

## **Corrective Action Plan**

Former Texaco Service Station  
Chevron Site No. 211874  
623 Holcombe Avenue  
Mobile, Alabama  
ADEM Incident No.:UST00-02-11



Prepared for:  
Mr. Lee Higgins  
Chevron Environmental  
Management Company  
4800 Fournace Place  
Bellaire, TX 77401

Prepared by:  
Stantec Consulting Services Inc.  
12585 Old Highway 280  
Suite 107  
Chelsea, AL 35043-3013

April 8, 2016

## CORRECTIVE ACTION PLAN

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

This document entitled Corrective Action Plan was prepared by Stantec Consulting Services Inc. ("Stantec") for the account of Chevron Environmental Management Company (the "Client"). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by Erin O'Malley  
(signature)

**Erin O'Malley**  
Project Engineer

Reviewed by Marisa Kaffenberger  
(signature)

**Marisa Kaffenberger**  
Senior Project Manager

Reviewed by Matthew Carlson  
(signature)

**Matthew Carlson, P.E.**  
Senior Engineer



# CORRECTIVE ACTION PLAN

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

## Table of Contents

<b>1.0</b>	<b>INTRODUCTION .....</b>	<b>1</b>
<b>2.0</b>	<b>SITE BACKGROUND.....</b>	<b>2</b>
2.1	SITE DESCRIPTION AND LAND USE .....	2
2.2	REGIONAL AND LOCAL GEOLOGY AND HYDROGEOLOGY.....	2
2.3	PREVIOUS INVESTIGATIONS AND REMEDIATION .....	3
<b>3.0</b>	<b>EXTENT OF IMPACTS .....</b>	<b>6</b>
3.1	SCREENING LEVELS .....	6
3.2	PHASE-SEPARATED HYDROCARBONS.....	6
3.3	ADSORBED-PHASE HYDROCARBONS .....	6
3.4	DISSOLVED-PHASE HYDROCARBONS .....	7
<b>4.0</b>	<b>CONCEPTUAL SITE MODEL.....</b>	<b>9</b>
4.1	CURRENT AND FUTURE LAND USE .....	9
4.2	WATER SURVEY .....	9
4.2.1	Groundwater Wells .....	9
4.2.2	Surface Water Bodies.....	9
4.2.3	Underground Utilities .....	10
4.3	POTENTIALLY EXPOSED POPULATIONS.....	10
4.3.1	On-Site Potential Populations .....	10
4.3.2	Off-Site Current or Potential Populations .....	10
4.3.3	Potential Sensitive Populations .....	10
4.4	COMPLETE AND POTENTIALLY COMPLETE EXPOSURE PATHWAYS .....	11
4.5	RISK EVALUATION .....	12
<b>5.0</b>	<b>EVALUATION OF REMEDIAL ALTERNATIVES .....</b>	<b>14</b>
5.1	EVALUATION CRITERIA .....	14
5.2	EXCAVATION WITH GYPSUM BACKFILL .....	14
5.2.1	Remedial Alternative Description .....	14
5.2.2	Remedial Alternative Evaluation .....	15
5.3	SULFATE INJECTION.....	16
5.3.1	Remedial Alternative Description .....	16
5.3.2	Remedial Alternative Evaluation .....	16
5.4	SULFATE SURFACE APPLICATION .....	19
5.4.1	Remedial Alternative Description .....	19
5.4.2	Remedial Alternative Evaluation .....	19
5.5	PHYTOREMEDIATION .....	21
5.5.1	Remedial Alternative Description .....	21
5.5.2	Remedial Alternative Evaluation .....	21
5.6	MONITORED NATURAL ATTENUATION.....	22
5.6.1	Remedial Alternative Description .....	22
5.6.2	Remedial Alternative Evaluation .....	23

## CORRECTIVE ACTION PLAN

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

5.7	SELECTED REMEDIAL ALTERNATIVE .....	25
<b>6.0</b>	<b>REMEDiation GOAL .....</b>	<b>27</b>
<b>7.0</b>	<b>CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>28</b>
7.1	CONCLUSIONS .....	28
7.1.1	Extent of Petroleum Hydrocarbons.....	28
7.1.2	Risk Assessment.....	28
7.1.3	Evaluation of Remedial Alternatives .....	29
7.2	RECOMMENDATIONS.....	30
<b>8.0</b>	<b>REFERENCES.....</b>	<b>31</b>

### LIST OF FIGURES

FIGURE 1 .....	Site Location Map
FIGURE 2 .....	Site Plan
FIGURE 3 .....	Potentiometric Surface Map – Uppermost Groundwater System – September 17, 2015
FIGURE 4 .....	Constituent Concentrations in Groundwater – September 17, 2015
FIGURE 5 .....	Exposure Pathway Flow Chart

### LIST OF TABLES

TABLE 1 .....	Summary of Soil Analytical Data
TABLE 2 .....	Summary of Groundwater Analytical Data
TABLE 3 .....	Liquid-Level Data
TABLE 4 .....	Natural Attenuation Parameters
TABLE 5 .....	Geochemical Data
TABLE 6 .....	Summary of HVE Recovery Data
TABLE 7 .....	Cost Estimate for Off-Site Excavation with Gypsum Backfill
TABLE 8 .....	Cost Estimate for Off-Site Enhanced Bioremediation via Sulfate Injection
TABLE 9.....	Cost Estimate for Off-Site Sulfate Surface Application
TABLE 10 .....	Cost Estimate for Off-Site Phytoremediation
TABLE 11.....	Cost Estimate for Off-Site Monitored Natural Attenuation

### LIST OF APPENDICES

APPENDIX A .....	ADEM Correspondence, dated November 10, 2015
APPENDIX B .....	Cross Sections and Additional Soil Tables from <i>Corrective Action Plan</i> , dated November 16, 2006
APPENDIX C .....	Timeframes to Achieve Water Quality Objectives

## CORRECTIVE ACTION PLAN

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

### 1.0 INTRODUCTION

Chevron Environmental Management Company (CEMC) retained Stantec Consulting Services Inc. (Stantec) to prepare this *Corrective Action Plan* (CAP) for former Texaco Service Station, Chevron Site No. 211874, located at 623 Holcombe Avenue in Mobile, Alabama (the Site; shown on **Figure 1**). In a letter dated June 11, 2014, the Alabama Department of Environmental Management (ADEM) approved clean-up optimization activities including implementation of two mobile, enhanced, multi-phase extraction (MEME) events in high concentration wells. An access agreement could not be secured with the on-site property owner; therefore, these events could not be implemented. In lieu of this, ADEM requested a corrective action evaluation in a letter dated November 10, 2015, in response to the *Corrective Action Report*, dated October 14, 2015 (Stantec, 2015). A copy of the ADEM correspondence is included in **Appendix A**.

The purpose of this CAP is to present the Site background information; evaluate the extent of petroleum hydrocarbons in soil and groundwater; present the current conceptual Site model (CSM); evaluate remedial alternatives; establish remediation goals; and provide conclusions and recommendations for implementation of a remediation approach.

This report is organized into the following sections summarizing:

- Site background;
- Extent of petroleum hydrocarbons;
- CSM;
- Evaluation of remedial alternatives;
- Remediation goal; and
- Conclusions and recommendations.

## CORRECTIVE ACTION PLAN

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

## 2.0 SITE BACKGROUND

### 2.1 SITE DESCRIPTION AND LAND USE

The Site is located at the intersection of Holcombe Avenue and Williams Street in Mobile, Mobile County, Alabama. The Site has operated as an independently owned automobile repair and service facility (currently SMR Automotive) since approximately 1974. The Site was a Texaco gasoline service station from 1963 to 1974 and during that time, three gasoline underground storage tanks (USTs; size unknown) in the northern portion of the Site, fuel dispensers in the western portion of the Site, and two 500-gallon waste oil USTs in the southern portion of the Site were in use. The three gasoline USTs were removed from service prior to November 8, 1984, and appear to have been abandoned-in-place. The presence of the two waste oil USTs was not discovered until field investigation was initiated on-site. Both USTs were abandoned-in-place in October 2003 (Stantec, 2009). It is unknown when the fuel dispensers were removed; however, the fuel dispensers are no longer present, though a canopy remains.

Land use near the Site consists of a mix of commercial and residential properties. The Site is bounded on the north by a plumbing and drain company, on the east by Williams Street followed by residential properties, on the south by a vacant property owned by the City of Mobile, and on the west by Holcombe Avenue followed by residential properties and office buildings. A Site Plan is shown on **Figure 2**.

### 2.2 REGIONAL AND LOCAL GEOLOGY AND HYDROGEOLOGY

The Site is located within the Southern Pine Hills physiographic district, which is characterized by flat to gently undulating, locally swampy plains underlain by terrigenous deposits of Holocene and late Pleistocene age (Sapp and Emplainscourt, 1975). Geologically, the area is underlain by the Citronelle formation of Pliocene age (Isphording and Lamb, 1971), which is approximately 200 feet thick and consists of gravelly sands and sandy clays. A review of the *Soil Survey of Mobile County*, dated May 1980, indicates that soils in the area of the Site have been mapped as urban land and cutting, filling, grading, excavation, and covering activities have altered the original soil (United States Department of Agriculture, 1980). The primary aquifer serving the area in and around the Site is the Watercourse aquifer of Holocene-Pleistocene age, which is contained in largely unconsolidated Quaternary alluvial, coastal, and low terrace deposits.

Cross sections A-A', B-B', and C-C' are included in **Appendix B**. These cross sections show Site lithology, well construction details, and static water level measurements on October 27, 2003. As shown on the cross sections, the subsurface beneath the Site consists primarily of silty sand/sandy silt and silty sandy clay to depths ranging from approximately 15 to 20 feet below ground surface (bgs). In locations where investigation went deeper, such as borings DW-1 and DW-2, the subsurface below 20 feet bgs consists primarily of silty sand/sandy silt and sand, with some silt with small layers of clay to a total depth explored of approximately 66 feet bgs.

## CORRECTIVE ACTION PLAN

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

Groundwater monitoring has been performed at the Site since May 2002. The groundwater monitoring well network currently consists of 23 Type II shallow monitoring wells (MW-1 through MW-17, TW-1 through TW-4, RW-1, and TP-1) and four Type III deep monitoring wells (DW-1 through DW-4). The groundwater encountered at the Site has been divided into three zones based on the potentiometric surfaces encountered in the monitoring well network: the surficial zone, the intermediate zone, and the deep zone. Twenty-three monitoring wells (MW-1 through MW-17, TW-1 through TW-4, RW-1, and TP-1) are screened in the surficial zone at depths ranging from approximately 1 to 23 feet below top of casing (btoc), three monitoring wells (DW-1, DW-3, and DW-4) are screened in the intermediate zone from approximately 32 to 37 feet btoc, and one monitoring well (DW-2) is screened in the deep zone from approximately 61 to 66 feet btoc. Previous remedial efforts have reduced dissolved-phase concentrations in the intermediate and deep zones to below target levels; therefore, this corrective action primarily focuses on the surficial zone, also referred to as the uppermost groundwater system.

Groundwater elevation data are presented in **Table 2**. The range of depth-to-groundwater (DTW) measurements for the Site, which includes data from all groundwater zones, is 0.04 to 21.91 feet btoc. Monitoring well MW-1 has not been able to be located since 2006 due to limestone covering the well, and on September 17, 2015, only off-site monitoring wells MW-7 through MW-17 were gauged and sampled due to on-going access issues with the on-site property owner. During that event, well MW-11 was dry, and the DTW measurements for the remaining off-site wells in the uppermost groundwater system (surficial zone) ranged from 4.70 to 11.78 feet btoc. The direction of groundwater flow at the time of sampling was generally toward the south and southeast at an average hydraulic gradient of approximately 0.03 feet per foot (ft/ft) (**Figure 3**) (Stantec, 2015). The direction of groundwater flow is consistent with historical directions of groundwater flow. Based on comparison of shallow and deep groundwater elevations, a downward vertical gradient is present.

## 2.3 PREVIOUS INVESTIGATIONS AND REMEDIATION

The locations of soil borings, wells, and other pertinent Site information are shown on **Figure 2**. Soil analytical data are summarized in **Table 1** and **Appendix B** and groundwater data are summarized in **Table 2 through Table 5**.

In January 2000, Southern Earth Sciences advanced two off-site shallow test borings (B-1 and B-2) and collected groundwater samples as part of an environmental assessment (Stantec, 2009). Total depth information and analytical data from this investigation could not be found.

In April 2002, Pangean Solutions installed nine Type II monitoring wells (MW-1 through MW-5 and TW-1 through TW-4) to total depths ranging from 10 to 11 feet bgs. Wells MW-1 and TW-1 were installed off-site, while the remainder of the wells were installed on-site. Soil samples were collected from all boreholes for laboratory analysis, and petroleum hydrocarbons were not detected in samples collected from boreholes MW-1, MW-2, MW-3, TW-1, and TW-3. The maximum concentration of benzene in soil (4.69 milligrams per kilogram [mg/kg]) was detected in the sample collected from borehole TW-2 from 5 to 7 feet bgs (Stantec, 2009).

## CORRECTIVE ACTION PLAN

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

In October 2003, SECOR oversaw the installation of seven Type II monitoring wells (MW-6 through MW-12) to total depths ranging from 7 to 14.5 feet bgs, and one Type III deep monitoring well (DW-1) to a total depth of 37 feet bgs. In addition, five soil borings (SB-1 through SB-5; total depths unknown) were advanced and the two waste oil USTs in the southern portion of the Site were abandoned-in-place. Wells MW-6 and DW-1 were installed and borings SB-4 and SB-5 were advanced on-site, while wells MW-7 through MW-12 were installed and borings SB-1, SB-2, and SB-3 were advanced off-site. Soil samples for laboratory analysis were collected from boreholes MW-6, MW-11, MW-12, and DW-1 and borings SB-1 through SB-5 only, and petroleum hydrocarbons were not detected in samples collected from borings SB-1, SB-2, SB-3, and SB-5. The maximum concentration of benzene in soil (0.472 mg/kg) was detected in the sample collected from borehole MW-6 from 9 to 11 feet bgs (Stantec, 2009).

In March 2005, SECOR oversaw the installation of four off-site Type II monitoring wells (MW-13 through MW-16) to total depths ranging from 18 to 20 feet bgs, and one on-site Type III deep monitoring well (DW-2) to a total depth of 66 feet bgs. Soil samples were collected from all boreholes for laboratory analysis, and petroleum hydrocarbons were not detected in samples collected from boreholes MW-13 through MW-16 and benzene was not detected in samples collected from borehole DW-2. A slug test was also performed and the average hydraulic conductivity was  $1.67 \times 10^{-4}$  centimeters per second (cm/sec) (Stantec, 2009).

In February 2006, SECOR oversaw the installation of one off-site Type II monitoring well (MW-17) to a total depth of 19 feet bgs and the advancement of 10 borings (MIP-1, MIP-2, MIP-3, MIP-4A, MIP-4B, and MIP-5 through MIP-9; total depths unknown). Soil borings MIP-1 and MIP-2 were advanced off-site and all remaining borings were advanced on-site. Soil samples for laboratory analysis were collected from borehole MW-17 and borings MIP-4A, MIP-5, MIP-6, MIP-8, and MIP-9 only, and petroleum hydrocarbons were not detected in the sample collected from borehole MW-17. The maximum concentration of benzene in soil (3.54 mg/kg) was detected in the sample collected from boring MIP-6 from 12 to 14 feet bgs (Stantec, 2009).

In June 2006, SECOR oversaw the installation of two Type III deep monitoring wells (DW-3 and DW-4), one recovery well (RW-1), and one tank pit well (TP-1) to total depths ranging from approximately 12 to 37 feet bgs. During this investigation, the maximum concentration of benzene in soil (7.2 mg/kg) was detected in the sample collected from borehole RW-1 from 1 to 2 feet bgs (Stantec, 2009).

Between June 2007 and March 2010, twelve 24-hour high vacuum extraction (HVE) (approximate duration) events were conducted. A summary of HVE data for each event, which includes a description of the wells used for extraction, and the amounts of water and petroleum hydrocarbons extracted, is included in **Table 6**. A cumulative total of 5,733 gallons of petroleum-contacted water (PCW) and 34,458 gallons (equivalent to 212.23 pounds) of petroleum hydrocarbons were removed during the HVE events (Stantec, 2015).

Between September 2010 and May 2013, Epsom salts were gravity fed into wells MW-6, MW-13, RW-1, and TP-1 as a sulfate amendment in an attempt to reduce dissolved-phase benzene

## **CORRECTIVE ACTION PLAN**

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

concentrations associated with the Site. A cumulative total of approximately 805 pounds of Epsom salts were gravity fed into the wells during this time (Stantec, 2010; 2015). The individual amounts of Epsom salts and dates they were added to each well are provided in **Table 2**.

## CORRECTIVE ACTION PLAN

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

### 3.0 EXTENT OF IMPACTS

The Site has not been used as a service station since 1974 and the gasoline USTs were abandoned-in-place prior to 1984; therefore, release of petroleum hydrocarbons from Texaco's operation occurred at least 32 years ago. Therefore, it is likely that the extent of dissolved-phase hydrocarbons from release UST00-02-11 has reached equilibrium and is not likely migrating. The following subsections discuss the screening levels, and the extent of phase-separated hydrocarbons (PSH), adsorbed-phase, and dissolved-phase impacts at the Site.

#### 3.1 SCREENING LEVELS

An Alabama Risk-Based Corrective Action (ARBCA) Tier I/II evaluation was completed for the Site, and Site-specific target levels (SSTLs) were prepared, revised, and approved by ADEM on November 9, 2005. The soil and groundwater SSTLs are provided in **Table 1** and **Table 2**, respectively. For soil, the most stringent of the SSTLs (for surface water protection [SWP] at the source) were used to screen impacts. A SWP SSTL at the source could not be generated for xylenes; therefore, the SSTL used for screening xylenes soil impacts is the groundwater resource protection (GRP) SSTL at the source. A comparison of soil impacts to the SSTLs is provided in Section 3.3. For groundwater, SWP SSTLs at the source and point of compliance (POC) and GRP SSTLs at the source and POC were used to screen impacts. A comparison of groundwater impacts to the SSTLs is provided in Section 3.4.

#### 3.2 PHASE-SEPARATED HYDROCARBONS

PSH have not been observed at the Site during assessment or groundwater monitoring activities.

#### 3.3 ADSORBED-PHASE HYDROCARBONS

Soil sample analytical results for petroleum hydrocarbons are presented in **Table 1**. Soil sample analytical results for polycyclic aromatic hydrocarbons (PAHs) and metals are included in **Appendix B**.

Sixty-six soil samples were collected from the Site; all were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX); 58 were analyzed for methyl tertiary-butyl ether (MTBE); and 53 were analyzed for PAHs. In addition, 54 soil samples were analyzed for lead, and 18 soil samples were analyzed for arsenic, barium, cadmium, chromium VI, and zinc.

Benzene concentrations exceeded the SWP SSTL at the source (0.88 mg/kg) in soil samples collected from boreholes TW-2 from 5 to 7 feet bgs (4.69 mg/kg), MIP-6 from 12 to 14 feet bgs (3.54 mg/kg), RW-1 from 1 to 2 feet bgs (7.2 mg/kg), and TP-1 from 4 to 5 feet bgs (3.2 mg/kg). Toluene concentrations exceeded the SWP SSTL at the source (28.90 mg/kg) in soil samples collected from boreholes TW-2 from 5 to 7 feet bgs (43.3 mg/kg), MW-6 from 7 to 9 feet bgs (43.5 mg/kg), DW-1 from 5 to 7 feet bgs (65.6 mg/kg), MIP-5 from 9 to 11 feet bgs (71.1 mg/kg),

## CORRECTIVE ACTION PLAN

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

MIP-6 from 12 to 14 feet bgs (30.1 mg/kg), and TP-1 from 1 to 2 feet bgs (130 mg/kg) and 4 to 5 feet bgs (73 mg/kg). Ethylbenzene and xylenes concentrations exceeded the SSTLs at the source (SWP SSTL of 106.33 mg/kg for ethylbenzene and GRP SSTL of 822.68 mg/kg for xylenes) in the soil sample collected from borehole TP-1 from 1 to 2 feet bgs (170 mg/kg and 1,000 mg/kg, respectively). Though below the SSTLs, MTBE was detected in a soil sample collected from borehole TW-2 from 5 to 7 feet bgs (0.54 mg/kg). None of the samples contained PAHs at concentrations above the SSTLs.

Petroleum hydrocarbon soil impacts (samples that exceeded SSTLs) are limited to on-site in the general vicinity of the former gasoline USTs and fuel dispensers and are defined vertically and laterally by concentrations below SSTLs in other soil samples collected in association with the Site.

Arsenic, barium, cadmium, chromium VI, and zinc were not detected above their respective ADEM Initial Screening Levels (ISLs) in any of the samples analyzed for these metals. Lead was detected in all 54 soil samples in which it was analyzed, but was only detected above the SSTL in two samples. Samples collected from boreholes MW-1 and MW-5 from 0 to 1 feet bgs exhibited concentrations of 70.9 mg/kg, and 99.50 mg/kg, respectively, which are above the lead SWP SSTL at the source of 20.63 mg/kg. Lead impacts (samples that exceeded the SSTL) are delineated vertically and laterally by concentrations below the SSTL in other soil samples collected in association with the Site.

### 3.4 DISSOLVED-PHASE HYDROCARBONS

Groundwater sample analytical results for petroleum hydrocarbons are presented in **Table 2**.

Monitoring well MW-1 has not been located since 2006 due to limestone covering the well. In addition, due to a reduced sampling frequency for a number of wells, on-going on-site access agreement issues, and well MW-11 frequently being dry, the last date monitoring wells were sampled varies. Well TW-1 was last sampled on September 20, 2012, wells MW-2, MW-4, MW-5, MW-11, DW-1 through DW-4, TW-3, and TW-4 were last sampled on November 21, 2013, wells MW-3, MW-6, TW-2, RW-1, and TP-1 were last sampled on July 2, 2014, and wells MW-7 through MW-10 and MW-12 through MW-17 were last sampled on September 17, 2015.

When the wells were last sampled, wells MW-6, TW-2, RW-1, and TP-1 exceeded the SWP and GRP SSTLs at the source for benzene (maximum concentration of 3.1 mg/L), and wells TW-2 and RW-1 exceeded the SWP SSTLs at the source for toluene (maximum concentration of 10 mg/L). In addition, wells MW-13 and MW-14 exceeded GRP SSTLs at the POC for benzene (maximum concentration of 7.3 mg/L). No concentrations of ethylbenzene, xylenes, and MTBE exceeded GRP or SWP SSTLs; however, maximum concentrations of 4.7 mg/L (RW-1), 19 mg/L (RW-1), and 0.0037 mg/L (MW-5) were detected, respectively.

A map showing the estimated lateral extent of the dissolved-phase benzene plume is included as **Figure 4**. The dissolved-phase benzene plume is defined by concentrations in monitoring wells which were less than detection limits or GRP or SWP SSTLs when the wells were last sampled. The

## **CORRECTIVE ACTION PLAN**

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

plume is defined by well MW-16 to the northwest, wells MW-2 and MW-3 to the north, wells MW-11, MW-12, and TW-1 to the northeast, wells MW-4, MW-5, MW-7 through MW-10, TW-3, and TW-4 to the east, well MW-17 to the south, and well MW-15 to the west. In addition, concentrations in deep wells DW-1 through DW-4 did not exceed GRP or SWP SSTLs when those wells were last sampled.

Texaco ceased operations at the Site in 1974. Use of MTBE was not started until 1979 (EPA, 1998a); therefore, the detections of MTBE observed in soil and groundwater at the Site indicate that there have been other releases at the Site that are not attributable to Texaco's operations.

## **CORRECTIVE ACTION PLAN**

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

### **4.0 CONCEPTUAL SITE MODEL**

A CSM was developed to identify complete and potentially complete exposure pathways relevant to human health risks at the Site based on analyses of the following components:

- Current and future land uses;
- Groundwater well and surface water body surveys;
- Potentially exposed populations; and
- Complete and potentially complete exposure pathways.

#### **4.1 CURRENT AND FUTURE LAND USE**

The Site has operated as an independently owned automobile repair and service facility since approximately 1974. The Site was a Texaco gasoline service station from 1963 to 1974. Land use near the Site consists of a mix of commercial and residential properties. The Site is zoned for neighborhood business land use. Adjacent properties are zoned for neighborhood or community business or residential land use.

Based on current zoning of the Site, its location at a major intersection, and the fact that the Site has operated as a commercial business since 1963, the Site will likely be used for commercial purposes in the future.

#### **4.2 WATER SURVEY**

##### **4.2.1 Groundwater Wells**

Stantec conducted a well survey in 2009 to identify all public water supply and private drinking water wells near the Site. The survey consisted of reviewing files provided by the City of Mobile and United States Geological Survey (USGS) and conducting visual inspection. The well survey indicated that there are no public water supply wells within 1 mile of the Site and no private drinking water wells within 1,000 feet of the Site (Stantec, 2009). Therefore, there is no imminent threat of migration of petroleum hydrocarbons from the Site to drinking water wells.

##### **4.2.2 Surface Water Bodies**

The USGS 7.5-minute topographic map for the Mobile Quadrangle and aerial photos from Google Earth® were reviewed to identify any surface water near the Site. An unnamed, intermittent stream/drainage ditch is located approximately 200 feet southeast (down-gradient) of the Site and acts as a tributary of Eslava Creek. Based on the extent of the defined dissolved-phase petroleum hydrocarbon plume, and the distance to this stream, it is unlikely that this stream will be impacted by Site-related petroleum hydrocarbons. Down-gradient monitoring

## **CORRECTIVE ACTION PLAN**

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

wells MW-7 through MW-10, MW-14, and MW-17 confirm that dissolved-phase petroleum hydrocarbons have not migrated to this stream. Furthermore, given the age of release UST00-02-11 (at least 32 years), the extent of dissolved-phase hydrocarbons has likely reached equilibrium, and impacts at the Site are unlikely to migrate to the stream in the future. Therefore, there is no imminent threat to surface waters in the vicinity of the Site.

### **4.2.3 Underground Utilities**

A utility survey identified underground water, storm sewer, and sanitary sewer lines in the area of the Site. The approximate location of these underground utilities is illustrated on **Figure 2**. Depths of the various utilities range from 2 to 3 feet bgs. Based on current and historical DTW measurements, impacts to underground utilities are possible; however, field observations do not indicate that any impacts have occurred (Stantec, 2009).

## **4.3 POTENTIALLY EXPOSED POPULATIONS**

### **4.3.1 On-Site Potential Populations**

Based on the likely future use of the Site as commercial, the potentially exposed on-site populations include commercial workers, customers, and construction workers. Evaluation of risk to commercial workers is conservatively representative of risk to customers.

### **4.3.2 Off-Site Current or Potential Populations**

Based on the current and likely future use of adjacent properties as commercial or residential, the potentially exposed off-Site populations include commercial workers, customers, construction workers, and residents. Evaluation of risk to commercial workers is conservatively representative of risk to customers.

### **4.3.3 Potential Sensitive Populations**

Stantec conducted a survey in March 2016 to determine if any sensitive populations were located in the vicinity of the Site. Sensitive populations are people who would potentially be more susceptible to risks resulting from exposure to Site-related hydrocarbons such as school-age children, medically-compromised people, and the elderly.

The potential sensitive populations located within a 0.5-mile radius of the Site are listed in the following table:

## CORRECTIVE ACTION PLAN

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

Potential Sensitive Population	Address	Distance from Site (miles)	Direction from Site
Children of Grace Daycare	515 Holcombe Ave.	0.2	N
Bridges to Success Daycare	716 Holcombe Ave.	0.2	S
Rainbow Childcare Center	421 Holcombe Ave.	0.4	N
Little Flower Catholic School	2103 Government St.	0.5	N

One of the identified sensitive populations within a 0.5-mile radius of the Site is potentially located down-gradient (south to southeast) of the Site (Bridges to Success Daycare); however, based on the distance from the Site (0.2 miles) and the limited extent of the defined dissolved-phase petroleum hydrocarbon plume, this potential sensitive receptor is not at risk from exposure to Site-related petroleum hydrocarbons.

### 4.4 COMPLETE AND POTENTIALLY COMPLETE EXPOSURE PATHWAYS

An exposure pathway is considered complete or potentially complete if it meets four basic requirements: 1) presence of chemical sources; 2) release and transport within an environmental medium; 3) an exposure route; and 4) a receptor. A graphical representation of the CSM for the Site is shown on **Figure 5**.

Incomplete pathways are justified as follows:

- The ingestion of groundwater and dermal contact with groundwater exposure pathways are considered incomplete for all human receptors because there is no mechanism for deliberate public consumption of the groundwater (no Site or nearby down-gradient water supply wells).
- The ingestion of surface water and dermal contact with surface water exposure pathways are considered incomplete for all human receptors. As described in Section 4.2.2, based on the extent of the defined dissolved-phase petroleum hydrocarbon plume, and the distance to the unnamed stream, it is unlikely that the stream will be impacted by Site-related petroleum hydrocarbons. Down-gradient monitoring wells MW-7 through MW-10, MW-14, and MW-17 confirm that dissolved-phase petroleum hydrocarbons have not migrated to this stream. Furthermore, given the age of release UST00-02-11 (at least 32 years), the extent of dissolved-phase hydrocarbons has likely reached equilibrium and impacts at the Site are unlikely to migrate to the stream in the future. Therefore, there is no imminent threat to surface waters in the vicinity of the Site.

## CORRECTIVE ACTION PLAN

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

Potentially complete pathways are summarized as follows:

- The ingestion and dermal contact surface soil exposure pathways are considered potentially complete for future on-site construction workers only because shallow (less than 10 feet bgs) soil concentrations above SSTLs were observed at the Site. The Site is paved, so customers and commercial workers are not likely to contact shallow soil. This pathway is considered incomplete for current and future off-site receptors because the source area in shallow soil appears to be confined to the Site.
- The ingestion, dermal contact, and inhalation of outdoor particulates from excavated soil exposure pathways are considered potentially complete for future on-site construction workers only, due to historical shallow (less than 10 feet bgs) soil detections above SSTLs at the Site. These pathways are considered incomplete for customers and commercial workers. Excavation work at the Site is currently unlikely due to on-going access issues with the Site property owner; if excavation were to be conducted in the future, it would not likely be conducted while the automobile repair and service center was active.
- The soil gas emission pathways (inhalation of indoor and outdoor air) are considered potentially complete for current and future on-site receptors only due to the potential for contaminants in shallow soil to volatilize and be inhaled in the indoor or outdoor air.
- The groundwater emission pathways (inhalation of indoor and outdoor air) are considered potentially complete for current and future on-site receptors and current and future off-site commercial and construction workers due to the potential for shallow groundwater within the dissolved-phase petroleum hydrocarbon plume to volatilize and be inhaled in the indoor or outdoor air. These pathways are considered incomplete for current and future off-site residents because historical groundwater analytical data indicate the plume only extends to the vacant City of Mobile right-of-way property to the south of the Site. That property is zoned for commercial purposes and is likely to remain vacant for the foreseeable future. Because the property is vacant, and is likely to remain so, this also means that the inhalation of indoor air groundwater emission pathway is incomplete for off-site commercial and construction workers.

## 4.5 RISK EVALUATION

An ARBCA Tier I/II evaluation was completed for the Site in 2005, and SSTLs were developed for complete exposure pathways. A comparison of current soil and groundwater concentrations to the approved SSTLs for on-site and off-site commercial and construction workers indicates that petroleum hydrocarbon concentrations are protective of current and reasonable future receptors (Stantec, 2009).

When well MW-13 was last sampled (September 17, 2015), the groundwater concentration in the well (7.3 mg/L) was 0.28 mg/L above the SSTL for off-site indoor inhalation (7.02 mg/L). However,

## **CORRECTIVE ACTION PLAN**

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

well MW-13 is located on the vacant right-of-way property to the south of the Site and the indoor inhalation pathway is incomplete for this property because there are no current buildings. Further, no buildings are expected to be constructed in the foreseeable future. Dissolved-phase concentrations in well MW-13 are below the off-site outdoor inhalation SSTL of 1,750 mg/L; therefore, the current concentration in well MW-13 is still protective of current and reasonable future receptors.

The ingestion, dermal contact, and inhalation pathways for shallow soil and excavated soil are considered potentially complete for on-site construction workers; however, the Site is paved, so risk to construction workers is unlikely at this time. In the event of planned construction or excavation, care should be taken to safely manage exposed and excavated soil.

Although the soil gas and groundwater emission pathways are considered potentially complete, the Site is currently used as an automobile repair and service facility, and background vapors associated with visiting vehicles and repair/service activities likely present a higher risk than vapors from residual contamination on-site. In addition, there is no evidence of hydrocarbon vapors originating from shallow soil or the dissolved-phase plume either on-site or off-site, and the risk evaluation did not identify any indoor or outdoor air exceedances (Stantec, 2009).

## **CORRECTIVE ACTION PLAN**

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

## **5.0 EVALUATION OF REMEDIAL ALTERNATIVES**

The remedial alternatives evaluated for implementation at the Site include: excavation with gypsum backfill, sulfate injection, sulfate surface application, phytoremediation, and monitored natural attenuation (MNA). Due to the on-going access agreement issues with the on-site property owner, these alternatives were evaluated with the assumption that they will be implemented off-site only. However, in the future, on-site alternatives may be evaluated.

### **5.1 EVALUATION CRITERIA**

These remedial alternatives were evaluated against the following United States Environmental Protection Agency (EPA) criteria:

- Overall protection of human health and the environment;
- Compliance with applicable or relevant and appropriate requirements (ARARs);
- Long-term effectiveness and performance;
- Reduction of toxicity, mobility, or volume;
- Short-term effectiveness;
- Implementability; and
- Cost.

It should be noted that costs are preliminary and intended for use only in relative comparison of remedial alternatives; they should not be used as actual cost estimates for implementing the chosen alternative. State and community acceptance were not evaluated at this time.

### **5.2 EXCAVATION WITH GYPSUM BACKFILL**

#### **5.2.1 Remedial Alternative Description**

Excavation removes contaminated material using heavy construction equipment, such as backhoes, bulldozers, and front loaders. At certain sites, specially designed equipment may be used to access difficult to reach impacts or prevent the spread of contaminants. The excavated material is commonly landfilled at an approved off-site disposal facility, but can also be remediated and reused. Excavation can be difficult and high risk if utilities or other structures are present above and/or below ground or if the groundwater table is relatively shallow.

Backfilling the excavation with a mixture of gypsum and import soil provides a source of sulfate for in-situ bioremediation, which is a technology that encourages growth and reproduction of

## CORRECTIVE ACTION PLAN

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

indigenous microorganisms to enhance biodegradation of organic constituents in the saturated zone. In-situ bioremediation can effectively degrade organic constituents which are dissolved in groundwater and adsorbed onto the aquifer matrix. In-situ bioremediation is dependent on the type of microorganisms, the type of contaminant, and the geological conditions at a site. Further description of in-situ bioremediation is provided in Section 5.3.1.

### 5.2.2 Remedial Alternative Evaluation

#### Overall Protection of Human Health and the Environment

Because there is limited risk to human health and the environment based on current conditions and current and future expected use of the off-site property, excavation with gypsum backfill would be protective of human health and the environment. Implementation would slightly increase the potential exposure of humans and the environment through excavation of hydrocarbon-impacted soils and handling of groundwater. This potential exposure would be limited to a moderate time span and can be reduced through proper planning, monitoring, and personnel training.

#### Compliance with ARARs

Excavation with gypsum backfill can be implemented within regulatory guidelines. It would likely require a short remediation timeframe to reach SSTLs in off-site groundwater (off-site soil concentrations are already below SSTLs) and the gypsum backfill would likely prevent dissolved-phase impacts from migrating further, but on-site soil and groundwater impacts will not be addressed.

#### Long-Term Effectiveness and Performance

Excavation can result in effective vadose zone source removal if source soil can be accessed. Backfilling the excavation with gypsum will provide an abundant sulfate source to the subsurface, which will aid in bioremediation of dissolved-phase petroleum hydrocarbons for the foreseeable future, providing long-term effectiveness.

#### Reduction of Toxicity, Mobility or Volume

As stated above, excavation with gypsum backfill has the potential to address off-site dissolved-phase impacts and prevent further migration; however, on-site soil and groundwater impacts will not be addressed.

#### Short-Term Effectiveness

Excavation with gypsum backfill has a short cleanup timeframe to reach SSTLs in off-site groundwater, but on-site impacts would remain. In addition, this alternative has a higher risk to the community, workers, and the environment than other alternatives due to heavy equipment operation, traffic control, etc.

## CORRECTIVE ACTION PLAN

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

### Implementability

Excavation would be high risk and cause disruption to the community and environment. Several implementability issues would make this option difficult, including:

- General health and safety risks associated with excavation (dust generation, traffic control, maneuvering of equipment on-site, utilities, etc.);
- Negotiation with the City of Mobile; and
- Shallow groundwater table (DTW at the off-site property ranged from 7.93 to 11.18 feet btoc when last measured on September 17, 2015), which would likely require large volumes of water to be removed from the excavation and disposed of.

### Cost

Excavation is a high cost alternative with many uncertainties. The life-cycle cost estimate assumes excavation within the 1 mg/L benzene contour around off-site wells MW-13 and MW-14 (approximately 1,500 square feet; shown on **Figure 4**) to approximately 15 feet bgs, 5 years of semi-annual groundwater monitoring, and off-site well destruction. It also assumes utilities are not an obstruction. The life-cycle cost estimate is presented in **Table 7** and is approximately \$650,900.

## 5.3 SULFATE INJECTION

### 5.3.1 Remedial Alternative Description

As described in Section 5.2.1, in-situ bioremediation is a technology that encourages growth and reproduction of indigenous microorganisms to enhance biodegradation of organic constituents. In-situ bioremediation can effectively degrade organic constituents which are dissolved in groundwater and adsorbed onto the aquifer matrix. In-situ bioremediation is dependent on the type of microorganisms, the type of contaminant, and the geological conditions at a site. Petroleum hydrocarbons will degrade both aerobically and anaerobically.

In an anaerobic process, sulfate-reducing bacteria (SRB) will utilize sulfate as an electron acceptor to degrade petroleum hydrocarbons in groundwater. In the process, the hydrocarbon is degraded to carbon dioxide and water and the sulfate is reduced to sulfide. Approximately 4.6 mass units of sulfate are stoichiometrically required to degrade 1.0 mass unit of hydrocarbon. Biodegradation of hydrocarbons by SRB is relatively common as these bacteria are extremely resilient and can be found in almost every environment.

### 5.3.2 Remedial Alternative Evaluation

Geochemical data from historical groundwater monitoring events (**Table 4** and **Table 5**) demonstrate the subsurface is conducive for bioremediation via sulfate application. Between September 2010 and May 2013, Epsom salts were gravity fed into wells MW-6, MW-13, RW-1, and

## CORRECTIVE ACTION PLAN

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

TP-1 as a sulfate amendment in an attempt to reduce dissolved-phase benzene concentrations associated with the Site. A cumulative total of approximately 805 pounds of Epsom salts were gravity fed into the wells during this time (**Table 2**; Stantec, 2010; 2015). Dissolved-phase data collected following the sulfate amendment indicated that residual petroleum hydrocarbons still existed within the source area and down-gradient monitoring wells at levels exceeding SSTLs. This was probably due to lack of mixing of dissolved sulfate with BTEX-impacted groundwater.

Delivery of sulfate can be undertaken by injection of a sulfate solution. Injection of a sulfate solution eliminates the rate-limiting step associated with salt dissolution, while potentially increasing the dispersion rate of sulfate ions within the surrounding aquifer. Sulfate salts typically used for sulfate amendment are magnesium sulfate heptahydrate (Epsom salt,  $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ ) or sodium sulfate. Both are highly soluble and easily introduced into the subsurface in solution form. The volume of injection solution may vary depending on geological conditions; however, typically the minimum goal is to achieve a 10% pore space displacement in the impacted saturated zone and deliver at least the necessary stoichiometric mass of sulfate needed using multiple injection points or wells to adequately disperse the solution throughout the formation. Injection would be conducted into existing wells under low pressure (less than 5 pound per square inch [psi]) to avoid fracture of the formation.

However, injection often has a limited zone of influence around the injection wells, and the previous technology applications indicate selection of the proper sulfate delivery system would be required to ensure successful application of the treatment remedy.

### Overall Protection of Human Health and the Environment

As there is limited risk to human health and the environment based on current conditions and current and future expected use of the off-site property, sulfate injection would be protective of human health and the environment. Implementation may slightly increase the potential exposure of humans and the environment through the introduction of sulfate. This potential exposure would be limited short-term exposure and can be controlled by monitoring and proper training of personnel.

### Compliance with ARARs

This alternative can be implemented within regulatory guidelines. Sulfate injection would require a moderate remediation timeframe to attempt to reach SSTLs in groundwater, which may be subject to potential contact limitations. With injection, multiple injection events would be needed. The sulfate solution can be injected into a well up-gradient of the Site to attempt to provide some remediation to on-site dissolved-phase concentrations; however, this would be subject to the natural hydraulic gradient and the primary area for treatment is the down-gradient off-site property.

## CORRECTIVE ACTION PLAN

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

### Long-Term Effectiveness and Performance

Geochemical data from previous groundwater monitoring events (**Tables 4 and 5**) demonstrate the subsurface is conducive for enhanced biodegradation using sulfate; however, previous events were not successful, likely due to the geology and density effects causing the dissolved sulfate slug to sink into the subsurface and miss the target smear zone. If potential contact limitations can be avoided or minimized, this alternative may be effective in the long-term; however, multiple injection events would likely be required.

### Reduction of Toxicity, Mobility or Volume

Sulfate injection would likely result in concentration reductions in off-site groundwater; however, concentration rebound was previously observed following sulfate application and may be observed again. As discussed above, with sulfate injection, addressing on-site soil and groundwater impacts would be limited. Sulfate could be added up-gradient of the Site and provide some remediation to on-site dissolved-phase concentrations, but there would be limited mass removal because contact with impacted soils would be subject to the natural groundwater fluctuations and petroleum hydrocarbon dissolution mechanisms at the Site and soil impacts would likely remain. In addition, with sulfate injection, there may be the potential for development of preferential pathways (i.e., short-circuiting) due to lower permeability soils.

### Short-Term Effectiveness

Sulfate injection has a moderate cleanup timeframe and should be effective in the short-term at reducing dissolved-phase hydrocarbon concentrations in off-site groundwater, and to a lesser extent, on-site groundwater. Injection would likely be effective within a shorter timeframe but density effects may limit contact with the smear zone.

### Implementability

Sulfate injection would be relatively easy to implement because the necessary equipment is mobile and no permanent system installation is required. With sulfate injection, multiple events would likely be required. A potential limitation of an in-situ treatment option like sulfate injection is limited contact with impacted groundwater.

### Cost

Sulfate injection is a relatively low cost alternative. The life-cycle cost estimate for sulfate injection assumes injection of sulfate solution into up to three off-site wells in six separate events. The life-cycle cost estimate also includes 10 years of semi-annual groundwater monitoring and off-site well destruction. The life-cycle cost estimate is presented in **Table 8** and is approximately \$295,400.

## CORRECTIVE ACTION PLAN

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

### 5.4 SULFATE SURFACE APPLICATION

#### 5.4.1 Remedial Alternative Description

As described in Section 5.2.1, in-situ bioremediation is a technology that encourages growth and reproduction of indigenous microorganisms to enhance biodegradation of organic constituents. In-situ bioremediation can effectively degrade organic constituents which are dissolved in groundwater and adsorbed onto the aquifer matrix. In-situ bioremediation is dependent on the type of microorganisms, the type of contaminant, and the geological conditions at a site. Petroleum hydrocarbons can degrade both aerobically and anaerobically.

Sulfate surface application is another way of delivering sulfate into the subsurface. It uses the same anaerobic process that was described in Section 5.3.1, where SRB utilize sulfate as an electron acceptor to degrade petroleum hydrocarbons. In this sulfate delivery alternative, the sulfate is applied to the ground surface over a larger area and relies on natural infiltration and transport through the soil matrix. This alternative is generally preferred in applications where impacts are shallow and not confined to a small area.

#### 5.4.2 Remedial Alternative Evaluation

Geochemical data from historical groundwater monitoring events (**Table 4** and **Table 5**) demonstrate the subsurface is conducive for bioremediation via sulfate application. Previous sulfate applications indicate selection of the proper sulfate delivery system would be required to ensure successful implementation of the treatment remedy. Therefore, sulfate application to the ground surface was considered a viable sulfate delivery alternative due to the shallow groundwater plume and limited access to the source area.

In sulfate application to the surface, powdered agricultural gypsum would be applied at a rate of approximately 0.2 to 0.3 pounds per square foot and tilled across the northern 6,000-square foot surface of the off-site property. The gypsum would dissolve into groundwater during subsequent rain events or through wetting of the surface, and be carried down through the soil via water infiltration.

#### Overall Protection of Human Health and the Environment

As there is limited risk to human health and the environment based on current conditions and current and future expected use of the off-site property, sulfate surface application would be protective of human health and the environment. Implementation may slightly increase the potential exposure of humans and the environment through the introduction of sulfate. This potential exposure would be limited short-term exposure and can be controlled by monitoring and proper training of personnel.

## **CORRECTIVE ACTION PLAN**

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

### Compliance with ARARs

This alternative can be implemented within regulatory guidelines. Sulfate surface application would require a moderate remediation timeframe to attempt to reach SSTLs in groundwater off-site, which may be subject to potential contact limitations. The sulfate would be applied to the down-gradient off-site property and on-site soil and groundwater impacts would not be addressed.

### Long-Term Effectiveness and Performance

Geochemical data from previous groundwater monitoring events (**Tables 4 and 5**) demonstrate the subsurface is conducive for bioremediation via sulfate application. If potential contact limitations can be avoided or minimized, this alternative may be effective in the long-term.

### Reduction of Toxicity, Mobility or Volume

Sulfate surface application would likely result in concentration reductions in off-site groundwater; however, concentration rebound was previously observed following sulfate injection and could be observed with this alternative. As discussed above, on-site soil and groundwater impacts would not be addressed.

### Short-Term Effectiveness

Sulfate surface application has a moderate cleanup timeframe and should be effective in the short-term at reducing dissolved-phase hydrocarbon concentrations in off-site groundwater. Surface application relies primarily on natural infiltration and transport through the soil matrix.

### Implementability

Sulfate surface application would be relatively easy to implement because no permanent equipment is required. A potential limitation of an in-situ treatment option like sulfate application is contact limitations due to transport through the soil matrix.

### Cost

The life-cycle cost estimate for sulfate surface application assumes the application of solid gypsum to the entire surface of the down-gradient off-site property. The life-cycle cost estimate also includes 10 years of semi-annual groundwater monitoring and off-site well destruction. The life-cycle cost estimate is presented in **Table 9** and is approximately \$219,500.

## CORRECTIVE ACTION PLAN

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

## 5.5 PHYTOREMEDIATION

### 5.5.1 Remedial Alternative Description

Phytoremediation refers to a number of processes in which plants are used to remediate or prevent migration of impacts to soil and groundwater. Phytoremediation is appropriate for mitigating BTEX through rhizodegradation, phytohydraulics, and phytodegradation mechanisms. These mechanisms are briefly described below (EPA, 2010).

- Rhizodegradation – a mechanism where the chemicals released by a plants roots enhance microbial biodegradation of contaminants in the rhizosphere;
- Phytohydraulics – a mechanism where plants take up and transpire water which inhibits dissolved plume migration.
- Phytodegradation – a mechanism where plants take up and breakdown contaminants within plant tissues through internal enzymatic activity.

Of the two mechanisms which are responsible for contaminant destruction, rhizodegradation is the primary mechanism because BTEX constituents are often rhizodegraded to an extent that limits phytoextraction (Fiorenza et al, 2005).

### 5.5.2 Remedial Alternative Evaluation

#### Overall Protection of Human Health and the Environment

Because there is limited risk to human health and the environment based on current conditions and current and future expected use of the off-site property, phytoremediation would be protective of human health and the environment. Implementation would slightly increase the potential exposure of humans and the environment through digging of hydrocarbon-impacted soils to plant the trees. This potential exposure would be limited to a moderate time span and can be reduced through proper planning, monitoring, and personnel training.

#### Compliance with ARARs

This alternative can be implemented within regulatory guidelines. Phytoremediation would require a moderate remediation timeframe to reach SSTLs in groundwater and would likely prevent off-site dissolved-phase impacts from migrating further, but on-site soil and groundwater impacts would not be addressed.

#### Long-Term Effectiveness and Performance

Once the planted trees are established (approximately 2 years), they will continue to remediate off-site impacts and prevent further migration throughout their lifetime, providing long-term effectiveness.

## CORRECTIVE ACTION PLAN

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

### Reduction of Toxicity, Mobility, or Volume

As stated above, phytoremediation has the potential to address off-site dissolved-phase impacts and prevent further migration; however, on-site soil and groundwater impacts would not be addressed.

### Short-Term Effectiveness

Phytoremediation has a moderate cleanup timeframe and should be effective in the short-term at reducing dissolved-phase hydrocarbon concentrations in off-site groundwater once the newly planted trees are established; however, this is expected to take approximately 2 years.

### Implementability

Phytoremediation would be moderately difficult to implement due to necessary negotiations with the City of Mobile and the large amount of trees that would need to be planted during initial implementation (approximately 90), which may cause some disruption to the community. However, once the initial tree planting is complete, minimal effort is required.

### Cost

Phytoremediation is a moderate cost alternative. The life-cycle cost estimate assumes the planting of approximately 90 trees on the down-gradient off-site property and 2 years of maintenance to establish the trees. The life-cycle cost estimate also includes 10 years of semi-annual groundwater monitoring and destruction of off-site wells. The life-cycle cost estimate is presented in **Table 10** and is approximately \$396,900.

## 5.6 MONITORED NATURAL ATTENUATION

### 5.6.1 Remedial Alternative Description

MNA is not a “technology,” per se. It generally describes a range of physical and biological processes, which, unaided by deliberate human intervention, reduce the concentration, toxicity, or mobility of contaminants in soil and/or groundwater. These processes take place whether or not other active cleanup measures occur; however, techniques and technologies for predicting and monitoring natural attenuation have been developed. MNA refers to the use of these techniques to monitor and document the progress of natural attenuation at a site.

The EPA describes natural attenuation as the reduction in dissolved hydrocarbon concentration, mass, or mobility due to naturally occurring processes in the environment (EPA, 1998b). These processes can be classified as follows:

- Physical (e.g., dispersion, diffusion by recharge, and volatilization);
- Chemical (e.g., sorption and chemical or abiotic reactions); and

## CORRECTIVE ACTION PLAN

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

- Biological (e.g., biodegradation).

For petroleum hydrocarbons, intrinsic biodegradation is typically the most important natural attenuation mechanism for the reduction of concentrations in groundwater. Intrinsic biodegradation involves the transfer of energy in the form of electrons by microorganisms in the subsurface. Bacteria use petroleum hydrocarbon constituents such as BTEX, and MTBE as electron donors while dissolved oxygen, nitrate, ferric iron, sulfate, and carbon dioxide, in order of preference, act as electron acceptors. The particular electron acceptor pathway followed is determined by site-specific geochemical conditions in the subsurface.

### 5.6.2 Remedial Alternative Evaluation

Current and historical groundwater quality data indicate the dissolved-phase petroleum hydrocarbon plume at the Site is generally stable or decreasing in size as would generally be expected for a plume that is at least 32 years old. In addition, concentrations appear to fluctuate with the seasonal groundwater elevation; however, overall stable or decreasing concentration trends are generally observed at all wells associated with the Site.

Attenuation of dissolved-phase petroleum hydrocarbon concentrations generally follows a first-order decay trend once the majority of petroleum hydrocarbon source material has been removed. As a result, decay rates can be estimated for wells within a plume using first-order trend graphs. The decay rates can then be subsequently used to estimate plume lifetime. Guidance from the EPA on the calculation and use of first-order rate constants was utilized for this evaluation (EPA, 2002).

Trend graphs were prepared for wells with concentrations of benzene that exceeded water quality objectives (WQOs; i.e., SSTLs) during the last event the wells were sampled (July 2, 2014 for wells MW-6, TW-2, RW-1, and TP-1, and September 17, 2015 for wells MW-13 and MW-14). Trend graphs were not included for constituents where the trend graphs showed stable or increasing concentration trends. This includes benzene at wells MW-13, MW-14, and TW-2. Trend graphs showing benzene in wells MW-6, RW-1, and TP-1 were created as shown in **Appendix C**.

First-order regression lines are shown on these graphs to estimate decay rates for a particular petroleum hydrocarbon at a particular well. To be consistent with EPA terminology, these decay rates will be referred to as point decay rate constants. A point decay rate is specific to the petroleum hydrocarbon and well for which it was calculated and should not be extrapolated to other wells at the Site or other petroleum hydrocarbons in any well. The point decay rate constant is the slope of the regression line, provided the slope is negative.

In plotting regression lines, all available data were utilized. Point decay rates can be used to estimate how quickly WQOs will be met at a particular point within the plume. Although a single point decay rate cannot be used to estimate the trends (i.e., increasing or decreasing concentrations) or persistence of an entire plume, multiple point decay rates calculated for wells throughout the plume can be evaluated as a group to determine the general trend of the plume. Point decay rate constants represent the change in source strength over time (if the

## CORRECTIVE ACTION PLAN

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

source is still present) with contribution from other attenuation processes such as dispersion and biodegradation. It is important to note that the point decay rate is not a biodegradation rate; it takes into account all natural attenuation processes.

The time remaining to reach the WQO for each applicable petroleum hydrocarbon in each well was calculated from the following first-order decay equation:

$$C_{CL} = C_o e^{-kt}$$

Where:  $C_{CL}$  = WQO ( $\mu\text{g/L}$ )

$C_o$  = mean concentration last 4 sampling events ( $\mu\text{g/L}$ )

$K_{\text{point}}$  = first order decay rate ( $\text{years}^{-1}$ )

$t$  = remaining time to reach cleanup level (years)

The calculations are presented in **Appendix C**.

To provide a range of timeframe estimates, calculations were performed using the mean concentration from the last four sampling events as well as the maximum concentration from the last four sampling events. Regression line correlation coefficient ( $R^2$ ) values, which are shown on each linear regression graph, provide an indication of the reliability of a relationship identified by regression analysis. For example, a  $R^2$  value of 0.8 indicates that 80% of the change in one variable is explained by a change in the related variable. The  $R^2$  values for the analyses conducted for the Site ranged from 0.0136 to 0.5986; therefore, estimates for how quickly WQOs will be met should be considered approximate.

Based on this evaluation, natural attenuation appears to be occurring in select wells. Benzene concentrations are estimated to reach WQOs via natural attenuation in approximately 59.6 to 86.8 years in well MW-6, 14.1 to 15.9 years in well RW-1, and 1.0 to 2.7 years in well TP-1.

### Overall Protection of Human Health and the Environment

Because there is limited risk to human health and the environment based on current conditions and current and future expected use of the off-site property, MNA would be protective of human health and the environment and would not increase the potential exposure of humans to petroleum hydrocarbon-impacted soil and groundwater.

### Compliance with ARARs

This alternative cannot be implemented within regulatory guidelines at this time. Benzene concentrations in select wells are currently stable or increasing, indicating that MNA alone would not reach SSTLs in groundwater based on current conditions.

## CORRECTIVE ACTION PLAN

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

### Long-Term Effectiveness and Performance

Calculation of estimated timeframes for groundwater concentrations to reach WQOs based on point decay rates provide evidence of biodegradation at the Site, indicating this remedial alternative may be effective in the long-term; however, decreasing concentration trends would need to be observed in all wells.

### Reduction of Toxicity, Mobility, or Volume

This alternative relies solely on natural attenuation for dissolved-phase petroleum hydrocarbon reduction. MNA could address on-site and off-site impacts, but residual petroleum hydrocarbons will be present in the subsurface for the foreseeable future.

### Short-Term Effectiveness

MNA does not involve source removal; therefore, it is not as effective in the short term because it will take time for natural attenuation to reduce on-site and off-site dissolved-phase petroleum hydrocarbon concentrations in groundwater. Calculations indicated that this alternative would not reach SSTLs within a reasonable timeframe based on current conditions.

### Implementability

Because no construction or operations would be required, MNA is very easy to implement and consists of continued groundwater monitoring.

### Cost

MNA is a relatively high cost alternative because it consists of continued groundwater monitoring for 25 years. The life-cycle cost estimate also includes off-site well destruction. The life-cycle cost estimate is presented in **Table 11** and is approximately \$433,000.

## 5.7 SELECTED REMEDIAL ALTERNATIVE

Stantec recommends bioremediation via sulfate surface application as the preferred remedial technology based on this evaluation. This alternative is the most cost-effective and meets the primary off-site remediation objectives in that it should prevent further migration of hydrocarbons and minimize disruptions to property use and the surrounding area. Geochemical data from previous groundwater monitoring events (**Tables 4 and 5**) demonstrate the subsurface is conducive for bioremediation via sulfate application. Surface application has a larger area of influence; therefore, it was selected over sulfate injection which is likely to have a limited spatial coverage.

Given the geology (silty sand overlying silty clay) and shallow depths of groundwater impacts, gypsum land application is considered a feasible approach. However, there are limitations with this approach, with the largest uncertainty being the lack of ability to forecast the timing of

## **CORRECTIVE ACTION PLAN**

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

increase in sulfate in the groundwater following surface application. Especially with a source still present immediately up-gradient, the concentration data may or may not be able to demonstrate effectiveness.

Though up to 10 years of semi-annual groundwater monitoring was included in the life-cycle cost estimate, it is recommended that effectiveness be evaluated after approximately 1 to 2 years of groundwater monitoring (quarterly at wells MW-13, MW-14, and MW-17 and semi-annual at other wells), and another remedy may be recommended following this evaluation if sulfate surface application does not prove to be successful. In addition, a comprehensive baseline monitoring event followed by periodic monitoring for BTEX, geochemical parameters, compound specific isotope analysis, and a tracer (bromide) is recommended at select wells to aid in evaluating effectiveness.

## **CORRECTIVE ACTION PLAN**

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

### **6.0 REMEDIATION GOAL**

The remediation goal is defined as the point at which implementation of a remedial alternative will be stopped. The remediation goal for this evaluation is identified as benzene concentration trends demonstrating reduction of dissolved-phase petroleum hydrocarbon concentrations to reach SSTLs in the off-site wells within a reasonable timeframe.

## CORRECTIVE ACTION PLAN

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

# 7.0 CONCLUSIONS AND RECOMMENDATIONS

## 7.1 CONCLUSIONS

### 7.1.1 Extent of Petroleum Hydrocarbons

- Based on soil and groundwater hydrocarbon concentrations, it appears that release UST00-02-11 originated in the vicinity of the former gasoline USTs. These structures were abandoned-in-place prior to 1984; therefore, this release of petroleum hydrocarbons occurred at least 32 years ago, and it is likely that the extent of dissolved-phase hydrocarbons has reached equilibrium and is not likely migrating.
- PSH has not been detected at the Site.
- Maximum BTEX concentrations in soil and groundwater are detected in the western portion of the Site in the area of the former gasoline USTs (wells MW-6, TW-2, RW-1, and TP-1) and down-gradient at the vacant City of Mobile right-of-way property located directly south of the Site (wells MW-13 and MW-14).
- Based on analytical results from soil samples collected during historical investigations associated with the Site, it appears that the vertical and lateral extents of petroleum hydrocarbons in soil are adequately defined.
- Based on current and historical data for the Site, the dissolved-phase petroleum hydrocarbon plume is delineated in all directions and is generally stable or decreasing in size and concentration as would be expected from a release that occurred over 30 years ago.
- Texaco ceased operations at the Site in 1974. Use of MTBE was not started until 1979 (EPA, 1998a); therefore, the detections of MTBE observed in soil and groundwater at the Site indicate that there have been other releases at the Site that are not attributable to Texaco's operations.

### 7.1.2 Risk Assessment

- An ARBCA Tier I/II evaluation was completed for the Site in 2005, and SSTLs were developed for complete exposure pathways. A comparison of current soil and groundwater concentrations to the approved SSTLs for on-site and off-site commercial and construction workers indicates that petroleum hydrocarbon concentrations are protective of current and reasonable future receptors.
- The ingestion, dermal contact, and inhalation pathways for shallow soil and excavated soil are considered potentially complete for on-site construction workers; however, the Site is paved, so risk to construction workers is unlikely at this time. In the event of planned

## CORRECTIVE ACTION PLAN

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

construction or excavation, care should be taken to safely manage exposed and excavated soil.

- Although the soil gas and groundwater emission pathways are considered potentially complete, the Site is currently used as an automobile repair and service facility and background vapors associated with visiting vehicles and repair/service activities likely present a higher risk than vapors from residual contamination on-site. In addition, there is no evidence of hydrocarbon vapors originating from shallow soil or the dissolved-phase plume either on-site or off-site and the risk evaluation did not identify any indoor or outdoor air exceedances (Stantec, 2009).

### 7.1.3 Evaluation of Remedial Alternatives

- Excavation with gypsum backfill has the potential to address off-site dissolved-phase impacts and prevent further migration; however, on-site soil and groundwater impacts would not be addressed. Because no impacts to the shallow soil were observed at the off-site property and there is limited exposure potential to receptors, excavation is not deemed favorable using a cost/benefit analysis. Excavation is also high risk with many uncertainties and implementation issues.
- Sulfate injection would be relatively easy to implement at a relatively low cost, but would require a moderate cleanup timeframe to attempt to reach SSTLs for groundwater and concentration rebound may occur. If injection is conducted at an up-gradient well, the technology can be used to attempt to clean up the on-site portion of the dissolved-phase plume, as well as the off-site portion; however, the technology would not address impacted vadose zone soils and contact with impacted soils in the smear zone would be subject to the natural groundwater fluctuations and petroleum hydrocarbon dissolution mechanisms at the Site. Injection may also be subject to potential contact limitations based on Site lithology and density effects, and there may be the potential for development of preferential pathways (i.e., short-circuiting).
- Sulfate surface application is the most cost-effective alternative, and meets the primary off-site remediation objectives in that it should prevent further migration of hydrocarbons and minimize disruptions to property use and the surrounding area. Given the geology and shallow depths of groundwater impacts, sulfate surface application is considered a feasible approach; however, there are limitations, with the largest uncertainty being the lack of ability to forecast the timing of increase in sulfate in the groundwater following surface application.
- Phytoremediation would be moderately difficult to implement at a relatively moderate cost due to necessary negotiations with the City of Mobile and the large amount of trees that would need to be planted during initial implementation; however, once the planted trees are established (approximately 2 years), minimal maintenance effort is required,

## CORRECTIVE ACTION PLAN

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

resulting in minimal costs, and the trees will continue to remediate off-site impacts (on-site impacts would remain) and prevent further migration throughout their lifetime.

- Based on the evaluation of MNA, natural attenuation appears to be occurring in select wells. Temporally, concentrations of constituents in wells within the dissolved-phase petroleum hydrocarbon plume are generally decreasing or stable. Estimated cleanup timeframes to reach SSTLs for benzene, which should be considered approximate, ranged from 1.0 to 86.8 years; however, timeframes could not be determined for some wells due to stable or increasing concentration trends. MNA is a relatively high cost alternative due to the long timeframe required to reach SSTLs in groundwater.

## 7.2 RECOMMENDATIONS

Stantec recommends bioremediation via sulfate surface application as the preferred remedial technology due to the shallow groundwater table, supporting geochemistry, and a large area of off-site impacts. This alternative is the most cost-effective and meets the primary off-site remediation objectives in that it should prevent further migration of hydrocarbons and minimize disruptions to property use and the surrounding area.

It is recommended that effectiveness be evaluated after approximately 1 to 2 years of groundwater monitoring (quarterly at wells MW-13, MW-14, and MW-17 and semi-annual at other wells), and another remedy may be recommended following this evaluation if sulfate surface application does not prove to be successful. In addition, a comprehensive baseline monitoring event followed by periodic monitoring for BTEX, geochemical parameters, compound specific isotope analysis, and a tracer (bromide) is recommended at select wells to aid in evaluating effectiveness in reaching the remediation goal of benzene concentration trends demonstrating reduction of dissolved-phase petroleum hydrocarbon concentrations to reach SSTLs in the off-site wells within a reasonable timeframe.

## CORRECTIVE ACTION PLAN

Former Texaco Service Station, Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
April 8, 2016

## 8.0 REFERENCES

EPA, 1998a. *MTBE Fact Sheet #2: Remediation of MTBE Contaminated Soil and Groundwater*. January.

EPA, 1998b. *Use of Monitored Natural Attenuation (MNA) at Superfund, RCRA Corrective Action, and Underground Storage Tank Sites*, Directive Number 9200.4-17P, Washington, D.C. EPA Office of Solid Waste and Emergency Response.

EPA, 2002. *Calculation and Use of First-Order Rate Constants for Monitored Natural Attenuation Studies*, EPA/540/S-02/500, National Risk Management Research Laboratory, Cincinnati, OH. November.

EPA, 2010. *Phytotechnologies for Site Cleanup*. September.

Fiorenza, S., F. Thomas, L. Rhea, and D. Tsao. 2005. "Groundwater Plume Delineation Using Tree Trunk Cores," presented at the 3rd International Phytotechnologies Conference, Atlanta.

Isphording, W.C. and G.M. Lamb, 1971. *Age and Origin of the Citronelle Formation in Alabama*, Geological Society of America, Bulletin 82: p. 775-780.

Sapp, C.D. and Emplincourt, Jacques, 1975. *Physiographic Regions of Alabama: Alabama Geological Survey Special Map 168*.

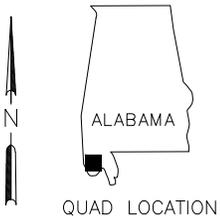
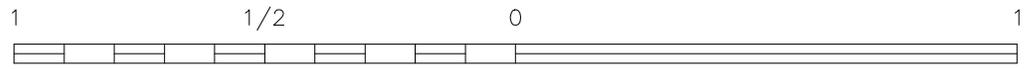
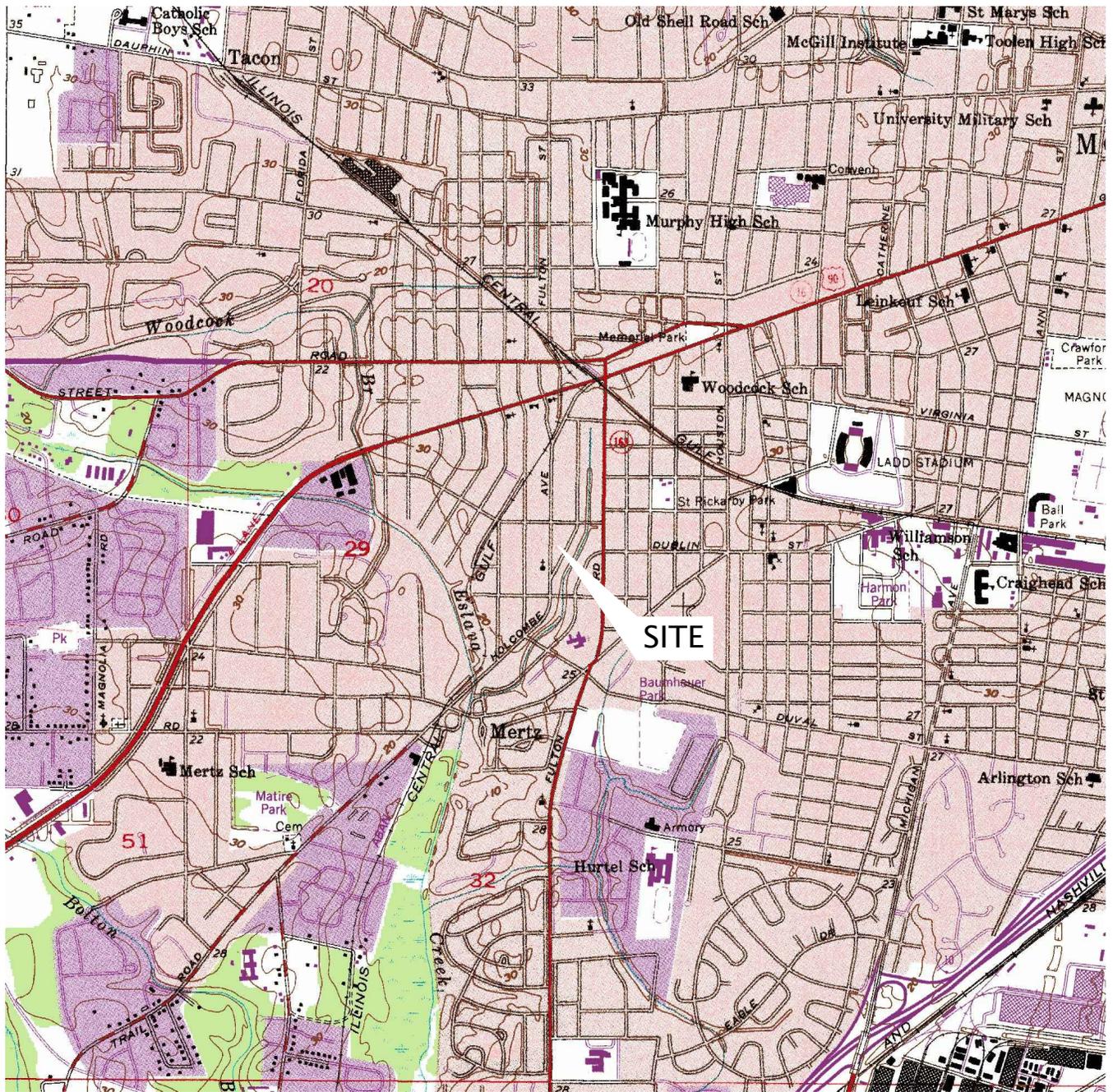
Stantec, 2009. *Additional Corrective Action Plan*. July 27.

Stantec, 2010. *Epsom Salt Emplacement Initial Pilot Test Report*. September 3.

Stantec, 2015. *Corrective Action Report 2015*. October 14.

United States Department of Agriculture, 1980. *Soil Survey of Mobile County, Alabama*. May.

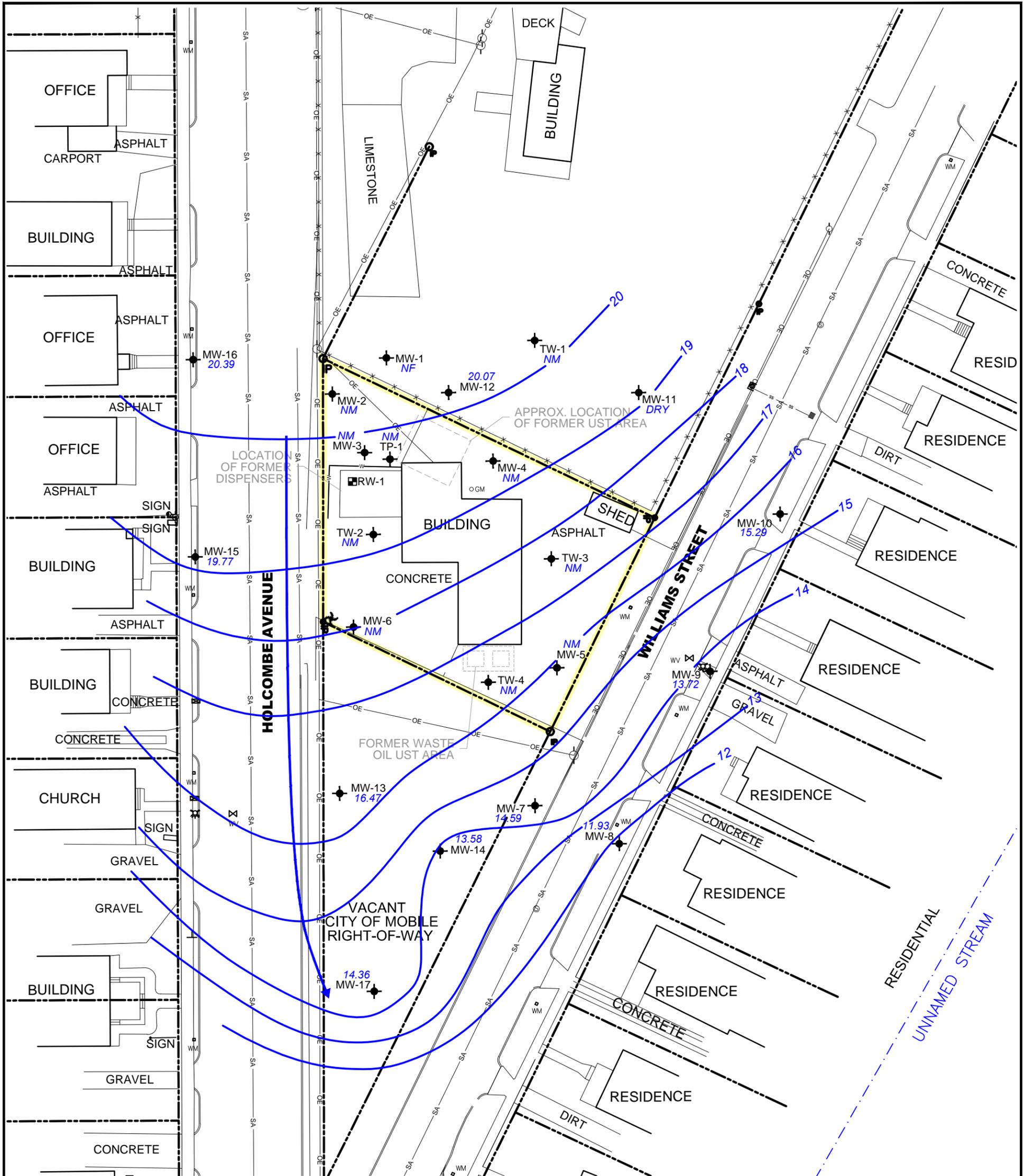
# FIGURES



REFERENCE: USGS 7.5 MINUTE QUADRANGLE; MOBILE, ALABAMA

 12585 OLD HIGHWAY 280, SUITE 107 CHELSEA, AL 35043 PHONE: (205) 678-7422 FAX: (205) 678-7214	FOR: <b>FORMER TEXACO SERVICE STATION          CHEVRON SITE NO. 211874          623 HOLCOMBE AVENUE          MOBILE, ALABAMA</b>		<b>SITE LOCATION MAP</b>		FIGURE: <b>1</b>
	JOB NUMBER: 212201183	DRAWN BY: ARA/JRO	CHECKED BY: EEO	APPROVED BY: MRK	DATE: 02/29/16

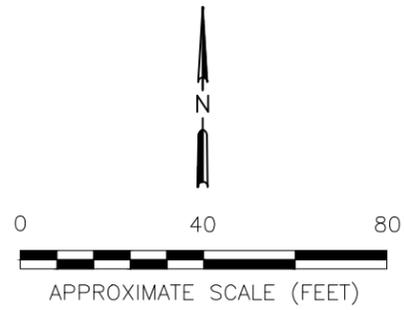




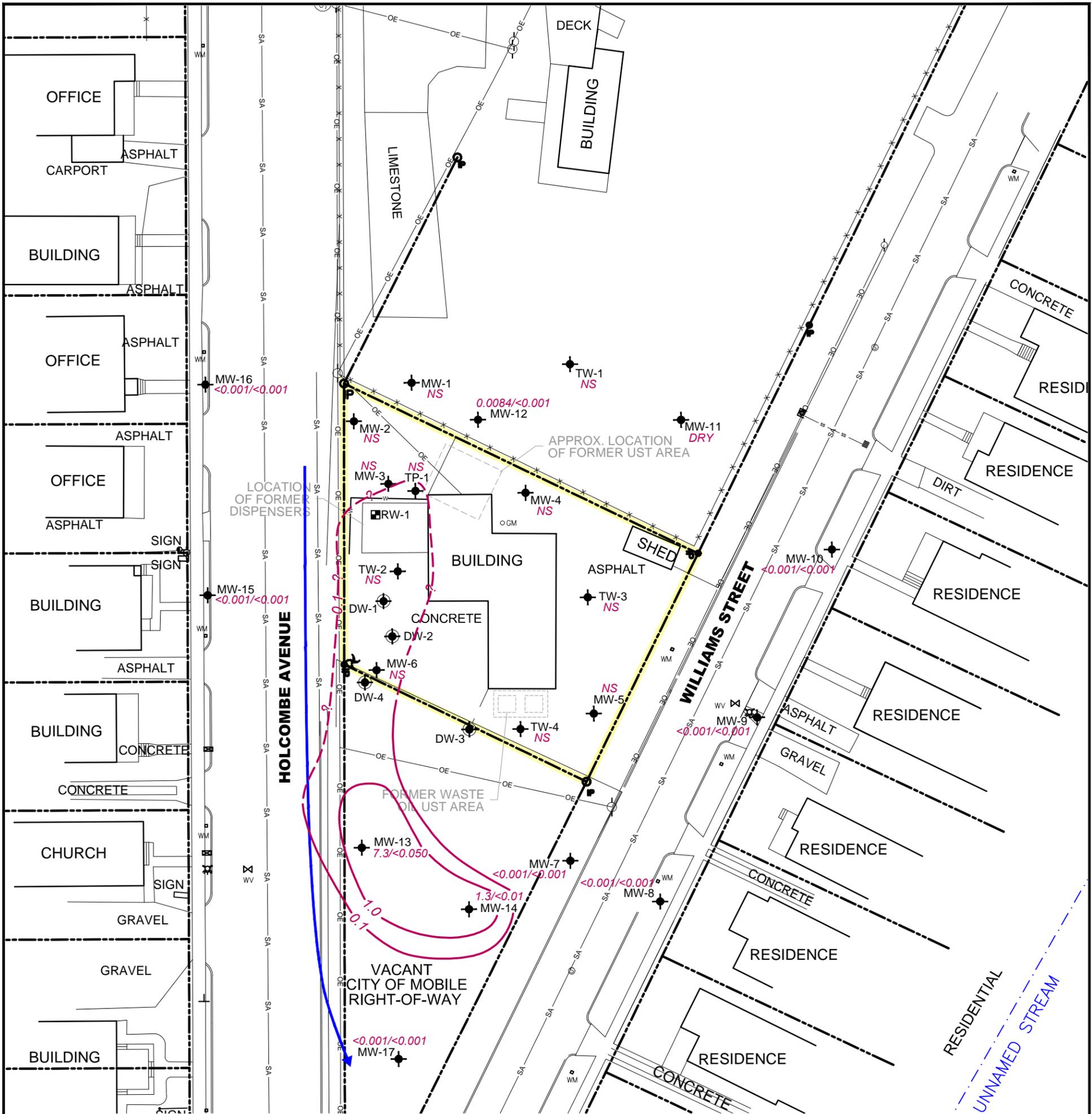
**LEGEND:**

- ◆ MW-14 MONITORING WELL LOCATION
- ◆ DW-3 DEEP MONITORING WELL LOCATION
- RW-1 RECOVERY WELL LOCATION
- UST UNDERGROUND STORAGE TANK
- PROPERTY LINES
- APPROXIMATE SITE BOUNDARY
- x-x- FENCE
- IP IRON PIN FOUND
- STORM SEWER DRAIN
- POWER POLE
- ss STORM SEWER
- OE OVERHEAD ELECTRIC LINE
- ⊕ LIGHT POLE
- Gm GAS METER
- W WATER LINE
- SA SANITARY SEWER

- 24.60 GROUNDWATER ELEVATION IN FEET RELATIVE TO A COMMON DATUM
- 22 CONTOUR LINE OF ESTIMATED EQUAL POTENTIOMETRIC ELEVATION IN FEET
- ← ESTIMATED GROUNDWATER FLOW DIRECTION
- NM NOT MEASURED
- NF NOT FOUND
- DRY WELL IS DRY



<p>12585 OLD HIGHWAY 280, SUITE 107 CHELSEA, AL 35043 PHONE: (205) 678-7422 FAX: (205) 678-7214</p>	<p>FOR: FORMER TEXACO SERVICE STION CHEVRON SITE NO. 211874 623 HOLCOMBE AVENUE MOBILE, ALABAMA</p>	<p>POTENTIOMETRIC SURFACE MAP - UPPERMOST GROUNDWATER SYSTEM - SEPTEMBER 17, 2015</p>		<p>FIGURE: <b>3</b></p>
	<p>JOB NUMBER: 212201183</p>	<p>DRAWN BY: ARA/JRO</p>	<p>CHECKED BY: EEO</p>	<p>APPROVED BY: MRK</p>



**LEGEND:**

- ◆ MW-14 MONITORING WELL LOCATION
- ◆ DW-3 DEEP MONITORING WELL LOCATION
- RW-1 RECOVERY WELL LOCATION
- UST UNDERGROUND STORAGE TANK
- PROPERTY LINES
- - - APPROXIMATE SITE BOUNDARY
- x - x - FENCE
- IP IRON PIN FOUND
- ▬ STORM SEWER DRAIN
- POWER POLE
- ss — STORM SEWER
- OE — OVERHEAD ELECTRIC LINE
- ⚡ LIGHT POLE
- GMo GAS METER
- W — WATER LINE
- SA — SANITARY SEWER

<0.001/<0.001 BENZENE/MTBE CONCENTRATIONS IN mg/l

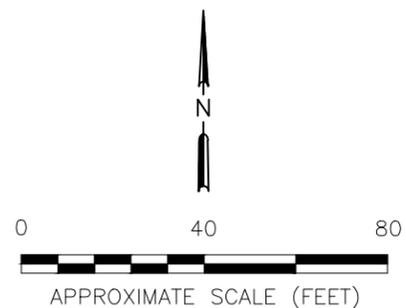
MTBE METHYL TERTIARY BUTYL ETHER

1.0 CONTOUR LINE OF ESTIMATED EQUAL BENZENE CONCENTRATIONS IN GROUNDWATER

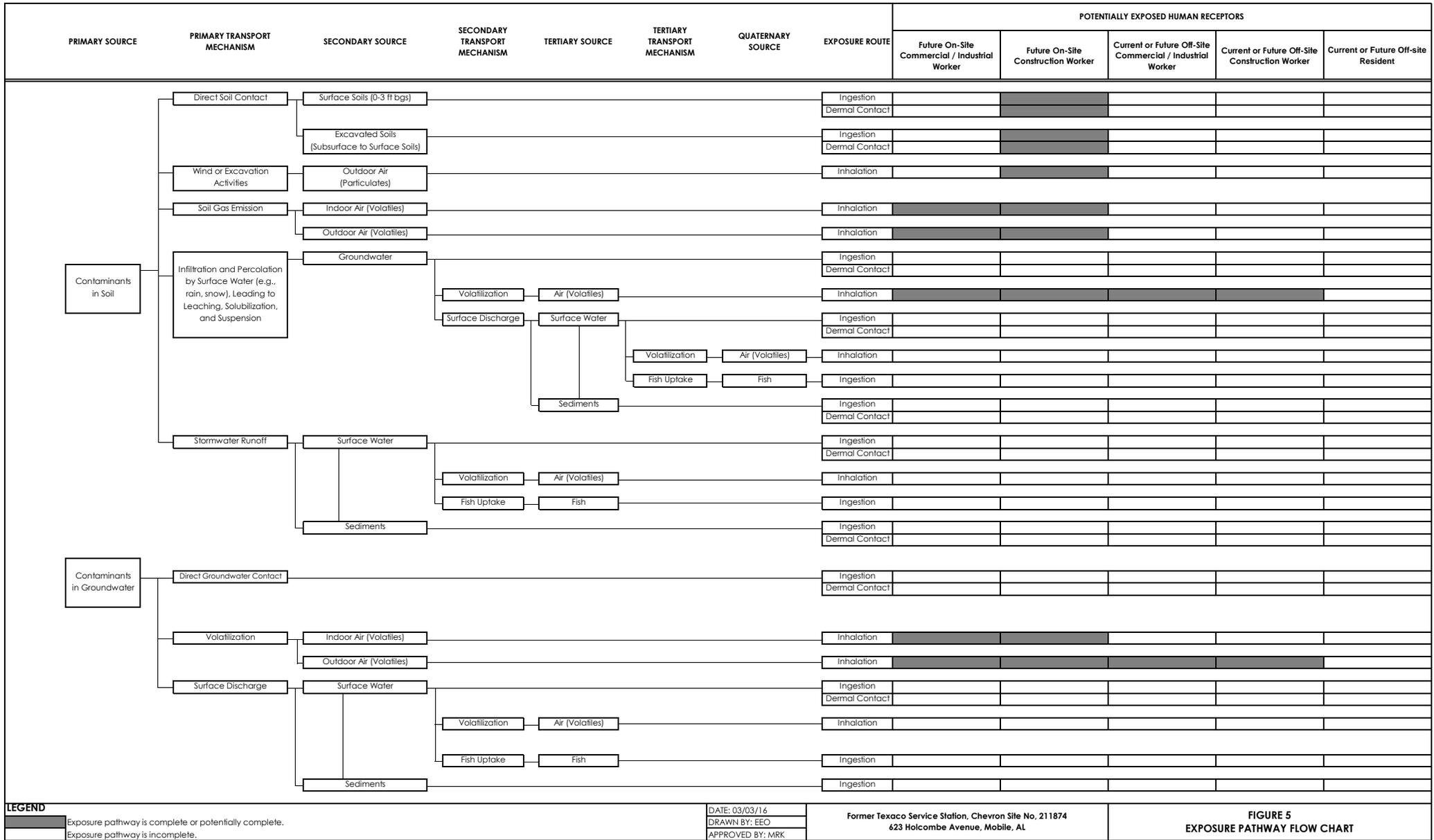
← ESTIMATED GROUNDWATER FLOW DIRECTION

NS NOT SAMPLED

DRY WELL IS DRY



<p>12585 OLD HIGHWAY 280, SUITE 107 CHELSEA, AL 35043 PHONE: (205) 678-7422 FAX: (205) 678-7214</p>	FOR: <b>FORMER TEXACO SERVICE STATION          CHEVRON SITE NO. 211874          623 HOLCOMBE AVENUE          MOBILE, ALABAMA</b>		<b>CONSTITUENT CONCENTRATIONS          IN GROUNDWATER -          SEPTEMBER 17, 2015</b>		FIGURE:  <span style="font-size: 24pt; font-weight: bold;">4</span>
	JOB NUMBER: 212201183	DRAWN BY: ARA/JRO	CHECKED BY: EEO	APPROVED BY: MRK	DATE: 02/29/16



**LEGEND**  
 Exposure pathway is complete or potentially complete.  
 Exposure pathway is incomplete.

DATE: 03/03/16  
 DRAWN BY: EEO  
 APPROVED BY: MRK

Former Texaco Service Station, Chevron Site No. 211874  
 623 Holcombe Avenue, Mobile, AL

**FIGURE 5**  
**EXPOSURE PATHWAY FLOW CHART**

# **TABLES**

**TABLE 1**Summary of Soil Analytical Data  
Former Texaco Service Station

Chevron Site No. 211874

623 Holcombe Avenue, Mobile, Alabama

All results expressed as milligrams per kilogram (mg/kg)

Sample Location	Sample Date	Sample Depth (feet)	Benzene	Toluene	Ethyl benzene	Xylenes	Total BTEX	MTBE	TPH (ORO)
MW-1	04/15/02	0-1	<0.05024	<0.05024	<0.05024	<0.05024	<RL	<0.05024	NA
		1.5-1.75	<0.05024	<0.05024	<0.05024	<0.05024	<RL	<0.05024	NA
MW-2	04/16/02	0.5-1	<0.05024	<0.05024	<0.05024	<0.05024	<RL	<0.05024	NA
		1-2	<0.05024	<0.05024	<0.05024	<0.05024	<RL	<0.05024	NA
MW-3	04/16/02	1-2	<0.05024	<0.05024	<0.05024	<0.05024	<RL	<0.05024	NA
		2-3	<0.05024	<0.05024	<0.05024	<0.05024	<RL	<0.05024	NA
MW-4	04/16/02	0.5-1.5	<0.005	<0.005	<0.005	<0.005	<RL	NA	<50
		1.5-2.5	<0.005	<0.005	<0.005	<0.005	<RL	NA	73
MW-5	04/15/02	0-1	0.0333	0.232	0.0533	0.2638	0.5824	NA	1,680
		5-7	<0.005	<0.005	<0.005	<0.005	<RL	NA	<50
TW-1	04/15/02	0.5-1	<0.05	<0.05	<0.05	<0.05	<RL	<0.05	NA
TW-2	04/15/02	1-1.5	<0.05	<0.05	<0.05	<0.05	<RL	<0.05	NA
		5-7	4.69	43.3	24.1	109.9	181.99	0.54	NA
TW-3	04/16/02	1-2	<0.005	<0.005	<0.005	<0.005	<RL	NA	<50
		2-2.5	<0.005	<0.005	<0.005	<0.005	<RL	NA	<50
TW-4	04/15/02	0-1.5	<0.005	<0.005	<0.005	0.0058	0.0058	NA	<50
		5-7	<0.005	<0.005	<0.005	<0.005	<RL	NA	<50
MW-6	10/08/03	5-7	<2.5	18.5	12.2	63	93.7	<2.5	NA
		7-9	<2.5	43.5	9.12	54.2	106.82	<2.5	NA
		9-11	0.472	4.86	0.724	4.1	10.156	<0.25	NA
MW-11	10/09/03	3	0.0086	0.109	0.0458	0.2116	0.375	<0.005	NA
		5	<0.005	0.0088	<0.005	0.0069	0.0157	<0.005	NA
MW-12	10/09/03	3	<0.005	0.0188	0.0056	0.0274	0.0518	<0.005	NA
		7	<0.025	0.145	0.462	1.955	2.562	<0.025	NA
DW-1	10/08/03	5-7	<2.5	65.6	23.1	128	216.7	<2.5	NA
		10-12	0.337	3.76	0.66	9.77	14.527	<0.025	NA
		30-32	<0.005	0.0719	0.0377	0.2126	0.3222	<0.005	NA
SB-1	10/29/03	5	<0.025	<0.025	<0.025	<0.025	<RL	<0.025	NA
		10	<0.025	<0.025	<0.025	<0.025	<RL	<0.025	NA
SB-2	10/29/03	5	<0.025	<0.025	<0.025	<0.025	<RL	<0.025	NA
		10	<0.025	<0.025	<0.025	<0.025	<RL	<0.025	NA
SB-3	10/29/03	5	<0.025	<0.025	<0.025	<0.025	<RL	<0.025	NA
		10	<0.025	<0.025	<0.025	<0.025	<RL	<0.025	NA
SB-4	10/29/03	5.5	0.05	0.104	0.275	1.17	1.599	<0.025	NA
SB-5	10/30/03	5.5	<0.025	<0.025	<0.025	<0.025	<RL	<0.025	NA
MW-13	03/07/05	2-3	<0.005	<0.005	<0.005	<0.005	<RL	<0.005	NA
		6-7	<0.005	<0.005	<0.005	<0.005	<RL	<0.005	NA
MW-14	03/07/05	2-3	<0.005	<0.005	<0.005	<0.005	<RL	<0.005	NA
		6-7	<0.005	<0.005	<0.005	<0.005	<RL	<0.005	NA
MW-15	03/07/05	2-3	<0.005	<0.005	<0.005	<0.005	<RL	<0.005	NA
		7-8	<0.005	<0.005	<0.005	<0.005	<RL	<0.005	NA
MW-16	03/07/05	2-3	<0.005	<0.005	<0.005	<0.005	<RL	<0.005	NA
		6-7	<0.005	<0.005	<0.005	<0.005	<RL	<0.005	NA
DW-2	03/08/05	2-3	<0.005	<0.005	<0.005	<0.005	<RL	<0.005	NA
		8-9	<0.25	0.637	3.91	16.53	21.077	<0.25	NA
		65-66	<0.005	<0.005	<0.005	<0.005	<RL	<0.005	NA

**TABLE 1**

Summary of Soil Analytical Data  
Former Texaco Service Station

Chevron Site No. 211874

623 Holcombe Avenue, Mobile, Alabama

All results expressed as milligrams per kilogram (mg/kg)

Sample Location	Sample Date	Sample Depth (feet)	Benzene	Toluene	Ethyl benzene	Xylenes	Total BTEX	MTBE	TPH (ORO)
MW-17	02/23/06	4.5-5	<0.005	<0.005	<0.005	<0.005	<RL	<0.005	NA
MIP-4A	02/23/06	7-9	<2.5	28.2	11.8	62.8	102.8	<2.5	NA
		10-12	<2.5	15.8	8.02	46.1	69.92	<2.5	NA
		30-32	0.0471	0.305	0.0246	0.1036	0.4803	<0.005	NA
		48-50	0.0493	0.46	0.0494	0.2197	0.7784	<0.005	NA
MIP-5	02/23/06	9-11	<2.5	71.1	33.8	175.2	280.1	<2.5	NA
MIP-6	02/23/06	12-14	3.54	30.1	7.6	41	82.24	<2.5	NA
MIP-8	02/23/06	13-15	<0.25	1.6	0.778	4.76	7.138	<0.25	NA
		21-23	0.262	0.807	0.106	0.486	1.661	<0.005	NA
MIP-9	02/24/06	10-12	0.575	5.02	1.00	5.52	12.115	<0.25	NA
		30-32	<0.005	<0.005	<0.005	<0.005	<RL	<0.005	NA
		47-49	<0.005	<0.005	<0.005	<0.005	<RL	<0.005	NA
DW-3	06/27/06	10-12	0.036	0.0069	0.022	<0.012	0.0649	<0.0061	NA
		28-30	0.24	0.043	0.10	0.34	0.723	<0.0064	NA
DW-4	06/27/06	5-7	<0.0064	<0.0064	<0.0064	<0.013	<RL	<0.0064	NA
		10-12	<0.31	4.3	0.43	2.4	7.13	<0.31	NA
		28-30	0.01	0.14	0.026	0.13	0.31	<0.0063	NA
RW-1	06/27/06	1-2	7.2	<0.66	48	140	195.2	<0.66	NA
TP-1	06/27/06	1-2	<6.1	130	170	1,000	1,300	<6.1	NA
		4-5	3.2	73	46	290	412.2	<3.1	NA
<b>Tier 2 SPTC at Source</b>			<b>0.88</b>	<b>28.90</b>	<b>106.33</b>	<b>NA</b>	<b>NE</b>	<b>NA</b>	<b>NE</b>
<b>Tier 2 GRPTC at Source</b>			<b>1.70</b>	<b>702.69</b>	<b>657.93</b>	<b>822.68</b>	<b>NE</b>	<b>2.17</b>	<b>NE</b>
<b>Tier 2 SSTL Surficial Soil</b>			<b>39.72</b>	<b>1,440.62</b>	<b>657.93</b>	<b>822.68</b>	<b>NE</b>	<b>393.04</b>	<b>NE</b>
<b>Tier 2 SSTL Subsurface Soil</b>			<b>49.72</b>	<b>1,440.62</b>	<b>657.93</b>	<b>822.68</b>	<b>NE</b>	<b>20,344.00</b>	<b>NE</b>

**Notes:**

<RL = below laboratory reporting limits

<0.005 = analyte not detected above the specified laboratory detection limit

BTEX = benzene, toluene, ethylbenzene, and xylenes

MTBE = methyl tertiary-butyl ether

TPH (ORO) = total petroleum hydrocarbons (oil range organics)

NA = not analyzed for this parameter

NE = not established

SWPTC = Surface Water Protection Target Concentration protective of a stream 200 feet downgradient

GRPTC = Groundwater Resource Protection Target Concentration protective of a hypothetical POC

POC = Point of compliance

**TABLE 2**

Summary of Groundwater Analytical Data  
 Former Texaco Service Station  
 Chevron Site No. 211874  
 623 Holcombe Avenue, Mobile, Alabama  
 All results expressed as milligrams per liter (mg/L)

Sample Location	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	Total BTEX	MTBE	
MW-1	05/08/02	0.0014	0.0175	0.0016	0.00913	0.02963	<0.005	
	10/27/03	NS	NS	NS	NS	NS	NS	
	03/15/05	<0.0005	<0.0005	<0.0005	<0.0005	<RL	<0.0005	
	06/20/05	<0.0005	<0.0005	<0.0005	<0.0005	<RL	<0.0005	
	11/03/05	<0.005	<0.005	<0.005	<0.01	<RL	<0.005	
	2/30/06	<0.005	<0.005	<0.005	<0.01	<RL	<0.005	
	07/09/06	NS	NS	NS	NS	NS	NS	
	09/15/06	NS	NS	NS	NS	NS	NS	
09/03/10	Start Epsom Salt Pilot Test							
<b>SP at Source</b>		<b>0.22</b>	<b>3.47</b>	<b>8.98</b>	<b>NA</b>	<b>NE</b>	<b>NA</b>	
<b>GRP at Source</b>		<b>0.42</b>	<b>84.31</b>	<b>59.02</b>	<b>175.00</b>	<b>NE</b>	<b>1.69</b>	
<b>GRP at a POC</b>		<b>0.35</b>	<b>70.83</b>	<b>49.58</b>	<b>175.00</b>	<b>NE</b>	<b>1.42</b>	
<b>Offsite Indoor Inhalation</b>		<b>7.02</b>	<b>400</b>	<b>169</b>	<b>175</b>	<b>NE</b>	<b>16,612</b>	
<b>Offsite Outdoor Inhalation</b>		<b>1,750</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NE</b>	<b>48,000</b>	
MW-2	05/07/02	0.1080	0.3030	0.0127	0.0718	0.4955	<0.005	
	10/27/03	<0.0005	0.0027	<0.0005	0.0023	0.0050	<0.0005	
	03/15/05	<0.0005	<0.0005	<0.0005	<0.0005	<RL	<0.0005	
	06/20/05	<0.0005	<0.0005	<0.0005	<0.0005	<RL	<0.0005	
	11/03/05	0.0749	<0.005	0.0082	0.0491	0.1322	<0.005	
	02/03/06	0.0435	0.1690	0.0274	0.1378	0.3777	<0.005	
	07/09/06	<0.0010	0.0012	<0.0010	<0.0020	0.0012	<0.0010	
	09/15/06	<0.0010	<0.0010	<0.0010	<0.0020	<RL	<0.0010	
	09/03/10	Start Epsom Salt Pilot Test						
	06/22/11	0.0016	0.0044	0.0018	0.0085	0.0163	<0.0010	
	12/20/12	<0.0010	<0.0050	<0.0010	<0.0050	<0.02	<0.0020	
	11/21/13	<0.0010	<0.0050	<0.0010	<0.0050	<0.02	<0.0010	
<b>SP at Source</b>		<b>0.22</b>	<b>3.47</b>	<b>8.98</b>	<b>NA</b>	<b>NE</b>	<b>NA</b>	
<b>GRP at Source</b>		<b>0.42</b>	<b>84.31</b>	<b>59.02</b>	<b>175.00</b>	<b>NE</b>	<b>1.69</b>	
<b>Onsite Indoor Inhalation</b>		<b>45.98</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NA</b>	<b>48,000</b>	
<b>Onsite Outdoor Inhalation</b>		<b>1,750</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NA</b>	<b>48,000</b>	
MW-3	05/07/02	0.0613	0.247	0.0129	0.048	0.3692	0.0013	
	10/27/03	<0.0005	<0.0005	0.0017	<0.0005	0.0017	<0.0005	
	03/15/05	<0.0005	0.0032	<0.0005	<0.0005	0.0032	0.0029	
	06/20/05	<0.0005	<0.0005	<0.0005	<0.0005	<RL	<0.0005	
	11/03/05	0.0212	0.0243	<0.005	0.0057	0.0512	<0.005	
	02/02/06	0.0073	0.0119	<0.005	<0.005	0.0192	<0.005	
	07/09/06	<0.0010	0.0016	<0.0010	<0.0020	0.0016	<0.0010	
	09/15/06	<0.0010	<0.0010	<0.0010	<0.0020	<RL	<0.0010	
	02/05/07	<0.0010	<0.0050	<0.0010	<0.0020	<0.0090	<0.0020	
	06/14/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	10/03/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	02/15/08	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	05/12/08	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	08/05/08	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
09/03/10	Start Epsom Salt Pilot Test							
06/22/11	<0.0010	0.0011	<0.0010	<0.0020	0.0011	<0.0010		

**TABLE 2**

Summary of Groundwater Analytical Data  
Former Texaco Service Station  
Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
All results expressed as milligrams per liter (mg/L)

Sample Location	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	Total BTEX	MTBE	
MW-3 Cont.	12/14/11	<0.00034	<0.0007	<0.0005	<0.0016	<0.0031	<0.00074	
	03/27/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	06/27/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	09/27/12	<0.00034	<0.00070	<0.00050	<0.0016	<0.00314	<0.00074	
	12/20/12	<0.0010	<0.0050	<0.0010	<0.0050	<0.02	<0.0020	
	03/22/13	<0.00034	<0.00070	<0.00050	<0.0016	<0.0031	<0.00074	
	06/27/13	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	09/25/13	<0.00034	<0.00070	<0.00050	<0.0016	<0.0031	<0.00074	
	11/21/13	<0.0010	0.0012	<0.0010	<0.0020	0.0012	<0.0010	
04/24/13	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010		
07/02/14	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010		
<b>SP at Source</b>		<b>0.22</b>	<b>3.47</b>	<b>8.98</b>	<b>NA</b>	<b>NE</b>	<b>NA</b>	
<b>GRP at Source</b>		<b>0.42</b>	<b>84.31</b>	<b>59.02</b>	<b>175.00</b>	<b>NE</b>	<b>1.69</b>	
<b>Onsite Indoor Inhalation</b>		<b>45.98</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NA</b>	<b>48,000</b>	
<b>Onsite Outdoor Inhalation</b>		<b>1,750</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NA</b>	<b>48,000</b>	
MW-4	05/07/02	0.0106	0.0715	0.0023	0.014	0.0984	<0.005	
	10/28/03	<0.0005	0.0014	<0.0005	0.00268	0.0041	<0.0005	
	03/16/05	<0.0005	<0.0005	<0.0005	<0.0005	<RL	<0.0005	
	06/21/05	<0.0005	<0.0005	<0.0005	<0.0005	<RL	<0.0005	
	11/04/05	<0.005	0.0087	<0.005	0.00884	0.0175	<0.005	
	02/02/06	<0.0005	<0.0005	<0.0005	<0.0005	<RL	<0.0005	
	07/10/06	<0.0010	<0.0010	<0.0010	<0.0020	<RL	<0.0010	
	09/15/06	<0.0010	<0.0010	<0.0010	<0.0020	<RL	<0.0010	
	09/03/10	Start Epsom Salt Pilot Test						
	06/22/11	<0.0010	<0.0010	<0.0010	<0.0020	<RL	<0.0010	
	12/20/12	<0.0010	<0.0050	<0.0010	<0.0050	<0.02	<0.0020	
11/21/13	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010		
<b>SP at Source</b>		<b>0.22</b>	<b>3.47</b>	<b>8.98</b>	<b>NA</b>	<b>NE</b>	<b>NA</b>	
<b>GRP at Source</b>		<b>0.42</b>	<b>84.31</b>	<b>59.02</b>	<b>175.00</b>	<b>NE</b>	<b>1.69</b>	
<b>Onsite Indoor Inhalation</b>		<b>45.98</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NA</b>	<b>48,000</b>	
<b>Onsite Outdoor Inhalation</b>		<b>1,750</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NA</b>	<b>48,000</b>	
MW-5	05/08/02	0.0146	0.0232	0.0075	0.0082	0.0535	NA	
	10/29/03	<0.005	<0.005	<0.005	<0.005	<RL	<0.005	
	03/16/05	<0.005	<0.005	<0.005	<0.005	<RL	<0.005	
	06/21/05	0.000977	0.00438	0.00130	0.00483	0.011487	0.00101	
	11/04/05	<0.005	<0.005	<0.005	<0.01	<RL	<0.005	
	02/02/06	0.0077	<0.005	<0.005	<0.01	0.0077	<0.005	
	07/10/06	0.013	<0.0010	0.0039	<0.0020	0.0169	0.0044	
	09/15/06	0.0016	<0.0010	<0.0010	<0.0020	0.0016	<0.0010	
	09/03/10	Start Epsom Salt Pilot Test						
	06/22/11	0.0032	<0.0010	<0.0010	<0.0020	0.0032	<0.0010	
	12/20/12	<0.0010	<0.0050	<0.0010	<0.0050	<0.02	<0.0020	
11/21/13	0.0025	<0.0010	<0.0010	<0.0020	0.0025	0.0037		
<b>Onsite Indoor Inhalation</b>		<b>45.98</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NA</b>	<b>48,000</b>	
<b>Onsite Outdoor Inhalation</b>		<b>1,750</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NA</b>	<b>48,000</b>	

**TABLE 2**

Summary of Groundwater Analytical Data  
 Former Texaco Service Station  
 Chevron Site No. 211874  
 623 Holcombe Avenue, Mobile, Alabama  
 All results expressed as milligrams per liter (mg/L)

Sample Location	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	Total BTEX	MTBE	
MW-6 Epsom Salt Application Well	10/27/03	4.17	45.6	3.32	20.9	73.99	<0.025	
	03/16/05	0.763	7.49	1.26	4.44	13.953	0.1170	
	06/20/05	1.230	14.60	3.01	13.70	32.540	<0.0250	
	11/04/05	2.050	26.70	2.94	13.55	45.240	<0.1	
	02/02/06	1.330	21.70	3.30	14.70	41.030	<0.1	
	07/09/06	1.1	9.9	1.8	7.8	20.6	<0.050	
	09/15/06	1.9	21	3	14	39.9	<0.10	
	02/05/07	0.61	7	1.6	6.7	15.91	<0.10	
	06/14/07	0.59	6.2	0.72	3	10.51	<0.10	
	10/03/07	1.4	14.0	2.30	9.4	27.1	<0.10	
	02/15/08	0.67	9.3	1.70	8.2	19.87	<0.050	
	05/12/08	1.3	14.0	2.0	8.8	26.1	<0.10	
	08/05/08	2.6	25.0	3.2	13.0	43.8	<0.20	
	11/15/08	1.9	16.0	1.5	8.7	28.1	<0.10	
	02/04/09	2.5	24.0	2.2	14.0	42.7	<0.10	
	05/14/09	2.5	21.0	2.2	11.0	36.7	<0.10	
	08/12/09	2.4	25.0	2.5	13.0	42.9	<0.20	
	11/20/09	1.7	20.0	3.0	15.0	39.7	<0.10	
	03/12/10	1.1	12.0	1.1	5.6	19.8	<0.10	
	09/02/10	2.1	18.0	2.9	14.0	37	<0.10	
	09/03/10	Initial Epsom salt application (50 lbs)						
	12/7/2010*	1.4	15	1.9	7.7	26	<0.074	
	12/08/10	Added 60 lbs Epsom salt						
	04/07/11	1.5	17	2.8	12.0	33.3	<0.20	
	04/08/11	Added 40 lbs Epsom salt						
	06/23/11	1.3	16	2.6	14.0	33.9	<0.10	
	10/11/11	0.7	3.6	1.5	4.2	10.0	<0.037	
	10/12/11	Added 10 lbs Epsom salt						
	12/14/11	1.3	9.5	1.1	5.2	17.1	<0.037	
	03/27/12	2.2	18.0	2.6	11.0	33.8	<0.10	
06/27/12	1.3	7.9	1.5	5.4	16.1	<0.037		
09/27/12	0.44	2.4	1.1	2.3	6.2	<0.0074		
12/21/12	1.20	4.1	1.8	4.0	11.1	<0.040		
03/22/13	1.8	6.5	2.8	5.0	16.1	<0.037		
06/27/13	1.7	7.6	2.3	5.7	17.3	<0.050		
09/25/13	1.3	2.5	1.5	2.4	7.7	<0.015		
11/21/13	2.3	7.6	2.8	6.2	18.9	<0.050		
04/24/14	0.80	2.9	1.4	2.6	7.7	<0.020		
07/02/14	1.00	3.4	1.7	2.0	8.1	<0.020		
<b>SP at Source</b>		<b>0.22</b>	<b>3.47</b>	<b>8.98</b>	<b>NA</b>	<b>NE</b>	<b>NA</b>	
<b>GRP at Source</b>		<b>0.42</b>	<b>84.31</b>	<b>59.02</b>	<b>175.00</b>	<b>NE</b>	<b>1.69</b>	
<b>Onsite Indoor Inhalation</b>		<b>45.98</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NA</b>	<b>48,000</b>	
<b>Onsite Outdoor Inhalation</b>		<b>1,750</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NA</b>	<b>48,000</b>	
MW-7	10/28/03	<0.0005	0.005	0.0013	0.0068	0.0131	<0.0005	
	03/15/05	<0.0005	<0.0005	<0.0005	<0.0005	<RL	<0.0005	
	06/20/05	<0.0005	<0.0005	<0.0005	<0.0005	<RL	<0.0005	

**TABLE 2**

Summary of Groundwater Analytical Data  
Former Texaco Service Station  
Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
All results expressed as milligrams per liter (mg/L)

Sample Location	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	Total BTEX	MTBE	
<b>MW-7 Cont.</b>	11/03/05	<0.005	<0.005	<0.005	<0.01	<RL	<0.005	
	02/02/06	<0.005	0.0214	<0.005	0.0086	0.0300	<0.005	
	07/10/06	<0.0010	<0.0010	<0.0010	<0.0020	<RL	<0.0010	
	09/15/06	<0.0010	<0.0010	<0.0010	<0.0020	<RL	<0.0010	
	09/03/10	Start Epsom Salt Pilot Test						
	06/22/11	<0.0010	<0.0010	<0.0010	<0.0020	<RL	<0.0010	
	12/20/12	<0.0010	<0.0050	<0.0010	<0.0050	<0.020	<0.0020	
	11/21/13	<0.0010	0.0017	<0.0010	<0.0020	0.0017	<0.0010	
09/17/15	<0.0010	<0.0010	<0.0010	<0.0050	<0.0080	<0.0010		
<b>GRP at a POC</b>		<b>0.09</b>	<b>18.69</b>	<b>13.08</b>	<b>175</b>	<b>NE</b>	<b>0.37</b>	
<b>Offsite Indoor Inhalation</b>		<b>7.02</b>	<b>400</b>	<b>169</b>	<b>175</b>	<b>NE</b>	<b>16,612</b>	
<b>Offsite Outdoor Inhalation</b>		<b>1,750</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NE</b>	<b>48,000</b>	
<b>MW-8</b>	10/28/03	0.00062	0.0075	0.0021	0.0107	0.02092	<0.0005	
	03/15/05	<0.0005	0.0033	<0.0005	<0.0005	0.00330	<0.0005	
	06/20/05	<0.0005	<0.0005	<0.0005	<0.0005	<RL	<0.0005	
	11/03/05	<0.005	<0.005	<0.005	<0.01	<RL	<0.005	
	02/02/06	<0.005	0.00919	<0.005	<0.01	0.0092	<0.005	
	07/10/06	<0.0010	<0.0010	<0.0010	<0.0020	<RL	<0.0010	
	09/15/06	<0.0010	<0.0010	<0.0010	<0.0020	<RL	<0.0010	
	02/05/07	<0.0010	<0.0050	<0.0010	<0.0020	<0.0090	<0.0020	
	06/14/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	10/03/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	02/15/08	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	05/12/08	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	08/05/08	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	09/03/10	Start Epsom Salt Pilot Test						
	06/22/11	<0.0010	<0.0010	<0.0010	<0.0020	<RL	<0.0010	
12/20/12	<0.0010	<0.0050	<0.0010	<0.0050	<0.020	<0.0020		
11/21/13	<0.0010	0.0013	<0.0010	<0.0020	0.0013	<0.0010		
09/17/15	<0.0010	<0.0010	<0.0010	<0.0050	<0.0080	<0.0010		
<b>GRP at a POC</b>		<b>0.06</b>	<b>12.93</b>	<b>9.05</b>	<b>129.35</b>	<b>NE</b>	<b>0.26</b>	
<b>SP at a POC</b>		<b>0.03</b>	<b>0.53</b>	<b>1.38</b>	<b>NA</b>	<b>NE</b>	<b>NA</b>	
<b>Offsite Indoor Inhalation</b>		<b>7.02</b>	<b>400</b>	<b>169</b>	<b>175</b>	<b>NE</b>	<b>16,612</b>	
<b>Offsite Outdoor Inhalation</b>		<b>1,750</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NE</b>	<b>48,000</b>	
<b>MW-9</b>	10/28/03	<0.0005	0.0121	0.0026	0.0138	0.0285	0.0011	
	03/15/05	<0.0005	<0.0005	<0.0005	<0.0005	<RL	<0.0005	
	06/20/05	<0.0005	0.000580	<0.0005	<0.0005	0.000580	<0.0005	
	11/03/05	0.0128	<0.005	<0.005	0.00605	0.018850	<0.005	
	02/02/06	<0.005	0.00755	<0.005	<0.005	0.007550	<0.005	
	07/10/06	<0.0010	<0.0010	<0.0010	<0.0020	<RL	0.0011	
	09/15/06	<0.0010	<0.0010	<0.0010	<0.0020	<RL	0.0014	
	02/05/07	<0.0010	<0.0050	<0.0010	<0.0020	<0.0090	<0.0020	
	06/14/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	10/03/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	0.0014	
	02/15/08	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	05/12/08	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	

**TABLE 2**

Summary of Groundwater Analytical Data  
Former Texaco Service Station  
Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
All results expressed as milligrams per liter (mg/L)

Sample Location	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	Total BTEX	MTBE
<b>MW-9 Cont.</b>	08/05/08	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010
	09/03/10	Start Epsom Salt Pilot Test					
	06/22/11	<0.0010	<0.0010	<0.0010	<0.0020	<RL	<0.0010
	12/20/12	<0.0010	<0.0050	<0.0010	<0.0050	<0.020	<0.0020
	11/21/13	<0.0010	0.0015	<0.0010	<0.0020	0.0015	<0.0010
09/17/15	<0.0010	<0.0010	<0.0010	<0.0050	<0.0080	<0.0010	
<b>GRP at a POC</b>		<b>0.09</b>	<b>18.44</b>	<b>12.91</b>	<b>175</b>	<b>NE</b>	<b>0.37</b>
<b>SP at a POC</b>		<b>0.05</b>	<b>0.76</b>	<b>1.96</b>	<b>NA</b>	<b>NE</b>	<b>NA</b>
<b>Offsite Indoor Inhalation</b>		<b>7.02</b>	<b>400</b>	<b>169</b>	<b>175</b>	<b>NE</b>	<b>16,612</b>
<b>Offsite Outdoor Inhalation</b>		<b>1,750</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NE</b>	<b>48,000</b>
<b>MW-10</b>	10/28/03	0.00053	0.0187	0.0033	0.0173	0.0398	<0.0005
	03/15/05	<0.0005	<0.0005	<0.0005	<0.0005	<RL	<0.0005
	06/20/05	<0.0005	<0.0005	<0.0005	<0.0005	<RL	<0.0005
	11/03/05	<0.005	<0.005	<0.005	<0.01	<RL	<0.005
	02/02/06	<0.005	<0.005	<0.005	<0.01	<RL	<0.005
	07/10/06	<0.0010	<0.0010	<0.0010	<0.0020	<RL	<0.0010
	09/15/06	<0.0010	<0.0010	<0.0010	<0.0020	<RL	<0.0010
	09/03/10	Start Epsom Salt Pilot Test					
	06/22/11	<0.0010	<0.0010	<0.0010	<0.0020	<RL	<0.0010
	12/20/12	<0.0010	<0.0050	<0.0010	<0.0050	<0.020	<0.0020
11/21/13	<0.0010	0.0019	<0.0010	<0.0020	0.0019	<0.0010	
09/17/15	<0.0010	<0.0010	<0.0010	<0.0050	<0.0080	<0.0010	
<b>GRP at a POC</b>		<b>0.09</b>	<b>18.69</b>	<b>13.08</b>	<b>175</b>	<b>NE</b>	<b>0.37</b>
<b>SP at a POC</b>		<b>0.05</b>	<b>0.77</b>	<b>1.99</b>	<b>NA</b>	<b>NE</b>	<b>NA</b>
<b>Offsite Indoor Inhalation</b>		<b>7.02</b>	<b>400</b>	<b>169</b>	<b>175</b>	<b>NE</b>	<b>16,612</b>
<b>Offsite Outdoor Inhalation</b>		<b>1,750</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NE</b>	<b>48,000</b>
<b>MW-11</b>	10/29/03	<0.0005	0.00069	<0.0005	0.0006	0.0013	<0.0005
	03/15/05	<0.0005	<0.0005	<0.0005	<0.0005	<RL	<0.0005
	06/20/05	<0.0005	<0.0005	<0.0005	<0.0005	<RL	<0.0005
	11/03/05	<0.005	0.00814	0.00593	0.02175	0.0358	<0.005
	02/02/06	<0.005	<0.005	<0.005	<0.01	<RL	<0.005
	07/09/06	Dry at 7.21					
	09/15/06	<0.0010	<0.0010	<0.0010	<0.0020	<RL	<0.0010
	09/03/10	Start Epsom Salt Pilot Test					
	12/20/12	<0.0010	<0.0050	<0.0010	<0.0050	<0.020	<0.0020
	11/21/13	<0.0010	0.0023	<0.0010	<0.0020	0.0023	<0.0010
<b>GRP at a POC</b>		<b>0.23</b>	<b>45.77</b>	<b>32.04</b>	<b>175</b>	<b>NE</b>	<b>0.92</b>
<b>SP at a POC</b>		<b>0.12</b>	<b>1.88</b>	<b>4.87</b>	<b>NA</b>	<b>NE</b>	<b>NA</b>
<b>Offsite Indoor Inhalation</b>		<b>7.02</b>	<b>400</b>	<b>169</b>	<b>175</b>	<b>NE</b>	<b>16,612</b>
<b>Offsite Outdoor Inhalation</b>		<b>1,750</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NE</b>	<b>48,000</b>
<b>MW-12</b>	10/29/03	<0.0005	0.068	0.54	2.557	3.165	<0.0005
	03/15/05	0.00472	0.0473	0.619	1.204	1.875	0.1170
	06/20/05	<0.0005	0.000718	0.0222	0.0419	0.0648	<0.0005
	11/03/05	0.0362	0.007980	0.2730	0.6020	0.9192	<0.005
	02/03/06	<0.005	<0.005	0.0484	0.0751	0.1235	<0.005
	07/09/06	Dry at 7.10					

**TABLE 2**

Summary of Groundwater Analytical Data  
 Former Texaco Service Station  
 Chevron Site No. 211874  
 623 Holcombe Avenue, Mobile, Alabama  
 All results expressed as milligrams per liter (mg/L)

Sample Location	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	Total BTEX	MTBE	
MW-12 Cont.	09/15/06	0.29	0.017	0.34	0.49	1.1370	<0.0010	
	02/05/07	<0.0010	<0.0050	<0.0010	<0.0020	<0.0090	<0.0020	
	06/14/07	0.070	0.0035	0.12	0.13	0.3235	<0.0010	
	10/03/07	0.0043	<0.0010	0.0091	<0.0020	0.0134	<0.0010	
	02/15/08	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	05/12/08	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	08/05/08	<0.0010	<0.0010	<0.0010	<0.0020	<RL	<0.0010	
	09/03/10	Start Epsom Salt Pilot Test						
	12/20/12	<0.0010	<0.0050	<0.0010	<0.0050	<0.020	<0.0020	
	11/21/13	0.0010	0.0030	<0.0010	<0.0020	0.0040	<0.0010	
09/17/15	0.0084	<0.0010	0.0095	<0.0050	0.0179	<0.0010		
<b>SP at Source</b>		<b>0.22</b>	<b>3.47</b>	<b>8.98</b>	<b>NA</b>	<b>NE</b>	<b>NA</b>	
<b>MW-12 GRP at Source</b>		<b>0.42</b>	<b>84.31</b>	<b>59.02</b>	<b>175.00</b>	<b>NE</b>	<b>1.69</b>	
<b>Offsite Indoor Inhalation</b>		<b>7.02</b>	<b>400</b>	<b>169</b>	<b>175</b>	<b>NE</b>	<b>16,611.57</b>	
<b>Offsite Outdoor Inhalation</b>		<b>1,750</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NE</b>	<b>48,000</b>	
MW-13 Epsom Salt Application Well	03/15/05	0.7210	0.03050	0.0373	0.2930	1.08180	0.00736	
	06/20/05	2.2900	0.08370	0.1260	1.1490	3.64870	<0.0005	
	11/03/05	<0.005	0.11100	0.1310	1.0090	1.25100	0.6820	
	02/02/06	2.5600	0.12100	0.2090	1.3310	4.22100	<0.1	
	07/10/06	3.7	0.20	0.31	1.6	5.81	<0.025	
	09/15/06	4.6	0.31	0.42	2.1	7.43	<0.025	
	02/05/07	5.2	0.42	0.5	2.7	8.82	<0.10	
	06/14/07	2.3	0.11	0.084	0.44	2.934	<0.020	
	10/03/07	5.0	0.44	0.5	2.5	8.44	<0.025	
	02/15/08	5.4	0.22	0.37	2.8	8.79	<0.025	
	05/12/08	4.9	0.24	0.24	1.9	7.28	<0.025	
	08/05/08	4.4	0.24	0.34	1.9	6.88	<0.050	
	11/15/08	5.3	0.29	0.45	2.7	8.74	<0.025	
	02/04/09	5.5	0.32	0.50	3	9.32	<0.025	
	05/14/09	4.4	0.14	0.23	1.5	6.27	<0.020	
	08/12/09	4.8	0.21	0.39	2.2	7.60	<0.050	
	11/20/09	3.4	0.20	0.29	1.6	5.49	<0.050	
	03/12/10	1.8	0.053	0.11	0.8	2.76	<0.010	
	09/02/10	3.9	0.094	0.29	1.5	5.78	<0.015	
	09/03/10	Initial Epsom salt application (50 lbs)						
	12/07/10*	7.1	0.12	0.32	0.88	8.42	<0.037	
	12/08/10	Added 75 lbs Epsom salt						
	04/07/11	3.7	0.07	0.32	1.10	5.19	<0.025	
	12/08/10	Added 25 lbs Epsom salt						
	06/23/11	5.7	0.16	0.55	2	8.41	<0.050	
	10/11/11	6.3	0.20	0.65	2.2	9.35	<0.037	
	12/14/11	5.6	0.23	0.56	1.8	8.19	<0.037	
	12/15/11	Added 40 lbs Epsom salt						
	03/27/11	5.9	0.18	0.56	2.2	8.84	<0.050	
	06/28/12	Added 10 lbs Epsom salt						
06/27/12	3.3	0.039	0.12	0.34	3.799	<0.019		

**TABLE 2**

Summary of Groundwater Analytical Data  
 Former Texaco Service Station  
 Chevron Site No. 211874  
 623 Holcombe Avenue, Mobile, Alabama  
 All results expressed as milligrams per liter (mg/L)

Sample Location	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	Total BTEX	MTBE	
<b>MW-13 Cont. Epsom Salt Application Well</b>	09/27/12	5.9	0.130	0.49	1.7	8.22	<0.019	
	12/21/12	4.40	0.20	0.47	2.0	7.1	<0.040	
	03/22/13	2.5	<0.014	0.13	0.092	2.72	<0.015	
	06/27/13	4.6	0.10	0.45	1.6	6.75	<0.050	
	09/25/13	5.5	0.12	0.51	1.7	7.83	<0.037	
	11/21/13	5.8	0.15	0.49	1.9	8.34	<0.025	
	04/24/14	1.1	<0.010	0.072	0.11	1.28	<0.010	
	07/02/14	3.9	0.065	0.25	1.20	5.42	<0.020	
	11/14/14	5.3	0.110	0.55	1.70	7.66	<0.050	
	09/17/15	7.3	0.23	0.52	2.3	10.35	<0.050	
<b>GRP at a POC</b>		<b>0.13</b>	<b>26.61</b>	<b>18.63</b>	<b>175</b>	<b>NE</b>	<b>0.53</b>	
<b>Offsite Indoor Inhalation</b>		<b>7.02</b>	<b>400</b>	<b>169</b>	<b>175</b>	<b>NE</b>	<b>16,612</b>	
<b>Offsite Outdoor Inhalation</b>		<b>1,750</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NE</b>	<b>48,000</b>	
<b>MW-14</b>	03/15/05	0.000988	<0.0005	<0.0005	<0.0005	0.000988	<0.0005	
	06/20/05	0.010300	<0.0005	<0.0005	<0.0005	0.010300	<0.0005	
	11/03/05	0.047300	<0.005	<0.005	<0.005	0.047300	<0.005	
	02/02/06	0.132000	0.0109	<0.005	0.0069	0.149760	<0.005	
	07/10/06	0.30	<0.0050	<0.0050	<0.0010	0.30	<0.0050	
	09/15/06	0.40	0.0056	<0.0020	<0.0040	0.4056	<0.0020	
	02/05/07	0.21	<0.0050	<0.0010	<0.0020	0.21	<0.0020	
	06/14/07	0.49	0.0050	<0.0020	<0.0040	0.495	<0.0020	
	10/03/07	0.093	<0.0010	<0.0010	<0.0020	0.093	<0.0010	
	02/15/08	0.0038	<0.0010	<0.0010	<0.0020	0.0038	<0.0010	
	05/12/08	0.0012	<0.0010	<0.0010	<0.0020	0.0012	<0.0010	
	08/05/08	0.14	<0.0010	<0.0010	<0.0020	0.1400	<0.0010	
	09/03/10	Start Epsom Salt Pilot Test						
	06/22/11	0.650	0.0088	<0.0050	<0.010	0.6588	<0.0050	
	12/14/11	0.460	0.006	<0.0010	0.0048	0.4708	<0.0015	
	12/20/12	0.65	<0.025	<0.0050	<0.025	0.65	<0.010	
	03/22/13	0.012	<0.00070	<0.00050	<0.0016	0.012	<0.00074	
	06/27/13	0.015	<0.0010	<0.0010	<0.0010	0.015	<0.0010	
	9/25/13	0.27	<0.0014	0.0015	0.0033	0.2748	<0.0015	
	11/21/13	0.47	0.0061	<0.0050	<0.010	0.4761	<0.0050	
04/24/14	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010		
07/02/14	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010		
11/14/14	0.45	0.0036	0.0024	<0.010	0.456	<0.0020		
09/17/15	1.3	0.034	<0.010	<0.050	1.334	<0.0010		
<b>GRP at a POC</b>		<b>0.11</b>	<b>21.22</b>	<b>14.85</b>	<b>175</b>	<b>NE</b>	<b>0.42</b>	
<b>Offsite Indoor Inhalation</b>		<b>7.02</b>	<b>400</b>	<b>169</b>	<b>175</b>	<b>NE</b>	<b>16,612</b>	
<b>Offsite Outdoor Inhalation</b>		<b>1,750</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NE</b>	<b>48,000</b>	
<b>MW-15</b>	03/15/05	<0.0005	<0.0005	<0.0005	<0.0005	<RL	<0.0005	
	06/20/05	<0.0005	<0.0005	<0.0005	<0.0005	<RL	<0.0005	
	11/04/05	<0.005	<0.005	<0.005	<0.01	<RL	<0.005	
	02/03/06	<0.005	<0.005	<0.005	<0.01	<RL	<0.005	
	07/10/06	<0.0010	<0.0010	<0.0010	<0.0020	<RL	<0.0010	
09/15/06	<0.0010	<0.0010	<0.0010	<0.0020	<RL	<0.0010		

**TABLE 2**

Summary of Groundwater Analytical Data  
Former Texaco Service Station  
Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
All results expressed as milligrams per liter (mg/L)

Sample Location	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	Total BTEX	MTBE	
MW-15 Cont.	02/05/07	<0.0010	<0.0050	<0.0010	<0.0020	<0.0090	<0.0020	
	06/14/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	10/03/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	02/15/08	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	05/12/08	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	08/05/08	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	09/03/10	Start Epsom Salt Pilot Test						
	06/22/11	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	12/20/12	<0.0010	<0.0050	<0.0010	<0.0050	<0.020	<0.0020	
	11/21/13	<0.0010	0.0015	<0.0010	<0.0050	0.0015	<0.0010	
09/17/15	<0.0010	<0.0010	<0.0010	<0.0050	<0.0080	<0.0010		
<b>GRP at a POC</b>		<b>0.25</b>	<b>50.94</b>	<b>35.66</b>	<b>175</b>	<b>NE</b>	<b>1.02</b>	
<b>Offsite Indoor Inhalation</b>		<b>7.02</b>	<b>400</b>	<b>169</b>	<b>175</b>	<b>NE</b>	<b>16,612</b>	
<b>Offsite Outdoor Inhalation</b>		<b>1,750</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NE</b>	<b>48,000</b>	
MW-16	03/15/05	<0.0005	0.000562	<0.0005	<0.0005	0.000562	<0.0005	
	06/20/05	<0.0005	<0.0005	<0.0005	<0.0005	<RL	<0.0005	
	11/04/05	<0.005	<0.005	<0.005	<0.01	<RL	<0.005	
	02/03/06	<0.005	<0.005	<0.005	<0.01	<RL	<0.005	
	07/10/06	<0.0010	<0.0010	<0.0010	<0.0020	<RL	<0.0010	
	09/15/06	<0.0010	<0.0010	<0.0010	<0.0020	<RL	<0.0010	
	09/03/10	Start Epsom Salt Pilot Test						
	06/22/11	<0.0010	<0.0010	<0.0010	<0.0020	<RL	<0.0010	
	12/20/12	<0.0010	<0.0050	<0.0010	<0.0050	<0.020	0.0028	
	11/21/13	<0.0010	0.0011	<0.0010	<0.0050	0.0011	<0.0010	
09/17/15	<0.0010	<0.0010	<0.0010	<0.0050	<0.0080	<0.0010		
<b>GRP at a POC</b>		<b>0.22</b>	<b>44.17</b>	<b>30.92</b>	<b>175</b>	<b>NE</b>	<b>0.88</b>	
<b>Offsite Indoor Inhalation</b>		<b>7.02</b>	<b>400</b>	<b>169</b>	<b>175</b>	<b>NE</b>	<b>16,612</b>	
<b>Offsite Outdoor Inhalation</b>		<b>1,750</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NE</b>	<b>48,000</b>	
MW-17	07/10/06	<0.0010	<0.0010	<0.0010	<0.0020	<RL	<0.0010	
	09/15/06	0.0010	<0.0010	<0.0010	<0.0020	0.0010	<0.0010	
	02/05/07	<0.0010	<0.0050	<0.0010	<0.0020	<0.0090	<0.0020	
	06/14/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	10/03/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	02/15/08	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	05/12/08	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	08/05/08	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	09/03/10	Start Epsom Salt Pilot Test						
	06/22/11	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	12/14/11	<0.0034	<0.0007	<0.005	<0.0016	<0.012	<0.00074	
	03/27/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	06/27/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	09/27/12	<0.00034	<0.00070	<0.00050	<0.0016	<0.00314	<0.00074	
	12/20/12	<0.0010	<0.0050	<0.0010	<0.0050	<0.020	<0.0020	
	03/22/13	<0.00034	<0.00070	<0.00050	<0.0016	<0.0031	<0.00074	
06/27/13	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010		
09/25/13	<0.0034	<0.00070	<0.00050	<0.0016	<0.0031	<0.00074		

**TABLE 2**

Summary of Groundwater Analytical Data  
 Former Texaco Service Station  
 Chevron Site No. 211874  
 623 Holcombe Avenue, Mobile, Alabama  
 All results expressed as milligrams per liter (mg/L)

Sample Location	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	Total BTEX	MTBE
<b>MW-17 Cont.</b>	11/21/13	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010
	04/24/14	0.0030	<0.0010	<0.0010	<0.0020	0.0030	<0.0010
	07/02/14	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010
	11/14/14	<0.0010	<0.0010	<0.0010	<0.0050	<0.0080	<0.0010
	09/17/15	<0.0010	<0.0010	<0.0010	<0.0050	<0.0080	<0.0010
<b>DW-1</b>	10/27/03	0.0428	0.244	0.0286	0.1384	0.4538	<0.0005
	03/16/05	3.9100	5.800	0.8950	4.2700	14.8750	0.0778
	06/21/05	5.1000	9.150	1.0700	5.1800	20.5000	<0.0100
	11/03/05	2.1500	3.320	0.0204	1.0560	6.5464	<0.005
	02/02/06	4.0300	6.400	0.6180	2.8810	13.9290	<0.25
	07/09/06	3.5	4.4	0.28	1.3	9.48	<0.025
	09/15/06	0.88	2.3	0.18	0.79	4.15	<0.0020
	02/05/07	0.15	0.87	0.12	0.55	1.69	<0.010
	06/14/07	0.19	0.70	0.10	0.49	1.48	<0.005
	10/03/07	0.090	0.55	0.13	0.61	1.380	<0.002
	02/15/08	0.026	0.094	0.038	0.17	0.328	<0.001
	05/12/08	0.12	0.18	0.040	0.20	0.540	<0.001
	08/05/08	0.11	0.22	0.054	0.24	0.624	<0.001
	09/03/10	Start Epsom Salt Pilot Test					
	06/22/11	0.024	0.026	0.0077	0.034	0.0917	<0.0010
12/20/12	0.250	0.200	0.0370	0.034	0.521	0.17	
11/21/13	0.16	0.12	0.029	0.14	0.449	<0.020	
<b>SP at Source</b>		<b>0.22</b>	<b>3.47</b>	<b>8.98</b>	<b>NA</b>	<b>NE</b>	<b>NA</b>
<b>GRP at Source</b>		<b>0.42</b>	<b>84.31</b>	<b>59.02</b>	<b>175.00</b>	<b>NE</b>	<b>1.69</b>
<b>Onsite Indoor Inhalation</b>		<b>45.98</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NA</b>	<b>48,000</b>
<b>Onsite Outdoor Inhalation</b>		<b>1,750</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NA</b>	<b>48,000</b>
<b>DW-2</b>	03/16/05	0.00113	0.00462	0.000647	0.003941	0.010338	<0.0005
	06/21/05	<0.0005	0.00104	<0.0005	<0.0005	0.001040	<0.0005
	11/04/05	<0.005	<0.005	<0.005	<0.01	<RL	<0.005
	02/02/06	0.00518	0.0204	<0.005	0.0090	0.0346	<0.005
	07/09/06	<0.0010	<0.0010	<0.0010	<0.0020	<RL	<0.0010
	09/15/06	0.020	<0.0010	0.0065	0.0025	0.0290	<0.0010
	02/05/07	<0.0010	<0.0050	<0.0010	<0.0020	<0.0090	<0.0020
	06/14/07	0.0015	0.017	<0.0010	0.0031	0.0216	<0.0010
	10/03/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010
	02/15/08	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010
	05/12/08	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010
	08/05/08	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010
	09/03/10	Start Epsom Salt Pilot Test					
06/22/11	0.0015	<0.0010	<0.0010	<0.0020	0.0015	<0.0010	
12/19/12	Dry						
11/21/13	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
<b>SP at Source</b>		<b>0.22</b>	<b>3.47</b>	<b>8.98</b>	<b>NA</b>	<b>NE</b>	<b>NA</b>
<b>GRP at Source</b>		<b>0.42</b>	<b>84.31</b>	<b>59.02</b>	<b>175.00</b>	<b>NE</b>	<b>1.69</b>
<b>Onsite Indoor Inhalation</b>		<b>45.98</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NA</b>	<b>48,000</b>
<b>Onsite Outdoor Inhalation</b>		<b>1,750</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NA</b>	<b>48,000</b>
<b>DW-3</b>	7/9/2006	0.0095	0.0022	0.0013	0.0026	0.0156	<0.0010
	09/15/06	0.0044	<0.0010	<0.0010	<0.0020	0.0044	<0.0010
	02/05/07	0.038	0.0059	0.0028	0.0064	0.0531	<0.0020
	06/14/07	0.0044	0.001	<0.0010	<0.0020	0.0054	<0.0010
	10/03/07	0.0073	<0.0010	<0.0010	<0.0020	0.0073	<0.0010

**TABLE 2**

Summary of Groundwater Analytical Data  
 Former Texaco Service Station  
 Chevron Site No. 211874  
 623 Holcombe Avenue, Mobile, Alabama  
 All results expressed as milligrams per liter (mg/L)

Sample Location	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	Total BTEX	MTBE	
<b>DW-3 Cont.</b>	02/15/08	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	05/12/08	0.0011	<0.0010	<0.0010	<0.0020	0.0011	<0.0010	
	08/05/08	0.0058	0.001	<0.0010	<0.0020	0.0068	<0.0010	
	09/03/10	Start Epsom Salt Pilot Test						
	06/22/11	0.0016	0.0011	<0.0010	<0.0020	0.0027	<0.0010	
	12/20/12	0.0016	<0.0050	<0.0010	<0.0050	0.0016	<0.0020	
	11/21/13	0.0019	0.0015	<0.0010	<0.0020	0.0034	<0.0010	
<b>SP at Source</b>		<b>0.22</b>	<b>3.47</b>	<b>8.98</b>	<b>NA</b>	<b>NE</b>	<b>NA</b>	
<b>GRP at Source</b>		<b>0.42</b>	<b>84.31</b>	<b>59.02</b>	<b>175.00</b>	<b>NE</b>	<b>1.69</b>	
<b>Onsite Indoor Inhalation</b>		<b>45.98</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NA</b>	<b>48,000</b>	
<b>Onsite Outdoor Inhalation</b>		<b>1,750</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NA</b>	<b>48,000</b>	
<b>DW-4</b>	7/9/2006	0.11	0.24	0.037	0.2	0.587	<0.0010	
	09/15/06	0.028	0.0013	0.0068	0.0081	0.0442	<0.0010	
	02/05/07	<0.0010	<0.0050	<0.0010	<0.0020	<0.0090	<0.0020	
	06/14/07	0.0034	<0.0010	<0.0010	<0.0020	0.0034	<0.0010	
	10/03/07	0.0025	<0.0010	<0.0010	<0.0020	0.0025	<0.0010	
	02/15/08	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	05/12/08	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	08/05/08	0.011	<0.0010	<0.0010	<0.0020	0.011	<0.0010	
	09/03/10	Start Epsom Salt Pilot Test						
	06/22/11	0.17	<0.0020	0.013	0.0057	0.1887	<0.0020	
	12/20/12	0.078	<0.0050	<0.0010	<0.0050	0.078	<0.0020	
11/21/13	0.027	0.0016	<0.0010	0.003	0.0316	<0.0010		
<b>SP at Source</b>		<b>0.22</b>	<b>3.47</b>	<b>8.98</b>	<b>NA</b>	<b>NE</b>	<b>NA</b>	
<b>GRP at Source</b>		<b>0.42</b>	<b>84.31</b>	<b>59.02</b>	<b>175.00</b>	<b>NE</b>	<b>1.69</b>	
<b>Onsite Indoor Inhalation</b>		<b>45.98</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NA</b>	<b>48,000</b>	
<b>Onsite Outdoor Inhalation</b>		<b>1,750</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NA</b>	<b>48,000</b>	
<b>TW-1</b>	05/08/02	0.0008	0.0116	0.0024	0.0106	0.0254	<0.005	
	10/29/03	<0.0005	<0.0005	<0.0005	<0.0005	<RL	<0.0005	
	03/15/05	<0.0005	<0.0005	<0.0005	<0.0005	<RL	<0.0005	
	06/20/05	<0.0005	<0.0005	<0.0005	<0.0005	<RL	<0.0005	
	11/03/05	<0.005	<0.005	<0.005	<0.01	<RL	<0.005	
	02/03/06	<0.005	0.0052	<0.005	<0.01	0.0052	<0.005	
	07/10/06	<0.0010	<0.0010	<0.0010	<0.0020	<RL	<0.0010	
	09/15/06	<0.0010	<0.0010	<0.0010	<0.0020	<RL	<0.0010	
	02/05/07	<0.0010	<0.0050	<0.0010	<0.0020	<0.0090	<0.0020	
	06/14/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	10/03/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	02/15/08	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	05/12/08	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	08/05/08	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	09/03/10	Start Epsom Salt Pilot Test						
06/22/11	<0.0010	<0.0010	<0.0010	<0.0020	<RL	<0.0010		
09/20/12	<0.0010	<0.0050	<0.0010	<0.0050	<0.020	<0.0020		
<b>GRP at a POC</b>		<b>0.33</b>	<b>66.79</b>	<b>46.75</b>	<b>175</b>	<b>NA</b>	<b>1.34</b>	
<b>Offsite Indoor Inhalation</b>		<b>7.02</b>	<b>400</b>	<b>169</b>	<b>175</b>	<b>NE</b>	<b>16,612</b>	
<b>Offsite Outdoor Inhalation</b>		<b>1,750</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NE</b>	<b>48,000</b>	

**TABLE 2**

Summary of Groundwater Analytical Data  
Former Texaco Service Station  
Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
All results expressed as milligrams per liter (mg/L)

Sample Location	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	Total BTEX	MTBE	
TW-2	05/07/02	12.8	37.1	3.18	15.86	68.94	0.695	
	10/27/03	3.32	9.59	0.9	5.2	19.01	<0.01	
	03/16/05	0.702	1.59	0.339	1.231	3.862	0.042	
	06/21/05	0.427	1.04	0.305	1.086	2.858	<0.0005	
	11/04/05	4.120	11.70	1.500	7.440	24.760	<0.005	
	02/02/06	1.200	3.76	0.634	2.831	8.425	<0.25	
	07/09/06	1.3	2.4	0.50	1.5	5.7	<0.010	
	09/15/06	0.17	0.22	0.11	0.65	1.15	<0.0010	
	02/05/07	0.14	0.16	0.047	0.23	0.577	<0.0040	
	06/14/07	0.54	0.61	0.062	0.25	1.462	<0.0010	
	10/03/07	0.35	0.25	0.21	0.51	1.32	<0.0020	
	02/15/08	0.091	0.012	0.031	0.14	0.274	<0.0010	
	05/12/08	0.49	0.11	0.13	0.35	1.08	<0.0010	
	08/05/08	0.30	0.026	0.13	0.25	0.706	<0.0050	
	09/03/10	Start Epsom Salt Pilot Test						
	06/22/11	5.8	14	3.40	16	39.2	<0.10	
	12/14/11	5.4	13	2.50	12	32.9	<0.074	
	12/20/12	2.5	4.1	0.43	1.9	8.93	<0.040	
	03/22/13	6.0	13.0	1.20	5.8	26.0	<0.074	
	06/27/13	4.6	12.0	2.70	12	31.3	<0.10	
09/25/13	2.5	5.5	0.83	3.6	12.4	<0.037		
11/21/13	4.3	16.0	2.90	13	36.2	<0.10		
04/24/14	2.3	5.7	0.66	3.1	11.8	<0.050		
07/02/14	1.9	4.1	0.95	3.4	10.4	<0.020		
<b>SP at Source</b>		<b>0.22</b>	<b>3.47</b>	<b>8.98</b>	<b>NA</b>	<b>NE</b>	<b>NA</b>	
<b>GRP at Source</b>		<b>0.42</b>	<b>84.31</b>	<b>59.02</b>	<b>175.00</b>	<b>NE</b>	<b>1.69</b>	
<b>Onsite Indoor Inhalation</b>		<b>45.98</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NA</b>	<b>48,000</b>	
<b>Onsite Outdoor Inhalation</b>		<b>1,750</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NA</b>	<b>48,000</b>	
TW-3	05/07/02	0.0069	0.04	<0.005	0.0063	0.0532	NA	
	10/28/03	<0.005	<0.005	<0.005	<0.005	<RL	<0.005	
	03/16/05	<0.005	<0.005	<0.005	<0.005	<RL	<0.005	
	06/21/05	<0.0005	<0.0005	<0.0005	<0.0005	<RL	<0.0005	
	11/04/05	<0.005	<0.005	<0.005	<0.01	<RL	<0.005	
	02/02/06	<0.005	0.0142	<0.005	0.00707	0.0213	<0.005	
	07/10/06	<0.0010	<0.0010	<0.0010	<0.0020	<RL	<0.0010	
	09/15/06	0.0032	0.0045	0.0022	0.013	0.0229	<0.0010	
	02/05/07	<0.0010	<0.0010	0.0023	<0.0020	0.0023	<0.0020	
	06/14/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	10/03/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	05/12/08	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	08/05/08	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
	09/03/10	Start Epsom Salt Pilot Test						
	06/22/11	<0.0010	<0.0010	<0.0010	<0.0020	<0.0050	<0.0010	
12/20/12	<0.0010	<0.0050	<0.0010	<0.0020	<0.020	<0.0020		
11/21/13	<0.0010	0.0015	<0.0010	<0.0020	0.0015	<0.0010		
<b>Onsite Indoor Inhalation</b>		<b>45.98</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NA</b>	<b>48,000</b>	
<b>Onsite Outdoor Inhalation</b>		<b>1,750</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NA</b>	<b>48,000</b>	

**TABLE 2**

Summary of Groundwater Analytical Data  
 Former Texaco Service Station  
 Chevron Site No. 211874  
 623 Holcombe Avenue, Mobile, Alabama  
 All results expressed as milligrams per liter (mg/L)

Sample Location	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	Total BTEX	MTBE	
TW-4	05/07/02	0.105	0.038	0.0898	0.4237	0.6565	NA	
	10/28/03	0.0101	<0.005	0.0185	0.0149	0.0435	<0.005	
	03/16/05	0.1030	<0.005	0.0518	0.1460	0.3008	<0.005	
	06/21/05	0.2400	0.00947	0.1540	0.37363	0.77710	<0.0005	
	11/04/05	0.3290	0.02150	0.1780	0.38223	0.91073	0.0084	
	02/02/06	0.4630	0.05860	0.2410	0.18320	0.94580	0.00972	
	07/10/06	1.0	0.015	0.50	0.50	2.015	0.015	
	09/15/06	0.72	0.0042	0.27	0.088	1.0822	0.014	
	02/05/07	0.14	0.016	0.06	0.028	0.244	<0.0040	
	06/14/07	1.30	0.36	0.30	0.43	2.39	0.013	
	10/03/07	2.10	0.068	1.20	0.44	3.808	<0.010	
	05/12/08	0.058	<0.001	0.036	0.003	0.097	<0.001	
	08/05/08	1.60	0.054	0.71	0.33	2.694	<0.010	
	11/15/08	0.69	0.0078	0.23	0.021	0.9488	0.012	
	02/04/09	0.37	0.0029	0.062	<0.004	0.4349	<0.002	
	05/14/09	0.13	0.0017	0.019	<0.002	0.1507	0.0026	
	09/03/10	Start Epsom Salt Pilot Test						
06/22/11	0.22	0.026	0.065	0.046	0.357	0.0065		
09/20/12	0.042	<0.010	0.011	<0.010	0.053	0.0074		
11/21/13	0.020	0.0017	<0.0010	<0.0020	0.0217	0.0025		
<b>Onsite Indoor Inhalation</b>		<b>45.98</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NA</b>	<b>48,000</b>	
<b>Onsite Outdoor Inhalation</b>		<b>1,750</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NA</b>	<b>48,000</b>	
RW-1 Epsom Salt Application Well	07/09/06	8.4	35	3.6	17	64	<0.20	
	09/15/06	8.0	39	4.1	20	71.1	<0.10	
	02/05/07	7.4	28	4.2	21	60.6	<0.20	
	06/14/07	1.9	3.7	0.24	1.5	7.34	<0.10	
	10/03/07	6.9	27	4.9	23	61.8	<0.20	
	02/15/08	5.2	18	3.2	17	43.4	<0.10	
	05/12/08	4.7	20	3.2	17	44.9	<0.20	
	08/05/08	4.3	16	3.4	16	39.7	<0.10	
	11/15/08	5.5	19	3.2	18	45.7	<0.10	
	02/04/09	6.1	23	3.8	20	52.9	<0.10	
	05/14/09	3.9	14	3	15	35.9	<0.10	
	08/12/09	4.7	18	3.5	18	44.2	<0.10	
	11/20/09	3.7	18	3.5	18	43.2	<0.050	
	03/12/10	2.9	9.5	2.6	13	28.0	<0.050	
	09/02/10	1.5	4.6	1.7	8	15.8	<0.050	
	09/03/10	Initial Epsom Salt Application (50 lbs)						
	12/7/2010*	5.8	16	2.8	14	38.6	<0.074	
	12/08/10	Added 70 lbs Epsom salt						
	04/07/11	4.3	14	4.6	21	43.9	<0.10	
	04/08/11	Added 25 lbs Epsom salt						
06/23/11	5.5	20	4.9	24	54.4	<0.10		
10/11/11	3.5	13.0	3.2	15.0	34.7	<0.074		
10/12/11	Added 10 lbs Epsom salt							
12/14/11	3.6	11.0	3.1	14.0	31.7	<0.074		

**TABLE 2**

Summary of Groundwater Analytical Data  
 Former Texaco Service Station  
 Chevron Site No. 211874  
 623 Holcombe Avenue, Mobile, Alabama  
 All results expressed as milligrams per liter (mg/L)

Sample Location	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	Total BTEX	MTBE
RW-1 Cont. Epsom Salt Application Well	12/15/11	Added 50 lbs Epsom salt					
	03/27/12	3.3	12.0	3.8	16.0	35.1	<0.050
	06/08/12	Added 40 lbs Epsom salt					
	06/27/12	2.8	7.3	3.5	11.0	24.6	<0.037
	09/27/12	2.8	6.7	3.8	10.0	23.3	<0.019
	12/21/12	1.5	5.5	1.9	7.0	15.9	<0.040
	03/22/13	3.2	8.7	3.0	11.0	25.9	<0.037
	05/15/13	Added 15 lbs Epsom salt					
	06/27/13	3.1	10.0	4.2	17.0	34.3	<0.10
	09/25/13	2.1	6.3	2.9	11.0	22.3	<0.037
	11/21/13	2.8	7.6	3.3	12.0	25.7	<0.050
	04/24/14	1.9	2.7	1.3	4.8	10.7	<0.020
07/02/14	3.1	10.0	4.7	19.0	36.8	<0.050	
<b>SP at Source</b>		<b>0.22</b>	<b>3.47</b>	<b>8.98</b>	<b>NA</b>	<b>NE</b>	<b>NA</b>
<b>GRP at Source</b>		<b>0.42</b>	<b>84.31</b>	<b>59.02</b>	<b>175.00</b>	<b>NE</b>	<b>1.69</b>
<b>Onsite Indoor Inhalation</b>		<b>45.98</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NA</b>	<b>48,000</b>
<b>Onsite Outdoor Inhalation</b>		<b>1,750</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NA</b>	<b>48,000</b>
TP-1 Epsom Salt Application Well	07/09/06	6.9	4.7	0.81	4.6	17.01	<0.050
	09/15/06	6.4	9.6	1.7	9.2	26.90	<0.050
	02/05/07	7.1	11	2.2	12	32.30	<0.10
	06/14/07	2.0	1.4	0.096	0.73	4.23	<0.050
	10/03/07	4.8	10	2.6	15	32.40	<0.050
	02/15/08	4.5	13	2.1	13	32.60	<0.050
	05/12/08	5.0	15	2.1	14	36.10	<0.20
	08/05/08	5.6	7.2	2.2	11	26.00	<0.050
	11/15/08	7.1	8.9	1.8	8.7	26.50	<0.050
	02/04/09	4.7	9	2	11	26.70	<0.050
	05/14/09	5.7	3.5	1.9	5.8	16.90	<0.025
	08/12/09	1.2	7.5	1.6	10.0	20.30	<0.050
	11/30/09	3.2	7.0	1.4	7.5	19.10	<0.05
	03/12/10	0.81	1.7	0.33	2.1	4.94	<0.010
	09/02/10	3.60	1.6	1.7	5.5	12.40	<0.015
	09/03/10	Initial Epsom Salt Application (45 lbs)					
	12/7/2010*	3.4	1.9	2.1	4.2	11.60	<0.015
	12/08/10	Added 75 lbs Epsom salt					
	04/07/11	2.2	0.39	2.5	2.8	7.89	<0.020
	04/08/11	Added 25 lbs Epsom salt					
	06/23/11	2.4	0.061	2.7	1.2	6.361	<0.020
	10/11/11	0.60	0.20	1.80	0.70	3.30	<0.15
	10/12/11	Added 10 lbs Epsom salt					
	12/14/11	0.47	<0.007	2.00	0.12	2.59	<0.0074
	12/15/11	Added 10 lbs Epsom salt					
	03/27/12	1.20	0.048	2.40	0.35	4.00	<0.020
	06/27/12	0.048	<0.0070	2.00	0.019	2.07	<0.0074
06/28/12	Added 10 lbs Epsom salt						
09/27/12	0.120	0.0062	1.40	0.032	1.56	<0.0037	

**TABLE 2**

Summary of Groundwater Analytical Data  
 Former Texaco Service Station  
 Chevron Site No. 211874  
 623 Holcombe Avenue, Mobile, Alabama  
 All results expressed as milligrams per liter (mg/L)

Sample Location	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	Total BTEX	MTBE
<b>TP-1 Cont. Epsom Salt Application Well</b>	12/21/12	0.430	0.0320	1.30	0.086	1.85	<0.010
	03/22/13	0.55	0.078	1.30	0.12	2.05	<0.0074
	05/15/13	Added 10 lbs Epsom salt					
	06/27/13	0.060	<0.0050	0.49	<0.010	0.55	<0.0050
	09/25/13	0.330	<0.0070	0.67	0.031	1.03	<0.0074
	11/21/13	0.190	0.0060	0.23	0.023	0.45	<0.0010
	04/24/14	1.5	0.15	0.31	0.22	2.18	<0.010
	07/02/14	0.60	0.032	0.56	0.14	1.33	<0.0050
<b>SP at Source</b>		<b>0.22</b>	<b>3.47</b>	<b>8.98</b>	<b>NA</b>	<b>NE</b>	<b>NA</b>
<b>GRP at Source</b>		<b>0.42</b>	<b>84.31</b>	<b>59.02</b>	<b>175.00</b>	<b>NE</b>	<b>1.69</b>
<b>Onsite Indoor Inhalation</b>		<b>45.98</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NA</b>	<b>48,000</b>
<b>Onsite Outdoor Inhalation</b>		<b>1,750</b>	<b>526</b>	<b>169</b>	<b>175</b>	<b>NA</b>	<b>48,000</b>

**Notes:**

\* = Initial sampling event conducted after sulfate amendment pilot test  
 <RL = below laboratory reporting limits  
 <0.005 = analyte not detected above the specified laboratory detection limit  
 BTEX = benzene, toluene, ethylbenzene, xylenes  
 MTBE = methyl tertiary-butyl ether  
 lbs = pounds  
 NA = not analyzed for this parameter  
 NE = not established  
 NS = not sampled  
 SWP = Surface Water Protection Target Concentration protective of a stream 200 feet downgradient  
 GRP = Groundwater Resource Protection Target Concentration protective of a hypothetical POC  
 POC = point of compliance

**TABLE 3**

## Liquid-Level Data

Former Texaco Service Station

Chevron Site No. 211874

623 Holcombe Avenue, Mobile, Alabama

(All measurements are in feet below top of casing)

Well ID	Date	Top of Casing Elevation	Depth to Water	Depth to Product	Product Thickness	Corrected Groundwater Elevation
MW-1	05/08/02	26.29	3.12	ND	0.00	23.17
	10/27/03	26.29		NM - Could not locate		
	03/15/05	26.29	4.17	ND	0.00	22.12
	06/20/05	26.29	2.32	ND	0.00	23.97
	11/02/05	26.29	4.62	ND	0.00	21.67
	02/03/06	26.29	4.02	ND	0.00	22.27
	07/09/06	26.29		NM - Could not locate (under limestone)		
	09/15/06	26.29		NM - Could not locate (under limestone)		
	02/05/07	26.29		NM - Could not locate (under limestone)		
	06/14/07	26.29		NM - Could not locate (under limestone)		
	10/03/07	26.29		NM - Could not locate (under limestone)		
	06/22/11	26.29		NM - Could not locate (under limestone)		
	04/23/14	26.29		NM - Could not locate (under limestone)		
MW-2	05/08/02	25.16	2.94	ND	0.00	22.22
	10/27/03	25.16	2.88	ND	0.00	22.28
	03/15/05	25.16	1.37	ND	0.00	23.79
	06/20/05	25.16	1.08	ND	0.00	24.08
	11/02/05	25.16	3.36	ND	0.00	21.80
	02/02/06	25.16	2.27	ND	0.00	22.89
	07/09/06	25.16	4.74	ND	0.00	20.42
	09/15/06	25.16	4.16	ND	0.00	21.00
	02/05/07	25.16	0.93	ND	0.00	24.23
	06/14/07	25.16	3.68	ND	0.00	21.48
	10/03/07	25.16	2.87	ND	0.00	22.29
	02/15/08	25.16	0.73	ND	0.00	24.43
	05/12/08	25.16	2.28	ND	0.00	22.88
	08/05/08	25.16	2.52	ND	0.00	22.64
	11/15/08	25.16	2.44	ND	0.00	22.72
	02/04/09	25.16	2.81	ND	0.00	22.35
	05/14/09	25.16	3.34	ND	0.00	21.82
	08/11/09	25.16	1.26	ND	0.00	23.90
	11/20/09	25.16	1.18	ND	0.00	23.98
	03/12/10	25.16	0.80	ND	0.00	24.36
	09/02/10	25.16	0.30	ND	0.00	24.86
06/22/11	25.16	5.89	ND	0.00	19.27	
10/11/11	25.16	1.90	ND	0.00	23.26	
12/14/11	25.16	3.64	ND	0.00	21.52	
03/27/12	25.16	1.98	ND	0.00	23.18	
06/27/12	25.16	2.31	ND	0.00	22.85	

**TABLE 3**

Liquid-Level Data  
Former Texaco Service Station  
Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
(All measurements are in feet below top of casing)

Well ID	Date	Top of Casing Elevation	Depth to Water	Depth to Product	Product Thickness	Corrected Groundwater Elevation	
<b>MW-2 Cont.</b>	09/27/12	25.16	1.50	ND	0.00	23.66	
	12/19/12	25.16	3.56	ND	0.00	21.60	
	03/21/13	25.16	1.98	ND	0.00	23.18	
	06/27/13	25.16	3.65	ND	0.00	21.51	
	09/24/13	25.16	2.85	ND	0.00	22.31	
	11/20/13	25.16	3.66	ND	0.00	21.50	
	04/23/14	25.16	0.65	ND	0.00	24.51	
07/01/14	25.16	2.95	ND	0.00	22.21		
<b>MW-3</b>	05/08/02	25.96	2.30	ND	0.00	23.66	
	10/27/03	25.96	1.70	ND	0.00	24.26	
	03/15/05	25.96	1.06	ND	0.00	24.90	
	06/20/05	25.96	0.81	ND	0.00	25.15	
	11/02/05	25.96	1.90	ND	0.00	24.06	
	02/02/06	25.96	0.50	ND	0.00	25.46	
	07/09/06	25.96	2.33	ND	0.00	23.63	
	09/15/06	25.96	1.97	ND	0.00	23.99	
	02/05/07	25.96	0.22	ND	0.00	25.74	
	06/14/07	25.96	1.38	ND	0.00	24.58	
	10/03/07	25.96	2.28	ND	0.00	23.68	
	02/15/08	25.96	0.82	ND	0.00	25.14	
	05/12/08	25.96	1.95	ND	0.00	24.01	
	08/05/08	25.96	1.99	ND	0.00	23.97	
	11/15/08	25.96	2.40	ND	0.00	23.56	
	02/04/09	25.96	2.45	ND	0.00	23.51	
	05/14/09	25.96	2.43	ND	0.00	23.53	
	08/11/09	25.96	1.58	ND	0.00	24.38	
	11/20/09	25.96	1.28	ND	0.00	24.68	
	03/12/10	25.96	0.04	ND	0.00	25.92	
	09/02/10	25.96	0.50	ND	0.00	25.46	
	11/11/10	25.96			NM		
	12/07/10	25.96	0.80	ND	0.00	25.16	
	04/07/11	25.96	2.62	ND	0.00	23.34	
	06/22/11	25.96	3.73	ND	0.00	22.23	
	10/11/11	25.96	1.65	ND	0.00	24.31	
	12/14/11	25.96	3.19	ND	0.00	22.77	
03/27/12	25.96	1.08	ND	0.00	24.88		
06/27/12	25.96	1.63	ND	0.00	24.33		
09/27/12	25.96	1.20	ND	0.00	24.76		
12/19/12	25.96	3.02	ND	0.00	22.94		

**TABLE 3**

## Liquid-Level Data

Former Texaco Service Station

Chevron Site No. 211874

623 Holcombe Avenue, Mobile, Alabama

(All measurements are in feet below top of casing)

Well ID	Date	Top of Casing Elevation	Depth to Water	Depth to Product	Product Thickness	Corrected Groundwater Elevation
<b>MW-3</b> Cont.	03/21/13	25.96	1.68	ND	0.00	24.28
	05/15/13	25.96	0.50	ND	0.00	25.46
	06/27/13	25.96	1.98	ND	0.00	23.98
	09/24/13	25.96	1.71	ND	0.00	24.25
	11/20/13	25.96	2.51	ND	0.00	23.45
	04/23/14	25.96	0.30	ND	0.00	25.66
	07/01/14	25.96	1.55	ND	0.00	24.41
<b>MW-4</b>	05/08/02	25.32	2.24	ND	0.00	23.08
	10/27/03	25.32	1.48	ND	0.00	23.84
	03/15/05	25.32	0.76	ND	0.00	24.56
	06/21/05	25.32	1.36	ND	0.00	23.96
	11/02/05	25.32	3.28	ND	0.00	22.04
	02/02/06	25.32	0.50	ND	0.00	24.82
	07/09/06	25.32	4.21	ND	0.00	21.11
	09/15/06	25.32	3.27	ND	0.00	22.05
	02/05/07	25.32	0.59	ND	0.00	24.73
	06/14/07	25.32	2.67	ND	0.00	22.65
	10/03/07	25.32	2.86	ND	0.00	22.46
	02/15/08	25.32	1.28	ND	0.00	24.04
	05/12/08	25.32	2.58	ND	0.00	22.74
	08/05/08	25.32	1.60	ND	0.00	23.72
	11/15/08	25.32	2.52	ND	0.00	22.80
	02/04/09	25.32	2.57	ND	0.00	22.75
	05/14/09	25.32	3.18	ND	0.00	22.14
	08/11/09	25.32	0.40	ND	0.00	24.92
	11/20/09	25.32	1.06	ND	0.00	24.26
	03/12/10	25.32	0.04	ND	0.00	25.28
	09/02/10	25.32	0.60	ND	0.00	24.72
	12/07/10	25.32	0.72	ND	0.00	24.60
	04/07/11	25.32	1.44	ND	0.00	23.88
	06/22/11	25.32	3.55	ND	0.00	21.77
	10/11/11	25.32	1.31	ND	0.00	24.01
	12/14/11	25.32	3.63	ND	0.00	21.69
	03/27/12	25.32	1.27	ND	0.00	24.05
	06/27/12	25.32	2.20	ND	0.00	23.12
09/27/12	25.32	2.50	ND	0.00	22.82	
12/19/12	25.32	3.24	ND	0.00	22.08	
03/21/13	25.32	2.43	ND	0.00	22.89	
06/27/13	25.32	2.90	ND	0.00	22.42	

<b>TABLE 3</b> Liquid-Level Data Former Texaco Service Station Chevron Site No. 211874 623 Holcombe Avenue, Mobile, Alabama (All measurements are in feet below top of casing)						
Well ID	Date	Top of Casing Elevation	Depth to Water	Depth to Product	Product Thickness	Corrected Groundwater Elevation
<b>MW-4</b> <b>Cont.</b>	09/24/13	25.32	2.20	ND	0.00	23.12
	11/20/13	25.32	2.93	ND	0.00	22.39
	04/23/14	25.32	0.85	ND	0.00	24.47
	07/01/14	25.32	2.30	ND	0.00	23.02
<b>MW-5</b>	05/08/02	24.66	5.01	ND	0.00	19.65
	10/27/03	24.66	5.18	ND	0.00	19.48
	03/15/05	24.66	2.16	ND	0.00	22.50
	06/21/05	24.66	3.34	ND	0.00	21.32
	11/02/05	24.66	5.30	ND	0.00	19.36
	02/02/06	24.66	3.84	ND	0.00	20.82
	07/09/06	24.66	6.74	ND	0.00	17.92
	09/15/06	24.66	6.13	ND	0.00	18.53
	02/05/07	24.66	2.79	ND	0.00	21.87
	06/14/07	24.66	5.46	ND	0.00	19.20
	10/03/07	24.66	5.33	ND	0.00	19.33
	02/15/08	24.66	3.17	ND	0.00	21.49
	05/12/08	24.66	4.48	ND	0.00	20.18
	08/05/08	24.66	4.37	ND	0.00	20.29
	11/15/08	24.66	5.41	ND	0.00	19.25
	02/04/09	24.66	5.87	ND	0.00	18.79
	05/14/09	24.66	4.98	ND	0.00	19.68
	08/11/09	24.66	2.81	ND	0.00	21.85
	11/20/09	24.66	3.04	ND	0.00	21.62
	03/12/10	24.66	2.25	ND	0.00	22.41
	09/02/10	24.66	2.85	ND	0.00	21.81
	12/07/10	24.66	2.62	ND	0.00	22.04
	04/07/11	24.66	2.91	ND	0.00	21.75
	06/22/11	24.66	7.35	ND	0.00	17.31
	10/11/11	24.66	2.86	ND	0.00	21.80
	12/14/11	24.66	6.46	ND	0.00	18.20
	03/27/12	24.66	2.89	ND	0.00	21.77
	06/27/12	24.66	3.01	ND	0.00	21.65
	09/27/12	24.66	4.18	ND	0.00	20.48
	12/19/12	24.66	6.46	ND	0.00	18.20
03/21/13	24.66	4.23	ND	0.00	20.43	
06/27/13	24.66	4.58	ND	0.00	20.08	
09/24/13	24.66	5.11	ND	0.00	19.55	
11/20/13	24.66	6.15	ND	0.00	18.51	
04/23/14	24.66	2.46	ND	0.00	22.20	
07/01/14	24.66	3.89	ND	0.00	20.77	

<b>TABLE 3</b> Liquid-Level Data Former Texaco Service Station Chevron Site No. 211874 623 Holcombe Avenue, Mobile, Alabama (All measurements are in feet below top of casing)						
Well ID	Date	Top of Casing Elevation	Depth to Water	Depth to Product	Product Thickness	Corrected Groundwater Elevation
MW-6	10/27/03	24.88	3.75	ND	0.00	21.13
	03/15/05	24.88	1.43	ND	0.00	23.45
	06/20/05	24.88	2.31	ND	0.00	22.57
	11/02/05	24.88	3.27	ND	0.00	21.61
	02/02/06	24.88	2.48	ND	0.00	22.40
	07/09/06	24.88	4.02	ND	0.00	20.86
	09/15/06	24.88	3.72	ND	0.00	21.16
	02/05/07	24.88	2.12	ND	0.00	22.76
	06/14/07	24.88	3.02	ND	0.00	21.86
	10/03/07	24.88	4.02	ND	0.00	20.86
	02/15/08	24.88	3.03	ND	0.00	21.85
	05/12/08	24.88	3.75	ND	0.00	21.13
	08/05/08	24.88	3.95	ND	0.00	20.93
	11/15/08	24.88	4.48	ND	0.00	20.40
	02/04/09	24.88	4.22	ND	0.00	20.66
	05/14/09	24.88	4.00	ND	0.00	20.88
	08/11/09	24.88	3.90	ND	0.00	20.98
	11/20/09	24.88	5.88	ND	0.00	19.00
	03/12/10	24.88	2.08	ND	0.00	22.80
	09/02/10	24.88	3.00	ND	0.00	21.88
	11/11/10	24.88	4.87	ND	0.00	20.01
	12/07/10	24.88	3.44	ND	0.00	21.44
	04/07/11	24.88	3.67	ND	0.00	21.21
	06/22/11	24.88	6.04	ND	0.00	18.84
	10/11/11	24.88	4.45	ND	0.00	20.43
	12/14/11	24.88	5.58	ND	0.00	19.30
	03/27/12	24.88	3.92	ND	0.00	20.96
	06/27/12	24.88	3.68	ND	0.00	21.20
	09/27/12	24.88	3.35	ND	0.00	21.53
	12/19/12	24.88	5.22	ND	0.00	19.66
	03/21/13	24.88	3.52	ND	0.00	21.36
05/15/13	24.88	2.89	ND	0.00	21.99	
06/27/13	24.88	3.94	ND	0.00	20.94	
09/24/13	24.88	4.08	ND	0.00	20.80	
11/20/13	24.88	4.70	ND	0.00	20.18	
04/23/14	24.88	2.24	ND	0.00	22.64	
07/01/14	24.88	3.34	ND	0.00	21.54	
MW-7	03/27/12	24.31	8.30	ND	0.00	16.01
	03/15/05	24.31	5.01	ND	0.00	19.30

**TABLE 3**

## Liquid-Level Data

Former Texaco Service Station

Chevron Site No. 211874

623 Holcombe Avenue, Mobile, Alabama

(All measurements are in feet below top of casing)

Well ID	Date	Top of Casing Elevation	Depth to Water	Depth to Product	Product Thickness	Corrected Groundwater Elevation
<b>MW-7 Cont.</b>	06/20/05	24.31	5.97	ND	0.00	18.34
	11/02/05	24.31	7.79	ND	0.00	16.52
	02/02/06	24.31	6.82	ND	0.00	17.49
	07/09/06	24.31	9.52	ND	0.00	14.79
	09/15/06	24.31	9.67	ND	0.00	14.64
	02/05/07	24.31	4.58	ND	0.00	19.73
	06/14/07	24.31	8.63	ND	0.00	15.68
	10/03/07	24.31	8.75	ND	0.00	15.56
	02/15/08	24.31	4.47	ND	0.00	19.84
	05/12/08	24.31	6.56	ND	0.00	17.75
	08/05/08	24.31	8.15	ND	0.00	16.16
	11/15/08	24.31	8.15	ND	0.00	16.16
	02/04/09	24.31	6.86	ND	0.00	17.45
	05/14/09	24.31	7.00	ND	0.00	17.31
	08/11/09	24.31	2.63	ND	0.00	21.68
	11/20/09	24.31	5.43	ND	0.00	18.88
	03/12/10	24.31	4.51	ND	0.00	19.80
	09/02/10	24.31	5.03	ND	0.00	19.28
	12/07/10	24.31	4.88	ND	0.00	19.43
	04/07/11	24.31	5.01	ND	0.00	19.30
	06/22/11	24.31	9.62	ND	0.00	14.69
	10/11/11	24.31	4.87	ND	0.00	19.44
	12/14/11	24.31	8.67	ND	0.00	15.64
	03/27/12	24.31	4.20	ND	0.00	20.11
	06/27/12	24.31	4.28	ND	0.00	20.03
	09/27/12	24.31	4.04	ND	0.00	20.27
	12/19/12	24.31	8.04	ND	0.00	16.27
	03/21/13	24.31	4.83	ND	0.00	19.48
	06/27/13	24.31	5.10	ND	0.00	19.21
	09/24/13	24.31	7.47	ND	0.00	16.84
11/20/13	24.31	8.61	ND	0.00	15.70	
04/23/14	24.31	3.06	ND	0.00	21.25	
07/01/14	24.31	6.05	ND	0.00	18.26	
09/17/15	24.31	9.72	ND	0.00	14.59	
<b>MW-8</b>	10/27/03	23.71	10.21	ND	0.00	13.50
	03/15/05	23.71	4.39	ND	0.00	19.32
	06/20/05	23.71	7.79	ND	0.00	15.92
	11/02/05	23.71	7.68	ND	0.00	16.03
	02/02/06	23.71	4.93	ND	0.00	18.78

**TABLE 3**

## Liquid-Level Data

Former Texaco Service Station

Chevron Site No. 211874

623 Holcombe Avenue, Mobile, Alabama

(All measurements are in feet below top of casing)

Well ID	Date	Top of Casing Elevation	Depth to Water	Depth to Product	Product Thickness	Corrected Groundwater Elevation
<b>MW-8 Cont.</b>	07/09/06	23.71	11.10	ND	0.00	12.61
	09/15/06	23.71	11.82	ND	0.00	11.89
	02/05/07	23.71	6.14	ND	0.00	17.57
	06/14/07	23.71	10.59	ND	0.00	13.12
	10/03/07	23.71	11.75	ND	0.00	11.96
	02/15/08	23.71	3.44	ND	0.00	20.27
	05/12/08	23.71	6.83	ND	0.00	16.88
	08/05/08	23.71	10.31	ND	0.00	13.40
	11/15/08	23.71	9.68	ND	0.00	14.03
	02/04/09	23.71	5.45	ND	0.00	18.26
	05/14/09	23.71	7.90	ND	0.00	15.81
	08/11/09	23.71	3.10	ND	0.00	20.61
	11/20/09	23.71	5.03	ND	0.00	18.68
	03/12/10	23.71	4.00	ND	0.00	19.71
	09/02/10	23.71	4.82	ND	0.00	18.89
	12/07/10	23.71	4.22	ND	0.00	19.49
	04/07/11	23.71	4.77	ND	0.00	18.94
	06/22/11	23.71	11.97	ND	0.00	11.74
	10/11/11	23.71	4.55	ND	0.00	19.16
	12/14/11	23.71	10.46	ND	0.00	13.25
	03/27/12	23.71	4.08	ND	0.00	19.63
	06/27/12	23.71	4.98	ND	0.00	18.73
	09/27/12	23.71	4.62	ND	0.00	19.09
	12/19/12	23.71	8.05	ND	0.00	15.66
	03/21/13	23.71	3.90	ND	0.00	19.81
	06/27/13	23.71	4.20	ND	0.00	19.51
	09/24/13	23.71	9.15	ND	0.00	14.56
	11/20/13	23.71	10.10	ND	0.00	13.61
	04/23/14	23.71	3.05	ND	0.00	20.66
	07/01/14	23.71	7.05	ND	0.00	16.66
09/17/15	23.71	11.78	ND	0.00	11.93	
<b>MW-9</b>	10/27/03	24.50	9.71	ND	1.00	14.74
	03/15/05	24.50	4.28	ND	0.00	20.22
	06/20/05	24.50	7.30	ND	0.00	17.20
	11/02/05	24.50	7.95	ND	0.00	16.55
	02/02/06	24.50	6.32	ND	0.00	18.18
	07/09/06	24.50	10.57	ND	0.00	13.93
	09/15/06	24.50	10.75	ND	0.00	13.75
	02/05/07	24.50	7.67	ND	0.00	16.83

**TABLE 3**

## Liquid-Level Data

Former Texaco Service Station

Chevron Site No. 211874

623 Holcombe Avenue, Mobile, Alabama

(All measurements are in feet below top of casing)

Well ID	Date	Top of Casing Elevation	Depth to Water	Depth to Product	Product Thickness	Corrected Groundwater Elevation
<b>MW-9 Cont.</b>	06/14/07	24.50	10.12	ND	0.00	14.38
	10/03/07	24.50	10.60	ND	0.00	13.90
	02/15/08	24.50	5.77	ND	0.00	18.73
	05/12/08	24.50	6.58	ND	0.00	17.92
	08/05/08	24.50	9.44	ND	0.00	15.06
	11/15/08	24.50	9.45	ND	0.00	15.05
	02/04/09	24.50	6.90	ND	0.00	17.60
	05/14/09	24.50	7.25	ND	0.00	17.25
	08/11/09	24.50	3.60	ND	0.00	20.90
	11/20/09	24.50	6.91	ND	0.00	17.59
	03/12/10	24.50	5.88	ND	0.00	18.62
	09/02/10	24.50	6.01	ND	0.00	18.49
	12/07/10	24.50	5.76	ND	0.00	18.74
	04/07/11	24.50	5.95	ND	0.00	18.55
	06/22/11	24.50	11.11	ND	0.00	13.39
	10/11/11	24.50	5.48	ND	0.00	19.02
	12/14/11	24.50	10.39	ND	0.00	14.11
	03/27/12	24.50	5.10	ND	0.00	19.40
	06/27/12	24.50	5.99	ND	0.00	18.51
	09/27/12	24.50	5.21	ND	0.00	19.29
12/19/12	24.50	9.10	ND	0.00	15.40	
03/21/13	24.50	4.68	ND	0.00	19.82	
06/27/13	24.50	4.18	ND	0.00	20.32	
09/24/13	24.50	8.58	ND	0.00	15.92	
11/20/13	24.50	9.83	ND	0.00	14.67	
04/23/14	24.50	3.59	ND	0.00	20.91	
07/01/14	24.50	6.68	ND	0.00	17.82	
09/17/15	24.50	10.78	ND	0.00	13.72	
<b>MW-10</b>	10/27/03	24.34	6.71	ND	0.00	17.63
	03/15/05	24.34	4.60	ND	0.00	19.74
	06/20/05	24.34	4.48	ND	0.00	19.86
	11/02/05	24.34	6.23	ND	0.00	18.11
	02/02/06	24.34	4.50	ND	0.00	19.84
	07/09/06	24.34	7.86	ND	0.00	16.48
	09/15/06	24.34	6.48	ND	0.00	17.86
	02/05/07	24.34	3.73	ND	0.00	20.61
	06/14/07	24.34	6.74	ND	0.00	17.60
	10/03/07	24.34	6.73	ND	0.00	17.61
02/15/08	24.34	4.08	ND	0.00	20.26	

**TABLE 3**

## Liquid-Level Data

Former Texaco Service Station

Chevron Site No. 211874

623 Holcombe Avenue, Mobile, Alabama

(All measurements are in feet below top of casing)

Well ID	Date	Top of Casing Elevation	Depth to Water	Depth to Product	Product Thickness	Corrected Groundwater Elevation
MW-10 Cont.	05/12/08	24.34	5.59	ND	0.00	18.75
	08/05/08	24.34	5.16	ND	0.00	19.18
	11/15/08	24.34	5.75	ND	0.00	18.59
	02/04/09	24.34	5.45	ND	0.00	18.89
	05/14/09	24.34	6.08	ND	0.00	18.26
	08/11/09	24.34	2.40	ND	0.00	21.94
	11/20/09	24.34	4.58	ND	0.00	19.76
	03/12/10	24.34	3.77	ND	0.00	20.57
	09/02/10	24.34	4.22	ND	0.00	20.12
	12/07/10	24.34	4.20	ND	0.00	20.14
	04/07/11	24.34	4.91	ND	0.00	19.43
	06/22/11	24.34	7.91	ND	0.00	16.43
	10/11/11	24.34	4.84	ND	0.00	19.50
	12/14/11	24.34	7.18	ND	0.00	17.16
	03/27/12	24.34	4.22	ND	0.00	20.12
	06/27/12	24.34	4.58	ND	0.00	19.76
	09/27/12	24.34	4.07	ND	0.00	20.27
	12/19/12	24.34	6.69	ND	0.00	17.65
	03/21/13	24.34	4.66	ND	0.00	19.68
	06/27/13	24.34	4.89	ND	0.00	19.45
	09/24/13	24.34	6.06	ND	0.00	18.28
	11/20/13	24.34	7.39	ND	0.00	16.95
	04/23/14	24.34	3.84	ND	0.00	20.50
07/01/14	24.34	5.48	ND	0.00	18.86	
09/17/15	24.34	9.05	ND	0.00	15.29	
MW-11	10/27/03	25.05	0.92	ND	0.00	24.13
	03/15/05	25.05	2.92	ND	0.00	22.13
	06/20/05	25.05	1.30	ND	0.00	23.75
	11/02/05	25.05	5.09	ND	0.00	19.96
	02/03/06	25.05	0.80	ND	0.00	24.25
	07/09/06	25.05			Dry at 7.21	
	09/15/06	25.05	6.13	ND	0.00	18.92
	02/05/07	25.05	1.38	ND	0.00	23.67
	06/14/07	25.05	6.39	ND	0.00	18.66
	10/03/07	25.05	4.35	ND	0.00	20.70
	02/15/08	25.05	1.56	ND	0.00	23.49
	05/12/08	25.05	3.74	ND	0.00	21.31
	08/05/08	25.05	2.19	ND	0.00	22.86
11/15/08	25.05	3.69	ND	0.00	21.36	

<b>TABLE 3</b> Liquid-Level Data Former Texaco Service Station Chevron Site No. 211874 623 Holcombe Avenue, Mobile, Alabama (All measurements are in feet below top of casing)						
Well ID	Date	Top of Casing Elevation	Depth to Water	Depth to Product	Product Thickness	Corrected Groundwater Elevation
<b>MW-11</b> Cont.	02/04/09	25.05	3.17	ND	0.00	21.88
	05/14/09	25.05	5.00	ND	0.00	20.05
	08/11/09	25.05	1.33	ND	0.00	23.72
	11/20/09	25.05	4.02	ND	0.00	21.03
	03/12/10	25.05	3.00	ND	0.00	22.05
	09/02/10	25.05	4.01	ND	0.00	21.04
	12/07/10	25.05	3.93	ND	0.00	21.12
	04/07/11	25.05	4.07	ND	0.00	20.98
	06/22/11	25.05	Dry	NA	NA	NA
	10/11/11	25.05	3.76	ND	0.00	21.29
	12/14/11	25.05	5.49	ND	0.00	19.56
	03/27/12	25.05	3.55	ND	0.00	21.50
	06/27/12	25.05	4.72	ND	0.00	20.33
	09/27/12	25.05	3.89	ND	0.00	21.16
	12/19/12	25.05	5.90	ND	0.00	19.15
	03/21/13	25.05	3.82	ND	0.00	21.23
	06/27/13	25.05	6.73	ND	0.00	18.32
	09/24/13	25.05	5.00	ND	0.00	20.05
	11/20/13	25.05	6.65	ND	0.00	18.40
	04/23/14	25.05	1.94	ND	0.00	23.11
07/01/14	25.05	6.04	ND	0.00	19.01	
09/17/15	25.05			Dry		
<b>MW-12</b>	10/27/03	25.74	1.28	ND	0.00	24.46
	03/15/05	25.74	2.85	ND	0.00	22.89
	06/20/05	25.74	1.91	ND	0.00	23.83
	11/02/05	25.74	5.07	ND	0.00	20.67
	02/03/06	25.74	0.80	ND	0.00	24.94
	07/09/06	25.74			Dry at 7.10	
	09/15/06	25.74	6.45	ND	0.00	19.29
	02/05/07	25.74	1.15	ND	0.00	24.59
	06/14/07	25.74	4.59	ND	0.00	21.15
	10/03/07	25.74	3.20	ND	0.00	22.54
	02/15/08	25.74	1.23	ND	0.00	24.51
	05/12/08	25.74	3.03	ND	0.00	22.71
	08/05/08	25.74	0.88	ND	0.00	24.86
	11/15/08	25.74	1.95	ND	0.00	23.79
	02/04/09	25.74	2.56	ND	0.00	23.18
	05/14/09	25.74	3.74	ND	0.00	22.00
08/11/09	25.74	1.42	ND	0.00	24.32	

**TABLE 3**

Liquid-Level Data  
Former Texaco Service Station  
Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
(All measurements are in feet below top of casing)

Well ID	Date	Top of Casing Elevation	Depth to Water	Depth to Product	Product Thickness	Corrected Groundwater Elevation
<b>MW-12 Cont.</b>	11/20/09	25.74	3.50	ND	0.00	22.24
	03/12/10	25.74	3.25	ND	0.00	22.49
	09/02/10	25.74	3.25	ND	0.00	22.49
	12/07/10	25.74	3.07	ND	0.00	22.67
	04/07/11	25.74	3.23	ND	0.00	22.51
	06/22/11	25.74			Dry	
	10/11/11	25.74	3.16	ND	0.00	22.58
	12/14/11	25.74	3.50	ND	0.00	22.24
	03/27/12	25.74	3.07	ND	0.00	22.67
	06/27/12	25.74	3.31	ND	0.00	22.43
	09/27/12	25.74	2.25	ND	0.00	23.49
	12/19/12	25.74	1.28	ND	0.00	24.46
	03/21/13	25.74	2.02	ND	0.00	23.72
	06/27/13	25.74	4.05	ND	0.00	21.69
	09/24/13	25.74	3.13	ND	0.00	22.61
	11/20/13	25.74	3.25	ND	0.00	22.49
	04/23/14	25.74	0.80	ND	0.00	24.94
	07/01/14	25.74	3.90	ND	0.00	21.84
09/17/15	25.74	5.67	ND	0.00	20.07	
<b>MW-13</b>	03/15/05	24.40	4.13	ND	0.00	20.27
	06/20/05	24.40	4.83	ND	0.00	19.57
	11/02/05	24.40	6.28	ND	0.00	18.12
	02/02/06	24.40	5.14	ND	0.00	19.26
	07/09/06	24.40	7.93	ND	0.00	16.47
	09/15/06	24.40	7.65	ND	0.00	16.75
	02/05/07	24.40	4.58	ND	0.00	19.82
	06/14/07	24.40	6.77	ND	0.00	17.63
	10/03/07	24.40	6.80	ND	0.00	17.60
	02/15/08	24.40	4.17	ND	0.00	20.23
	05/12/08	24.40	5.39	ND	0.00	19.01
	08/05/08	24.40	6.04	ND	0.00	18.36
	11/15/08	24.40	6.61	ND	0.00	17.79
	02/04/09	24.40	5.75	ND	0.00	18.65
	05/14/09	24.40	5.80	ND	0.00	18.60
	08/11/09	24.40	5.60	ND	0.00	18.80
	11/20/09	24.40	4.68	ND	0.00	19.72
03/12/10	24.40	8.20	ND	0.00	16.20	
09/02/10	24.40	6.10	ND	0.00	18.30	
11/11/10	24.40	7.02	ND	0.00	17.38	

**TABLE 3**

## Liquid-Level Data

Former Texaco Service Station

Chevron Site No. 211874

623 Holcombe Avenue, Mobile, Alabama

(All measurements are in feet below top of casing)

Well ID	Date	Top of Casing Elevation	Depth to Water	Depth to Product	Product Thickness	Corrected Groundwater Elevation
<b>MW-13 Cont.</b>	12/07/10	24.40	5.95	ND	0.00	18.45
	04/07/11	24.40	5.40	ND	0.00	19.00
	06/22/11	24.40	8.34	ND	0.00	16.06
	10/11/11	24.40	6.23	ND	0.00	18.17
	12/14/11	24.40	7.46	ND	0.00	16.94
	03/27/12	24.40	5.05	ND	0.00	19.35
	06/27/12	24.40	5.42	ND	0.00	18.98
	09/27/12	24.40	5.33	ND	0.00	19.07
	12/19/12	24.40	7.10	ND	0.00	17.30
	03/21/13	24.40	4.45	ND	0.00	19.95
	06/27/13	24.40	6.06	ND	0.00	18.34
	09/24/13	24.40	6.09	ND	0.00	18.31
	11/20/13	24.40	7.18	ND	0.00	17.22
	04/23/14	24.40	3.22	ND	0.00	21.18
	07/01/14	24.40	4.90	ND	0.00	19.50
11/14/14	24.40	9.58	ND	0.00	14.82	
09/17/15	24.40	7.93	ND	0.00	16.47	
<b>MW-14</b>	03/15/05	24.76	4.36	ND	0.00	20.40
	06/20/05	24.76	6.45	ND	0.00	18.31
	11/02/05	24.76	8.42	ND	0.00	16.34
	02/02/06	24.76	7.07	ND	0.00	17.69
	07/09/06	24.76	10.86	ND	0.00	13.90
	09/15/06	24.76	11.25	ND	0.00	13.51
	02/05/07	24.76	6.45	ND	0.00	18.31
	06/14/07	24.76	9.71	ND	0.00	15.05
	10/03/07	24.76	10.42	ND	0.00	14.34
	02/15/08	24.76	4.25	ND	0.00	20.51
	05/12/08	24.76	6.67	ND	0.00	18.09
	08/05/08	24.76	9.13	ND	0.00	15.63
	11/15/08	24.76	8.86	ND	0.00	15.90
	02/04/09	24.76	7.17	ND	0.00	17.59
	05/14/09	24.76	7.19	ND	0.00	17.57
	08/11/09	24.76	4.45	ND	0.00	20.31
	11/20/09	24.76	5.56	ND	0.00	19.20
	03/12/10	24.76	4.88	ND	0.00	19.88
	09/02/10	24.76	5.12	ND	0.00	19.64
	12/07/10	24.76	5.07	ND	0.00	19.69
04/07/11	24.76	5.37	ND	0.00	19.39	
06/22/11	24.76	11.94	ND	0.00	12.82	

**TABLE 3**

## Liquid-Level Data

Former Texaco Service Station

Chevron Site No. 211874

623 Holcombe Avenue, Mobile, Alabama

(All measurements are in feet below top of casing)

Well ID	Date	Top of Casing Elevation	Depth to Water	Depth to Product	Product Thickness	Corrected Groundwater Elevation
MW-14 Cont.	10/11/11	24.76	5.11	ND	0.00	19.65
	12/14/11	24.76	10.26	ND	0.00	14.50
	03/27/12	24.76	6.98	ND	0.00	17.78
	06/27/12	24.76	7.20	ND	0.00	17.56
	09/27/12	24.76	7.01	ND	0.00	17.75
	12/19/12	24.76	9.40	ND	0.00	15.36
	03/21/13	24.76	4.50	ND	0.00	20.26
	06/27/13	24.76	7.89	ND	0.00	16.87
	09/24/13	24.76	7.89	ND	0.00	16.87
	11/20/13	24.76	9.75	ND	0.00	15.01
	04/23/14	24.76	3.04	ND	0.00	21.72
	07/01/14	24.76	6.31	ND	0.00	18.45
	11/14/14	24.76	11.75	ND	0.00	13.01
09/17/15	24.76	11.18	ND	0.00	13.58	
MW-15	03/15/05	24.47	3.02	ND	0.00	21.45
	06/20/05	24.47	2.89	ND	0.00	21.58
	11/02/05	24.47	4.40	ND	0.00	20.07
	02/03/06	24.47	2.68	ND	0.00	21.79
	07/09/06	24.47	5.63	ND	0.00	18.84
	09/15/06	24.47	4.68	ND	0.00	19.79
	02/05/07	24.47	2.53	ND	0.00	21.94
	06/14/07	24.47	3.92	ND	0.00	20.55
	10/03/07	24.47	3.61	ND	0.00	20.86
	02/15/08	24.47	2.93	ND	0.00	21.54
	05/12/08	24.47	3.46	ND	0.00	21.01
	08/05/08	24.47	3.00	ND	0.00	21.47
	11/15/08	24.47	3.15	ND	0.00	21.32
	02/04/09	24.47	3.45	ND	0.00	21.02
	05/14/09	24.47	3.95	ND	0.00	20.52
	08/11/09	24.47	2.85	ND	0.00	21.62
	11/20/09	24.47	3.13	ND	0.00	21.34
	03/12/10	24.47	2.60	ND	0.00	21.87
	09/02/10	24.47	3.10	ND	0.00	21.37
	12/07/10	24.47	2.76	ND	0.00	21.71
04/07/11	24.47	5.45	ND	0.00	19.02	
06/22/11	24.47	5.01	ND	0.00	19.46	
10/11/11	24.47	5.24	ND	0.00	19.23	
12/14/11	24.47	3.89	ND	0.00	20.58	
03/27/12	24.47	5.07	ND	0.00	19.40	

<b>TABLE 3</b> Liquid-Level Data Former Texaco Service Station Chevron Site No. 211874 623 Holcombe Avenue, Mobile, Alabama (All measurements are in feet below top of casing)						
Well ID	Date	Top of Casing Elevation	Depth to Water	Depth to Product	Product Thickness	Corrected Groundwater Elevation
<b>MW-15</b> Cont.	06/27/12	24.47	5.89	ND	0.00	18.58
	09/27/12	24.47	3.23	ND	0.00	21.24
	12/19/12	24.47	3.73	ND	0.00	20.74
	03/21/13	24.47	3.10	ND	0.00	21.37
	06/27/13	24.47	3.30	ND	0.00	21.17
	09/24/13	24.47	3.21	ND	0.00	21.26
	11/20/13	24.47	3.60	ND	0.00	20.87
	04/23/14	24.47	2.63	ND	0.00	21.84
	07/01/14	24.47	3.13	ND	0.00	21.34
09/17/15	24.47	4.70	ND	0.00	19.77	
<b>MW-16</b>	03/15/05	25.22	3.33	ND	0.00	21.89
	06/20/05	25.22	2.94	ND	0.00	22.28
	11/02/05	25.22	4.42	ND	0.00	20.80
	02/03/06	25.22	3.14	ND	0.00	22.08
	07/09/06	25.22	5.38	ND	0.00	19.84
	09/15/06	25.22	4.96	ND	0.00	20.26
	02/05/07	25.22			NM - Car on Well	
	06/14/07	25.22	4.00	ND	0.00	21.22
	10/03/07	25.22	3.93	ND	0.00	21.29
	02/15/08	25.22	3.56	ND	0.00	21.66
	05/12/08	25.22	3.74	ND	0.00	21.48
	08/05/08	25.22	3.19	ND	0.00	22.03
	11/15/08	25.22	3.53	ND	0.00	21.69
	02/04/09	25.22	3.91	ND	0.00	21.31
	05/14/09	25.22	3.15	ND	0.00	22.07
	08/11/09	25.22	3.10	ND	0.00	22.12
	11/20/09	25.22	3.42	ND	0.00	21.80
	03/12/10	25.22	2.82	ND	0.00	22.40
	09/02/10	25.22	2.80	ND	0.00	22.42
	12/07/10	25.22	2.32	ND	0.00	22.90
	04/07/11	25.22	2.80	ND	0.00	22.42
	06/22/11	25.22	4.55	ND	0.00	20.67
	10/11/11	25.22	2.62	ND	0.00	22.60
	12/14/11	25.22	4.15	ND	0.00	21.07
	03/27/12	25.22	2.38	ND	0.00	22.84
	06/27/12	25.22	3.05	ND	0.00	22.17
	09/27/12	25.22	3.51	ND	0.00	21.71
	12/19/12	25.22	3.98	ND	0.00	21.24
	03/21/13	25.22	3.33	ND	0.00	21.89
	06/27/13	25.22	5.20	ND	0.00	20.02
	09/24/13	25.22	5.08	ND	0.00	20.14
	11/20/13	25.22	3.99	ND	0.00	21.23
04/23/14	25.22	2.56	ND	0.00	22.66	
07/01/14	25.22	3.52	ND	0.00	21.70	
09/17/15	25.22	4.83	ND	0.00	20.39	
<b>MW-17</b>	07/09/06	24.06	9.83	ND	0.00	14.23
	09/15/06	24.06	9.60	ND	0.00	14.46
	02/05/07	24.06	4.89	ND	0.00	19.17
	06/14/07	24.06	8.83	ND	0.00	15.23

**TABLE 3**

## Liquid-Level Data

Former Texaco Service Station

Chevron Site No. 211874

623 Holcombe Avenue, Mobile, Alabama

(All measurements are in feet below top of casing)

Well ID	Date	Top of Casing Elevation	Depth to Water	Depth to Product	Product Thickness	Corrected Groundwater Elevation
<b>MW-17 Cont.</b>	10/03/07	24.06	8.78	ND	0.00	15.28
	02/15/08	24.06	4.24	ND	0.00	19.82
	05/12/08	24.06	6.52	ND	0.00	17.54
	08/05/08	24.06	7.27	ND	0.00	16.79
	11/15/08	24.06	7.78	ND	0.00	16.28
	02/04/09	24.06	6.62	ND	0.00	17.44
	05/14/09	24.06	6.89	ND	0.00	17.17
	08/11/09	24.06	6.40	ND	0.00	17.66
	11/20/09	24.06	5.19	ND	0.00	18.87
	03/12/10	24.06	2.82	ND	0.00	21.24
	09/02/10	24.06	4.55	ND	0.00	19.51
	11/11/10	24.06	8.35	ND	0.00	15.71
	09/02/10	24.06	5.57	ND	0.00	18.49
	04/07/11	24.06	6.28	ND	0.00	17.78
	06/22/11	24.06	9.63	ND	0.00	14.43
	10/11/11	24.06	7.26	ND	0.00	16.80
	12/14/11	24.06	8.41	ND	0.00	15.65
	03/27/12	24.06	5.57	ND	0.00	18.49
	06/27/12	24.06	6.12	ND	0.00	17.94
	09/27/12	24.06	6.25	ND	0.00	17.81
	12/19/12	24.06	8.09	ND	0.00	15.97
	03/21/13	24.06	4.78	ND	0.00	19.28
	06/27/13	24.06	7.15	ND	0.00	16.91
09/24/13	24.06	6.97	ND	0.00	17.09	
11/20/13	24.06	8.40	ND	0.00	15.66	
04/23/14	24.06	3.23	ND	0.00	20.83	
07/01/14	24.06	5.97	ND	0.00	18.09	
11/14/14	24.06	9.23	ND	0.00	14.83	
09/17/15	24.06	24.06	9.70	ND	0.00	14.36
<b>DW-1</b>	10/27/03	25.00	8.59	ND	0.00	16.41
	03/15/05	25.00	5.90	ND	0.00	19.10
	06/21/05	25.00	6.03	ND	0.00	18.97
	11/02/05	25.00	7.24	ND	0.00	17.76
	02/02/06	25.00	6.75	ND	0.00	18.25
	07/09/06	25.00	9.25	ND	0.00	15.75
	09/15/06	25.00	9.03	ND	0.00	15.97
	02/05/07	25.00	5.82	ND	0.00	19.18
	06/14/07	25.00	8.37	ND	0.00	16.63
10/03/07	25.00	7.86	ND	0.00	17.14	

**TABLE 3**

Liquid-Level Data  
Former Texaco Service Station  
Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
(All measurements are in feet below top of casing)

Well ID	Date	Top of Casing Elevation	Depth to Water	Depth to Product	Product Thickness	Corrected Groundwater Elevation
<b>DW-1</b> <b>Cont.</b>	02/15/08	25.00	5.51	ND	0.00	19.49
	05/12/08	25.00	6.63	ND	0.00	18.37
	08/05/08	25.00	7.27	ND	0.00	17.73
	11/15/08	25.00	7.63	ND	0.00	17.37
	02/04/09	25.00	6.80	ND	0.00	18.20
	05/14/09	25.00	7.20	ND	0.00	17.80
	08/11/09	25.00	2.99	ND	0.00	22.01
	11/20/09	25.00	5.77	ND	0.00	19.23
	03/12/10	25.00	4.40	ND	0.00	20.60
	09/02/10	25.00	6.65	ND	0.00	18.35
	12/07/10	25.00	6.47	ND	0.00	18.53
	04/07/11	25.00	6.55	ND	0.00	18.45
	06/22/11	25.00	9.98	ND	0.00	15.02
	10/11/11	25.00	6.35	ND	0.00	18.65
	12/14/11	25.00	6.97	ND	0.00	18.03
	03/27/12	25.00	6.08	ND	0.00	18.92
	06/27/12	25.00	6.99	ND	0.00	18.01
	09/27/12	25.00	6.69	ND	0.00	18.31
	12/19/12	25.00	6.68	ND	0.00	18.32
	03/21/13	25.00	7.88	ND	0.00	17.12
	06/27/13	8.28	8.28	ND	0.00	16.72
	09/24/13	8.28	7.40	ND	0.00	17.60
	11/20/13	8.28	7.25	ND	0.00	17.75
	04/23/14	8.28	5.40	ND	0.00	19.60
	07/01/14	8.28	6.58	ND	0.00	18.42
<b>DW-2</b>	03/15/05	24.88	20.05	ND	0.00	4.83
	06/21/05	24.88	19.67	ND	0.00	5.21
	11/02/05	24.88	20.03	ND	0.00	4.85
	02/02/06	24.88	20.61	ND	0.00	4.27
	07/09/06	24.88	21.45	ND	0.00	3.43
	09/15/06	24.88	21.46	ND	0.00	3.42
	02/05/07	24.88	20.98	ND	0.00	3.90
	06/14/07	24.88	21.91	ND	0.00	2.97
	10/03/07	24.88	21.75	ND	0.00	3.13
	02/15/08	24.88	21.13	ND	0.00	3.75
	05/12/08	24.88	20.72	ND	0.00	4.16
	08/05/08	24.88	20.98	ND	0.00	3.90
	11/15/08	24.88	20.94	ND	0.00	3.94
02/04/09	24.88	21.38	ND	0.00	3.50	

**TABLE 3**

## Liquid-Level Data

Former Texaco Service Station

Chevron Site No. 211874

623 Holcombe Avenue, Mobile, Alabama

(All measurements are in feet below top of casing)

Well ID	Date	Top of Casing Elevation	Depth to Water	Depth to Product	Product Thickness	Corrected Groundwater Elevation
<b>DW-2</b> <b>Cont.</b>	05/14/09	24.88	20.44	ND	0.00	4.44
	08/11/09	24.88	21.86	ND	0.00	3.02
	11/20/09	24.88	20.18	ND	0.00	4.70
	03/12/10	24.88	18.85	ND	0.00	6.03
	09/02/10	24.88	20.20	ND	0.00	4.68
	12/07/10	24.88	20.15	ND	0.00	4.73
	04/07/11	24.88	20.44	ND	0.00	4.44
	06/22/11	24.88	21.73	ND	0.00	3.15
	10/11/11	24.88	18.19	ND	0.00	6.69
	12/14/11	24.88	21.81	ND	0.00	3.07
	03/27/12	24.88	18.05	ND	0.00	6.83
	06/27/12	24.88	18.88	ND	0.00	6.00
	09/27/12	24.88	20.69	ND	0.00	4.19
	12/19/12	24.88	21.25	ND	0.00	3.63
	03/21/13	24.88	20.63	ND	0.00	4.25
	06/27/13	24.88	21.10	ND	0.00	3.78
	09/24/13	24.88	20.52	ND	0.00	4.36
	11/20/13	24.88	21.13	ND	0.00	3.75
	04/23/14	24.88	20.02	ND	0.00	4.86
07/01/14	24.88	19.71	ND	0.00	5.17	
<b>DW-3</b>	07/09/06	25.52	12.45	ND	0.00	13.07
	09/15/06	25.52	10.54	ND	0.00	14.98
	02/05/07	25.52	8.14	ND	0.00	17.38
	06/14/07	25.52	9.89	ND	0.00	15.63
	10/03/07	25.52	9.38	ND	0.00	16.14
	02/15/08	25.52	6.89	ND	0.00	18.63
	05/12/08	25.52	7.73	ND	0.00	17.79
	08/05/08	25.52	8.32	ND	0.00	17.20
	11/15/08	25.52	9.27	ND	0.00	16.25
	02/04/09	25.52	8.05	ND	0.00	17.47
	05/14/09	25.52	8.65	ND	0.00	16.87
	08/11/09	25.52	3.53	ND	0.00	21.99
	11/20/09	25.52	7.11	ND	0.00	18.41
	03/12/10	25.52	6.18	ND	0.00	19.34
	09/02/10	25.52	7.09	ND	0.00	18.43
	12/07/10	25.52	6.73	ND	0.00	18.79
04/07/11	25.52	7.02	ND	0.00	18.50	
06/22/11	25.52	11.11	ND	0.00	14.41	
10/11/11	25.52	6.86	ND	0.00	18.66	

**TABLE 3**

## Liquid-Level Data

Former Texaco Service Station

Chevron Site No. 211874

623 Holcombe Avenue, Mobile, Alabama

(All measurements are in feet below top of casing)

Well ID	Date	Top of Casing Elevation	Depth to Water	Depth to Product	Product Thickness	Corrected Groundwater Elevation
<b>DW-3 Cont.</b>	12/14/11	25.52	9.33	ND	0.00	16.19
	03/27/12	25.52	8.74	ND	0.00	16.78
	06/27/12	25.52	9.20	ND	0.00	16.32
	09/27/12	25.52	7.69	ND	0.00	17.83
	12/19/12	25.52	9.14	ND	0.00	16.38
	03/21/13	25.52	7.30	ND	0.00	18.22
	06/27/13	25.52	8.76	ND	0.00	16.76
	09/24/13	25.52	8.42	ND	0.00	17.10
	11/20/13	25.52	9.70	ND	0.00	15.82
	04/23/14	25.52	6.24	ND	0.00	19.28
07/01/14	25.52	7.74	ND	0.00	17.78	
<b>DW-4</b>	07/09/06	25.95	10.31	ND	0.00	15.64
	09/15/06	25.95	9.92	ND	0.00	16.03
	02/05/07	25.95	6.47	ND	0.00	19.48
	06/14/07	25.95	9.29	ND	0.00	16.66
	10/03/07	25.95	8.75	ND	0.00	17.20
	02/15/08	25.95	6.35	ND	0.00	19.60
	05/12/08	25.95	7.28	ND	0.00	18.67
	08/05/08	25.95	7.73	ND	0.00	18.22
	11/15/08	25.95	8.68	ND	0.00	17.27
	02/04/09	25.95	7.43	ND	0.00	18.52
	05/14/09	25.95	7.98	ND	0.00	17.97
	08/11/09	25.95	4.03	ND	0.00	21.92
	11/20/09	25.95	6.62	ND	0.00	19.33
	03/12/10	25.95	6.12	ND	0.00	19.83
	09/02/10	25.95	8.15	ND	0.00	17.80
	12/07/10	25.95	7.83	ND	0.00	18.12
	04/07/11	25.95	8.00	ND	0.00	17.95
	06/22/11	25.95	10.60	ND	0.00	15.35
	10/11/11	25.95	7.58	ND	0.00	18.37
	12/14/11	25.95	8.78	ND	0.00	17.17
	03/27/12	25.95	7.05	ND	0.00	18.90
	06/27/12	25.95	8.10	ND	0.00	17.85
	09/27/12	25.95	7.57	ND	0.00	18.38
	12/19/12	25.95	8.84	ND	0.00	17.11
	03/21/13	25.95	6.80	ND	0.00	19.15
06/27/13	25.95	7.30	ND	0.00	18.65	
09/24/13	25.95	7.85	ND	0.00	18.10	
11/20/13	25.95	9.11	ND	0.00	16.84	

<p align="center"><b>TABLE 3</b>  Liquid-Level Data  Former Texaco Service Station  Chevron Site No. 211874  623 Holcombe Avenue, Mobile, Alabama  (All measurements are in feet below top of casing)</p>						
Well ID	Date	Top of Casing Elevation	Depth to Water	Depth to Product	Product Thickness	Corrected Groundwater Elevation
DW-4 Cont.	04/23/14	25.95	5.70	ND	0.00	20.25
	07/01/14	25.95	7.25	ND	0.00	18.70
TW-1	05/08/02	25.67	2.09	ND	0.00	23.58
	10/27/03	25.67	0.11	ND	0.00	25.56
	03/15/05	25.67	2.90	ND	0.00	22.77
	06/20/05	25.67	1.26	ND	0.00	24.41
	11/02/05	25.67	5.08	ND	0.00	20.59
	02/03/06	25.67	0.38	ND	0.00	25.29
	07/09/06	25.67	7.91	ND	0.00	17.76
	09/15/06	25.67	6.46	ND	0.00	19.21
	02/05/07	25.67	0.58	ND	0.00	25.09
	06/14/07	25.67	5.42	ND	0.00	20.25
	10/03/07	25.67	3.46	ND	0.00	22.21
	02/15/08	25.67	0.48	ND	0.00	25.19
	05/12/08	25.67	3.32	ND	0.00	22.35
	08/05/08	25.67	1.43	ND	0.00	24.24
	11/15/08	25.67	2.49	ND	0.00	23.18
	02/04/09	25.67	2.73	ND	0.00	22.94
	05/14/09	25.67	4.20	ND	0.00	21.47
	08/11/09	25.67	0.60	ND	0.00	25.07
	11/20/09	25.67	3.66	ND	0.00	22.01
	03/12/10	25.67	3.03	ND	0.00	22.64
	09/02/10	25.67	4.12	ND	0.00	21.55
	12/07/10	25.67	4.08	ND	0.00	21.59
	04/07/11	25.67	4.36	ND	0.00	21.31
	06/22/11	25.67	7.90	ND	0.00	17.77
	10/11/11	25.67	4.09	ND	0.00	21.58
	12/14/11	25.67	3.85	ND	0.00	21.82
	03/27/12	25.67	3.82	ND	0.00	21.85
	06/27/12	25.67	3.50	ND	0.00	22.17
	09/27/12	25.67	3.33	ND	0.00	22.34
	12/19/12	25.67	2.46	ND	0.00	23.21
03/21/13	25.67	3.05	ND	0.00	22.62	
06/27/13	25.67			NM - Covered		
09/24/13	25.67			NM - Covered		
11/20/13	25.67			NM - Covered		
04/23/14	25.67			NM - Blocked		

**TABLE 3**

## Liquid-Level Data

Former Texaco Service Station

Chevron Site No. 211874

623 Holcombe Avenue, Mobile, Alabama

(All measurements are in feet below top of casing)

Well ID	Date	Top of Casing Elevation	Depth to Water	Depth to Product	Product Thickness	Corrected Groundwater Elevation
TW-2	05/08/02	25.02	2.63	ND	0.00	22.39
	10/27/03	25.02	1.88	ND	0.00	23.14
	03/15/05	25.02	1.18	ND	0.00	23.84
	06/21/05	25.02	0.71	ND	0.00	24.31
	11/02/05	25.02	1.40	ND	0.00	23.62
	02/02/06	25.02	0.50	ND	0.00	24.52
	07/09/06	25.02	1.75	ND	0.00	23.27
	09/15/06	25.02	1.56	ND	0.00	23.46
	02/05/07	25.02	0.75	ND	0.00	24.27
	06/14/07	25.02	0.97	ND	0.00	24.05
	10/03/07	25.02	2.79	ND	0.00	22.23
	02/15/08	25.02	2.22	ND	0.00	22.80
	05/12/08	25.02	2.59	ND	0.00	22.43
	08/05/08	25.02	2.77	ND	0.00	22.25
	11/15/08	25.02	3.34	ND	0.00	21.68
	02/04/09	25.02	3.14	ND	0.00	21.88
	05/14/09	25.02	2.94	ND	0.00	22.08
	08/11/09	25.02	2.93	ND	0.00	22.09
	11/20/09	25.02	2.30	ND	0.00	22.72
	03/12/10	25.02	2.10	ND	0.00	22.92
	09/02/10	25.02	2.09	ND	0.00	22.93
	12/07/10	25.02	1.89	ND	0.00	23.13
	04/07/11	25.02	2.12	ND	0.00	22.90
	06/22/11	25.02	4.31	ND	0.00	20.71
	10/11/11	25.02	1.97	ND	0.00	23.05
	12/14/11	25.02	4.25	ND	0.00	20.77
	03/27/12	25.02	1.76	ND	0.00	23.26
	06/27/12	25.02	2.05	ND	0.00	22.97
	09/27/12	25.02	2.43	ND	0.00	22.59
	12/19/12	25.02	3.96	ND	0.00	21.06
03/21/13	25.02	2.60	ND	0.00	22.42	
06/27/13	25.02	3.40	ND	0.00	21.62	
09/24/13	25.02	2.67	ND	0.00	22.35	
11/20/13	25.02	3.34	ND	0.00	21.68	
04/23/14	25.02	1.40	ND	0.00	23.62	
07/01/14	25.02	2.30	ND	0.00	22.72	
TW-3	05/08/02	26.01	4.34	ND	0.00	21.67
	10/27/03	26.01	3.26	ND	0.00	22.75
	03/15/05	26.01	2.06	ND	0.00	23.95

**TABLE 3**

## Liquid-Level Data

Former Texaco Service Station

Chevron Site No. 211874

623 Holcombe Avenue, Mobile, Alabama

(All measurements are in feet below top of casing)

Well ID	Date	Top of Casing Elevation	Depth to Water	Depth to Product	Product Thickness	Corrected Groundwater Elevation
<b>TW-3</b> <b>Cont.</b>	06/21/05	26.01	2.19	ND	0.00	23.82
	11/02/05	26.01	3.60	ND	0.00	22.41
	02/02/06	26.01	2.52	ND	0.00	23.49
	07/09/06	26.01	4.21	ND	0.00	21.80
	09/15/06	26.01	3.67	ND	0.00	22.34
	02/05/07	26.01	1.94	ND	0.00	24.07
	06/14/07	26.01	2.65	ND	0.00	23.36
	10/03/07	26.01	3.48	ND	0.00	22.53
	02/15/08	26.01	NM	ND	0.00	NA
	05/12/08	26.01	3.33	ND	0.00	22.68
	08/05/08	26.01	2.97	ND	0.00	23.04
	11/15/08	26.01	4.21	ND	0.00	21.80
	02/04/09	26.01	3.65	ND	0.00	22.36
	05/14/09	26.01	3.76	ND	0.00	22.25
	08/11/09	26.01	2.35	ND	0.00	23.66
	11/20/09	26.01	2.82	ND	0.00	23.19
	03/12/10	26.01	2.05	ND	0.00	23.96
	09/02/10	26.01	2.38	ND	0.00	23.63
	12/07/10	26.01	2.32	ND	0.00	23.69
	04/07/11	26.01	2.55	ND	0.00	23.46
	06/22/11	26.01	5.85	ND	0.00	20.16
	10/11/11	26.01	2.12	ND	0.00	23.89
	12/14/11	26.01	5.19	ND	0.00	20.82
	03/27/12	26.01	3.09	ND	0.00	22.92
	06/27/12	26.01	2.78	ND	0.00	23.23
	09/27/12	26.01	3.92	ND	0.00	22.09
	12/19/12	26.01	5.18	ND	0.00	20.83
	03/21/13	26.01	3.10	ND	0.00	22.91
	06/27/13	26.01	3.63	ND	0.00	22.38
	09/24/13	26.01	3.63	ND	0.00	22.38
11/20/13	26.01	4.73	ND	0.00	21.28	
04/23/14	26.01	1.98	ND	0.00	24.03	
07/01/14	26.01	2.85	ND	0.00	23.16	
<b>TW-4</b>	05/08/02	25.22	5.79	ND	0.00	19.43
	10/27/03	25.22	5.20	ND	0.00	20.02
	03/15/05	25.22	1.95	ND	0.00	23.27
	06/21/05	25.22	3.38	ND	0.00	21.84
	11/02/05	25.22	5.37	ND	0.00	19.85
	02/02/06	25.22	3.77	ND	0.00	21.45

**TABLE 3**

## Liquid-Level Data

Former Texaco Service Station

Chevron Site No. 211874

623 Holcombe Avenue, Mobile, Alabama

(All measurements are in feet below top of casing)

Well ID	Date	Top of Casing Elevation	Depth to Water	Depth to Product	Product Thickness	Corrected Groundwater Elevation
<b>TW-4</b> <b>Cont.</b>	07/09/06	25.22	7.12	ND	0.00	18.10
	09/15/06	25.22	6.71	ND	0.00	18.51
	02/05/07	25.22	2.81	ND	0.00	22.41
	06/14/07	25.22	5.61	ND	0.00	19.61
	10/03/07	25.22	5.55	ND	0.00	19.67
	02/15/08	25.22	NM	ND	0.00	NA
	05/12/08	25.22	4.50	ND	0.00	20.72
	08/05/08	25.22	4.45	ND	0.00	20.77
	11/15/08	25.22	5.54	ND	0.00	19.68
	02/04/09	25.22	5.09	ND	0.00	20.13
	05/14/09	25.22	5.10	ND	0.00	20.12
	08/11/09	25.22	3.77	ND	0.00	21.45
	11/20/09	25.22	3.27	ND	0.00	21.95
	03/12/10	25.22	2.51	ND	0.00	22.71
	09/02/10	25.22	3.10	ND	0.00	22.12
	12/07/10	25.22	2.00	ND	0.00	23.22
	04/07/11	25.22	2.68	ND	0.00	22.54
	06/22/11	25.22	8.42	ND	0.00	16.80
	10/11/11	25.22	2.33	ND	0.00	22.89
	12/14/11	25.22	7.15	ND	0.00	18.07
	03/27/12	25.22	4.03	ND	0.00	21.19
	06/27/12	25.22	5.07	ND	0.00	20.15
	09/27/12	25.22	4.38	ND	0.00	20.84
	12/19/12	25.22	7.37	ND	0.00	17.85
	03/21/13	25.22	6.54	ND	0.00	18.68
	06/27/13	25.22	7.18	ND	0.00	18.04
	09/24/13	25.22	5.53	ND	0.00	19.69
11/20/13	25.22	7.20	ND	0.00	18.02	
04/23/14	25.22	2.56	ND	0.00	22.66	
07/01/14	25.22	2.99	ND	0.00	22.23	
<b>RW-1</b>	07/09/06	25.12	2.43	ND	0.00	22.69
	09/15/06	25.12	2.52	ND	0.00	22.60
	02/05/07	25.12	1.61	ND	0.00	23.51
	06/14/07	25.12	1.20	ND	0.00	23.92
	10/03/07	25.12	2.82	ND	0.00	22.30
	02/15/08	25.12	2.07	ND	0.00	23.05
	05/12/08	25.12	2.33	ND	0.00	22.79
	08/05/08	25.12	2.67	ND	0.00	22.45
11/15/08	25.12	3.33	ND	0.00	21.79	

**TABLE 3**

## Liquid-Level Data

Former Texaco Service Station

Chevron Site No. 211874

623 Holcombe Avenue, Mobile, Alabama

(All measurements are in feet below top of casing)

Well ID	Date	Top of Casing Elevation	Depth to Water	Depth to Product	Product Thickness	Corrected Groundwater Elevation
<b>RW-1</b> <b>Cont.</b>	02/04/09	25.12	3.15	ND	0.00	21.97
	05/14/09	25.12	3.06	ND	0.00	22.06
	08/11/09	25.12	2.72	ND	0.00	22.40
	11/20/09	25.12	2.35	ND	0.00	22.77
	03/12/10	25.12	1.70	ND	0.00	23.42
	09/02/10	25.12	1.12	ND	0.00	24.00
	11/11/10	25.12	3.51	ND	0.00	21.61
	09/02/10	25.12	2.36	ND	0.00	22.76
	04/07/11	25.12	2.72	ND	0.00	22.40
	06/22/11	25.12	4.41	ND	0.00	20.71
	10/11/11	25.12	2.70	ND	0.00	22.42
	12/14/11	25.12	4.17	ND	0.00	20.95
	03/27/12	25.12	3.60	ND	0.00	21.52
	06/27/12	25.12	2.40	ND	0.00	22.72
	09/27/12	25.12	2.45	ND	0.00	22.67
	12/19/12	25.12	3.92	ND	0.00	21.20
	03/21/13	25.12	2.05	ND	0.00	23.07
	05/15/13	25.12	1.90	ND	0.00	23.22
	06/27/13	25.12	2.90	ND	0.00	22.22
	09/24/13	25.12	2.42	ND	0.00	22.70
11/20/13	25.12	3.63	ND	0.00	21.49	
04/23/14	25.12	2.15	ND	0.00	22.97	
07/01/14	25.12	2.53	ND	0.00	22.59	
<b>TP-1</b>	07/09/06	25.26	2.87	ND	0.00	22.39
	09/15/06	25.26	2.58	ND	0.00	22.68
	02/05/07	25.26	1.72	ND	0.00	23.54
	06/14/07	25.26	1.79	ND	0.00	23.47
	10/03/07	25.26	2.51	ND	0.00	22.75
	02/15/08	25.26	1.41	ND	0.00	23.85
	05/12/08	25.26	2.20	ND	0.00	23.06
	08/05/08	25.26	2.17	ND	0.00	23.09
	11/15/08	25.26	2.50	ND	0.00	22.76
	02/04/09	25.26	2.66	ND	0.00	22.60
	05/14/09	25.26	2.55	ND	0.00	22.71
	08/11/09	25.26	1.70	ND	0.00	23.56
	11/20/09	25.26	1.74	ND	0.00	23.52
	03/12/10	25.26	0.08	ND	0.00	25.18
	09/02/10	25.26	0.70	ND	0.00	24.56
11/11/10	25.26	2.60	ND	0.00	22.66	

**TABLE 3**

Liquid-Level Data  
Former Texaco Service Station  
Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama  
(All measurements are in feet below top of casing)

Well ID	Date	Top of Casing Elevation	Depth to Water	Depth to Product	Product Thickness	Corrected Groundwater Elevation
TP-1 Cont.	09/02/10	25.26	1.48	ND	0.00	23.78
	04/07/11	25.26	2.20	ND	0.00	23.06
	06/22/11	25.26	3.99	ND	0.00	21.27
	10/11/11	25.26	2.02	ND	0.00	23.24
	12/14/11	25.26	3.22	ND	0.00	22.04
	03/27/12	25.26	1.90	ND	0.00	23.36
	06/27/12	25.26	1.89	ND	0.00	23.37
	09/27/12	25.26	2.48	ND	0.00	22.78
	12/19/12	25.26	3.10	ND	0.00	22.16
	03/21/13	25.26	1.95	ND	0.00	23.31
	05/15/13	25.26	1.30	ND	0.00	23.96
	06/27/13	25.26	2.94	ND	0.00	22.32
	09/24/13	25.26	2.20	ND	0.00	23.06
	11/20/13	25.26	2.72	ND	0.00	22.54
	04/23/14	25.26	0.82	ND	0.00	24.44
07/01/14	25.26	2.18	ND	0.00	23.08	
<b>Notes:</b>						
ND = not detected						
NM = not measured						

<b>TABLE 4</b> Natural Attenuation Parameters Former Texaco Service Station Chevron Site No. 211874 623 Holcombe Avenue, Mobile, Alabama						
Sample Location	Date Sampled	Temp °C	Spec. Cond mS/cm	pH (su)	DO (mg/L)	ORP (mV)
<b>MW-1</b>	05/08/02	22.2	0.060	4.30	3.75	355
	03/15/05	17.6	0.543	6.14	NM	36
	06/20/05	24.7	0.480	6.00	1.6	-7
	11/03/05	23.59	0.471	6.17	1.01	53.2
	02/03/06	17.70	0.482	8.25	4.50	104.8
	02/03/06	28.50	0.297	5.67	1.50	-5.0
<b>MW-2</b>	05/07/02	24.6	0.077	7.46	0.46	25
	03/15/05	19.3	0.244	6.87	NM	2
	06/20/05	28.5	0.154	7.50	3.0	-10
	11/03/05	26.29	0.024	7.29	5.14	407.8
	02/02/06	19.43	0.165	6.94	7.90	19.2
	07/09/06	28.20	0.242	6.27	1.60	-44.0
	09/15/06	27.60	0.410	5.35	2.60	56.0
	08/12/09	33.62	0.172	8.27	2.63	-19.2
	06/22/11	26.76	0.281	7.55	0.83	-73.0
	12/21/12	21.20	0.242	7.2	2.56	105.5
	11/21/13	24.91	0.289	7.25	2.34	33.4
	<b>MW-3</b>	05/07/02	21.4	0.097	5.51	0.38
03/15/05		17.7	0.319	6.79	NM	12
06/20/05		29.1	0.274	6.69	1.6	-9
11/03/05		23.43	0.365	6.70	0.26	-33.7
02/02/06		17.60	0.356	6.84	0.60	-96.0
07/09/06		28.70	0.408	5.83	1.60	-58.0
09/15/06		26.30	0.190	5.50	1.10	-34.0
02/05/07		17.00	0.397	7.16	3.80	-61.0
06/14/07		24.60	0.418	6.75	1.30	-102.0
10/03/07		22.40	0.391	6.68	1.30	-31.0
02/15/08		18.70	0.319	6.28	1.10	-27.0
05/12/08		22.90	0.318	6.81	1.80	-59.0
08/05/08		26.50	0.292	6.96	2.20	-84.0
09/02/10		29.25	0.402	7.48	1.52	-46.3
12/07/10		14.85	0.395	7.58	10.13	-12.4
04/07/11		23.77	0.272	6.80	11.71	218.0
06/22/11		27.61	0.208	6.69	2.52	96.9
10/11/11		25.71	0.350	7.36	3.26	53.6
12/14/11	21.06	0.325	6.88	4.83	33.6	
03/27/12	22.90	0.278	7.28	3.07	54.6	
06/27/12	29.79	0.348	8.59	5.40	79.8	

<b>TABLE 4</b> Natural Attenuation Parameters Former Texaco Service Station Chevron Site No. 211874 623 Holcombe Avenue, Mobile, Alabama						
Sample Location	Date Sampled	Temp °C	Spec. Cond mS/cm	pH (su)	DO (mg/L)	ORP (mV)
<b>MW-3</b> Cont.	09/27/12	27.98	0.439	8.00	1.15	-65.5
	12/20/12	19.26	0.0276	8.15	13.66	-35.6
	03/22/13	18.22	0.192	7.31	8.66	-22.9
	06/01/13	21.22	1.87	7.21	8.54	-202.0
	09/25/13	28.04	0.290	7.45	3.60	-12.3
	11/21/13	22.76	0.240	8.01	8.06	-47.6
	04/23/14	23.24	0.305	6.87	4.00	-1.0
	07/02/14	28.06	0.303	8.19	0.92	-3.2
<b>MW-4</b>	05/07/02	22.0	0.088	5.47	2.37	181
	03/16/05	16.6	0.546	6.57	NM	-44
	06/21/05	26.4	0.448	6.31	1.4	-57
	11/04/05	23.27	0.522	6.48	0.22	-32.4
	02/02/06	16.59	0.491	6.68	1.29	-17.0
	07/10/06	25.70	0.507	5.73	1.30	24.0
	09/15/06	26.30	0.448	5.50	1.10	-34.0
	06/22/11	27.19	0.235	6.45	4.84	15.6
	12/20/12	17.43	0.065	7.17	9.81	43.9
11/21/13	21.83	0.206	7.67	4.99	-10.2	
<b>MW-5</b>	05/08/02	21.8	0.051	4.89	0.35	271
	03/16/05	18.6	0.133	6.01	NM	-8
	06/21/05	26.7	0.146	6.04	1.3	-5
	11/04/05	24.83	0.034	5.65	0.55	-24.9
	02/02/06	19.01	0.252	6.06	0.33	-13.8
	07/10/06	26.60	0.297	5.83	1.80	19.0
	09/15/06	28.50	0.190	5.63	2.10	-14.0
	06/22/11	22.95	0.367	6.37	6.42	-56.8
	12/20/12	20.93	0.204	6.46	9.82	119.7
11/20/13	22.96	0.217	7.33	3.21	21.2	
<b>MW-6</b>	03/16/05	19.0	0.206	6.69	NM	-68
	06/20/05	25.3	0.226	5.10	2.0	-16
	11/04/05	25.96	0.238	5.70	0.22	-64.3
	02/02/06	19.13	0.263	5.90	3.55	-18.3
	07/10/06	23.00	0.213	6.76	1.60	-24.0
	09/15/06	27.50	0.331	6.18	0.80	-41.0
	02/05/07	17.90	0.067	5.25	2.70	54.0
	06/14/07	25.20	0.226	6.05	1.10	-95.0
	10/03/07	21.30	0.208	6.15	1.50	-19.0

<b>TABLE 4</b> Natural Attenuation Parameters Former Texaco Service Station Chevron Site No. 211874 623 Holcombe Avenue, Mobile, Alabama						
Sample Location	Date Sampled	Temp °C	Spec. Cond mS/cm	pH (su)	DO (mg/L)	ORP (mV)
<b>MW-6</b>	02/15/08	18.20	0.194	6.02	1.40	-21.0
<b>Cont.</b>	05/12/08	22.30	0.209	6.35	1.30	-68.0
	08/05/08	26.80	0.246	6.13	2.50	-26.0
	11/15/08	23.10	0.235	6.19	2.1	-35
	02/04/09	16.10	0.216	6.32	1.9	-58
	05/14/09	24.48	0.141	6.72	NM	-36.2
	08/12/09	29.73	0.152	6.42	1.27	-44.1
	09/02/10	27.51	0.222	6.60	0.63	-45.3
	12/07/10	22.22	0.348	7.01	1.22	-110.3
	04/07/11	23.05	0.026	7.05	11.87	16.0
	06/23/11	25.04	0.051	4.65	2.41	146.3
	10/11/11	28.11	2.159	6.95	1.82	-157.5
	12/14/11	23.10	5.291	5.77	2.64	-7.8
	03/27/12	21.93	0.98	36.80	15.33	-265.3
	06/27/12	27.30	24.29	6.40	7.83	-2.6
	09/27/12	30.31	16.69	6.93	1.90	-124.4
	12/20/12	22.58	40.55	6.76	1.62	-12.9
	03/22/13	19.62	3.50	7.13	8.17	-128.3
	06/27/13	22.30	3.402	7.06	7.59	-128.7
	09/25/13	28.32	12.76	7.17	3.30	-89.8
	11/20/13	22.76	4.40	7.73	2.17	-114.5
	04/23/14	21.67	1.79	6.04	1.32	61.0
	07/02/14	26.81	3.74	7.23	2.09	-89.6
<b>MW-7</b>	03/15/05	17.4	0.153	4.74	NM	147
	06/20/05	23.0	0.076	4.66	2.3	120
	11/03/05	24.34	0.072	4.49	0.34	239.8
	02/02/06	19.71	0.074	4.66	4.15	202.5
	07/10/06	23.40	0.073	4.95	1.70	40.0
	09/15/06	24.30	0.077	5.26	2.10	15.0
	06/22/11	21.70	0.090	5.31	4.60	41.4
	12/20/12	20.52	0.063	7.01	6.39	84.9
	11/21/13	22.39	0.066	7.30	3.38	66.9
<b>MW-8</b>	03/15/05	17.5	0.272	4.50	NM	164
	06/20/05	23.2	0.150	5.48	1.2	72
	11/03/05	24.29	0.109	4.24	1.08	495.1
	02/02/06	19.57	0.120	4.18	4.73	278.4
	07/10/06	23.20	0.115	4.55	1.80	82.0
	09/15/06	23.60	0.112	5.12	1.90	42.0

<b>TABLE 4</b> Natural Attenuation Parameters Former Texaco Service Station Chevron Site No. 211874 623 Holcombe Avenue, Mobile, Alabama						
Sample Location	Date Sampled	Temp °C	Spec. Cond mS/cm	pH (su)	DO (mg/L)	ORP (mV)
<b>MW-8</b> <b>Cont.</b>	02/05/07	18.40	0.048	4.71	3.40	184.0
	06/14/07	24.80	0.150	5.26	1.30	91.0
	10/03/07	22.90	0.184	5.37	1.40	21.0
	02/15/08	18.50	0.168	5.46	1.30	34.0
	05/12/08	20.40	0.196	5.12	2.10	152.0
	08/05/08	23.70	0.238	5.45	2.10	9.0
	06/22/11	23.09	0.177	5.70	3.93	43.3
	12/20/12	21.75	0.121	6.60	2.60	108.1
11/21/13	22.70	0.110	7.25	2.71	62.3	
<b>MW-9</b>	03/15/05	18.7	0.372	4.30	NM	176
	06/20/05	23.4	0.229	5.47	1.7	72
	11/03/05	24.88	0.187	5.09	1.62	-51.4
	02/02/06	20.40	0.126	3.89	4.04	272.4
	07/10/06	23.70	0.088	5.54	1.40	112.0
	09/15/06	24.00	0.099	4.83	1.80	62.0
	02/05/07	19.20	0.048	4.21	3.90	307.0
	06/14/07	23.70	0.085	4.91	1.50	149.0
	10/03/07	21.00	0.092	5.74	1.40	94.0
	02/15/08	18.90	0.042	5.66	1.30	45.0
	05/12/08	21.10	0.208	4.95	1.80	164.0
	08/05/08	23.70	0.093	5.56	2.10	99.0
	06/22/11	22.70	0.005	0.98	6.10	94.2
	12/20/12	21.29	0.070	6.27	2.15	293.9
11/21/13	23.16	0.098	7.23	3.64	37.1	
<b>MW-10</b>	03/15/05	18.8	0.110	4.50	NM	155
	06/20/05	25.2	0.112	4.91	1.7	192
	11/03/05	25.38	0.114	4.26	0.47	214.7
	02/02/06	19.63	0.112	3.93	3.93	303.0
	07/10/06	24.90	0.093	4.47	1.80	1.4
	09/15/06	24.00	0.098	4.72	2.10	66.0
	06/22/11	24.96	0.005	2.88	2.60	14.0
	12/20/12	21.47	0.074	6.86	5.30	182.1
11/21/13	23.66	0.081	6.96	26.81	77.0	

<b>TABLE 4</b> Natural Attenuation Parameters Former Texaco Service Station Chevron Site No. 211874 623 Holcombe Avenue, Mobile, Alabama						
Sample Location	Date Sampled	Temp °C	Spec. Cond mS/cm	pH (su)	DO (mg/L)	ORP (mV)
<b>MW-11</b>	03/15/05	17.5	0.154	5.47	NM	96
	06/20/05	25.4	0.207	5.51	2.0	84
	11/03/05	26.09	0.112	5.16	NM	332.6
	02/03/06	17.52	0.158	7.30	2.2	209.2
	07/10/06	Dry at 7.21 feet				
	09/15/06	24.30	0.082	4.77	2.8	81.0
	11/21/13	23.22	0.050	7.01	20.2	78.0
<b>MW-12</b>	03/15/05	17.8	0.258	6.08	NM	35
	06/20/05	24.2	0.273	6.14	1.6	10
	11/03/05	22.95	0.338	6.30	2.61	38.1
	02/03/06	18.06	0.302	7.86	6.96	-0.5
	07/10/06	Dry at 7.10 feet				
	09/15/06	24.80	0.071	5.66	1.70	66.0
	02/05/07	15.10	0.075	5.10	4.70	48.0
	06/14/07	25.90	0.354	6.24	1.30	-88.0
	10/03/07	23.20	0.328	6.39	1.30	-42.0
	02/15/08	19.10	0.361	16.80	1.20	-28.0
	05/12/08	21.50	0.243	6.41	1.50	13.0
	08/05/08	26.50	0.298	6.42	1.80	-1.0
	08/12/09	28.09	0.375	7.56	1.36	-0.4
	12/20/12	18.99	0.231	8.76	8.20	2.1
11/21/13	22.30	0.048	7.05	20.21	77.0	
<b>MW-13</b>	03/15/05	17.90	0.131	5.37	NM	117.00
	06/20/05	23.30	0.110	4.94	1.80	-15.00
	11/03/05	25.16	0.055	4.28	2.64	-220.90
	02/02/06	20.15	0.076	4.24	2.88	180.10
	07/10/06	24.10	0.059	5.61	2.10	16.00
	08/04/06	25.20	0.063	5.21	1.30	-64.00
	09/15/06	25.30	0.073	6.09	2.70	-39.00
	02/05/07	19.10	0.025	5.10	2.80	107.00
	06/14/07	24.50	0.057	4.92	2.40	134.00
	10/03/07	22.80	0.059	5.12	2.70	56.00
	02/15/08	18.90	0.045	5.26	2.40	62.00
	05/12/08	21.40	0.061	5.41	1.80	82.00
	08/05/08	25.70	0.064	6.29	1.90	134.00
	11/15/08	22.90	0.062	5.01	1.80	125.00
02/04/09	16.40	0.072	5.26	2.00	80.00	
05/14/09	21.95	0.056	5.21	NM	66.10	

<b>TABLE 4</b> Natural Attenuation Parameters Former Texaco Service Station Chevron Site No. 211874 623 Holcombe Avenue, Mobile, Alabama						
Sample Location	Date Sampled	Temp °C	Spec. Cond mS/cm	pH (su)	DO (mg/L)	ORP (mV)
<b>MW-13</b> <b>Cont.</b>	08/12/09	26.35	0.070	4.43	1.01	149.30
	09/02/10	26.99	0.076	6.07	1.23	11.10
	12/07/10	21.27	0.005	5.60	0.93	-43.40
	04/07/11	21.19	0.031	6.78	11.50	51.0
	06/23/11	22.67	0.190	4.99	3.00	43.6
	10/11/11	25.90	0.204	6.77	1.88	-59.4
	12/14/11	22.97	1.702	5.57	3.71	-3.6
	03/27/12	20.40	0.452	6.25	0.45	-219.3
	06/28/12	24.50	0.164	6.88	13.21	-18.7
	09/27/12	28.50	7.279	7.13	1.58	-128.7
	12/20/12	20.10	0.662	6.58	2.40	40.7
	03/22/13	17.94	1.327	6.80	3.05	34.8
	06/27/13	19.27	1.275	6.90	2.89	40.2
	09/25/13	24.29	3.308	6.78	4.31	21.0
	11/21/13	23.21	1.529	6.83	2.75	-17.5
	04/23/14	19.52	0.768	4.56	1.53	155.0
	07/02/14	23.90	0.126	7.57	4.15	-43.6
11/14/14	23.78	1.590	6.86	2.10	-66.9	
<b>MW-14</b>	03/15/05	16.7	0.096	5.36	NM	121
	06/20/05	21.7	0.070	4.80	2.0	86
	11/03/05	23.35	0.068	4.52	0.25	412.6
	02/02/06	19.91	0.091	5.48	7.78	142.4
	07/10/06	21.70	0.058	5.17	1.30	24.0
	09/15/06	22.50	0.072	5.62	1.70	11.0
	02/05/07	18.50	0.027	4.85	2.70	236.0
	06/14/07	24.50	0.072	5.42	1.60	73.0
	10/03/07	22.40	0.087	5.67	3.40	61.0
	02/15/08	17.90	0.092	5.48	3.10	51.0
	05/12/08	20.30	0.114	4.68	1.50	223.0
	08/05/08	23.10	0.134	5.21	2.10	105.0
	06/23/11	20.60	0.073	5.00	5.31	45.4
	12/14/11	21.06	0.325	6.88	4.83	33.6
	12/20/12	20.82	0.064	7.15	3.32	74.4
	03/22/13	19.29	0.053	6.70	8.60	117.0
	06/27/13	22.13	0.046	6.89	8.63	112.0
	09/25/13	23.21	0.084	7.46	6.59	31.9
	11/21/13	21.76	0.089	7.37	3.54	25.2
	04/23/14	18.45	0.096	4.66	2.72	239.0
07/02/14	21.39	0.086	7.08	3.75	62.2	
11/14/14	22.81	2.260	6.94	1.96	-17.5	

<b>TABLE 4</b> Natural Attenuation Parameters Former Texaco Service Station Chevron Site No. 211874 623 Holcombe Avenue, Mobile, Alabama						
Sample Location	Date Sampled	Temp °C	Spec. Cond mS/cm	pH (su)	DO (mg/L)	ORP (mV)
<b>MW-15</b>	03/15/05	21.3	0.098	5.46	NM	68
	06/20/05	27.6	0.134	6.50	1.8	21
	11/04/05	26.09	0.043	4.96	1.15	144.7
	02/03/06	21.30	0.006	6.26	0.97	166.9
	07/10/06	25.80	0.039	4.96	1.40	135.0
	08/04/06	26.20	0.057	5.18	1.70	13.0
	09/15/06	24.60	0.050	4.69	1.80	94.0
	02/05/07	19.00	0.041	6.37	3.30	97.0
	06/14/07	26.50	0.050	5.70	1.40	80.0
	10/03/07	23.20	0.042	5.89	1.50	48.0
	02/15/08	18.50	0.056	5.78	1.60	38.0
	05/12/08	24.10	0.082	6.36	1.80	19.0
	08/05/08	26.50	0.123	6.46	1.50	35.0
	06/22/11	27.61	0.047	5.40	4.22	179.3
11/21/13	23.00	0.500	6.99	20.77	68.8	
<b>MW-16</b>	03/15/05	21.8	0.106	5.37	NM	66
	06/20/05	27.4	0.234	6.61	1.6	19
	11/04/05	27.29	0.008	5.25	2.46	391.6
	02/03/06	22.21	0.125	6.49	3.29	275.6
	07/10/06	27.70	0.090	4.97	1.60	100.0
	09/15/06	26.30	0.098	4.74	1.90	22.0
	06/22/11	29.91	0.098	6.20	5.70	87.6
	12/20/12	21.25	0.127	7.67	8.03	56.3
	11/21/13	23.20	0.070	6.98	20.51	70.0
<b>MW-17</b>	07/10/06	23.30	0.062	5.46	1.60	-12.0
	08/04/06	23.90	0.061	5.36	1.10	-28.0
	09/15/06	23.80	0.063	5.53	1.90	3.0
	02/05/07	17.10	0.027	4.57	3.50	205.0
	06/14/07	24.40	0.073	5.23	1.40	131.0
	10/03/07	22.70	0.082	5.61	1.90	95.0
	02/15/08	18.10	0.072	5.42	1.70	66.0
	05/12/08	21.90	0.110	4.83	1.40	183.0
	08/05/08	25.00	0.106	5.23	2.40	154.0
	08/12/09	25.72	0.076	4.71	1.26	237.5
	09/02/10	27.31	0.104	6.61	1.69	184.7
	12/07/10	12.16	0.085	7.10	12.73	313.5
	04/07/11	22.43	0.067	6.76	2.13	222.0
06/22/11	23.95	0.189	6.92	5.80	-88.4	

<b>TABLE 4</b> Natural Attenuation Parameters Former Texaco Service Station Chevron Site No. 211874 623 Holcombe Avenue, Mobile, Alabama						
Sample Location	Date Sampled	Temp °C	Spec. Cond mS/cm	pH (su)	DO (mg/L)	ORP (mV)
<b>MW-17</b> <b>Cont.</b>	10/11/11	25.90	0.070	6.96	2.01	111.0
	12/14/11	23.70	0.055	6.68	5.94	157.2
	03/27/12	21.30	0.099	6.80	9.03	-21.3
	06/28/12	24.63	0.130	6.80	6.31	208.2
	09/27/12	26.45	0.581	6.59	1.20	-12.5
	12/21/12	20.81	2.220	6.63	2.42	107.9
	03/22/13	20.82	0.223	6.71	7.77	114.6
	06/27/13	23.32	0.287	6.90	7.85	120.0
	09/25/13	24.32	0.183	7.01	4.29	105.9
	11/21/13	22.82	0.253	7.04	2.24	66.0
	04/23/14	20.29	0.142	6.88	2.58	263.0
	07/02/14	21.30	0.049	7.67	7.36	75.9
	11/14/14	22.96	0.480	6.77	2.25	54.0
<b>DW-1</b>	03/16/05	22.1	2.673	10.53	NM	-110
	06/21/05	24.5	0.983	9.81	1.6	-64
	11/03/05	25.33	0.243	11.77	5.0	-140.7
	02/02/06	23.10	0.003	12.12	3.1	-198.5
	07/09/06	25.70	0.003	7.99	1.0	-88.0
	09/15/06	24.50	0.481	7.14	1.4	-44.0
	02/05/07	20.80	0.061	6.92	4.1	-84.0
	06/14/07	24.70	0.473	10.98	1.1	-207.0
	10/03/07	22.10	0.504	10.64	1.4	-105.0
	02/15/08	19.10	0.493	9.45	1.9	-68.0
	05/12/08	22.80	0.190	9.73	1.1	-261.0
	08/05/08	25.40	0.142	7.01	2.4	-226.0
	12/20/12	21.60	0.163	8.00	1.8	64.0
11/21/13	25.00	0.028	7.010	1.20	33.8	
<b>DW-2</b>	03/16/05	21.7	0.137	6.43	NM	-62
	06/21/05	23.5	0.179	7.56	1.6	-83
	11/04/05	24.99	0.173	6.49	2.08	-60.3
	02/02/06	23.20	0.165	6.34	1.54	-58.5
	07/09/06	23.90	0.157	7.36	1.20	-140.0
	09/15/06	23.10	0.187	6.68	1.70	-45.0
	02/05/07	21.30	0.058	5.58	3.10	36.0
	06/14/07	24.90	0.114	6.81	1.20	-109.0
	10/03/07	22.60	0.107	7.01	2.30	-89.0
	02/15/08	18.20	0.093	7.12	1.80	-78.0
	05/12/08	23.30	0.156	6.64	1.10	-128.0
	08/05/08	25.00	0.131	7.20	2.40	-163.0
	11/21/13	25.05	0.036	7.090	1.82	33.5

<b>TABLE 4</b> Natural Attenuation Parameters Former Texaco Service Station Chevron Site No. 211874 623 Holcombe Avenue, Mobile, Alabama						
Sample Location	Date Sampled	Temp °C	Spec. Cond mS/cm	pH (su)	DO (mg/L)	ORP (mV)
<b>DW-3</b>	07/09/06	25.00	0.275	7.16	1.60	15.0
	09/15/06	23.40	0.166	6.72	1.80	-55.0
	02/05/07	20.80	0.071	8.35	3.00	-86.0
	06/14/07	24.30	0.253	8.26	1.30	-155.0
	10/03/07	21.90	0.289	8.04	1.40	-91.0
	02/15/08	18.60	0.249	7.95	1.30	-62.0
	05/12/08	22.80	0.266	6.89	1.40	-65.0
	08/05/08	24.10	0.229	6.42	1.10	-69.0
	06/22/11	23.95	0.189	6.92	5.80	-88.4
	12/20/12	21.56	0.152	7.21	2.49	-5.2
11/21/13	25.30	0.040	7.270	2.22	38.0	
<b>DW-4</b>	07/09/06	25.10	0.193	6.69	1.40	30.0
	09/15/06	24.10	0.206	6.09	1.70	-38.0
	02/05/07	20.50	0.053	5.84	3.70	75.0
	06/14/07	24.30	0.096	6.32	1.40	-56.0
	10/03/07	22.00	0.104	6.41	1.60	-52.0
	02/15/08	19.40	0.125	6.31	1.40	-48.0
	05/12/08	22.70	0.063	6.48	1.20	-55.0
	08/05/08	24.50	0.084	6.22	2.10	-18.0
	06/22/11	23.99	0.090	5.99	4.02	-34.0
	12/20/12	22.63	0.082	6.78	4.54	122.2
11/21/13	25.36	0.047	7.270	2.95	40.0	
<b>TW-1</b>	05/08/02	22.7	0.083	5.21	0.19	61
	03/15/05	18.2	0.095	5.41	NM	94
	06/20/05	26.1	0.134	5.65	2.1	80
	11/03/05	24.4	0.119	5.86	4.31	551.6
	02/03/06	17.3	0.181	7.74	4.55	122.4
	07/10/06	23.8	0.102	5.09	3.70	69.0
	08/04/06	25.6	0.070	5.16	26.00	97.0
	09/15/06	24.9	0.065	4.77	4.10	73.0
	02/05/07	15.5	0.073	5.79	5.00	115.0
	06/14/07	25.2	0.105	5.74	1.40	55.0
	10/03/07	23.1	0.113	5.81	1.00	61.0
	02/15/08	17.9	0.129	5.74	1.10	74.0
	05/12/08	21.5	0.151	6.18	1.80	-1.0
	08/05/08	24.8	0.111	6.19	2.40	10.0
08/12/09	28.68	0.234	7.46	1.47	6.0	
06/22/11	22.88	0.077	5.34	4.90	108.6	
12/20/12	20.67	0.119	7.69	5.19	28.7	

<b>TABLE 4</b> Natural Attenuation Parameters Former Texaco Service Station Chevron Site No. 211874 623 Holcombe Avenue, Mobile, Alabama						
Sample Location	Date Sampled	Temp °C	Spec. Cond mS/cm	pH (su)	DO (mg/L)	ORP (mV)
<b>TW-2</b>	05/07/02	25.1	0.030	4.25	1.18	336
	03/16/05	19.7	0.288	9.34	NM	-76
	06/21/05	26.9	0.462	6.30	1.7	-127
	11/04/05	24.84	0.488	6.17	0.23	-86.3
	02/02/06	19.61	0.398	6.39	0.25	-31.6
	07/09/06	28.40	0.411	6.96	2.10	-161.0
	08/04/06	29.40	0.292	7.42	1.30	-146.0
	09/15/06	28.00	0.264	5.17	2.70	77.0
	02/05/07	16.80	0.069	6.54	3.20	-76.0
	06/14/07	25.60	0.591	6.36	1.00	-101.0
	10/03/07	22.90	0.604	6.41	1.30	-61.0
	02/15/08	18.60	0.548	6.34	1.40	-42.0
	05/12/08	23.10	0.214	6.34	1.60	-59.0
	08/05/08	27.60	0.222	6.40	3.20	-83.0
	06/22/11	27.39	0.205	6.49	5.11	-3.7
	12/14/11	23.03	0.216	6.05	1.72	-54.7
	12/20/12	20.72	0.105	7.47	3.33	28.8
	03/22/13	20.80	0.202	6.81	7.01	76.6
	06/27/13	23.82	0.203	6.89	7.52	88.8
	09/25/13	26.82	0.399	7.41	14.66	-70.8
11/21/13	24.87	0.159	7.32	3.06	-14.1	
04/23/14	21.71	1.88	5.85	0.66	99.0	
07/02/14	28.41	0.329	7.48	2.80	-55.1	
<b>TW-3</b>	05/07/02	22.0	0.091	5.06	1.5	263
	03/16/05	19.2	0.336	5.79	NM	22
	06/21/05	27.5	0.310	6.31	1.6	-70
	11/04/05	26.85	0.283	5.67	0.45	253.9
	02/02/06	19.72	0.234	5.27	1.23	147.2
	07/10/06	27.60	0.576	5.02	1.90	81.0
	09/15/06	28.20	0.333	5.34	2.20	2.0
	02/05/07	16.20	0.066	5.46	3.70	45.0
	06/14/07	25.50	0.371	6.17	1.40	-80.0
	10/03/07	23.40	0.391	6.29	1.50	-71.0
	05/12/08	22.60	0.325	5.96	1.80	-6.0
	08/05/08	26.70	0.316	5.53	1.20	-27.0
	06/22/11	27.31	0.223	5.86	1.82	25.9
	12/20/12	22.10	0.136	6.88	3.00	77.2
11/21/13	24.04	0.202	1.80	7.79	-9.0	

<b>TABLE 4</b> Natural Attenuation Parameters Former Texaco Service Station Chevron Site No. 211874 623 Holcombe Avenue, Mobile, Alabama						
Sample Location	Date Sampled	Temp °C	Spec. Cond mS/cm	pH (su)	DO (mg/L)	ORP (mV)
<b>TW-4</b>	05/07/02	21.8	0.116	5.37	0.10	144
	03/16/05	18.9	0.243	5.84	NM	-1.0
	06/21/05	26.3	0.228	5.87	1.7	-5.0
	11/04/05	26.12	0.201	5.43	0.22	36.2
	02/02/06	19.97	0.212	5.58	0.65	-8.9
	07/10/06	27.50	0.377	5.96	1.90	53.0
	08/04/06	22.70	0.121	5.11	1.90	27.0
	09/15/06	26.50	0.289	5.28	2.40	14.0
	02/05/07	17.70	0.061	4.54	2.60	48.0
	06/14/07	25.50	0.412	6.12	1.40	-87.0
	10/03/07	23.10	0.452	6.20	1.30	-69.0
	05/12/08	22.30	0.200	6.32	1.60	-87.0
	08/05/08	23.00	0.418	6.13	1.70	-68.0
	11/15/08	18.60	0.318	6.15	1.40	-23.0
	02/04/09	16.50	0.267	5.66	1.70	146.0
	05/14/09	22.56	0.260	6.22	NM	-34.7
	06/22/11	23.89	0.314	6.02	3.56	-72.8
12/20/12	22.39	0.211	6.47	2.10	59.4	
11/21/13	24.05	0.151	7.56	3.20	-10.7	
<b>RW-1</b>	07/09/06	26.20	0.080	6.04	1.80	-114.0
	08/04/06	26.20	0.103	6.18	1.70	-114.0
	09/15/06	26.60	0.146	4.73	2.20	89.0
	02/05/07	18.80	0.053	5.61	3.70	22.0
	06/14/07	24.00	0.207	5.93	1.30	34.0
	10/03/07	21.80	0.198	6.02	1.60	46.0
	02/15/08	19.30	0.182	6.11	1.50	58.0
	05/12/08	22.10	0.251	5.77	2.00	3.0
	08/05/08	25.00	0.186	5.81	3.80	6.0
	11/15/08	24.20	0.131	5.65	2.80	95.0
	02/04/09	17.20	0.137	5.47	2.40	154.0
	05/14/09	23.54	0.151	5.39	NM	78.8
	08/12/09	29.03	0.097	4.75	0.59	71.5
	09/02/10	29.93	0.494	7.24	1.35	-126.4
	12/07/10	20.34	0.429	7.25	1.36	-26.10
	04/07/11	23.64	0.255	7.17	12.80	-16.00
	06/23/11	25.79	0.448	5.42	1.71	43.6
10/11/11	27.43	0.342	6.60	1.28	-95.9	
12/14/11	24.31	3.672	6.32	4.16	-85.2	
03/27/12	21.68	2.017	6.68	3.19	-216.7	

**TABLE 4**  
 Natural Attenuation Parameters  
 Former Texaco Service Station  
 Chevron Site No. 211874  
 623 Holcombe Avenue, Mobile, Alabama

Sample Location	Date Sampled	Temp °C	Spec. Cond mS/cm	pH (su)	DO (mg/L)	ORP (mV)
<b>RW-1</b> <b>Cont.</b>	06/27/12	28.32	1.112	7.07	12.80	-128.4
	09/27/12	26.82	1.115	7.50	1.060	-139.9
	12/21/12	22.26	0.923	7.41	6.86	-57.7
	03/22/13	21.34	0.373	7.57	6.99	-108.9
	06/27/13	22.12	0.371	7.48	7.21	-100.2
	09/25/13	26.84	0.003	7.49	5.44	-70.4
	11/21/13	22.40	0.439	7.71	2.87	-123.9
	04/23/14	21.08	0.404	5.84	1.02	44.0
	07/02/14	27.27	0.522	7.32	4.85	-80.2
<b>TP-1</b>	07/09/06	27.90	0.400	5.76	1.60	-20.0
	09/15/06	26.80	0.493	5.37	1.80	29.0
	02/05/07	17.20	0.641	6.64	2.70	-15.0
	06/14/07	24.00	0.433	6.27	1.50	-55.0
	10/03/07	21.70	0.409	6.38	1.60	-48.0
	02/15/08	18.30	0.427	6.42	1.60	-12.0
	05/12/08	22.50	0.669	6.68	1.50	-140.0
	08/05/08	26.50	0.681	6.22	1.60	-105.0
	11/15/08	21.90	0.576	6.11	1.40	-31.0
	02/04/09	14.10	0.506	6.02	1.60	18.0
	05/14/09	23.65	0.327	7.14	NM	-74.6
	08/12/09	31.37	0.403	7.08	0.38	-123.9
	09/02/10	26.99	0.701	6.07	1.23	-130.7
	12/07/10	16.30	0.111	6.80	2.20	-70.8
	04/07/11	23.31	0.835	8.01	2.84	-77.0
	06/23/11	28.30	0.030	6.75	3.12	-145.9
	10/11/11	25.89	1.782	7.50	1.75	-153.8
	12/14/11	20.71	1.66	7.01	2.55	-43.0
	03/27/11	20.16	2.66	7.14	1.80	-245.1
	06/27/12	32.08	2.37	7.69	9.89	-128.4
	09/27/12	27.68	2.69	6.70	8.21	-128.4
	12/21/12	20.32	5.052	7.77	2.37	-92.3
	03/22/13	17.80	1.202	7.81	7.01	126.3
	06/27/13	19.42	1.289	7.57	7.03	122.3
09/25/13	27.71	2.452	7.77	3.05	-106.9	
11/21/13	21.69	1.840	8.00	2.35	-98.1	
04/23/14	23.88	0.985	6.70	0.41	-61.0	
	07/02/14	27.03	1.169	8.07	2.22	-95.0

**Notes:**

- DO = dissolved oxygen
- ORP = oxidation reduction potential
- °C = degrees Celsius
- mS/cm = millisiemens per centimeter
- su = standard units
- mg/L = milligrams per liter
- mv = millivolts
- NM = not measured

**TABLE 5**

Geochemical Data  
Former Texaco Service Station  
Chevron Site No. 211874

623 Holcombe Avenue, Mobile, Alabama  
All results expressed as milligrams per liter (mg/L)

Sample Location	Date Sampled	Iron	Manganese	Alkalinity	Chloride	Ferrous Iron	Ferric Iron	Methane	Nitrogen, Nitrate	Nitrogen, Nitrate Nitrite	Nitrogen, Nitrite	Sulfate	Sulfide
MW-2	08/12/09	NA	NA	73	NA	<0.050	NA	<0.001	0.94	0.95	<0.10	18	NA
	06/22/11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	09/02/10	NA	NA	150	NA	0.025	NA	0.00170	0.71	0.71	<0.018	8.7	NA
	12/07/10	NA	NA	190	NA	<0.020	NA	0.059	0.23	0.23	<0.013	15	NA
	04/07/11	NA	NA	89	NA	NA	NA	<0.001	0.43	0.43	<0.100	12	NA
	06/22/11	NA	NA	94	NA	NA	NA	NA	0.27	0.27	<0.1	11	NA
	10/11/11	NA	NA	160	NA	<0.020	NA	0.11	0.53	0.53	<0.013	16	NA
	12/14/11	NA	NA	110	NA	<0.020	NA	0.13	<0.018	<0.012	<0.018	9.2	NA
	03/27/12	NA	NA	180	NA	0.086	NA	<0.001	0.64	0.64	<0.10	17	NA
	06/27/12	NA	NA	150	NA	<0.020	NA	0.05	2.3	2.3	<0.018	13	NA
	09/27/12	NA	NA	230	NA	<0.020	NA	0.36	<0.018	<0.018	<0.018	7.4	NA
	12/21/12	NA	NA	92	NA	0.15	NA	0.029	<0.050	<0.050	<0.10	<5.0	NA
	03/22/13	NA	NA	180	NA	<0.020	NA	0.029	0.66	0.66	<0.018	11	NA
	06/27/13	NA	NA	150	NA	0.33	NA	0.051	0.12	0.12	<0.10	12	NA
	09/25/13	NA	NA	150	NA	<0.050	NA	0.082	0.74	0.74	<0.10	9.7	NA
	11/21/13	NA	NA	110	NA	0.20	NA	0.059	0.26	0.26	<0.10	<5.0	NA
	04/24/13	NA	NA	160	NA	<0.050	NA	0.059	0.051	0.051	<0.10	9.2	NA
07/02/14	NA	NA	160	NA	1.90	NA	0.26	0.050	0.050	<0.10	9.7	NA	
MW-6*	08/12/09	NA	NA	45	NA	2.1	NA	2.9	<0.050	<0.050	<0.10	7.9	NA
	09/02/10	NA	NA	3.1	NA	6.9	NA	1.3	<0.018	<0.0087	<0.018	<1.6	NA
	10/12/10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	17,000	NA
	11/11/10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	23,000	NA
	12/07/10	NA	NA	84	NA	29	NA	1.0	<0.013	<0.0087	<0.013	1,600	NA
	04/07/11	NA	NA	93	NA	NA	NA	3.6	<0.05	<0.05	<0.10	17,000	NA
	06/23/11	NA	NA	44	NA	10	NA	1.3	<0.05	<0.05	<0.10	91,000	NA
	10/11/11	NA	NA	1.9	NA	87	NA	0.90	<0.013	<0.013	<0.013	5,200,000	NA
	12/14/11	NA	NA	76	NA	22	NA	0.38	<0.018	<0.012	<0.018	49,000	NA
	03/27/12	NA	NA	30	NA	42	NA	2.5	<0.050	<0.10	<0.10	53,000	NA
	06/27/12	NA	NA	32	NA	15	NA	0.5	<0.018	<0.012	<0.018	26,000	NA
	09/27/12	NA	NA	39	NA	120	NA	0.6	<0.018	<0.018	<0.018	59,000	NA
	12/21/12	NA	NA	210	NA	83	NA	1.0	<0.50	<0.50	<0.10	29,000	NA
	03/22/13	NA	NA	140	NA	28	NA	0.54	0.028	0.028	<0.018	5,600	NA
	06/27/13	NA	NA	200	NA	50	NA	0.49	0.054	0.054	<0.10	7,700	NA
09/25/13	NA	NA	220	NA	67	NA	1.30	<0.050	<0.050	<0.10	27,000	NA	
11/21/13	NA	NA	280	NA	170	NA	1.60	<0.050	<0.050	<0.10	4,000	NA	
04/24/14	NA	NA	170	NA	12	NA	0.58	<0.050	<0.050	<0.10	930	NA	
07/02/14	NA	NA	57	NA	14	NA	0.64	<0.050	<0.050	<0.10	9,100	NA	
MW-8	08/04/06	0.78	0.09	<1.0	24	0.22	0.56	NA	NA	860	<0.10	<5.0	<2.0
MW-12	08/12/09	NA	NA	200	NA	<0.050	NA	0.0021	0.089	0.10	<0.10	<5.0	NA

**TABLE 5**

Geochemical Data  
Former Texaco Service Station  
Chevron Site No. 211874

623 Holcombe Avenue, Mobile, Alabama  
All results expressed as milligrams per liter (mg/L)

Sample Location	Date Sampled	Iron	Manganese	Alkalinity	Chloride	Ferrous Iron	Ferric Iron	Methane	Nitrogen, Nitrate	Nitrogen, Nitrate Nitrite	Nitrogen, Nitrite	Sulfate	Sulfide
<b>MW-13*</b>	08/04/06	1.1	0.022	3	10	0.89	0.21	NA	NA	550	<0.10	<5.0	<2.0
	08/12/09	NA	NA	<1.0	NA	0.73	NA	6.4	<0.050	<0.050	<0.10	<5.0	NA
	09/02/10	NA	NA	130	NA	7.1	NA	5.7	<0.018	<0.0087	<0.018	9.2	NA
	10/12/10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	260	NA
	11/11/10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	75	NA
	12/07/10	NA	NA	<0.79	NA	19	NA	4.80	0.10	0.10	<0.013	4,200	NA
	04/07/11	NA	NA	27	NA	NA	NA	3.10	<0.05	<0.05	<0.01	37,000	NA
	06/23/11	NA	NA	2.4	NA	11	NA	5.20	<0.05	<0.05	<0.1	170	NA
	10/11/11	NA	NA	8.7	NA	1.9	NA	5.60	<0.013	<0.013	<0.013	100	NA
	12/14/11	NA	NA	1.9	NA	22	NA	6.90	<0.018	<0.012	<0.018	2,300	NA
	03/27/12	NA	NA	2.1	NA	38	NA	9.0	<.10	<0.050	<0.050	320	NA
	06/27/12	NA	NA	<0.98	NA	15	NA	6.6	<0.018	<0.012	<0.018	9,000	NA
	09/27/12	NA	NA	2.9	NA	9.1	NA	3.8	<0.018	<0.018	<0.018	25,000	NA
	12/21/12	NA	NA	5.4	NA	0.79	NA	2.4	<0.050	<0.050	<0.10	340	NA
	03/22/13	NA	NA	<0.98	NA	26	NA	3.3	0.028	0.028	<0.018	780	NA
	06/27/13	NA	NA	<1.0	NA	2.7	NA	3.2	<0.050	<0.050	<0.10	470	NA
	09/25/13	NA	NA	73	NA	3.5	NA	5.7	<0.050	<0.050	<0.10	220	NA
	11/21/13	NA	NA	2.2	NA	7.0	NA	0.37	<0.050	<0.050	<0.10	650	NA
	04/24/14	NA	NA	<1.0	NA	16	NA	0.74	<0.050	<0.050	<0.10	380	NA
07/02/14	NA	NA	5.1	NA	3.4	NA	3.1	<0.050	<0.050	<0.10	38	NA	
<b>MW-15</b>	08/04/06	1.9	0.013	13	5.5	0.075	1.8	NA	NA	940	<0.10	5.9	<2.0
<b>MW-17</b>	08/04/06	1.8	0.025	2.2	7.4	0.15	1.7	NA	NA	940	<0.10	<5.0	<2.0
	08/12/09	NA	NA	<1.0	NA	<0.050	NA	0.014	<0.050	<0.050	<0.10	19	NA
	09/02/10	NA	NA	83	NA	0.032	NA	0.00053	<0.018	<0.0087	<0.018	18	NA
	12/07/10	NA	NA	<0.79	NA	<0.020	NA	0.00051	<0.013	<0.0087	<0.013	8.2	NA
	04/07/11	NA	NA	NA	NA	NA	NA	0.014	NA	NA	NA	12	NA
	06/22/11	NA	NA	<1.0	NA	NA	NA	NA	<0.050	<0.050	<0.10	21	NA
	10/11/11	NA	NA	<0.98	NA	0.093	NA	0.0029	<0.013	<0.013	<0.013	7.1	NA
	12/14/11	NA	NA	<0.98	NA	<0.020	NA	0.0660	0.022	0.022	<0.018	33	NA
	03/27/12	NA	NA	<1.0	NA	0.26	NA	<0.001	<0.050	<0.050	<0.10	18	NA
	06/27/12	NA	NA	1.6	NA	<0.020	NA	0.00093	<0.018	<0.012	<0.018	74	NA
	09/27/12	NA	NA	<0.98	NA	0.40	NA	0.0032	<0.018	<0.018	<0.018	51	NA
	12/21/12	NA	NA	<1.0	NA	48.00	NA	0.0060	<0.050	<0.050	<0.10	180	NA
	03/22/13	NA	NA	<0.98	NA	0.12	NA	0.0033	<0.018	<0.018	<0.018	43	NA
	06/27/13	NA	NA	<1.0	NA	1.2	NA	0.0054	<0.050	<0.050	<.10	49	NA
	09/25/13	NA	NA	<1.0	NA	4.0	NA	0.0068	<0.050	<0.050	<0.10	33	NA
	11/21/13	NA	NA	<1.0	NA	4.7	NA	0.0038	<0.050	<0.050	<0.10	34	NA
04/24/14	NA	NA	<1.0	NA	<0.050	NA	<0.001	<0.050	<0.050	<0.10	38	NA	
07/02/14	NA	NA	<1.0	NA	1.5	NA	0.0079	<0.050	<0.050	<0.10	24	NA	
11/14/14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	17	NA	
<b>TW-1</b>	08/04/06	4.1	0.026	13	8.9	0.63	3.5	NA	NA	830	<0.10	5.8	<2.0
	08/12/09	NA	NA	<1.0	NA	0.43	NA	<0.001	<0.050	<0.050	<0.10	<5.0	NA

**TABLE 5**

Geochemical Data  
Former Texaco Service Station  
Chevron Site No. 211874

623 Holcombe Avenue, Mobile, Alabama  
All results expressed as milligrams per liter (mg/L)

Sample Location	Date Sampled	Iron	Manganese	Alkalinity	Chloride	Ferrous Iron	Ferric Iron	Methane	Nitrogen, Nitrate	Nitrogen, Nitrate Nitrite	Nitrogen, Nitrite	Sulfate	Sulfide
TW-2	08/04/06	2.4	<0.010	140	6	0.72	1.7	NA	NA	730	<0.10	6.7	<2.0
TW-4	08/04/06	36	0.17	78	15	8.5	28	NA	NA	930	<0.10	<5.0	<2.0
TP-1*	08/12/09	NA	NA	0.220	NA	16	NA	0.79	<0.050	<0.050	<0.10	<5.0	NA
	09/02/10	NA	NA	170	NA	8.1	NA	4.1	0.039	0.039	<0.018	<1.6	NA
	10/12/10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	12,000	NA
	11/11/10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10,000	NA
	12/07/10	NA	NA	350	NA	25	NA	3.9	0.071	0.071	<0.013	6,000	NA
	04/07/11	NA	NA	360	NA	NA	NA	4.1	NA	NA	NA	8,700	NA
	06/23/11	NA	NA	390	NA	8.8	NA	2.1	<0.050	<0.05	<0.10	25	NA
	10/11/11	NA	NA	600	NA	1.5	NA	2.9	<0.013	<0.013	0.013	62,000	NA
	12/14/11	NA	NA	950	NA	22	NA	3.8	0.041	0.041	<0.018	3,100	NA
	03/27/12	NA	NA	1,000	NA	0.89	NA	NA	<0.050	<0.050	<0.10	770	NA
	06/27/12	NA	NA	950	NA	1.6	NA	3.0	<0.018	<0.012	<0.018	54,000	NA
	09/27/12	NA	NA	1,400	NA	<0.020	NA	2.4	<0.018	<0.018	<0.018	2,000	NA
	12/21/12	NA	NA	1,100	NA	28	NA	2.7	<0.050	<0.050	<0.10	980	NA
	03/22/13	NA	NA	1,100	NA	14	NA	2.4	<0.018	<0.018	<0.018	280	NA
	06/27/13	NA	NA	1,100	NA	6.9	NA	3.5	<0.050	<0.050	<0.10	3,700	NA
	09/25/13	NA	NA	1,100	NA	3	NA	4.40	<0.050	<0.050	<0.10	3,400	NA
11/21/13	NA	NA	920	NA	15	NA	0.44	<0.050	<0.050	<0.10	3,000	NA	
04/24/14	NA	NA	440	NA	22	NA	3.7	<0.050	<0.050	<0.10	65	NA	
07/02/14	NA	NA	780	NA	19	NA	4.1	<0.050	<0.050	<0.10	12	NA	
RW-1*	08/04/06	2.5	0.12	35	6.4	2.2	0.3	NA	NA	920	<0.10	<5.0	<2.0
	08/12/09	NA	NA	35	NA	0.44	NA	0.93	<0.050	<0.050	<0.10	9.2	NA
	09/02/10	NA	NA	240	NA	7.5	NA	1.40	<0.018	<0.0087	<0.018	8.6	NA
	10/12/10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	59	NA
	11/11/10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	17	NA
	12/07/10	NA	NA	130	NA	28	NA	2.1	0.038	0.038	<0.013	18	NA
	04/07/11	NA	NA	110	NA	NA	NA	2.3	<0.05	<0.05	<0.10	3,400	NA
	06/23/11	NA	NA	73	NA	11	NA	2.0	<0.05	<0.05	<0.10	130	NA
	10/11/11	NA	NA	130	NA	19	NA	2.2	<0.013	<0.013	<0.013	16	NA
	12/14/11	NA	NA	52	NA	22	NA	2.4	0.046	0.046	<0.018	2,100	NA
	03/27/12	NA	NA	120	NA	43	NA	2.4	<0.050	<0.050	<0.10	1,100	NA
	06/27/12	NA	NA	200	NA	14	NA	2.4	<0.018	<0.012	<0.018	500	NA
	09/27/12	NA	NA	360	NA	0.035	NA	2.0	<0.018	<0.018	<0.018	76	NA
	12/21/12	NA	NA	180	NA	27	NA	0.8	<0.050	<0.10	<0.050	37	NA
	03/22/13	NA	NA	200	NA	51	NA	2.6	<0.018	<0.018	<0.018	17	NA
	06/27/13	NA	NA	130	NA	2.9	NA	2.5	0.050	<0.050	<0.10	150	NA
09/25/13	NA	NA	200	NA	22	NA	2.60	<0.050	<0.050	<0.10	9.6	NA	
11/21/13	NA	NA	140	NA	17	NA	0.34	<0.050	<0.050	<0.10	31	NA	
04/24/14	NA	NA	250	NA	27	NA	1.6	<0.050	<0.050	<0.10	16	NA	
07/02/14	NA	NA	190	NA	25	NA	2.1	<0.050	<0.050	<0.10	9.8	NA	

**Note:**  
\* = wells used as Epsom salt application wells  
NA = not analyzed

**TABLE 6**

Summary of HVE Recovery Data  
Former Texaco Service Station  
Chevron Site No. 211874  
623 Holcombe Avenue, Mobile, Alabama

HVE Date	Duration (hours)	Gallons of hydrocarbon	Pounds of hydrocarbon	Total Liquid (gallons)	Extraction Wells (per event)
06/07/07	24	9.380	57.78	395	TP-1 and RW-1
10/10/07	24	0.244	1.50	350	MW-13 and MW-14
02/07/08	24	1.834	11.30	461	TP-1 and RW-1
05/22/08	24	12.436	76.61	200	TP-1 and RW-1
08/27/08	24	0.133	0.82	285	MW-6 and MW-13
10/22/08	24	3.788	23.27	425	MW-3, TW-2, TP-1 and RW-1
11/06/08	24	0.673	4.15	500	MW-6, MW-13 and MW-14
01/22/09	24	0.624	3.84	700	RW-1,TW-2,TP-1,MW-2,MW-3,MW-6,MW-13,MW-14
02/10/09	24	3.762	23.18	400	MW-3, TW-2, TP-1 and RW-1
08/04/09	23.5	0.563	3.47	893	MW-6, MW-13, TP-1 and RW-1
11/19/09	24	0.791	4.87	497	MW-6, MW-13, TP-1 and RW-1
03/11/10	24	0.230	1.44	627	MW-6, MW-13, TP-1 and RW-1
<b>TOTALS</b>	<b>288</b>	<b>34.458</b>	<b>212.23</b>	<b>5,733</b>	

**Notes:**

HVE = high vacuum extraction

**Table 7**  
**Cost Estimate for Off-Site Excavation with Gypsum Backfill**  
Former Texaco-branded Service Station 211874  
623 Holcombe Avenue  
Mobile, Alabama

<b><u>Design and Permitting/Access</u></b>	
Design/Work Plan	\$30,000
Permitting/Access	\$15,000
<b>Total Design/Permitting Costs</b>	<b>\$45,000</b>
<b><u>Implementation Costs</u></b>	
Site Preparation	\$7,500
Excavation, Backfill, Transportation, and Disposal (Shoring Included)	\$495,000
Surface Restoration	\$5,000
<b>Total Implementation Costs</b>	<b>\$507,500</b>
<b><u>Groundwater Sampling</u></b>	
Expected Duration (years)	5
Semiannual GWM	\$12,780
<b>Total GWM Costs</b>	<b>\$63,900</b>
<b><u>Site Closure</u></b>	
Well Destruction	\$34,500
<b>Total Site Closure Costs</b>	<b>\$34,500</b>
<b>Total Cost</b>	<b>\$650,900</b>

**Table 8**  
**Cost Estimate for Off-Site Enhanced Bioremediation via Sulfate Injection**  
Former Texaco-branded Service Station 211874  
623 Holcombe Avenue  
Mobile, Alabama

**Design and Permitting/Access**

Design/Work Plan	\$10,000
Permitting/Access	\$15,000
<b>Total Design/Permitting Costs</b>	<b>\$25,000</b>

**Capital Equipment**

Tankage, Piping, Etc.	\$15,000
<b>Total Equipment Costs</b>	<b>\$15,000</b>

**Drilling Costs**

<b>Total Drilling Costs</b>	<b>\$0</b>
-----------------------------	------------

**Injection Costs**

Expected Number of Injection Events	6
Planning and Preparation (per event)	\$5,000
Chemical Costs - Magnesium Sulfate (per event)	\$150
Consultant Fees (per event)	\$5,000
Misc. Expenses	\$12,000
<b>Total Injection Costs</b>	<b>\$72,900</b>

**Groundwater Sampling**

Expected Duration (years)	10
Semiannual GWM	\$14,200
<b>Total GWM Costs</b>	<b>\$142,000</b>

**Site Closure**

Well Destruction	\$40,500
<b>Total Site Closure Costs</b>	<b>\$40,500</b>

<b>Total Cost</b>	<b>\$295,400</b>
-------------------	------------------

**Table 9**  
**Cost Estimate for Off-Site Sulfate Surface Application**  
Former Texaco-branded Service Station 211874  
623 Holcombe Avenue  
Mobile, Alabama

<b><u>Design and Permitting/Access</u></b>	
Design/Work Plan	\$10,000
Permitting/Access	\$15,000
<b>Total Design/Permitting Costs</b>	<b>\$25,000</b>
<b><u>Implementation Costs</u></b>	
Planning and Prep	\$5,000
Chemical Costs - Gypsum	\$500
Consultant Fees	\$6,500
<b>Total Implementation Costs</b>	<b>\$12,000</b>
<b><u>Groundwater Sampling</u></b>	
Expected Duration (years)	10
Semiannual GWM	\$14,200
<b>Total GWM Costs</b>	<b>\$142,000</b>
<b><u>Site Closure</u></b>	
Well Destruction	\$40,500
<b>Total Site Closure Costs</b>	<b>\$40,500</b>
<b>Total Cost</b>	<b>\$219,500</b>

**Table 10**  
**Cost Estimate for Off-Site Phytoremediation**  
Former Texaco-branded Service Station 211874  
623 Holcombe Avenue  
Mobile, Alabama

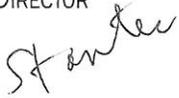
<b><u>Design and Permitting/Access</u></b>	
Design/Work Plan/O&M Plan	\$20,000
Permitting/Access	\$15,000
<b>Total Cap/Const Costs</b>	<b>\$35,000</b>
<b><u>Site Preparation Costs</u></b>	
Drillers Cost for Airknifing 90 Boreholes	\$58,000
Drum Disposal	\$22,500
Backfill Costs - Sand and Compost	\$1,500
Equipment Rental	\$2,500
Consultant Fees	\$38,500
<b>Total Site Preparation Costs</b>	<b>\$123,000</b>
<b><u>Planting Costs</u></b>	
Tree Removal and Trimming	\$4,000
Trees and Tree Protection Material	\$11,000
Subcontractor Labor	\$8,000
Planning and Preparation	\$5,000
Consultant Fees	\$6,500
Misc. Expenses	\$7,500
<b>Total Planting Costs</b>	<b>\$42,000</b>
<b><u>O&amp;M Costs</u></b>	
Expected Duration (months)	24
Consultant Fees (per/mth)	\$600
<b>Total O&amp;M Costs (incl Utilities)</b>	<b>\$14,400</b>
<b><u>Groundwater Sampling</u></b>	
Expected Duration (years)	10
Semiannual GWM	\$14,200
<b>Total GWM Costs</b>	<b>\$142,000</b>
<b><u>Well Destruction</u></b>	
Well Destruction	\$40,500
<b>Total Well Destruction Costs</b>	<b>\$40,500</b>
<b>Total Cost</b>	<b>\$396,900</b>

**Table 11**  
**Cost Estimate for Off-Site Monitored Natural Attenuation**  
Former Texaco-branded Service Station 211874  
623 Holcombe Avenue  
Mobile, Alabama

<b><u>Capital Equipment and Construction</u></b>	
<b>Total Cap/Const Costs</b>	<b>\$0</b>
<b><u>Drilling Costs</u></b>	
<b>Total Drilling Costs</b>	<b>\$0</b>
<b><u>Utility Costs</u></b>	
<b>Total Utility Costs</b>	<b>\$0</b>
<b><u>O&amp;M Costs</u></b>	
<b>Total O&amp;M Costs (incl Utilities)</b>	<b>\$0</b>
<b><u>Groundwater Sampling</u></b>	
Expected Duration (years)	25
Semiannual GWM	\$15,700
<b>Total GWM Costs</b>	<b>\$392,500</b>
<b><u>Site Closure</u></b>	
Well Destruction	\$40,500
<b>Total Site Closure Costs</b>	<b>\$40,500</b>
<b>Total Cost</b>	<b>\$433,000</b>

**APPENDIX A  
ADEM CORRESPONDENCE, DATED  
NOVEMBER 10, 2015**

LANCE R. LEFLEUR  
DIRECTOR



ROBERT J. BENTLEY  
GOVERNOR

Alabama Department of Environmental Management  
adem.alabama.gov

1400 Coliseum Blvd. 36110-2400 ■ Post Office Box 301463  
Montgomery, Alabama 36130-1463  
(334) 271-7700 ■ FAX (334) 271-7950

November 10, 2015

Mr. Lee Higgins  
Chevron Environmental Management Company  
Company Marketing Business Unit, Retail, C&I East  
4800 Fournace Place, E536B  
Bellaire, TX 44701



Dear Mr. Higgins:

**RE: REVIEW OF OCTOBER 2015 GROUNDWATER CLEAN-UP REPORT**

Former Roberts Texaco, Flagship Texaco, Chevron 211874  
623 Holcombe Avenue  
Mobile, Mobile County, Alabama  
Facility I. D. Number: **10950-097-000000 (Not Registered)**  
Release Incident No.: **UST00-02-11**  
ADEM File Code: **UST000211 / CORR09923**

The Department has reviewed the October 14, 2015 groundwater clean-up report prepared for this Incident by Stantec. The Department recognizes that an access agreement with the site owner could not be obtained, and, therefore, all wells were not sampled. The report was expected to have results from all wells being sampled.

Based on the conclusions in the report, the Department is requesting that a corrective-action evaluation be conducted. Please submit this evaluation by **April 10, 2016**.

The next semi-annual groundwater sampling report is due **May 15, 2016**. If possible, please sample all wells for BTEX, MtBE, and naphthalene.

If you would like to discuss your clean up, please call me at **(334) 271-7809**.

Sincerely,



Rosemary Manty, Hydrogeologist  
UST Corrective Action Section  
Groundwater Branch  
Land Division  
REM/rem

cc: Stantec, Mr. David Wilcox, 12585 Old Highway 280, Ste. 107, Chelsea, AL 35043

Birmingham Branch  
110 Vulcan Road  
Birmingham, AL 35209-4702  
(205) 942-6168  
(205) 941-1603 (FAX)

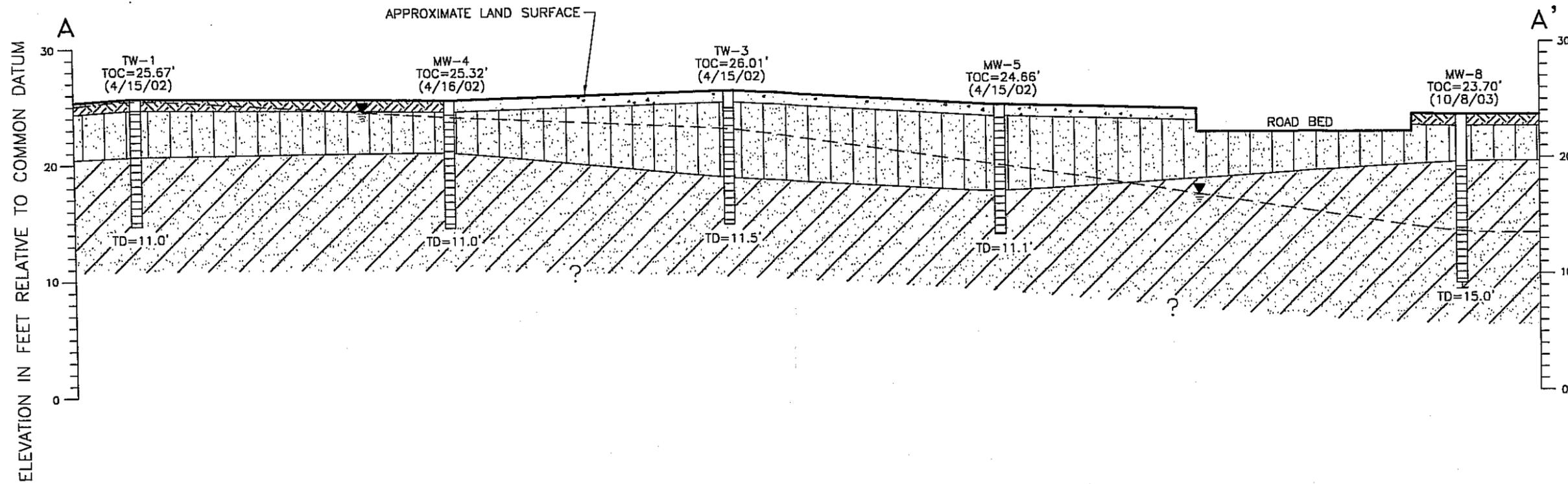
Decatur Branch  
2715 Sandlin Road, S.W.  
Decatur, AL 35603-1333  
(256) 353-1713  
(256) 340-9359 (FAX)



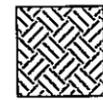
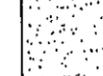
Mobile Branch  
2204 Perimeter Road  
Mobile, AL 36615-1131  
(251) 450-3400  
(251) 479-2593 (FAX)

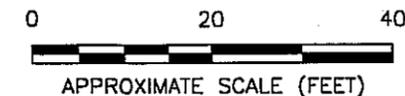
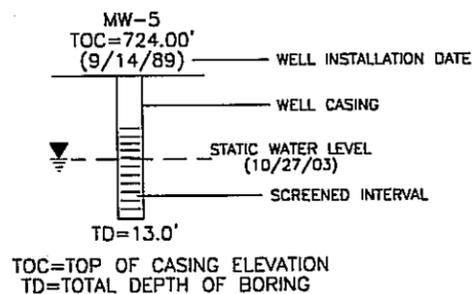
Mobile-Coastal  
3664 Dauphin Street, Suite B  
Mobile, AL 36608  
(251) 304-1176  
(251) 304-1189 (FAX)

**APPENDIX B**  
**CROSS SECTIONS AND ADDITIONAL SOIL**  
**TABLES FROM *CORRECTIVE***  
***ACTION PLAN*, DATED**  
**NOVEMBER 16, 2006**

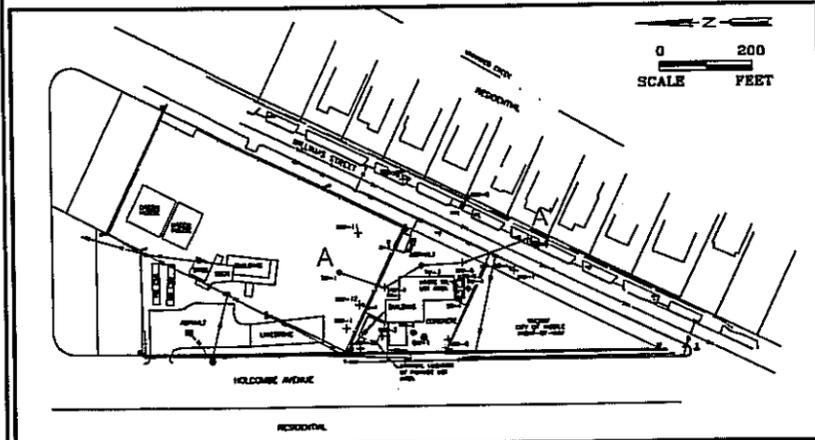


**LITHOLOGY**

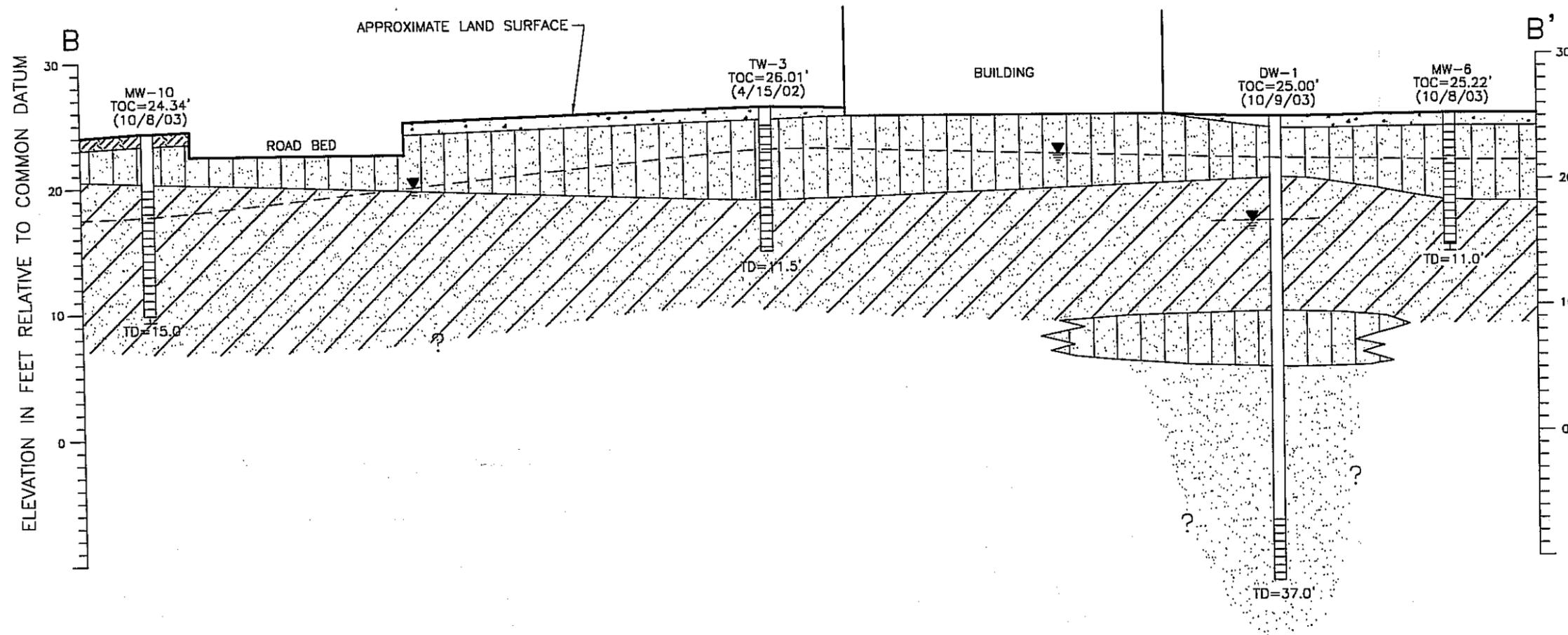
-  CONCRETE/ASPHALT
-  TOP SOIL, SILTY SAND WITH ORGANIC MATTER AND ROOTS, BROWN TO BLACK
-  SILTY SAND/SANDY SILT, VERY FINE GRAINED, TAN TO GRAY
-  SILTY SANDY CLAY, YELLOWISH BROWN TO GRAY
-  SAND, SOME SILT, FINE TO MEDIUM GRAINED, GRAY



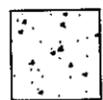
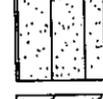
**SITE MAP**

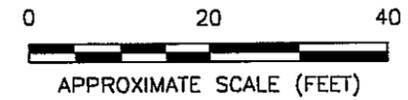
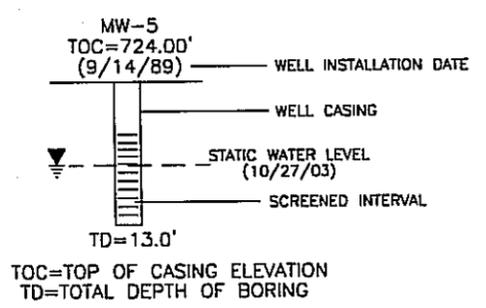


 <b>SECOR</b> 20 Mansell Court East, Suite 275 Roswell, Georgia (770) 569-9181	FOR:	<b>CROSS SECTION A-A'</b>		FIGURE:
	TEXACO DOWNSTREAM PROPERTIES INC. FORMER ROBERTS TEXACO (CHEVRON FACILITY NO. 211874) 623 HOLCOMBE AVENUE MOBILE, ALABAMA			<b>13A</b>
JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
89CH.49182.42	ARA	ES	BB	11/9/06

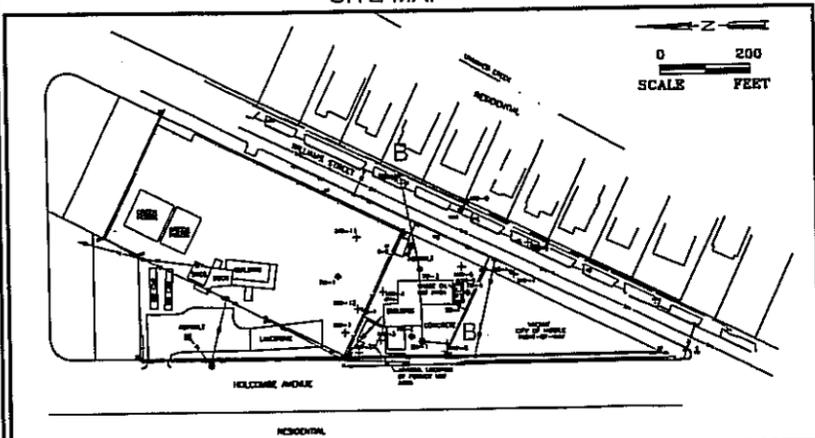


**LITHOLOGY**

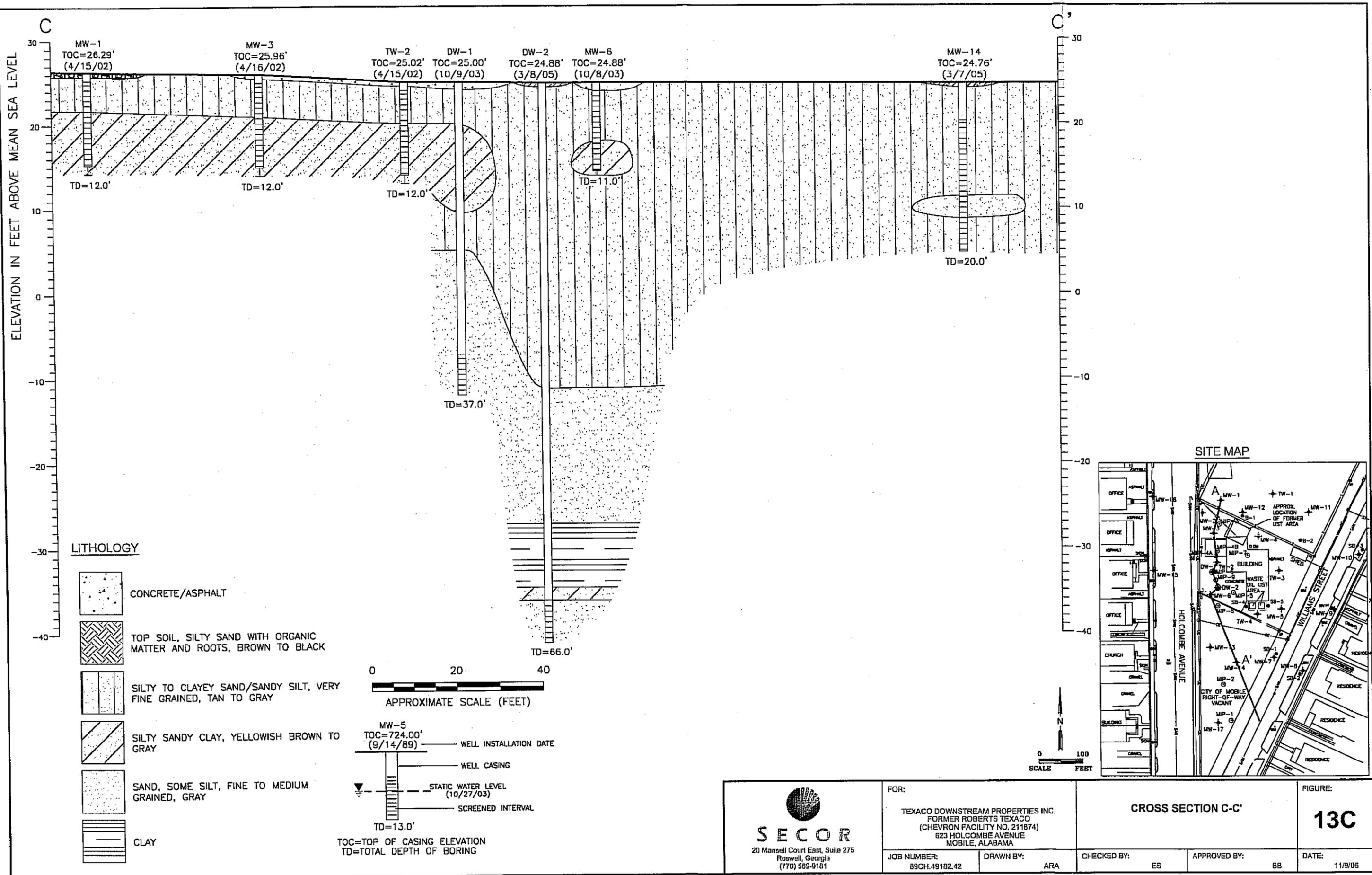
-  CONCRETE/ASPHALT
-  TOP SOIL, SILTY SAND WITH ORGANIC MATTER AND ROOTS, BROWN TO BLACK
-  SILTY SAND/SANDY SILT, VERY FINE GRAINED, TAN TO GRAY
-  SILTY SANDY CLAY, YELLOWISH BROWN TO GRAY
-  SAND, SOME SILT, FINE TO MEDIUM GRAINED, GRAY



**SITE MAP**



 20 Mansell Court East, Suite 275 Roswell, Georgia (770) 569-9181	FOR:	TEXACO DOWNSTREAM PROPERTIES INC. FORMER ROBERTS TEXACO (CHEVRON FACILITY NO. 211874) 623 HOLCOMBE AVENUE MOBILE, ALABAMA		<b>CROSS SECTION B-B'</b>		FIGURE:	<b>13B</b>
	JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:		
89CH.49182.42	ARA	ES	BB	11/9/06			



ELEVATION IN FEET ABOVE MEAN SEA LEVEL

MW-1 TOC=26.29' (4/15/02) TD=12.0'

MW-3 TOC=25.96' (4/16/02) TD=12.0'

TW-2 TOC=25.02' (4/15/02) TD=12.0'

DW-1 TOC=25.00' (10/9/03) TD=37.0'

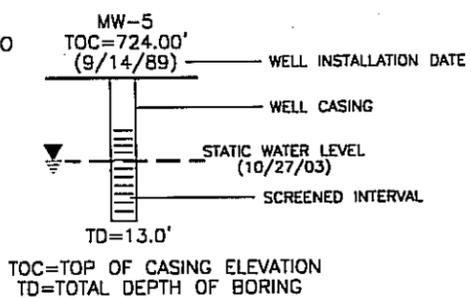
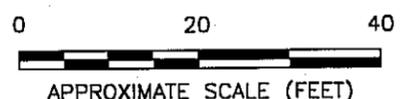
DW-2 TOC=24.88' (3/8/05) TD=66.0'

MW-6 TOC=24.88' (10/8/03) TD=11.0'

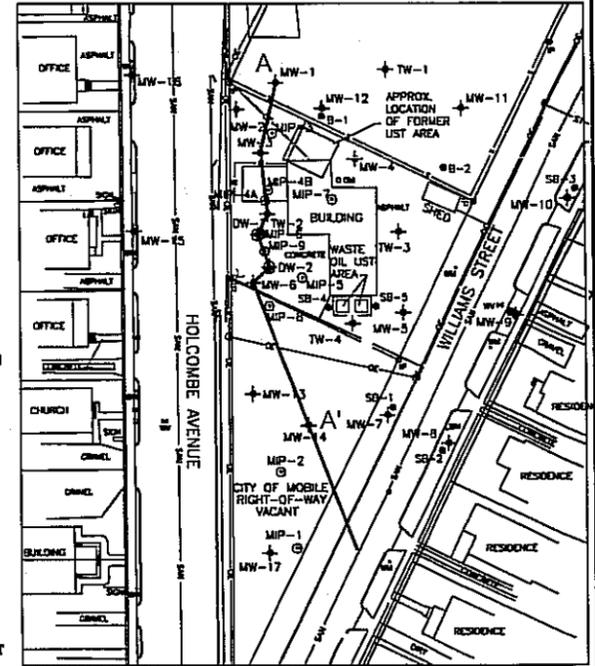
MW-14 TOC=24.76' (3/7/05) TD=20.0'

**LITHOLOGY**

- CONCRETE/ASPHALT
- TOP SOIL, SILTY SAND WITH ORGANIC MATTER AND ROOTS, BROWN TO BLACK
- SILTY TO CLAYEY SAND/SANDY SILT, VERY FINE GRAINED, TAN TO GRAY
- SILTY SANDY CLAY, YELLOWISH BROWN TO GRAY
- SAND, SOME SILT, FINE TO MEDIUM GRAINED, GRAY
- CLAY



**SITE MAP**



<p><b>SECOR</b> 20 Mansell Court East, Suite 275 Roswell, Georgia (770) 569-9181</p>	FOR: TEXACO DOWNSTREAM PROPERTIES INC. FORMER ROBERTS TEXACO (CHEVRON FACILITY NO. 211874) 623 HOLCOMBE AVENUE MOBILE, ALABAMA		<b>CROSS SECTION C-C'</b>		FIGURE: <b>13C</b>
	JOB NUMBER: 89CH.49182.42	DRAWN BY: ARA	CHECKED BY: ES	APPROVED BY: BB	DATE: 11/9/06

**TABLE 2B**  
 Summary of Soil Analytical Data (PAH)  
 All results reported in milligrams per Kilogram (mg/Kg)

Former Roberts Texaco  
 (Chevron Facility No. 211874)  
 623 Holcombe Avenue  
 Mobile, Alabama

Well ID	Date	Sample Depth (ft.)	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Total PAHs	
MW-1	04/15/02	0-1	<0.0033	0.0109	<0.0033	<0.0067	<0.0067	<0.0033	<0.0033	<0.0067	<0.0067	<0.0333	<0.0033	<0.0033	0.0109	
		1.5-1.75	<0.0033	<0.0033	<0.0033	<0.0067	<0.0067	<0.0033	<0.0033	<0.0033	<0.0067	<0.0067	<0.0333	<0.0033	<0.0033	<RL
MW-2	04/16/02	0.5-1	<0.0033	<0.0033	<0.0033	<0.0067	<0.0067	<0.0033	<0.0033	<0.0067	<0.0067	<0.0333	<0.0033	<0.0033	<RL	
		1-2	<0.0033	<0.0033	<0.0033	<0.0067	<0.0067	<0.0033	<0.0033	<0.0067	<0.0067	<0.0333	<0.0033	<0.0033	<RL	
MW-3	04/16/02	1-2	<0.0033	<0.0033	<0.0033	<0.0067	<0.0067	<0.0033	<0.0033	<0.0067	<0.0067	<0.0333	<0.0033	<0.0033	<RL	
		2-3	<0.0033	<0.0033	<0.0033	<0.0067	<0.0067	<0.0033	<0.0033	<0.0067	<0.0067	<0.0333	<0.0033	<0.0033	<RL	
MW-4	04/16/02	0.5-1.5	<0.0033	<0.0033	<0.0033	<0.0067	<0.0067	<0.0033	<0.0033	<0.0067	<0.0067	<0.0333	0.0079	<0.0033	0.0079	
		1.5-2.5	<0.0033	<0.0033	<0.0033	<0.0067	<0.0067	<0.0033	<0.0033	<0.0067	<0.0067	<0.0333	<0.0033	<0.0033	<RL	
MW-5	04/15/02	0-1	<0.0033	<0.0033	<0.0033	<0.0067	<0.0067	<0.0033	<0.0033	0.0127	<0.0067	0.0115	<0.0333	<0.0033	<0.0033	0.0242
		5-7	<0.0033	<0.0033	<0.0033	<0.0067	<0.0067	<0.0033	<0.0033	<0.0067	<0.0067	<0.0333	<0.0033	<0.0033	<RL	
MW-6	10/08/03	5-7	<0.0033	<0.00333	<0.00333	<0.00666	<0.00666	<0.00333	0.0049	<0.00666	<0.00667	0.575	0.0121	<0.00333	0.5920	
		7-9	<0.0033	<0.00333	<0.00333	<0.00666	<0.00666	<0.00333	0.0055	<0.00666	<0.00667	0.547	0.0109	<0.00333	0.5634	
		9-11	<0.0033	<0.00333	<0.00333	<0.00666	<0.00666	<0.00333	<0.00333	<0.00666	<0.00667	<0.0333	<0.00333	<0.00333	<RL	
MW-11	10/09/03	3	<0.0033	<0.00333	<0.00333	<0.00666	<0.00666	<0.00333	<0.00333	<0.00666	<0.00667	<0.0333	<0.00333	<0.00333	<RL	
		5	<0.0033	<0.00333	<0.00333	<0.00666	<0.00666	<0.00333	<0.00333	<0.00666	<0.00667	<0.0333	<0.00333	<0.00333	<RL	
MW-12	10/09/03	3	<0.0033	<0.00333	<0.00333	<0.00666	<0.00666	<0.00333	<0.00333	<0.00666	<0.00667	<0.0333	<0.00333	<0.00333	<RL	
		7	<0.0033	<0.00333	<0.00333	<0.00666	<0.00666	<0.00333	<0.00333	<0.00666	<0.00667	0.126	0.0083	<0.00333	0.1343	
MW-13	03/07/05	2-3	<0.0033	<0.00333	<0.00333	<0.0033	<0.00333	<0.00333	<0.00333	<0.0033	<0.00333	<0.00333	<0.00333	<0.00333	<RL	
		6-7	<0.0033	<0.00333	<0.00333	<0.0033	<0.00333	<0.00333	<0.00333	<0.0033	<0.00333	<0.00333	<0.00333	<0.00333	<RL	
MW-14	03/07/05	2-3	<0.0033	<0.00333	<0.00333	<0.0033	<0.00333	<0.00333	<0.00333	<0.0033	<0.00333	<0.00333	<0.00333	<0.00333	<RL	
		6-7	<0.0033	<0.00333	<0.00333	<0.0033	<0.00333	<0.00333	<0.00333	<0.0033	<0.00333	<0.00333	<0.00333	<0.00333	<RL	
MW-15	03/07/05	2-3	<0.0033	0.0147	0.0183	0.0253	0.0176	0.00899	0.02	0.0266	<0.00333	<0.00333	0.00866	0.0286	0.16875	
		7-8	<0.0033	<0.00333	<0.00333	<0.0033	<0.00333	<0.00333	<0.00333	0.00366	<0.00333	<0.00333	<0.00333	0.00366	0.00732	
MW-16	03/07/05	2-3	<0.0033	<0.00333	<0.00333	<0.0033	<0.00333	<0.00333	<0.00333	<0.0033	<0.00333	<0.00333	<0.00333	<0.00333	<RL	
		6-7	<0.0033	<0.00333	<0.00333	<0.0033	<0.00333	<0.00333	<0.00333	<0.0033	<0.00333	<0.00333	<0.00333	<0.00333	<RL	

**TABLE 2B**  
 Summary of Soil Analytical Data (PAH)  
 All results reported in milligrams per Kilogram (mg/Kg)

Former Roberts Texaco  
 (Chevron Facility No. 211874)  
 623 Holcombe Avenue  
 Mobile, Alabama

Well ID	Date	Sample Depth (ft.)	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Total PAHs
DW-1	10/08/03	5-7	<0.0033	<0.00333	<0.00333	<0.00666	<0.00666	<0.00333	0.0059	<0.00666	<0.00667	0.317	0.0134	<0.00333	0.3363
		10-12	<0.0033	<0.00333	<0.00333	<0.00666	<0.00666	<0.00333	<0.00333	<0.00666	<0.00667	0.131	<0.00333	<0.00333	0.1310
		30-32	<0.0033	<0.00333	<0.00333	<0.00666	<0.00666	<0.00333	<0.00333	<0.00666	<0.00667	0.0506	<0.00333	<0.00333	0.0506
DW-2	03/08/05	2-3	<0.0033	<0.00333	<0.00333	<0.00333	<0.00333	<0.00333	<0.00333	<0.00333	<0.00333	0.00699	<0.00333	<0.00333	0.00699
		8-9	<0.0033	<0.00333	<0.00333	<0.0033	<0.00333	<0.00333	<0.00333	<0.0033	<0.00333	<0.00333	<0.00333	<0.00333	<RL
		65-66	<0.0033	<0.00333	<0.00333	<0.0033	<0.00333	<0.00333	<0.00333	<0.0033	<0.00333	<0.00333	<0.00333	<0.00333	<RL
DW-3	06/27/06	12-Oct	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<RL
		28-30	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<RL
DW-4	06/27/06	5-7	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<RL
		10-12	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<RL
TW-1	04/15/02	28-30	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<RL
		0.5-1	<0.0033	<0.0033	<0.0033	<0.0067	<0.0067	<0.0033	<0.0033	<0.0067	<0.0067	<0.0333	<0.0033	<0.0033	<RL
TW-2	04/15/02	1-1.5	<0.0033	<0.0033	<0.0033	<0.0067	<0.0067	<0.0033	<0.0033	<0.0067	<0.0067	<0.0333	<0.0033	<0.0033	<RL
		5-7	0.0733	0.0899	0.0124	0.0140	<0.0666	0.0059	<0.0333	0.235	0.119	1.61	0.350	0.152	2.6615
TW-3	04/16/02	1-2	<0.0033	0.0467	<0.0033	<0.0067	<0.0067	<0.0033	<0.0033	<0.0067	<0.0067	<0.0333	<0.0033	<0.0033	0.0467
		2-2.5	<0.0033	<0.0033	<0.0033	<0.0067	<0.0067	<0.0033	<0.0033	<0.0067	<0.0067	<0.0333	<0.0033	<0.0033	<RL
TW-4	04/15/02	0-1.5	<0.0033	<0.0033	<0.0033	<0.0067	<0.0067	<0.0033	<0.0033	<0.0067	<0.0067	<0.0333	<0.0033	<0.0033	<RL
		5-7	<0.0033	<0.0033	<0.0033	<0.0067	<0.0067	<0.0033	<0.0033	<0.0067	<0.0067	<0.0333	<0.0033	<0.0033	<RL
SB-1	10/29/03	5	<0.00333	<0.00333	<0.00333	<0.00666	<0.00666	<0.00333	<0.00333	<0.00666	<0.00667	<0.0333	<0.00333	<0.00333	<RL
		10	<0.00333	<0.00333	<0.00333	<0.00666	<0.00666	<0.00333	<0.00333	<0.00666	<0.00667	<0.0333	<0.00333	<0.00333	<RL
SB-2	10/29/03	5	<0.00333	<0.00333	<0.00333	<0.00666	<0.00666	<0.00333	<0.00333	<0.00666	<0.00667	<0.0333	<0.00333	<0.00333	<RL
		10	<0.00333	<0.00333	<0.00333	<0.00666	<0.00666	<0.00333	<0.00333	<0.00666	<0.00667	<0.0333	<0.00333	<0.00333	<RL
SB-3	10/29/03	5	<0.00333	<0.00333	<0.00333	<0.00666	<0.00666	<0.00333	<0.00333	<0.00666	<0.00667	<0.0333	<0.00333	<0.00333	<RL
		10	<0.00333	<0.00333	<0.00333	<0.00666	<0.00666	<0.00333	<0.00333	<0.00666	<0.00667	<0.0333	<0.00333	<0.00333	<RL
SB-4	10/29/03	5.5	<0.00333	<0.00333	<0.00333	<0.00666	<0.00666	<0.00333	<0.00333	0.0614	<0.00667	0.0985	0.0253	0.0519	0.2371
RW-1	06/27/06	1-2	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	9.1	<0.43	<0.43	9.1
TP-1	06/27/06	1-2	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	0.42	<0.40	15	0.62	<0.40	16.04
		4-5	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	6.3	<0.40	<0.40	6.3
<b>Tier 2 SPTC at Source</b>			<b>18.367</b>	<b>7.771</b>	<b>21.034</b>	<b>26.699</b>	<b>NA</b>	<b>17.712</b>	<b>8.639</b>	<b>182.105</b>	<b>275.194</b>	<b>670.459</b>	<b>NA</b>	<b>165.268</b>	<b>NE</b>
<b>Tier 2 GRPTC at Source</b>			<b>18.367</b>	<b>60.576</b>	<b>28.256</b>	<b>33.210</b>	<b>19.908</b>	<b>17.712</b>	<b>11.463</b>	<b>182.105</b>	<b>275.194</b>	<b>110.979</b>	<b>254.007</b>	<b>165.268</b>	<b>NE</b>
<b>Tier 2 SSSL Surficial Soil</b>			<b>18.364</b>	<b>22.378</b>	<b>2.239</b>	<b>22.373</b>	<b>19.908</b>	<b>17.712</b>	<b>11.463</b>	<b>182.088</b>	<b>275.031</b>	<b>645.494</b>	<b>253.925</b>	<b>165.257</b>	<b>NE</b>
<b>Tier 2 SSSL Subsurface Soil</b>			<b>18.364</b>	<b>60.575</b>	<b>28.256</b>	<b>33.210</b>	<b>19.908</b>	<b>17.712</b>	<b>11.463</b>	<b>182.088</b>	<b>275.031</b>	<b>571.607</b>	<b>253.925</b>	<b>165.257</b>	<b>NE</b>

Notes:

- <0.001 = analyte not detected above specified laboratory detection limit
- <RL = below laboratory reporting limits
- ISL = Initial Screening Level
- NE = not established
- SPTC = Stream Protection Target Concentration protective of a stream 279 feet downgradient
- GRPTC = Groundwater Resource Protection Target Concentration protective of a hypothetical POE

**TABLE 2C**

Summary of Soil Analytical Data - Metals  
 All results expressed as milligrams per Kilogram (mg/Kg)

Former Roberts Texaco  
 (Chevron Facility No. 211874)  
 623 Holcombe Avenue  
 Mobile, Alabama

Well ID	Date	Sample Depth (feet)	Arsenic	Barium	Cadmium	Chromium VI	Lead	Zinc
MW-1	04/15/02	0-1	NA	NA	NA	NA	70.9	NA
		1.5-1.75	NA	NA	NA	NA	4.10	NA
MW-2	04/16/02	0.5-1	NA	NA	NA	NA	0.92	NA
		1-2	NA	NA	NA	NA	5.10	NA
MW-3	04/16/02	1-2	NA	NA	NA	NA	4.90	NA
		2-3	NA	NA	NA	NA	3.80	NA
MW-4	04/16/02	0.5-1.5	1.40	<16.7	<0.417	<2.00	12.40	2.20
		1.5-2.5	1.90	16.40	<0.373	<2.00	4.70	3.80
MW-5	04/15/02	0-1	1.70	14.90	<0.294	9.00	99.50	2.60
		5-7	1.90	<19.6	<0.490	9.60	4.00	3.00
MW-6	10/08/03	5-7	<0.98	<19.6	NA	<2.0	13.5	2.5
		7-9	10.9	<18.2	NA	<2.0	6.20	7.1
		9-11	0.97	<16.1	NA	<2.0	4.70	4.6
MW-11	10/09/03	3	1.3	<18.5	NA	<2.0	12	5.7
		5	1.4	<18.9	NA	<2.0	4.50	2.2
MW-12	10/09/03	3	<0.943	<18.9	NA	<2.0	3.80	2
		7	1.4	<18.5	NA	<2.0	8.50	5.4
MW-13	03/07/05	2-3	NA	NA	NA	NA	5.21	NA
		6-7	NA	NA	NA	NA	4.47	NA
MW-14	03/07/05	2-3	NA	NA	NA	NA	5.64	NA
		6-7	NA	NA	NA	NA	7.30	NA
MW-15	03/07/05	2-3	NA	NA	NA	NA	19.5	NA
		7-8	NA	NA	NA	NA	4.10	NA
MW-16	03/07/05	2-3	NA	NA	NA	NA	4.42	NA
		6-7	NA	NA	NA	NA	6.05	NA
DW-1	10/08/03	5-7	2.60	18.70	NA	<2.0	4.60	4.30
		10-12	2.70	16.70	NA	<2.0	5.30	3.50
		30-32	1.50	<16.1	NA	<2.0	2.30	9.80
DW-2	03/08/05	2-3	NA	NA	NA	NA	7.37	NA
		8-9	NA	NA	NA	NA	3.96	NA
		65-66	NA	NA	NA	NA	1.64	NA
DW-3	06/27/06	10-12	NA	NA	NA	NA	7.8	NA
		28-30	NA	NA	NA	NA	5.0	NA
DW-4	06/27/06	5-7	NA	NA	NA	NA	6.5	NA
		10-12	NA	NA	NA	NA	7.0	NA
		28-30	NA	NA	NA	NA	4.4	NA

**TABLE 2C**

Summary of Soil Analytical Data - Metals  
 All results expressed as milligrams per Kilogram (mg/Kg)

Former Roberts Texaco  
 (Chevron Facility No. 211874)  
 623 Holcombe Avenue  
 Mobile, Alabama

Well ID	Date	Sample Depth (feet)	Arsenic	Barium	Cadmium	Chromium VI	Lead	Zinc
TW-1	04/15/02	0.5-1	NA	NA	NA	NA	9.30	NA
TW-2	04/15/02	1-1.5	NA	NA	NA	NA	3.90	NA
		5-7	NA	NA	NA	NA	8.30	NA
TW-3	04/16/02	1-2	1.50	<14.5	<0.362	<4.00	6.00	2.10
		2-2.5	<0.862	<17.2	<0.431	<2.00	3.30	3.00
TW-4	04/15/02	0-1.5	1.60	16.70	<0.291	<2.00	8.00	7.40
		5-7	0.90	16.50	<0.284	<2.00	4.70	5.70
SB-1	10/29/03	5	NA	NA	NA	NA	7.5	NA
		10	NA	NA	NA	NA	5.70	NA
SB-2	10/29/03	5	NA	NA	NA	NA	4.20	NA
		10	NA	NA	NA	NA	5.10	NA
SB-3	10/29/03	5	NA	NA	NA	NA	6.10	NA
		10	NA	NA	NA	NA	6.70	NA
SB-4	10/29/03	5.5	1.8	<12.8	NA	NA	4.80	2.8
SB-5	10/30/03	5.5	NA	NA	NA	NA	5.50	NA
RW-1	06/27/06	1-2	NA	NA	NA	NA	16.00	NA
TP-1	06/27/06	1-2	NA	NA	NA	NA	14.00	NA
		4-5	NA	NA	NA	NA	12.00	NA
<b>Tier 2 SPTC at Source</b>			<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>20.63</b>	<b>NE</b>
<b>Tier 2 GRPTC at Source</b>			<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>470.31</b>	<b>NE</b>
<b>Tier 2 SSTL Surficial Soil</b>			<b>36.34</b>	<b>4255.54</b>	<b>498.54</b>	<b>62.07</b>	<b>400.00</b>	<b>153882.04</b>
<b>Tier 2 SSTL Subsurface Soil</b>			<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>
<b>ADEM ISL</b>			<b>6.05</b>	<b>1,880</b>	<b>8.61</b>	<b>43.7</b>	<b>42</b>	<b>2,850</b>

## Notes:

&lt;0.005 = analyte not detected above the specified laboratory detection limit

NA = not analyzed for this parameter

ISL = Initial Screening Level

SPTC = Stream Protection Target Concentration protective of a stream 279 feet downgradient

GRPTC = Groundwater Resource Protection Target Concentration protective of a hypothetical POE

**APPENDIX C**  
**TIMEFRAMES TO ACHIEVE WATER**  
**QUALITY OBJECTIVES**

Point Decay Rate Constant & Timeframe to Achieve Benzene Water Quality Objective in Well MW-6 Based on Data Since 2003

Former Texaco Service Station  
Chevron Site No. 211874  
623 Holcombe Avenue  
Mobile, Alabama

Sampling Date	Benzene (mg/L)	In Benzene (mg/L)	Elapsed time since 10/27/03 (years)
10/27/03	4.2	1.43	0.00
03/16/05	0.8	-0.27	1.39
06/20/05	1.2	0.21	1.65
11/04/05	2.1	0.72	2.02
02/02/06	1.3	0.29	2.27
07/09/06	1.1	0.10	2.70
09/15/06	1.9	0.64	2.89
02/05/07	0.6	-0.49	3.28
06/14/07	0.6	-0.53	3.63
10/03/07	1.4	0.34	3.94
02/15/08	0.7	-0.40	4.31
05/12/08	1.3	0.26	4.55
08/05/08	2.6	0.96	4.78
11/15/08	1.9	0.64	5.06
02/04/09	2.5	0.92	5.28
05/14/09	2.5	0.92	5.55
08/12/09	2.4	0.88	5.80
11/20/09	1.7	0.53	6.07
03/12/10	1.1	0.10	6.38
09/02/10	2.1	0.74	6.85
12/07/10	1.4	0.34	7.12
04/07/11	1.5	0.41	7.45
06/23/11	1.3	0.26	7.66
10/11/11	0.7	-0.36	7.96
12/14/11	1.3	0.26	8.14
03/27/12	2.2	0.79	8.42
06/27/12	1.3	0.26	8.67
09/27/12	0.4	-0.82	8.93
12/21/12	1.2	0.18	9.16
03/22/13	1.8	0.59	9.41
06/27/13	1.7	0.53	9.67
09/25/13	1.3	0.26	9.92
11/21/13	2.3	0.83	10.08
04/24/14	0.8	-0.22	10.50
07/02/14	1.0	0.00	10.69

Mean Last 4 Events 1.4

**Formula**

$$t = -[\ln(C_{CL}/C_o)] / k_{point}$$

where:

t = Time to achieve cleanup levels, years

C<sub>CL</sub> = Cleanup level for contaminant of concern, mg/L

C<sub>o</sub> = Initial concentration of contaminant of concern, mg/L

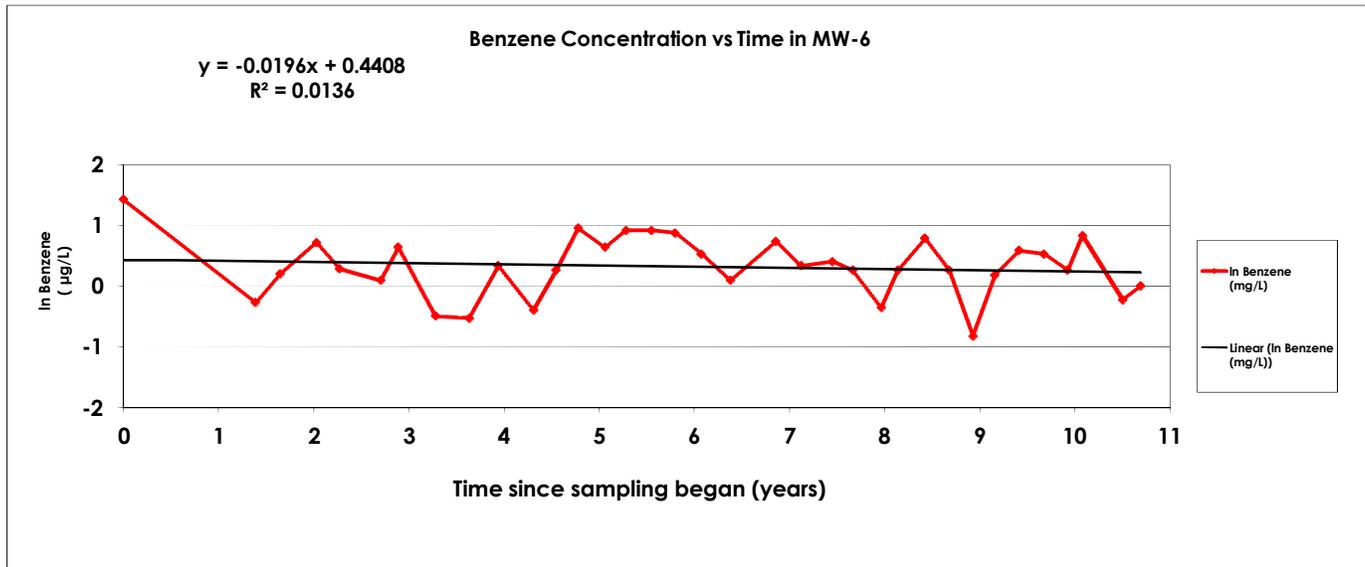
k<sub>point</sub> = First-order decay rate constant at one monitoring point, years<sup>-1</sup>  
= slope of the line, y

**Solutions**

C <sub>CL</sub>	⇒	0.42	Water Quality Objective (mg/L)
C <sub>o</sub>	⇒	1.4	Mean Concentration Last 4 Sampling Events (mg/L)
k <sub>point</sub>	⇒	0.0196	First Order Decay Rate (years <sup>-1</sup> )
<b>Time to reach cleanup level</b>			<b>59.6 years</b>

C <sub>CL</sub>	⇒	0.42	Water Quality Objective (mg/L)
C <sub>o</sub>	⇒	2.3	Maximum Concentration Last 4 Sampling Events (mg/L)
k <sub>point</sub>	⇒	0.0196	First Order Decay Rate (years <sup>-1</sup> )
<b>Time to reach cleanup level</b>			<b>86.8 years</b>

WQO = GRP at Source



Point Decay Rate Constant & Timeframe to Achieve Benzene Water Quality Objective in Well RW-1 Based on Data Since 2006

Former Texaco Service Station  
Chevron Site No. 211874  
623 Holcombe Avenue  
Mobile, Alabama

Sampling Date	Benzene (mg/L)	In Benzene (mg/L)	Elapsed time since 07/09/06 (years)
07/09/06	8.4	2.13	0.00
09/15/06	8.0	2.08	0.19
02/05/07	7.4	2.00	0.58
06/14/07	1.9	0.64	0.93
10/03/07	6.9	1.93	1.24
02/15/08	5.2	1.65	1.61
05/12/08	4.7	1.55	1.84
08/05/08	4.3	1.46	2.08
11/15/08	5.5	1.70	2.36
02/04/09	6.1	1.81	2.58
05/14/09	3.9	1.36	2.85
08/12/09	4.7	1.55	3.10
11/20/09	3.7	1.31	3.37
03/12/10	2.9	1.06	3.68
09/02/10	1.5	0.41	4.15
12/07/10	5.8	1.76	4.42
04/07/11	4.3	1.46	4.75
06/23/11	5.5	1.70	4.96
10/11/11	3.5	1.25	5.26
12/14/11	3.6	1.28	5.44
03/27/12	3.3	1.19	5.72
06/27/12	2.8	1.03	5.97
09/27/12	2.8	1.03	6.22
12/21/12	1.5	0.41	6.46
03/22/13	3.2	1.16	6.71
06/27/13	3.1	1.13	6.97
09/25/13	2.1	0.74	7.22
11/21/13	2.8	1.03	7.38
04/24/14	1.9	0.64	7.80
07/02/14	3.1	1.13	7.99
<b>Mean Last 4 Events</b>	<b>2.48</b>		

**Formula**

$$t = -[\ln(C_{CL}/C_o)] / k_{point}$$

where:

t = Time to achieve cleanup levels, years

C<sub>CL</sub> = Cleanup level for contaminant of concern, mg/L

C<sub>o</sub> = Initial concentration of contaminant of concern, mg/L

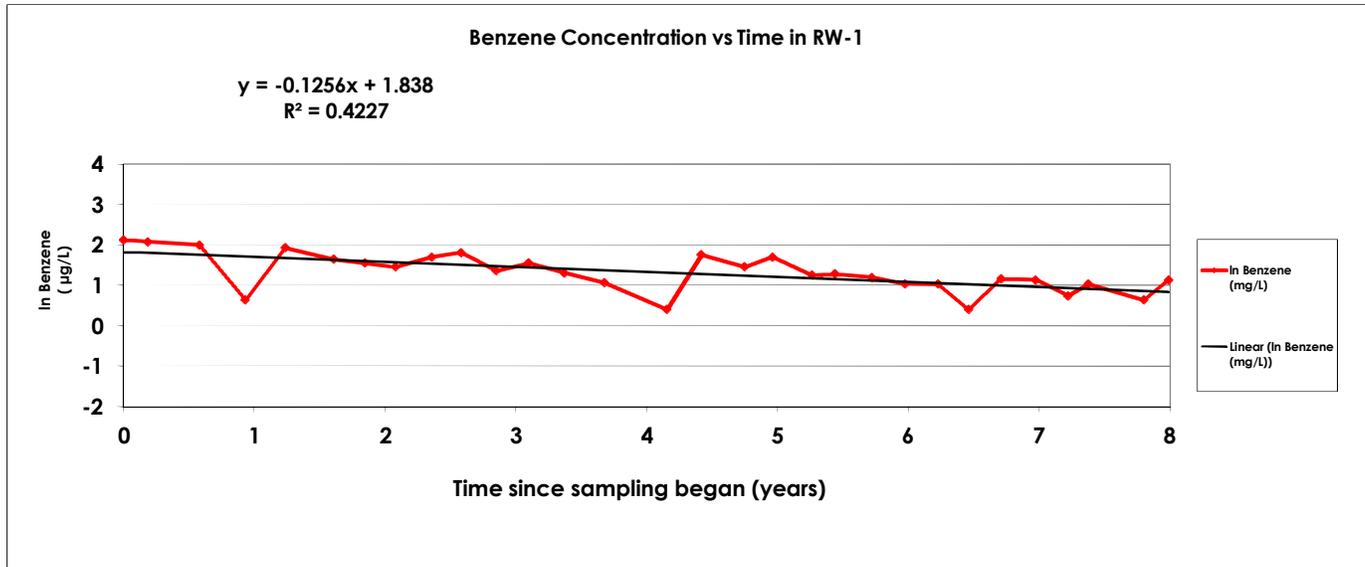
k<sub>point</sub> = First-order decay rate constant at one monitoring point, years<sup>-1</sup>  
= slope of the line, y

**Solutions**

C <sub>CL</sub>	⇒	0.42	Water Quality Objective (mg/L)
C <sub>o</sub>	⇒	2.48	Mean Concentration Last 4 Sampling Events (mg/L)
k <sub>point</sub>	⇒	0.1256	First Order Decay Rate (years <sup>-1</sup> )
<b>Time to reach cleanup level</b>			<b>14.1 years</b>

C <sub>CL</sub>	⇒	0.42	Water Quality Objective (mg/L)
C <sub>o</sub>	⇒	3.1	Maximum Concentration Last 4 Sampling Events (mg/L)
k <sub>point</sub>	⇒	0.1256	First Order Decay Rate (years <sup>-1</sup> )
<b>Time to reach cleanup level</b>			<b>15.9 years</b>

WQO = GRP at Source



Point Decay Rate Constant & Timeframe to Achieve Benzene Water Quality Objective in Well TP-1 Based on Data Since 2006

Former Texaco Service Station  
Chevron Site No. 211874  
623 Holcombe Avenue  
Mobile, Alabama

Sampling Date	Benzene (mg/L)	In Benzene (mg/L)	Elapsed time since 07/09/06 (years)
07/09/06	6.9	1.93	0.00
09/15/06	6.4	1.86	0.19
02/05/07	7.1	1.96	0.58
06/14/07	2.0	0.69	0.93
10/03/07	4.8	1.57	1.24
02/15/08	4.5	1.50	1.61
05/12/08	5.0	1.61	1.84
08/05/08	5.6	1.72	2.08
11/15/08	7.1	1.96	2.36
02/04/09	4.7	1.55	2.58
05/14/09	5.7	1.74	2.85
08/12/09	1.2	0.18	3.10
11/30/09	3.2	1.16	3.40
03/12/10	0.81	-0.21	3.68
09/02/10	3.60	1.28	4.15
12/07/10	3.4	1.22	4.42
04/07/11	2.2	0.79	4.75
06/23/11	2.4	0.88	4.96
10/11/11	0.60	-0.51	5.26
12/14/11	0.47	-0.76	5.44
03/27/12	1.20	0.18	5.72
06/27/12	0.048	-3.04	5.97
09/27/12	0.120	-2.12	6.22
12/21/12	0.430	-0.84	6.46
03/22/13	0.55	-0.60	6.71
06/27/13	0.060	-2.81	6.97
09/25/13	0.330	-1.11	7.22
11/21/13	0.190	-1.66	7.38
04/24/14	1.5	0.41	7.80
07/02/14	0.60	-0.51	7.99
<b>Mean Last 4 Events</b>	<b>0.66</b>		

**Formula**

$$t = -[\ln(C_{CL}/C_o)] / k_{point}$$

where:

t = Time to achieve cleanup levels, years

C<sub>CL</sub> = Cleanup level for contaminant of concern, mg/L

C<sub>o</sub> = Initial concentration of contaminant of concern, mg/L

k<sub>point</sub> = First-order decay rate constant at one monitoring point, years<sup>-1</sup>  
= slope of the line, y

**Solutions**

C <sub>CL</sub>	⇒	0.42	Water Quality Objective (mg/L)
C <sub>o</sub>	⇒	0.66	Mean Concentration Last 4 Sampling Events (mg/L)
k <sub>point</sub>	⇒	0.4636	First Order Decay Rate (years <sup>-1</sup> )
<b>Time to reach cleanup level</b>			<b>1.0 years</b>

C <sub>CL</sub>	⇒	0.42	Water Quality Objective (mg/L)
C <sub>o</sub>	⇒	1.5	Maximum Concentration Last 4 Sampling Events (mg/L)
k <sub>point</sub>	⇒	0.4636	First Order Decay Rate (years <sup>-1</sup> )
<b>Time to reach cleanup level</b>			<b>2.7 years</b>

WQO = GRP at Source

