Robert M. Summers, Ph.D.
 Secretary

 Anthony G. Brown
 Lieutenant Governor

October 18, 2013

 Mr. Herbert M. Meade
 Environmental, Health and Safety Director
 Carroll Independent Fuel Company
 2700 Loch Raven Road
 Baltimore MD 21218

RE: REQUEST TO REVISE SAMPLING PLAN
Case No. 2005-0834-FR
Green Valley Citgo
11791 Fingerboard Road, Monrovia
Frederick County, Maryland
Facility I.D. No. 11836

Dear Mr. Meade:

The Oil Control Program recently completed a review of the case file for the above-referenced facility, including the *Request to Revise the Monitoring Well Sampling Plan - May 22, 2013*; the *May 2013 Metals Sampling Data Transmittal Letter - June 17, 2013*; and the *Second Quarter 2013 Monitoring Report - August 15, 2013*. The time series data continue to demonstrate a decreasing trend for volatile organic compounds (VOCs) in the on-site monitoring well network, the on-site drinking water supply wells, and the impacted off-site private drinking water supply wells. Taking this decreasing trend into consideration, your environmental consultant has completed a statistical analysis of contaminant concentrations in groundwater and the corresponding contaminant distribution in the on-site monitoring wells. As a result, the *Request to Revise the Monitoring Well Sampling Plan* proposes to reduce the sampling frequency for seven of the monitoring wells to an annual basis. Your consultant also requests that the Oil Control Program eliminate total petroleum hydrocarbons - diesel range organics (TPH-DRO) from the list of required analytical parameters.

Prior to and throughout implementation of in-situ chemical oxidation (ISCO) remediation, the groundwater sampling plan was amended to include the evaluation of additional water quality parameters and the analysis of inorganic compounds. After almost two years of supplemental groundwater sampling from site monitoring wells and the off-site private drinking water supply wells, the *May 2013 Metals Sampling Data Transmittal Letter* concludes there is no evidence to confirm the ISCO system is generating or causing the migration of metals (i.e., chromium, iron, and lead) in groundwater in the vicinity of the site. The *May 2013 Metals Sampling Data Transmittal Letter* proposes to discontinue the analysis for metals when collecting samples from site monitoring wells and off-site private drinking water supply wells.

The Maryland Department of the Environment and the Frederick County Health Department have also collected drinking water and groundwater samples from select supply wells. The samples have been evaluated for certain water quality parameters and analyzed for the presence of metals. Pending final evaluation of the collected data, the Departments will issue its assessment regarding the ISCO system and the impacts it may have had on local groundwater quality.

The Oil Control Program has reviewed the proposals and associated data. At this time, the request to modify the groundwater sampling plan is denied. The remedial activities completed to date (e.g., removal of underground storage tanks, soil excavation, and ISCO treatment) have achieved a significant reduction in the concentration of dissolved phase petroleum contaminants; however, additional corrective action is required. In order to further evaluate the requested reduction in data collection, Carroll Independent Fuel Company must submit a *Revised Corrective Action Plan (Revised CAP)*. The requirements for the *Revised CAP* and other ongoing sampling requirements, including additional metals sampling, are detailed below.

REQUEST FOR REVISED CORRECTIVE ACTION PLAN:

- 1) **No later than January 31, 2014**, submit a *Revised CAP*. The *Revised CAP* may propose active remediation, monitored natural attenuation, or a combination of appropriate remedial options.
- 2) The *Revised CAP* must present an up-to-date conceptual site model of the dissolved-phase hydrocarbon plume, discuss any changes to the contaminant plume realized as a result of previous remedial activities, and propose a means to mitigate current and future risks to on-site and/or off-site receptors.
- 3) The *Revised CAP* must detail any treatment and/or disposal measures used as part of the proposed remedial activities to handle any waste materials generated.
- 4) The *Revised CAP* must discuss any additional pilot tests that may be required to demonstrate the effectiveness of a particular technology.
- 5) The *Revised CAP* must include a discussion of the cleanup goals and identify remedial endpoints based on site-specific conditions and the associated risk to human health and the environment. Once cleanup endpoints are achieved, approval to implement post-remedial monitoring may be requested through the submittal of a post-remedial monitoring plan. The Department reserves the right to modify the remedial endpoints and the post-remedial monitoring plan based on site-specific conditions.

MONITORING WELLS:

- 6) Continue quarterly (every three months) sampling of the on-site monitoring wells and tank field monitoring pipes using the USEPA Region III Low-Flow Sampling Standard Operating Procedure. All samples collected from the monitoring wells and tank field pipes must be analyzed for full-suite VOCs, including fuel oxygenates and naphthalene, in accordance with EPA Method 8260 and for total petroleum hydrocarbons – diesel and gasoline range organics (TPH-DRO and TPH-GRO) using EPA Method 8015B.

- 7) **No later than October 30, 2013**, complete an additional round of supplemental sampling of the on-site monitoring wells and tank field monitoring pipes. All samples collected must be analyzed for: total chromium, dissolved chromium, hexavalent chromium, total iron, dissolved iron, total lead, dissolved lead, chemical oxygen demand, total organic carbon, total dissolved solids, and total suspended solids. Record the groundwater elevation, temperature, turbidity, dissolved oxygen, oxidation reduction potential, conductivity, and pH at each monitoring well. The supplemental sampling may coincide with a quarterly groundwater sampling event.

COMMERCIAL SUPPLY WELLS:

- 8) Continue quarterly sampling of the Green Valley Plaza supply wells FR-94-1233 and FR-94-1281, the Green Valley Plaza POET system, and the Green Valley Shopping Center supply wells FR-73-4918, FR-73-6674, and FR-73-1687. All samples collected from the referenced supply wells must be analyzed for full-suite VOCs, including fuel oxygenates and naphthalene, in accordance with EPA Method 524.2.
- 9) Continue annual sampling of Green Valley Plaza supply wells FR-81-5955, FR-88-1394, and FR-88-1366. All samples collected from the referenced supply wells must be analyzed for full-suite VOCs, including fuel oxygenates and naphthalene, in accordance with EPA Method 524.2.
- 10) **No later than October 30, 2013**, complete an additional round of supplemental sampling from the five supply wells serving the Green Valley Plaza, the three supply wells serving the Green Valley Shopping Center, and the point-of-use sample locations for both the Green Valley Plaza and the Green Valley Shopping Center. All samples collected must be analyzed for: total chromium, dissolved chromium, hexavalent chromium, total iron, dissolved iron, total lead, dissolved lead, chemical oxygen demand, total organic carbon, total dissolved solids, and total suspended solids. Record temperature, turbidity, dissolved oxygen, oxidation reduction potential, conductivity, and pH at each supply well. The supplemental sampling may coincide with a quarterly groundwater sampling event.

RESIDENTIAL SUPPLY WELLS:

- 11) Continue quarterly sampling of the following residential supply wells: 3923 Rosewood Road and 3990, 3992, 3994, 3996, and 3997 Farm Lane. The samples must be collected pre-, mid-, and post-filtration. All samples collected from the referenced supply wells must be analyzed for full-suite VOCs, including fuel oxygenates and naphthalene, in accordance with EPA Method 524.2.
- 12) **No later than October 30, 2013**, complete an additional round of supplemental sampling from the following residential supply wells: 3923 Rosewood Road and 3990, 3992, 3994, 3996, and 3997 Farm Lane. The samples must be collected prior to any filtration system (e.g., granular activated carbon filtration system) and post-filtration at a point of use (e.g., water faucet). All samples collected must be analyzed for: total chromium, dissolved chromium, hexavalent chromium, total iron, dissolved iron, total lead, dissolved lead, chemical oxygen demand, total organic carbon, total dissolved solids, and total suspended solids. Record temperature, turbidity, dissolved oxygen, oxidation reduction potential, conductivity, and pH at each supply well. The supplemental sampling may coincide with a quarterly groundwater sampling event.

- 13) Continue quarterly sampling of the following residential supply wells:
- 3985, 3987, 3989, 3991, 3993, 3995, and 3998 Farm Lane;
 - 3829, 3833, 3835, and 3837 Green Ridge Road; and
 - 3737, 3739, and 3740 Blueberry Court
- 14) Continue semi-annual sampling of the following residential supply wells:
- 3979, 3981, 3983, 3984 (both wells) Farm Lane; and
 - 3992, 3994, 3996, and 3998 Rye Lane.

All samples collected from the supply wells referenced in 13) and 14) above must be analyzed for full-suite VOCs, including fuel oxygenates and naphthalene, in accordance with EPA Method 524.2.

- 15) **No later than February 15, 2014**, submit a comprehensive report of the quarterly groundwater sampling results including the above supplemental groundwater monitoring data.
- 16) **Within 45 days of completing sample collection**, the Department must receive an analytical data summary package for all collected data.

If you have any questions, please contact the case manager, Mr. Jim Richmond, at 410-537-3337 (email: jim.richmond@maryland.gov) or me at 410-537-3449 (email: susan.bull@maryland.gov).

Sincerely,



Susan R. Bull, Western Regional Manager
Remediation and State Lead Division
Oil Control Program

JWR/nln

cc: Mr. Steven M. Slatnick (Groundwater and Environmental Services, Inc.)
Craig Silverman, Esq. (Law Offices of Peter G. Angelos)
Dwight W. Stone II, Esq. (Whiteford, Taylor, Preston)
Eric Klein, Esq. (Beveridge & Diamond)
Mr. George Keller (Frederick County Health Dept.)
Mr. John Grace (MDE-Water Supply Program)
Priscilla N. Carroll, Esq.
Mr. Andrew B. Miller
Mr. Christopher H. Ralston
Mr. Horacio Tablada

APPENDIX B

Site History Summary



HISTORICAL ACTIVITY SUMMARY (key / relevant dates):

- 1990 – 2000: The facility was operated by Timbercrest LP.
2000: Underground storage tanks (USTs) were registered to Carroll Independent Fuel Company (Carroll).
- June 13, 2001: Three soil borings (SB-1AR, SB-2AR and SB-3) were advanced onsite and soil samples were collected by ATC Associates (ATC) as part of a Phase II Environmental Assessment.
- July 24, 2001: ATC completed a *Phase II Environmental Assessment* report.
- January 28, 2005: The Maryland Department of the Environment (MDE) Oil Control Program (OCP) conducted a compliance inspection, during which elevated levels of petroleum vapors were detected in the vicinity of the tank field, around tank top components, and in the tank field monitoring wells.
- June 1, 2005: MDE correspondence required vapor leak testing, containment sump and catchment basin testing, the installation of groundwater monitoring wells to comply with High-Risk Groundwater Use Area (HRGUA) Regulations, and the submittal of a *Subsurface Investigation Work Plan* to assess the vertical and lateral extent of any contamination of soil and/or groundwater. OCP Case #2005-0834-FR was assigned to the site.
- July 8, 2005: A *Work Plan – Subsurface Investigation and Emergency Regulation Compliance* was submitted to the MDE by Environmental Alliance (Alliance), proposing a soil boring event, installation of four monitoring wells, groundwater sampling, slug tests, and a sensitive receptor search.
- August 18, 2005: The MDE approved the *Work Plan*, with modifications, and required a drinking water well survey within a half-mile radius of the site be conducted.
- September 14-15, 2005: Ten soil borings (GP-1 through GP-10) were advanced.
- February 6-7, 2006: Four bedrock monitoring wells (MW-1 through MW-4) were installed.
- March 28, 2006: Methyl-tertiary butyl ether (MTBE) was detected at a concentration of 14 micrograms per liter ($\mu\text{g/L}$) in a blended influent sample collected from two onsite drinking water wells supplying the shopping center, Green Valley Plaza (GVP), that houses the station.
- April 2006: Mr. Arshad Ranjha, doing business as Saaba Corporation, registered as the new UST owner.
- May 24, 2006: An *Assessment for the Emergency Regulations Compliance Report* was submitted to the MDE, detailing the soil boring event, the monitoring well installation, groundwater sampling, sampling of the onsite potable wells, and a sensitive receptor survey.
- July 7, 2006: The MDE responded to the *Assessment Report*, and required semi-annual sampling of the monitoring wells, the tank field wells, and the Site's supply wells, and submittal of boring logs for the onsite drinking water supply wells and the bedrock monitoring wells.
- September 19, 2006: MTBE was detected in a blended influent sample from the GVP's supply wells at a concentration of 42 $\mu\text{g/L}$.
- November 17, 2006: A *Semi-Annual Sampling Report* was submitted to the MDE detailing the results of groundwater sampling and the potable well sampling, and the intention to install a point of entry treatment (POET) system on GVP's water supply.



HISTORICAL ACTIVITY SUMMARY (Continued):

- January 22, 2007: The MDE issued a *Request for Interim Corrective Action Plan (ICAP) and Supplemental Investigation*, requiring the submittal of an ICAP to reduce vapor concentrations in the tank field, including a soil-vapor extraction (SVE) test on the tank field and monitoring well MW-3, an investigation of surface drains, and increased frequency of monitoring well and tank field well sampling from semi-annually to quarterly. The submittal of a *Site Conceptual Model (SCM)* and a supplemental *Work Plan* to further develop the SCM were also required. Quarterly sampling of GVP's and the adjacent Green Valley Shopping Center's (GVSC's) potable wells, initial sampling of several private offsite potable wells, and a detailed drinking water well survey within a half-mile radius of the site was required.
- March 23, 2007: An extension request for the submittal of the ICAP was submitted to the MDE, noting that there was more than one potentially responsible party at the Site.
- April 5, 2007: MDE correspondence acknowledged that more than one potentially responsible party existed at the Site.
- April 5, 2007: The MDE issued *Notice of Violation (NOV) NV-2007-069* to all potentially responsible parties for failure to meet the requirements of the January 22, 2007 directive letter within the specified deadlines. The MDE also sent correspondence regarding the case to the Frederick County Health Department (FCHD).
- April 5-6, 2007: An initial round of samples was collected from select offsite residential potable wells.
- April 11, 2007: Alliance met with the MDE's Water Supply Division to discuss installing a POET system on GVP's water supply.
- April 12, 2007: Email correspondence to MDE proposed sampling of additional select residential potable wells. The proposal was approved.
- April 19, 2007: Email correspondence to MDE proposed sampling of additional select residential potable wells. The proposal was approved.
- April 25, 2007: An ICAP was submitted to the MDE proposing SVE feasibility testing.
- April 25, 2007: A *Sampling Results and Work Plan* was submitted to the MDE detailing the results of sampling of offsite residential potable wells, the GVP supply wells and the GVSC supply wells, and included plans for future sampling.
- April 30, 2007: A *Drinking Water Well Survey* detailing the results of a search for potable wells within a half-mile radius of the site was submitted to the MDE.
- April 30, 2007: Granular activated carbon (GAC) POET systems were installed at two residences (3996 and 3994 Farm Lane) where MTBE was detected above the MDE's action level of 20 µg/L.
- May 7, 2007: The MDE approved the ICAP, with modifications, and required monthly sampling of certain residential potable wells. Alliance submitted *Site Conceptual Model and Supplemental Work Plan* to the MDE. A POET system was installed at 3990 Farm Lane.
- May 11, 2007: A POET system was installed at 3923 Rosewood Lane.
- May 17, 2007: A *Surface Drain Evaluation* was submitted to the MDE.
- May 22, 2007: *Modifications to the Work Plan and the ICAP* was submitted to the MDE via email.
- May 23, 2007: A POET system was installed at 3992 Farm Lane.
- May 31 – June 1, 2007: Soil vapor monitoring points SV-1, SV-2 and SV-3 were installed around the tank field in preparation for SVE testing. Soil boring SB-1 was also advanced.
- June 9, 2007: A POET system was installed at 3997 Farm Lane.



HISTORICAL ACTIVITY SUMMARY (Continued):

- June 21-22, 2007: SVE feasibility testing was performed onsite.
- June 27, 2007: The MDE approved the *Supplemental Work Plan*.
- July 27, 2007: The MDE sent *Request to Sample Drinking Water Supply Well* notices to seven residences surrounding the Site.
- August 8, 2007: The MDE issued the directive *Off-Site Domestic Well Sampling Frequencies* requiring monthly sampling of 25 residences with potable wells and the submission of *Monthly Status Reports*, and quarterly sampling of 14 residences with potable wells and the submission of *Quarterly Drinking Water Supply Well Sampling Reports*.
- October 15, 2007: A *Potable Well Sampling Report* was submitted to the MDE. A *Quarterly Sampling Report* was also submitted, and included details of the SVE testing.
- March 27, 2008: The MDE issued *Modifications to Off-Site Domestic Well Sampling Frequencies and Request for Site Status*, reducing the reporting frequency for all data and the sampling frequency of certain potable wells to quarterly, but still required monthly sampling of wells outfitted with POET systems. The MDE requested an update on the proposed installation of a POET system on the GVSC supply wells, and the installation of five monitoring wells required in the April 5, 2007 NOV.
- May 6, 2008: A *Supplemental Work Plan Addendum* was submitted to the MDE proposing changes to the construction and installation of monitoring wells.
- May 12-15 2008: Four shallow groundwater monitoring wells (MW-5 through MW-8) were installed. The monitoring wells were left as open boreholes in the water-bearing zone. Monitoring well MW-3 was abandoned in anticipation of upcoming UST removal activities.
- May 28, 2008: The MDE approved the *Supplemental Work Plan Addendum*.
- June 2008: Down-hole geophysical testing of monitoring wells MW-6, MW-7 and MW-8, and drinking water wells FR-88-1356 and FR-94-1233 was conducted.
- June 20, 2008: A *Response to Directive* was submitted to the MDE, proposing the installation of four monitoring wells rather than five.
- July 21-25, 2008: One 2,000-gallon diesel UST and three 10,000-gallon gasoline USTs were removed from the Site. MDE was onsite to observe UST removal activities. Over 1,100 tons of soil, approximately 523 tons of which were petroleum-impacted, were removed from the Site. Soil vapor point SV-3 and tank field wells TF-1 and TF-2 were destroyed during UST removal activities. Site surface water discharge was reconfigured during Site upgrade activities.
- August 2008: A new UST system, consisting of two 10,000-gallon gasoline USTs, one 10,000-gallon diesel UST and one 4,000-gallon diesel UST, was installed at the Site. SVE piping was installed, connected to the tank field monitoring wells.
- August 2008: Water treatment permit was approved for modifications to the GVP supply well.
- August 22, 2008: A *UST System Closure Report* was submitted to the MDE.
- September 2008: A POET system was installed on the GVP water supply.
- September 16, 2008: A *Hydrogeologic Investigation Update Report and Work Plan* was submitted to the MDE, and included results of the down-hole geophysical well testing. The Work Plan proposed the installation of monitoring wells within the open boreholes of monitoring wells MW-5 through MW-8, installation of additional shallow monitoring wells, additional SVE testing, modifications to the potable well sampling plan, and preparation of an updated SCM.



HISTORICAL ACTIVITY SUMMARY (Continued):

- December 12, 2008: The MDE approved the *Work Plan* with modifications. The MDE did not approve the installation of new shallow monitoring wells, but requested the evaluation of need for deep monitoring wells near the tank field and offsite to the south and southeast; frequency of sampling POET systems at three residential addresses was increased to semi-monthly, frequency of the other three residential POET systems remained monthly; frequency of sampling at certain residences with potable wells was changed to quarterly, and others were changed to semi-annually. The MDE sent letters to area residents to inform them of the sampling frequency change.
- December 16, 2008: The need for installation of shallow monitoring wells in order to better place deep monitoring wells was verbally discussed with Jim Richmond of MDE.
- December 17, 2008: Susan Bull of MDE approved, via email, the installation of shallow monitoring wells if the data from them was needed in order to place deep monitoring wells.
- December 30, 2008: A *Response to Directive* was sent to the MDE.
- January 16, 2009: SVE feasibility testing was conducted.
- February 3, 2009: The MDE issued *Work Plan Clarification*, approving the installation of shallow wells in order to better place deep monitoring wells, and clarified the frequency of monitoring of the GVP and CVSC supply wells and residential potable wells.
- February 2009: Permanent screened monitoring wells were constructed in the open boreholes of monitoring wells MW-5 through MW-8.
- February 27, 2009: Alliance submitted *Soil Vapor Extraction (SVE) Pilot Testing Results* to the MDE.
- March 12, 2009: Five shallow monitoring wells (MW-9 through MW-13) were installed.
- May 20, 2009: The MDE issued *Changes to Off-Site Sampling Frequency*, changing the frequency of sampling residential POET systems to quarterly, and restating the required frequency of sampling offsite residential potable wells. The MDE also sent letters to area residents to inform them of the sampling frequency changes.
- June 5, 2009: A *Hydrogeologic Investigation Update and Work Plan* was submitted to MDE, detailing recent monitoring well installation, groundwater and potable well sampling, and updating the SCM. The *Work Plan* proposed the installation and geophysical testing of one deep monitoring well, installation of five shallow monitoring wells to help monitoring pump testing, packer testing of the deep monitoring well, pump testing of monitoring well MW-10, installation of an injection well, and injection testing of that well.
- August 21, 2009: A meeting was conducted with representatives of Carroll, Alliance, and MDE to discuss monitoring well installation and aquifer testing activities proposed in the *Work Plan*. It was decided that additional investigation in the vicinity of the tank field was necessary, and that short-term and long-term aquifer testing would be completed on monitoring wells close to the tank field in order to determine hydraulic conductivity and determine if any of the selected wells could function as recovery wells.
- August 26, 2009: *Work Plan Update* was submitted to the MDE, proposing installation of two deep monitoring wells, installation of two shallow monitoring wells, down-hole geophysical testing, packer testing of deep monitoring well PMW-14D, a 72-hour pumping test on deep monitoring well PMW-15D, and 4-hour pumping tests on monitoring wells MW-10, MW-13, PMW-16, and PMW-17.
- September 22, 2009: The MDE approved the *Work Plan Update*, but required a brief report be submitted prior to packer testing, and a brief report be submitted prior to the short-term pumping tests.



HISTORICAL ACTIVITY SUMMARY (Continued):

- September 21–25, 2009: Deep monitoring wells MW-14D and MW-15D and shallow monitoring wells MW-16 and MW-17 were installed. The monitoring wells were left as open boreholes.
- October 8, 2009: Alliance submitted *Response to September 22, 2009 Directive*, and included the required details of the planned short-term pumping tests.
- October 19, 2009: Pumping tests were performed onsite, including a step-drawdown test and subsequent 72-hour pumping test on monitoring well MW-15D.
- November 2, 2009: Geophysical testing of monitoring wells MW-14D, MW-16 and MW-17 was performed.
- November 4, 2009: *Packer Testing Work Plan* was submitted to the MDE.
- November 5-6, 2009: Packer testing was completed on monitoring well MW-14D.
- March 15, 2010: Alliance submitted *Update Report and Work Plan* to the MDE detailing monitoring well installation, step testing, pump testing, geophysical well testing and packer testing. The *Work Plan* proposed the installation of 2-inch wells within monitoring well MW-14D, conversion of monitoring wells MW-15D, MW-16 and MW-17 to permanent screened wells, and the submittal of a *Corrective Action Plan (CAP)*.
- June 17, 2010: MDE issued *Request for Corrective Action Plan*, requiring the submittal of a CAP by August 6, 2010. The MDE also required that monitoring well MW-14D be finished as a 4-inch well, and a new 4-inch well, MW-14S be installed adjacent to it; and approved the completion of monitoring wells MW-15D, MW-16, and MW-17 as permanent screened wells, continued quarterly groundwater sampling, the initiation of quarterly sampling of the GVP POET system, continued quarterly sampling of residential POET systems, continued quarterly sampling of 14 residential potable wells, continued semi-annual sampling of 8 residential potable wells.
- July 9, 2010: Carroll submitted a response to the MDE's request for a CAP, requesting an extension of the deadline for the submittal of a CAP to October 31, 2010.
- July 19-21, 2010: Monitoring well MW-14S was installed onsite. Monitoring wells MW-15D, MW-16, and MW-17 were converted to permanent screened wells.
- August 9, 2010: The MDE approved the extension of the deadline for CAP submittal.
- August 10, 2010: A meeting was conducted between GES, Carroll, and the MDE.
- September 2010: The case was transferred from Alliance to GES.
- September 9, 2010: GES submitted *In Situ Chemical Oxidation (ISCO) Pilot Test Work Plan* to the MDE, proposing the installation of three nested injection wells, a nested observation well, and a vapor extraction well; and the injection of hydrogen peroxide and ozone at three subsurface intervals during a two-day pilot test.
- October 13, 2010: A *Proposed Groundwater and Potable Well Sampling Program* was submitted to the MDE, proposing low-flow sampling methods and the collection of field measurements to replace the current purge and sample method for groundwater sampling; and the removal of Total Petroleum Hydrocarbons – Diesel Range Organics (TPH-DRO) from the list of parameters analyzed for all monitoring and non-transient, non-community supply wells. All POET system sampling, non-transient, non-community supply well sampling and residential potable well sampling was to remain on the schedule previously followed.
- November 16-19, 2010: Nested monitoring wells MW-18S and MW-18D, vapor extraction well VE-1 and injection wells IW-1S/D, IW-2S/D and IW-3S/D were installed onsite.



HISTORICAL ACTIVITY SUMMARY (Continued):

- November 18, 2010: The MDE approved the *ISCO Pilot Test Work Plan*, with slight modifications, and the use of low-flow sampling techniques at the Site. The MDE approved the elimination of TPH-DRO and TPH-Gasoline Range Organics (GRO) from analysis of samples collected from the GVP POET system, the GVP supply wells, and the GVSC supply wells. The MDE stated that the request to eliminate TPH-DRO from the analysis of groundwater would be considered pending a review of low-flow sampling data and pilot testing activities.
- November 30, 2010: ISCO pilot testing was conducted onsite.
- December 1, 2010: Carroll informed the MDE of the results of the pilot testing via email, and included a proposed plan to redevelop the injection wells and introduce air to see if they could be used for further injection testing. Carroll also requested to modify the post ISCO pilot test groundwater sampling plan proposed in the *ISCO Pilot Test Work Plan*. Monitoring wells sampled prior to the pilot testing (with the exception of MW-18S and MW-18D) would be omitted from additional groundwater sampling in December 2010. The MDE approved both proposals via email.
- December 8, 2010: Injection wells IW-1S/D, IW-2S/D and IW-3S/D were re-developed.
- December 15, 2010: Slug testing was conducted on monitoring wells MW-18S and MW-18D.
- January 4, 2011: Monitoring wells MW-18S and MW-18D, vapor extraction well VE-1 and injection wells IW-1S/D, IW-2S/D and IW-3S/D were surveyed into the existing well network.
- March 15, 2011: A CAP was submitted to the MDE proposing the installation of an ISCO remediation system, and an eight-week pilot program.
- June 1, 2011: The MDE issued *Extended Pilot Testing Approval* in response to the CAP, approving the ISCO pilot program, and requiring expanded groundwater monitoring during the pilot program.
- June 3, 2011: Carroll requested clarifications of two points in the *Extended Pilot Testing Approval* via email.
- June 6, 2011: The MDE responded via email to Carroll's questions, and issued an updated *Site Management Schedule*, requiring the submission of a *CAP Implementation Plan* by July 1, 2011.
- July 1, 2011: A *CAP Implementation Plan* was submitted to the MDE.
- August 28, 2011: The MDE approved the *CAP Implementation Plan* and required an *Extended ISCO Pilot Testing Reports* be submitted during operation of the system and after completion of the pilot test period.
- September 14, 2011: The ISCO system was activated and GES began groundwater and POET System monitoring as per the schedule outlined in the MDE approved *CAP Implementation Plan*.
- October 14, 2011: An *Extended ISCO Pilot Testing – Week 3 Operation Report* was submitted to the MDE.
- November 11, 2011: ISCO system operation stopped, completing the 8 week ISCO Pilot Test.
- November 18, 2011: An *Extended ISCO Pilot Testing – Week 7 Operation Report* was submitted to the MDE.
- December 19, 2011: An *Extended ISCO Pilot Testing – Comprehensive Summary Report* was submitted to the MDE.
- February 10, 2012: GES received from the MDE a *Corrective Action Plan (CAP) Approval* letter.
- February 20, 2012: The ISCO system was activated and GES began groundwater and POET System monitoring as per the schedule outlined in the MDE *Corrective Action Plan (CAP) Approval* letter and subsequent correspondence.



HISTORICAL ACTIVITY SUMMARY (Continued):

April 2, 2012: An ISCO Injection Well Installation Work Plan was submitted to the MDE.
May 5, 2012: An ISCO System Operation Report was submitted to the MDE.
May 21-30, 2012: Completion of a rock coring and hydraulic pressure testing investigation and the construction of injection well IW-4.
May 31-June 5, 2012: Injection well IW-4 trenching, system connections, development and testing were completed, followed by the well being added to the injection well network for ISCO system operation.
June 25, 2012: An ISCO System Operation Report was submitted to the MDE.
July 31, 2012: The MDE requested that the ISCO system be shut down at the site pending further groundwater sampling.
August 1, 2012: The ISCO system was deactivated.
August 1, 2012: GES received from the MDE a *Modification to the Corrective Action Plan* letter.
August 3, 2012: GES sent a letter to the MDE in response to the *Modification to the Corrective Action Plan* letter received.
August 9, 10, 13, 14, 15, 16, 20, 21, 23: GES emailed laboratory analytical results to the MDE that included hexavalent and chromium data.
September 4, 2012: Monitoring well slug testing conducted at select monitoring wells.
August 31, 2012: GES received from the MDE an email requesting additional information regarding lead analysis.
September 12, 2012: GES received from the MDE an email regarding remediation system equipment removal.
September 18, 2012: Carroll sent an email to the MDE regarding additional monitoring and sampling to be conducted during the 4th quarter sampling event and the timing of the event.
September 21, 2012: The ISCO system trailer was removed from the site.
September 27, 2012: An ISCO System Comprehensive Summary Report and Update to the Conceptual Site Model and Supplemental Chromium and Lead Investigation Summary were submitted to the MDE.
September 28, 2012: GES submitted an *October 2012 Sampling Data Transmittal Letter* to the MDE.
November 21, 2012: The FCHD and the MDE's contractor sampled the drinking water supply at 3833 Greenridge Drive.
December 1, 2012: The MDE sent a letter to Mr. and Mrs. Gray in regards to the additional investigation of 11712 Serene Court.
December 20, 2012: The MDE sent a letter to Mr. Schlessinger in regards to the sampling results for 3833 Greenridge Drive.
December 21, 2012: GES submitted a *January 2013 Sampling Data Transmittal Letter* to the MDE.
March 1, 2013: GES submitted an attachment to the January 2013 Sampling Data Transmittal Letter to the MDE.
March 14, 2013: The MDE sent a letter to Mr. and Mrs. Gray in regards to the additional investigation of 11712 Serene Court.
April 19, 2013: GES submitted a *Request to Revise the Monitoring Well Sampling Plan*.
May 22, 2013: GES submitted an *April 2013 Sampling Data Transmittal Letter* to the MDE.
May 29, 2013: GES submitted a *May 2013 Sampling Data Transmittal Letter* to the MDE.
June 17, 2013: GES received a response from the MDE regarding the *Request to Revise Sampling Plan*. The MDE denied the request to eliminate TPH-DRO from the monitoring well sampling program. The MDE has requested an additional supplemental sampling event during the fourth quarter of 2013 and a *Revised CAP* by January 31, 2014.
October 18, 2013:

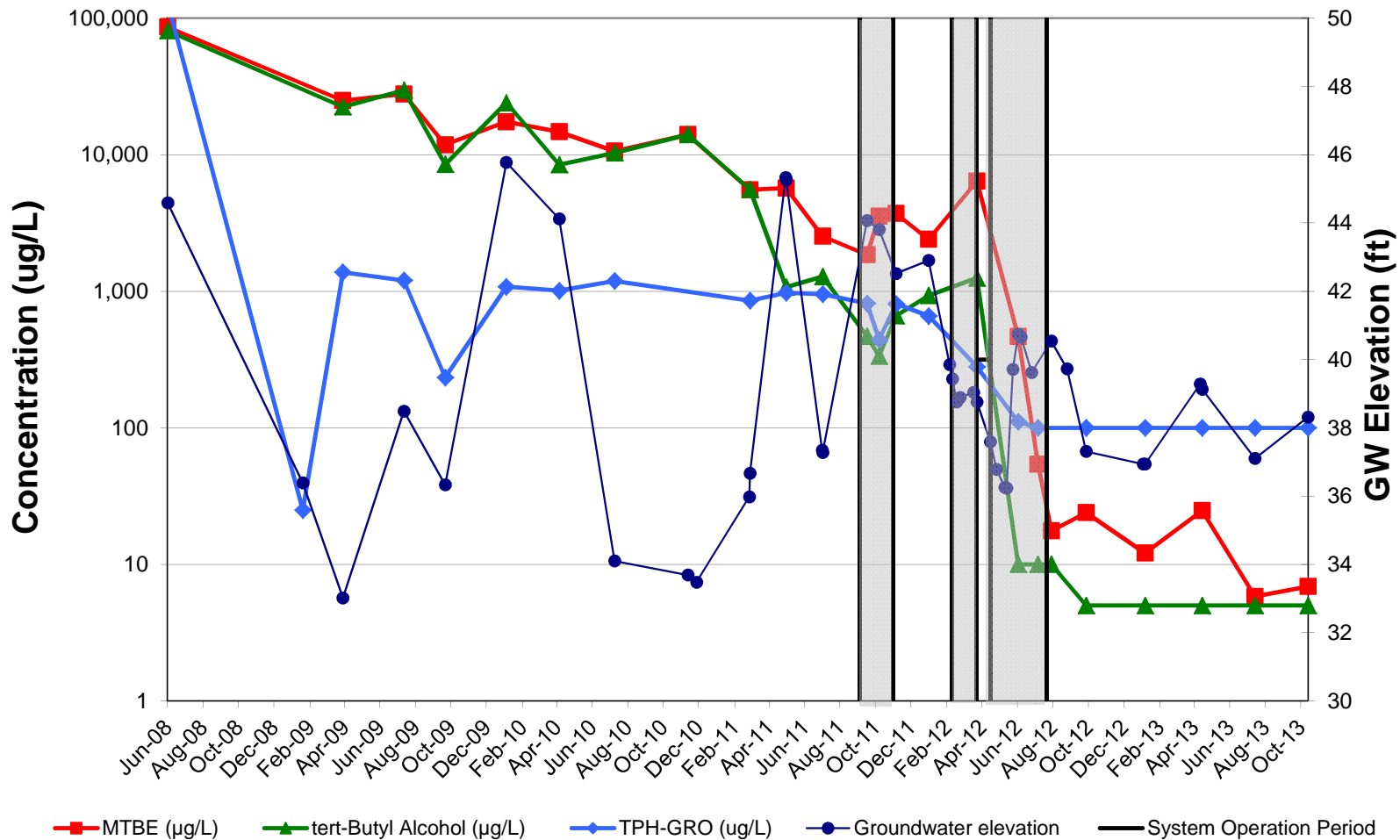
APPENDIX C

Trend Graphs for Monitoring Wells

GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo
11791 Fingerboard Rd

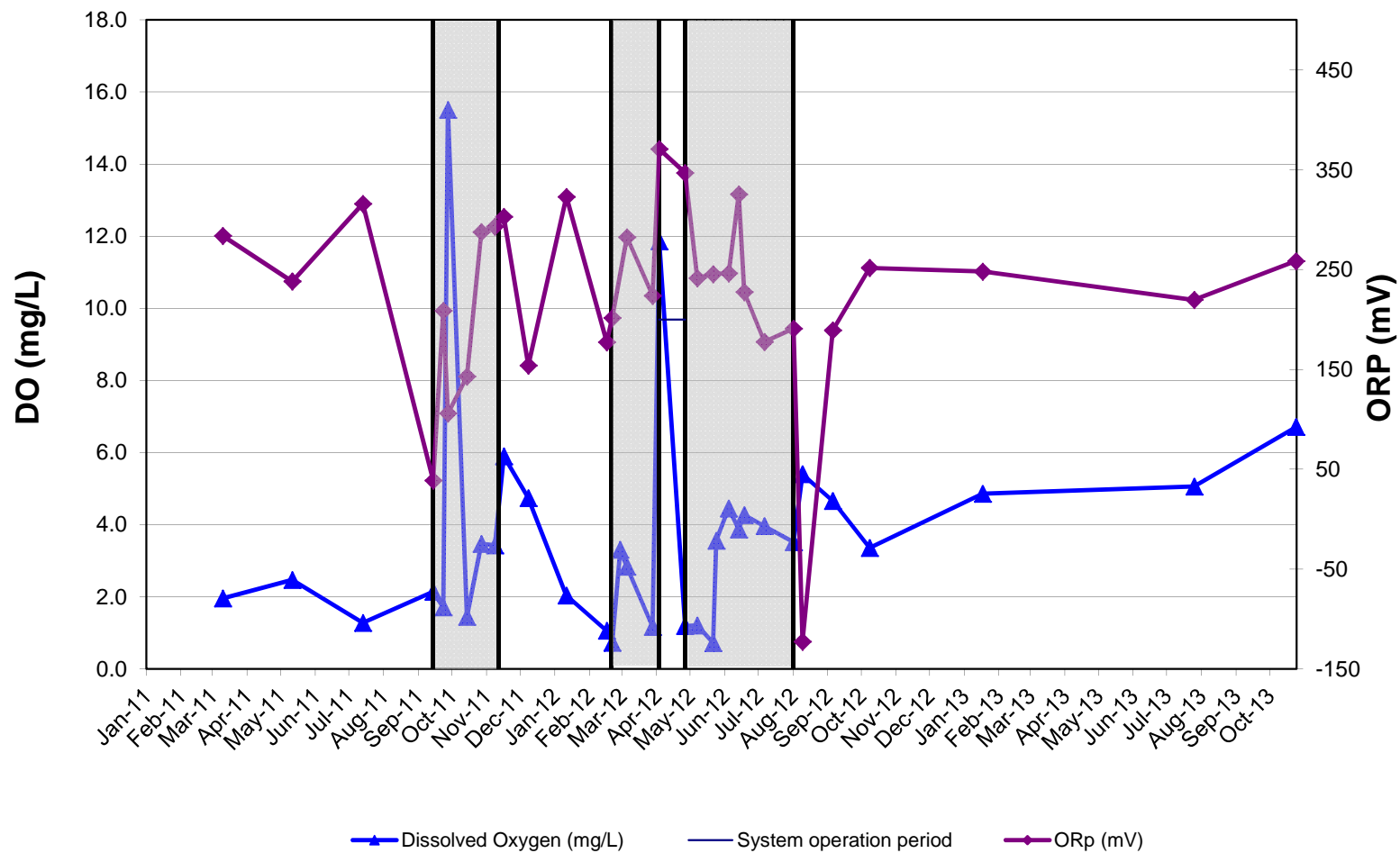
MW-7



GROUNDWATER MONITORING GRAPHS

**Carroll - Monrovia BP/Former Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD**

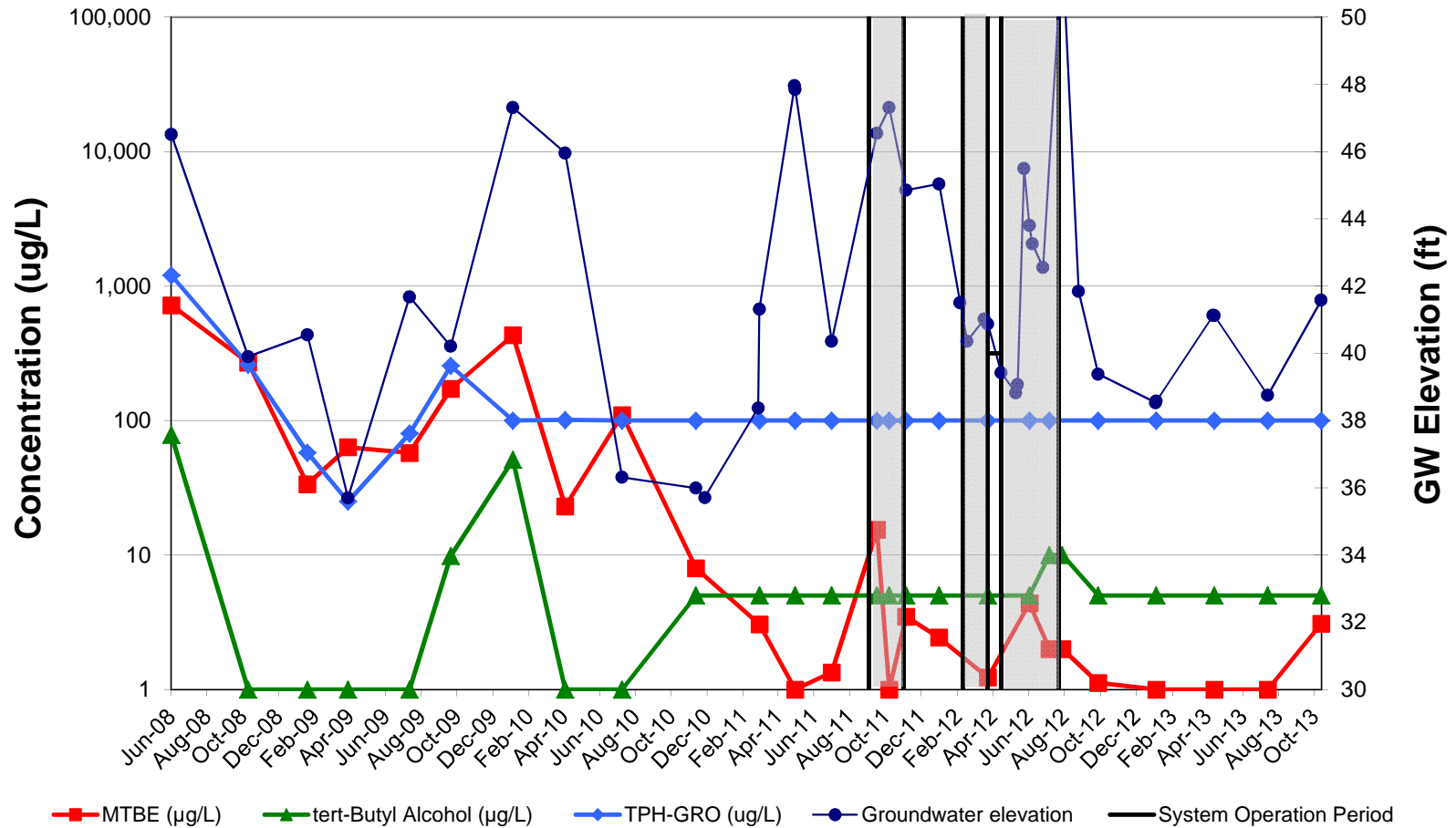
MW-7



GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

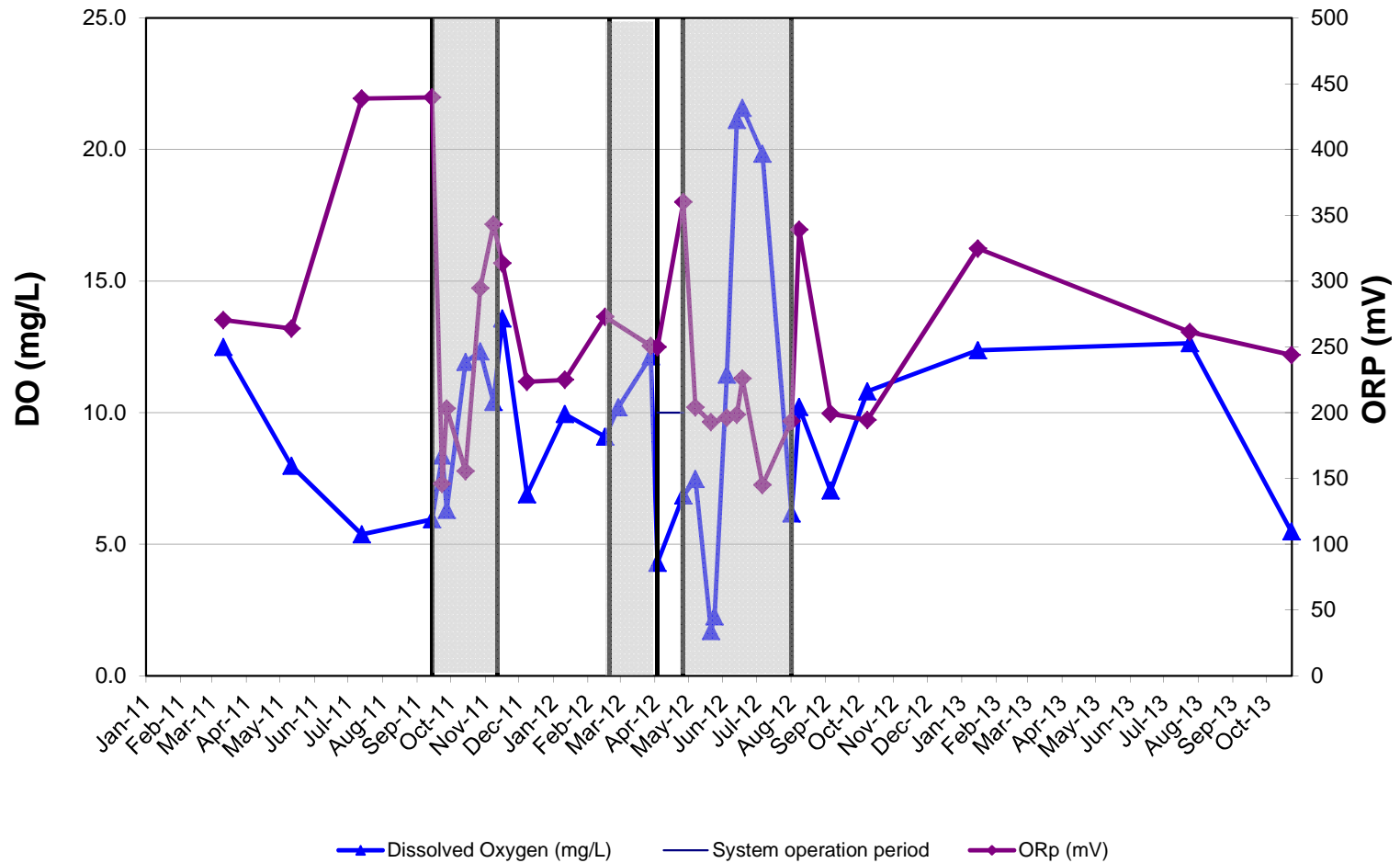
MW-8



GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

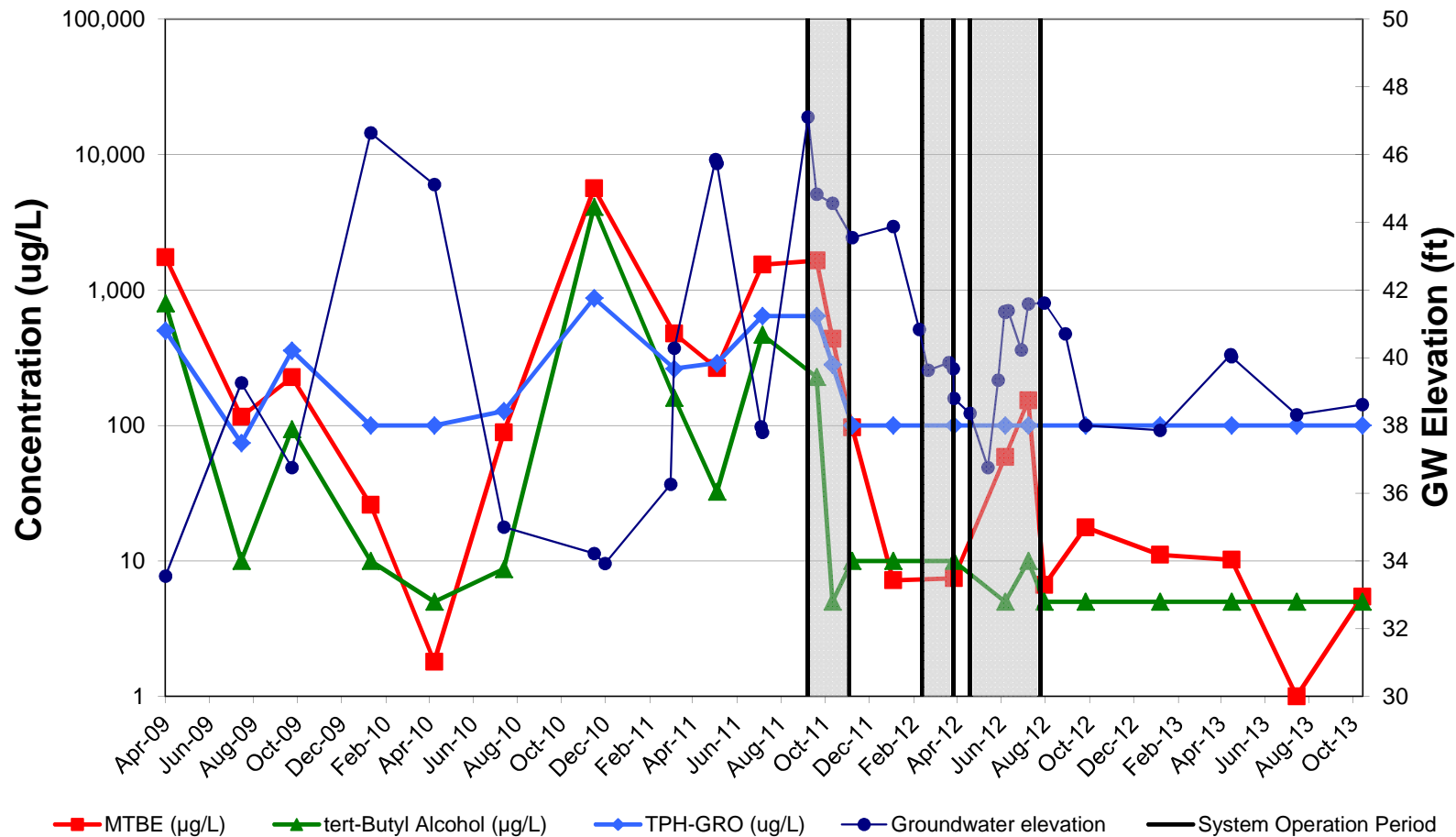
MW-8



GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

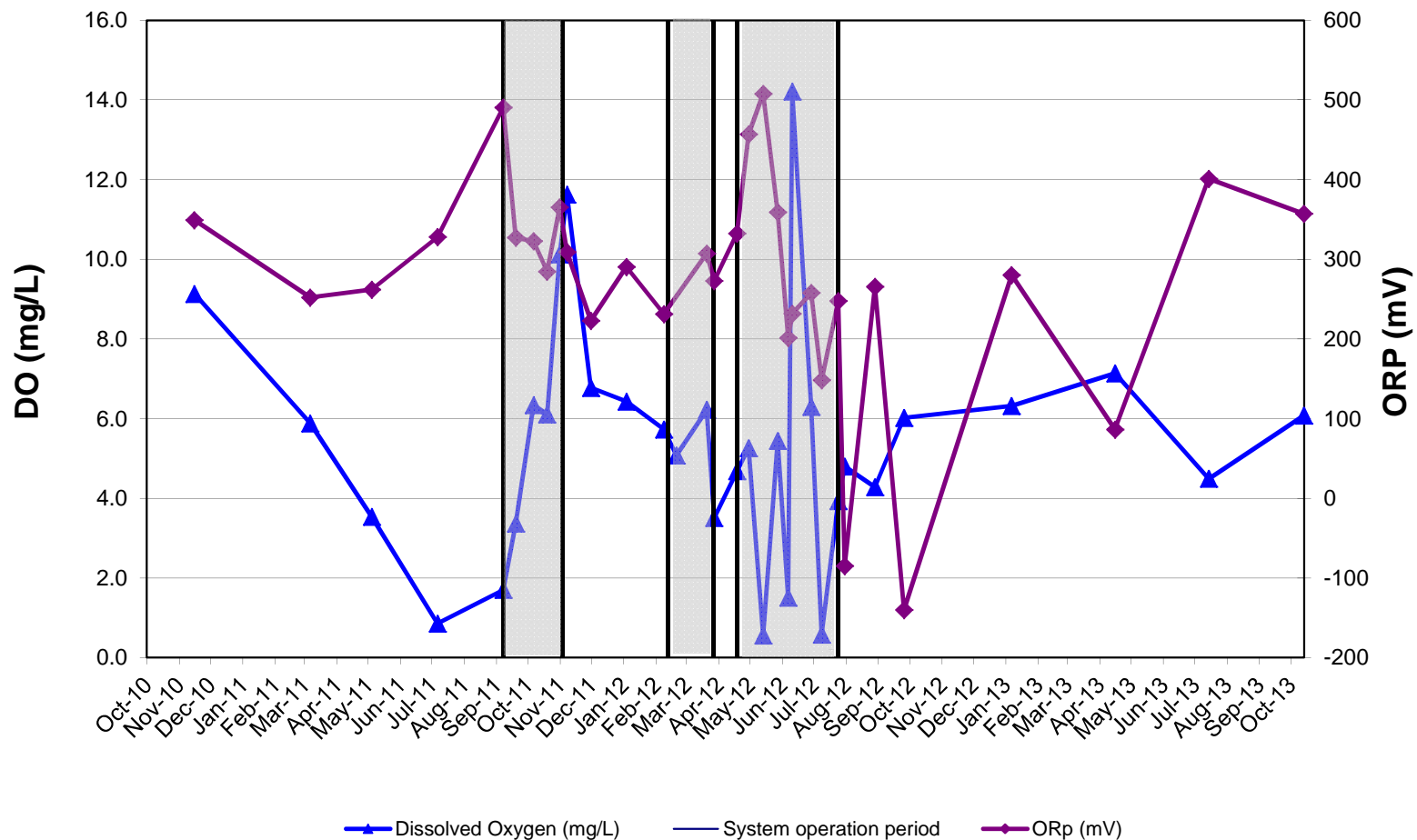
MW-10



GROUNDWATER MONITORING GRAPHS

**Carroll - Monrovia BP/Former Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD**

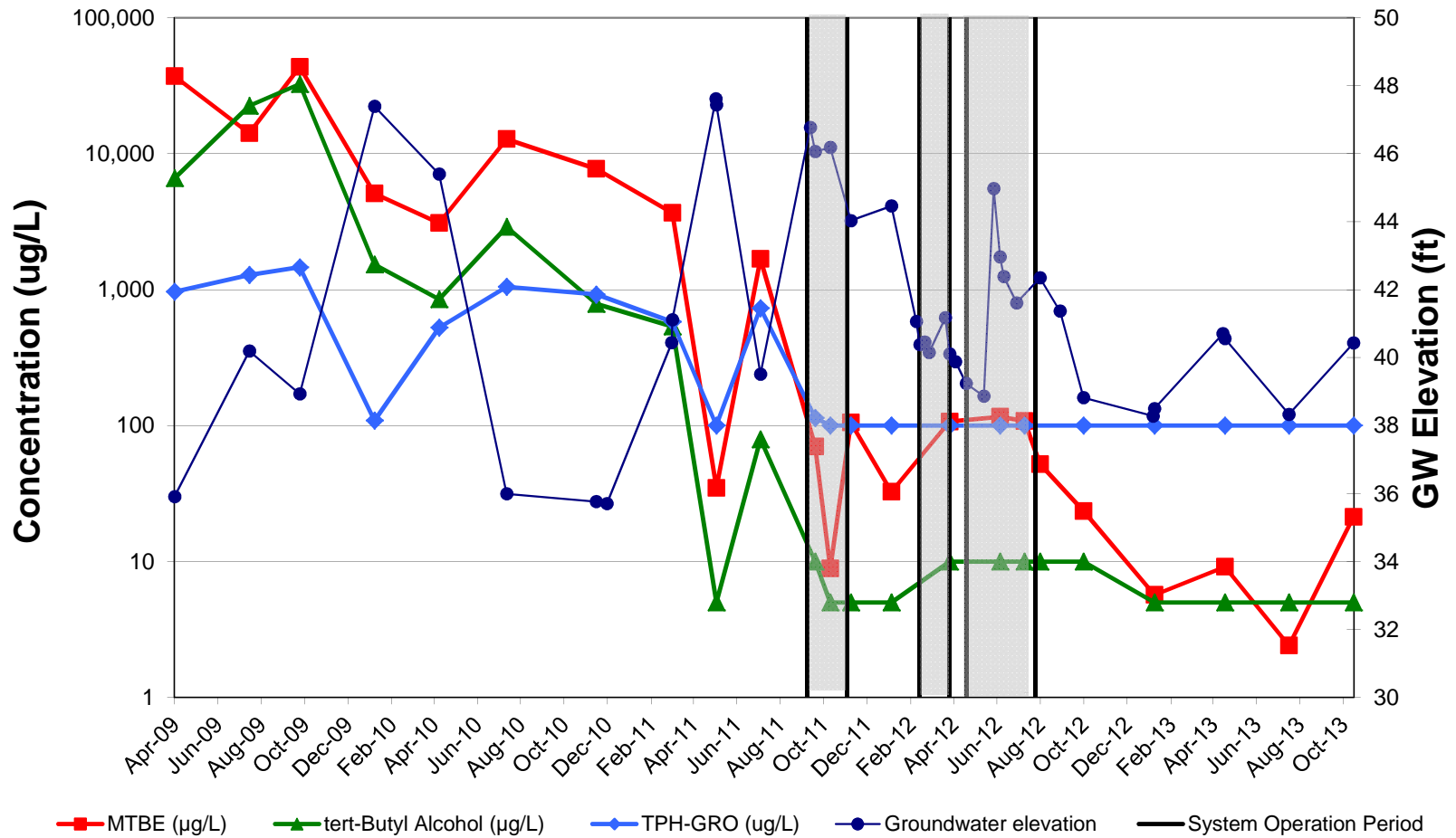
MW-10



Appendix C
GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

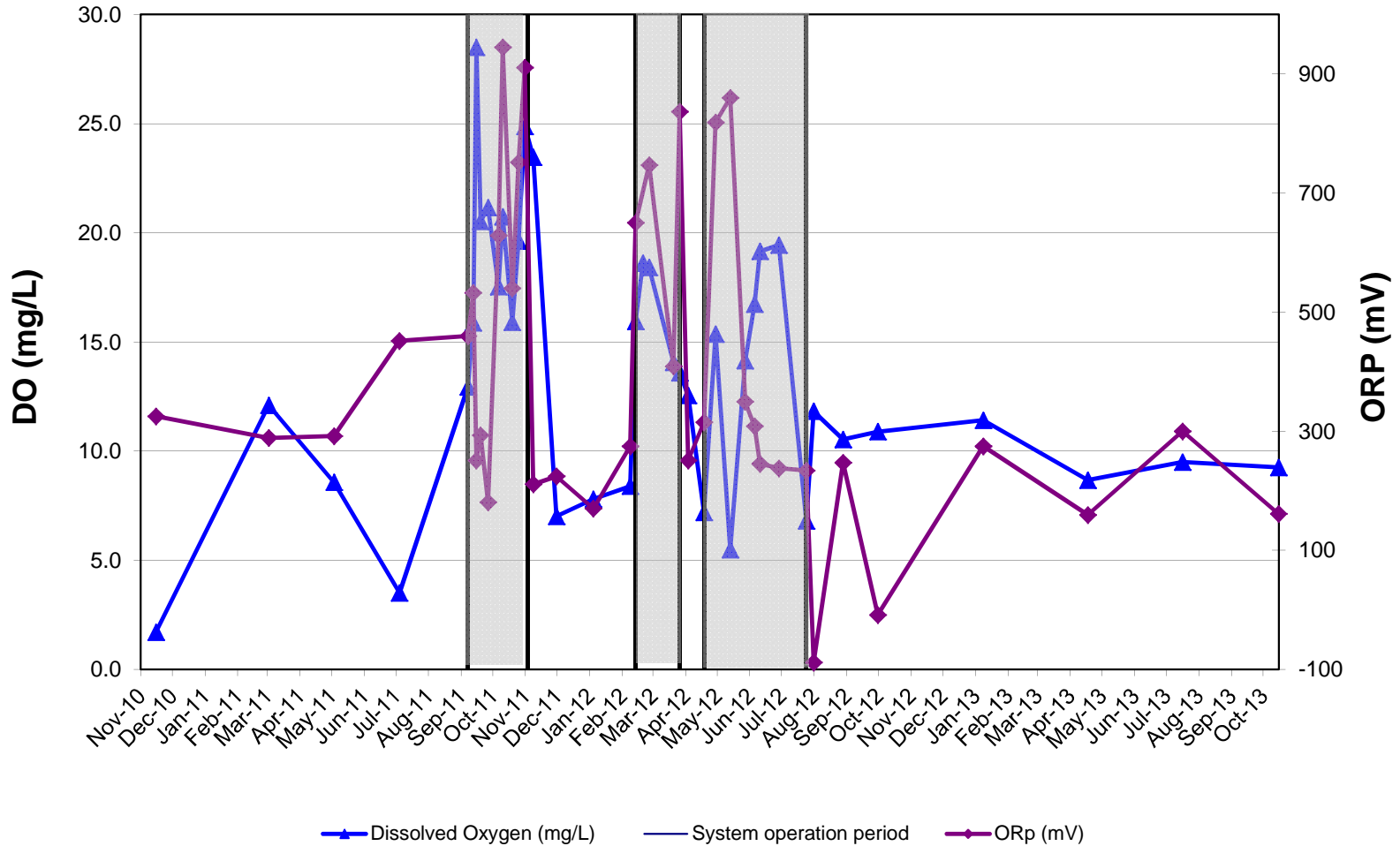
MW-13



Appendix C
GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

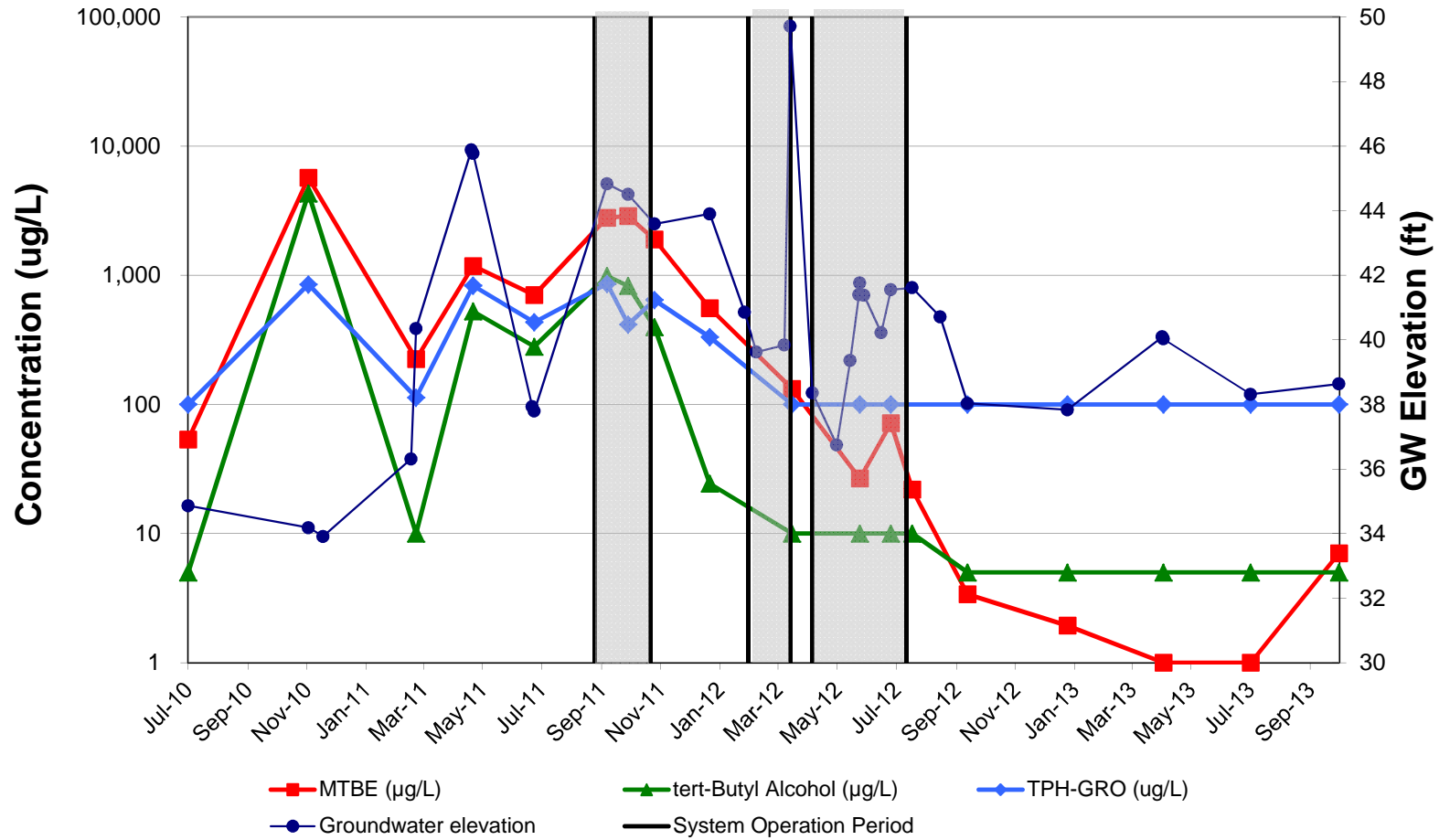
MW-13



GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

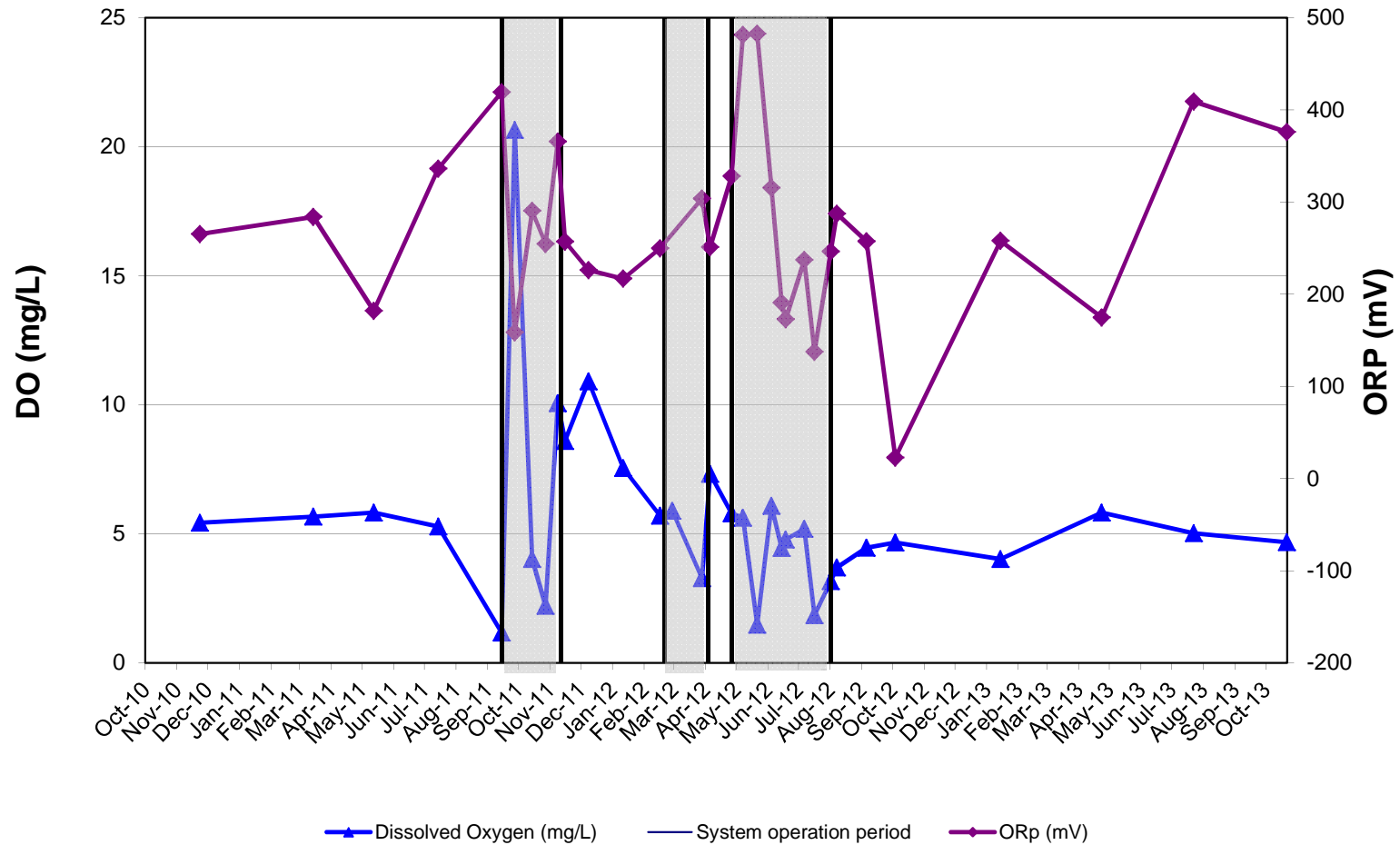
MW-14S



GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo
 11791 Fingerboard Rd
 Monrovia MD

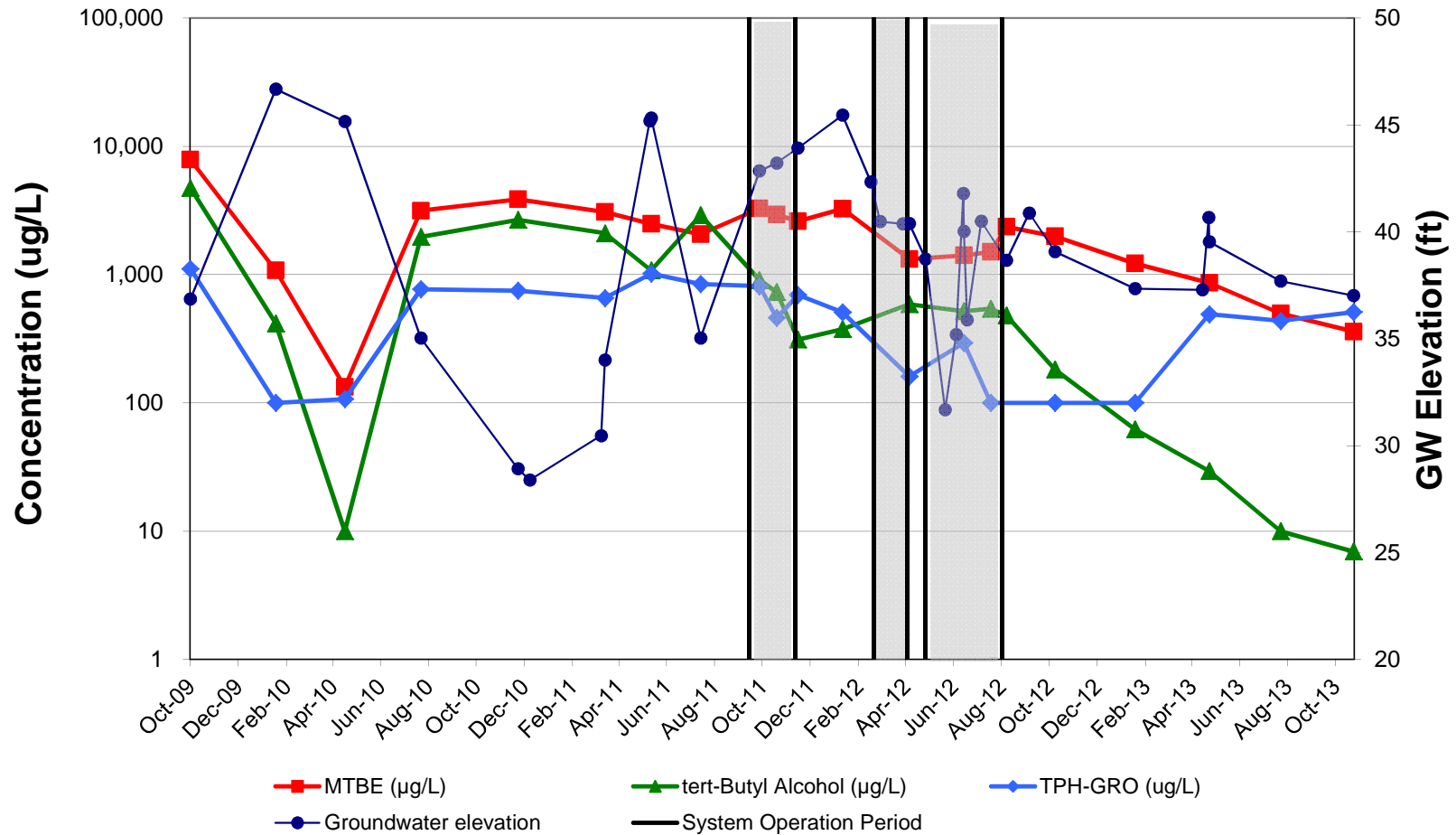
MW-14S



Appendix C
GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

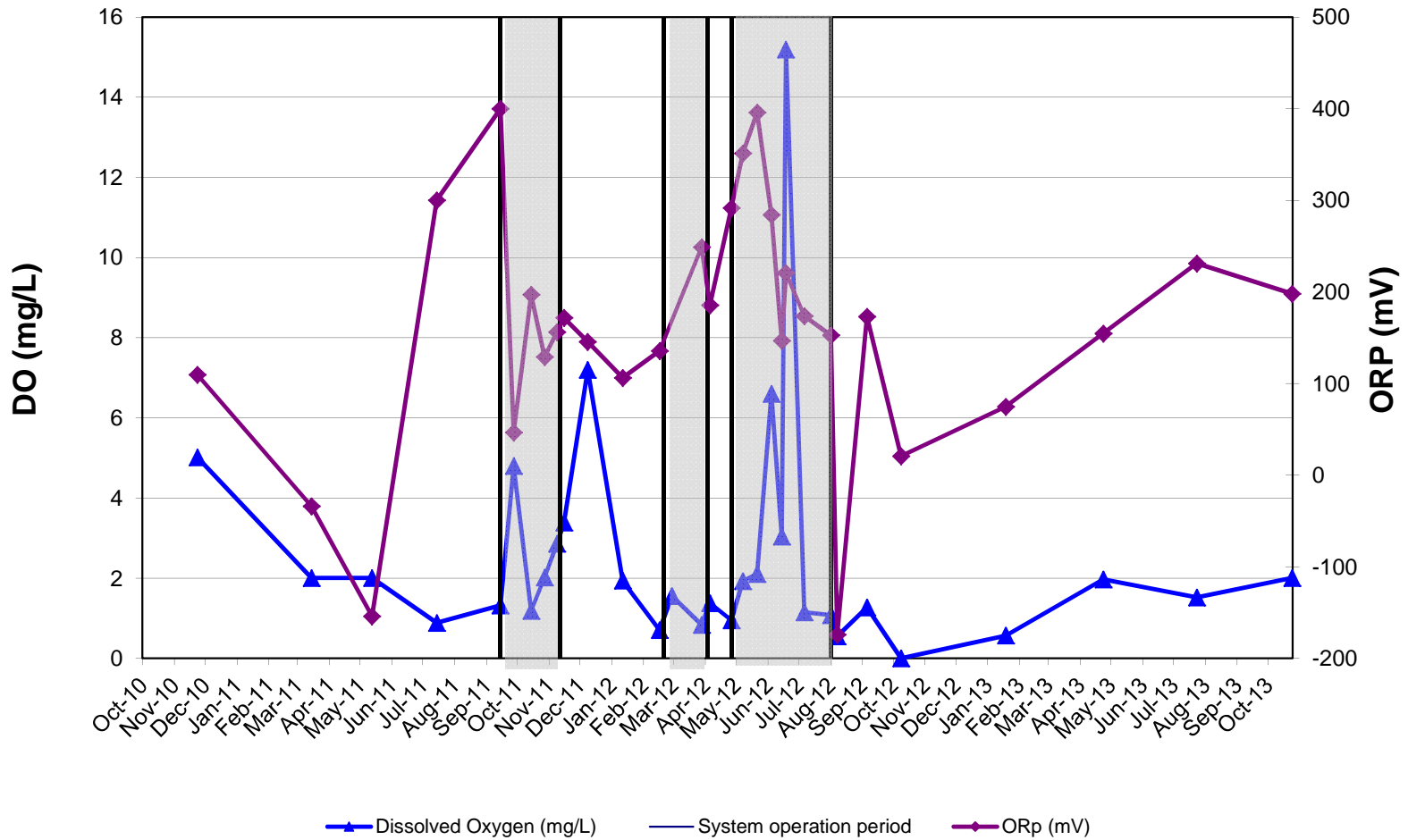
MW-14D



Appendix C
GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

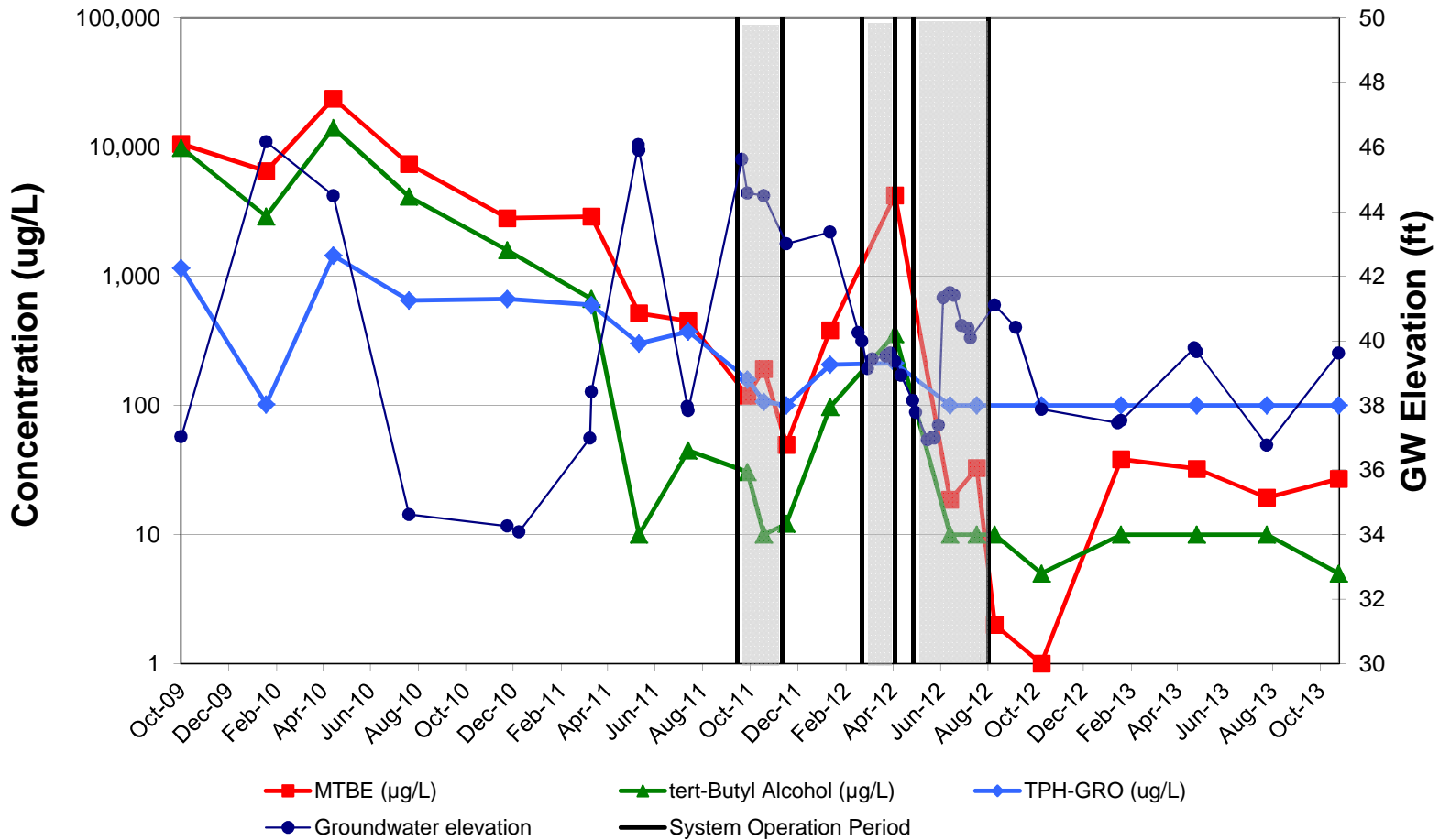
MW-14D



GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

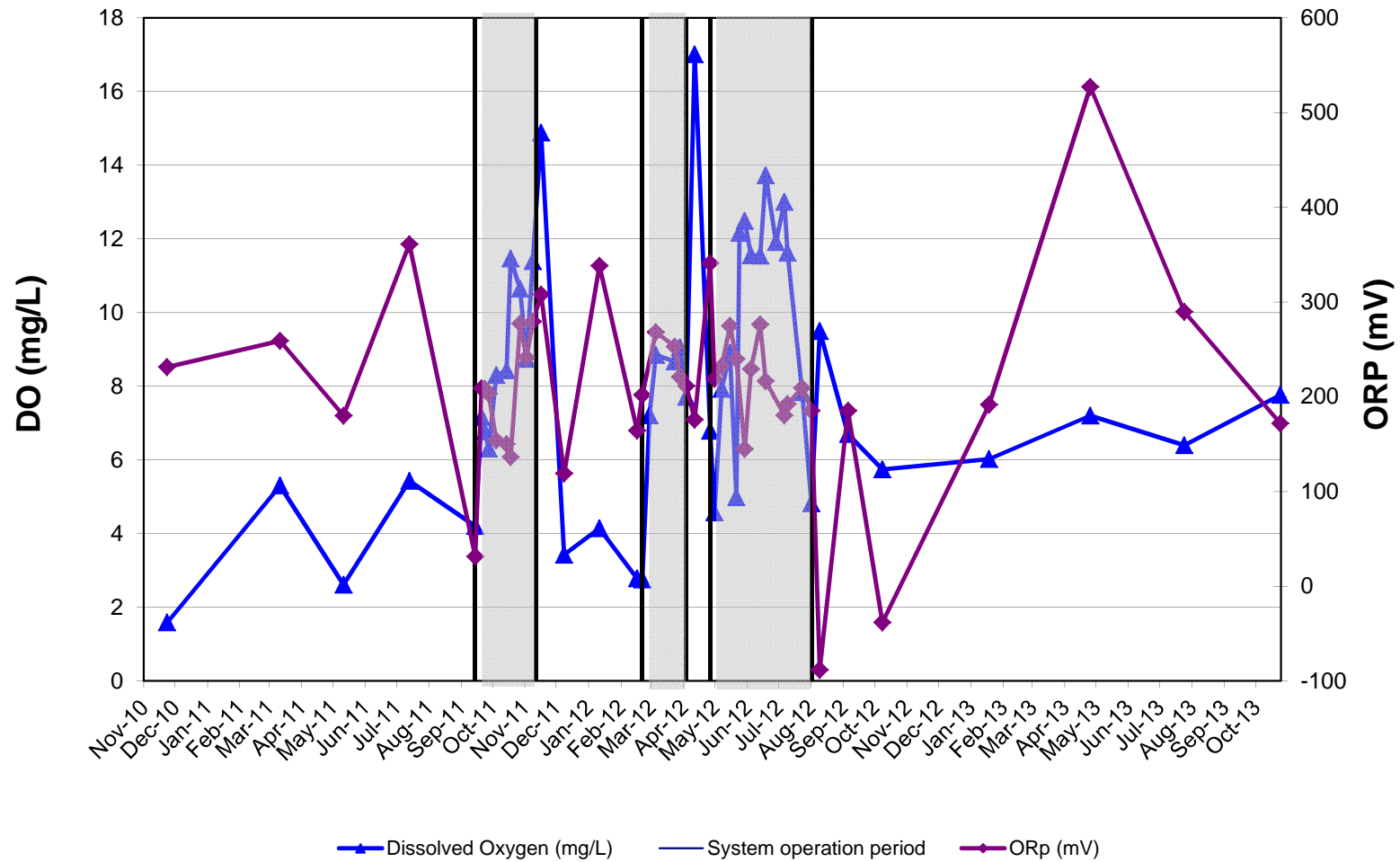
MW-15D



GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo
11791 Fingerboard Rd
Monrovia MD

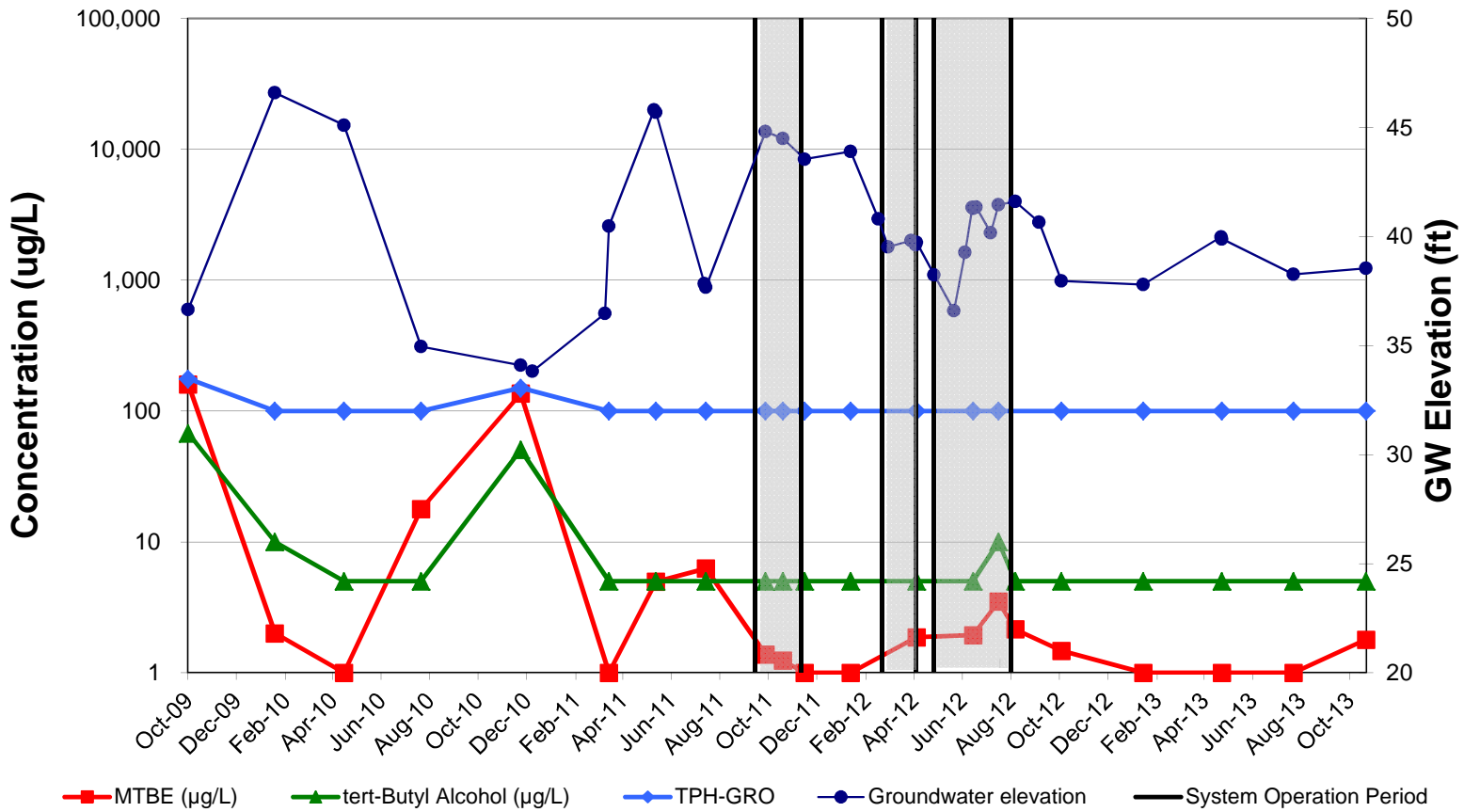
MW-15D



Appendix C
GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo
 11791 Fingerboard Rd
 Monrovia, MD

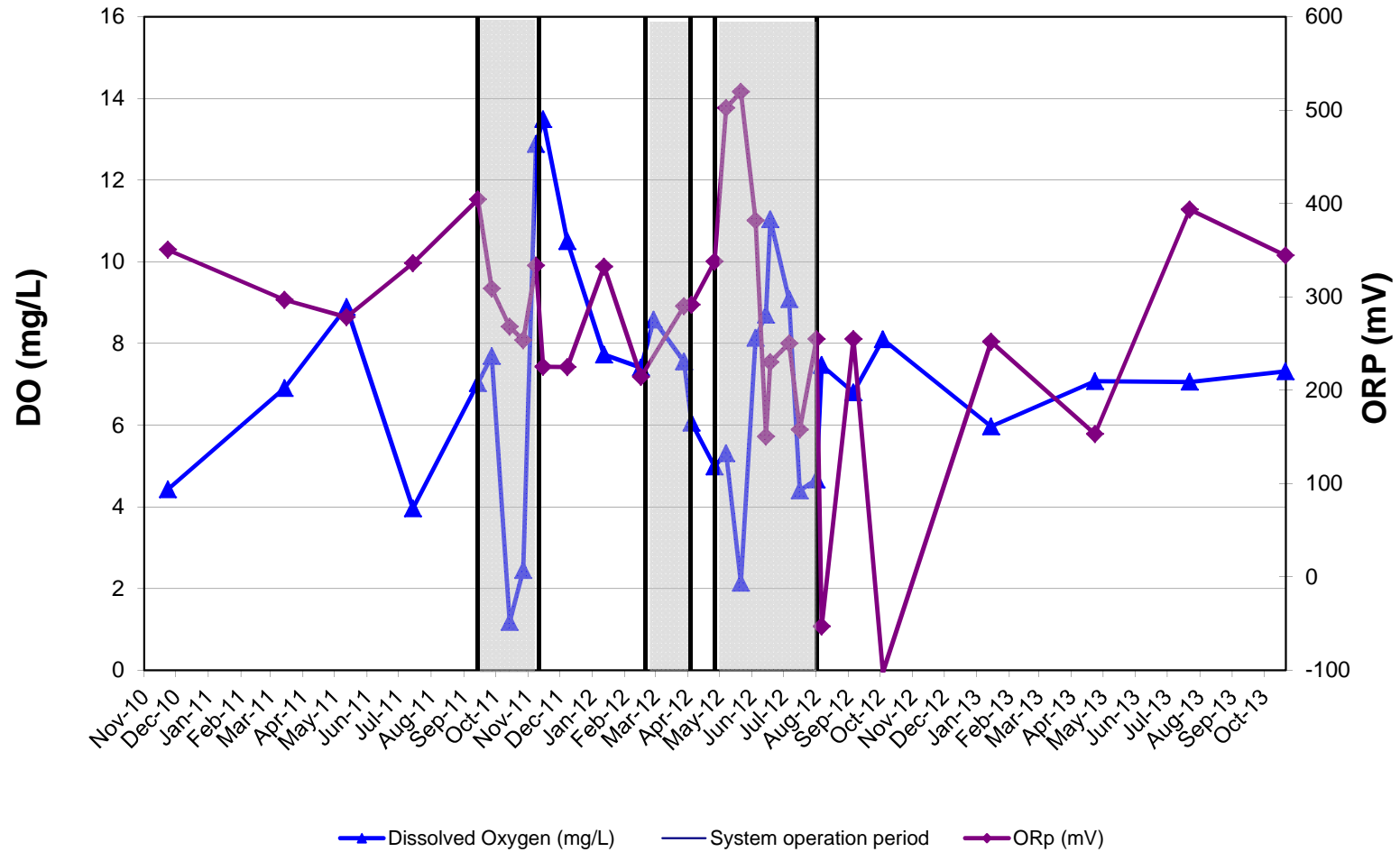
MW-16



Appendix C
GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

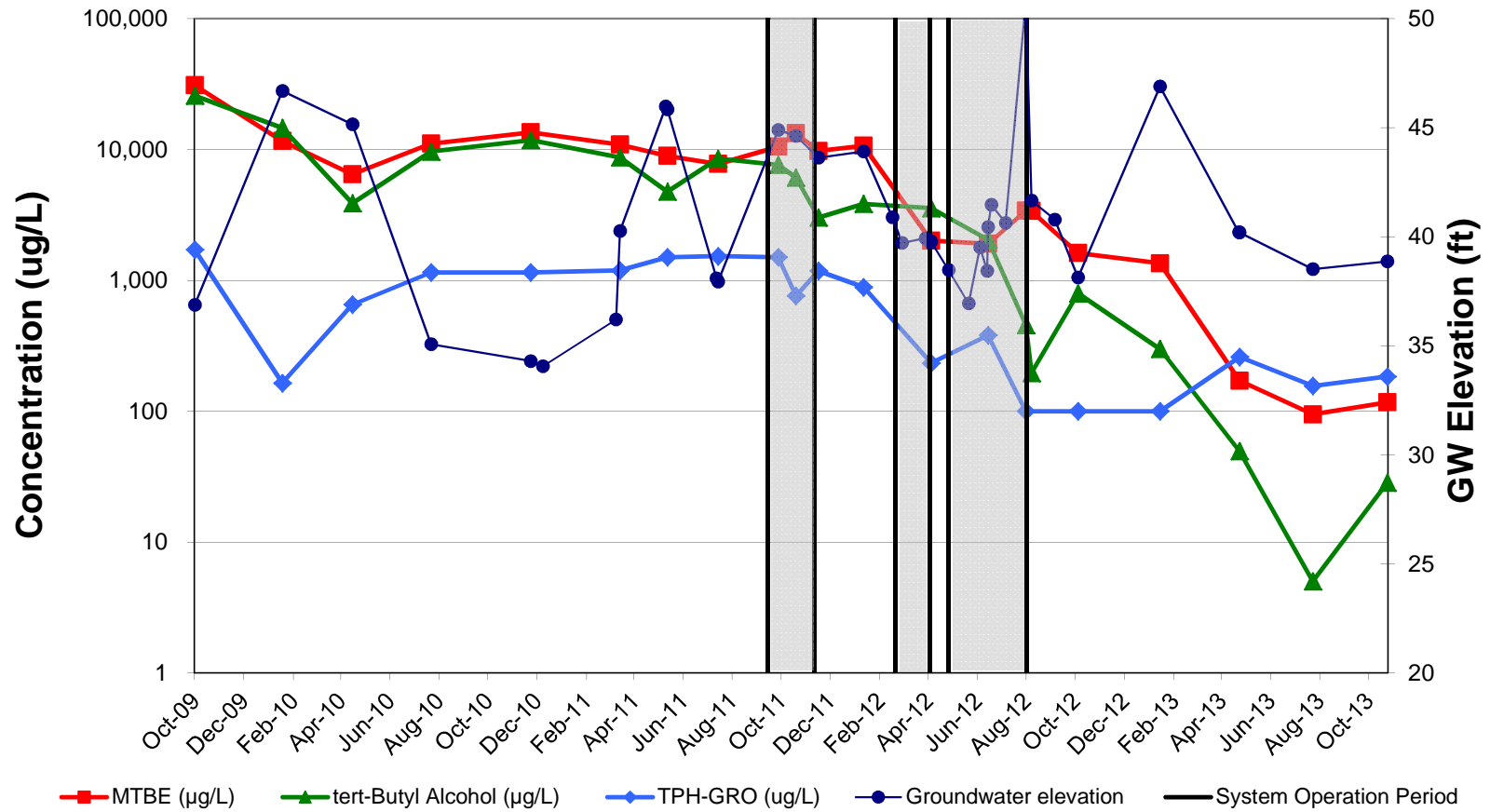
MW-16



Appendix C
GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

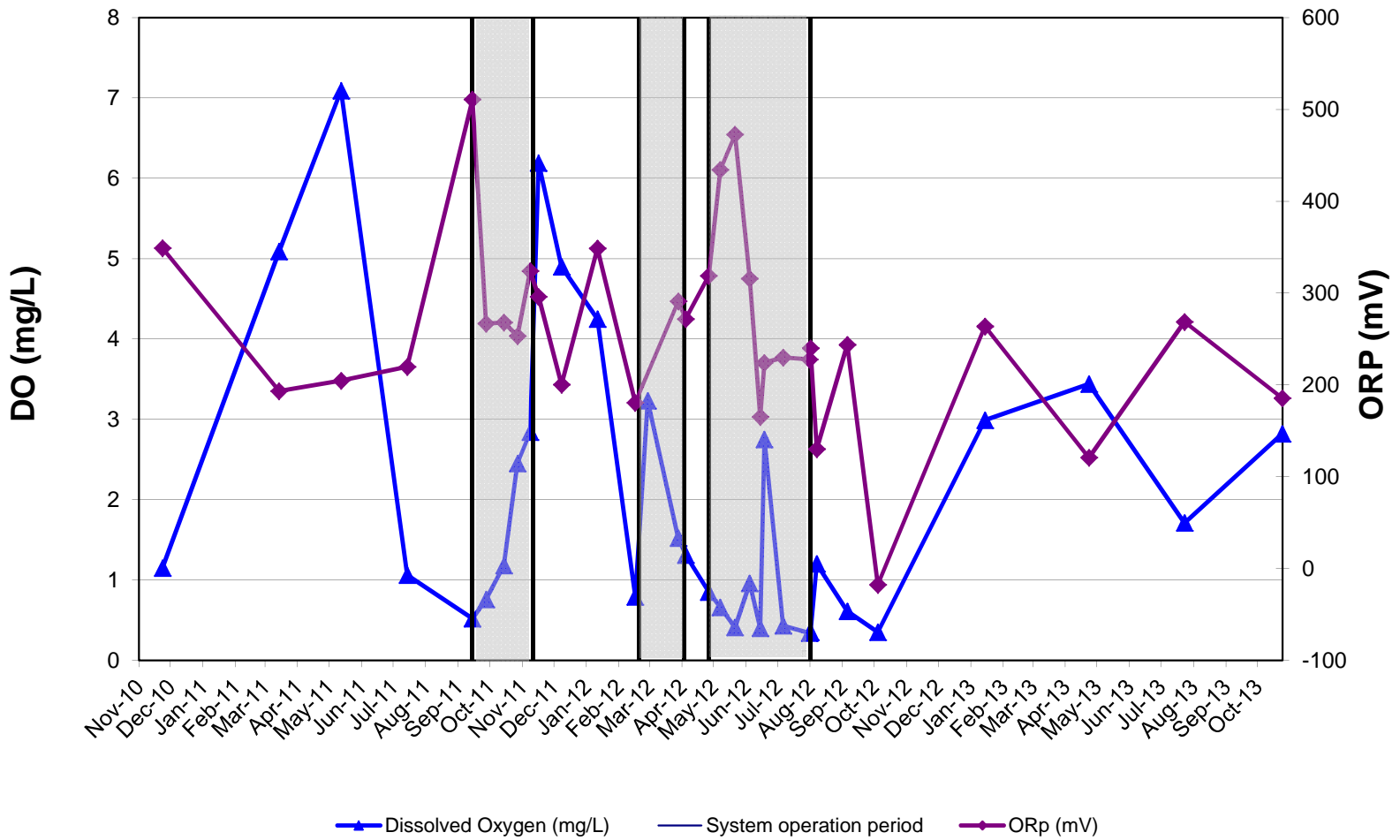
MW-17



Appendix C
GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

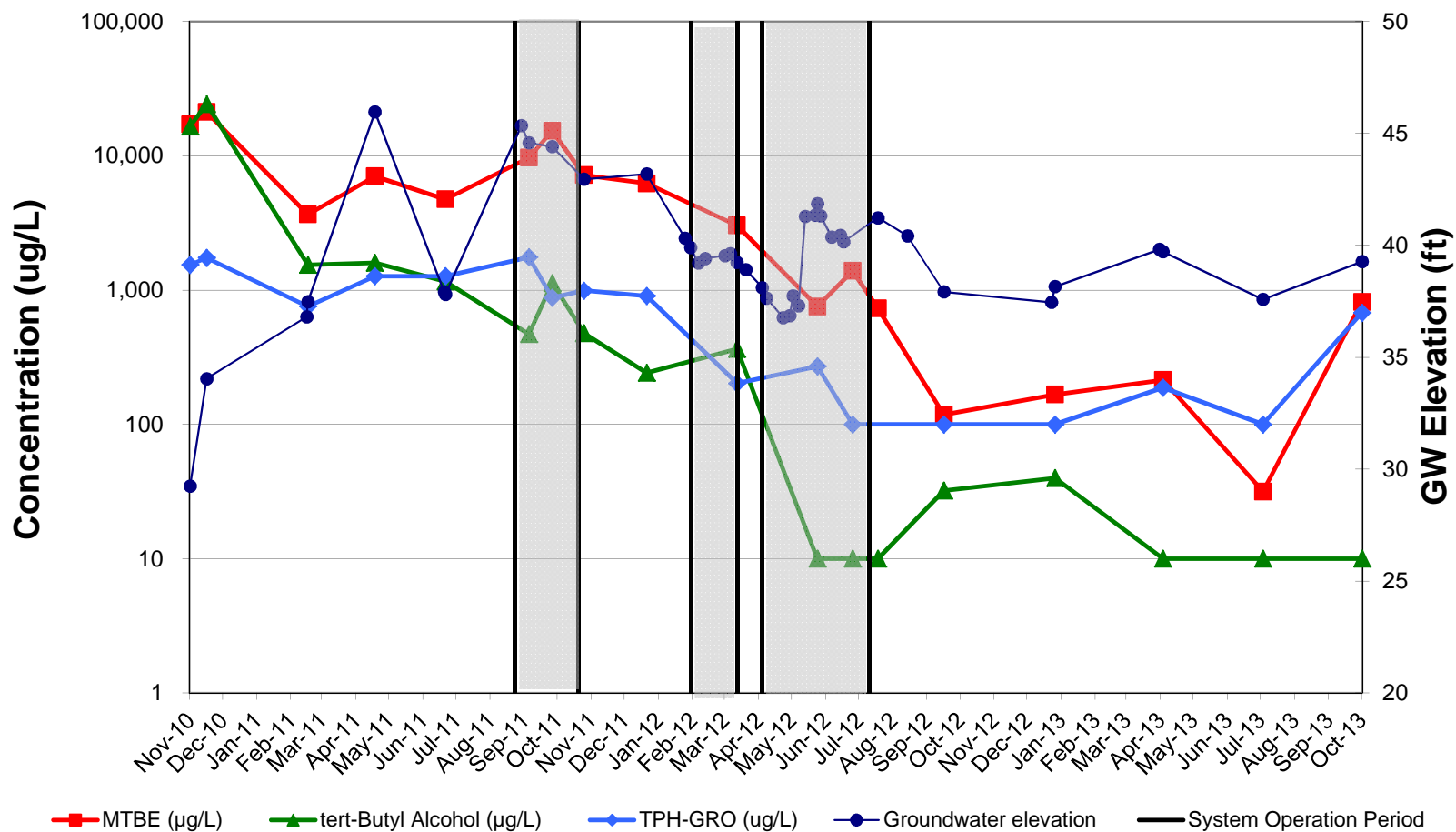
MW-17



GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo
 11791 Fingerboard Rd
 Monrovia, MD

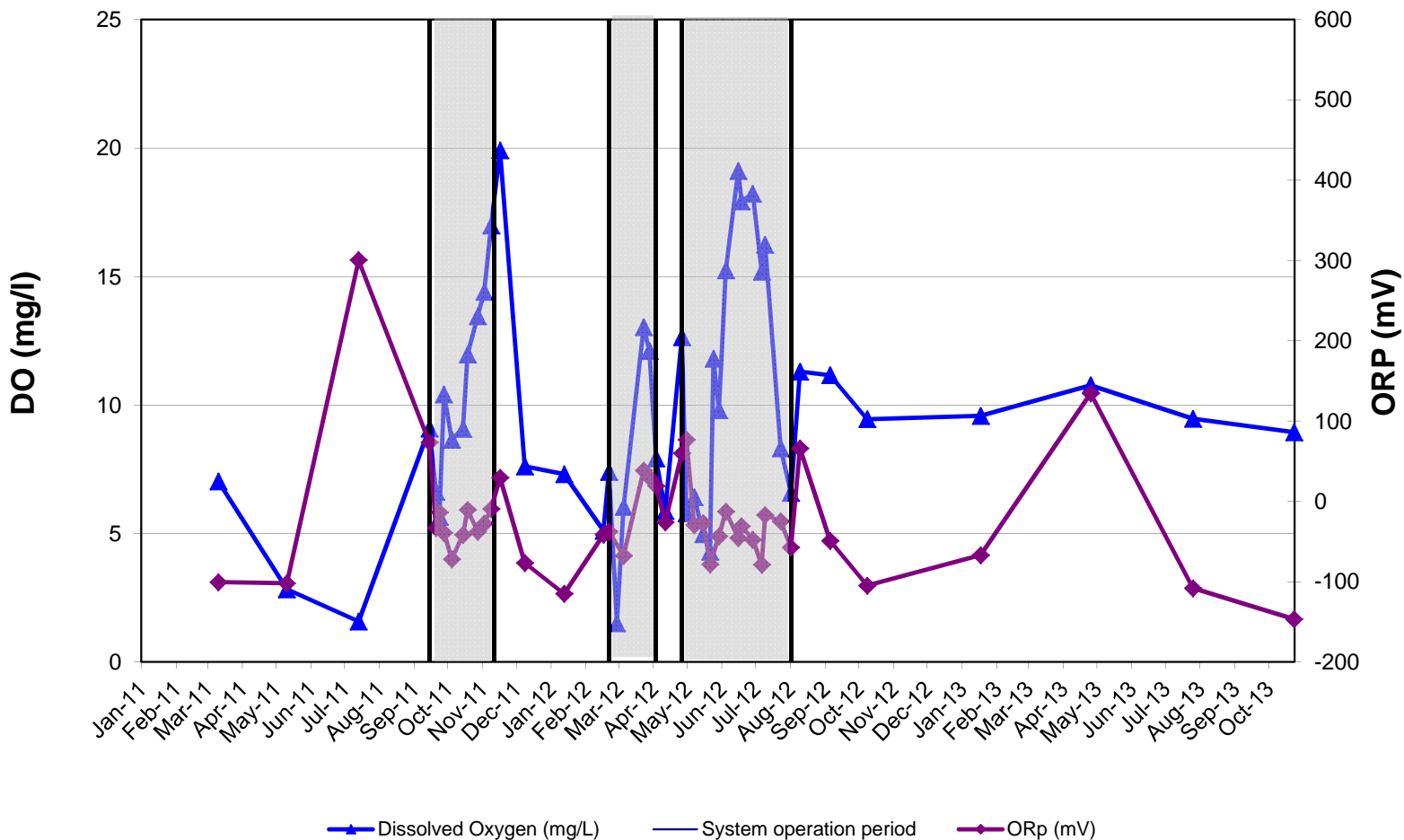
MW-18S



GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

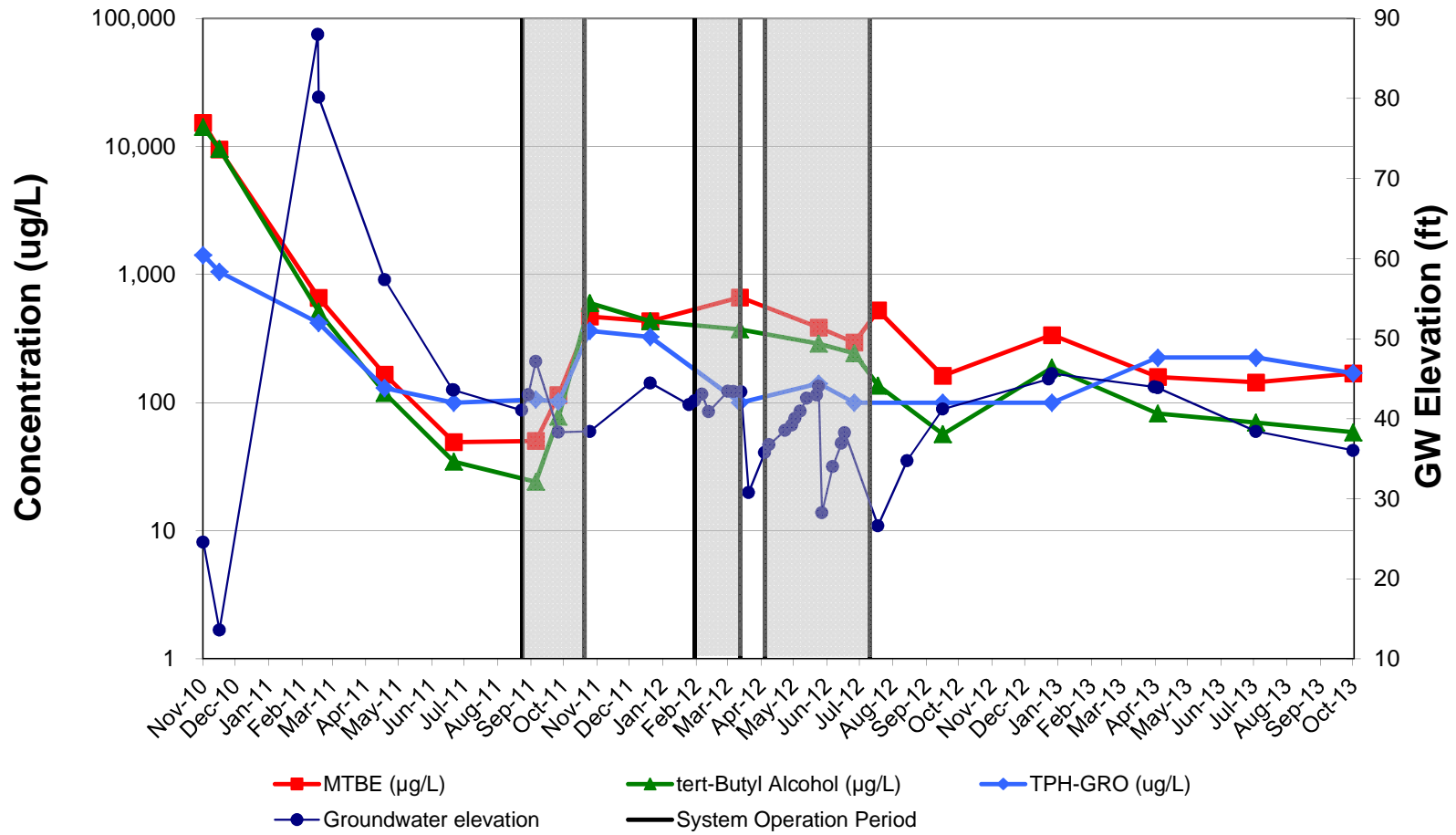
MW-18S



Appendix C
GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo
 11791 Fingerboard Rd
 Monrovia, MD

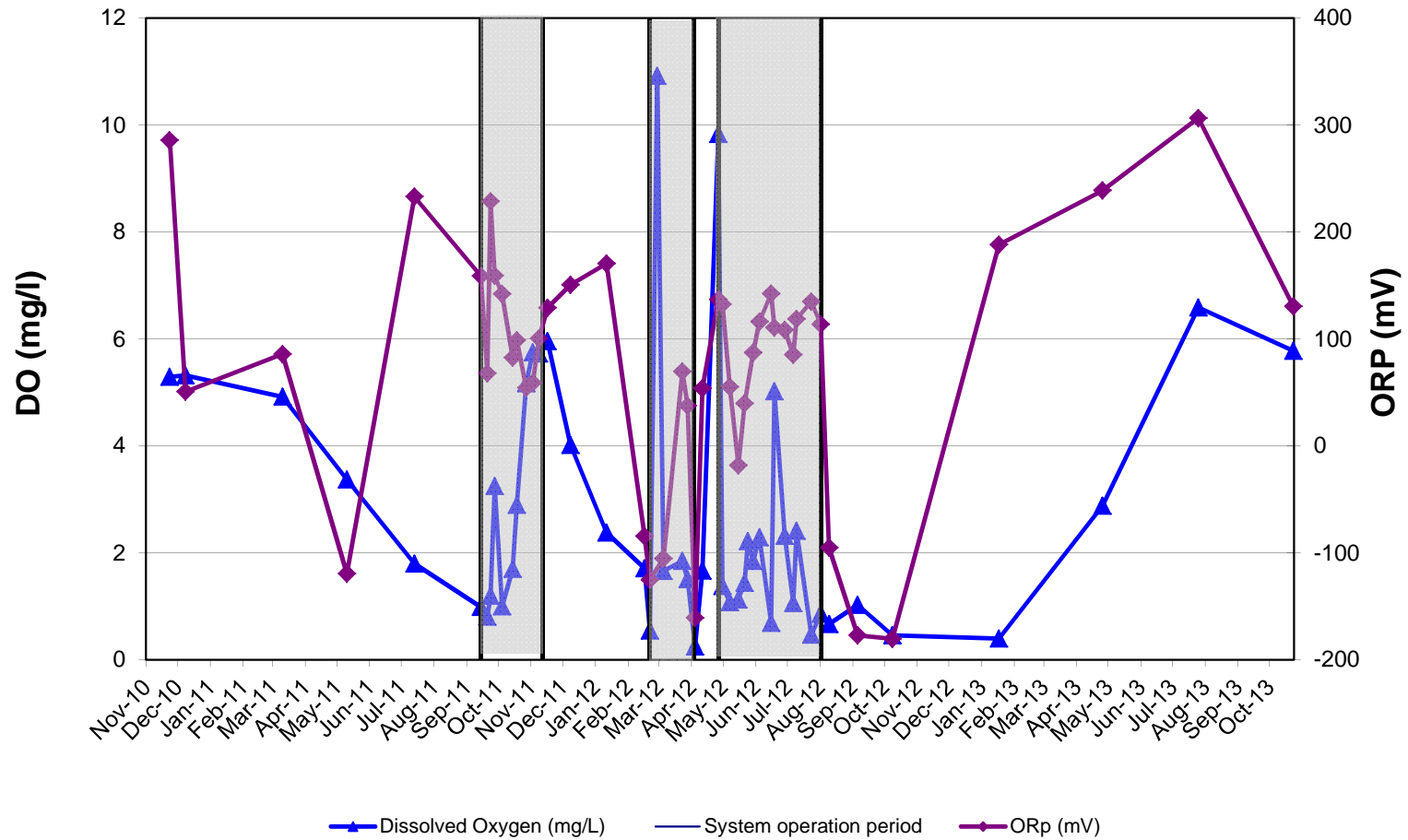
MW-18D



Appendix C
GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

MW-18D



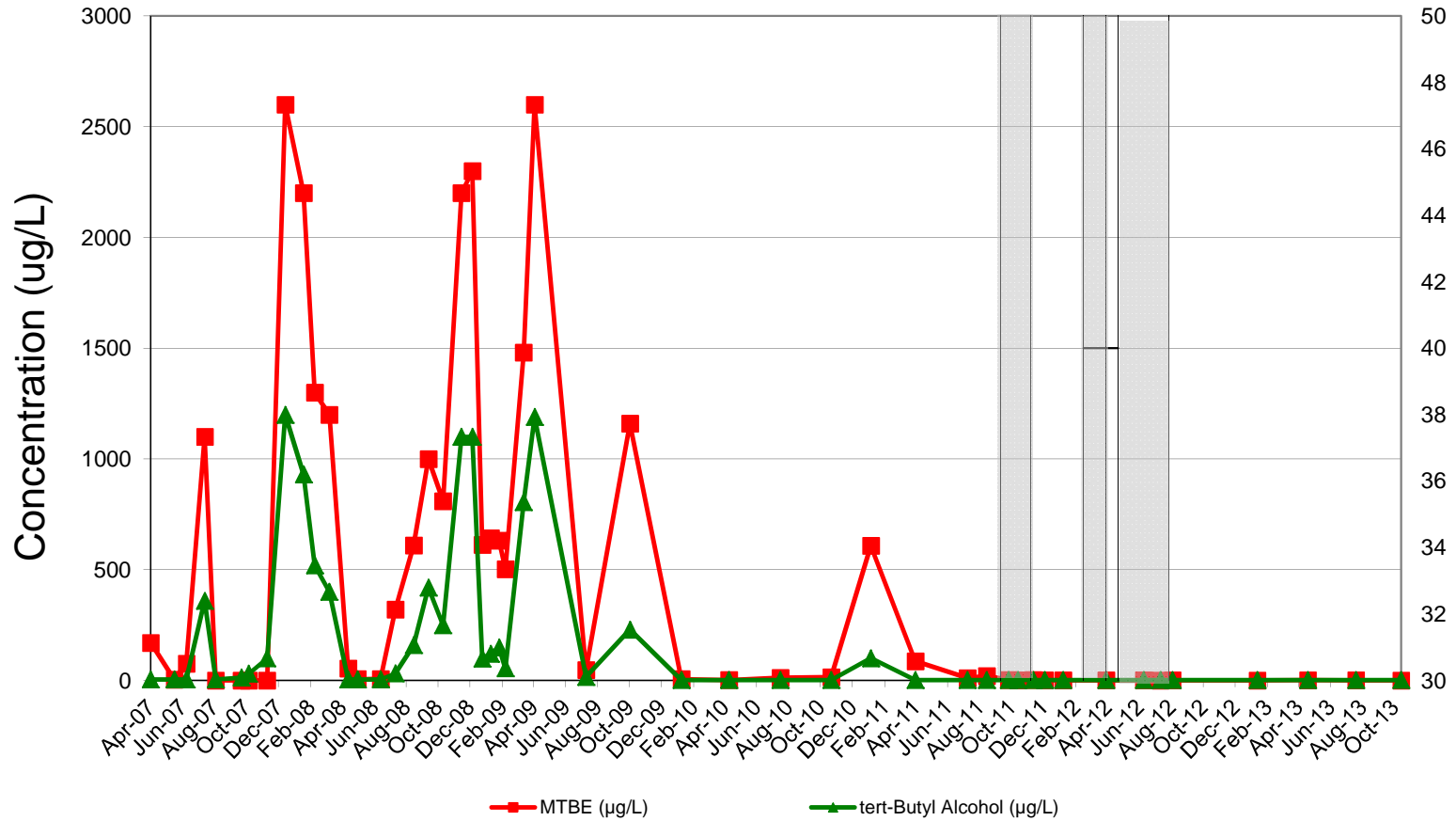
APPENDIX D

Trend Graphs for Potable Wells

RESIDENTIAL SUPPLY WELL GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

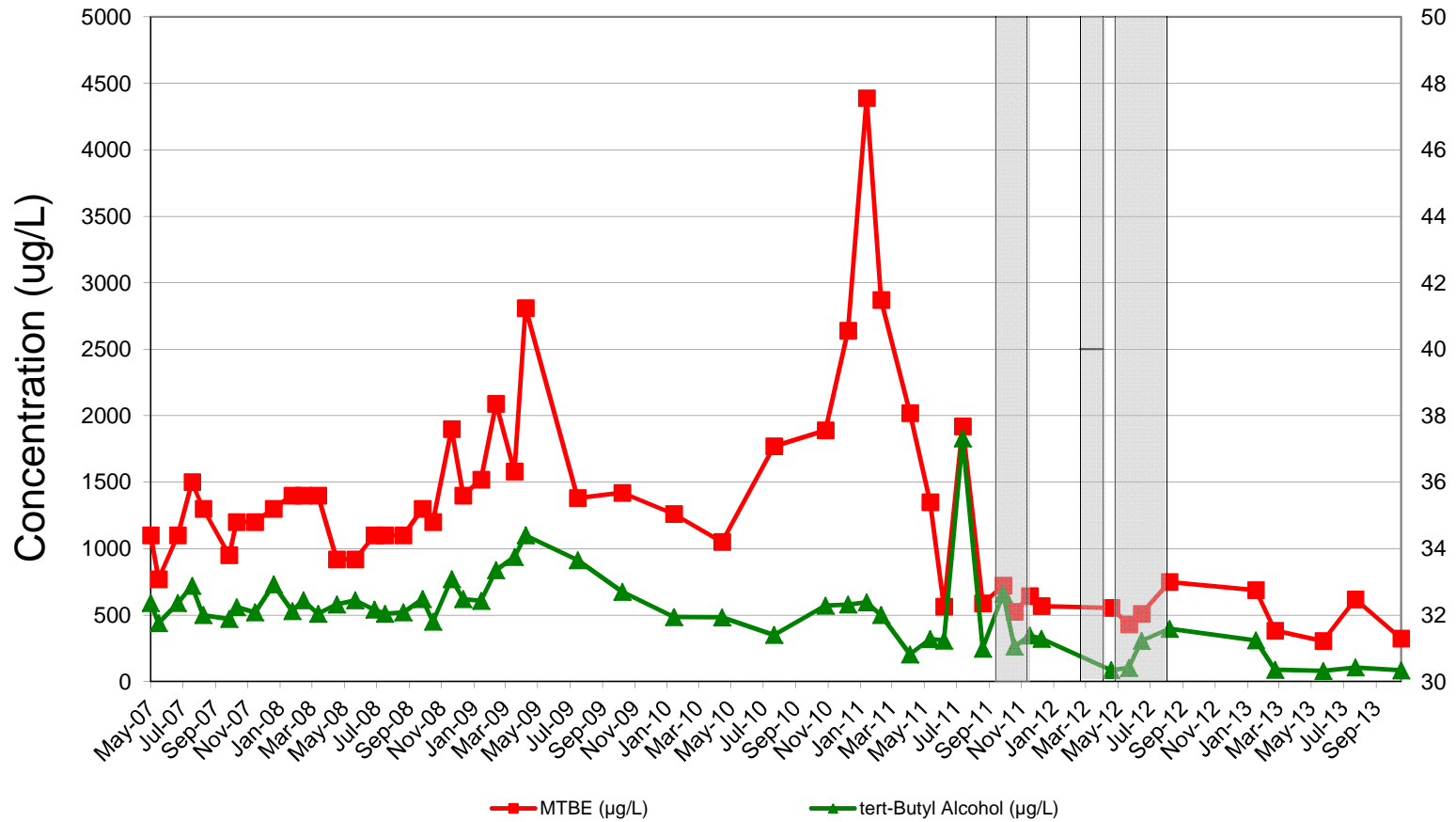
3923-ROSE-INF



RESIDENTIAL & SUPPLY WELL GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo
 11791 Fingerboard Rd
 Monrovia, MD

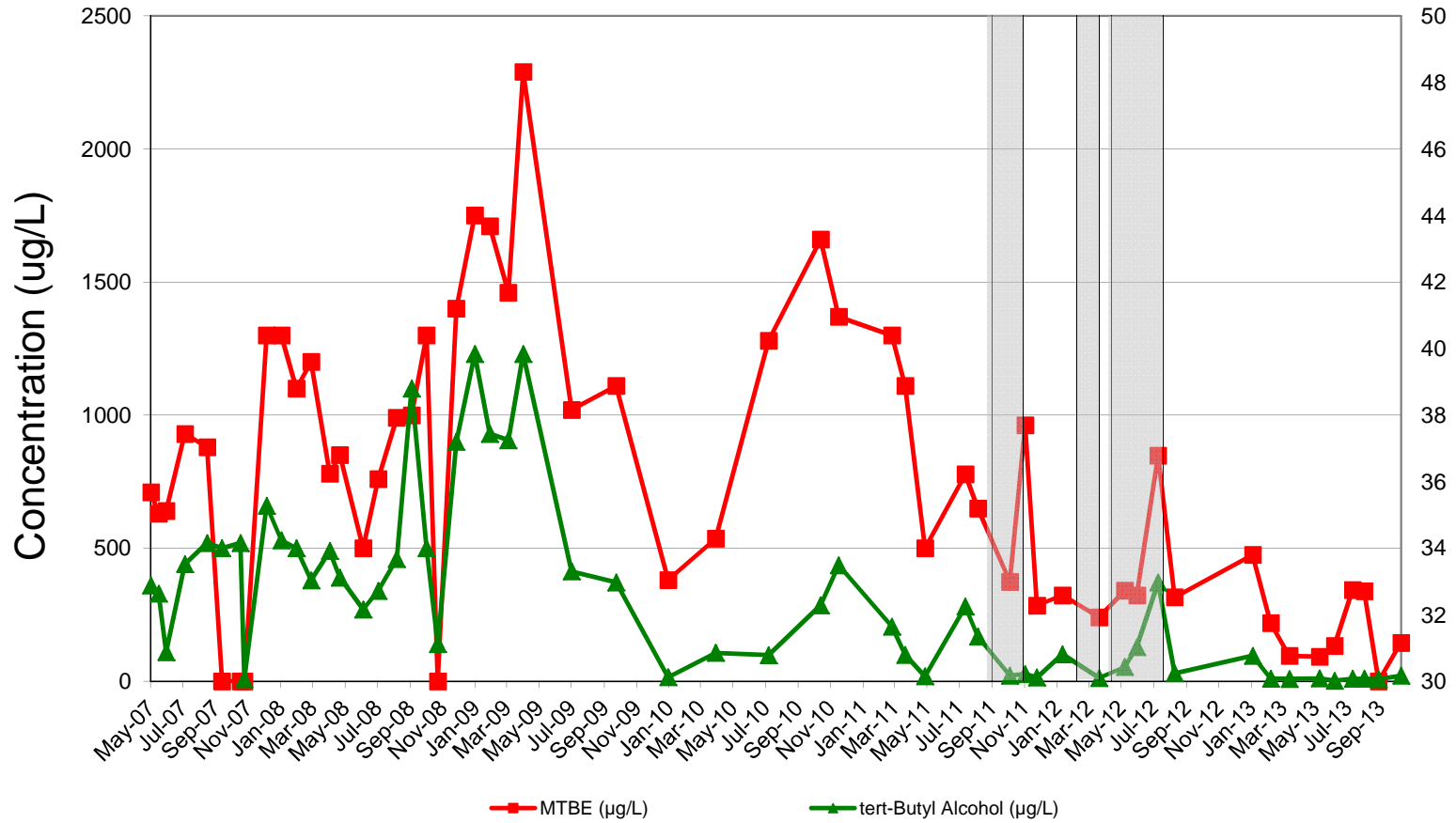
3990-FARM-INF



RESIDENTIAL & SUPPLY WELL GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

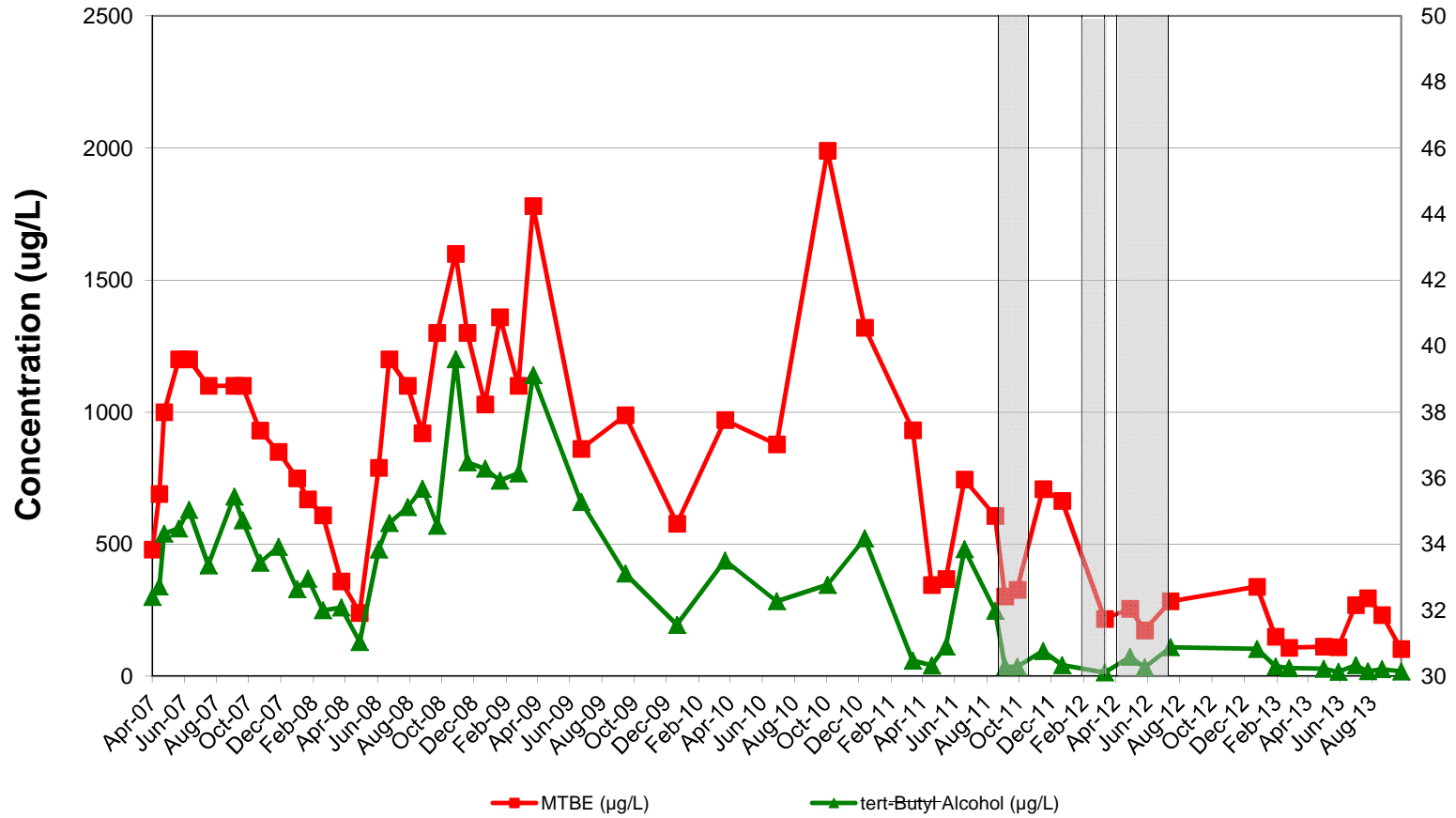
3992-FARM-INF



RESIDENTIAL & SUPPLY WELL GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

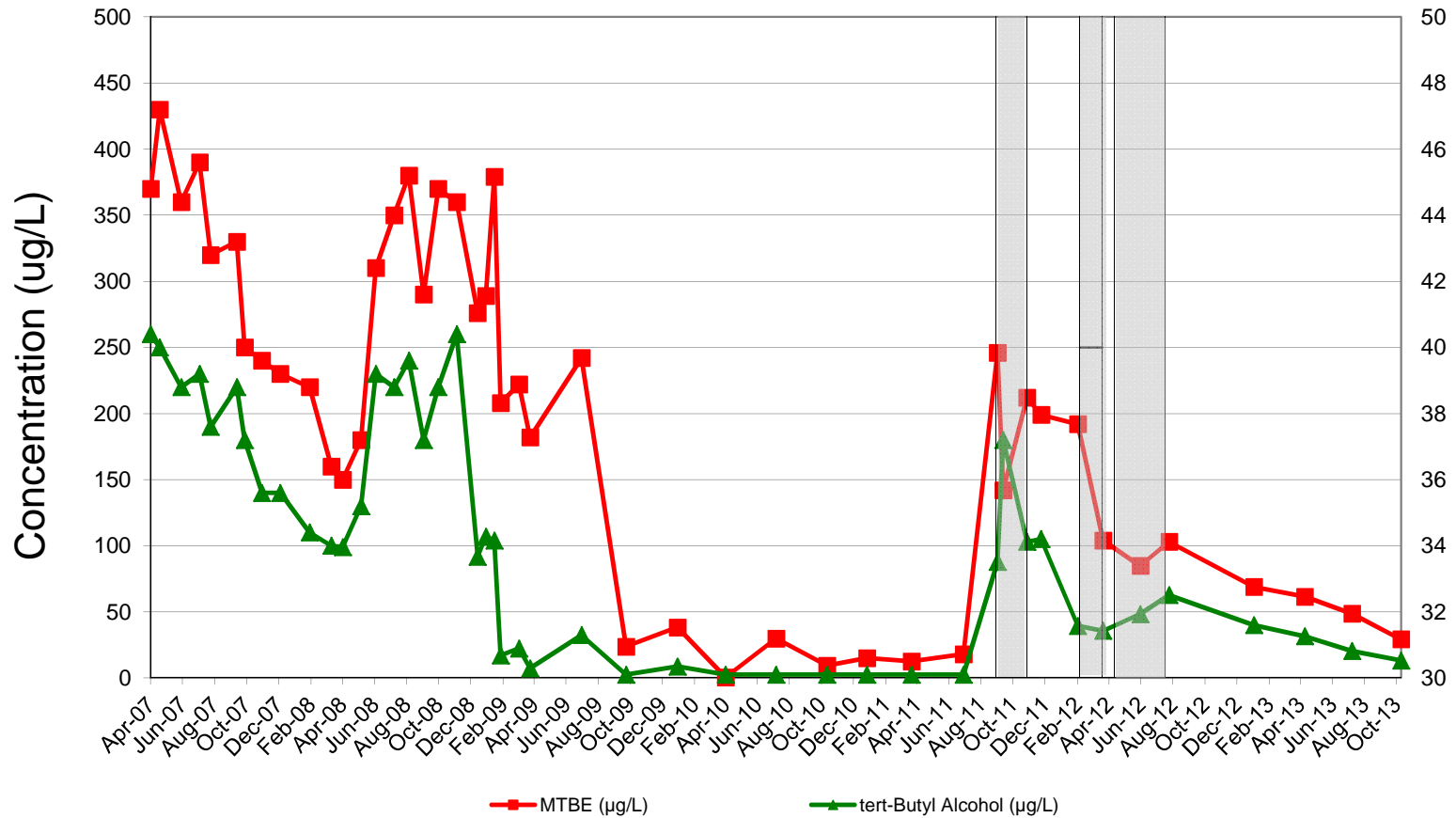
3994-FARM-INF



RESIDENTIAL & SUPPLY WELL GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

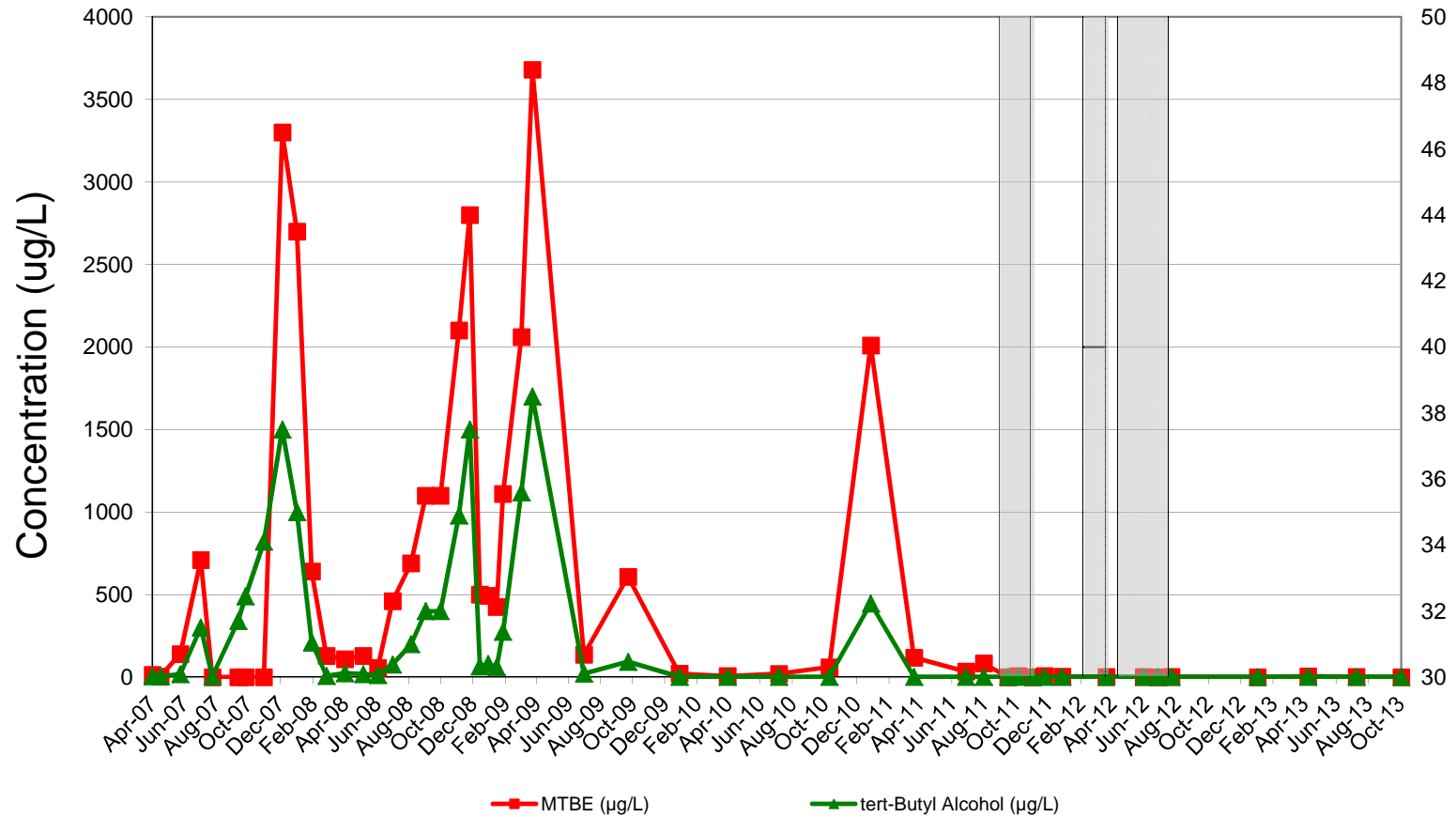
3996-FARM-INF



RESIDENTIAL & SUPPLY WELL GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

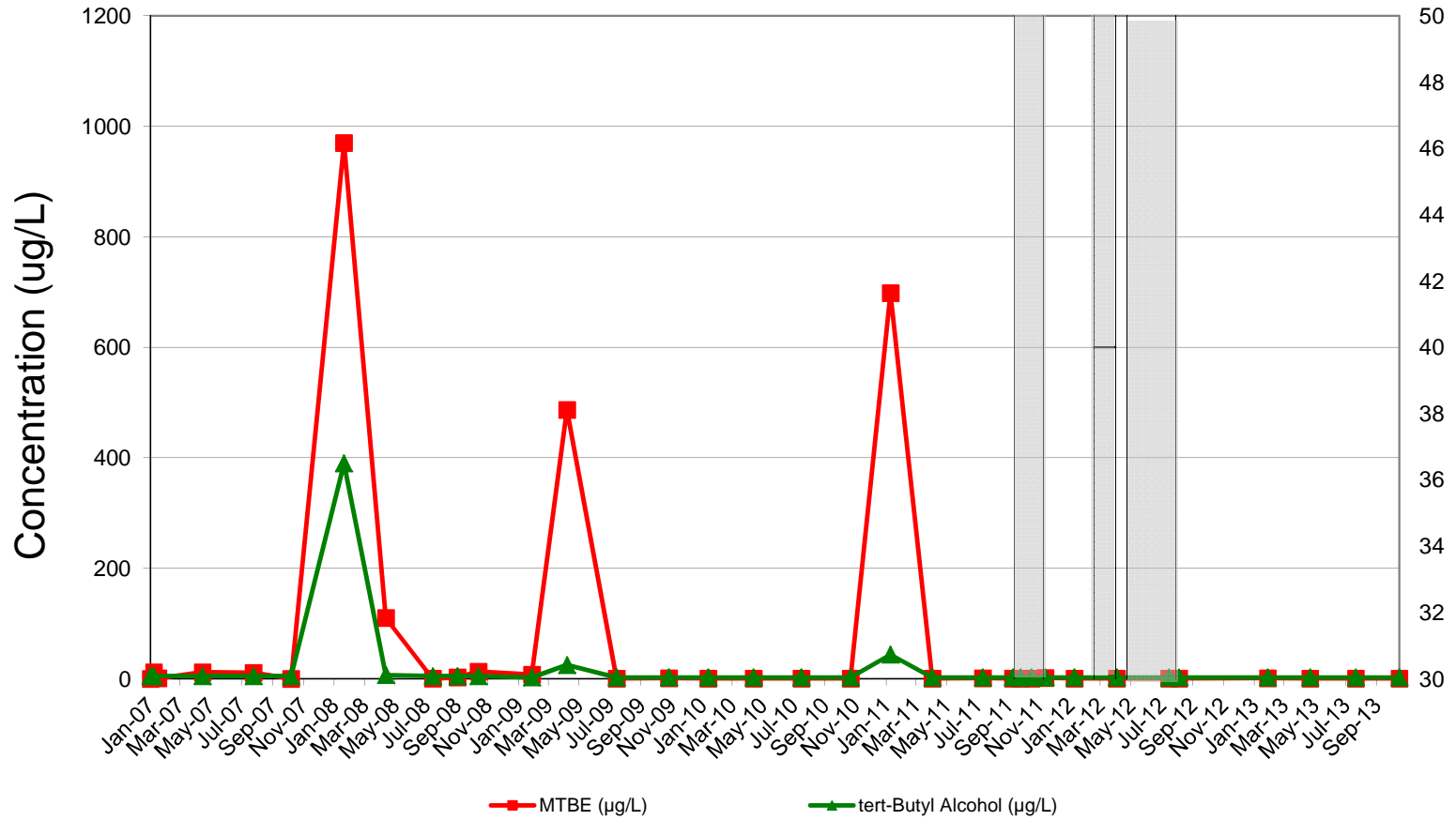
3997-FARM-INF



RESIDENTIAL & SUPPLY WELL GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

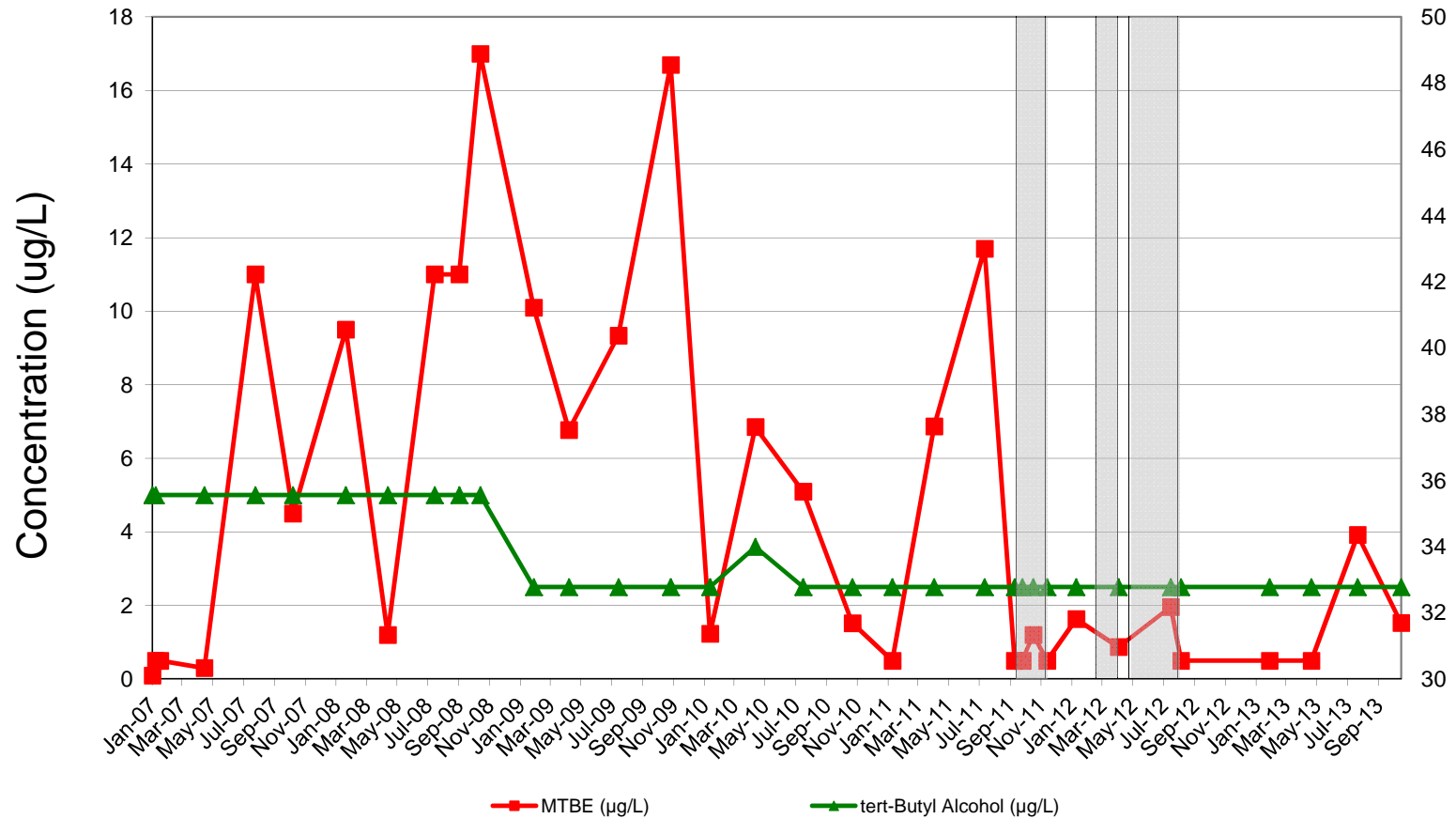
GVP-FR941233



RESIDENTIAL & SUPPLY WELL GROUNDWATER MONITORING GRAPHS

Carroll - Monrovia BP/Former Green Valley Citgo
11791 Fingerboard Rd
Monrovia, MD

GVP-FR941281



APPENDIX E

MAROS Analysis

Introduction

This letter provides an assessment of the dissolved sampling program at the Monrovia BP/Former Green Valley Citgo station (Site) located at 11791 Fingerboard Road, Monrovia, Maryland. Groundwater & Environmental Services, Inc. (GES) applied the Monitoring and Remediation Optimization System (MAROS) software to evaluate the efficacy of the current sampling program. The MAROS software was developed in 1998 by GSI Environmental Inc. in conjunction with the University of Houston (UH), with funding from the Air Force Center for Engineering and the Environment (AFCEE) (GSI, 2012). MAROS provides a statistical review of groundwater monitoring data with the goal of improving the efficiency of monitoring networks. Statistical modules exist for individual well analyses, plume analyses, spatial optimization, and sampling frequency optimization.

Specifically, statistical modules providing summary statistics using the Kaplan-Meier Method, trend analysis using the Mann-Kendall Test for Trend, and Data Sufficiency were applied to dissolved methyl tert-butyl ether (MTBE) data collected at monitoring wells and area private drinking water wells. The objective of this analysis is to determine which monitoring wells and area private drinking water wells should remain in the sampling program. This was achieved by determining if the mean contaminant concentration at a given monitoring well is below the cleanup goal with statistical significance.

Approach

Dissolved MTBE data were collected from 75 discrete monitoring locations (monitoring wells and private drinking water wells) divided into 34 sampling events between February 2006 and October 2013. Once uploaded into the program, data were consolidated: half of the reported detection limit was applied in the model for non-detect results, results reported below the detection limit were applied in the model as the actual value, and the maximum concentration was used when duplicate values were reported for a given monitoring location for the same sampling event.

Site-specific input parameters as defined in the ISCO System Comprehensive Summary & Update to the Conceptual Site Model (September 2012) were applied in the model.

Hydraulic Conductivity: The maximum hydraulic conductivity determined during a rising head slug test conducted on August 31, 2012 at MW-10 was applied in the MAROS model.

Hydraulic Gradient: Calculations from the September 5, 2012 shallow groundwater elevation dataset demonstrate a hydraulic gradient of 0.02 feet per foot (ft/ft) from MW-2 to MW-9 and a hydraulic gradient of 0.05 ft/ft from MW-8 to MW-9. The average gradient of 0.035 ft/ft was applied in the model.

Porosity: The porosity was set at 0.10 to represent the saprolite/weathered bedrock silt matrix.

Groundwater Flow Direction: Due to the existence of active water supply wells both onsite and offsite, the effects of large volume pumping may influence the direction of groundwater flow, however, the effects of localized pumping are generally not evident (GES, 2012). Groundwater flow through saprolite or in crystalline rock aquifers is strongly influenced by the structural attributes of the parent rock and is further driven by groundwater elevation or head. As such the groundwater flow direction in the model (NW to SE) was set to mimic the anisotropy of the formation.

Source Location: The source of the dissolved MTBE plume was identified in the model as the center of the tank field.

Aquifer Thickness: A uniform aquifer thickness was set at 30 feet which was based on the average depth to water in the formation and the top of rock defined at IW-4.

Plume Delineation: During plume delineation monitoring wells and private drinking water wells were divided into 3 categories: source, tail, and delineation. Source wells are located in areas where the original source occurred or where aqueous-phase releases have occurred, and generally have high detected concentrations. Tail wells are located



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downgradient of the contaminant source zone. Delineation wells are unaffected locations. They can be upgradient, downgradient, or cross-gradient from the source. Delineation wells are used to assist with defining the plume; statistics are not performed on these wells.

All site monitoring wells were delineated as sources wells, while the area private drinking water wells were designated as tail wells. Monitoring wells and area private drinking water wells will be considered for removal.

It is important to note that while MW-3 was designated as a source well in this analysis, the well has been abandoned, and therefore, it is no longer part of the sampling program. It was, however, important in delineating the plume at the beginning of the timeline.

Data Sufficiency Analysis: A cleanup goal of 20 ug/L, the MDE Action Level for MTBE, a target level of 16 ug/L, and an alpha of 0.05 was applied in the model.

Results

Summary statistics were performed identifying the sampling frequency, the detection frequency, minimum and maximum detected concentrations, and whether or not the maximum concentration is above the cleanup goal. The Shapiro-Wilk method was used to determine whether the data at each monitoring location followed a normal or lognormal distribution. The majority of the data follows a lognormal distribution.

Mann-Kendall Test for Trend

Monitoring wells and area private drinking water wells were excluded from the Mann-Kendall analysis if they had a high percentage of censored, or non-detect, data. As a result, eight monitoring wells and 34 area private drinking water wells were excluded from the analysis, as listed below. In addition, MTBE has not been detected in the monitoring wells MW-5 and MW-12 and at area private drinking water wells: 3981 Farm Lane, 3984A Farm Lane, and 3996 Rye Lane.

Sampling Locations Excluded from the Mann-Kendall Analysis

MW-1	GVP	3737 Blueberry Court	3979 Farm Lane	3993 Farm Lane
MW-2	GVP-FR815955	3739 Blueberry Court	3983 Farm Lane	3995 Farm Lane
MW-4	GVP-FR881366	3740 Blueberry Court	3984 Farm Lane	3997 Farm Lane
MW-6	GVP-FR881394	3829 Greenridge Drive	3985 Farm Lane	3998 Farm Lane
MW-8	GVP-FR941233	3833 Greenridge Drive	3987 Farm Lane	3992 Rye Lane
MW-9	GVP-FR941281	3835 Greenridge Drive	3989 Farm Lane	3994 Rye Lane
MW-11	GVSC-FR731687	3837 Greenridge Drive	3991 Farm Lane	3998 Rye Lane
MW-16	GVSC-FR734918			
	GVSC-FR736674			

The Mann-Kendall Test for Trend was applied to 10 source and eight tail monitoring locations in the MAROS module. Confidence of trend was determined using an alpha of 0.05, or a 95% confidence interval.

Results indicate that decreasing trends exist in dissolved MTBE concentrations detected in monitoring wells MW-7, MW-10, MW-13, MW-14D, MW-14S, MW-15D, MW-17, and MW-18S, and in area private drinking water wells 3923 Rosewood Road, 3990 Farm Lane, 3992 Farm Lane, 3994 Farm Lane, and 3996 Farm Lane. No trend was determined to be statistically significant in MW-18D, and the MTBE concentrations for MW-18D are not stable.

Individual Well Cleanup Status

Data sufficiency, in the statistical sense, defines whether or not the observed data are adequate in quantity and quality. MAROS' Data Sufficiency module identifies monitoring locations that have statistically attained the cleanup goal. This module requires a minimum of six years of sampling data, and the analysis can only be applied to



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a plume that has reached or is reaching steady state. Applying the analysis to wells in an expanding plume may cause incorrect conclusions (GSI, 2012).

The Sequential T-test Method was applied to all source and tail monitoring locations in the MAROS module. Results indicate that monitoring wells MW-1, MW-2, MW-4, MW-5, MW-6, MW-11, and MW-12 may be eliminated from the sampling program, as well as private drinking water wells 3737 Blueberry Court, 3739 Blueberry Court, 3740 Blueberry Court, 3829 Greenridge Drive, 3833 Greenridge Drive, 3835 Greenridge Drive, 3837 Greenridge Drive, 3979 Farm Lane, 3981 Farm Lane, 3983 Farm Lane, 3984A Farm Lane, 3984 Farm Lane, 3985 Farm Lane, 3987 Farm Lane, 3989 Farm Lane, 3991 Farm Lane, 3993 Farm Lane, 3995 Farm Lane, 3998 Farm Lane, 3992 Rye Lane, 3994 Rye Lane, 3996 Rye Lane, 3998 Rye Lane, GVP-FR815955, GVP-FR881366, GVP-FR881394, GVP-FR941281, GVSC-FR731687, GVSC-FR734918, and GVSC-FR736674. Statistically, the mean dissolved MTBE concentration in these wells is less than the cleanup goal of 20 ug/L, the MDE Action Level for MTBE.

In addition sampling should continue at MW-7, MW-8, MW-9, MW-10, MW-13, MW-14S, MW-15D, MW-16, MW-18S, MW-18D, 3923 Rosewood Road, 3992 Farm Lane, 3994 Farm Lane, 3997 Farm Lane, GVP, and GVP-FR941233. The mean dissolved MTBE concentration in these wells is below the cleanup goal, although it is not statistically significant. The mean MTBE concentration in MW-14D, MW-17, 3990 Farm Lane, and 3996 Farm Lane is higher than the cleanup goal, and, therefore, sampling should continue.

Recommendations

The Mann-Kendall Test for Trend and the Data Sufficiency modules in MAROS were applied to dissolved MTBE data that were collected from 75 discrete monitoring locations (monitoring wells and private drinking water wells) divided into 34 sampling events between February 2006 and October 2013. Based on the results of these statistical analyses GES recommends that sampling should continue at MW-7, MW-8, MW-9, MW-10, MW-13, MW-14S, MW-15D, MW-16, MW-18S, MW-18D, 3923 Rosewood Road, 3992 Farm Lane, 3994 Farm Lane, 3997 Farm Lane, GVP, and GVP-FR941233. The mean MTBE concentration in these wells is below the cleanup goal, although it is not statistically significant. Additionally, the mean MTBE concentration in MW-14D, MW-17, 3990 Farm Lane, and 3996 Farm Lane is higher than the cleanup goal, and, therefore, sampling should continue.

Finally, GES recommends that monitoring wells MW-1, MW-2, MW-4, MW-5, MW-6, MW-11, and MW-12 be eliminated from the sampling program. In addition GES recommends that private drinking water wells 3737 Blueberry Court, 3739 Blueberry Court, 3740 Blueberry Court, 3829 Greenridge Drive, 3833 Greenridge Drive, 3835 Greenridge Drive, 3837 Greenridge Drive, 3979 Farm Lane, 3981 Farm Lane, 3983 Farm Lane, 3984A Farm Lane, 3984 Farm Lane, 3985 Farm Lane, 3987 Farm Lane, 3989 Farm Lane, 3991 Farm Lane, 3993 Farm Lane, 3995 Farm Lane, 3998 Farm Lane, 3992 Rye Lane, 3994 Rye Lane, 3996 Rye Lane, 3998 Rye Lane, GVP-FR815955, GVP-FR881366, GVP-FR881394, GVP-FR941281, GVSC-FR731687, GVSC-FR734918, and GVSC-FR736674 be eliminated from the sampling program as well. Statistically, the mean dissolved MTBE concentration in these wells is less than the cleanup goal of 20 ug/L, the MDE Action Level for MTBE.

References

- GES. 2012. ISCO System Comprehensive Summary Report and Update to CSM, Monrovia BP/Former Green Valley CITGO, MDE Case #2005-0834-FR, MDE Facility ID #11836, 11791 Fingerboard Road, Monrovia, Maryland. Groundwater & Environmental Services, Inc., Odenton, Maryland, September 2012.
- GSI. 2012. Monitoring and Remediation Optimization System (MAROS), Software Version 3.0, User's Guide and Technical Manual. GSI Environmental, Inc., Houston, Texas, September 2012.

MAROS Mann-Kendall Statistics Summary

Project: Carroll Fuels, Monrovia, MD

User Name: Monika Lynch, GES

Location: 11791 Fingerboard Rd, Monrovia

State: Maryland

Time Period: 2/27/2006 to 10/17/2013

Consolidation Period: No Time Consolidation

Consolidation Type: Median

Duplicate Consolidation: Maximum

ND Values: 1/2 Detection Limit

J Flag Values : Actual Value

Well	Source/ Tail	Number of Samples	Number of Detects	Coefficient of Variation	Mann- Kendall Statistic	Confidence in Trend	All Samples "ND" ?	Concentration Trend
tert-BUTYL METHYL ETHER								
11892BRLY	T	3	0	0.00	0	0.0%	Yes	ND
11894BRLY	T	4	3	0.46	-3	72.9%	No	S
11896BRLY	T	4	4	0.18	-1	50.0%	No	S
3737BLUE	T	22	6	0.60	-104	99.9%	No	D
3739BLUE	T	24	4	0.17	18	66.2%	No	NT
3740BLUE	T	25	5	0.33	-120	99.8%	No	D
3829GRNR	T	16	2	0.14	-10	65.5%	No	S
3833GRNR	T	18	5	0.16	-32	87.8%	No	S
3835GRNR	T	20	4	0.76	-79	99.5%	No	D
3837GRNR	T	25	8	0.98	-140	100.0%	No	D
3923RSWD	T	31	26	2.31	-195	100.0%	No	D
3978RYEL	T	4	4	0.22	-3	72.9%	No	S
3979FARM	T	14	1	0.45	43	99.0%	No	I
3980RYEL	T	1	1	0.00	0	0.0%	No	N/A
3981FARM	T	12	0	0.36	20	90.2%	Yes	ND
3982RYEL	T	4	2	0.38	0	37.5%	No	S
3983FARM	T	15	1	0.43	47	99.0%	No	I
3984AFARM	T	14	0	0.41	33	96.0%	Yes	ND
3984FARM	T	13	1	0.39	32	97.1%	No	I
3984RYEL	T	5	1	0.34	8	95.8%	No	I
3985FARM	T	23	2	0.27	47	88.6%	No	NT
3986RYEL	T	4	0	0.00	0	37.5%	Yes	ND
3987FARM	T	23	4	0.22	40	84.7%	No	NT
3988RYEL	T	4	1	0.40	-3	72.9%	No	S
3989FARM	T	23	3	0.24	53	91.4%	No	PI
3990FARM	T	29	29	0.68	-141	99.6%	No	D

MAROS Mann-Kendall Statistics Summary

Project: Carroll Fuels, Monrovia, MD

User Name: Monika Lynch, GES

Location: 11791 Fingerboard Rd, Monrovia

State: Maryland

tert-BUTYL METHYL ETHER

Well	Source/ Tail	Number of Samples	Number of Detects	Coefficient of Variation	Mann- Kendall Statistic	Confidence in Trend	All Samples "ND" ?	Concentration Trend
3990RYEL	T	4	4	0.41	-3	72.9%	No	S
3991FARM	T	25	5	0.13	-43	83.5%	No	S
3992FARM	T	27	27	0.66	-166	100.0%	No	D
3992RYEL	T	14	3	1.06	-32	95.5%	No	D
3993FARM	T	27	6	0.63	-150	99.9%	No	D
3994FARM	T	29	29	0.66	-199	100.0%	No	D
3994RYEL	T	14	3	0.29	39	98.2%	No	I
3995FARM	T	28	5	0.20	104	97.9%	No	I
3996FARM	T	28	27	0.91	-133	99.6%	No	D
3996RYEL	T	10	0	0.61	24	98.2%	Yes	ND
3997FARM	T	31	24	2.41	-170	99.8%	No	D
3998FARM	T	25	6	0.41	-2	50.9%	No	S
3998RYEL	T	16	2	0.48	57	99.5%	No	I
FR881394	T	8	2	1.14	-4	64.0%	No	NT
GVP	T	24	19	2.21	-32	77.7%	No	NT
GVP-FR815955	T	8	1	0.07	7	76.4%	No	NT
GVP-FR881366	T	13	3	2.12	20	87.4%	No	NT
GVP-FR881394	T	1	0	0.00	0	0.0%	Yes	ND
GVP-FR941233	T	28	13	2.83	-127	99.4%	No	D
GVP-FR941281	T	28	22	1.08	-128	99.4%	No	D
GVSC-FR731687	T	25	8	0.79	-121	99.8%	No	D
GVSC-FR734918	T	25	5	0.31	121	99.8%	No	I
GVSC-FR736674	T	25	5	0.09	-22	68.6%	No	S
IW-1D	S	1	1	0.00	0	0.0%	No	N/A
IW-1S	S	2	2	0.00	0	0.0%	No	N/A
IW-2D	S	2	2	0.00	0	0.0%	No	N/A
IW-2S	S	2	2	0.00	0	0.0%	No	N/A
IW-3D	S	1	1	0.00	0	0.0%	No	N/A
IW-3S	S	2	2	0.00	0	0.0%	No	N/A
MW-1	S	30	22	1.43	-285	100.0%	No	D
MW-10	S	23	22	2.26	-107	99.8%	No	D
MW-11	S	20	1	0.38	-45	92.3%	No	PD
MW-12	S	20	0	0.34	-8	58.9%	Yes	ND

MAROS Mann-Kendall Statistics Summary

Project: Carroll Fuels, Monrovia, MD

User Name: Monika Lynch, GES

Location: 11791 Fingerboard Rd, Monrovia

State: Maryland

tert-BUTYL METHYL ETHER

Well	Source/ Tail	Number of Samples	Number of Detects	Coefficient of Variation	Mann- Kendall Statistic	Confidence in Trend	All Samples "ND" ?	Concentration Trend
MW-13	S	23	23	2.08	-173	100.0%	No	D
MW-14D	S	21	21	0.74	-94	99.8%	No	D
MW-14S	S	18	16	1.69	-96	100.0%	No	D
MW-15D	S	21	19	1.97	-148	100.0%	No	D
MW-16	S	21	13	2.89	-49	92.6%	No	PD
MW-17	S	21	21	0.94	-150	100.0%	No	D
MW-18D	S	18	18	2.46	-41	93.4%	No	PD
MW-18S	S	18	18	1.17	-103	100.0%	No	D
MW-2	S	25	1	1.20	88	97.9%	No	I
MW-3	S	6	6	0.35	9	93.2%	No	PI
MW-4	S	30	12	0.91	-182	100.0%	No	D
MW-5	S	23	0	0.40	36	82.0%	Yes	ND
MW-6	S	11	2	0.74	-15	85.9%	No	S
MW-7	S	24	24	1.81	-232	100.0%	No	D
MW-8	S	26	19	2.23	-204	100.0%	No	D
MW-9	S	20	5	3.66	-77	99.4%	No	D

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A)-Due to insufficient Data (< 4 sampling events); Source/Tail (S/T)

The Number of Samples and Number of Detects shown above are post-consolidation values.

MAROS Power Analysis for Individual Well Cleanup Status

Project: Carroll Fuels, Monrovia, MD

User Name: Monika Lynch, GES

Location: 11791 Fingerboard Rd, Monrovia

State: Maryland

From Period: 2/27/2006 to 10/17/2013

Well Name	Sample Size	Sample Mean	Sample Stdev.	Normal	Lognormal	Alpha Level	Expected Power
				Distribution	Distribution		
Cleanup Status	Cleanup Status						
tert-BUTYL METHYL ETHER		Cleanup Goal (mg/L) = 0.02		Target Level (mg/L) = 0.016			
11892BRLY	3	5.00E-05	0.00E+00	N/C	N/C	0.05	0.8
11894BRLY	4	1.63E-04	7.50E-05	Attained	Cont Sampling	0.05	0.8
11896BRLY	4	2.75E-04	5.00E-05	Attained	Cont Sampling	0.05	0.8
3737BLUE	22	3.56E-04	2.15E-04	Attained	Attained	0.05	0.8
3739BLUE	24	2.37E-04	4.12E-05	Attained	Attained	0.05	0.8
3740BLUE	25	2.79E-04	9.22E-05	Attained	Attained	0.05	0.8
3829GRNR	16	2.43E-04	3.41E-05	Attained	Attained	0.05	0.8
3833GRNR	18	2.64E-04	4.13E-05	Attained	Attained	0.05	0.8
3835GRNR	20	3.69E-04	2.79E-04	Attained	Attained	0.05	0.8
3837GRNR	25	5.69E-04	5.55E-04	Attained	Attained	0.05	0.8
3923RSWD	31	2.75E-01	6.37E-01	Cont Sampling	Cont Sampling	0.05	0.8
3978RYEL	4	2.25E-04	5.00E-05	Attained	Cont Sampling	0.05	0.8
3979FARM	14	1.96E-04	8.87E-05	Attained	Cont Sampling	0.05	0.8
3980RYEL	1	2.00E-04	0.00E+00	N/C	N/C	0.05	0.8
3981FARM	12	2.17E-04	7.78E-05	Attained	Attained	0.05	0.8
3982RYEL	4	7.50E-05	2.89E-05	Attained	Cont Sampling	0.05	0.8
3983FARM	15	2.00E-04	8.66E-05	Attained	Cont Sampling	0.05	0.8
3984AFARM	14	2.07E-04	8.52E-05	Attained	Cont Sampling	0.05	0.8
3984FARM	13	2.08E-04	8.13E-05	Attained	Cont Sampling	0.05	0.8
3984RYEL	5	8.00E-05	2.74E-05	Attained	Cont Sampling	0.05	0.8
3985FARM	23	2.23E-04	6.10E-05	Attained	Attained	0.05	0.8
3986RYEL	4	5.00E-05	0.00E+00	Attained	Attained	0.05	0.8
3987FARM	23	2.32E-04	5.03E-05	Attained	Attained	0.05	0.8
3988RYEL	4	6.25E-05	2.50E-05	Attained	Cont Sampling	0.05	0.8
3989FARM	23	2.25E-04	5.51E-05	Attained	Attained	0.05	0.8
3990FARM	29	1.30E+00	8.81E-01	Cont Sampling	Not Attained	0.05	0.8
3990RYEL	4	2.00E-04	8.16E-05	Attained	Cont Sampling	0.05	0.8
3991FARM	25	2.47E-04	3.26E-05	Attained	Attained	0.05	0.8
3992FARM	27	8.31E-01	5.47E-01	Cont Sampling	Not Attained	0.05	0.8
3992RYEL	14	5.11E-04	5.42E-04	Attained	Attained	0.05	0.8

MAROS Power Analysis for Individual Well Cleanup Status

Project: Carroll Fuels, Monrovia, MD

User Name: Monika Lynch, GES

Location: 11791 Fingerboard Rd, Monrovia

State: Maryland

From Period: 2/27/2006 to 10/17/2013

Well Name	Sample Size	Sample Mean	Sample Stdev.	Normal	Lognormal	Alpha Level	Expected Power
				Distribution	Distribution		
				Cleanup Status	Cleanup Status		
3993FARM	27	3.53E-04	2.22E-04	Attained	Attained	0.05	0.8
3994FARM	29	7.32E-01	4.84E-01	Cont Sampling	Not Attained	0.05	0.8
3994RYEL	14	2.18E-04	6.39E-05	Attained	Cont Sampling	0.05	0.8
3995FARM	28	2.30E-04	4.49E-05	Attained	Cont Sampling	0.05	0.8
3996FARM	28	1.39E-01	1.26E-01	Cont Sampling	Not Attained	0.05	0.8
3996RYEL	10	1.70E-04	1.03E-04	Attained	Cont Sampling	0.05	0.8
3997FARM	31	3.61E-01	8.70E-01	Cont Sampling	Cont Sampling	0.05	0.8
3998FARM	25	2.51E-04	1.02E-04	Attained	Attained	0.05	0.8
3998RYEL	16	1.88E-04	9.04E-05	Attained	Cont Sampling	0.05	0.8
FR881394	8	4.00E-04	4.54E-04	Attained	Cont Sampling	0.05	0.8
GVP	24	7.49E-03	1.65E-02	Attained	Cont Sampling	0.05	0.8
GVP-FR815955	8	2.44E-04	1.77E-05	Attained	Attained	0.05	0.8
GVP-FR881366	13	5.38E-04	1.14E-03	Attained	Cont Sampling	0.05	0.8
GVP-FR881394	1	2.50E-04	0.00E+00	N/C	N/C	0.05	0.8
GVP-FR941233	28	8.28E-02	2.35E-01	Cont Sampling	Cont Sampling	0.05	0.8
GVP-FR941281	28	4.73E-03	5.08E-03	Attained	Cont Sampling	0.05	0.8
GVSC-FR731687	25	4.43E-04	3.50E-04	Attained	Attained	0.05	0.8
GVSC-FR734918	25	2.38E-04	7.40E-05	Attained	Cont Sampling	0.05	0.8
GVSC-FR736674	25	2.52E-04	2.27E-05	Attained	Attained	0.05	0.8
IW-1D	1	9.52E+00	0.00E+00	N/C	N/C	0.05	0.8
IW-1S	2	6.83E+00	9.43E+00	N/C	N/C	0.05	0.8
IW-2D	2	4.16E+01	3.82E+00	N/C	N/C	0.05	0.8
IW-2S	2	1.36E+00	6.48E-01	N/C	N/C	0.05	0.8
IW-3D	1	9.86E-01	0.00E+00	N/C	N/C	0.05	0.8
IW-3S	2	7.25E+00	1.74E+00	N/C	N/C	0.05	0.8
MW-1	30	9.35E-03	1.34E-02	Attained	Cont Sampling	0.05	0.8
MW-10	23	5.48E-01	1.24E+00	Cont Sampling	Cont Sampling	0.05	0.8
MW-11	20	6.10E-04	2.29E-04	Attained	Attained	0.05	0.8
MW-12	20	6.00E-04	2.05E-04	Attained	Attained	0.05	0.8
MW-13	23	5.62E+00	1.17E+01	Cont Sampling	Cont Sampling	0.05	0.8
MW-14D	21	2.25E+00	1.67E+00	Cont Sampling	Not Attained	0.05	0.8

MAROS Power Analysis for Individual Well Cleanup Status

Project: Carroll Fuels, Monrovia, MD

User Name: Monika Lynch, GES

Location: 11791 Fingerboard Rd, Monrovia

State: Maryland

From Period: 2/27/2006 to 10/17/2013

Well Name	Sample Size	Sample Mean	Sample Stdev.	Normal Distribution	Lognormal Distribution	Alpha Level	Expected Power
				Cleanup Status	Cleanup Status		
MW-14S	18	9.01E-01	1.53E+00	Cont Sampling	Cont Sampling	0.05	0.8
MW-15D	21	2.86E+00	5.65E+00	Cont Sampling	Cont Sampling	0.05	0.8
MW-16	21	2.25E-02	6.50E-02	Cont Sampling	Cont Sampling	0.05	0.8
MW-17	21	7.60E+00	7.15E+00	Cont Sampling	Not Attained	0.05	0.8
MW-18D	18	1.64E+00	4.04E+00	Cont Sampling	Cont Sampling	0.05	0.8
MW-18S	18	5.52E+00	6.46E+00	Cont Sampling	Cont Sampling	0.05	0.8
MW-2	25	6.75E-04	8.08E-04	Attained	Cont Sampling	0.05	0.8
MW-3	6	5.72E+01	2.02E+01	Cont Sampling	Not Attained	0.05	0.8
MW-4	30	1.21E-03	1.11E-03	Attained	Attained	0.05	0.8
MW-5	23	5.87E-04	2.34E-04	Attained	Attained	0.05	0.8
MW-6	11	8.73E-04	6.50E-04	Attained	Attained	0.05	0.8
MW-7	24	9.98E+00	1.81E+01	Cont Sampling	Cont Sampling	0.05	0.8
MW-8	26	7.42E-02	1.66E-01	Cont Sampling	Cont Sampling	0.05	0.8
MW-9	20	4.70E-03	1.72E-02	Cont Sampling	Cont Sampling	0.05	0.8

Note: N/C refers to "not conducted" because of insufficient data (N<4); S/E indicates the sample mean significantly exceeds the cleanup level and thus no analysis is conducted; Sample Size is the number of concentration data in a sampling location that are used in the analysis; Target Level is the expected mean concentration in wells after cleanup attainment, it is only used in individual well cleanup status evaluation. The test for evaluating attainment status is from EPA (1992). Refer to Appendix A.6 of MAROS Manual for details.

MAROS Individual Well Cleanup Status

Carroll Fuels
11791 Fingerboard Road
Monrovia, MD

Well Name	Well Name	Shapiro Wilk Critical	Normal By Shapiro Wilk	Lognormal By Shapiro Wilk	Sample Size	Sample Mean	Sample STDEV	Cleanup Status		Alpha Level	Expected Power
								Normal Distribution	Lognormal Distribution		
11894BRLY	11894BRLY		Yes	Yes	4	1.63E-04	7.50E-05	Attained	Continue Sampling	0.05	0.8
11896BRLY	11896BRLY		Yes	Yes	4	2.75E-04	5.00E-05	Attained	Continue Sampling	0.05	0.8
3978RYEL	3978RYEL		Yes	Yes	4	2.25E-04	5.00E-05	Attained	Continue Sampling	0.05	0.8
3982RYEL	3982RYEL		Yes	Yes	4	7.50E-05	2.89E-05	Attained	Continue Sampling	0.05	0.8
3986RYEL	3986RYEL		Yes	Yes	4	5.00E-05	0.00E+00	Attained	Attained	0.05	0.8
3988RYEL	3988RYEL		Yes	Yes	4	6.25E-05	2.50E-05	Attained	Continue Sampling	0.05	0.8
3990RYEL	3990RYEL		Yes	Yes	4	2.00E-04	8.16E-05	Attained	Continue Sampling	0.05	0.8
3992FARM	3992FARM	0.923	Yes	Yes	27	8.31E-01	5.47E-01	Continue Sampling	Not Attained	0.05	0.8
3994FARM	3994FARM	0.926	Yes	Yes	29	7.32E-01	4.84E-01	Continue Sampling	Not Attained	0.05	0.8
3923RSWD	3923RSWD	0.929	No	Yes	31	2.75E-01	6.37E-01	Continue Sampling	Continue Sampling	0.05	0.8
3997FARM	3997FARM	0.929	No	Yes	31	3.61E-01	8.70E-01	Continue Sampling	Continue Sampling	0.05	0.8
GVP	GVP	0.916	No	Yes	24	7.49E-03	1.65E-02	Attained	Continue Sampling	0.05	0.8
MW-10	MW-10	0.914	No	Yes	23	5.48E-01	1.24E+00	Continue Sampling	Continue Sampling	0.05	0.8
MW-13	MW-13	0.914	No	Yes	23	5.62E+00	1.17E+01	Continue Sampling	Continue Sampling	0.05	0.8
MW-14S	MW-14S	0.897	No	Yes	18	9.01E-01	1.53E+00	Continue Sampling	Continue Sampling	0.05	0.8
MW-15D	MW-15D	0.908	No	Yes	21	2.86E+00	5.65E+00	Continue Sampling	Continue Sampling	0.05	0.8
MW-18S	MW-18S	0.897	No	Yes	18	5.52E+00	6.46E+00	Continue Sampling	Continue Sampling	0.05	0.8
3990FARM	3990FARM	0.926	No	Yes	29	1.30E+00	8.81E-01	Continue Sampling	Not Attained	0.05	0.8
MW-14D	MW-14D	0.908	No	Yes	21	2.25E+00	1.67E+00	Continue Sampling	Not Attained	0.05	0.8
3737BLUE	3737BLUE	0.911	No	No	22	3.56E-04	2.15E-04	Attained	Attained	0.05	0.8
3739BLUE	3739BLUE	0.916	No	No	24	2.37E-04	4.12E-05	Attained	Attained	0.05	0.8
3740BLUE	3740BLUE	0.918	No	No	25	2.79E-04	9.22E-05	Attained	Attained	0.05	0.8
3829GRNR	3829GRNR	0.887	No	No	16	2.43E-04	3.41E-05	Attained	Attained	0.05	0.8
3833GRNR	3833GRNR	0.897	No	No	18	2.64E-04	4.13E-05	Attained	Attained	0.05	0.8
3835GRNR	3835GRNR	0.905	No	No	20	3.69E-04	2.79E-04	Attained	Attained	0.05	0.8
3837GRNR	3837GRNR	0.918	No	No	25	5.69E-04	5.55E-04	Attained	Attained	0.05	0.8
3981FARM	3981FARM	0.859	No	No	12	2.17E-04	7.78E-05	Attained	Attained	0.05	0.8
3985FARM	3985FARM	0.914	No	No	23	2.23E-04	6.10E-05	Attained	Attained	0.05	0.8
3987FARM	3987FARM	0.914	No	No	23	2.32E-04	5.03E-05	Attained	Attained	0.05	0.8
3989FARM	3989FARM	0.914	No	No	23	2.25E-04	5.51E-05	Attained	Attained	0.05	0.8
3991FARM	3991FARM	0.918	No	No	25	2.47E-04	3.26E-05	Attained	Attained	0.05	0.8
3992RYEL	3992RYEL	0.874	No	No	14	5.11E-04	5.42E-04	Attained	Attained	0.05	0.8
3993FARM	3993FARM	0.923	No	No	27	3.53E-04	2.22E-04	Attained	Attained	0.05	0.8
3998FARM	3998FARM	0.918	No	No	25	2.51E-04	1.02E-04	Attained	Attained	0.05	0.8
GVP-FR815955	GVP-FR815955	0.818	No	No	8	2.44E-04	1.77E-05	Attained	Attained	0.05	0.8
GVSC-FR731687	GVSC-FR731687	0.918	No	No	25	4.43E-04	3.50E-04	Attained	Attained	0.05	0.8
GVSC-FR736674	GVSC-FR736674	0.918	No	No	25	2.52E-04	2.27E-05	Attained	Attained	0.05	0.8
MW-11	MW-11	0.905	No	No	20	6.10E-04	2.29E-04	Attained	Attained	0.05	0.8
MW-12	MW-12	0.905	No	No	20	6.00E-04	2.05E-04	Attained	Attained	0.05	0.8
MW-4	MW-4	0.927	No	No	30	1.21E-03	1.11E-03	Attained	Attained	0.05	0.8

MAROS Individual Well Cleanup Status

Carroll Fuels
11791 Fingerboard Road
Monrovia, MD

Well Name	Well Name	Shapiro Wilk Critical	Normal By Shapiro Wilk	Lognormal By Shapiro Wilk	Sample Size	Sample Mean	Sample STDEV	Cleanup Status		Alpha Level	Expected Power
								Normal Distribution	Lognormal Distribution		
MW-5	MW-5	0.914	No	No	23	5.87E-04	2.34E-04	Attained	Attained	0.05	0.8
MW-6	MW-6	0.85	No	No	11	8.73E-04	6.50E-04	Attained	Attained	0.05	0.8
3979FARM	3979FARM	0.874	No	No	14	1.96E-04	8.87E-05	Attained	Continue Sampling	0.05	0.8
3983FARM	3983FARM	0.881	No	No	15	2.00E-04	8.66E-05	Attained	Continue Sampling	0.05	0.8
3984AFARM	3984AFARM	0.874	No	No	14	2.07E-04	8.52E-05	Attained	Continue Sampling	0.05	0.8
3984FARM	3984FARM	0.866	No	No	13	2.08E-04	8.13E-05	Attained	Continue Sampling	0.05	0.8
3984RYEL	3984RYEL	0.762	No	No	5	8.00E-05	2.74E-05	Attained	Continue Sampling	0.05	0.8
3994RYEL	3994RYEL	0.874	No	No	14	2.18E-04	6.39E-05	Attained	Continue Sampling	0.05	0.8
3995FARM	3995FARM	0.924	No	No	28	2.30E-04	4.49E-05	Attained	Continue Sampling	0.05	0.8
3996RYEL	3996RYEL	0.842	No	No	10	1.70E-04	1.03E-04	Attained	Continue Sampling	0.05	0.8
3998RYEL	3998RYEL	0.887	No	No	16	1.88E-04	9.04E-05	Attained	Continue Sampling	0.05	0.8
FR881394	FR881394	0.818	No	No	8	4.00E-04	4.54E-04	Attained	Continue Sampling	0.05	0.8
GVP-FR881366	GVP-FR881366	0.866	No	No	13	5.38E-04	1.14E-03	Attained	Continue Sampling	0.05	0.8
GVP-FR941281	GVP-FR941281	0.924	No	No	28	4.73E-03	5.08E-03	Attained	Continue Sampling	0.05	0.8
GVSC-FR734918	GVSC-FR734918	0.918	No	No	25	2.38E-04	7.40E-05	Attained	Continue Sampling	0.05	0.8
MW-1	MW-1	0.927	No	No	30	9.35E-03	1.34E-02	Attained	Continue Sampling	0.05	0.8
MW-2	MW-2	0.918	No	No	25	6.75E-04	8.08E-04	Attained	Continue Sampling	0.05	0.8
GVP-FR941233	GVP-FR941233	0.924	No	No	28	8.28E-02	2.35E-01	Continue Sampling	Continue Sampling	0.05	0.8
MW-16	MW-16	0.908	No	No	21	2.25E-02	6.50E-02	Continue Sampling	Continue Sampling	0.05	0.8
MW-18D	MW-18D	0.897	No	No	18	1.64E+00	4.04E+00	Continue Sampling	Continue Sampling	0.05	0.8
MW-7	MW-7	0.916	No	No	24	9.98E+00	1.81E+01	Continue Sampling	Continue Sampling	0.05	0.8
MW-8	MW-8	0.92	No	No	26	7.42E-02	1.66E-01	Continue Sampling	Continue Sampling	0.05	0.8
MW-9	MW-9	0.905	No	No	20	4.70E-03	1.72E-02	Continue Sampling	Continue Sampling	0.05	0.8
3996FARM	3996FARM	0.924	No	No	28	1.39E-01	1.26E-01	Continue Sampling	Not Attained	0.05	0.8
MW-17	MW-17	0.908	No	No	21	7.60E+00	7.15E+00	Continue Sampling	Not Attained	0.05	0.8
MW-3	MW-3	0.988	No	No	6	5.72E+01	2.02E+01	Continue Sampling	Not Attained	0.05	0.8
11892BRLY	11892BRLY		Yes	Yes	3	5.00E-05	0.00E+00	N/C	N/C	0.05	0.8
3980RYEL					1	2.00E-04	0.00E+00	N/C	N/C	0.05	0.8
GVP-FR881394					1	2.50E-04	0.00E+00	N/C	N/C	0.05	0.8
IW-1D					1	9.52E+00	0.00E+00	N/C	N/C	0.05	0.8
IW-1S					2	6.83E+00	9.43E+00	N/C	N/C	0.05	0.8
IW-2D					2	4.16E+01	3.82E+00	N/C	N/C	0.05	0.8
IW-2S					2	1.36E+00	6.48E-01	N/C	N/C	0.05	0.8
IW-3D					1	9.86E-01	0.00E+00	N/C	N/C	0.05	0.8
IW-3S					2	7.25E+00	1.74E+00	N/C	N/C	0.05	0.8

APPENDIX F

Local Geologic Map

