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**RECEIVED**

By Alameda County Environmental Health 10:01 am, Dec 15, 2014

Re: Chevron Service Station No. 90121  
3026 Lakeshore Avenue  
Oakland, CA

I have reviewed the attached report entitled *Site Investigation Report*.

I agree with the conclusions and recommendations presented in the referenced report. The information in this report is accurate to the best of my knowledge and all local Agency/Regional Board guidelines have been followed. This report was prepared by GHD Services Inc., upon whose assistance and advice I have relied.

This letter is submitted pursuant to the requirements of California Water Code Section 13267(b)(1) and the regulating implementation entitled Appendix A pertaining thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Sincerely,

A handwritten signature in blue ink that reads "Mark E. Horne".

Mark Horne  
Project Manager

Attachment: *Site Investigation Report*



## Site Investigation Report

Former Chevron Service Station 90121  
3026 Lakeshore Avenue  
Oakland, California  
ACEH Fuel Leak Case No. RO0284

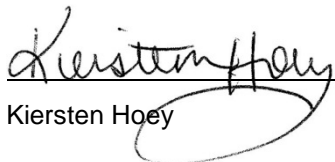
Chevron Environmental Management Company


**GHD** | 5900 Hollis Street Suite A Emeryville, 94608 California USA  
311973 | 2015.4 | 04.05 | Report No 31 | December 7 2016



## Site Investigation Report

Former Chevron Service Station 90121  
3026 Lakeshore Avenue  
Oakland, California  
ACEH Fuel Leak Case No. RO0284

  
Kiersten Hoey

  
Greg Barclay PG 6260



**GHD** | 5900 Hollis Street Suite A Emeryville, 94608 California USA  
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# Table of Contents

1.	Introduction	1
2.	Site Background	1
2.1	Site Description	1
2.2	Previous Environmental Work	1
2.3	Site Geology	2
2.4	Site Hydrogeology	2
3.	Subsurface Investigation	2
3.1	Site Specific Health and Safety Plan	2
3.2	Permits	3
3.3	Utility Clearance	3
3.4	Drilling	3
3.4.1	Soil Borings	3
3.4.2	Monitoring Well Installation	3
3.5	Soil Sampling	4
3.6	Well Development and Groundwater Sampling	4
3.7	Chemical Analysis	4
3.8	Well Survey	5
3.9	Waste Disposal	5
4.	Investigation Results	5
4.1	Lithology	5
4.2	Light Non-Aqueous Phase Liquid (LNAPL)	5
4.3	Petroleum Hydrocarbon Distribution in Soil	6
4.3.1	Offsite Borings	6
4.3.2	Onsite Borings	6
4.4	Petroleum Hydrocarbon Distribution in Groundwater	6
5.	Conclusions and Recommendations	8



## Figure Index

Figure 1	Vicinity Map
Figure 2	Site Plan
Figure 3	Maximum TPHg Concentrations in Soil (0 to 5 fbg)
Figure 4	Maximum Benzene Concentrations in Soil (0 to 5 fbg)
Figure 5	Maximum Benzene Concentrations in Soil (<5 to 10 fbg)
Figure 6	Hydrocarbon Concentrations in Groundwater – March 18, 2016
Figure 7	Hydrocarbon Concentrations in Groundwater – September 27, 2016

## Table Index

Table 1	Soil Analytical Data
Table 2	Cumulative Soil Analytical Data
Table 3	Grab-Groundwater Analytical Data
Table 4	Cumulative Groundwater Monitoring and Sampling Data

## Appendix Index

Appendix A	Regulatory Letter
Appendix B	Summary of Environmental Remediation and Investigation
Appendix C	Permits
Appendix D	Standard Operating Procedures for Soil Boring and Monitoring Well Installation and for Hand Auger Boring and Sampling
Appendix E	Boring Logs
Appendix F	Laboratory Analytical Reports
Appendix G	Well Survey



## 1. Introduction

GHD is submitting this *Site Investigation Report* for the subject site (Figure 1) on behalf of Chevron Environmental Management Company (EMC). GHD performed the site investigation as outlined in GHD's *Data Gap Work Plan and Focused Site Conceptual Model* dated February 6, 2015 and technical comments included in Alameda County Environmental Health's (ACEH) conditional approval letter dated March 23, 2015 (Appendix A). The subsurface investigation was completed to further delineate the downgradient and lateral extent of the dissolved hydrocarbon plume, determine if the storm drain along the southern edge of the site is a preferential pathway, and further delineate hydrocarbons in soil beneath the former dispensers and piping. The due date for the submittal of this report was extended to December 7, 2016 due to the lengthy process of obtaining City of Oakland encroachment permits. The site background, investigation details and results, and conclusions and recommendations are presented below.

## 2. Site Background

### 2.1 Site Description

The site is currently a vacant lot on the southern corner of Lakeshore Avenue and MacArthur Boulevard in Oakland, California (Figure 1) utilized by the current owner as a parking lot. A retail gasoline service station operated onsite from 1933 to 2009. The service station was demolished in August 2010, removing all site facilities, including one building, one kiosk, three dispenser islands, four 10,000-gallon gasoline underground storage tanks (USTs), and product piping (Figure 2). The property was sold to FWS Highland LLC (FWS) in 2011. Surrounding land use is a mixture of commercial and residential, with Lake Merritt and a city park located across Lakeshore Avenue.

A review of Sanborn Maps and city records produced by Environmental Data Resources Inc (EDR) indicates that a service station and automobile repair shop were formerly located at 3000 Lakeshore Avenue, which is downgradient of the site at the corner of Lakeshore Avenue and Beacon Street (Figure 2). The service station operated from approximately 1933 to 1957 when the service station was replaced by an office building.

### 2.2 Previous Environmental Work

The site has been an open environmental case since 1990 under ACEH jurisdiction (Fuel Leak Case Number RO0000284 and GeoTracker Global ID T0600100328). A total of 23 monitoring wells (13 of which have been destroyed), 3 sub-slab vapor probes, and 22 soil borings have been installed/advanced on and near the site (Figure 2). Remedial activities have consisted of light non-aqueous phase liquid (LNAPL) recovery and at least five fueling facility upgrades, some of which included remedial excavations. A summary of previous environmental investigation and remediation is included in Appendix B.



## 2.3 Site Geology

The site is approximately 7 feet above mean sea level (ft-amsl) with relatively flat topography and located in a valley adjacent to hilly terrain to the southeast. The site is located within the Oakland sub-area of the East Bay Plain groundwater basin.<sup>1</sup> This basin encompasses approximately 115 square miles and is bounded by San Pablo Bay to the north, northern boundary of the Alameda County Water District to the south, the Hayward Fault to the east, and the San Francisco Bay to the west. Sediments in the vicinity consist of Holocene-age estuarine deposits comprised of organic clay and silty clay (Bay Mud); overlying Holocene-age alluvial sand and silt, and Pleistocene-age interbedded clay, silt, sand, and gravel.<sup>2</sup> Locally, the site is underlain primarily by clays interbedded with silt, silty sand, fine sand, and gravel layers to the total depth explored of 35 feet below grade (fbg).

## 2.4 Site Hydrogeology

The site is located in the Santa Clara Valley Groundwater Basin, East Bay Plain Sub Basin, Oakland sub-area. Groundwater in this region has been designated potentially beneficial for agricultural, municipal, and industrial uses.<sup>3</sup> The average historical groundwater elevation has ranged from approximately 2 to 14 fbg and flows predominantly to the southwest. The nearest surface water body is Lake Merritt, approximately 900 feet to the southwest.

# 3. Subsurface Investigation

To further delineate the downgradient extent of the dissolved hydrocarbon plume to the west-southwest, well MW-10 was installed offsite. The two wells proposed crossgradient to the northwest in the sidewalk along Lake Merritt Park were not installed due to a 10- to 12-foot diameter storm drain corridor encountered beneath the sidewalk (B-8). To determine if the storm drain along the southern edge of the site is a preferential pathway, soil borings B-9 and B-10 were advanced adjacent to the storm drain and grab-groundwater samples were collected for analysis. Additionally, to further delineate hydrocarbons in soil beneath the former product lines and dispensers, borings B-11, B-12, and B-13 were advanced. Due to an existing underground telecommunication line, the nearest B-13 could be located to 1996 sample P-14, was 5 feet. Field activities are summarized below.

## 3.1 Site Specific Health and Safety Plan

GHD performed all work under the guidelines set forth in a comprehensive site-specific health and safety plan. The plan was reviewed and signed by all site workers and visitors, and kept onsite at all times.

<sup>1</sup> *East Bay Plain Groundwater Basin Beneficial Use Evaluation Report*, Alameda and Contra Costa Counties, CA prepared by the California Regional Water Quality Control Board San Francisco Bay, August 4, 1999

<sup>2</sup> *California's Groundwater Bulletin 118*; The State of California Department of Water Resources Agency, February 27, 2004

<sup>3</sup> *Table 2-2 Existing and Potential Beneficial Uses in Groundwater in Identified Basins, Water Quality Control Plan (Basin Plan) for the San Francisco Bay Basins*; California Regional Water Quality Control Board – San Francisco Bay Region, January 18, 2007.



## 3.2 Permits

GHD obtained Alameda County Public Works Agency (ACPWA) drilling permits W2016-0704 to W2016-0708, and City of Oakland excavation permits X1602372 and X1602373, obstruction permit OB1601228, and minor encroachment permit ENMI15176 to conduct work within the public right-of-way. All permits are included in Appendix C.

## 3.3 Utility Clearance

Prior to drilling, GHD contacted Underground Service Alert (USA) to mark existing underground utilities near the proposed boring locations. GHD contracted NORCAL Geophysical Consultants, Inc. (NORCAL) of Cotati, California to verify underground utility locations near the proposed locations. A metal detector, tracer cable, electronic line location equipment, and ground penetrating radar (GPR) were used by NORCAL to determine utility locations in the areas of the proposed locations. Prior to drilling, boring and well locations were cleared to 8 fbg with a hand auger.

## 3.4 Drilling

On October 24 and 25, 2016, Gregg Drilling and Testing Inc. of Martinez, California (C-57 License # 485165) was contracted to advance six soil borings and install one monitoring well. GHD personnel managed the drilling under the supervision of California Professional Geologist Brandon Wilken. Standard field procedures for soil boring and monitoring well installation, and hand auger borings and sampling are presented in Appendix D.

### 3.4.1 Soil Borings

Using a hand auger, offsite soil boring B-8 was advanced to 4 fbg where a flat concrete surface was encountered below the Lakeshore Avenue sidewalk (Figure 2). This concrete surface was determined to be a 10- to 12-foot diameter storm drain corridor. Onsite soil borings B-9 and B-10 were advanced to 12 fbg using a hand auger. Onsite soil borings B-11, B-12, and B-13 were advanced to 15 fbg using direct push technology (DPT). After the borings were completed, they were backfilled with Portland Type II/V cement and the surfaces were finished to match the existing grades. Boring logs are included in Appendix E.

### 3.4.2 Monitoring Well Installation

Following borehole clearance to 8 fbg, a 3-inch diameter borehole for well MW-10 was advanced using DPT to 20 fbg and was utilized to determine lithology, groundwater depth, and to collect soil samples prior to monitoring well installation. The monitoring well was constructed with 1-inch diameter Schedule 40 polyvinyl chloride (PVC) and screened with a 0.020-inch factory-machine slotted PVC from 10 to 20 fbg. Monterey #3 sand was used to fill the annular space from 20 fbg to approximately 9 fbg, one foot above the screened interval. Approximately 2 feet of hydrated bentonite seal was placed above the sand pack. The remainder of the well annulus was backfilled with Portland Type I/II cement. A well box equipped with a traffic-rated lid was installed flush to grade with concrete. A well log is included in Appendix E. As stated above, the two wells proposed in the sidewalk on the north side of Lakeshore Avenue were not completed due to the location of a 10- to 12-foot diameter storm drain corridor encountered beneath the sidewalk.





### 3.5 Soil Sampling

Soil samples from borings B-8 and MW-10 above 8 fbg were collected from the hand auger bucket using a 6-inch stainless steel tube. A slide hammer was not used due to risk to striking one of the several nearby underground utilities. All soil samples from B-9 and B-10 and soil samples at 3 fbg from B-11 and B-12 were collected using a slide-hammer lined with 6-inch stainless steel tubes. All other soil samples from B-11, B-12, and B-13 were collected from acetate lined direct push samplers. Soil was continuously logged using the American Society for Testing and Materials (ASTM) D2488-06 Unified Soil Classification System (USCS) and screened using a photoionization detector (PID). Samples collected for analyses were capped with Teflon® tape and plastic end caps. All samples were properly sealed, labeled, preserved on ice, logged on chain-of-custody forms, and released to Eurofins Lancaster Laboratories (Eurofins) of Lancaster, Pennsylvania for analysis. Soil samples were not collected at all depths proposed in the work plan due to lack of recovery at various depths in the acetate liners (Appendix E). This was suspected to be due to backfill from the former dispenser removals.

### 3.6 Well Development and Groundwater Sampling

Blaine Tech Services, Inc. (Blaine Tech) of San Jose, California is scheduled to develop well MW-10 on December 5, 2016 and monitor and sample the well on December 9, 2016. Well development details and monitoring and sampling results will be included in the Fourth Quarter 2016 Groundwater Monitoring and Sampling Report.

Grab-groundwater samples were collected from borings B-9 and B-10 on October 25, 2016 using disposable bailers, as described in Appendix D. The grab-groundwater samples were properly labeled, preserved on ice, logged on chain-of-custody forms, and released to Eurofins of Lancaster, Pennsylvania for analysis.

### 3.7 Chemical Analysis

All soil and grab-groundwater samples collected were analyzed by Eurofins for the following:

- Total petroleum hydrocarbons (TPH) as motor oil (mo) by Environmental Protection Agency (EPA) Method 8015M
- TPH as diesel (TPHd) by EPA Method 8015M
- TPH as gasoline (TPHg) by EPA Method 8015M
- Benzene, toluene, ethylbenzene and xylenes (BTEX), methyl tertiary butyl ether (MTBE) and naphthalene by EPA Method 8260B.
- Polycyclic aromatic hydrocarbons (PAHs) by EPA 8270 (grab-groundwater only)

Laboratory analytical reports are included in Appendix F.



### 3.8 Well Survey

On November 4, 2016, Morrow Surveying, Inc. (Morrow) of West Sacramento, California surveyed geographical coordinates and the top of casing elevation for all site monitoring wells. Survey data is included in Appendix G.

### 3.9 Waste Disposal

Soil cuttings generated during well and soil boring installation are temporarily stored onsite in sealed and labeled Department of Transportation (DOT) approved 55-gallon drums, awaiting analytical profile results. Following receipt of the analytical profile, the waste will be transported by licensed waste haulers to a Chevron-approved and licensed disposal facility.

## 4. Investigation Results

### 4.1 Lithology

Soil encountered during the advancement of offsite well MW-10 consisted primarily of silt and clay to 13 fbg, underlain by wet or moist sand and gravel to 19 fbg. Clay was encountered beneath the sand and gravel to the maximum depth explored of 20 fbg.

Soil encountered during the advancement of borings B-9 and B-10 adjacent to the storm drain consisted primarily silt and clay to the maximum depth explored of 12.5 fbg. Sand was encountered in B-9 from 12 to 12.5 fbg. Water was encountered at approximately 12 fbg in B-9 and 11.5 fbg in B-10.

Soil borings B-11, B-12, and B-13 were advanced in the locations of the former dispenser islands.

- B-11: Fill was encountered down to 10 fbg. The top 4 feet consisted of a non-native mixture of silt, sand, and gravel, underlain by pea gravel to 10 fbg. Beneath the fill, native soil consisting of sand with gravel, silty sand, clay, and sandy silt was encountered to the maximum depth explored of 15 fbg.
- B-12: Fill was encountered down to 15 fbg. The top 3.5 feet consisted of a non-native mixture of silt, sand, and gravel, underlain by loose pea gravel and loose angular gravel with sand to 15 fbg. Based on the location of the former tank pit and the depth of the encountered gravel, this gravel is likely the UST pit backfill.
- B-13: Fill was encountered to 6 fbg. The top foot consisted of a non-native mixture of silt, sand, and gravel, underlain by loose pea gravel to 6 fbg. Beneath the fill, native soil consisting of consisting of clay and sandy silt was encountered to the maximum depth explored of 15 fbg.

### 4.2 Light Non-Aqueous Phase Liquid (LNAPL)

No LNAPL was encountered during this investigation.



### 4.3 Petroleum Hydrocarbon Distribution in Soil

During this investigation, soil samples were collected at various depths from offsite well boring MW-10 and boring B-8, and onsite borings B-9 through B-13. No petroleum hydrocarbon concentration detected in these soil samples exceed Low-Threat Underground Storage Tank Case Closure Policy (LTC) Table 1.<sup>4</sup> criteria for direct contact or volatilization to outdoor air on a residential or commercial property or for direct exposure to utility workers.

#### 4.3.1 Offsite Borings

No TPHmo was detected in soil from MW-10 and 100 milligrams per kilogram (mg/kg) TPHmo was detected in B-8. The highest TPHd concentration detected was 63 mg/kg. No TPHg was detected, and with the exception of 0.001J<sup>5</sup> mg/kg toluene, no BTEX, MTBE, or naphthalene was detected.

#### 4.3.2 Onsite Borings

TPHmo was detected in B-9, B-10, and B-12 at a maximum concentration of 69 mg/kg at 8 fbg in B-9. TPHd was detected in all three borings at a maximum concentration of 22 mg/kg at 8 fbg in B-9. No TPHg, BTEX, or naphthalene were detected in B-9 and B-10, located adjacent to the storm drain, or in B-11 or B-12, with the exception of 0.002J mg/kg xylenes at 10 fbg in B-11. Boring B-13, located at the northern edge of the site near MW-2 and MW-2A, contained hydrocarbon concentrations up to 7.6 mg/kg TPHg, 0.022 mg/kg benzene, 0.001J mg/kg toluene, 0.004J xylenes, and 0.002J naphthalene. MTBE was detected in four of the onsite borings at a maximum concentration of 0.13 mg/kg at 15 fbg in B-11, located in the center of the site.

Borings B-11, B-12, and B-13 were advanced in the former product line and dispenser areas where elevated hydrocarbons were previously detected in 1996 product piping samples P-8, P-14, P-12, and P-15 at 2.5 fbg. Analytical soil data from borings B-11, B-12, and B-13 indicate hydrocarbons in soil are limited to shallow soil at approximately 4 fbg which was likely excavated during the 1996 and 2010 product piping replacement and removal activities. This is also evidenced by the fill and no recovery encountered during the boring advancements.

The distribution of TPHg in soil 0 to 5 fbg, benzene in soil 0 to 5 fbg and >5 to 10 fbg are illustrated on Figures 3, 4, and 5, respectively. Analytical results from this investigation are listed on Table 1 and cumulative soil analytical results are presented on Table 2. The laboratory analytical reports for soil are included in Appendix F.

### 4.4 Petroleum Hydrocarbon Distribution in Groundwater

During this investigation, grab-groundwater samples were collected from borings B-9 and B-10, located adjacent to the onsite storm drain to assess if the drain is acting as a preferential pathway. Grab-groundwater data are presented on Table 3 and the analytical laboratory report is included in Appendix F. Boring B-9 was located on the downgradient end of the storm drain and B-10 was located on the upgradient end, near MW-3A. Heavier end hydrocarbon concentrations of

<sup>4</sup> State Water Control Board Resolution No. 2012-006, Low-Threat Underground Storage Tank Closure Policy (LTP), California State Water Resources Control Board, August 17, 2012.

<sup>5</sup> J = An estimated value greater than the laboratory Method Detection Limit and less than the Laboratory Limit of Quantitation



820 micrograms per liter ( $\mu\text{g/L}$ ) TPHmo and 560  $\mu\text{g/L}$  TPHd were detected in boring B-10, which is similar to historical TPHd detected in MW-3A (Table 4). TPHmo was detected in B-9 at 75J  $\mu\text{g/L}$  and no TPHd was detected. TPHg was only detected in B-10 at 79J  $\mu\text{g/L}$ , below the water quality objective (WQO)<sup>6</sup> of 100  $\mu\text{g/L}$ . No BTEX or naphthalene were detected in the grab-groundwater samples. The highest MTBE concentration detected was 3  $\mu\text{g/L}$ . The onsite storm drain does not appear to be acting as a preferential pathway based on the following:

- No BTEX or naphthalene was detected.
- Only minor MTBE concentrations were detected; below WQO of 5  $\mu\text{g/L}$ .
- TPHg was detected in B-10 at an estimated value of 79  $\mu\text{g/L}$  and no TPHg was detected downgradient in B-9.
- TPHmo and TPHd were detected in B-10; however, in downgradient boring B-9, TPHmo was only detected at an estimated value of 75  $\mu\text{g/L}$  and no TPHd was detected.

Groundwater monitoring and sampling of site wells has been ongoing for 25 years since 1991. On March 18, 2016 and September 27, 2016, Blaine Tech Services (BT) sampled all wells, per the established sampling schedule. During the September sampling event, onsite wells MW-1, MW-2A, and MW-9 were not sampled due to cars parked over the wells. The March 18, 2016 groundwater sampling data is summarized in Table 4.1 below and cumulative monitoring and sampling data are presented in Table 4. Dissolved hydrocarbons in groundwater are illustrated on Figures 6 and 7.

Table 4.1 Hydrocarbon Concentrations in Groundwater – March 18, 2016

	DTW (fbg)	TPHd w/ silica gel	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
Concentrations in micrograms per liter ( $\mu\text{g/L}$ )								
WQO (ESL Table F-1a Drinking Groundwater)		100	100	1	40	13	20	5
<b>MW-1</b>	3.46	62J	140	<1	<1	<1	<1	1
<b>MW-2A</b>	4.05	<110	290	<1	<1	<1	<1	75
<b>MW-3A</b>	4.88	<110	<100	<1	<1	<1	<1	<1
<b>MW-4A</b>	3.29	<110	72J	<1	<1	<1	<1	4
<b>MW-5</b>	9.84	<110	<100	<1	<1	<1	<1	<1
<b>MW-6</b>	5.81	<110	<1,000	<5	<5	<5	<5	<5
<b>MW-8</b>	6.18	<110	<100	<1	<1	<1	<1	<1
<b>MW-9</b>	2.07	<110	<100	<1	<1	<1	<1	2
<b>MW-10</b>	Installed October 24, 2016							
WQO = Environmental Screening Levels (ESL) from <i>Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater</i> prepared by the California Regional Water Quality Control Board – San Francisco Bay Region, Interim Final – 2016								
J = Estimated value (the result is $\geq$ the Method Detection Limit and $<$ the Limit of Quantitation)								

<sup>6</sup> WQOs are the Environmental Screening Levels from *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater* prepared by the California Regional Water Quality Control Board – San Francisco Bay Region, Interim Final February 2016



TPHd in water is composed of unaltered, nonpolar compounds and polar compounds associated with the oxidation and biodegradation of the diesel fuel. Polar compounds can be removed using the silica gel prior to analysis. Since 2011, TPHd has been analyzed intermittently with and without silica gel. When TPHd is analyzed without silica gel cleanup, concentrations onsite are generally reported  $>1,000 \mu\text{g/L}$ . When analyzed with silica gel, concentrations are reported one to two orders of magnitude less and often below laboratory reporting limit and/or WQO. Data presented in Table 4.1 above and on Table 4 indicate biodegradation of TPHd to mostly polar compounds and the dissolved TPHd plume is shrinking in size and mass.

On March 18, 2016, the highest TPHg concentration detected in groundwater was  $290 \mu\text{g/L}$ , and is limited to the western corner of the site. No BTEX was detected in groundwater. MTBE was detected in well MW-2A at  $75 \mu\text{g/L}$ , and below the WQO or the laboratory reporting limit in all other wells. Groundwater typically flows southwest toward Beacon Street. Based on data presented above, dissolved hydrocarbon concentrations are generally limited in extent, the hydrocarbon plume is shrinking following source removal and bioattenuation processes, and no additional assessment is warranted crossgradient across Lakeshore Avenue. Dissolved hydrocarbons in groundwater on March 18, 2016 and September 27, 2016 are presented on Figures 6 and 7, respectively.

## 5. Conclusions and Recommendations

- Based on grab-groundwater data from borings B-9 and B-10, the onsite storm drain does not appear to be acting as a preferential pathway.
- Borings B-11, B-12, and B-13 were advanced in the former dispenser areas where elevated hydrocarbons were previously detected in product piping samples P-8, P-14, P-12, and P-15 at 2.5 fbg. Analytical data from the soil samples collected from these borings indicate hydrocarbons in soil are limited in extent.
- It appears hydrocarbon-bearing soil previously detected in soil samples P-1 through P-15 collected at depths ranging from 2 to 3 fbg during the 1996 piping/dispenser replacements were excavated either during installation of the replacement piping/dispensers (in the same locations) or when the piping/dispensers were removed in 2010 (therefore the 1996 P-1 through P-15 concentrations are not included on Figures 3, 4, and 5). This is evidenced by the following:
  - Soil samples P-1 through P-14 collected in 2010 during the piping/dispenser removals were collected at depths ranging from 4 to 6.5 fbg, suggesting soil beneath the piping and dispensers was excavated to depth of 4 to 6.5 fbg.
  - During advancement of borings B-11, B-12, and B-13 in the former dispenser areas, fill and pea gravel were encountered to depths ranging from 6 to 15 fbg.
- No petroleum hydrocarbon concentrations detected in soil samples collected from MW-10 or B-8 through B-13 exceed LTC Table 1 criteria for direct contact or volatilization to outdoor air on a residential or commercial property or for direct exposure to utility workers.
- Based on dissolved hydrocarbon concentrations, the dissolved hydrocarbon plume is generally limited in extent, and the hydrocarbon plume is shrinking following source removal and

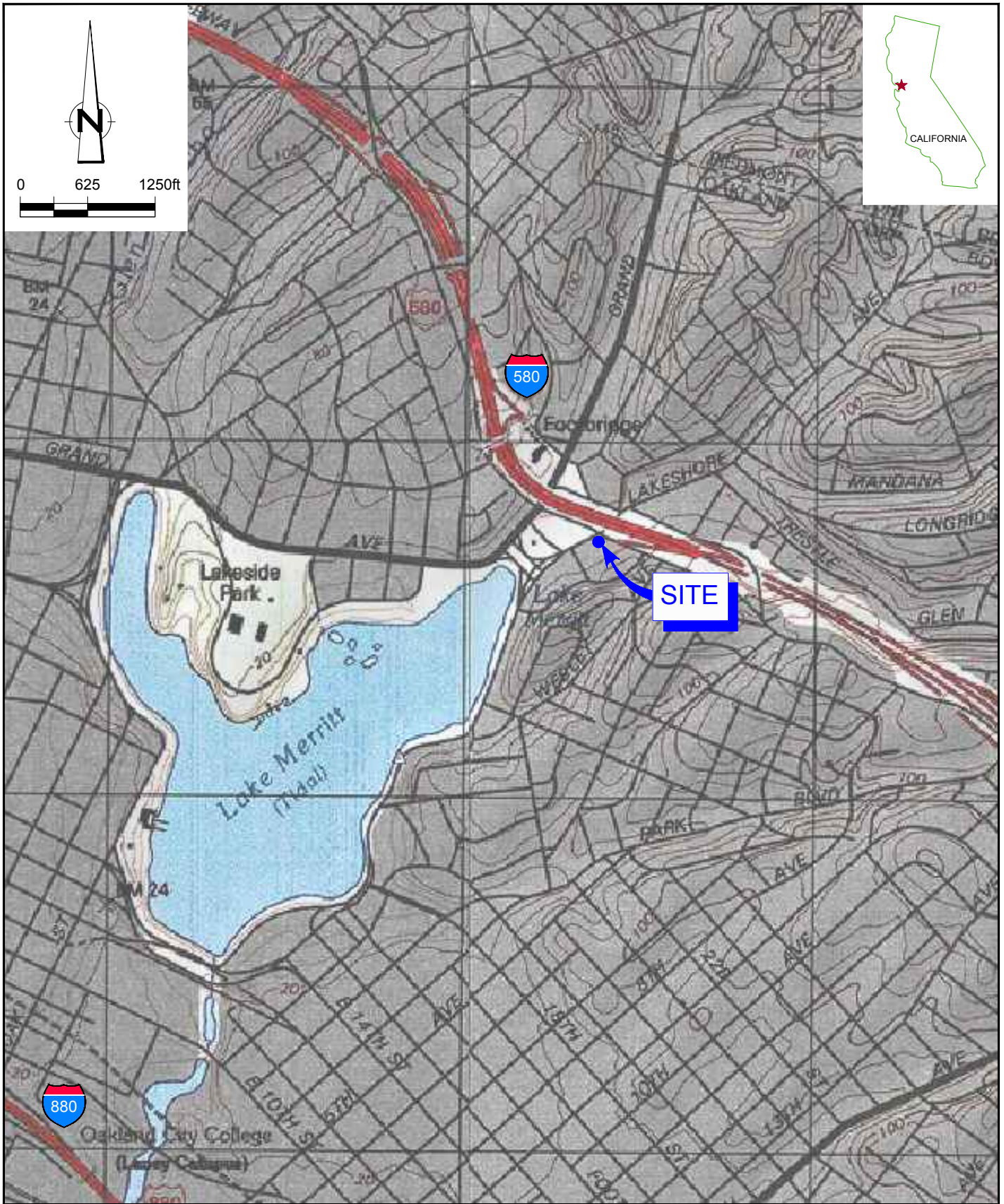


bioattenuation processes; therefore, GHD recommends no additional assessment crossgradient across Lakeshore Avenue.

- GHD recommends one year of quarterly groundwater monitoring and sampling of new well MW-10 and continued semi-annual monitoring and sampling of existing wells which GHD evaluates site data against the LTC criteria.

# Figures





SOURCE: TOPO! MAPS



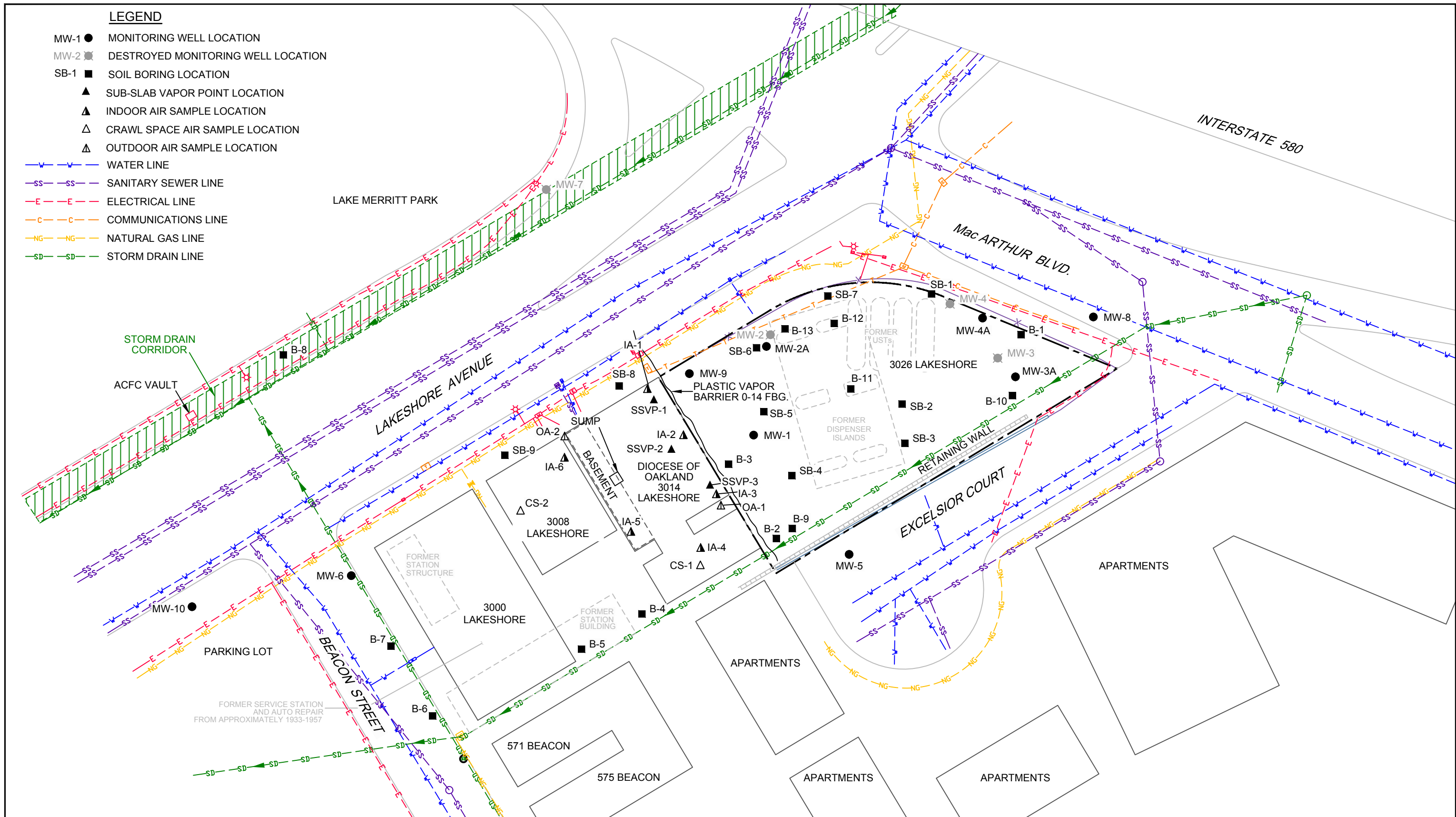
FORMER CHEVRON SERVICE STATION 90121  
 3026 LAKESHORE AVENUE  
 OAKLAND, CALIFORNIA

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 Nov 22, 2016

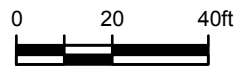
VICINITY MAP

FIGURE 1





SOURCE: MORROW SURVEY LAND SURVEYORS, NOV 4, 2016.



Coordinate System:  
California State  
Plane Zone 3



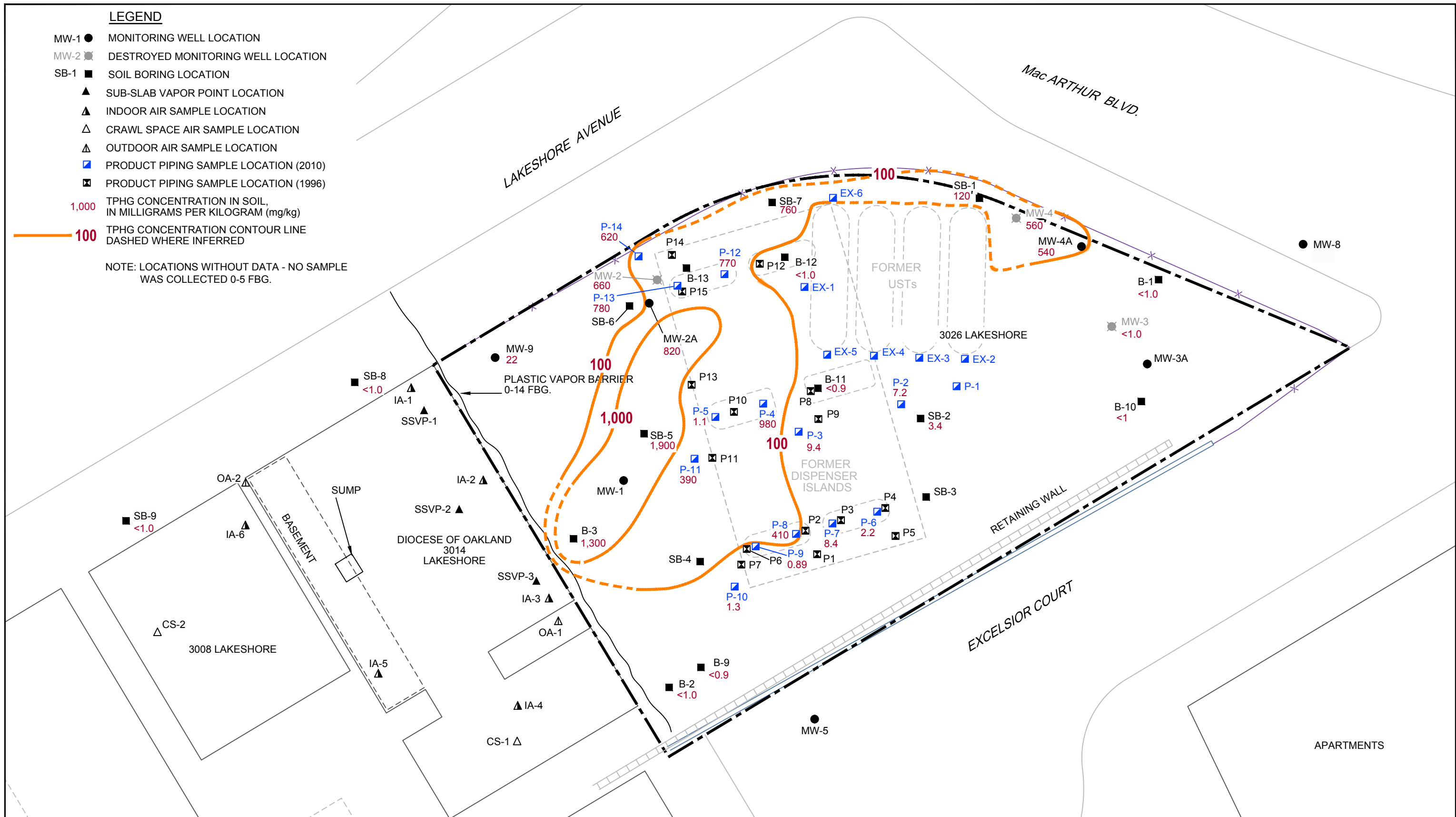
FORMER CHEVRON SERVICE STATION 90121  
3026 LAKESHORE AVENUE, OAKLAND, CALIFORNIA

SITE PLAN

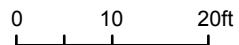
311973-2015.4

Nov 29, 2016

FIGURE 2



SOURCE: MORROW SURVEY LAND SURVEYORS, NOV 4, 2016.



Coordinate System:  
California State  
Plane Zone 3



FORMER CHEVRON SERVICE STATION 90121  
3026 LAKESHORE AVENUE, OAKLAND, CALIFORNIA

MAXIMUM TPHg CONCENTRATIONS IN SOIL (0 TO 5 FBG)

311973-2015.4

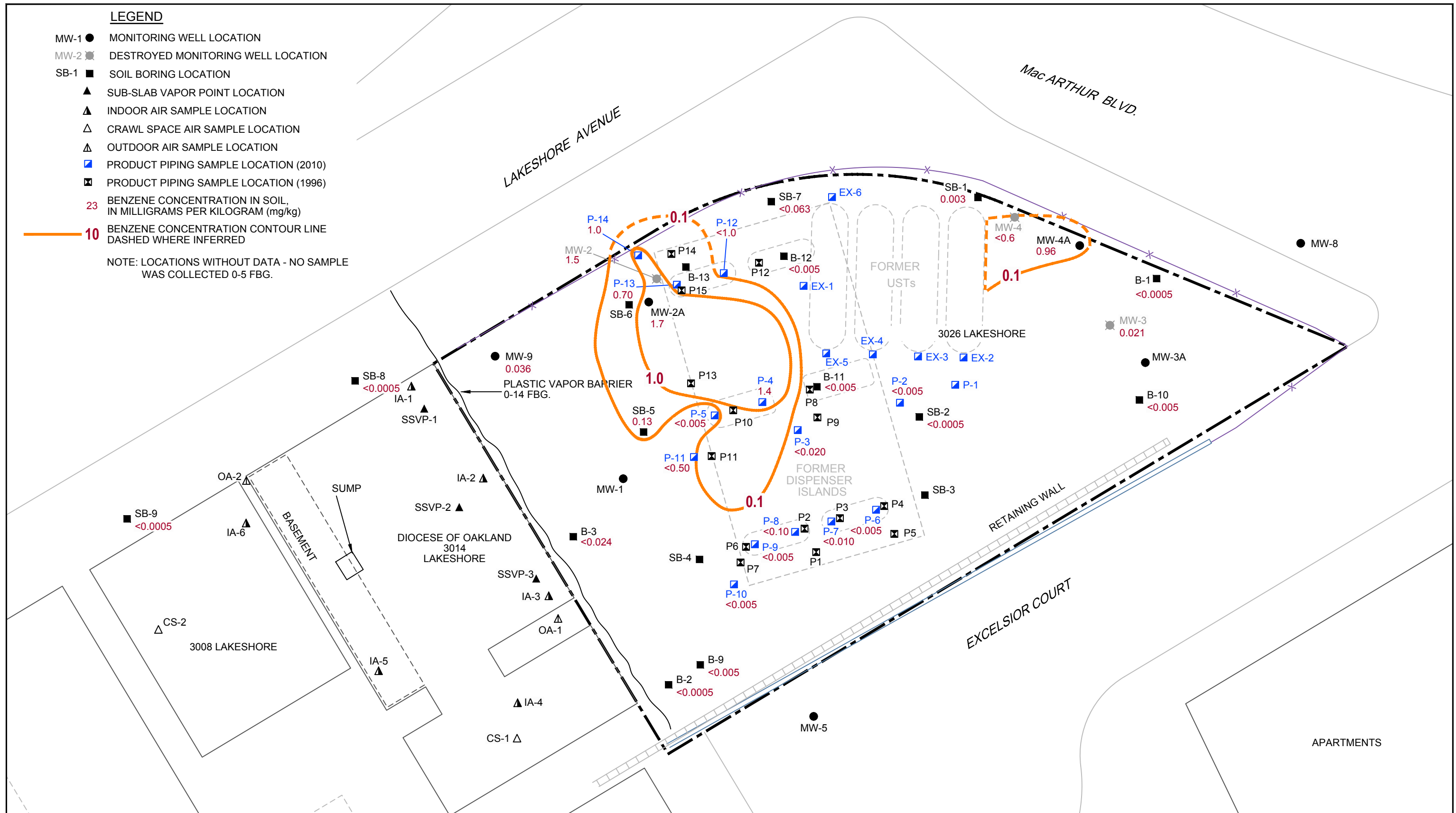
Nov 29, 2016

FIGURE 3

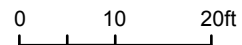
**LEGEND**

- MW-1 ● MONITORING WELL LOCATION
- MW-2 ☒ DESTROYED MONITORING WELL LOCATION
- SB-1 ■ SOIL BORING LOCATION
- ▲ SUB-SLAB VAPOR POINT LOCATION
- ▲ INDOOR AIR SAMPLE LOCATION
- △ CRAWL SPACE AIR SAMPLE LOCATION
- △ OUTDOOR AIR SAMPLE LOCATION
- ▣ PRODUCT PIPING SAMPLE LOCATION (2010)
- ☒ PRODUCT PIPING SAMPLE LOCATION (1996)
- 23 BENZENE CONCENTRATION IN SOIL, IN MILLIGRAMS PER KILOGRAM (mg/kg)
- 10 BENZENE CONCENTRATION CONTOUR LINE DASHED WHERE INFERRED

NOTE: LOCATIONS WITHOUT DATA - NO SAMPLE WAS COLLECTED 0-5 FBG.



SOURCE: MORROW SURVEY LAND SURVEYORS, NOV 4, 2016.



Coordinate System:  
California State  
Plane Zone 3



FORMER CHEVRON SERVICE STATION 90121  
3026 LAKESHORE AVENUE, OAKLAND, CALIFORNIA

311973-2015.4

Nov 29, 2016

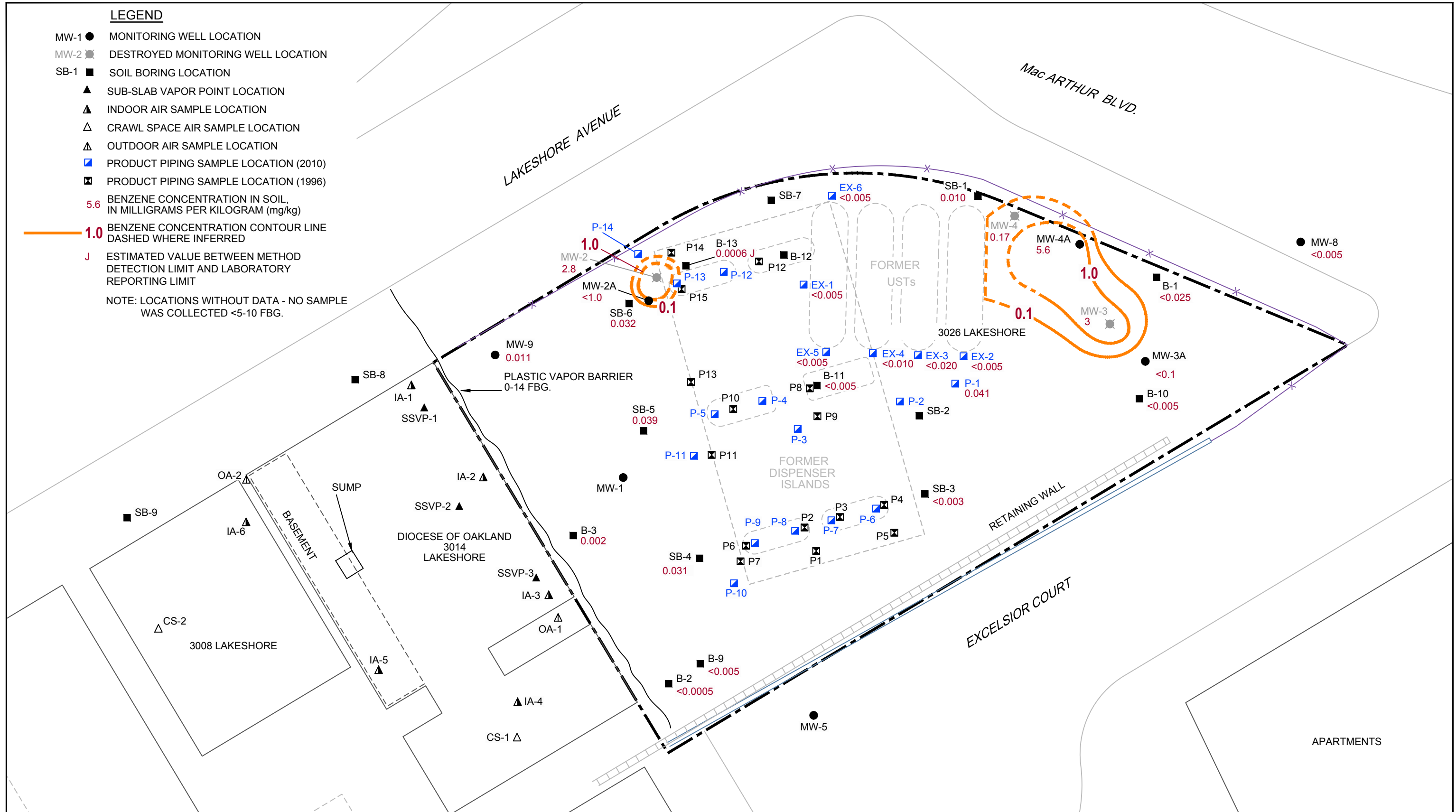
MAXIMUM BENZENE CONCENTRATIONS IN SOIL (0 TO 5 FBG)

FIGURE 4

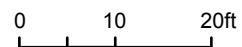
**LEGEND**

- MW-1 ● MONITORING WELL LOCATION
- MW-2 ■ DESTROYED MONITORING WELL LOCATION
- SB-1 ■ SOIL BORING LOCATION
- ▲ SUB-SLAB VAPOR POINT LOCATION
- ▲ INDOOR AIR SAMPLE LOCATION
- △ CRAWL SPACE AIR SAMPLE LOCATION
- △ OUTDOOR AIR SAMPLE LOCATION
- PRODUCT PIPING SAMPLE LOCATION (2010)
- PRODUCT PIPING SAMPLE LOCATION (1996)
- 5.6 BENZENE CONCENTRATION IN SOIL, IN MILLIGRAMS PER KILOGRAM (mg/kg)
- 1.0 BENZENE CONCENTRATION CONTOUR LINE DASHED WHERE INFERRED
- J ESTIMATED VALUE BETWEEN METHOD DETECTION LIMIT AND LABORATORY REPORTING LIMIT

NOTE: LOCATIONS WITHOUT DATA - NO SAMPLE WAS COLLECTED <5-10 FBG.



SOURCE: MORROW SURVEY LAND SURVEYORS, NOV 4, 2016.



Coordinate System:  
California State  
Plane Zone 3



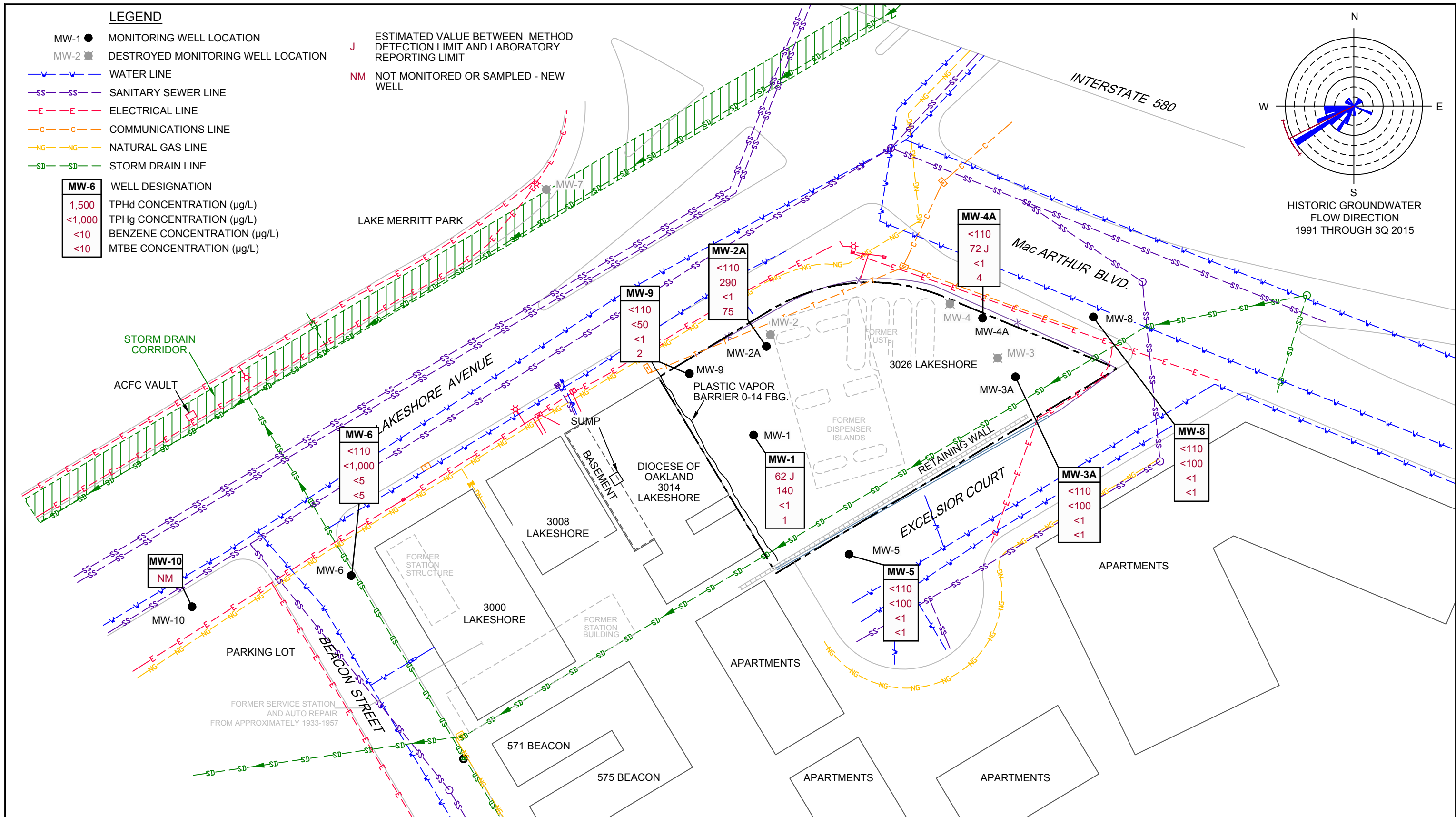
FORMER CHEVRON SERVICE STATION 90121  
3026 LAKESHORE AVENUE, OAKLAND, CALIFORNIA

311973-2015.4

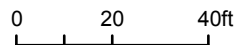
Nov 29, 2016

MAXIMUM BENZENE CONCENTRATIONS IN SOIL (>5 TO 10 FBG) FIGURE 5





SOURCE: MORROW SURVEY LAND SURVEYORS, NOV 4, 2016.



Coordinate System:  
California State  
Plane Zone 3



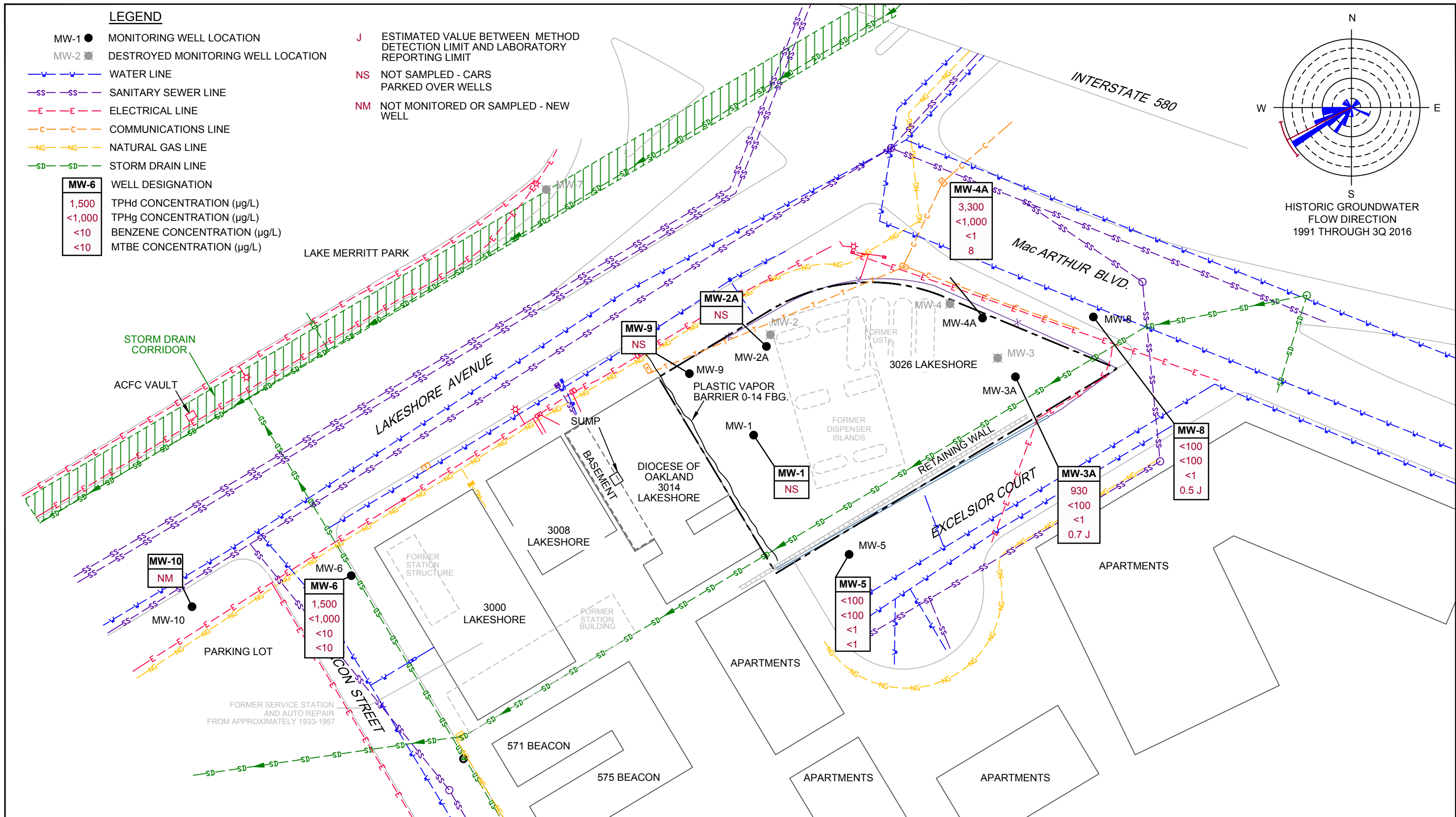
FORMER CHEVRON SERVICE STATION 90121  
3026 LAKESHORE AVENUE, OAKLAND, CALIFORNIA

HYDROCARBON CONCENTRATIONS IN GROUNDWATER  
MARCH 18, 2016

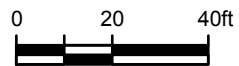
311973-2015.4

Nov 23, 2016

FIGURE 6



SOURCE: MORROW SURVEY LAND SURVEYORS, NOV 4, 2016.



Coordinate System:  
California State  
Plane Zone 3



FORMER CHEVRON SERVICE STATION 90121  
3026 LAKESHORE AVENUE, OAKLAND, CALIFORNIA

HYDROCARBON CONCENTRATIONS IN GROUNDWATER  
SEPTEMBER 27, 2016

311973-2015.4

Nov 23, 2016

FIGURE 7

# Tables

**Table 1  
Soil Analytical Data  
Former Chevron Service Station 90121  
3026 Lakeshore Avenue  
Oakland, California**

Sample ID	Date	Sample Depth (fbg)	Total	TPHmo	TPHd	TPHg	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	Naphthalene
			TPH	Concentrations reported in milligrams per kilogram (mg/kg)								
<i>LTP-Direct Contact (0-5 fbg)</i>		<i>Residential<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>1.9</i>	<i>NE</i>	<i>21</i>	<i>NE</i>	<i>NE</i>	<i>9.7</i>
		<i>Commercial<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>8.2</i>	<i>NE</i>	<i>89</i>	<i>NE</i>	<i>NE</i>	<i>45</i>
<i>LTP-Outdoor Air (5-10 fbg)</i>		<i>Residential<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>2.8</i>	<i>NE</i>	<i>32</i>	<i>NE</i>	<i>NE</i>	<i>9.7</i>
		<i>Commercial<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>12</i>	<i>NE</i>	<i>134</i>	<i>NE</i>	<i>NE</i>	<i>45</i>
<i>LTP-Direct Contact (0-10 fbg)</i>		<i>Utility Worker<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>14</i>	<i>NE</i>	<i>314</i>	<i>NE</i>	<i>NE</i>	<i>219</i>
<i>LTP-Indoor Air (0-5 fbg)</i>			<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>100</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>
MW-10	10/24/16	3	<30	<30	<12	<0.9	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
		5	<30	<30	<12	<1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
		10	<30	<30	55	<1.1	<0.005	0.001J	<0.005	<0.005	<0.005	<0.005
		15	<30	<30	11J	<1.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
		20	<30	<30	10J	<0.9	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
B-8	10/24/16	3	100	100	63	<0.9	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
B-9	10/25/16	3	58	58	18	<0.9	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
		5	<30	<30	<12	<0.9	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
		8	69	69	22	<1.0	<0.005	<0.005	<0.005	<0.005	0.0008J	<0.005
		10	31	31	15	<1.0	<0.005	<0.005	<0.005	<0.005	0.002J	<0.005
		12	<30	<30	<12	<1.0	<0.005	<0.005	<0.005	<0.005	0.001J	<0.005



**Table 1  
Soil Analytical Data  
Former Chevron Service Station 90121  
3026 Lakeshore Avenue  
Oakland, California**

Sample ID	Date	Sample Depth (fbg)	Total	TPHmo	TPHd	TPHg	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	Naphthalene
			TPH	Concentrations reported in milligrams per kilogram (mg/kg)								
<i>LTP-Direct Contact (0-5 fbg)</i>		<i>Residential<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>1.9</i>	<i>NE</i>	<i>21</i>	<i>NE</i>	<i>NE</i>	<i>9.7</i>
		<i>Commercial<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>8.2</i>	<i>NE</i>	<i>89</i>	<i>NE</i>	<i>NE</i>	<i>45</i>
<i>LTP-Outdoor Air (5-10 fbg)</i>		<i>Residential<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>2.8</i>	<i>NE</i>	<i>32</i>	<i>NE</i>	<i>NE</i>	<i>9.7</i>
		<i>Commercial<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>12</i>	<i>NE</i>	<i>134</i>	<i>NE</i>	<i>NE</i>	<i>45</i>
<i>LTP-Direct Contact (0-10 fbg)</i>		<i>Utility Worker<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>14</i>	<i>NE</i>	<i>314</i>	<i>NE</i>	<i>NE</i>	<i>219</i>
<i>LTP-Indoor Air (0-5 fbg)</i>			<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>100</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>
B-10	10/25/16	3	<30	<30	<12	<0.9	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
		5	<30	<30	<12	<1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
		8	23J	23J	7.7J	<1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
		10	19J	19J	18	<1.1	<0.005	<0.005	<0.005	<0.005	<0.006	<0.005
		12	<30	<30	<12	<1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
B-11	10/25/16	3	<30	<30	<12	<0.9	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
		10	<30	<30	8.2J	3.2	<0.005	<0.005	<0.005	0.002J	0.012	<0.005
		15	<30	<30	<12	<1.0	<0.005	<0.005	<0.005	<0.005	0.13	<0.005
B-12	10/25/16	3	27J	27J	9.8J	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
		15	<30	<30	<12	78	<0.005	<0.005	<0.005	<0.005	0.001J	<0.005
B-13	10/25/16	6	<30	<30	13	7.6	0.0006J	<0.005	<0.005	0.003J	0.01	<0.005
		10	<30	<30	<12	2.2	<0.005	0.001J	<0.005	0.003J	0.004J	<0.005
		15	<30	<30	<12	4.4	0.022	0.001J	<0.005	0.004J	0.029	0.002J

**Table 1**  
**Soil Analytical Data**  
**Former Chevron Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Sample ID	Date	Sample Depth (fbg)	Total	TPHmo	TPHd	TPHg	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	Naphthalene
			TPH									
← Concentrations reported in milligrams per kilogram (mg/kg) →												
<i>LTP-Direct Contact (0-5 fbg)</i>		<i>Residential<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>1.9</i>	<i>NE</i>	<i>21</i>	<i>NE</i>	<i>NE</i>	<i>9.7</i>
		<i>Commercial<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>8.2</i>	<i>NE</i>	<i>89</i>	<i>NE</i>	<i>NE</i>	<i>45</i>
<i>LTP-Outdoor Air (5-10 fbg)</i>		<i>Residential<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>2.8</i>	<i>NE</i>	<i>32</i>	<i>NE</i>	<i>NE</i>	<i>9.7</i>
		<i>Commercial<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>12</i>	<i>NE</i>	<i>134</i>	<i>NE</i>	<i>NE</i>	<i>45</i>
<i>LTP-Direct Contact (0-10 fbg)</i>		<i>Utility Worker<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>14</i>	<i>NE</i>	<i>314</i>	<i>NE</i>	<i>NE</i>	<i>219</i>
<i>LTP-Indoor Air (0-5 fbg)</i>			<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>100</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>

**Notes/Abbreviations:**

Total petroleum hydrocarbons by modified EPA Method 8015B unless otherwise noted.

Total petroleum hydrocarbons as motor oil (TPHmo) by modified EPA Method 8015B unless otherwise noted.

Total petroleum hydrocarbons as diesel (TPHd) and gasoline (TPHg) by modified EPA Method 8015B unless otherwise noted.

Benzene, toluene, ethylbenzene, total xylenes, methyl tertiary butyl ether (MTBE), di-isopropyl ether (DIPE), t-amyl methyl ether (TAME), t-butyl alcohol (TBA), ethyl t-butyl ether (ETBE), naphthalene, 1,2-dichloroethane (1,2-DCA), 1,2-dibromoethane (EDB) and ethanol by EPA Method 8026B unless otherwise noted.

Poly-aromatic hydrocarbons (PAHs) analyzed by EPA Method 8270C

fbg = Feet below grade

NE = Not established

ND = Not detected above various laboratory limit of quantitation.

<x.x = Not detected above laboratory limit of quantitation

--- = Not analyzed

J = Estimated value > the Method Detection Limit and < the Limit of Quantitation

<sup>a</sup> State Water Control Board Resolution No. 2012 006, Low Threat Underground Storage Tank Closure Policy (LTP), California State Water Resources Control Board, August 17, 2012.

**Table 2**  
**Cumulative Soil Analytical Data**  
**Former Chevron Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Sample ID	Date	Sample Depth (fbg)	Total	TPHmo w/	TPHd	TPHd w/	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	DIPE	TAME	TBA	ETBE	Naphthalene	1,2-DCA	EDB	Ethanol	PAH
			TPH	Silica Gel	Silica Gel																
<i>Concentrations reported in milligrams per kilogram (mg/kg)</i>																					
<i>LTP-Direct Contact (0-5 fbg)</i>		<i>Residential<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>1.9</i>	<i>NE</i>	<i>21</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>9.7</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>0.063</i>
		<i>Commercial<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>8.2</i>	<i>NE</i>	<i>89</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>45</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>
<i>LTP-Outdoor Air (5-10 fbg)</i>		<i>Residential<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>2.8</i>	<i>NE</i>	<i>32</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>9.7</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>0.68</i>
		<i>Commercial<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>12</i>	<i>NE</i>	<i>134</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>45</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>
<i>LTP-Direct Contact (0-10 fbg)</i>		<i>Utility Worker<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>14</i>	<i>NE</i>	<i>314</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>219</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>4.5</i>
<i>LTP-Indoor Air (0-5 fbg)<sup>a</sup></i>			<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>100</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>

**2016 GHD Investigation**

MW-10	10/24/16	3	<30	<30	<12	---	<0.9	<0.005	<0.005	<0.005	<0.005	<0.005	---	---	---	---	<0.005	---	---	---	
		5	<30	<30	<12	---	<1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	---	---	---	---	<0.005	---	---	---
		10	<30	<30	55	---	<1.1	<0.005	0.001J	<0.005	<0.005	<0.005	<0.005	---	---	---	---	<0.005	---	---	---
		15	<30	<30	11J	---	<1.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	---	---	---	---	<0.005	---	---	---
		20	<30	<30	10J	---	<0.9	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	---	---	---	---	<0.005	---	---	---
B-8	10/24/16	3	100	100	63	---	<0.9	<0.005	<0.005	<0.005	<0.005	<0.005	---	---	---	---	<0.005	---	---	---	
B-9	10/25/16	3	58	58	18	---	<0.9	<0.005	<0.005	<0.005	<0.005	<0.005	---	---	---	---	<0.005	---	---	---	
		5	<30	<30	<12	---	<0.9	<0.005	<0.005	<0.005	<0.005	<0.005	---	---	---	---	<0.005	---	---	---	
		8	69	69	22	---	<1.0	<0.005	<0.005	<0.005	<0.005	0.0008J	---	---	---	---	<0.005	---	---	---	
		10	31	31	15	---	<1.0	<0.005	<0.005	<0.005	<0.005	0.002J	---	---	---	---	<0.005	---	---	---	
		12	<30	<30	<12	---	<1.0	<0.005	<0.005	<0.005	<0.005	0.001J	---	---	---	---	<0.005	---	---	---	
B-10	10/25/16	3	<30	<30	<12	---	<0.9	<0.005	<0.005	<0.005	<0.005	<0.005	---	---	---	---	<0.005	---	---	---	
		5	<30	<30	<12	---	<1	<0.005	<0.005	<0.005	<0.005	<0.005	---	---	---	---	<0.005	---	---	---	
		8	23J	23J	7.7J	---	<1	<0.005	<0.005	<0.005	<0.005	<0.005	---	---	---	---	<0.005	---	---	---	
		10	19J	19J	18	---	<1.1	<0.005	<0.005	<0.005	<0.005	<0.006	---	---	---	---	<0.005	---	---	---	
		12	<30	<30	<12	---	<1	<0.005	<0.005	<0.005	<0.005	<0.005	---	---	---	---	<0.005	---	---	---	
B-11	10/25/16	3	<30	<30	<12	---	<0.9	<0.005	<0.005	<0.005	<0.005	<0.005	---	---	---	---	<0.005	---	---	---	
		10	<30	<30	8.2J	---	3.2	<0.005	<0.005	<0.005	0.002J	0.012	---	---	---	---	<0.005	---	---	---	
		15	<30	<30	<12	---	<1.0	<0.005	<0.005	<0.005	<0.005	0.13	---	---	---	---	<0.005	---	---	---	
B-12	10/25/16	3	27J	27J	9.8J	---	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005	---	---	---	---	<0.005	---	---	---	
		15	<30	<30	<12	---	78	<0.005	<0.005	<0.005	<0.005	0.001J	---	---	---	---	<0.005	---	---	---	
B-13	10/25/16	6	<30	<30	13	---	7.6	0.0006J	<0.005	<0.005	0.003J	0.01	---	---	---	---	<0.005	---	---	---	
		10	<30	<30	<12	---	2.2	<0.005	0.001J	<0.005	0.003J	0.004J	---	---	---	---	<0.005	---	---	---	

**Table 2**  
**Cumulative Soil Analytical Data**  
**Former Chevron Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Sample ID	Date	Sample Depth (fbg)	Total	TPHmo w/	TPHd	TPHd w/	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	DIPE	TAME	TBA	ETBE	Naphthalene	1,2-DCA	EDB	Ethanol	PAH
			TPH	Silica Gel	TPHd	Silica Gel															
<i>Concentrations reported in milligrams per kilogram (mg/kg)</i>																					
<i>LTP-Direct Contact (0-5 fbg)</i>	<i>Residential<sup>a</sup></i>		<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>1.9</i>	<i>NE</i>	<i>21</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>9.7</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>0.063</i>
	<i>Commercial<sup>a</sup></i>		<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>8.2</i>	<i>NE</i>	<i>89</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>45</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>
<i>LTP-Outdoor Air (5-10 fbg)</i>	<i>Residential<sup>a</sup></i>		<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>2.8</i>	<i>NE</i>	<i>32</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>9.7</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>0.68</i>
	<i>Commercial<sup>a</sup></i>		<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>12</i>	<i>NE</i>	<i>134</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>45</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>
<i>LTP-Direct Contact (0-10 fbg)</i>	<i>Utility Worker<sup>a</sup></i>		<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>14</i>	<i>NE</i>	<i>314</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>219</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>4.5</i>
<i>LTP-Indoor Air (0-5 fbg)<sup>a</sup></i>			<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>100</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>
		15	<30	<30	<12	---	4.4	0.022	0.001J	<0.005	0.004J	0.029	---	---	---	---	0.002J	---	---	---	---
<b>2013 CRA Site Investigation</b>																					
B-1	11/11/13	3	38 <sup>b,c</sup>	38 <sup>b,c</sup>	---	14 <sup>b</sup>	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.021	<0.001	<0.001	---	---	---	---
B-1	11/11/13	6	<9.9 <sup>b,c</sup>	<9.9 <sup>b,c</sup>	---	<3.9 <sup>b</sup>	<1.0	<0.0005	<0.001	<0.001	0.001	<0.0005	<0.001	<0.001	<0.020	<0.001	<0.001	---	---	---	---
B-1	11/11/13	9	40 <sup>b,c</sup>	40 <sup>b,c</sup>	---	11 <sup>b</sup>	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.020	<0.001	<0.001	---	---	---	---
B-1	11/11/13	9.5	<9.9 <sup>b,c</sup>	<9.9 <sup>b,c</sup>	---	27 <sup>d</sup>	220	<0.025 <sup>e</sup>	<0.051 <sup>e</sup>	<0.051 <sup>e</sup>	<0.051 <sup>e</sup>	<0.025 <sup>e</sup>	<0.051 <sup>e</sup>	<0.051 <sup>e</sup>	<1.0 <sup>e</sup>	<0.051 <sup>e</sup>	<0.051 <sup>e</sup>	---	---	---	---
B-1	11/11/13	12.5	<9.9 <sup>b,c,f</sup>	<9.9 <sup>b,c,f</sup>	---	<4.0 <sup>b</sup>	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.021	<0.001	<0.001	---	---	---	---
B-1	11/11/13	14.5	<10 <sup>b,c,f</sup>	<10 <sup>b,c,f</sup>	---	<4.0 <sup>b,f</sup>	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.019	<0.001	<0.001	---	---	---	---
B-2	11/11/13	3	<10 <sup>b,c</sup>	<10 <sup>b,c</sup>	---	<4.0 <sup>b</sup>	<1.0	<0.0005	<0.0009	<0.0009	<0.0009	<0.0005	<0.0009	<0.0009	<0.019	<0.0009	<0.0009	---	---	---	---
B-2	11/11/13	6	<9.9 <sup>b,c</sup>	<9.9 <sup>b,c</sup>	---	<4.0 <sup>b</sup>	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.020	<0.001	<0.001	---	---	---	---
B-2	11/11/13	9	<10 <sup>b,c</sup>	<10 <sup>b,c</sup>	---	<4.0 <sup>b</sup>	<1.0	<0.0005	<0.0009	<0.0009	<0.0009	0.0006	<0.0009	<0.0009	<0.018	<0.0009	<0.0009	---	---	---	---
B-2	11/11/13	13	<9.9 <sup>b,c</sup>	<9.9 <sup>b,c</sup>	---	<3.9 <sup>b</sup>	<1	<0.0005	<0.001	<0.001	<0.001	0.28	<0.001	<0.001	0.17	0.004	<0.001	---	---	---	---
B-3	11/11/13	3	<10 <sup>b,c</sup>	<10 <sup>b,c</sup>	---	<4.0 <sup>b</sup>	2.1	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.020	<0.001	<0.001	---	---	---	---
B-3	11/11/13	5	110 <sup>c,d,g</sup>	110 <sup>c,d,g</sup>	---	920 <sup>b</sup>	1,300	<0.024 <sup>e</sup>	<0.048 <sup>e</sup>	<0.048 <sup>e</sup>	<0.048 <sup>e</sup>	<0.024 <sup>e</sup>	<0.048 <sup>e</sup>	<0.048 <sup>e</sup>	<0.95 <sup>e</sup>	<0.048 <sup>e</sup>	<0.048 <sup>e</sup>	---	---	---	---
B-3	11/11/13	7.5	<9.9 <sup>b,c,f</sup>	<9.9 <sup>b,c,f</sup>	---	14 <sup>d,f</sup>	58	0.0008	0.002	0.002	0.011	0.017	<0.001	<0.001	0.061	<0.001	0.002	---	---	---	---
B-3	11/11/13	9	<10 <sup>b,c</sup>	<10 <sup>b,c</sup>	---	7.9 <sup>b</sup>	5.6	0.002	0.001	0.002	0.005	0.088	<0.001	<0.001	0.29	0.001	0.006	---	---	---	---
B-3	11/11/13	11	<9.9 <sup>b,c</sup>	<9.9 <sup>b,c</sup>	---	<4.0 <sup>b</sup>	2.9	0.001 <sup>h</sup>	<0.001 <sup>h</sup>	<0.001 <sup>h</sup>	<0.001 <sup>h</sup>	0.071 <sup>h</sup>	<0.001 <sup>h</sup>	<0.001 <sup>h</sup>	0.49 <sup>h</sup>	0.001 <sup>h</sup>	<0.001 <sup>h</sup>	---	---	---	---
B-4	11/12/13	3	870 <sup>c,j</sup>	870 <sup>c,j</sup>	---	330 <sup>d,g</sup>	<41 <sup>i</sup>	0.0007 <sup>h</sup>	<0.001 <sup>h</sup>	<0.001 <sup>h</sup>	<0.001 <sup>h</sup>	<0.0005 <sup>h</sup>	<0.001 <sup>h</sup>	<0.001 <sup>h</sup>	<0.021 <sup>h</sup>	<0.001 <sup>h</sup>	0.005 <sup>h</sup>	---	---	---	---
B-4	11/13/13	6	700 <sup>b,c</sup>	700 <sup>b,c</sup>	---	190 <sup>b</sup>	<9.8 <sup>j</sup>	<0.0005 <sup>h</sup>	<0.001 <sup>h</sup>	<0.001 <sup>h</sup>	<0.001 <sup>h</sup>	<0.0005 <sup>h</sup>	<0.001 <sup>h</sup>	<0.001 <sup>h</sup>	<0.021 <sup>h</sup>	<0.001 <sup>h</sup>	<0.001 <sup>h</sup>	---	---	---	---
B-4	11/13/13	9	<10 <sup>b,c</sup>	<10 <sup>b,c</sup>	---	<4.0 <sup>b</sup>	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.020	<0.001	<0.001	---	---	---	---
B-4	11/13/13	15	<10 <sup>b,c</sup>	<10 <sup>b,c</sup>	---	<4.0 <sup>b</sup>	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.019	<0.001	<0.001	---	---	---	---
B-4	11/13/13	20	<10 <sup>b,c</sup>	<10 <sup>b,c</sup>	---	<4.0 <sup>b</sup>	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.020	<0.001	<0.001	---	---	---	---
B-4	11/13/13	25	<10 <sup>b,c</sup>	<10 <sup>b,c</sup>	---	<4.0 <sup>b</sup>	<1.1	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.021	<0.001	<0.001	---	---	---	---
B-4	11/13/13	27.5	<10 <sup>b,c</sup>	<10 <sup>b,c</sup>	---	<4.0 <sup>b</sup>	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.020	<0.001	<0.001	---	---	---	---
B-5	11/12/13	3	27 <sup>b,c</sup>	27 <sup>b,c</sup>	---	5.2 <sup>b</sup>	<1	<0.0005	<0.0009	<0.0009	<0.0009	<0.0005	<0.0009	<0.0009	<0.019	<0.0009	<0.0009	---	---	---	---
B-5	11/12/13	6	140 <sup>b,c</sup>	140 <sup>b,c</sup>	---	33 <sup>b</sup>	<1	<0.0005 <sup>h</sup>	<0.001 <sup>h</sup>	<0.001 <sup>h</sup>	<0.001 <sup>h</sup>	<0.0005 <sup>h</sup>	<0.001 <sup>h</sup>	<0.001 <sup>h</sup>	<0.019 <sup>h</sup>	<0.001 <sup>h</sup>	<0.001 <sup>h</sup>	---	---	---	---

**Table 2**  
**Cumulative Soil Analytical Data**  
**Former Chevron Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Sample ID	Date	Sample Depth (fbg)	Total	TPHmo w/	TPHd	TPHd w/	TPHg	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	DIPE	TAME	TBA	ETBE	Naphthalene	1,2-DCA	EDB	Ethanol	PAH
			TPH	Silica Gel	Silica Gel																
<i>Concentrations reported in milligrams per kilogram (mg/kg)</i>																					
<i>LTP-Direct Contact (0-5 fbg)</i>		<i>Residential<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>1.9</i>	<i>NE</i>	<i>21</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>9.7</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>0.063</i>
		<i>Commercial<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>8.2</i>	<i>NE</i>	<i>89</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>45</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>
<i>LTP-Outdoor Air (5-10 fbg)</i>		<i>Residential<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>2.8</i>	<i>NE</i>	<i>32</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>9.7</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>0.68</i>
		<i>Commercial<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>12</i>	<i>NE</i>	<i>134</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>45</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>
<i>LTP-Direct Contact (0-10 fbg)</i>		<i>Utility Worker<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>14</i>	<i>NE</i>	<i>314</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>219</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>4.5</i>
<i>LTP-Indoor Air (0-5 fbg)<sup>a</sup></i>			<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>100</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>
B-5	11/12/13	9	17 <sup>b,c</sup>	17 <sup>b,c</sup>	---	<4.0 <sup>b</sup>	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.020	<0.001	<0.001	---	---	---	---
B-5	11/13/13	24	<10 <sup>b,c</sup>	<10 <sup>b,c</sup>	---	<4.0 <sup>b</sup>	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.020	<0.001	<0.001	---	---	---	---
B-6	11/13/13	3	46 <sup>b,c</sup>	46 <sup>b,c</sup>	---	11 <sup>b,f</sup>	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.020	<0.001	<0.001	---	---	---	---
B-6	11/12/13	6	<10 <sup>b,c</sup>	<10 <sup>b,c</sup>	---	<4.0 <sup>b</sup>	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.020	<0.001	<0.001	---	---	---	---
B-6	11/12/13	9	<10 <sup>b,c</sup>	<10 <sup>b,c</sup>	---	<4.0 <sup>b</sup>	<1	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.020	<0.001	<0.001	---	---	---	---
B-6	11/12/13	15	<10 <sup>b,c</sup>	<10 <sup>b,c</sup>	---	<4.0 <sup>b</sup>	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.021	<0.001	<0.001	---	---	---	---
B-7	11/12/13	3	19 <sup>b,c</sup>	19 <sup>b,c</sup>	---	21 <sup>b</sup>	86	<0.025 <sup>e</sup>	<0.049 <sup>e</sup>	<0.049 <sup>e</sup>	<0.049	<0.025 <sup>e</sup>	<0.049 <sup>e</sup>	<0.049 <sup>e</sup>	<0.98 <sup>e</sup>	<0.049 <sup>e</sup>	0.14 <sup>e</sup>	---	---	---	---
B-7	11/12/13	6	<10 <sup>b,c</sup>	<10 <sup>b,c</sup>	---	79 <sup>d</sup>	2,600	0.058 <sup>e</sup>	<0.10 <sup>e</sup>	<0.10 <sup>e</sup>	0.13 <sup>e</sup>	<0.050 <sup>e</sup>	<0.10 <sup>e</sup>	<0.10 <sup>e</sup>	<2.0 <sup>e</sup>	<0.10 <sup>e</sup>	0.24 <sup>e</sup>	---	---	---	---
B-7	11/12/13	6.75	16 <sup>c,d</sup>	16 <sup>c,d</sup>	---	130 <sup>d</sup>	130	<0.024 <sup>e</sup>	<0.048 <sup>e</sup>	<0.048 <sup>e</sup>	<0.048 <sup>e</sup>	<0.024 <sup>e</sup>	<0.048 <sup>e</sup>	<0.048 <sup>e</sup>	<0.96 <sup>e</sup>	<0.048 <sup>e</sup>	0.053 <sup>e</sup>	---	---	---	---
B-7	11/12/13	7.5	<10 <sup>b,c</sup>	<10 <sup>b,c</sup>	---	5.9 <sup>d</sup>	22	0.0009	<0.001	<0.001	0.002	<0.0005	<0.001	<0.001	<0.020	<0.001	0.008	---	---	---	---
B-7	11/12/13	10	<10 <sup>b,c</sup>	<10 <sup>b,c</sup>	---	20 <sup>b</sup>	8.0	0.004	<0.001	0.004	0.022	<0.0005	<0.001	<0.001	<0.020	<0.001	0.002	---	---	---	---
<b>2010 CRA Compliance Soil Sampling</b>																					
EX-1	08/10/10	9.5	---	---	2.3	---	2.5	<0.005	<0.005	<0.005	<0.005	0.18	<0.005	<0.005	0.16	<0.005	---	<0.004	<0.004	<0.5	---
EX-2	08/10/10	9.5	---	---	7.0	---	7.9	<0.005	<0.005	<0.005	<0.005	0.041	<0.005	<0.005	<0.05	<0.005	---	<0.004	<0.004	<0.5	---
EX-3	08/10/10	9.5	---	---	<1.0	---	1.1	<0.020	<0.020	<0.020	<0.020	0.77	<0.020	<0.020	0.35	<0.020	---	<0.016	<0.016	<2.0	---
EX-4	08/10/10	9.5	---	---	27	---	20	<0.010	<0.010	<0.010	<0.010	0.22	<0.010	<0.010	0.23	<0.010	---	<0.0080	<0.0080	<1.0	---
EX-5	08/10/10	9.5	---	---	<1.0	---	0.78	<0.005	<0.005	<0.005	<0.005	0.087	<0.005	<0.005	0.12	<0.005	---	<0.004	<0.004	<0.5	---
EX-6	08/10/10	9.5	---	---	18	---	1.6	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	---	<0.004	<0.004	<0.5	---
P-1	08/10/10	6.5	---	---	6.0	---	5.7	0.041	0.22	0.040	0.20	0.074	<0.010	<0.010	<0.10	<0.010	---	<0.0080	<0.0080	<1.0	---
P-2	08/10/10	5	---	---	12	---	7.2	<0.005	<0.005	0.039	0.16	0.17	<0.005	<0.005	0.17	<0.005	---	<0.004	<0.004	<0.5	---
P-3	08/10/10	5	---	---	11	---	9.4	<0.020	<0.020	<0.020	0.035	0.46	<0.020	<0.020	0.24	<0.020	---	<0.016	<0.016	<2.0	---
P-4	08/10/10	5	---	---	730	---	980	1.4	<1.0	16	2.6	<1.0	<1.0	<1.0	<10	<1.0	---	<0.80	<0.80	<100	---
P-5	08/10/10	5	---	---	30	---	1.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	---	<0.004	<0.004	<0.5	---
P-6	08/10/10	4	---	---	9.4	---	2.2	<0.005	<0.005	0.0054	<0.005	0.0081	<0.005	<0.005	<0.05	<0.005	---	<0.004	<0.004	<0.5	---
P-7	08/10/10	4	---	---	900	---	8.4	<0.010	<0.010	<0.010	<0.010	0.037	<0.010	<0.010	<0.10	<0.010	---	<0.0080	<0.0080	<1.0	---
P-8	08/10/10	4	---	---	150	---	410	<0.10	<0.10	3.0	0.12	<0.10	<0.10	<0.10	<1.0	<0.10	---	<0.080	<0.080	<10	---
P-9	08/10/10	4	---	---	<1.0	---	0.89	<0.005	<0.005	<0.005	<0.005	0.0051	<0.005	<0.005	<0.05	<0.005	---	<0.004	<0.004	<0.5	---

**Table 2**  
**Cumulative Soil Analytical Data**  
**Former Chevron Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Sample ID	Date	Sample Depth (fbg)	Total TPH	TPHmo w/ Silica Gel	TPHd	TPHd w/ Silica Gel	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	DIPE	TAME	TBA	ETBE	Naphthalene	1,2-DCA	EDB	Ethanol	PAH
<i>LTP-Direct Contact (0-5 fbg)</i>			<i>Residential<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>1.9</i>	<i>NE</i>	<i>21</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>9.7</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>0.063</i>
			<i>Commercial<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>8.2</i>	<i>NE</i>	<i>89</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>45</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>
<i>LTP-Outdoor Air (5-10 fbg)</i>			<i>Residential<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>2.8</i>	<i>NE</i>	<i>32</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>9.7</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>0.68</i>
			<i>Commercial<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>12</i>	<i>NE</i>	<i>134</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>45</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>
<i>LTP-Direct Contact (0-10 fbg)</i>			<i>Utility Worker<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>14</i>	<i>NE</i>	<i>314</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>219</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>4.5</i>
<i>LTP-Indoor Air (0-5 fbg)<sup>a</sup></i>				<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>100</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>
P-10	08/10/10	4	---	---	1.5	---	1.3	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	---	<0.004	<0.004	<0.5	---
P-11	08/10/10	4	---	---	290	---	390	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	---	<0.40	<0.40	<50	---
P-12	08/10/10	4	---	---	1,100	---	770	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	---	<0.80	<0.80	<100	---
P-13	08/10/10	4	---	---	610	---	780	0.70	<0.50	5.9	0.66	<0.50	<0.50	<0.50	<5.0	<0.50	---	<0.40	<0.40	<50	---
P-14	08/10/10	4	---	---	420	---	620	1.0	<0.50	9.4	0.84	<0.50	<0.50	<0.50	<5.0	<0.50	---	<0.40	<0.40	<50	---
SS-1	08/10/10	--	---	---	15	---	6.1	<0.005	<0.005	<0.005	0.047	---	---	---	---	---	---	---	---	---	27
SS-2	08/10/10	--	---	---	28	---	<1.0	<0.005	<0.005	<0.005	<0.005	---	---	---	---	---	---	---	---	---	6.0
SS-3	08/10/10	--	---	---	29	---	8.3	<0.005	0.023	<0.005	0.014	---	---	---	---	---	---	---	---	---	23
<b>2006 Cambria Soil investigation</b>																					
SB-3-S-6	08/28/06	6	---	---	1,200	---	420	<0.003	<0.005	0.006	0.046	<0.003	<0.005	<0.005	<0.10	<0.005	---	---	---	<0.50	---
SB-3-S-10	08/28/06	10	---	---	310	---	750	<0.002	<0.005	<0.005	0.011	0.47	<0.005	0.01	<0.099	<0.005	---	---	---	<0.50	---
SB-5-S-4	08/23/06	4	---	---	<200	---	1,900	0.13	<0.013	7.6	5.2	<0.063	<0.13	<0.13	<2.5	<0.13	---	---	---	<13	---
SB-5-S-8	08/23/06	8	---	---	14	---	21	0.039	0.009	0.12	0.063	0.01	<0.005	<0.005	<0.099	<0.005	---	---	---	<0.50	---
SB-2-S-2	08/22/06	2	---	---	<10	---	<1	<0.0005	<0.001	<0.001	<0.001	0.012	<0.001	<0.001	<0.020	<0.001	---	---	---	<0.099	---
SB-2-S-4	08/22/06	4	---	---	<10	---	3.4	<0.0005	<0.001	<0.001	<0.001	0.064	<0.001	<0.001	0.078	<0.001	---	---	---	<0.10	---
SB-4-S-6	08/22/06	6	---	---	56	---	620	<0.063	<0.013	0.32	<0.13	<0.063	<0.13	<0.13	<2.5	<0.13	---	---	---	<13	---
SB-4-S-10	08/22/06	10	---	---	16	---	1.5	0.031	0.004	0.19	0.018	0.054	<0.001	<0.001	0.036	<0.001	---	---	---	<0.10	---
SB-1-S-4	08/03/06	4	---	---	41	---	120	0.003	<0.005	0.021	0.013	0.011	<0.005	<0.005	<0.099	<0.005	---	---	---	<0.50	---
SB-1-S-6	08/03/06	6	---	---	<10	---	7.3	0.010	<0.001	0.002	0.002	0.15	<0.001	0.00	0.15	<0.001	---	---	---	<0.099	---
SB-6-S-6	08/23/06	6	---	---	25	---	26	0.025	0.014	0.73	0.15	<0.003	<0.005	<0.005	<0.10	<0.005	---	---	---	<0.50	---
SB-6-S-10	08/23/06	10	---	---	19	---	<40	0.032	0.007	0.27	0.061	0.003	<0.005	<0.005	<0.10	<0.005	---	---	---	<0.50	---
SB-7-S-2	08/23/06	2	---	---	240	---	150	<0.062	<0.12	<0.12	<0.12	<0.062	<0.12	<0.12	<2.5	<0.12	---	---	---	<12	---
SB-7-S-4	08/23/06	4	---	---	900	---	760	<0.063	<0.013	<0.013	<0.013	<0.063	<0.13	<0.13	<2.5	<0.13	---	---	---	<13	---

**Table 2**  
**Cumulative Soil Analytical Data**  
**Former Chevron Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Sample ID	Date	Sample Depth (fbg)	Total	TPHmo w/	TPHd	TPHd w/	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	DIPE	TAME	TBA	ETBE	Naphthalene	1,2-DCA	EDB	Ethanol	PAH
			TPH	Silica Gel	Silica Gel																
<i>Concentrations reported in milligrams per kilogram (mg/kg)</i>																					
<i>LTP-Direct Contact (0-5 fbg)</i>		<i>Residential<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>1.9</i>	<i>NE</i>	<i>21</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>9.7</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>0.063</i>
		<i>Commercial<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>8.2</i>	<i>NE</i>	<i>89</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>45</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>
<i>LTP-Outdoor Air (5-10 fbg)</i>		<i>Residential<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>2.8</i>	<i>NE</i>	<i>32</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>9.7</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>0.68</i>
		<i>Commercial<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>12</i>	<i>NE</i>	<i>134</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>45</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>
<i>LTP-Direct Contact (0-10 fbg)</i>		<i>Utility Worker<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>14</i>	<i>NE</i>	<i>314</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>219</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>4.5</i>
<i>LTP-Indoor Air (0-5 fbg)<sup>a</sup></i>			<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>100</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>

**2006 Cambria Soil Boring Investigation**

SB-8	08/03/06	2	<10	<10 <sup>k</sup>	<10	---	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.020	<0.001	---	<0.001	<0.001	<0.10	---
SB-8	08/03/06	4	<10	<10 <sup>k</sup>	<10	---	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.020	<0.001	---	<0.001	<0.001	<0.099	---
SB-9	08/03/06	2	100	100 <sup>k</sup>	41	---	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.020	<0.001	---	<0.001	<0.001	<0.10	---
SB-9	08/03/06	4	<10	<10 <sup>k</sup>	<10	---	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.020	<0.001	---	<0.001	<0.001	<0.10	---

**1999 Cambria Soil Investigation**

MW2A-3	04/01/99	3	---	---	28	---	820	1.7	2.8	13	29	<0.5	---	---	---	---	---	---	---	---	---
MW2A-6	04/01/99	6	---	---	100	---	430	<1	1.7	5.0	2.6	<10	---	---	---	---	---	---	---	---	---
MW2A-17	04/01/99	17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3A-5.5	04/01/99	5.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3A-6	04/01/99	6	---	---	3.8	---	41	<0.1	<0.1	<0.1	0.28	<1	---	---	---	---	---	---	---	---	---
MW3A-11	04/01/99	11	---	---	9.2	---	180	0.57	0.52	<0.5	1.8	<5	---	---	---	---	---	---	---	---	---
MW3A-15	04/01/99	15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4A-3	04/01/99	3	---	---	94	---	540	0.96	1.6	4.6	1.3	<2.5	---	---	---	---	---	---	---	---	---
MW4A-6	04/01/99	6	---	---	72	---	1,100	5.6	13	2.4	18	<10	---	---	---	---	---	---	---	---	---
MW9-3	04/01/99	3	---	---	1.2	---	22	0.036	0.048	0.028	0.091	0.089	---	---	---	---	---	---	---	---	---
MW9-6	04/01/99	6	---	---	<1	---	8.3	0.011	0.033	0.010	0.078	0.18	---	---	---	---	---	---	---	---	---

**1996 Piping Trench and Dispenser Sampling**

P1	10/03/96	3	---	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---	---	---	---	---	---	---	---	<b>18</b>
P2	10/03/96	2	---	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---	---	---	---	---	---	---	---	<b>12</b>
P3	10/03/96	2.5	---	---	---	---	<1.0	0.0056	<0.0050	<0.0050	0.005	0.63	---	---	---	---	---	---	---	---	<b>25</b>
P4	10/03/96	2.5	---	---	---	---	710	<0.25	19	7.8	78	15	---	---	---	---	---	---	---	---	<b>28</b>
P5	10/03/96	3	---	---	---	---	110	<0.25	<0.25	<0.25	0.46	<1.2	---	---	---	---	---	---	---	---	<b>14</b>
P6	10/03/96	3	---	---	---	---	1.3	0.021	0.15	0.033	0.18	2.5	---	---	---	---	---	---	---	---	<b>6.6</b>

**Table 2**  
**Cumulative Soil Analytical Data**  
**Former Chevron Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Sample ID	Date	Sample Depth (fbg)	Total	TPHmo w/	TPHd	TPHd w/	TPHg	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	DIPE	TAME	TBA	ETBE	Naphthalene	1,2-DCA	EDB	Ethanol	PAH
			TPH	Silica Gel	Silica Gel																
<i>Concentrations reported in milligrams per kilogram (mg/kg)</i>																					
<i>LTP-Direct Contact (0-5 fbg)</i>		<i>Residential<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>1.9</i>	<i>NE</i>	<i>21</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>9.7</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>0.063</i>
		<i>Commercial<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>8.2</i>	<i>NE</i>	<i>89</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>45</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>
<i>LTP-Outdoor Air (5-10 fbg)</i>		<i>Residential<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>2.8</i>	<i>NE</i>	<i>32</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>9.7</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>0.68</i>
		<i>Commercial<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>12</i>	<i>NE</i>	<i>134</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>45</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>
<i>LTP-Direct Contact (0-10 fbg)</i>		<i>Utility Worker<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>14</i>	<i>NE</i>	<i>314</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>219</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>4.5</i>
<i>LTP-Indoor Air (0-5 fbg)<sup>a</sup></i>			<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>100</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>
P7	10/03/96	3	---	---	---	---	<1.0	<0.0050	0.0071	0.0063	0.024	0.49	---	---	---	---	---	---	---	---	<b>8.0</b>
P8	10/03/96	2.5	---	---	---	---	4,100	<b>33</b>	19	51	30	31	---	---	---	---	---	---	---	---	<b>20</b>
P9	10/03/96	2	---	---	---	---	1,400	<0.50	22	5.4	5	9.7	---	---	---	---	---	---	---	---	<b>13</b>
P10	10/03/96	2.5	---	---	---	---	410	<b>8.3</b>	<0.12	4.8	2.4	<0.62	---	---	---	---	---	---	---	---	<b>52</b>
P11	10/03/96	3	---	---	---	---	1,600	<b>25</b>	<0.50	25	26	<2.5	---	---	---	---	---	---	---	---	<b>15</b>
P12	10/03/96	2.5	---	---	---	---	2.2	<b>28</b>	<1.0	23	12	<5.0	---	---	---	---	---	---	---	---	<b>20</b>
P13	10/03/96	3	---	---	---	---	290	6.1	4	2.1	1.3	<0.62	---	---	---	---	---	---	---	---	<b>36</b>
P14	10/03/96	2.5	---	---	---	---	2,500	<b>40</b>	20	27	76	<5.0	---	---	---	---	---	---	---	---	<b>19</b>
P15	10/03/96	2.5	---	---	---	---	1,000	<b>23</b>	<0.25	13	3	<1.2	---	---	---	---	---	---	---	---	<b>44</b>
<b>1992 GTI Well Installation</b>																					
MW1A	06/19/92	20.5	---	---	---	<1	<1	0.006	0.019	<0.005	0.015	---	---	---	---	---	---	---	---	---	---
MW5D	06/12/92	20.5	---	---	---	<1	<1	<0.005	<0.005	<0.005	<0.005	---	---	---	---	---	---	---	---	---	---
MW6A	06/12/92	5.5	---	---	---	<1	<1	<0.005	<0.005	<0.005	<0.005	---	---	---	---	---	---	---	---	---	---
MW7A	06/12/92	5.5	---	---	---	<1	<1	<0.005	<0.005	<0.005	<0.005	---	---	---	---	---	---	---	---	---	---
MW8A	06/12/92	5.5	---	---	---	<1	<1	<0.005	<0.005	<0.005	<0.005	---	---	---	---	---	---	---	---	---	---
MW8B	06/12/92	10.5	---	---	---	2'	13	<0.005	0.006	0.012	0.078	---	---	---	---	---	---	---	---	---	---
<b>1991 GTI Well Installation</b>																					
MW-2A	08/07/91	2	---	---	---	4	660	1.5	1.2	2.3	4.6	---	---	---	---	---	---	---	---	---	---
MW-2B	08/07/91	7	---	---	---	17	540	2.8	1.3	11	4.3	---	---	---	---	---	---	---	---	---	---
MW-3A	08/13/91	2	---	---	---	2	<1.0	0.021	<0.005	<0.005	<0.005	---	---	---	---	---	---	---	---	---	---
MW-3B	08/13/91	9	---	---	---	34	660	3	3.7	5.0	8.0	---	---	---	---	---	---	---	---	---	---
MW-4A	08/13/91	3	---	---	---	13	560	<0.6	4.5	3.6	7.4	---	---	---	---	---	---	---	---	---	---
MW-4B	08/13/91	8	---	---	---	2	31	0.17	0.29	0.11	0.220	---	---	---	---	---	---	---	---	---	---



**Table 2  
Cumulative Soil Analytical Data  
Former Chevron Service Station 90121  
3026 Lakeshore Avenue  
Oakland, California**

Sample ID	Date	Sample Depth (fbg)	Total TPH	TPHmo w/ Silica Gel	TPHd	TPHd w/ Silica Gel	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	DIPE	TAME	TBA	ETBE	Naphthalene	1,2-DCA	EDB	Ethanol	PAH
<i>Concentrations reported in milligrams per kilogram (mg/kg)</i>																					
<i>LTP-Direct Contact (0-5 fbg)</i>		<i>Residential<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>1.9</i>	<i>NE</i>	<i>21</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>9.7</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>0.063</i>
		<i>Commercial<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>8.2</i>	<i>NE</i>	<i>89</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>45</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>
<i>LTP-Outdoor Air (5-10 fbg)</i>		<i>Residential<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>2.8</i>	<i>NE</i>	<i>32</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>9.7</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>0.68</i>
		<i>Commercial<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>12</i>	<i>NE</i>	<i>134</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>45</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>
<i>LTP-Direct Contact (0-10 fbg)</i>		<i>Utility Worker<sup>a</sup></i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>14</i>	<i>NE</i>	<i>314</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>219</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>4.5</i>
<i>LTP-Indoor Air (0-5 fbg)<sup>a</sup></i>			<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>100</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>

**Notes/Abbreviations:**

Total petroleum hydrocarbons by modified EPA Method 8015B unless otherwise noted.

Total petroleum hydrocarbons as motor oil (TPHmo) and total oil and grease (TOG) by modified EPA Method 8015B unless otherwise noted.

Total petroleum hydrocarbons as diesel (TPHd) and gasoline (TPHg) by modified EPA Method 8015B unless otherwise noted.

Benzene, toluene, ethylbenzene, total xylenes, methyl tertiary butyl ether (MTBE), di-isopropyl ether (DIPE), t-amyl methyl ether (TAME), t-butyl alcohol (TBA), ethyl t-butyl ether (ETBE), naphthalene, 1,2-dichloroethane (1,2-DCA), 1,2-dibromoethane (EDB) and ethanol by EPA Method 8026B unless otherwise noted.

Lead (Pb) by EPA Method 6010 unless otherwise noted.

Poly-aromatic hydrocarbons (PAHs) analysed by EPA Method 8270C

fbg = Feet below grade

NE = Not established

ND = Not detected above various laboratory method detection limits.

--- = Not analyzed

<x.x = Not detected above laboratory limit of quantitation

J = Estimated value > the Method Detection Limit and < the Limit of Quantitation

a = Low-Threat Underground Storage Tank Case Closure Policy Criteria - California State Water Resources Control Board (SWRCB), August 2012, Low-Threat Underground Storage Tank Policy.

b = The reverse surrogate, capric acid, is present at <1%

c = TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetraoctane) normal hydrocarbons.

d = Due to the presence of fuel in the sample extract, capric acid recovery can not be determined

e = Reporting limits were raised due to interference from the sample matrix

f = The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC summary. The following corrective action was taken: The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.

g = The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram

h = The recovery for the sample internal standard is outside the QC acceptance limits. The following corrective action was taken: The sample was re-analyzed and the QC is again outside of the acceptance limits, indicating a matrix effect. The data is reported from the initial trial.

i = Reporting limits were raised due to sample foaming

j = Due to the dilution of the sampl extract, capric acid recovery can not be determined

k = TPHmo or TOG not analyzed with silica gel cleanup

l = According to laboratory analytical reports the chromatogram pattern observed was not typical of diesel.

**Table 3**  
**Grab-Groundwater Analytical Data**  
**Former Chevron Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Sample ID	Date	Total	TPHmo	TPHd	TPHd w/ Silica Gel	TPHg	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	Naphthalene	PAHs
		← Concentrations reported in micrograms per liter (µg/L) →											
<b>Water Quality Objective<sup>a</sup></b>		<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>1</b>	<b>40</b>	<b>13</b>	<b>20</b>	<b>5</b>	<b>0.17</b>	<b>Varies</b>
B-9	10/25/16	75J	75J	<100		<100	<1	<1	<1	<1	3	<0.5	<0.5
B-10	10/25/16	820	820	560		79J	<1	<1	<1	<1	2	<0.5	<0.5

**Notes/Abbreviations:**

Total petroleum hydrocarbons by modified EPA Method 8015B unless otherwise noted.

Total petroleum hydrocarbons as motor oil (TPHmo) by modified EPA Method 8015B unless otherwise noted.

Total petroleum hydrocarbons as diesel (TPHd) and gasoline (TPHg) by modified EPA Method 8015B unless otherwise noted.

(TBA), ethyl t-butyl ether (ETBE), naphthalene, 1,2-dichloroethane (1,2-DCA), 1,2-dibromoethane (EDB) and ethanol by EPA Method 8026B unless otherwise noted.

Poly-aromatic hydrocarbons (PAHs) analysed by EPA Method 8270C

fbg = Feet below grade

NE = Not established

ND = Not detected above various laboratory limit of quantitation.

<x.x = Not detected above laboratory limit of quantitation

--- = Not analyzed

J = Estimated value > the Method Detection Limit and < the Limit of Quantitation

<sup>a</sup> WQOs are the Environmental Screening Levels from Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater prepared by the California Regional Water Quality Control Board – San Francisco Bay Region, Interim Final February 2016

**Table 4**  
**Cumulative Groundwater Monitoring and Sampling Data**  
**Former Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS					ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X	MTBE by SW8260		Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-1	08/20/1991	6.82	5.20	1.62	0.00	0.00	-	-	260	-	5,100	1,700	21	220	34	-	-	-	-	-	-	-	-
MW-1	09/30/1991	6.82	5.67	1.15	Sheen	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	10/28/1991	6.82	5.30	1.50	0.03	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	01/08/1992	6.82	5.15	1.67	Sheen	0.00	-	-	4,400	-	5,400	770	13	95	31	-	-	-	-	-	-	-	-
MW-1	01/13/1992	6.82	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	06/23/1992	6.89	5.41	1.48	0.00	0.00	-	-	2,000	-	7,700	1,500	40	230	100	-	-	-	-	-	-	-	-
MW-1	08/24/1992	6.89	5.77	1.12	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	09/21/1992	6.89	5.89	1.00	0.00	0.00	-	-	<50	-	3,500	1,700	28	190	78	-	-	-	-	-	-	-	-
MW-1	10/26/1992	6.89	5.94	0.95	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	12/23/1992	6.89	4.71	2.18	0.00	0.00	-	-	5,500	-	60,000	7,100	240	2,000	1,300	-	-	-	-	-	-	-	-
MW-1	01/08/1993	6.89	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	03/25/1993	6.89	4.72	2.17	0.00	0.00	-	-	<10	-	530	1,100	41	67	79	-	-	-	-	-	-	-	-
MW-1	06/11/1993	6.89	5.07	5.37	0.00	0.00	-	-	-	-	7,000	1,900	33	120	69	9,600	-	-	-	-	-	-	840
MW-1	09/29/1993	6.89	5.76	1.13	0.00	0.00	-	-	<10	-	6,600	1,600	28	43	74	-	-	-	-	-	-	-	-
MW-1	12/20/1993	6.89	5.15	1.74	0.00	0.00	-	-	<10	-	6,300	1,900	36	82	65	-	-	-	-	-	-	-	-
MW-1	03/07/1994	6.89	4.68	2.21	0.00	0.00	-	-	<10	-	7,700	1,100	55	66	38	12,000	-	-	-	-	-	-	-
MW-1	06/17/1994	6.89	5.06	1.83	0.00	0.00	-	-	2,200	-	4,300	710	12	90	38	-	-	-	-	-	-	-	-
MW-1	09/12/1994	6.89	5.65	1.24	0.00	0.00	-	-	2,500	-	6,400	1,500	<25	180	<25	12,000	-	-	-	-	-	-	-
MW-1	11/30/1994	6.89	4.57	2.32	0.00	0.00	-	-	2,300 <sup>1</sup>	-	4,900	690	26	97	60	3,900	-	-	-	-	-	-	-
MW-1	03/24/1995	6.89	2.98	3.91	0.00	0.00	-	-	1,400 <sup>2</sup>	-	1,800	160	7.3	11	14	1,300	-	-	-	-	-	-	-
MW-1	06/27/1995	6.89	5.02	1.87	0.00	0.00	-	-	2,300 <sup>2</sup>	-	4,600	1,300	11	97	13	5,100	-	-	-	-	-	-	-
MW-1	09/28/1995	6.89	5.30	1.59	0.00	0.00	-	-	3,900 <sup>2</sup>	-	6,600	1,500	<20	<20	<20	5,800	-	-	-	-	-	-	-
MW-1	12/19/1995	6.89	4.68	2.21	0.00	0.00	-	-	2,600 <sup>2</sup>	-	3,800	930	<10	100	<10	6,300	-	-	-	-	-	-	-
MW-1	02/28/1996	6.89	3.62	3.27	0.00	0.00	-	-	1,800 <sup>2</sup>	-	3,600	280	<5.0	18	5.5	2,200	-	-	-	-	-	-	-
MW-1	06/25/1996	6.89	5.02	1.87	0.00	0.00	-	-	3,000	-	4,700	1,600	36	150	31	3,000	-	-	-	-	-	-	-
MW-1	12/17/1996	6.89	4.66	2.23	0.00	0.00	-	-	2,700 <sup>3</sup>	-	7,800	1,000	28	340	63	1,200	-	-	-	-	-	-	-
MW-1	03/31/1997	6.89	4.88	2.01	0.00	0.00	-	-	2,200 <sup>2</sup>	-	5,300	590	55	210	53	950	-	-	-	-	-	-	-
MW-1	06/30/1997	6.89	5.57	1.32	0.00	0.00	-	-	2,200 <sup>2</sup>	-	4,400	350	<10	<10	11	580	-	-	-	-	-	-	-
MW-1	09/12/1997	6.89	5.33	1.56	0.00	0.00	-	-	2,300 <sup>2</sup>	-	3,400	220	9.5	15	11	460	-	-	-	-	-	-	-
MW-1	12/05/1997	6.89	4.45	2.44	0.00	0.00	-	-	1,900 <sup>2</sup>	-	4,700	870	21	120	18	750	-	-	-	-	-	-	-
MW-1	02/16/1998	6.89	3.37	3.52	0.00	0.00	-	-	1,600 <sup>2</sup>	-	4,400	120	12	11	7.7	270	-	-	-	-	-	-	-
MW-1	06/17/1998	6.89	4.65	2.24	0.00	0.00	-	-	1,300 <sup>2</sup>	-	7,800	<25	50	34	650	650	-	-	-	-	-	-	-
MW-1	08/31/1998	6.89	5.19	1.70	0.00	0.00	-	-	2,400 <sup>2</sup>	-	3,700	620	17	120	31	380	-	-	-	-	-	-	-

**Table 4**  
**Cumulative Groundwater Monitoring and Sampling Data**  
**Former Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS					MTBE by SW8260	ADDITIONAL VOCS		GENERAL CHEMISTRY				
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X	Ethanol		Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids		
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-1	12/28/1998	6.89	4.95	1.94	0.00	0.00	-	-	1,500 <sup>2</sup>	-	3,800	250	14	28	15	330	-	4900	<1,000	390000	<1,000	-		
MW-1	03/04/1999	6.89	3.65	3.24	0.00	0.00	-	-	1,070 <sup>2</sup>	-	1,560	17.9	<0.5	4.17	1.05	70.4	-	-	-	-	-	-		
MW-1	06/14/1999	6.89	5.00	1.89	0.00	0.00	-	-	2,500 <sup>2</sup>	-	<10,000	820	240	320	640	<500	-	-	-	-	-	-		
MW-1	09/17/1999	6.89	6.59	0.30	0.00	0.00	-	-	2,110 <sup>2</sup>	-	3,300	141	12.3	<10	<10	238	-	-	-	-	-	-		
MW-1	12/20/1999	6.89	4.97	1.92	0.00	0.00	-	-	1,840 <sup>2</sup>	-	2,990	218	16.3	20	<10	232	-	-	-	-	-	-		
MW-1	03/20/2000	6.89	3.78	3.11	0.00	0.00	-	-	938 <sup>2</sup>	-	1,340	20	3.07	1.87	1.87	29.1	-	-	-	-	-	-		
MW-1	06/24/2000	6.89	4.44	2.45	0.00	0.00	-	-	1,680 <sup>9</sup>	-	1,500 <sup>7</sup>	12	5.3	<2.5	7.9	190	-	-	-	-	-	-		
MW-1	09/07/2000	6.89	5.15	1.74	0.00	0.00	-	-	1,500 <sup>9</sup>	-	3,100 <sup>7</sup>	190	13	14	<10	210	-	-	-	-	-	-		
MW-1	12/05/2000	6.89	4.73	2.16	0.00	0.00	-	-	970 <sup>13</sup>	-	2,140 <sup>14</sup>	248	<5.00	20.5	<5.00	<25.0	-	-	-	-	-	-		
MW-1	03/01/2001	6.89	3.56	3.33	0.00	0.00	-	-	610 <sup>8</sup>	-	1,000 <sup>7</sup>	21	<10	<10	<10	280	-	-	-	-	-	-		
MW-1	06/04/2001	6.89	4.76	2.13	0.00	0.00	-	-	1,100 <sup>9</sup>	-	2,800 <sup>7</sup>	310	23	11	15	470	-	-	-	-	-	-		
MW-1	09/10/2001	6.89	5.61	1.28	0.00	0.00	-	-	2,600	-	2,500 <sup>16</sup>	<20	26	<20	<20	310	-	-	-	-	-	-		
MW-1	12/03/2001	6.89	3.58	3.31	0.00	0.00	-	-	2,700	-	2,400	30	7.3	7.0	6.5	160	-	-	-	-	-	-		
MW-1	03/04/2002	6.89	4.53	2.36	0.00	0.00	-	-	2,700	-	3,300	120	17	22	9.0	110	-	-	-	-	-	-		
MW-1	05/30/2002	6.89	4.48	2.41	0.00	0.00	-	-	2,700	-	4,100	110	9.3	22	11	100	-	-	-	-	-	-		
MW-1	09/03/2002	6.89	5.47	1.42	0.00	0.00	-	-	2,900	-	3,700	<5.0	7.8	3.2	10	130	-	-	-	-	-	-		
MW-1	12/09/2002	6.89	5.28	1.61	0.00	0.00	-	-	3,000	-	2,900	35	5.1	5.5	8.3	170	-	-	-	-	-	-		
MW-1	03/10/2003	6.89	4.39	2.50	0.00	0.00	-	-	1,600	-	3,000	42	5.0	8.2	8.7	110	-	-	-	-	-	-		
MW-1	06/09/2003 <sup>5,18</sup>	6.89	4.36	2.53	0.00	0.00	-	-	2,000	-	5,200	140	16	20	15	100	-	-	-	-	-	-		
MW-1	09/08/2003 <sup>5,18</sup>	6.89	5.37	1.52	0.00	0.00	-	-	2,100	-	3,500	4	10	2	11	200	<50	-	-	-	-	-		
MW-1	12/08/2003 <sup>5,18</sup>	6.89	4.45	2.44	0.00	0.00	-	-	3,400	-	2,200	8	4	3	8	160	<50	-	-	-	-	-		
MW-1	03/09/2004 <sup>18,20</sup>	6.89	4.03	2.86	0.00	0.00	-	-	3,300	-	1,500	16	3	5	4	99	<130	-	-	-	-	-		
MW-1	06/17/2004 <sup>18</sup>	6.89	5.48	1.41	0.00	0.00	-	-	2,700	-	3,400	180	13	27	13	160	<50	-	-	-	-	-		
MW-1	09/15/2004 <sup>18</sup>	6.89	7.80	-0.91	0.00	0.00	-	-	2,600	-	1,700	2	1	0.8	5	180	<50	-	-	-	-	-		
MW-1	12/23/2004 <sup>18</sup>	6.89	5.54	1.35	0.00	0.00	-	-	3,000	-	1,800	120	3	5	5	120	<50	-	-	-	-	-		
MW-1	03/24/2005 <sup>18</sup>	6.89	3.40	3.49	0.00	0.00	-	-	950	-	1,100	45	2	5	2	16	<50	-	-	-	-	-		
MW-1	09/16/2005 <sup>18</sup>	6.89	5.79	1.10	0.00	0.00	-	-	2,200	-	3,700	74	9	21	14	150	<50	-	-	-	-	-		
MW-1	12/21/2005 <sup>18</sup>	6.89	3.78	3.11	0.00	0.00	-	-	1,600 <sup>22</sup>	-	1,400	53	2	4	4	62	<50	-	-	-	-	-		
MW-1	03/23/2006 <sup>18</sup>	6.89	3.56	3.33	0.00	0.00	-	-	1,400	-	1,100	3	2	2	3	26	<50	-	-	-	-	-		
MW-1	06/09/2006 <sup>18</sup>	6.89	4.78	2.11	0.00	0.00	-	-	1,300	-	5,200	160	13	42	20	77	<50	-	-	-	-	-		
MW-1	09/05/2006 <sup>18</sup>	6.89	6.00	0.89	0.00	0.00	-	-	1,600	-	2,000	0.8	<0.5	<0.5	0.8	1,500	<50	-	-	-	-	-		
MW-1	12/15/2006 <sup>18</sup>	6.89	4.05	2.84	0.00	0.00	-	-	1,800	-	1,400	3	0.9	1	5	47	<50	-	-	-	-	-		
MW-1	03/01/2007 <sup>18</sup>	6.89	3.93	2.96	0.00	0.00	-	-	1,500	-	1,000	23	3	3	3	16	<50	-	-	-	-	-		

**Table 4**  
**Cumulative Groundwater Monitoring and Sampling Data**  
**Former Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS					ADDITIONAL VOCS	GENERAL CHEMISTRY						
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X	MTBE by SW8260		Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids	
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-1	06/05/2007 <sup>18</sup>	6.89	4.81	2.08	0.00	0.00	-	-	1,200	-	4,000	90	9	21	12	68	<50	-	-	-	-	-		
MW-1	09/05/2007 <sup>18</sup>	6.89	5.71	1.18	0.00	0.00	-	-	1,800	-	2,000	3	2	1	6	66	<50	-	-	-	-	-		
MW-1	12/05/2007 <sup>18</sup>	6.89	5.02	1.87	0.00	0.00	-	-	1,200	-	2,400	58	6	7	7	97	150	-	-	-	-	-		
MW-1	03/03/2008 <sup>18</sup>	6.89	4.53	2.36	0.00	0.00	-	-	1,400	-	1,500	13	2	2	3	36	<50	-	-	-	-	-		
MW-1	06/02/2008 <sup>18</sup>	6.89	5.77	1.12	0.00	0.00	-	-	1,000	-	1,100	1	1	<0.5	3	59	<50	-	-	-	-	-		
MW-1	09/04/2008 <sup>18</sup>	6.89	6.11	0.78	0.00	0.00	-	-	1,000	-	1,200	0.6	<0.5	<0.5	2	20	<50	-	-	-	-	-		
MW-1	12/04/2008 <sup>18</sup>	6.89	6.11	0.78	0.00	0.00	-	-	2,400	-	810	1	0.8	<0.5	1	91	<50	-	-	-	-	-		
MW-1	02/26/2009 <sup>18</sup>	6.89	4.31	2.58	0.00	0.00	-	-	1,300	-	460	2	2	<0.5	<0.5	39	-	-	-	-	-			
MW-1	06/30/2009 <sup>18</sup>	6.89	5.42	1.47	0.00	0.00	-	-	1,700	-	2,900	14	4	3	6	70	<50	-	-	-	-	-		
MW-1	09/29/2009 <sup>18</sup>	6.89	5.81	1.08	0.00	0.00	-	-	1,600	-	1,000	<0.5	<0.5	<0.5	1	37	<50	-	-	-	-	-		
MW-1	03/10/2010 <sup>18</sup>	6.89	3.80	3.09	0.00	0.00	-	-	570	-	450	0.9 J	<0.5	<0.5	<0.5	18	<50	-	-	-	-	-		
MW-1	09/15/2010	6.89	6.42	0.47	0.00	0.00	-	-	1,400	-	1,600	<0.5	0.6 J	<0.5	3	25	<50	-	-	-	-	-		
MW-1	03/14/2011	6.89	4.05	2.84	0.00	0.00	94 J	-	56 J	-	220	<0.5	<0.5	<0.5	<0.5	10	<50	-	-	-	-	-		
MW-1	09/26/2011	6.89	6.42	0.47	0.00	0.00	-	160	-	200	260	<0.5	<0.5	<0.5	<0.5	11	<50	-	-	-	-	-		
MW-1	03/30/2012	6.89	3.31	3.58	0.00	0.00	-	<38	-	<50	100	<0.5	<0.5	<0.5	<0.5	4	<50	-	-	-	-	-		
MW-1	09/22/2012	6.89	6.48	0.41	0.00	0.00	-	<38	-	73 J	320	<0.5	<0.5	<0.5	<0.5	16	<50	-	-	-	-	-		
MW-1	03/19/2013	6.89	5.37	1.52	0.00	0.00	-	<38	-	69 J	270	<0.5	<0.5	<0.5	<0.5	24	<50	-	-	-	-	-		
MW-1	09/25/2013	6.89	6.48	0.41	0.00	0.00	-	-	2,000	-	210	<0.5	<0.5	<0.5	<0.5	13	<50	-	-	-	-	-		
MW-1	03/28/2014	6.89	4.41	2.48	0.00	0.00	-	-	2,000	-	140	2	<0.5	<0.5	<0.5	12	<50	-	-	-	-	-		
MW-1	09/25/2014	6.89	6.42	0.47	0.00	0.00	-	-	-	<50	160	<0.5	<0.5	<0.5	<0.5	15	<50	-	-	-	-	-		
MW-1	03/05/2015	6.89	5.17	1.72	0.00	0.00	-	-	1,900	-	280	3	<0.5	0.6 J	<0.5	16	<50	-	-	-	-	-		
MW-1	09/25/2015	6.89	6.56	0.33	0.00	0.00	-	-	1,800	-	180	<0.5	<0.5	<0.5	<0.5	13	<50	-	-	-	-	-		
MW-1	03/18/2016	6.89	3.46	3.43	0.00	0.00	-	-	-	62 J	140	<1	<1	<1	<1	1	<250	-	-	-	-	-		
<b>MW-1</b>	<b>09/27/2016<sup>26</sup></b>	<b>6.89</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-2	08/20/1991	6.27	4.35	1.92	0.00	0.00	-	-	600	-	9,300	3,700	55	530	75	-	-	-	-	-	-	-	-	
MW-2	09/30/1991	6.27	4.99	1.28	0.00	0.00	-	-	-	-	3,500	2,600	47	440	68	-	-	-	-	-	-	-	-	
MW-2	10/28/1991	6.27	4.91	1.36	0.00	0.00	-	-	-	-	4,600	1,800	29	290	53	-	-	-	-	-	-	-	-	
MW-2	01/08/1992	6.27	4.64	1.63	Sheen	0.00	-	-	-	-	14,000	4,300	70	<25	130	-	-	-	-	-	-	-	-	
MW-2	01/13/1992	6.27	-	-	0.00	0.00	-	-	38,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-2	06/23/1992	6.27	4.64	1.63	0.02	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-2	08/24/1992	6.27	4.94	1.34	0.02	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-2	09/21/1992	6.27	5.08	1.20	0.01	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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**Cumulative Groundwater Monitoring and Sampling Data**  
**Former Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS					ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X	MTBE by SW8260		Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-2	10/26/1992	6.27	5.93	0.34	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	12/23/1992	6.27	-	-	0.00	0.00	-	-	160,000	-	21,000	5,400	59	1,300	160	-	-	-	-	-	-	-	-
MW-2	01/08/1993	6.27	3.70	2.57	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	03/25/1993	6.27	3.38	2.89	Sheen	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	06/11/1993	6.27	4.18	2.09	0.00	0.00	-	-	-	-	5,900	1,100	23	240	51	-	-	-	-	-	-	-	2,300
MW-2	09/29/1993	6.27	6.20	0.07	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	12/20/1993	6.27	4.35	1.94	0.02	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	03/07/1994	6.27	3.67	2.60	0.00	0.00	-	-	<10	-	26,000	5,700	170	1,000	150	-	-	-	-	-	-	-	-
MW-2	06/17/1994	6.27	4.02	2.25	Sheen	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	09/12/1994	6.27	4.83	1.45	0.00	0.00	-	-	-	-	-	0.01	-	-	-	-	-	-	-	-	-	-	-
MW-2	11/30/1994 <sup>26</sup>	6.27	4.00	2.27	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	03/24/1995	6.27	4.01	2.73	0.59	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	06/27/1995	6.27	4.96	1.71	0.50	0.013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	09/28/1995	6.27	4.25	2.62	0.75	0.013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	12/19/1995	6.27	4.76	1.99	0.60	0.010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	02/28/1996	6.27	4.58	1.99	0.38	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	06/25/1996	6.27	4.29	2.36	0.47	0.030	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	12/17/1996	6.27	4.16	2.22	0.14	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	03/31/1997	6.27	4.07	2.34	0.18	0.030	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	06/30/1997	6.27	4.32	2.06	0.14	0.030	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	09/12/1997	6.27	4.38	2.00	0.14	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	12/05/1997	6.27	3.78	2.51	0.02	0.00	-	-	-	-	-	0.02	-	-	-	-	-	-	-	-	-	-	-
MW-2	02/16/1998	6.27	3.29	3.08	0.12	0.007	-	-	-	-	-	-	0.12	-	-	-	-	-	-	-	-	-	-
MW-2	06/17/1998	6.27	4.00	2.35	0.10	0.010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	08/31/1998	6.27	5.71	0.65	0.11	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	12/28/1998	6.27	4.60	1.75	0.10	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	03/04/1999	6.27	3.73	2.58	0.05	0.200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2A	04/19/1999	6.53	4.86	1.67	0.00	0.00	-	-	820 <sup>2</sup>	-	<2,000	<20	<20	<20	<20	9,200	-	-	-	-	-	-	-
MW-2A	06/14/1999	6.53	5.30	1.23	0.00	0.00	-	-	2,000 <sup>2</sup>	-	<5,000	89	<50	66	<50	10,000	-	-	-	-	-	-	-
MW-2A	09/17/1999	6.53	5.84	0.69	0.00	0.00	-	-	1,050 <sup>2</sup>	-	903	42	1.63	22.8	7.74	11,400	-	-	-	-	-	-	-
MW-2A	12/20/1999	6.53	6.60	-0.07	0.00	0.00	-	-	2,820 <sup>2</sup>	-	2,280	115	<10	87.2	27.2	14,000	-	-	-	-	-	-	-
MW-2A	03/20/2000	6.53	4.79	1.74	0.00	0.00	-	-	1,220 <sup>2</sup>	-	1,040	54.3	<5.0	33.8	12.1	10,900 <sup>2</sup>	-	-	-	-	-	-	-

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**Former Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS					ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X	MTBE by SW8260		Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-2A	06/24/2000	6.53	5.25	1.28	0.00	0.00	-	-	1,300 <sup>9</sup>	-	690 <sup>7</sup>	50	2.5	18	9.5	15,000 <sup>8</sup>	-	-	-	-	-	-	-
MW-2A	09/07/2000	6.53	5.44	1.09	0.00	0.00	-	-	770 <sup>9</sup>	-	310 <sup>7</sup>	6.7	1.4	1.6	3.8	16,000	-	-	-	-	-	-	-
MW-2A	12/05/2000	6.53	5.37	1.16	0.00	0.00	-	-	810 <sup>13</sup>	-	414 <sup>14</sup>	32.4	<0.500	7.49	5.96	8,910 <sup>8</sup>	-	-	-	-	-	-	-
MW-2A	03/01/2001	6.53	4.50	2.03	0.00	0.00	-	-	590 <sup>9</sup>	-	370 <sup>7</sup>	30	4.0	12	9.2	8,200	-	-	-	-	-	-	-
MW-2A	06/04/2001	6.53	5.17	1.36	0.00	0.00	-	-	930 <sup>9</sup>	-	<500	19	<5.0	<5.0	<5.0	7,800	-	-	-	-	-	-	-
MW-2A	09/10/2001	6.53	5.74	0.79	0.00	0.00	-	-	2,400	-	<5,000	<50	<50	<50	<50	9,700	-	-	-	-	-	-	-
MW-2A	12/03/2001	6.53	5.07	1.46	0.00	0.00	-	-	2,500	-	480	4.5	<1.0	1.1	<3.0	10,000	-	-	-	-	-	-	-
MW-2A	03/04/2002	6.53	5.01	1.52	0.00	0.00	-	-	2,300	-	630	5.4	1.5	2.9	2.3	7,000	-	-	-	-	-	-	-
MW-2A	05/30/2002	6.53	4.87	1.66	0.00	0.00	-	-	2,100	-	520	6.1	<1.0	2.6	5.4	7,100	-	-	-	-	-	-	-
MW-2A	09/03/2002	6.53	5.50	1.03	0.00	0.00	-	-	2,600	-	590	7.8	0.98	2.9	7.8	7,800	-	-	-	-	-	-	-
MW-2A	12/09/2002	6.53	5.47	1.06	0.00	0.00	-	-	1,900	-	670	7.9	0.88	2.1	5.0	8,300	-	-	-	-	-	-	-
MW-2A	03/10/2003	6.53	5.01	1.52	0.00	0.00	-	-	1,700	-	640	8.0	0.76	2.6	4.1	7,500	-	-	-	-	-	-	-
MW-2A	06/09/2003 <sup>18</sup>	6.53	4.76	1.77	0.00	0.00	-	-	1,900	-	540	3	<3	<3	<3	6,800	-	-	-	-	-	-	-
MW-2A	09/08/2003 <sup>18</sup>	6.53	5.37	1.16	0.00	0.00	-	-	2,000	-	540	3	0.7	0.7	3	7,000	<50	-	-	-	-	-	-
MW-2A	12/08/2003 <sup>18</sup>	6.53	5.19	1.34	0.00	0.00	-	-	3,100	-	480	<5	<5	<5	<5	6,500	<500	-	-	-	-	-	-
MW-2A	03/09/2004 <sup>18</sup>	6.53	4.72	1.81	0.00	0.00	-	-	1,200	-	1,300	44	2	15	10	2,900	<130	-	-	-	-	-	-
MW-2A	06/17/2004 <sup>18</sup>	6.53	6.60	-0.07	0.00	0.00	-	-	2,300	-	920	23	2	6	12	1,700	<100	-	-	-	-	-	-
MW-2A	09/15/2004 <sup>18</sup>	6.53	8.87	-2.34	0.00	0.00	-	-	1,900	-	880	6	2	<1	7	2,100	<100	-	-	-	-	-	-
MW-2A	12/23/2004 <sup>18</sup>	6.53	5.85	0.68	0.00	0.00	-	-	2,200	-	430	6	<3	<3	<3	5,100	<250	-	-	-	-	-	-
MW-2A	03/24/2005 <sup>18</sup>	6.53	4.75	1.78	0.00	0.00	-	-	810	-	390	<5	<5	<5	<5	5,200	<500	-	-	-	-	-	-
MW-2A	06/16/2005 <sup>18</sup>	6.53	5.23	1.30	0.00	0.00	-	-	3,000	-	380	<5	<5	<5	<5	5,500	<500	-	-	-	-	-	-
MW-2A	09/16/2005 <sup>18</sup>	6.53	6.08	0.45	0.00	0.00	-	-	2,600	-	380	<5	<5	<5	<5	5,900	<500	-	-	-	-	-	-
MW-2A	12/21/2005 <sup>18</sup>	6.53	4.98	1.55	0.00	0.00	-	-	4,000 <sup>23</sup>	-	450	1	0.6	<0.5	2	4,800	<50	-	-	-	-	-	-
MW-2A	03/23/2006 <sup>18</sup>	6.53	4.56	1.97	0.00	0.00	-	-	2,600	-	330	1	0.8	<0.5	2	4,500	-	-	-	-	-	-	-
MW-2A	06/09/2006 <sup>18</sup>	6.53	5.16	1.37	0.00	0.00	-	-	2,800	-	500	<1	<1	<1	<1	4,500	<100	-	-	-	-	-	-
MW-2A	09/05/2006 <sup>18</sup>	6.53	5.81	0.72	0.00	0.00	-	-	3,000	-	510	<5	<5	<5	<5	3,600	<500	-	-	-	-	-	-
MW-2A	12/15/2006 <sup>18</sup>	6.53	5.05	1.48	0.00	0.00	-	-	2,800	-	600	4	<1	<1	1	4,000	<100	-	-	-	-	-	-
MW-2A	03/01/2007 <sup>18</sup>	6.53	5.03	1.50	0.00	0.00	-	-	1,800	-	230	<3	<3	<3	<3	3,700	<250	-	-	-	-	-	-
MW-2A	06/05/2007 <sup>18</sup>	6.53	4.81	1.72	0.00	0.00	-	-	1,700	-	480	0.9	0.6	<0.5	2	3,500	<50	-	-	-	-	-	-
MW-2A	09/05/2007 <sup>18</sup>	6.53	5.25	1.28	0.00	0.00	-	-	2,400	-	430	1	1	<0.5	2	1,700	<50	-	-	-	-	-	-
MW-2A	12/05/2007 <sup>18</sup>	6.53	5.28	1.25	0.00	0.00	-	-	2,000	-	530	2	<1	<1	2	3,400	<100	-	-	-	-	-	-
MW-2A	03/03/2008 <sup>18</sup>	6.53	5.13	1.40	0.00	0.00	-	-	2,100	-	960	85	3	3	5	520	<50	-	-	-	-	-	-
MW-2A	06/02/2008 <sup>18</sup>	6.53	5.60	0.93	0.00	0.00	-	-	2,300	-	600	10	1	0.7	5	1,300	<50	-	-	-	-	-	-

**Table 4**  
**Cumulative Groundwater Monitoring and Sampling Data**  
**Former Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				MTBE by SW8260	ADDITIONAL VOCS	GENERAL CHEMISTRY							
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X			Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids		
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
MW-2A	09/04/2008 <sup>18</sup>	6.53	5.72	0.81	0.00	0.00	-	-	2,600	-	440	<1	<1	<1	1	2,500	<100	-	-	-	-	-	-	-	
MW-2A	12/04/2008 <sup>18</sup>	6.53	6.20	0.33	0.00	0.00	-	-	4,000	-	480	<1	<1	<1	1	2,400	<100	-	-	-	-	-	-	-	
MW-2A	02/26/2009 <sup>18</sup>	6.53	4.39	2.14	0.00	0.00	-	-	860	-	420	44	4	3	3	18	<50	-	-	-	-	-	-	-	
MW-2A	06/30/2009 <sup>18</sup>	6.53	5.38	1.15	0.00	0.00	-	-	2,900	-	500	1	13	2	22	1,900	<50	-	-	-	-	-	-	-	
MW-2A	09/29/2009 <sup>18</sup>	6.53	5.70	0.83	0.00	0.00	-	-	4,200	-	500	2	1	<0.5	5	900	<50	-	-	-	-	-	-	-	
MW-2A	03/10/2010 <sup>18</sup>	6.53	3.77	2.76	0.00	0.00	-	-	1,100	-	900	90	4	2	2	27	<50	-	-	-	-	-	-	-	
MW-2A	09/15/2010	6.53	5.80	0.73	0.00	0.00	-	-	2,800	-	360	<0.5	<0.5	<0.5	2	24	<50	-	-	-	-	-	-	-	
MW-2A	03/14/2011	6.53	4.72	1.81	0.00	0.00	540	-	670	-	960	34	4	1	4	39	<50	-	-	-	-	-	-	-	
MW-2A	09/26/2011	6.53	5.95	0.58	0.00	0.00	-	<39	-	120	340	<0.5	<0.5	<0.5	0.7 J	80	<50	-	-	-	-	-	-	-	
MW-2A	03/30/2012	6.53	4.18	2.35	0.00	0.00	-	<38	-	82 J	360	<0.5	<0.5	<0.5	2	200	<50	-	-	-	-	-	-	-	
MW-2A	09/22/2012	6.53	6.23	0.30	0.00	0.00	-	<38	-	50 J	350	<0.5	<0.5	<0.5	1	86	<50	-	-	-	-	-	-	-	
MW-2A	03/20/2013	6.53	5.84	0.69	0.00	0.00	-	<38	-	<50	310	<0.5	<0.5	<0.5	<0.5	130	<50	-	-	-	-	-	-	-	
MW-2A	09/25/2013	6.53	6.22	0.31	0.00	0.00	-	-	2,700	-	310	<0.5	<0.5	<0.5	0.6 J	48	<50	-	-	-	-	-	-	-	
MW-2A	03/28/2014	6.53	5.08	1.45	0.00	0.00	-	-	2,200	-	340	<0.5	<0.5	<0.5	0.6 J	99	<50	-	-	-	-	-	-	-	
MW-2A	09/25/2014	6.53	6.02	0.51	0.00	0.00	-	-	-	54 J	350	1	<0.5	<0.5	2	39	<50	-	-	-	-	-	-	-	
MW-2A	03/05/2015	6.53	5.44	1.09	0.00	0.00	-	-	2,500	-	250	<0.5	<0.5	<0.5	<0.5	86	<50	-	-	-	-	-	-	-	
MW-2A	09/25/2015	6.53	6.13	0.40	0.00	0.00	-	-	2,700	-	420	<0.5	<0.5	<0.5	2	32	<50	-	-	-	-	-	-	-	
MW-2A	03/18/2016	6.53	4.05	2.48	0.00	0.00	-	-	-	<110	290	<1	<1	<1	<1	75	<250	-	-	-	-	-	-	-	
<b>MW-2A</b>	<b>09/27/2016<sup>26</sup></b>	<b>6.53</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-3	08/20/1991	8.71	8.45	0.26	0.00	0.00	-	-	200	-	3,100	200	13	15	12	-	-	-	-	-	-	-	-	-	-
MW-3	09/30/1991	8.71	8.74	-0.03	0.00	0.00	-	-	-	-	1,000	150	8.3	13	6.7	-	-	-	-	-	-	-	-	-	-
MW-3	10/28/1991	8.71	8.76	-0.05	0.00	0.00	-	-	-	-	1,200	120	6.7	11	7.5	-	-	-	-	-	-	-	-	-	-
MW-3	01/08/1992	8.71	8.77	-0.06	0.00	0.00	-	-	-	-	410	120	0.9	4.1	3.4	-	-	-	-	-	-	-	-	-	-
MW-3	01/13/1992	8.71	-	-	0.00	0.00	-	-	220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	06/23/1992	8.71	8.68	0.03	0.00	0.00	-	-	<50	-	630	43	0.8	8.2	3.4	-	-	-	-	-	-	-	-	-	-
MW-3	08/24/1992	8.71	8.85	-0.14	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	09/21/1992	8.71	8.94	-0.23	0.00	0.00	-	-	<50	-	1,800	730	1.4	66	39	-	-	-	-	-	-	-	-	-	-
MW-3	10/26/1992	8.71	9.07	-0.36	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	12/23/1992	8.71	-	-	0.00	0.00	-	-	850	-	840	270	3.4	15	4.2	-	-	-	-	-	-	-	-	-	-
MW-3	01/08/1993	8.71	7.69	1.02	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	03/25/1993	8.71	7.74	0.97	0.00	0.00	-	-	<10	-	760	270	4.0	10	5.0	-	-	-	-	-	-	-	-	-	-
MW-3	06/11/1993	8.71	8.52	0.19	0.00	0.00	-	-	-	-	200	32	1.0	5.0	2.0	-	-	-	-	-	-	-	-	-	5,600



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**Former Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS					ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X	MTBE by SW8260		Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-3	09/29/1993	8.71	6.05	2.66	0.00	0.00	-	-	-	-	9,300	2,800	60	270	62	-	-	-	-	-	-	-	-
MW-3	12/20/1993	8.71	8.83	-0.12	0.00	0.00	-	-	<10	-	460	250	4.0	8.0	4.0	-	-	-	-	-	-	-	-
MW-3	03/07/1994	8.71	8.07	0.64	0.00	0.00	-	-	<10	-	2,400	260	13	35	18	-	-	-	-	-	-	-	-
MW-3	06/17/1994	8.71	8.52	0.19	0.00	0.00	-	-	<50	-	1,000	200	4.0	6.6	6.7	-	-	-	-	-	-	-	-
MW-3	09/12/1994	8.71	8.92	-0.21	0.00	0.00	-	-	<50	-	360	130	3.4	4.8	3.3	130	-	-	-	-	-	-	-
MW-3	11/30/1994 <sup>26</sup>	8.71	8.13	0.58	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	03/24/1995	8.71	6.78	1.93	0.00	0.00	-	-	1,200 <sup>2</sup>	-	4,100	920	<10	23	<10	70	-	-	-	-	-	-	-
MW-3	06/27/1995	8.71	8.22	0.49	0.00	0.00	-	-	1,000 <sup>2</sup>	-	3,100	640	16	31	<10	<50	-	-	-	-	-	-	-
MW-3	09/28/1995	8.71	8.85	-0.14	0.00	0.00	-	-	460 <sup>2</sup>	-	490	78	3.4	4.4	2.4	38	-	-	-	-	-	-	-
MW-3	12/19/1995	8.71	8.02	0.69	0.00	0.00	-	-	650 <sup>2</sup>	-	2,600	580	<10	25	<10	<50	-	-	-	-	-	-	-
MW-3	02/28/1996	8.71	7.55	1.16	0.00	0.00	-	-	780 <sup>2</sup>	-	1,500	510	<5.0	9.9	<5.0	<25	-	-	-	-	-	-	-
MW-3	06/25/1996	8.71	8.37	0.34	0.00	0.00	-	-	1,200 <sup>2</sup>	-	1,300	390	7.8	14	6.5	31	-	-	-	-	-	-	-
MW-3	12/17/1996	8.71	8.30	0.41	0.00	0.00	-	-	1,100 <sup>2</sup>	-	760	85	<1.2	5.9	5.1	<6.2	-	-	-	-	-	-	-
MW-3	03/31/1997	8.71	8.19	0.52	0.00	0.00	-	-	1,300 <sup>2</sup>	-	2,000	380	12	24	12	<25	-	-	-	-	-	-	-
MW-3	06/30/1997	8.71	8.71	0.00	0.00	0.00	-	-	620 <sup>2</sup>	-	1,900	340	9.9	23	6.1	<25	-	-	-	-	-	-	-
MW-3	09/12/1997	8.71	7.64	1.07	0.00	0.00	-	-	400 <sup>2</sup>	-	1,200	200	4.6	14	4.8	3.9	-	-	-	-	-	-	-
MW-3	12/05/1997	8.71	8.25	0.46	0.00	0.00	-	-	190 <sup>2</sup>	-	460	72	2.7	5.2	1.7	<5.0	-	-	-	-	-	-	-
MW-3	02/16/1998	8.71	7.00	1.71	0.00	0.00	-	-	1,000 <sup>2</sup>	-	6,200	1,100	20	34	12	<50	-	-	-	-	-	-	-
MW-3	06/17/1998	8.71	8.00	0.71	0.00	0.00	-	-	1,100 <sup>2</sup>	-	3,000	350	<10	<10	<10	120	-	-	-	-	-	-	-
MW-3	08/31/1998	8.71	8.63	0.08	0.00	0.00	-	-	790 <sup>2</sup>	-	430	100	2.6	8.6	6.0	<12	-	-	-	-	-	-	-
MW-3	12/28/1998	8.71	8.73	-0.02	0.00	0.00	-	-	180 <sup>2</sup>	-	1,400	220	<10	12	<10	<50	-	4500	<1,000	980000	390000	-	-
MW-3	03/04/1999	8.71	7.65	1.06	0.00	0.00	-	-	763 <sup>2</sup>	-	2,880	355	9.15	19	<5.0	<20	-	-	-	-	-	-	-
MW-3A	04/19/1999	8.70	7.70	1.00	0.00	0.00	-	-	93 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	3.1	-	-	-	-	-	-	-
MW-3A	06/14/1999	8.70	8.20	0.50	0.00	0.00	-	-	160 <sup>2</sup>	-	148	4.55	0.82	0.53	1.1	3.7	-	-	-	-	-	-	-
MW-3A	09/17/1999	8.70	8.72	-0.02	0.00	0.00	-	-	101 <sup>2</sup>	-	169	6.02	0.806	0.515	0.786	4.68	-	-	-	-	-	-	-
MW-3A	12/20/1999	8.70	8.92	-0.22	0.00	0.00	-	-	153 <sup>2</sup>	-	<50	1.82	<0.5	<0.5	<0.5	11	-	-	-	-	-	-	-
MW-3A	03/20/2000	8.70	7.64	1.06	0.00	0.00	-	-	223 <sup>2</sup>	-	140	5.08	0.695	<0.5	<0.5	10.1	-	-	-	-	-	-	-
MW-3A	06/24/2000	8.70	8.38	0.32	0.00	0.00	-	-	128 <sup>9</sup>	-	<50	0.74	<0.50	<0.50	<0.50	34	-	-	-	-	-	-	-
MW-3A	09/07/2000	8.70	8.79	-0.09	0.00	0.00	-	-	<50	-	<50	1.4	<0.50	<0.50	<0.50	15	-	-	-	-	-	-	-
MW-3A	12/05/2000	8.70	8.68	0.02	0.00	0.00	-	-	<50	-	<50.0	1.39	<0.500	<0.500	<0.500	12.9	-	-	-	-	-	-	-
MW-3A	03/01/2001	8.70	7.82	0.88	0.00	0.00	-	-	66 <sup>11</sup>	-	<50	1.0	<0.50	<0.50	<0.50	19	-	-	-	-	-	-	-
MW-3A	06/04/2001	8.70	8.45	0.25	0.00	0.00	-	-	69 <sup>9</sup>	-	<50	2.0	<0.50	<0.50	<0.50	37	-	-	-	-	-	-	-

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**Former Service Station 90121**  
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Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS					ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X	MTBE by SW8260		Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-3A	09/10/2001	8.70	9.10	-0.40	0.00	0.00	-	-	<50	-	<50	3.9	<0.50	<0.50	<0.50	19	-	-	-	-	-	-	-
MW-3A	12/03/2001	8.70	8.08	0.62	0.00	0.00	-	-	56	-	<50	<0.50	<0.50	<0.50	<1.5	19	-	-	-	-	-	-	-
MW-3A	03/04/2002	8.70	8.94	-0.24	0.00	0.00	-	-	85	-	<50	<0.50	<0.50	<0.50	<1.5	26	-	-	-	-	-	-	-
MW-3A	05/30/2002	8.70	8.78	-0.08	0.00	0.00	-	-	210	-	<50	<0.50	<0.50	<0.50	<1.5	22	-	-	-	-	-	-	-
MW-3A	09/03/2002	8.70	8.98	-0.28	0.00	0.00	-	-	89	-	<50	<0.50	<0.50	<0.50	<1.5	24	-	-	-	-	-	-	-
MW-3A	12/09/2002	8.70	8.90	-0.20	0.00	0.00	-	-	110	-	<50	<0.50	<0.50	<0.50	<1.5	22	-	-	-	-	-	-	-
MW-3A	03/10/2003	8.70	8.12	0.58	0.00	0.00	-	-	66	-	<50	<0.50	<0.50	<0.50	<1.5	40	-	-	-	-	-	-	-
MW-3A	06/09/2003 <sup>18</sup>	8.70	8.23	0.47	0.00	0.00	-	-	82	-	<50	<0.5	0.5	<0.5	<0.5	35	-	-	-	-	-	-	-
MW-3A	09/08/2003 <sup>18</sup>	8.70	8.76	-0.06	0.00	0.00	-	-	110	-	<50	<0.5	<0.5	<0.5	<0.5	27	<50	-	-	-	-	-	-
MW-3A	12/08/2003 <sup>18</sup>	8.70	8.50	0.20	0.00	0.00	-	-	74 <sup>18</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	23	<50	-	-	-	-	-	-
MW-3A	03/09/2004 <sup>18</sup>	8.70	7.71	0.99	0.00	0.00	-	-	410	-	53	1	<0.5	<0.5	<0.5	28	<50	-	-	-	-	-	-
MW-3A	06/17/2004 <sup>18</sup>	8.70	8.52	0.18	0.00	0.00	-	-	430	-	180	1	<0.5	<0.5	<0.5	3	<50	-	-	-	-	-	-
MW-3A	09/15/2004 <sup>18</sup>	8.70	9.12	-0.42	0.00	0.00	-	-	280	-	92	<0.5	<0.5	<0.5	<0.5	63	<50	-	-	-	-	-	-
MW-3A	12/23/2004 <sup>18</sup>	8.70	8.76	-0.06	0.00	0.00	-	-	330	-	76	<0.5	<0.5	<0.5	<0.5	5	<50	-	-	-	-	-	-
MW-3A	03/24/2005 <sup>18</sup>	8.70	6.28	2.42	0.00	0.00	-	-	210	-	<50	<0.5	<0.5	<0.5	<0.5	0.6	360	-	-	-	-	-	-
MW-3A	06/16/2005 <sup>18</sup>	8.70	8.18	0.52	0.00	0.00	-	-	590	-	<50	<0.5	<0.5	<0.5	<0.5	2	<50	-	-	-	-	-	-
MW-3A	09/16/2005 <sup>18</sup>	8.70	8.78	-0.08	0.00	0.00	-	-	160 <sup>21</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	5	<50	-	-	-	-	-	-
MW-3A	12/21/2005 <sup>18</sup>	8.70	8.30	0.40	0.00	0.00	-	-	220 <sup>23</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	10	<50	-	-	-	-	-	-
MW-3A	03/23/2006 <sup>18</sup>	8.70	7.10	1.60	0.00	0.00	-	-	150	-	<50	<0.5	<0.5	<0.5	<0.5	0.5	<50	-	-	-	-	-	-
MW-3A	06/09/2006 <sup>18</sup>	8.70	8.30	0.40	0.00	0.00	-	-	390	-	<50	<0.5	<0.5	<0.5	<0.5	2	<50	-	-	-	-	-	-
MW-3A	09/05/2006 <sup>18</sup>	8.70	9.00	-0.30	0.00	0.00	-	-	140	-	<50	<0.5	<0.5	<0.5	<0.5	5	<50	-	-	-	-	-	-
MW-3A	12/15/2006 <sup>18</sup>	8.70	8.53	0.17	0.00	0.00	-	-	250	-	<50	<0.5	0.8	<0.5	2	9	<50	-	-	-	-	-	-
MW-3A	03/01/2007 <sup>18</sup>	8.70	8.07	0.63	0.00	0.00	-	-	140	-	<50	2	4	1	5	10	<50	-	-	-	-	-	-
MW-3A	06/05/2007 <sup>18</sup>	8.70	8.44	0.26	0.00	0.00	-	-	2,900	-	<50	<0.5	<0.5	<0.5	<0.5	7	<50	-	-	-	-	-	-
MW-3A	09/05/2007 <sup>18</sup>	8.70	9.05	-0.35	0.00	0.00	-	-	520	-	<50	<0.5	<0.5	<0.5	<0.5	8	<50	-	-	-	-	-	-
MW-3A	12/05/2007 <sup>18</sup>	8.70	8.71	-0.01	0.00	0.00	-	-	110	-	<50	<0.5	<0.5	<0.5	<0.5	30	<50	-	-	-	-	-	-
MW-3A	03/03/2008 <sup>18</sup>	8.70	8.22	0.48	0.00	0.00	-	-	240	-	<50	<0.5	<0.5	<0.5	<0.5	9	<50	-	-	-	-	-	-
MW-3A	06/02/2008 <sup>18</sup>	8.70	8.68	0.02	0.00	0.00	-	-	160	-	<50	<0.5	<0.5	<0.5	<0.5	25	<50	-	-	-	-	-	-
MW-3A	09/04/2008 <sup>18</sup>	8.70	9.17	-0.47	0.00	0.00	-	-	220	-	<50	<0.5	<0.5	<0.5	<0.5	54	<50	-	-	-	-	-	-
MW-3A	12/04/2008 <sup>18</sup>	8.70	8.95	-0.25	0.00	0.00	-	-	150	-	<50	<0.5	<0.5	<0.5	<0.5	29	<50	-	-	-	-	-	-
MW-3A	02/26/2009 <sup>18</sup>	8.70	7.77	0.93	0.00	0.00	-	-	440	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
MW-3A	06/30/2009 <sup>18</sup>	8.70	5.73	2.97	0.00	0.00	-	-	52 J	-	<50	<0.5	<0.5	<0.5	<0.5	25	<50	-	-	-	-	-	-
MW-3A	09/29/2009 <sup>18,25</sup>	8.70	6.30	2.40	0.00	0.00	-	-	400	-	<500	<0.5	<0.5	<0.5	<0.5	39	<50	-	-	-	-	-	-

**Table 4**  
**Cumulative Groundwater Monitoring and Sampling Data**  
**Former Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS					ADDITIONAL VOCS	GENERAL CHEMISTRY							
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X	MTBE by SW8260		Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids		
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L		
MW-3A	03/10/2010 <sup>18</sup>	8.70	4.43	4.27	0.00	0.00	-	-	1,200	-	<50	<0.5	<0.5	<0.5	<0.5	2	<50	-	-	-	-	-	-	-	
MW-3A	09/15/2010	8.70	8.95	-0.25	0.00	0.00	-	-	360	-	<50	<0.5	<0.5	<0.5	<0.5	8	<50	-	-	-	-	-	-	-	
MW-3A	03/14/2011	8.70	5.50	3.20	0.00	0.00	<38	-	<33	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-	-	
MW-3A	09/26/2011	8.70	8.78	-0.08	0.00	0.00	-	<38	-	<50	<50	<0.5	<0.5	<0.5	<0.5	1	<50	-	-	-	-	-	-	-	
MW-3A	03/30/2012	8.70	6.17	2.53	0.00	0.00	-	<38	-	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-	-	
MW-3A	09/22/2012	8.70	8.69	0.01	0.00	0.00	-	<38	-	<50	<50	<0.5	<0.5	<0.5	<0.5	2	<50	-	-	-	-	-	-	-	
MW-3A	03/20/2013	8.70	7.72	0.98	0.00	0.00	-	<38	-	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-	-	
MW-3A	09/25/2013	8.70	8.54	0.16	0.00	0.00	-	-	400	-	<50	<0.5	<0.5	<0.5	<0.5	0.8 J	<50	-	-	-	-	-	-	-	
MW-3A	03/28/2014	8.70	6.45	2.25	0.00	0.00	-	-	530	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-	-	
MW-3A	09/25/2014	8.70	8.72	-0.02	0.00	0.00	-	-	-	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-	-	
MW-3A	03/05/2015	8.70	7.29	1.41	0.00	0.00	-	-	1,000	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-	-	
MW-3A	09/25/2015	8.70	8.66	0.04	0.00	0.00	-	-	540	-	72 J	<0.5	<0.5	<0.5	<0.5	1	<50	-	-	-	-	-	-	-	
MW-3A	03/18/2016	8.70	4.88	3.82	0.00	0.00	-	-	-	<110	<100	<1	<1	<1	<1	<1	<250	-	-	-	-	-	-	-	
<b>MW-3A</b>	<b>09/27/2016</b>	<b>8.70</b>	<b>8.64</b>	<b>0.06</b>	<b>0.00</b>	<b>0.00</b>	-	-	<b>930</b>	-	<b>&lt;100</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>0.7 J</b>	<b>&lt;250</b>	-	-	-	-	-	-	-	
MW-4	08/20/1991	7.37	5.05	1.32	0.00	0.00	-	-	160	-	1,800	870	4.0	3.0	9.0	-	-	-	-	-	-	-	-	-	-
MW-4	09/30/1991	7.37	5.67	1.70	0.00	0.00	-	-	-	-	670	830	5.5	2.7	12	-	-	-	-	-	-	-	-	-	-
MW-4	10/28/1991	7.37	5.81	1.56	0.00	0.00	-	-	-	-	2,800	990	5.8	4.8	19	-	-	-	-	-	-	-	-	-	-
MW-4	01/08/1992	7.37	5.34	2.03	0.00	0.00	-	-	-	-	2,900	1,200	10	7.0	18	-	-	-	-	-	-	-	-	-	-
MW-4	01/13/1992	7.37	-	-	0.00	0.00	-	-	1,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	06/23/1992	7.37	5.37	2.00	0.00	0.00	-	-	<50	-	1,600	380	6.5	3.0	12	-	-	-	-	-	-	-	-	-	-
MW-4	08/24/1992	7.37	5.75	1.62	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	09/21/1992	7.37	5.95	1.42	0.00	0.00	-	-	<50	-	1,200	480	5.6	3.7	11	-	-	-	-	-	-	-	-	-	-
MW-4	10/26/1992	7.37	5.96	1.41	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	12/23/1992	7.37	-	-	0.00	0.00	-	-	1,800	-	1,500	700	3.6	3.2	11	-	-	-	-	-	-	-	-	-	-
MW-4	01/08/1993	7.37	4.64	2.73	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	03/25/1993	7.37	4.42	2.95	0.00	0.00	-	-	<10	-	520	160	3.0	1.0	4.0	-	-	-	-	-	-	-	-	-	-
MW-4	06/11/1993	7.37	5.12	2.25	0.00	0.00	-	-	-	-	1,200	430	5.0	6.0	11	-	-	-	-	-	-	-	-	-	2,600
MW-4	09/29/1993	7.37	5.80	1.57	0.00	0.00	-	-	-	-	1,300	210	8.0	2.0	14	-	-	-	-	-	-	-	-	-	-
MW-4	12/20/1993	7.37	5.10	2.27	0.00	0.00	-	-	3,900	-	570	230	5.0	4.0	8.0	-	-	-	-	-	-	-	-	-	-
MW-4	03/07/1994	7.37	5.01	2.36	0.00	0.00	-	-	2,600	-	2,200	290	18	2.5	11	22,000	-	-	-	-	-	-	-	-	-
MW-4	06/17/1994	7.37	5.82	1.55	0.00	0.00	-	-	2,800	-	2,100	480	11	4.3	9.5	-	-	-	-	-	-	-	-	-	-
MW-4	09/12/1994	7.37	5.64	1.73	0.00	0.00	-	-	3,000	-	1,700	340	6.1	2.7	9.7	63,000	-	-	-	-	-	-	-	-	-

**Table 4**  
**Cumulative Groundwater Monitoring and Sampling Data**  
**Former Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				MTBE by SW8260	ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X		Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids	
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-4	11/30/1994 <sup>26</sup>	7.37	5.58	1.79	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	03/24/1995	7.37	4.95	2.42	0.00	0.00	-	-	3,000 <sup>2</sup>	-	1,500	280	<5.0	<5.0	6.9	12,000	-	-	-	-	-	-	-
MW-4	06/27/1995	7.37	8.79	-1.42	0.00	0.00	-	-	3,100 <sup>2</sup>	-	<10,000	310	<100	<100	<100	32,000	-	-	-	-	-	-	-
MW-4	09/28/1995	7.37	5.85	1.52	0.00	0.00	-	-	6,300 <sup>2</sup>	-	330	64	1.1	<0.5	<0.5	630	-	-	-	-	-	-	-
MW-4	12/19/1995	7.37	5.50	1.87	0.00	0.00	-	-	3,400 <sup>2</sup>	-	3,000	520	<25	<25	<25	44,000	-	-	-	-	-	-	-
MW-4	02/28/1996	7.37	5.10	2.27	0.00	0.00	-	-	4,700 <sup>2</sup>	-	<10,000	230	<100	<100	<100	32,000	-	-	-	-	-	-	-
MW-4	06/25/1996	7.37	5.78	1.59	0.00	0.00	-	-	3,100	-	<10,000	160	<100	<100	<100	31,000	-	-	-	-	-	-	-
MW-4	12/17/1996	7.37	5.95	1.42	0.00	0.00	-	-	3,600 <sup>3</sup>	-	<5,000	110	<50	<50	<50	22,000	-	-	-	-	-	-	-
MW-4	03/31/1997	7.37	5.62	1.75	0.00	0.00	-	-	2,700 <sup>2</sup>	-	<2,500	130	<25	<25	<25	16,000	-	-	-	-	-	-	-
MW-4	06/30/1997	7.37	6.03	1.34	0.00	0.00	-	-	2,700 <sup>2</sup>	-	<2,500	130	<25	<25	<25	14,000	-	-	-	-	-	-	-
MW-4	09/12/1997	7.37	5.69	1.68	0.00	0.00	-	-	2,100 <sup>2</sup>	-	<5,000	63	<50	<50	<50	15,000	-	-	-	-	-	-	-
MW-4	12/05/1997	7.37	5.15	2.22	0.00	0.00	-	-	2,600 <sup>2</sup>	-	1,300	120	<5.0	<5.0	8.5	15,000	-	-	-	-	-	-	-
MW-4	02/16/1998	7.37	6.26	1.11	0.00	0.00	-	-	1,300 <sup>2</sup>	-	1,200	57	4.5	<2.5	7.0	12,000	-	-	-	-	-	-	-
MW-4	06/17/1998	7.37	4.96	2.41	0.00	0.00	-	-	530 <sup>2</sup>	-	5,300	390	290	28	150	17,000	-	-	-	-	-	-	-
MW-4	08/31/1998	7.37	5.91	1.46	0.00	0.00	-	-	2,400 <sup>2</sup>	-	<50	89	<0.5	<0.5	<0.5	14,000/16,000 <sup>4</sup>	-	-	-	-	-	-	-
MW-4	12/28/1998	7.37	5.41	1.96	0.00	0.00	-	-	2,900 <sup>2</sup>	-	1,000	52	5.6	4.6	9.1	8,400	-	3500	<1,000	670000	6800	-	-
MW-4	03/04/1999	7.37	5.20	2.17	0.00	0.00	-	-	4,490 <sup>2</sup>	-	<2,500	85.5	40.9	<25	<25	11,400	-	-	-	-	-	-	-
MW-4A	03/20/1999	7.69	5.62	2.07	0.00	0.00	-	-	1,280 <sup>2</sup>	-	1,370	129	8.6	18.3	7.3	2,110	-	-	-	-	-	-	-
MW-4A	04/19/1999	7.69	4.91	2.78	0.00	0.00	-	-	370 <sup>2</sup>	-	<500	<5.0	<5.0	<5.0	<5.0	1,600	-	-	-	-	-	-	-
MW-4A	06/14/1999	7.69	5.25	2.44	0.00	0.00	-	-	2,500 <sup>2</sup>	-	5,360	312	<20	44	<20	2,880	-	-	-	-	-	-	-
MW-4A	09/17/1999	7.69	7.37	0.32	0.00	0.00	-	-	1,430 <sup>2</sup>	-	1,290	38.6	<5.0	7.01	<5.0	1,780	-	-	-	-	-	-	-
MW-4A	12/20/1999	7.69	6.30	1.39	0.00	0.00	-	-	7,480 <sup>2</sup>	-	852	43.5	4.63	9.18	4.36	1,070	-	-	-	-	-	-	-
MW-4A	06/24/2000	7.69	6.12	1.57	0.00	0.00	-	-	1,190 <sup>9</sup>	-	190 <sup>7</sup>	1.4	1.7	1.7	3.3	3,900 <sup>7</sup>	-	-	-	-	-	-	-
MW-4A	09/07/2000	7.69	6.26	1.43	0.00	0.00	-	-	740 <sup>9</sup>	-	490 <sup>7</sup>	15	1.9	1.1	3.9	3,300	-	-	-	-	-	-	-
MW-4A	12/05/2000	7.69	5.99	1.70	0.00	0.00	-	-	560 <sup>12</sup>	-	<500	<5.00	<5.00	<5.00	<5.00	3,380 <sup>8</sup>	-	-	-	-	-	-	-
MW-4A	03/01/2001	7.69	5.68	2.01	0.00	0.00	-	-	600 <sup>9</sup>	-	<1,000	10	<10	<10	<10	4,600	-	-	-	-	-	-	-
MW-4A	06/04/2001	7.69	6.60	1.09	0.00	0.00	-	-	770 <sup>9</sup>	-	390 <sup>15</sup>	8.4	3.8	<2.5	3.0	3,800	-	-	-	-	-	-	-
MW-4A	09/10/2001	7.69	6.57	1.12	0.00	0.00	-	-	810	-	<500	13	<5.0	22	<5.0	4,900	-	-	-	-	-	-	-
MW-4A	12/03/2001	7.69	5.95	1.74	0.00	0.00	-	-	2,100	-	<250	1.5	<1.0	<1.0	<3.0	3,800	-	-	-	-	-	-	-
MW-4A	03/04/2002	7.69	8.88	-1.19	0.00	0.00	-	-	2,400	-	2,500	49	6.8	21	9.5	2,600	-	-	-	-	-	-	-
MW-4A	05/30/2002	7.69	6.20	1.49	0.00	0.00	-	-	2,600	-	430	4.6	<1.0	2.0	<3.0	3,700	-	-	-	-	-	-	-
MW-4A	09/03/2002	7.69	6.49	1.20	0.00	0.00	-	-	3,200	-	<500	4.5	<2.0	3.5	7.5	3,800	-	-	-	-	-	-	-

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**Cumulative Groundwater Monitoring and Sampling Data**  
**Former Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				MTBE by SW8260	ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X			Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-4A	12/09/2002	7.69	6.26	1.43	0.00	0.00	-	-	1,600	-	440	1.1	<0.50	0.71	<5.0	4,000	-	-	-	-	-	-	-
MW-4A	03/10/2003	7.69	5.83	1.86	0.00	0.00	-	-	1,700	-	710	14	2.2	4.2	<10	4,100	-	-	-	-	-	-	-
MW-4A	06/09/2003 <sup>18</sup>	7.69	6.44	1.25	0.00	0.00	-	-	3,200	-	400	3	<1	2	<1	4,100	-	-	-	-	-	-	-
MW-4A	09/08/2003 <sup>18</sup>	7.69	5.86	1.83	0.00	0.00	-	-	3,900	-	1,300	28	4	4	<3	2,900	<250	-	-	-	-	-	-
MW-4A	12/08/2003 <sup>18</sup>	7.69	6.12	1.57	0.00	0.00	-	-	2,500	-	360	3	<3	<3	<3	3,200	<250	-	-	-	-	-	-
MW-4A	03/09/2004 <sup>18</sup>	7.69	5.37	2.32	0.00	0.00	-	-	4,300	-	1,400	28	5	10	3	3,200	<250	-	-	-	-	-	-
MW-4A	06/17/2004 <sup>18</sup>	7.69	6.05	1.64	0.00	0.00	-	-	7,900	-	6,000	140	20	52	16	1,500	<50	-	-	-	-	-	-
MW-4A	09/15/2004 <sup>18</sup>	7.69	7.40	0.29	0.00	0.00	-	-	4,200	-	3,300	14	5	4	6	2,400	<100	-	-	-	-	-	-
MW-4A	12/23/2004 <sup>18</sup>	7.69	6.26	1.43	0.00	0.00	-	-	2,800	-	1,500	7	3	4	4	3,000	<100	-	-	-	-	-	-
MW-4A	03/24/2005 <sup>18</sup>	7.69	5.01	2.68	0.00	0.00	-	-	900	-	2,700	28	7	9	4	2,300	<250	-	-	-	-	-	-
MW-4A	06/16/2005 <sup>18</sup>	7.69	6.03	1.66	0.00	0.00	-	-	3,600	-	1,000	3	5	3	6	3,200	<250	-	-	-	-	-	-
MW-4A	09/16/2005 <sup>18</sup>	7.69	6.62	1.07	0.00	0.00	-	-	2,400	-	380	<5	<5	<5	<5	3,700	<500	-	-	-	-	-	-
MW-4A	12/21/2005 <sup>18</sup>	7.69	5.86	1.83	0.00	0.00	-	-	2,900 <sup>23</sup>	-	580	2	0.7	1	2	3,000	<50	-	-	-	-	-	-
MW-4A	03/23/2006 <sup>18</sup>	7.69	5.14	2.55	0.00	0.00	-	-	1,900	-	1,400	16	5	9	<3	2,800	<250	-	-	-	-	-	-
MW-4A	06/09/2006 <sup>18</sup>	7.69	5.93	1.76	0.00	0.00	-	-	3,900	-	1,200	4	2	3	3	3,000	<50	-	-	-	-	-	-
MW-4A	09/05/2006 <sup>18</sup>	7.69	6.62	1.07	0.00	0.00	-	-	3,800	-	650	<5	<5	<5	<5	1,600	<500	-	-	-	-	-	-
MW-4A	12/15/2006 <sup>18</sup>	7.69	6.00	1.69	0.00	0.00	-	-	3,500	-	1,000	2	1	0.8	3	520	<50	-	-	-	-	-	-
MW-4A	03/01/2007 <sup>18</sup>	7.69	5.83	1.86	0.00	0.00	-	-	1,600	-	1,200	11	5	6	5	1,100	<50	-	-	-	-	-	-
MW-4A	06/05/2007 <sup>18</sup>	7.69	5.36	2.33	0.00	0.00	-	-	3,000	-	3,300	34	9	7	8	330	<100	-	-	-	-	-	-
MW-4A	09/05/2007 <sup>18</sup>	7.69	5.72	1.97	0.00	0.00	-	-	3,800	-	1,700	11	4	2	4	130	<50	-	-	-	-	-	-
MW-4A	12/05/2007 <sup>18</sup>	7.69	6.12	1.57	0.00	0.00	-	-	2,100	-	1,300	3	3	1	3	82	<50	-	-	-	-	-	-
MW-4A	03/03/2008 <sup>18</sup>	7.69	5.83	1.86	0.00	0.00	-	-	4,900	-	2,700	13	6	9	7	700	<50	-	-	-	-	-	-
MW-4A	06/02/2008 <sup>18</sup>	7.69	5.69	2.00	0.00	0.00	-	-	6,500	-	6,200	60	17	17	16	1,100	<50	-	-	-	-	-	-
MW-4A	09/04/2008 <sup>18</sup>	7.69	6.23	1.46	0.00	0.00	-	-	3,000	-	1,800	11	2	1	3	58	<50	-	-	-	-	-	-
MW-4A	12/04/2008 <sup>18</sup>	7.69	6.27	1.42	0.00	0.00	-	-	3,800	-	470	<0.5	<0.5	<0.5	<0.5	58	<50	-	-	-	-	-	-
MW-4A	02/26/2009 <sup>18</sup>	7.69	5.46	2.23	0.00	0.00	-	-	4,000	-	1,900	4	3	5	6	140	<50	-	-	-	-	-	-
MW-4A	06/30/2009 <sup>18</sup>	7.69	8.70	-1.01	0.00	0.00	-	-	6,100	-	7,400	33	16	13	17	920	<50	-	-	-	-	-	-
MW-4A	09/29/2009 <sup>18</sup>	7.69	6.60	1.09	0.00	0.00	-	-	4,700	-	250	3	3	1J	6	36	<50	-	-	-	-	-	-
MW-4A	03/10/2010 <sup>18</sup>	7.69	4.67	3.02	0.00	0.00	-	-	3,700	-	5,100	22	11	12	12	690	<50	-	-	-	-	-	-
MW-4A	09/15/2010	7.69	7.07	0.62	0.00	0.00	-	-	5,700	-	3,500	6	2	3	10	18	<50	-	-	-	-	-	-
MW-4A	03/14/2011	7.69	4.90	2.79	0.00	0.00	590	-	2,800	-	6,200	24	12	14	14	870	<50	-	-	-	-	-	-
MW-4A	09/26/2011	7.69	6.51	1.18	0.00	0.00	-	<39	-	1,000	5,000	9	3	2	10	43	<50	-	-	-	-	-	-
MW-4A	03/30/2012	7.69	4.43	3.26	0.00	0.00	-	<38	-	430	1,300	5	2	2	3	130	<50	-	-	-	-	-	-

**Table 4**  
**Cumulative Groundwater Monitoring and Sampling Data**  
**Former Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				MTBE by SW8260	ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X			Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-4A	09/22/2012	7.69	6.53	1.16	0.00	0.00	-	<38	-	210	990	2	<0.5	<0.5	0.7 J	51	<50	-	-	-	-	-	-
MW-4A	03/20/2013	7.69	5.73	1.96	0.00	0.00	-	<38	-	78 J	410	2	0.8 J	0.7 J	0.7 J	120	<50	-	-	-	-	-	-
MW-4A	09/25/2013	7.69	6.62	1.07	0.00	0.00	-	-	4,500	-	1,900	0.7 J	<0.5	<0.5	3	16	<50	-	-	-	-	-	-
MW-4A	03/28/2014	7.69	5.07	2.62	0.00	0.00	-	-	5,200	-	770	4	2	2	2	230	<50	-	-	-	-	-	-
MW-4A	09/25/2014	7.69	6.61	1.08	0.00	0.00	-	-	-	420	2,500	2	1	2	4	35	<50	-	-	-	-	-	-
MW-4A	03/05/2015	7.69	5.50	2.19	0.00	0.00	-	-	6,200	-	1,400	3	1	2	2	130	<50	-	-	-	-	-	-
MW-4A	09/25/2015	7.69	6.73	0.96	0.00	0.00	-	-	5,200	-	1,600	<0.5	<0.5	<0.5	0.6 J	9	<50	-	-	-	-	-	-
MW-4A	03/18/2016	7.69	3.29	4.40	0.00	0.00	-	-	-	<110	72 J	<1	<1	<1	<1	4	<250	-	-	-	-	-	-
<b>MW-4A</b>	<b>09/27/2016</b>	<b>7.69</b>	<b>6.60</b>	<b>1.09</b>	<b>0.00</b>	<b>0.00</b>	-	-	<b>3,300</b>	-	<b>&lt;1,000</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>8</b>	<b>&lt;250</b>	-	-	-	-	-	-
MW-5	06/23/1992	14.14	12.24	1.90	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-5	08/24/1992	14.14	12.29	1.85	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/21/1992	14.14	12.46	1.68	0.00	0.00	-	-	60	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-5	10/26/1992	14.14	12.52	1.62	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	12/23/1992	14.14	11.12	3.02	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	01/08/1993	14.14	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	03/25/1993	14.14	9.74	4.40	0.00	0.00	-	-	<10	-	<50	<0.5	<0.5	<0.5	0.9	-	-	-	-	-	-	-	-
MW-5	06/11/1993	14.14	10.44	3.70	0.00	0.00	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	770
MW-5	09/29/1993	14.14	11.92	2.22	0.00	0.00	-	-	<10	-	<50	<0.5	0.6	<0.5	0.6	-	-	-	-	-	-	-	-
MW-5	12/20/1993	14.14	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	03/07/1994	14.14	11.34	2.80	0.00	0.00	-	-	<10	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-5	06/17/1994	14.14	11.27	2.87	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-5	09/12/1994	14.14	12.86	1.28	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	-	-	-	-	-	-
MW-5	11/30/1994	14.14	11.91	2.23	0.00	0.00	-	-	99 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-5	03/24/1995	14.14	9.76	4.38	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-5	06/27/1995	14.14	11.40	2.74	0.00	0.00	-	-	55 <sup>3</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-5	09/28/1995	14.14	11.90	2.24	0.00	0.00	-	-	300 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-5	12/19/1995	14.14	12.58	1.56	0.00	0.00	-	-	53 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	3.1	-	-	-	-	-	-	-
MW-5	02/28/1996	14.14	11.70	2.44	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
MW-5	06/25/1996	14.14	11.43	2.71	0.00	0.00	-	-	120 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	36	-	-	-	-	-	-	-
MW-5	12/17/1996	14.14	11.40	2.74	0.00	0.00	-	-	89 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
MW-5	03/31/1997	14.14	12.10	2.04	0.00	0.00	-	-	150 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
MW-5	06/30/1997 <sup>25</sup>	14.14	12.78	1.36	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**Table 4**  
**Cumulative Groundwater Monitoring and Sampling Data**  
**Former Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS					ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X	MTBE by SW8260		Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-5	09/12/1997	14.14	13.68	0.46	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
MW-5	12/05/1997	14.14	13.03	1.11	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	02/16/1998	14.14	9.97	4.17	0.00	0.00	-	-	62 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
MW-5	06/17/1998	14.14	11.85	2.29	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	08/31/1998	14.14	12.82	1.32	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
MW-5	12/28/1998	14.14	13.43	0.71	0.00	0.00	-	-	-	-	-	-	-	-	-	-	15	<1,000	480000	51000	-	-	-
MW-5	03/04/1999	14.14	13.75	0.39	0.00	0.00	-	-	70.5	-	<50	<0.5	<0.5	<0.5	<0.5	3.34	-	-	-	-	-	-	-
MW-5	06/14/1999	14.14	14.10	0.04	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/17/1999	14.14	14.18	-0.04	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
MW-5	12/20/1999	14.14	13.70	0.44	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	03/20/2000	14.14	12.64	1.50	0.00	0.00	-	-	115 <sup>3</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
MW-5	06/24/2000	14.14	13.04	1.10	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/07/2000	14.14	13.17	0.97	0.00	0.00	-	-	<50	-	<50	<0.50	<0.50	<0.50	<0.50	5.0	-	-	-	-	-	-	-
MW-5	12/05/2000	14.14	11.28	2.86	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	03/01/2001	14.14	10.30	3.84	0.00	0.00	-	-	<50	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5	-	-	-	-	-	-	-
MW-5	06/04/2001 <sup>25</sup>	14.14	11.31	2.83	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/10/2001	14.14	12.16	1.98	0.00	0.00	-	-	<50	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5	-	-	-	-	-	-	-
MW-5	12/03/2001 <sup>25</sup>	14.14	8.62	5.52	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	03/04/2002	14.14	9.85	4.29	0.00	0.00	-	-	78	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5	-	-	-	-	-	-	-
MW-5	05/30/2002 <sup>25</sup>	14.14	10.83	3.31	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/03/2002 <sup>26</sup>	14.14	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	12/09/2002 <sup>25</sup>	14.14	11.36	2.78	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	03/10/2003	14.14	11.19	2.95	0.00	0.00	-	-	100	-	<50	<0.50	<0.50	<0.50	<1.5	8.2	-	-	-	-	-	-	-
MW-5	06/09/2003 <sup>25</sup>	14.14	12.57	1.57	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/08/2003 <sup>18</sup>	14.14	12.01	2.13	0.00	0.00	-	-	65	-	<50	<0.5	<0.5	<0.5	<0.5	8	<50	-	-	-	-	-	-
MW-5	12/08/2003 <sup>25</sup>	14.14	11.13	3.01	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	03/09/2004 <sup>18</sup>	14.14	10.58	3.56	0.00	0.00	-	-	110	-	<50	<0.5	<0.5	<0.5	<0.5	4	<50	-	-	-	-	-	-
MW-5	06/17/2004 <sup>25</sup>	14.14	12.10	2.04	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/15/2004 <sup>18</sup>	14.14	12.58	1.56	0.00	0.00	-	-	92	-	<50	<0.5	<0.5	<0.5	<0.5	7	<50	-	-	-	-	-	-
MW-5	12/23/2004 <sup>25</sup>	14.14	12.20	1.94	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	03/24/2005 <sup>18</sup>	14.14	7.70	6.44	0.00	0.00	-	-	85	-	<50	<0.5	<0.5	<0.5	3	6	<50	-	-	-	-	-	-
MW-5	06/16/2005 <sup>25</sup>	14.14	11.55	2.59	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/16/2005 <sup>18</sup>	14.14	11.78	2.36	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	6	<50	-	-	-	-	-	-

**Table 4**  
**Cumulative Groundwater Monitoring and Sampling Data**  
**Former Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				MTBE by SW8260	ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X			Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-5	12/21/2005 <sup>25</sup>	14.14	9.70	4.44	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	03/23/2006 <sup>18</sup>	14.14	9.20	4.94	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	4	<50	-	-	-	-	-	-
MW-5	06/09/2006 <sup>25</sup>	14.14	10.67	3.47	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/05/2006 <sup>18</sup>	14.14	11.80	2.34	0.00	0.00	-	-	120	-	<50	<0.5	<0.5	<0.5	<0.5	4	<50	-	-	-	-	-	-
MW-5	12/15/2006 <sup>25</sup>	14.14	11.50	2.64	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	03/01/2007 <sup>18</sup>	14.14	9.22	4.92	0.00	0.00	-	-	150	-	<50	1	3	0.7	3	2	<50	-	-	-	-	-	-
MW-5	06/05/2007 <sup>25</sup>	14.14	11.02	3.12	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/05/2007 <sup>18</sup>	14.14	12.50	1.64	0.00	0.00	-	-	68	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
MW-5	12/05/2007 <sup>25</sup>	14.14	10.65	3.49	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	03/03/2008 <sup>18</sup>	14.14	10.51	3.63	0.00	0.00	-	-	89	-	<50	<0.5	<0.5	<0.5	<0.5	1	<50	-	-	-	-	-	-
MW-5	06/02/2008 <sup>25</sup>	14.14	12.57	1.57	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/04/2008 <sup>18</sup>	14.14	12.48	1.66	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	2	<50	-	-	-	-	-	-
MW-5	12/04/2008 <sup>25</sup>	14.14	12.10	2.04	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	02/26/2009 <sup>18</sup>	14.14	10.35	3.79	0.00	0.00	-	-	320	-	<50	<0.5	<0.5	<0.5	<0.5	1	<50	-	-	-	-	-	-
MW-5	06/30/2009 <sup>18</sup>	14.14	10.93	3.21	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/29/2009 <sup>18,25</sup>	14.14	12.27	1.87	0.00	0.00	-	-	270	-	<500	<0.5	<0.5	<0.5	<0.5	2	<50	-	-	-	-	-	-
MW-5	03/10/2010 <sup>18</sup>	14.14	10.21	3.93	0.00	0.00	-	-	540	-	<50	<0.5	<0.5	<0.5	<0.5	1	<50	-	-	-	-	-	-
MW-5	09/15/2010	14.14	11.25	2.89	0.00	0.00	-	-	<32	-	<50	<0.5	<0.5	<0.5	<0.5	1	<50	-	-	-	-	-	-
MW-5	03/14/2011	14.14	10.30	3.84	0.00	0.00	<38	-	<33	-	<50	<0.5	<0.5	<0.5	<0.5	1	<50	-	-	-	-	-	-
MW-5	09/26/2011	14.14	10.34	3.80	0.00	0.00	-	<39	-	<50	<50	<0.5	<0.5	<0.5	<0.5	1	<50	-	-	-	-	-	-
MW-5	03/30/2012	14.14	10.91	3.23	0.00	0.00	-	48 J	-	<50	<50	<0.5	<0.5	<0.5	<0.5	1 J	<50	-	-	-	-	-	-
MW-5	09/21/2012	14.14	12.48	1.66	0.00	0.00	-	<38	-	<50	<50	<0.5	<0.5	<0.5	<0.5	1	<50	-	-	-	-	-	-
MW-5	03/19/2013	14.14	10.97	3.17	0.00	0.00	-	<38	-	<50	<50	<0.5	<0.5	<0.5	<0.5	0.9 J	<50	-	-	-	-	-	-
MW-5	09/25/2013	14.14	12.46	1.68	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	0.7 J	<50	-	-	-	-	-	-
MW-5	03/28/2014	14.14	10.32	3.82	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
MW-5	09/25/2014	14.14	12.50	1.64	0.00	0.00	-	-	-	<50	<50	<0.5	<0.5	<0.5	<0.5	0.6 J	<50	-	-	-	-	-	-
MW-5	03/05/2015	14.14	11.41	2.73	0.00	0.00	-	-	530	-	<50	<0.5	<0.5	<0.5	<0.5	0.5 J	<50	-	-	-	-	-	-
MW-5	09/25/2015	14.14	12.49	1.65	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	0.6 J	<50	-	-	-	-	-	-
MW-5	03/18/2016	14.14	9.84	4.30	0.00	0.00	-	-	-	<110	<100	<1	<1	<1	<1	<1	<250	-	-	-	-	-	-
<b>MW-5</b>	<b>09/27/2016</b>	<b>14.14</b>	<b>12.74</b>	<b>1.40</b>	<b>0.00</b>	<b>0.00</b>	-	-	<b>&lt;100</b>	-	<b>&lt;100</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;250</b>	-	-	-	-	-	-
MW-6	06/23/1992	4.46	5.14	-0.68	0.00	0.00	-	-	120	-	<50	4.3	<0.5	0.8	0.9	-	-	-	-	-	-	-	-
MW-6	08/24/1992	4.46	4.95	-0.49	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				MTBE by SW8260	ADDITIONAL VOCS	GENERAL CHEMISTRY						
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X		Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids		
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
MW-6	09/21/1992	4.46	4.90	-0.44	0.00	0.00	-	-	<50	-	<250	<2.5	<2.5	<2.5	<2.5	-	-	-	-	-	-	-	-	-
MW-6	10/26/1992	4.46	5.52	-1.06	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	12/23/1992	4.46	5.40	-0.94	0.00	0.00	-	-	81	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-6	01/08/1993	4.46	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	03/25/1993	4.46	6.10	-1.64	0.00	0.00	-	-	<10	-	<50	<0.5	<0.5	<0.5	0.7	-	-	-	-	-	-	-	-	-
MW-6	06/11/1993	4.46	6.56	-2.10	0.00	0.00	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	15,000
MW-6	09/29/1993	4.46	5.17	-0.71	0.00	0.00	-	-	<10	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-6	12/20/1993	4.46	5.93	-1.47	0.00	0.00	-	-	<10	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-6	03/07/1994	4.46	5.27	-0.81	0.00	0.00	-	-	<10	-	54	<0.5	<0.5	<0.5	0.6	-	-	-	-	-	-	-	-	-
MW-6	06/17/1994	4.46	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/12/1994	4.46	5.10	-0.64	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-	-	-
MW-6	11/30/1994	4.46	5.58	-1.12	0.00	0.00	-	-	800 <sup>1</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-6	03/24/1995	4.46	6.33	-1.87	0.00	0.00	-	-	490 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-6	06/27/1995	4.46	8.20	-3.74	0.00	0.00	-	-	300 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-6	09/28/1995	4.46	4.65	-0.19	0.00	0.00	-	-	1,200 <sup>2</sup>	-	120	1.1	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-6	12/19/1995	4.46	6.04	-1.58	0.00	0.00	-	-	820 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-
MW-6	02/28/1996	4.46	6.00	-1.54	0.00	0.00	-	-	270 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-
MW-6	06/25/1996	4.46	6.17	-1.71	0.00	0.00	-	-	750 <sup>2</sup>	-	97	<0.5	<0.5	<0.5	0.71	<2.5	-	-	-	-	-	-	-	-
MW-6	12/17/1996	4.46	6.13	-1.67	0.00	0.00	-	-	540 <sup>2</sup>	-	65	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-
MW-6	03/31/1997	4.46	6.69	-2.23	0.00	0.00	-	-	780 <sup>2</sup>	-	65	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-
MW-6	06/30/1997 <sup>25</sup>	4.46	7.08	-2.62	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/12/1997	4.46	5.41	-0.95	0.00	0.00	-	-	270 <sup>2</sup>	-	65	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-
MW-6	12/05/1997	4.46	6.42	-1.96	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	02/16/1998	4.46	4.76	-0.30	0.00	0.00	-	-	3302	-	140	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-
MW-6	06/17/1998	4.46	6.00	-1.54	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	08/31/1998	4.46	5.10	-0.64	0.00	0.00	-	-	2701	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-
MW-6	12/28/1998	4.46	6.50	-2.04	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	03/04/1999	4.46	5.81	-1.35	0.00	0.00	-	-	638 <sup>1</sup>	-	95.5	<0.5	<0.5	<0.5	<0.5	<2.0	-	-	810	<1,000	2400000	110000	-	-
MW-6	06/14/1999	4.46	5.43	-0.97	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/17/1999	4.46	6.20	-1.74	0.00	0.00	-	-	258 <sup>1</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-
MW-6	12/20/1999	4.46	6.77	-2.31	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	03/20/2000	4.46	6.58	-2.12	0.00	0.00	-	-	257 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-
MW-6	06/24/2000 <sup>25</sup>	4.46	6.98	-2.52	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS					ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X	MTBE by SW8260		Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-6	09/07/2000	4.46	4.92	-0.46	0.00	0.00	-	-	98 <sup>11</sup>	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5	-	-	-	-	-	-	-
MW-6	12/05/2000	4.46	5.10	-0.64	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	03/01/2001	4.46	4.89	-0.43	0.00	0.00	-	-	190 <sup>9</sup>	-	<50	<0.50	<0.50	<0.50	<2.5	-	-	-	-	-	-	-	-
MW-6	06/04/2001 <sup>25</sup>	4.46	5.21	-0.75	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/10/2001	4.46	5.11	-0.65	0.00	0.00	-	-	140 <sup>17</sup>	-	<50	<0.50	<0.50	<0.50	<2.5	-	-	-	-	-	-	-	-
MW-6	12/03/2001 <sup>25</sup>	4.46	5.03	-0.57	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	03/04/2002 <sup>26</sup>	4.46	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	05/30/2002 <sup>25</sup>	4.46	6.11	-1.65	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/03/2002	4.46	5.28	-0.82	0.00	0.00	-	-	340	-	<500	<2.0	<2.0	<2.0	<6.0	<3.0	-	-	-	-	-	-	-
MW-6	12/09/2002 <sup>25</sup>	4.46	5.12	-0.66	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	03/10/2003	4.46	6.26	-1.80	0.00	0.00	-	-	420	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5	-	-	-	-	-	-	-
MW-6	06/09/2003 <sup>25</sup>	4.46	5.91	-1.45	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/08/2003 <sup>18</sup>	4.46	4.65	-0.19	0.00	0.00	-	-	230	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
MW-6	12/08/2003 <sup>25</sup>	4.46	5.24	-0.78	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	03/09/2004 <sup>18</sup>	4.46	5.85	-1.39	0.00	0.00	-	-	1,500	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
MW-6	06/17/2004 <sup>25</sup>	4.46	6.08	-1.62	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/15/2004 <sup>18</sup>	4.46	6.74	-2.28	0.00	0.00	-	-	1,200	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
MW-6	12/23/2004 <sup>25</sup>	4.46	5.76	-1.30	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	03/24/2005 <sup>18</sup>	4.46	4.65	-0.19	0.00	0.00	-	-	290	-	60	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
MW-6	06/16/2005 <sup>25</sup>	4.46	5.50	-1.04	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/16/2005 <sup>18</sup>	4.46	5.09	-0.63	0.00	0.00	-	-	640	-	<50	<3	<3	<3	<3	<3	<250	-	-	-	-	-	-
MW-6	12/21/2005 <sup>25</sup>	4.46	5.00	-0.54	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	03/23/2006 <sup>18</sup>	4.46	4.63	-0.17	0.00	0.00	-	-	1,500	-	50	<3	<3	<3	<3	<3	<250	-	-	-	-	-	-
MW-6	06/09/2006 <sup>25</sup>	4.46	4.95	-0.49	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/05/2006 <sup>18</sup>	4.46	4.85	-0.39	0.00	0.00	-	-	820	-	<250	<3	<3	<3	<3	<3	<250	-	-	-	-	-	-
MW-6	12/15/2006 <sup>25</sup>	4.46	5.40	-0.94	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	03/01/2007 <sup>18</sup>	4.46	5.42	-0.96	0.00	0.00	-	-	1,600	-	<250	0.9	3	0.7	4	<0.5	<50	-	-	-	-	-	-
MW-6	06/05/2007 <sup>25</sup>	4.46	5.87	-1.41	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/05/2007 <sup>18</sup>	4.46	4.75	-0.29	0.00	0.00	-	-	850	-	58	<5	<5	<5	<5	<5	<500	-	-	-	-	-	-
MW-6	12/05/2007 <sup>25</sup>	4.46	5.58	-1.12	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	03/03/2008 <sup>18</sup>	4.46	5.86	-1.40	0.00	0.00	-	-	1,800	-	82	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
MW-6	06/02/2008 <sup>25</sup>	4.46	5.24	-0.78	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/04/2008 <sup>18</sup>	4.46	4.71	-0.25	0.00	0.00	-	-	770	-	<50	<5 <sup>24</sup>	<5 <sup>24</sup>	<5 <sup>24</sup>	<5 <sup>24</sup>	<5 <sup>24</sup>	<500	-	-	-	-	-	-

**Table 4**  
**Cumulative Groundwater Monitoring and Sampling Data**  
**Former Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS					ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X	MTBE by SW8260		Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-6	12/04/2008 <sup>25</sup>	4.46	4.80	-0.34	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	02/26/2009 <sup>18,26</sup>	4.46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	06/30/2009 <sup>18</sup>	4.46	5.29	-0.83	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/29/2009 <sup>18,24</sup>	4.46	4.82	-0.36	0.00	0.00	-	-	1,500	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
MW-6	03/10/2010 <sup>18</sup>	4.46	2.91	1.55	0.00	0.00	-	-	2,500	-	120	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
MW-6	09/15/2010	4.46	5.00	-0.54	0.00	0.00	-	-	1,300	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
MW-6	03/14/2011	4.46	7.15	-2.69	0.00	0.00	72 J	-	710	-	89 J	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
MW-6	09/26/2011	4.46	4.79	-0.33	0.00	0.00	-	<38	-	<50	<50	<1	<1	<1	<1	<1	<100	-	-	-	-	-	-
MW-6	03/30/2012	4.46	6.87	-2.41	0.00	0.00	-	<38	-	<50	<50	<5	<5	<5	<5	<5	<500	-	-	-	-	-	-
MW-6	09/22/2012	4.46	6.88	-2.42	0.00	0.00	-	<38	-	<50	<250	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
MW-6	03/19/2013	4.46	7.41	-2.95	0.00	0.00	-	<38	-	<50	62 J	<3	<3	<3	<3	<3	<250	-	-	-	-	-	-
MW-6	09/25/2013	4.46	5.25	-0.79	0.00	0.00	-	-	1,600	-	70 J	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
MW-6	03/28/2014	4.46	7.00	-2.54	0.00	0.00	-	-	1,500	-	69 J	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
MW-6	09/25/2014	4.46	5.09	-0.63	0.00	0.00	-	-	-	<50	<250	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
MW-6	03/05/2015	4.46	6.43	-1.97	0.00	0.00	-	-	1,300	-	70 J	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
MW-6	09/25/2015	4.46	4.99	-0.53	0.00	0.00	-	-	1,000	-	<500	<5	<5	<5	<5	<5	<500	-	-	-	-	-	-
MW-6	03/18/2016	4.46	5.81	-1.35	0.00	0.00	-	-	-	<110	<1,000	<5	<5	<5	<5	<5	<1,300	-	-	-	-	-	-
<b>MW-6</b>	<b>09/27/2016</b>	<b>4.46</b>	<b>5.10</b>	<b>-0.64</b>	<b>0.00</b>	<b>0.00</b>	-	-	<b>1,500</b>	-	<b>&lt;1,000</b>	<b>&lt;10</b>	<b>&lt;10</b>	<b>&lt;10</b>	<b>&lt;10</b>	<b>&lt;10</b>	<b>&lt;2,500</b>	-	-	-	-	-	-
MW-7	08/24/1992	5.26	5.55	-0.29	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	09/21/1992	5.26	5.65	-0.39	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-7	10/26/1992	5.26	5.51	-0.25	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	12/23/1992	5.26	3.95	1.31	0.00	0.00	-	-	60	-	<50	2.9	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-7	01/08/1993	5.26	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	03/25/1993	5.26	2.50	2.76	0.00	0.00	-	-	<10	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-7	06/11/1993	5.26	3.46	1.80	0.00	0.00	-	-	-	-	<50	0.6	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	2,200
MW-7	09/29/1993	5.26	5.52	-0.26	0.00	0.00	-	-	<10	-	<50	2.0	1.0	1.0	7.0	-	-	-	-	-	-	-	-
MW-7	12/20/1993	5.26	4.41	0.85	0.00	0.00	-	-	<10	-	<50	2.0	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-7	03/07/1994	5.26	2.62	2.64	0.00	0.00	-	-	<10	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-7	06/17/1994	5.26	3.27	1.99	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-7	09/12/1994	5.26	4.11	1.15	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-	-	-	-	-	-	-
MW-7	11/30/1994	5.26	2.76	2.50	0.00	0.00	-	-	92 <sup>1</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-7	03/24/1995	5.26	2.20	3.06	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-

**Table 4**  
**Cumulative Groundwater Monitoring and Sampling Data**  
**Former Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS					ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X	MTBE by SW8260		Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-7	06/27/1995	5.26	3.90	1.36	0.00	0.00	-	-	69 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-7	09/28/1995	5.26	4.85	0.41	0.00	0.00	-	-	84 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-7	12/19/1995	5.26	3.02	2.24	0.00	0.00	-	-	84 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
MW-7	02/28/1996	5.26	1.43	3.83	0.00	0.00	-	-	99 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
MW-7	06/25/1996	5.26	4.29	0.97	0.00	0.00	-	-	110 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
MW-7	12/17/1996	5.26	2.18	3.08	0.00	0.00	-	-	54 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
MW-7	03/31/1997	5.26	2.94	2.32	0.00	0.00	-	-	100 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
MW-7	06/30/1997 <sup>27</sup>	5.26	3.58	1.68	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	09/12/1997	5.26	3.41	1.85	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	12/05/1997	5.26	1.89	3.37	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	02/16/1998	5.26	1.83	3.43	0.00	0.00	-	-	77 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
MW-7	06/17/1998	5.26	1.94	3.32	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	08/31/1998	5.26	4.19	1.07	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	12/28/1998	5.26	4.47	0.79	0.00	0.00	-	-	-	-	-	-	-	-	-	-	12000	<1,000	350000	79000	-	-	-
MW-7	03/04/1999	5.26	1.75	3.51	0.00	0.00	-	-	73.4	-	<50	<0.5	<0.5	<0.5	<0.5	<2.0	-	-	-	-	-	-	-
MW-7	06/14/1999	5.26	1.62	3.64	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	09/17/1999	5.26	4.84	0.42	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	12/20/1999	5.26	4.81	0.45	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	03/20/2000	5.26	1.85	3.41	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
MW-7	06/24/2000	5.26	2.21	3.05	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	09/07/2000	5.26	3.65	1.61	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	12/05/2000	5.26	2.95	2.31	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	03/01/2001	5.26	0.65	4.61	0.00	0.00	-	-	<50	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5	-	-	-	-	-	-	-
MW-7	06/04/2001	5.26	1.52	3.74	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	09/10/2001 <sup>27</sup>	5.26	4.18	1.08	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	12/03/2001 <sup>27</sup>	5.26	1.06	4.20	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	03/04/2002	5.26	1.50	3.76	0.00	0.00	-	-	<50	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5	-	-	-	-	-	-	-
MW-7	05/30/2002 <sup>27</sup>	5.26	2.75	2.51	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	09/03/2002 <sup>27</sup>	5.26	3.02	2.24	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	12/09/2002 <sup>27</sup>	5.26	2.85	2.41	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	03/10/2003	5.26	1.94	3.32	0.00	0.00	-	-	85	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5	-	-	-	-	-	-	-
MW-7	06/09/2003 <sup>27</sup>	5.26	2.54	2.72	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	09/08/2003 <sup>27</sup>	5.26	2.60	2.66	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**Table 4**  
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**Former Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS					ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X	MTBE by SW8260		Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-7	12/08/2003 <sup>27</sup>	5.26	2.45	2.81	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	03/09/2004 <sup>18</sup>	5.26	0.73	4.53	0.00	0.00	-	-	230	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
MW-7	06/17/2004 <sup>26</sup>	5.26	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	09/15/2004 <sup>26</sup>	5.26	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	12/23/2004 <sup>28</sup>	5.26	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	03/24/2005 <sup>28</sup>	5.26	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	06/16/2005 <sup>28</sup>	5.26	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	09/16/2005 <sup>28</sup>	5.26	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	12/21/2005 <sup>28</sup>	5.26	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	03/23/2006 <sup>28</sup>	5.26	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	06/09/2006 <sup>28</sup>	5.26	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	09/05/2006 <sup>28</sup>	5.26	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	12/15/2006 <sup>28</sup>	5.26	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	06/23/1992	8.94	24.14	-15.20	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-8	08/24/1992	8.94	8.60	0.34	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/21/1992	8.94	8.39	0.55	0.00	0.00	-	-	<50	-	94	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-8	10/26/1992	8.94	9.12	-0.18	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	12/23/1992	8.94	8.11	0.83	0.00	0.00	-	-	79	-	<50	0.7	5.0	0.7	2.9	-	-	-	-	-	-	-	-
MW-8	01/08/1993	8.94	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/25/1993	8.94	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	06/11/1993	8.94	8.39	0.55	0.00	0.00	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	3,500
MW-8	09/29/1993	8.94	8.25	0.69	0.00	0.00	-	-	<10	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-8	12/20/1993	8.94	8.46	0.48	0.00	0.00	-	-	<10	-	<50	<0.5	0.6	<0.5	1.0	-	-	-	-	-	-	-	-
MW-8	03/07/1994	8.94	8.66	0.28	0.00	0.00	-	-	<10	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-8	06/17/1994	8.94	8.82	0.12	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-8	09/12/1994	8.94	8.83	0.11	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	0.8	<5.0	-	-	-	-	-	-	-
MW-8	11/30/1994	8.94	8.63	0.31	0.00	0.00	-	-	120 <sup>1</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-8	03/24/1995	8.94	8.51	0.43	0.00	0.00	-	-	110 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-8	06/27/1995	8.94	8.97	-0.03	0.00	0.00	-	-	67 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-8	09/28/1995	8.94	8.90	0.04	0.00	0.00	-	-	91 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-8	12/19/1995	8.94	8.40	0.54	0.00	0.00	-	-	76 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
MW-8	02/28/1996	8.94	8.44	0.50	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-

**Table 4**  
**Cumulative Groundwater Monitoring and Sampling Data**  
**Former Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS					ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X	MTBE by SW8260		Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-8	06/25/1996	8.94	8.89	0.05	0.00	0.00	-	-	80 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
MW-8	12/17/1996	8.94	8.45	0.49	0.00	0.00	-	-	79 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-
MW-8	03/31/1997	8.94	8.76	0.18	0.00	0.00	-	-	72 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	3.6	-	-	-	-	-	-	-
MW-8	06/30/1997	8.94	9.12	-0.18	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/12/1997	8.94	8.81	0.13	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	12/05/1997	8.94	8.35	0.59	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	02/16/1998	8.94	7.94	1.00	0.00	0.00	-	-	68 <sup>2</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	4.3	-	-	-	-	-	-	-
MW-8	06/17/1998	8.94	8.43	0.51	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	08/31/1998	8.94	8.88	0.06	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	12/28/1998	8.94	8.30	0.64	0.00	0.00	-	-	-	-	-	-	-	-	-	-	45	<1,000	1100000	87000	-	-	-
MW-8	03/04/1999	8.94	8.65	0.29	0.00	0.00	-	-	106	-	<50	<0.5	<0.5	<0.5	<0.5	3.83	-	-	-	-	-	-	-
MW-8	06/14/1999	8.94	8.42	0.52	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/17/1999	8.94	9.87	-0.93	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	12/20/1999	8.94	8.40	0.54	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/20/2000	8.94	8.12	0.82	0.00	0.00	-	-	82.2 <sup>6</sup>	-	<50	<0.5	<0.5	<0.5	<0.5	3.46	-	-	-	-	-	-	-
MW-8	06/24/2000 <sup>27</sup>	8.94	8.63	0.31	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/07/2000	8.94	8.68	0.26	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	12/05/2000	8.94	8.13	0.81	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/01/2001	8.94	7.90	1.04	0.00	0.00	-	-	51 <sup>11</sup>	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5	-	-	-	-	-	-	-
MW-8	06/04/2001	8.94	9.21	-0.27	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/10/2001 <sup>27</sup>	8.94	8.68	0.26	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	12/03/2001 <sup>27</sup>	8.94	7.82	1.12	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/04/2002	8.94	7.68	1.26	0.00	0.00	-	-	82	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5	-	-	-	-	-	-	-
MW-8	05/30/2002 <sup>26</sup>	8.94	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/03/2002 <sup>27</sup>	8.94	9.15	-0.21	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	12/09/2002 <sup>27</sup>	8.94	8.73	0.21	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/10/2003	8.94	8.39	0.55	0.00	0.00	-	-	110	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5	-	-	-	-	-	-	-
MW-8	06/09/2003 <sup>27</sup>	8.94	8.97	-0.03	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/08/2003 <sup>27</sup>	8.94	8.42	0.52	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	12/08/2003 <sup>27</sup>	8.94	8.17	0.77	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/09/2004 <sup>18</sup>	8.94	7.91	1.03	0.00	0.00	-	-	300	-	<50	<0.5	<0.5	<0.5	<0.5	3	<50	-	-	-	-	-	-
MW-8	06/17/2004 <sup>27</sup>	8.94	8.93	0.01	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/15/2004 <sup>27</sup>	8.94	9.91	-0.97	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**Table 4**  
**Cumulative Groundwater Monitoring and Sampling Data**  
**Former Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS					ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X	MTBE by SW8260		Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-8	12/23/2004 <sup>27</sup>	8.94	5.74	3.20	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/24/2005 <sup>18</sup>	8.94	8.44	0.50	0.00	0.00	-	-	240	-	<50	<0.5	<0.5	<0.5	<0.5	1	<50	-	-	-	-	-	-
MW-8	06/16/2005 <sup>27</sup>	8.94	8.78	0.16	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/16/2005 <sup>27</sup>	8.94	8.68	0.26	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	12/21/2005 <sup>27</sup>	8.94	8.21	0.73	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/23/2006 <sup>18</sup>	8.94	7.91	1.03	0.00	0.00	-	-	120	-	<50	<0.5	<0.5	<0.5	<0.5	0.8	<50	-	-	-	-	-	-
MW-8	06/09/2006 <sup>27</sup>	8.94	8.91	0.03	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/05/2006 <sup>27</sup>	8.94	8.55	0.39	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	12/15/2006 <sup>27</sup>	8.94	8.26	0.68	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/01/2007 <sup>18</sup>	8.94	8.08	0.86	0.00	0.00	-	-	150	-	63	2	5	1	7	1	<50	-	-	-	-	-	-
MW-8	06/05/2007 <sup>27</sup>	8.94	8.35	0.59	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/05/2007 <sup>27</sup>	8.94	7.21	1.73	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	12/05/2007 <sup>27</sup>	8.94	7.17	1.77	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/03/2008 <sup>18</sup>	8.94	7.13	1.81	0.00	0.00	-	-	510	-	<50	<0.5	<0.5	<0.5	<0.5	0.9	<50	-	-	-	-	-	-
MW-8	06/02/2008 <sup>27</sup>	8.94	7.74	1.20	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/04/2008 <sup>27</sup>	8.94	7.88	1.06	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	12/04/2008 <sup>27</sup>	8.94	7.22	1.72	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	02/26/2009 <sup>18</sup>	8.94	6.44	2.50	0.00	0.00	-	-	580	-	<50	<0.5	<0.5	<0.5	<0.5	2	<50	-	-	-	-	-	-
MW-8	06/30/2009 <sup>27</sup>	8.94	7.62	1.32	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/29/2009 <sup>18,27</sup>	8.94	7.22	1.72	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/10/2010 <sup>18</sup>	8.94	5.18	3.76	0.00	0.00	-	-	460	-	<50	<0.5	<0.5	<0.5	<0.5	2	<50	-	-	-	-	-	-
MW-8	09/15/2010 <sup>27</sup>	8.94	8.77	0.17	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/14/2011 <sup>29</sup>	8.94	7.75	1.19	0.00	0.00	<38	-	<33	-	<50	<0.5	<0.5	<0.5	<0.5	1	<50	-	-	-	-	-	-
MW-8	09/26/2011 <sup>29</sup>	8.94	8.52	0.42	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/30/2012	8.94	7.56	1.38	0.00	0.00	-	<38	-	<50	<50	<0.5	<0.5	<0.5	<0.5	1	<50	-	-	-	-	-	-
MW-8	09/22/2012 <sup>29</sup>	8.94	8.55	0.39	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/19/2013	8.94	8.01	0.93	0.00	0.00	-	<38	-	<50	<50	<0.5	<0.5	<0.5	<0.5	0.7 J	<50	-	-	-	-	-	-
MW-8	09/25/2013	8.94	8.60	0.34	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
MW-8	03/28/2014	8.94	7.49	1.45	0.00	0.00	-	-	<50	-	<50	<0.5	<0.5	<0.5	<0.5	0.6 J	<50	-	-	-	-	-	-
MW-8	09/25/2014 <sup>29</sup>	8.94	8.39	0.55	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/05/2015	8.94	7.70	1.24	0.00	0.00	-	-	230	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
MW-8	09/25/2015	8.94	8.65	0.29	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/18/2016	8.94	6.18	2.76	0.00	0.00	-	-	-	<110	<100	<1	<1	<1	<1	<1	<250	-	-	-	-	-	-

**Table 4**  
**Cumulative Groundwater Monitoring and Sampling Data**  
**Former Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS					ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X	MTBE by SW8260		Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
<b>MW-8</b>	<b>09/27/2016</b>	<b>8.94</b>	<b>8.79</b>	<b>0.15</b>	<b>0.00</b>	<b>0.00</b>	-	-	<100	-	<100	<1	<1	<1	<1	<b>0.5 J</b>	<b>&lt;250</b>	-	-	-	-	-	-
MW-9	04/19/1999	5.87	3.16	2.71	0.00	0.00	-	-	2,600 <sup>2</sup>	-	3,900 <sup>6</sup>	14	6.9	14	24	140	-	-	-	-	-	-	-
MW-9	06/14/1999	5.87	4.81	1.06	0.00	0.00	-	-	2,800 <sup>2</sup>	-	2,880	12.6	<10	<10	<10	138	-	-	-	-	-	-	-
MW-9	09/17/1999	5.87	4.85	1.02	0.00	0.00	-	-	1,770 <sup>2</sup>	-	3,370	33.1	14.4	<5.0	<5.0	202	-	-	-	-	-	-	-
MW-9	12/20/1999	5.87	4.00	1.87	0.00	0.00	-	-	996 <sup>2</sup>	-	3,970	42.2	13.5	<10	<10	311	-	-	-	-	-	-	-
MW-9	03/20/2000	5.87	3.00	2.87	0.00	0.00	-	-	2,710 <sup>2</sup>	-	5,920	22.1	<5.0	6.8	<5.0	106.0	-	-	-	-	-	-	-
MW-9	06/24/2000	5.87	3.91	1.96	0.00	0.00	-	-	1,940 <sup>9</sup>	-	2,500 <sup>7</sup>	12	<10	11	<10	120	-	-	-	-	-	-	-
MW-9	09/07/2000	5.87	4.28	1.59	0.00	0.00	-	-	1,500 <sup>9</sup>	-	3,700 <sup>7</sup>	<25	<25	<25	<25	330	-	-	-	-	-	-	-
MW-9	12/05/2000	5.87	3.80	2.07	0.00	0.00	-	-	1,300 <sup>12</sup>	-	3,470 <sup>2</sup>	<5.00	7.64	<5.00	<5.00	177	-	-	-	-	-	-	-
MW-9	03/01/2001	5.87	2.68	3.19	0.00	0.00	-	-	960 <sup>9</sup>	-	2,400 <sup>7</sup>	11	18.0	<10	<10	250	-	-	-	-	-	-	-
MW-9	06/04/2001	5.87	3.91	1.96	0.00	0.00	-	-	1,200 <sup>9</sup>	-	3,200 <sup>7</sup>	45	17	6.1	8.9	300	-	-	-	-	-	-	-
MW-9	09/10/2001	5.87	4.69	1.18	0.00	0.00	-	-	2,000 <sup>17</sup>	-	2,300	5.7	7.3	10	<5.0	200	-	-	-	-	-	-	-
MW-9	12/03/2001	5.87	2.99	2.88	0.00	0.00	-	-	2,600	-	3,600	14	5.4	8.2	8.5	210	-	-	-	-	-	-	-
MW-9	03/04/2002	5.87	3.55	2.32	0.00	0.00	-	-	3,700	-	4,400	17	<5.0	9.2	6.4	79	-	-	-	-	-	-	-
MW-9	05/30/2002	5.87	3.65	2.22	0.00	0.00	-	-	4,600	-	4,300	15	3.7	5.8	6.1	110	-	-	-	-	-	-	-
MW-9	09/03/2002	5.87	4.56	1.31	0.00	0.00	-	-	2,500	-	3,200	5.8	2.6	3.5	5.6	84	-	-	-	-	-	-	-
MW-9	12/09/2002	5.87	4.36	1.51	0.00	0.00	-	-	2,600	-	3,000	6.3	3.2	3.9	6.1	110	-	-	-	-	-	-	-
MW-9	03/10/2003	5.87	3.61	2.26	0.00	0.00	-	-	1,500	-	3,300	11	3.7	5.4	<7.5	150	-	-	-	-	-	-	-
MW-9	06/09/2003 <sup>18</sup>	5.87	3.58	2.29	0.00	0.00	-	-	2,700	-	3,500	2	2	3	2	46	-	-	-	-	-	-	-
MW-9	09/08/2003 <sup>18</sup>	5.87	4.44	1.43	0.00	0.00	-	-	3,000	-	3,000	3	2	2	3	120	<50	-	-	-	-	-	-
MW-9	12/08/2003 <sup>18</sup>	5.87	3.66	2.21	0.00	0.00	-	-	2,500	-	2,400	3	3	3	4	560	<50	-	-	-	-	-	-
MW-9	03/09/2004 <sup>18</sup>	5.87	3.18	2.69	0.00	0.00	-	-	2,500	-	3,700	2	1	2	2	120	<50	-	-	-	-	-	-
MW-9	06/17/2004 <sup>18</sup>	5.87	4.82	1.05	0.00	0.00	-	-	2,700	-	3,100	2	1	2	3	96	<50	-	-	-	-	-	-
MW-9	09/15/2004 <sup>18</sup>	5.87	9.03	-3.16	0.00	0.00	-	-	2,600	-	1,200	1	<0.5	<0.5	2	190	<50	-	-	-	-	-	-
MW-9	12/23/2004 <sup>18</sup>	5.87	4.49	1.38	0.00	0.00	-	-	3,400	-	2,900	4	4	4	4	93	<50	-	-	-	-	-	-
MW-9	03/24/2005 <sup>18</sup>	5.87	2.52	3.35	0.00	0.00	-	-	1,500	-	3,200	16	2	3	3	23	<50	-	-	-	-	-	-
MW-9	06/16/2005 <sup>18</sup>	5.87	3.62	2.25	0.00	0.00	-	-	1,600	-	2,300	30	2	2	3	28	<50	-	-	-	-	-	-
MW-9	09/16/2005 <sup>18</sup>	5.87	4.78	1.09	0.00	0.00	-	-	1,500	-	1,400	2	0.9	1	2	50	<50	-	-	-	-	-	-
MW-9	12/21/2005 <sup>18</sup>	5.87	2.90	2.97	0.00	0.00	-	-	1,400 <sup>22</sup>	-	2,300	2	2	3	3	40	<50	-	-	-	-	-	-
MW-9	03/23/2006 <sup>18</sup>	5.87	2.62	3.25	0.00	0.00	-	-	1,600	-	2,900	1	9	6	160	24	<50	-	-	-	-	-	-
MW-9	06/09/2006 <sup>18</sup>	5.87	3.81	2.06	0.00	0.00	-	-	1,500	-	1,900	5	1	1	34	32	<50	-	-	-	-	-	-
MW-9	09/05/2006 <sup>18</sup>	5.87	4.93	0.94	0.00	0.00	-	-	1,700	-	1,300	1	1	0.9	14	53	<50	-	-	-	-	-	-



**Table 4**  
**Cumulative Groundwater Monitoring and Sampling Data**  
**Former Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS					ADDITIONAL VOCS	GENERAL CHEMISTRY						
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X	MTBE by SW8260		Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids	
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-9	12/15/2006 <sup>18</sup>	5.87	3.19	2.68	0.00	0.00	-	-	2,000	-	2,300	1	1	1	5	43	<50	-	-	-	-	-	-	-
MW-9	03/01/2007 <sup>18</sup>	5.87	3.07	2.80	0.00	0.00	-	-	1,700	-	3,000	1	1	1	4	36	<50	-	-	-	-	-	-	-
MW-9	06/05/2007 <sup>18</sup>	5.87	3.85	2.02	0.00	0.00	-	-	1,200	-	1,900	1	0.6	0.8	2	35	<50	-	-	-	-	-	-	-
MW-9	09/05/2007 <sup>18</sup>	5.87	4.98	0.89	0.00	0.00	-	-	1,800	-	1,400	1	0.8	0.8	3	56	<50	-	-	-	-	-	-	-
MW-9	12/05/2007 <sup>18</sup>	5.87	4.05	1.82	0.00	0.00	-	-	1,800	-	2,100	1	0.8	1	3	65	93	-	-	-	-	-	-	-
MW-9	03/03/2008 <sup>18</sup>	5.87	3.59	2.28	0.00	0.00	-	-	1,000	-	2,500	0.6	0.6	1	2	26	<50	-	-	-	-	-	-	-
MW-9	06/02/2008 <sup>18</sup>	5.87	4.78	1.09	0.00	0.00	-	-	1,700	-	2,400	1	0.8	0.8	2	50	<50	-	-	-	-	-	-	-
MW-9	09/04/2008 <sup>18</sup>	5.87	5.10	0.77	0.00	0.00	-	-	1,400	-	2,000	2	1	0.5	3	92	<50	-	-	-	-	-	-	-
MW-9	12/04/2008 <sup>18</sup>	5.87	4.73	1.14	0.00	0.00	-	-	2,300	-	1,700	1	2	1	3	50	<50	-	-	-	-	-	-	-
MW-9	02/26/2009 <sup>18</sup>	5.87	2.57	3.30	0.00	0.00	-	-	3,000	-	3,100	0.9	1	1	2	29	<50	-	-	-	-	-	-	-
MW-9	06/30/2009	5.87	4.63	1.24	0.00	0.00	-	-	1,700	-	2,600	0.9 J	0.9 J	0.8 J	4	49	<50	-	-	-	-	-	-	-
MW-9	09/29/2009	5.87	5.20	0.67	0.00	0.00	-	-	2,300	-	3,100	2	1	0.9 J	3	52	<50	-	-	-	-	-	-	-
MW-9	03/10/2010	5.87	3.00	2.87	0.00	0.00	-	-	5,000	-	4,100	0.6 J	0.8 J	1	2	19	<50	-	-	-	-	-	-	-
MW-9	09/15/2010	5.87	5.12	0.75	0.00	0.00	-	-	1,900	-	1,700	<0.5	<0.5	<0.5	<0.5	69	<50	-	-	-	-	-	-	-
MW-9	03/14/2011	5.87	3.53	2.34	0.00	0.00	430	-	1,100	-	2,600	0.6 J	5	0.9 J	1	14	<50	-	-	-	-	-	-	-
MW-9	09/26/2011	5.87	5.00	0.87	0.00	0.00	-	120	-	400	1,100	<0.5	<0.5	<0.5	<0.5	84	<50	-	-	-	-	-	-	-
MW-9	03/30/2012	5.87	2.32	3.55	0.00	0.00	-	310	-	790	1,200	0.5 J	3	1 J	0.9 J	19	<50	-	-	-	-	-	-	-
MW-9	09/22/2012	5.87	5.09	0.78	0.00	0.00	-	160	-	490	950	<0.5	0.6 J	<0.5	<0.5	68	<50	-	-	-	-	-	-	-
MW-9	03/19/2013	5.87	4.47	1.40	0.00	0.00	-	<38	-	240	1,800	<0.5	0.8 J	<0.5	0.5 J	25	<50	-	-	-	-	-	-	-
MW-9	09/25/2013	5.87	5.13	0.74	0.00	0.00	-	-	2,000	-	920	<0.5	<0.5	<0.5	<0.5	62	<50	-	-	-	-	-	-	-
MW-9	03/28/2014	5.87	4.08	1.79	0.00	0.00	-	-	4,000	-	240	<0.5	<0.5	<0.5	<0.5	23	<50	-	-	-	-	-	-	-
MW-9	09/25/2014	5.87	3.98	1.89	0.00	0.00	-	-	-	250	<500	<0.5	<0.5	<0.5	<0.5	44	<50	-	-	-	-	-	-	-
MW-9	03/05/2015	5.87	4.42	1.45	0.00	0.00	-	-	2,600	-	660	<0.5	<0.5	<0.5	<0.5	20	<50	-	-	-	-	-	-	-
MW-9	09/25/2015	5.87	5.11	0.76	0.00	0.00	-	-	2,800	-	350	<0.5	<0.5	<0.5	<0.5	38	<50	-	-	-	-	-	-	-
MW-9	03/18/2016	5.87	2.07	3.80	0.00	0.00	-	-	-	<110	<100	<1	<1	<1	<1	2	<250	-	-	-	-	-	-	-
<b>MW-9</b>	<b>09/27/2016<sup>26</sup></b>	<b>5.87</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUMP	05/30/2007	-	-	-	0.00	0.00	-	-	830	-	1,300	1	1	2	4	28	130	-	-	-	-	-	-	-
SUMP	03/05/2009	-	-	-	0.00	0.00	-	-	670	-	1,100	2	1	1	2	23	<50	-	-	-	-	-	-	-
SUMP	07/13/2009	-	-	-	0.00	0.00	-	-	270	-	120	<0.5	<0.5	<0.5	<0.5	5	<50	-	-	-	-	-	-	-
SUMP	03/19/2010	-	-	-	0.00	0.00	-	-	5,200	-	3,200	7	3	3	5	35	<50	-	-	-	-	-	-	-
SUMP	09/15/2010 <sup>26</sup>	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUMP	03/14/2011	-	-	-	0.00	0.00	<38	-	610	-	990	1	2	1	2	16	<50	-	-	-	-	-	-	-

**Table 4**  
**Cumulative Groundwater Monitoring and Sampling Data**  
**Former Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS					ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X	MTBE by SW8260		Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
SUMP	09/26/2011	-	-	-	0.00	0.00	-	4,200	-	1,000	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
SUMP	03/30/2012	-	-	-	0.00	0.00	-	39 J	-	580	1,600	1	3	2	2	21	<50	-	-	-	-	-	-
SUMP	09/21/2012	-	-	-	0.00	0.00	-	<38	-	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
SUMP	03/19/2013	-	-	-	0.00	0.00	-	<38	-	<50	120	<0.5	<0.5	<0.5	<0.5	6	<50	-	-	-	-	-	-
SUMP	09/25/2013 <sup>30</sup>	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUMP	03/28/2014	-	-	-	0.00	0.00	-	-	2,700	-	1,800	0.7 J	2	0.9 J	2	18	<50	-	-	-	-	-	-
SUMP	09/25/2014	-	-	-	0.00	0.00	-	-	-	<50	<250	<0.5	<0.5	<0.5	<0.5	0.7 J	<50	-	-	-	-	-	-
SUMP	03/05/2015 <sup>30</sup>	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUMP	09/25/2014 <sup>30</sup>	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUMP	03/18/2016 <sup>30</sup>	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>SUMP</b>	<b>09/27/2016<sup>30</sup></b>	-	-	-	<b>0.00</b>	<b>0.00</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QA	12/03/2001	-	-	-	-	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5	-	-	-	-	-	-	-
QA	03/04/2002	-	-	-	-	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5	-	-	-	-	-	-	-
QA	05/30/2002	-	-	-	-	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5	-	-	-	-	-	-	-
QA	09/03/2002	-	-	-	-	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5	-	-	-	-	-	-	-
QA	12/09/2002	-	-	-	-	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5	-	-	-	-	-	-	-
QA	03/10/2003	-	-	-	-	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5	-	-	-	-	-	-	-
QA	06/09/2003 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	09/08/2003 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	12/08/2003 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	03/09/2004 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	06/17/2004 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	09/15/2004 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	12/23/2004 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	03/24/2005 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	06/16/2005 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	09/16/2005 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	12/21/2005 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	03/23/2006 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	06/09/2006 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	09/05/2006 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	12/15/2006 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-

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**Cumulative Groundwater Monitoring and Sampling Data**  
**Former Service Station 90121**  
**3026 Lakeshore Avenue**  
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Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS					ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X	MTBE by SW8260		Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
QA	03/01/2007 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	06/05/2007 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	09/05/2007 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	12/05/2007 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	03/03/2008 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	06/02/2008 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	09/04/2008 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	12/04/2008 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	02/26/2009 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	06/30/2009 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	09/29/2009 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	03/10/2010 <sup>18</sup>	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	09/15/2010	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	-	-	-	-	-	-
QA	03/14/2011	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	09/26/2011	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	03/30/2012	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	09/21/2012	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	03/19/2013	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	09/25/2013	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	03/28/2014	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	09/25/2014	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	03/05/2015	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	09/25/2015	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-
QA	03/18/2016	-	-	-	-	-	-	-	-	-	<100	<1	<1	<1	<1	<1	-	-	-	-	-	-	-
<b>QA</b>	<b>09/27/2016</b>	-	-	-	-	-	-	-	-	-	<b>&lt;100</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	-	-	-	-	-	-	-
Trip Blank	09/21/1992	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
Trip Blank	12/23/1992	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
Trip Blank	03/25/1993	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
Trip Blank	06/11/1993	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
Trip Blank	09/29/1993	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
Trip Blank	12/20/1993	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
Trip Blank	03/07/1994	-	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-

**Table 4**  
**Cumulative Groundwater Monitoring and Sampling Data**  
**Former Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS					ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X	MTBE by SW8260		Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate	Total Dissolved Solids
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Trip Blank	06/17/1994	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
Trip Blank	09/12/1994	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	1.0	-	-	-	-	-	-	-	-	-
Trip Blank	11/30/1994	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
Trip Blank	03/24/1995	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
Trip Blank	06/27/1995	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
Trip Blank	09/28/1995	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
Trip Blank	12/19/1995	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
Trip Blank	02/28/1996	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
Trip Blank	06/25/1996	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
Trip Blank	12/17/1996	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-
Trip Blank	03/31/1997	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-
Trip Blank	06/30/1997	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-
Trip Blank	09/12/1997	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-
Trip Blank	12/05/1997	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-
Trip Blank	02/16/1998	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-
Trip Blank	06/17/1998	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-
Trip Blank	08/31/1998	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-
Trip Blank	12/28/1998	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-
Trip Blank	03/04/1999	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.0	-	-	-	-	-	-	-	-
Trip Blank	06/14/1999	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-
Trip Blank	09/17/1999	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-
Trip Blank	12/20/1999	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-
Trip Blank	03/20/2000	-	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	-	-	-	-	-	-	-
Trip Blank	06/24/2000	-	-	-	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5	-	-	-	-	-	-	-	-
Trip Blank	09/07/2000	-	-	-	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5	-	-	-	-	-	-	-	-
Trip Blank	12/05/2000	-	-	-	-	-	-	-	-	<50	<0.500	<0.500	<0.500	<0.500	<2.5	-	-	-	-	-	-	-	-
Trip Blank	03/01/2001	-	-	-	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5	-	-	-	-	-	-	-	-
Trip Blank	06/04/2001	-	-	-	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5	-	-	-	-	-	-	-	-
Trip Blank	09/10/2001	-	-	-	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5	-	-	-	-	-	-	-	-

**Table 4**  
**Cumulative Groundwater Monitoring and Sampling Data**  
**Former Service Station 90121**  
**3026 Lakeshore Avenue**  
**Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				ADDITIONAL VOCS	GENERAL CHEMISTRY					
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X		MTBE by SW8260	Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L

**Abbreviations and Notes:**

- TOC = Top of casing
- DTW = Depth to water
- GWE = Groundwater elevation
- LNAPLT = Light non-aqueous phase liquid thickness
- (ft-amsl) = Feet above mean sea level
- ft = Feet
- µg/L = Micrograms per liter
- TPH-DRO = Total petroleum hydrocarbons - diesel range organics
- TPH-GRO = Total petroleum hydrocarbons - gasoline range organics
- VOCS = Volatile organic compounds
- B = Benzene
- T = Toluene
- E = Ethylbenzene
- X = Xylenes (Total)
- MTBE = Methyl tert butyl ether
- = Not available / not applicable
- <x = Not detected at or above laboratory method detection limit
- J = Estimated value between method detection limit and laboratory reporting limit.
- 1 Chromatogram pattern indicates a non-diesel mix.
- 2 Chromatogram pattern indicates an unidentified hydrocarbon.
- 3 Chromatogram pattern indicates an unidentified hydrocarbon and weathered diesel.
- 4 Confirmation run.
- 5 ORC present in well.
- 6 Laboratory report indicates gasoline and unidentified hydrocarbons >10.
- 7 Laboratory report indicates gasoline C6-C12.
- 8 Laboratory report indicates this sample was analyzed outside of the EPA recommended holding time.
- 9 Laboratory report indicates unidentified hydrocarbons C9-C24.
- 10 Laboratory report indicates unidentified hydrocarbons C10-C24.
- 11 Laboratory report indicates unidentified hydrocarbons >C16.
- 12 Laboratory report indicates unidentified hydrocarbons C9-C40.
- 13 Laboratory report indicates diesel C9-C24 + unidentified hydrocarbons <C16.
- 14 Laboratory report indicates weathered gasoline C6-C12.

**Table 4  
Cumulative Groundwater Monitoring and Sampling Data  
Former Service Station 90121  
3026 Lakeshore Avenue  
Oakland, California**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS					PRIMARY VOCS				MTBE by SW8260	ADDITIONAL VOCS	GENERAL CHEMISTRY				
							Motor Oil	Motor Oil w/ SI Gel	TPH-DRO	TPH-DRO w/ SI Gel	TPH-GRO	B	T	E	X			Ethanol	Ferrous Iron	Nitrate	Total Alkalinity	Sulfate
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L

- 15 Laboratory report indicates unidentified hydrocarbons C6-C12.
- 16 Laboratory report indicates hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.
- 17 Laboratory report indicates hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel. The pattern more closely resembles that of a heavier hydrocarbon mix.
- 18 BTEX and MTBE by EPA Method 8260.
- 19 Laboratory report indicates the observed sample pattern is not typical of diesel/#2 fuel oil.
- 20 ORC removed from well.
- 21 Laboratory report indicates the observed sample pattern is not typical of diesel/#2 fuel oil. It elutes in the DRO range later than #2 fuel and also has individual peaks eluting in the DRO range.
- 22 Laboratory report indicates the observed sample pattern is not typical of #2 fuel/diesel. It contains two patterns in the DRO range, one earlier and one later than #2 fuel.
- 23 Laboratory report indicates the observed sample pattern includes #2 fuel/diesel and an additional pattern which elutes later in the DRO range.
- 24 Laboratory report indicates the preservation requirements were not met. The vial submitted for volatile analysis did not have a pH <2 at the time of analysis. Due to the volital nature of the analytes, it is not appropriate for the laboratory to adjust the pH at the time of sample receipt. The pH of this sample was pH=6
- 24 Laboratory report indicates reporting limits for the GC/MS volatile compounds were raised due to sample foaming.
- 25 Sampled semi-annually
- 26 Inaccessible
- 27 Sampled annually
- 28 Unable to locate
- 29 Well Not Sampled
- 30 Unable to collect sample - sump does not work

# Appendix A Regulatory Letter

ALAMEDA COUNTY  
**HEALTH CARE SERVICES**  
AGENCY  
ALEX BRISCOE, Agency Director



ENVIRONMENTAL HEALTH DEPARTMENT  
ENVIRONMENTAL PROTECTION  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577  
(510) 567-6700  
FAX (510) 337-9335

March 23, 2015

Mr. Mark Horne  
Chevron Products Company  
6101 Bollinger Canyon Road  
San Ramon, CA 94583  
(sent via electronic mail to [MarkHorne@chevron.com](mailto:MarkHorne@chevron.com))

Subject: Conditional Approval of Work Plan; Fuel Leak Case No. RO0000284 and Geotracker Global ID T0600100328, Chevron #9-0121; 3026 Lakeshore Avenue, Oakland, CA 94610

Dear Mr. Mark Horne:

Alameda County Environmental Health (ACEH) staff has reviewed the case file including the *Crawl Space, Indoor and Outdoor Ambient Air, and Sub-Slab Soil Gas Investigation Report*, dated December 12, 2014, and the *Data Gap Investigation Work Plan and Focused Site Conceptual Model*, dated February 6, 2015. The reports were submitted on your behalf by Conestoga-Rovers & Associates (CRA). Thank you for their submittal.

Based on ACEH staff review of the work plan, the proposed scope of work is conditionally approved for implementation provided that the technical comments below are incorporated during the proposed work. Submittal of a revised work plan or a work plan addendum is not required unless an alternate scope of work outside that described in the work plan or these technical comments is proposed. We request that you address the following technical comments, perform the proposed work, and send us the report described below. Please provide 72-hour advance written notification to this office (e-mail preferred to: [mark.detterman@acgov.org](mailto:mark.detterman@acgov.org)) prior to the start of field activities.

#### **TECHNICAL COMMENTS**

1. **Work Plan Modification** – The referenced work plan proposes a series of actions with which ACEH is in general agreement of undertaking; however, ACEH requests several modifications to the proposed scope of work. Please submit a report by the date specified below.
  - a. **Soil Sample Selection Protocols** – The work plan proposes to collect and retain for laboratory analysis soil samples at pre-defined set depths, and also states that additional samples would be collected at signs of contamination such as photoionization detections, discoloration, etc., and at major lithologic changes. The work plan also states that selected samples would be submitted for laboratory analysis. In addition to Low Threat Closure Policy required soil samples in the 0 to 5 and the 5 to 10 foot intervals, ACEH requests that soil samples collected for each of the additional reasons, be submitted for laboratory analysis.
  - b. **Soil Bore Relocation** – It appears appropriate to request the slight relocation of the proposed soil bore adjacent to product line sample P15 and former well MW-2 to a position adjacent to product line sample P14. At the time of sampling, P14 contained significantly higher TPH and benzene concentrations compared to P15. The location is also closer to the site perimeter and may provide insight into the lateral extent of contamination at this location.



Mr. Mark Horne  
RO0000284  
March 23, 2015, Page 2

- c. **Additional Grab Groundwater Sample** – The request to relocate the proposed soil bore from P15 to P14, as just discussed, additionally creates the opportunity to collect a grab groundwater sample at an unmonitored site perimeter location. Please use the standard proposed analytical suite.

#### TECHNICAL REPORT REQUEST

Please upload technical reports to the ACEH ftp site (Attention: Mark Detterman), and to the State Water Resources Control Board's Geotracker website, in accordance with the specified file naming convention below, according to the following schedule:

- **May 22, 2015** – First Semiannual 2015 Groundwater Monitoring Report  
File to be named: RO284\_GWM\_R\_yyyy-mm-dd
- **May 29, 2015** – Site Investigation Report (can be combined with above report)  
File to be named: RO284\_SWI\_R\_yyyy-mm-dd
- **November 20, 2015** – Second Semiannual 2015 Groundwater Monitoring Report  
File to be named: RO284\_GWM\_R\_yyyy-mm-dd

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

Online case files are available for review at the following website: <http://www.acgov.org/aceh/index.htm>.

If you have any questions, please call me at (510) 567-6876 or send me an electronic mail message at [mark.detterman@acgov.org](mailto:mark.detterman@acgov.org).

Sincerely,



Digitally signed by Mark E. Detterman  
DN: cn=Mark E. Detterman, o, ou,  
email, c=US  
Date: 2015.03.23 14:39:30 -07'00'

Mark E. Detterman, P.G., C.E.G.  
Senior Hazardous Materials Specialist

Enclosures: Attachment 1 – Responsible Party (ies) Legal Requirements / Obligations  
Electronic Report Upload (ftp) Instructions

cc: Nathan Lee, Conestoga-Rovers & Associates, Inc., 5900 Hollis Street, Suite A, Emeryville, CA 94608; (sent via electronic mail to [nlee@croworld.com](mailto:nlee@croworld.com))

Dilan Roe, ACEH (sent via electronic mail to [dilan.roe@acgov.org](mailto:dilan.roe@acgov.org))  
Mark Detterman (sent via electronic mail to [mark.detterman@acgov.org](mailto:mark.detterman@acgov.org))  
Electronic file, GeoTracker

## Attachment 1

### Responsible Party(ies) Legal Requirements / Obligations

#### REPORT REQUESTS

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

#### ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) GeoTracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the GeoTracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in GeoTracker (in PDF format). Please visit the SWRCB website for more information on these requirements ([http://www.waterboards.ca.gov/water\\_issues/programs/ust/electronic\\_submittal/](http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/)).

#### PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

#### PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

#### UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

#### AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.



<b>Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)</b>	<b>REVISION DATE:</b> May 15, 2014
	<b>ISSUE DATE:</b> July 5, 2005
	<b>PREVIOUS REVISIONS:</b> October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010, July 25, 2010
<b>SECTION:</b> Miscellaneous Administrative Topics & Procedures	<b>SUBJECT:</b> Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

## REQUIREMENTS

- **Please do not submit reports as attachments to electronic mail.**
- Entire report including cover letter must be submitted to the ftp site as a **single portable document format (PDF) with no password protection.**
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- **Signature pages and perjury statements must be included and have either original or electronic signature.**
- **Do not password protect the document.** Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted.**
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:

RO#\_Report Name\_Year-Month-Date (e.g., RO#5555\_WorkPlan\_2005-06-14)

## Submission Instructions

- 1) Obtain User Name and Password
  - a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
    - i) Send an e-mail to [deh.loptoxic@acgov.org](mailto:deh.loptoxic@acgov.org)
  - b) In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses, and the Case Numbers (RO# available in Geotracker) you will be posting for.**
- 2) Upload Files to the ftp Site
  - a) Using Internet Explorer (IE4+), go to <ftp://alcoftp1.acgov.org>
    - (i) Note: Netscape, Safari, and Firefox browsers will not open the FTP site as they are NOT being supported at this time.
  - b) Click on Page located on the Command bar on upper right side of window, and then scroll down to Open FTP Site in Windows Explorer.
  - c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
  - d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
  - e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.
- 3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
  - a) Send email to [deh.loptoxic@acgov.org](mailto:deh.loptoxic@acgov.org) notify us that you have placed a report on our ftp site.
  - b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
  - c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO#, use the street address instead.
  - d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.

# Appendix B

## Summary of Environmental Remediation and Investigation

# Appendix B      Summary of Environmental Investigation and Remediation

## Former Chevron Service Station 90121

### **1967 Source Leak**

In July 1967, a 2,000-gallon inventory loss was discovered. The steel underground storage tanks (USTs) were removed and replaced with new USTs double wrapped in asphalt. A 32-inch long gash was observed in one of the removed tanks. This information was reported in Pacific Environmental Group, Inc.'s (PEG) October 4, 1993 *Remedial Feasibility Study*.

### **Prior to 1981 Monitoring Well Installation**

Six monitoring wells were installed between the late 1970s and 1981 and used as recovery wells to recover light non-aqueous phase liquids (LNAPL). Installation dates and well construction logs were unavailable. This information was reported in PEG's October 4, 1993 *Remedial Feasibility Study*.

### **1980 Tank Replacement**

A tank tightness test indicated that one of the USTs may have had a leak and was subsequently replaced with a fiberglass UST. An undocumented quantity of soil was removed from the site during UST replacement. A plastic impermeable barrier extending to approximately 14 to 16 feet below grade (fbg) was installed along the southwestern property line. This information was reported in PEG's October 4, 1993 *Remedial Feasibility Study*.

### **1981 Monitoring Well Installation**

Four additional 8-inch diameter monitoring wells were installed in July 1981. In August 1981, a pump test was performed to determine groundwater draw down and production rates. Additional information is available in Groundwater Technology, Inc.'s (GTI) *Considerations on Retrieval of Product from Groundwater*. The report is not dated.

### **1984 Station Rebuild and UST Abandonment**

In 1984, the station was torn down and completely rebuilt. During renovation two USTs, approximately 500 to 1,000 gallons, were discovered beneath the sidewalk. The USTs were abandoned in place by filling them with grout. Approximately 740 cubic yards of soil related to the site redevelopment were over-excavated and disposed of offsite. This information was reported in PEG's October 4, 1993 *Remedial Feasibility Study*.

### **1984 Basement Inspections**

The building tenants at 3014 Lakeshore Avenue complained of petroleum odors in the building. No odor or sheen was noted in the basement. A letter was sent to the property owner by Chevron stating that Chevron had been monitoring the basement during the two previous years (1982 and 1983) and did not find any evidence of hydrocarbons. This information was reported in PEG's October 4, 1993 *Remedial Feasibility Study*.

### **1990 UST Repair**

A hole created by repetitive tank volume gauging with a stick was discovered in the unleaded gasoline UST. The hole was repaired and the UST was put back in service. This information was reported in PEG's October 4, 1993 *Remedial Feasibility Study*.

### **1991 Monitoring Well Destruction**

In March and April 1991, eight wells were destroyed. Additional information is available in GTI's April 25, 1991 *Destruction of Five Groundwater Monitoring Wells and Three Groundwater Extraction Wells*.

### **1991 Monitoring Well Installation**

On August 7 and 13, 1991, monitoring wells MW-1 through MW-4 were installed. Additional information is available in GTI's October 18, 1991 *Well Installation Report*.

### **1992 Monitoring Well Installation and Destruction**

In June 1992, offsite monitoring wells MW-5 through MW-8 were installed and onsite well MW-1 was destroyed. Additional information is available in GTI's July 31, 1992 *Environmental Assessment Report*.

### **1993 Feasibility Study**

In October 1993, PEG completed a remedial feasibility study and recommended natural attenuation as the cleanup method. Additional information is available in PEG's October 4, 1993 *Remedial Feasibility Study*.

### **1996 Product Piping and Dispenser Replacement**

In September 1996, the product piping and dispensers were replaced. Soil samples were collected from beneath the dispensers and product piping at depths ranging from 2 to 3 fbg. Approximately 100 cubic yards of soil was removed and disposed of offsite. Additional information is available in Touchstone Development's November 1, 1996 *Product Piping Removal and Soil Sampling Report*.

### **1996 Well Destruction**

In October 1996, one well was destroyed. Additional information is available in RRM Engineering Contracting Firm's October 2, 1996 *Well 1S/3W25R80 Abandonment Document Letter*.

### **1999 Well Installation**

In April 1999, onsite monitoring well MW-9 was installed, and ¾-inch diameter wells MW-2 through MW-4 were destroyed and replaced with 2-inch diameter wells MW-2A through MW-4A. Additional information is available in Gettler-Ryan's May 26, 1999 *Monitoring Well Destruction and Installation Report*.

### **2001 Site Conceptual Model**

In October 2001, Delta Environmental Consultants, Inc. (Delta) completed a site conceptual model and recommended further offsite, downgradient delineation of dissolved hydrocarbons by installing additional monitoring wells to the southwest. Additional information is available in Delta's October 15, 2001 *Site Conceptual Model*.

### **2006 Offsite Borings**

In August 2006, Cambria Environmental Technology, Inc. (Cambria) supervised the advancement of offsite borings SB-8 and SB-9 as part of the ongoing site assessment. Boring SB-10 was not advanced due to refusal and boring SB-11 was not advanced due to its location on the opposite side of a newly installed culvert. Additional information is available in Cambria's October 20, 2006 *Additional Subsurface Investigation Report*.

### **2007 Offsite Sump Sampling**

In May 2007, Conestoga-Rovers & Associates (CRA) collected a single grab-groundwater sample from the sump located downgradient of the site in the basement of the Diocese of Oakland office building. CRA agreed with ACEH to add sump monitoring to the semi-annual groundwater monitoring and sampling schedule once an access agreement was in place to allow regularly scheduled sump sampling. Additional information is available in CRA's July 12, 2007 *Offsite Sampling Report*.

### **2010 Station Demolition and Fueling Facilities Removal**

On August 10, 2010, CRA observed Musco Excavators, Inc. remove the USTs and associated fuel piping. CRA collected soil samples EX-1 through EX-6 beneath the former USTs at 9.5 fbg, P-1 through P-14 beneath the former product piping at 4 and 6 fbg, and soil stockpile samples SS-1 through SS-3. Groundwater sample GW-1 was collected from the UST excavation. Additional information is available in CRA's September 9, 2010 *Underground Storage Tank Removal and Soil Sampling Report*.

### ***2013 Subsurface Investigation***

On November 11 through 13, 2013, CRA observed Vapor Tech Services (VTS) advance soil borings B-1 through B-7 onsite and offsite to depths between 11 to 27.5 fbg to assess downgradient delineation of petroleum hydrocarbons. CRA also observed the installation of sub-slab vapor probes SSVP-1 through SSVP-3 in the adjacent property located at 3014 Lakeshore Avenue to assess vapor intrusion risk. CRA sampled indoor, outdoor, and crawl space air, and sub-slab soil vapor at adjacent properties downgradient to the site. Additional information is available in CRA's February 14, 2014 *Subsurface Investigation Report*.

### ***2014 Soil Vapor Assessment***

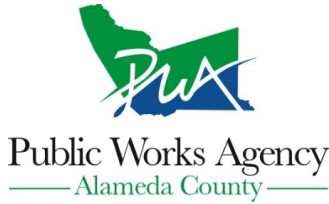
On October 2014, CRA sampled sub-slab probes SSVP-1, SSVP-2, and SSVP-3, collected five indoor air samples (IA-1 in the front office, IA-2 in the office cubicle area, IA-3 in the back office, IA-4 in the office annex's main room, and IA-5 in the basement where the sump is located), one crawl space sample (CS-1 in the office annex's crawl space), and one outdoor air sample from the upwind location (OA-1) between the main building and annex office building at 3014 Lakeshore Avenue. CRA also collected one indoor sample (A-6 located within the front of the building within the first floor office space), one crawl space sample (CS-2), and one outdoor upwind air sample (OA-2) in the northeast corner at 3008 Lakeshore Avenue. Additional information is available in CRA's December 12, 2014 *Crawl Space, Indoor and Outdoor Ambient Air, and Sub-Slab Soil Gas Investigation Report*.



# Appendix C

## Permits

# Alameda County Public Works Agency - Water Resources Well Permit



399 Elmhurst Street  
Hayward, CA 94544-1395  
Telephone: (510)670-6633 Fax:(510)782-1939

**Application Approved on: 09/27/2016 By jamesy**

**Permit Numbers: W2016-0704 to W2016-0708**  
**Permits Valid from 10/24/2016 to 10/28/2016**

**Application Id:** 1473956455302  
**Site Location:** 3026 Lakeshore Ave  
**Project Start Date:** 10/24/2016  
**Assigned Inspector:** Contact Marcelino Vialpando at (510) 670-5760 or Marcelino@acpwa.org

**City of Project Site:**Oakland

**Completion Date:**10/28/2016

**Applicant:** GHD Services Inc. - Charley McLean  
2300 Clayton Rd, Ste 920, Concord, CA 94596  
**Property Owner:** Highland LLC FWS  
99 South Hill Drive, Brisbane, CA 94005  
**Client:** Chevron EMC  
6101 Bollinger Canyon Rd, San Ramon, CA 94583  
**Contact:** Kiersten Hoey

**Phone:** 925-849-1017

**Phone:** --

**Phone:** --

**Phone:** 510-420-3347  
**Cell:** --

	<b>Total Due:</b>	\$1721.00
<b>Receipt Number: WR2016-0478</b>	<b>Total Amount Paid:</b>	\$1721.00
<b>Payer Name : GHD Services Inc.</b>	<b>Paid By: CHECK</b>	<b>PAID IN FULL</b>

**Works Requesting Permits:**

Well Construction-Monitoring-Monitoring - 3 Wells

Driller: GREGG DRILLING & TESTING INC - Lic #: 485165 - Method: hstem

**Work Total: \$1191.00**

**Specifications**

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2016-0704	09/27/2016	01/22/2017	MW-10	8.00 in.	2.00 in.	6.00 ft	20.00 ft
W2016-0705	09/27/2016	01/22/2017	MW-11	8.00 in.	2.00 in.	6.00 ft	20.00 ft
W2016-0706	09/27/2016	01/22/2017	MW-12	8.00 in.	2.00 in.	6.00 ft	20.00 ft

**Specific Work Permit Conditions**

1. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

2. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

3. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

# Alameda County Public Works Agency - Water Resources Well Permit

4. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 30 days. Include permit number and site map.
5. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
6. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.
7. Minimum surface seal thickness is two inches of cement grout placed by tremie.
8. Minimum seal (Neat Cement seal) depth for monitoring wells is 5 feet below ground surface(BGS) or the maximum depth practicable or 20 feet.
9. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.
10. Electronic Reporting Regulations (Chapter 30, Division 3 of Title 23 & Division 3 of Title 27, CCR) require electronic submission of any report or data required by a regulatory agency from a cleanup site. Submission dates are set by a Regional Water Board or by a regulatory agency. Once a report/data is successfully uploaded, as required, you have met the reporting requirement (i.e. the compliance measure for electronic submittals is the actual upload itself). The upload date should be on or prior to the regulatory due date.

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Borehole(s) for Investigation-Environmental/Monitoring Study - 2 Boreholes

Driller: GREGG DRILLING & TESTING INC - Lic #: 485165 - Method: Hand

**Work Total: \$265.00**

## Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2016-0707	09/27/2016	01/22/2017	2	3.00 in.	10.00 ft

## Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.
2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to,

# Alameda County Public Works Agency - Water Resources Well Permit

properly damage, personal injury and wrongful death.

4. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

5. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

6. Electronic Reporting Regulations (Chapter 30, Division 3 of Title 23 & Division 3 of Title 27, CCR) require electronic submission of any report or data required by a regulatory agency from a cleanup site. Submission dates are set by a Regional Water Board or by a regulatory agency. Once a report/data is successfully uploaded, as required, you have met the reporting requirement (i.e. the compliance measure for electronic submittals is the actual upload itself). The upload date should be on or prior to the regulatory due date.

## 7. NOTE:

Under California laws, the owner/operator are responsible for reporting the contamination to the governmental regulatory agencies under Section 25295(a). The owner/operator is liable for civil penalties under Section 25299(a)(4) and criminal penalties under Section 25299(d) for failure to report a leak. The owner/operator is liable for civil penalties under Section 25299(b)(4) for knowing failure to ensure compliance with the law by the operator. These penalty provisions do not apply to a potential buyer.

8. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

9. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

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Borehole(s) for Investigation-Environmental/Monitoring Study - 3 Boreholes

Driller: GREGG DRILLING & TESTING INC - Lic #: 485165 - Method: DP

**Work Total: \$265.00**

## Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2016-0708	09/27/2016	01/22/2017	3	1.75 in.	15.00 ft

## Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend

## Alameda County Public Works Agency - Water Resources Well Permit

and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

4. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

5. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

6. Electronic Reporting Regulations (Chapter 30, Division 3 of Title 23 & Division 3 of Title 27, CCR) require electronic submission of any report or data required by a regulatory agency from a cleanup site. Submission dates are set by a Regional Water Board or by a regulatory agency. Once a report/data is successfully uploaded, as required, you have met the reporting requirement (i.e. the compliance measure for electronic submittals is the actual upload itself). The upload date should be on or prior to the regulatory due date.

### 7. NOTE:

Under California laws, the owner/operator are responsible for reporting the contamination to the governmental regulatory agencies under Section 25295(a). The owner/operator is liable for civil penalties under Section 25299(a)(4) and criminal penalties under Section 25299(d) for failure to report a leak. The owner/operator is liable for civil penalties under Section 25299(b)(4) for knowing failure to ensure compliance with the law by the operator. These penalty provisions do not apply to a potential buyer.

8. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

9. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

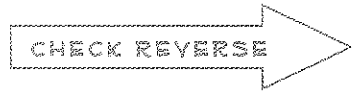
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Permits for which no major inspection has been approved within 180 days shall expire by limitation. No refund more than 180 days after expiration of permit.

**JOB SITE**



SL and X permits valid 90 days  
CGS permit valid 30 days



**CITY OF OAKLAND**

DEPARTMENT OF PUBLIC WORKS 4th FLOOR

250 FRANK H. OGAWA PLAZA ▪ 2ND FLOOR ▪ OAKLAND, CA 94612

Planning and Building Department  
www.oaklandnet.com

To schedule inspection  
Email: pwa\_inspections@oaklandnet.com or call 510-238-3651

510-238-3651  
510-238-3651  
510-238-3651

**Permit No:** OB1601228      **Obstruction**      **Filed Date:** 10/19/2016  
**Job Site:** 3026 LAKESHORE AVE      **Schedule inspection by calling:** 510-238-3444  
**Parcel No:** 023 041800100  
**District:** For SL; X; and CGS permits see **SPECIAL NOTE** below

**Project Description:** Reserve four NON-METERED parking only for construction vehicles. Two spaces NO FEE Re: X1602372, -2373. Impact on 110' sidewalk per approved TSD-16-0213. Post 72 hours prior; comply with terms set forth in CVC Section 22651 (m). No impact on traffic lane or sidewalk allowed. To Have Illegally Parked Vehicle Ticketed Call 510-777-3333. Applicant arranges towing. For Towed Vehicle: Call 510-238-3021.  
Re: Excavate to install three additional monitoring wells (MW-10, -11, -12) near Beacon Street on Lakeshore Avenue. Set up PWA PRE-CON and provide USA Ticket # prior to start work: 510-238-3651.  
Re: Petition to allow three additional monitoring wells (MW-10, -11, -12) on Lakeshore near Beacon Street.  
Contact: C McLean, GHD, 225 907-5910.  
Re: Record only to establish historical event: In June, 1992 Chevron USA, Inc. applied for permission to place four monitoring wells. Agreement recorded July 17, 1992, doc #: 92-232809. Unfortunately, no record of the application was created in PTS. One well in each location: on Lakeshore Ave; MacArthur Bl; Excelsior Ct; Beacon St. No fee charged at this time for this record.

**Related Permits:** X1602373

ADDRESS

	<u>Name</u>	<u>Applicant</u>	<u>Address</u>	<u>Phone</u>	<u>License #</u>
<b>Owner:</b>	CHEVRON USA, INC			5555555	
<b>Contractor:</b>	GREGG DRILLING & TESTING INC		2726 WALNUT AVENUE SIGNAL HILL, CA	(562) 427-6899	485165
<b>Owner-Agent:</b>	CHEVRON USA, INC/ K HOEY, GHD	X		510 420-3347	

**PERMIT DETAILS: Building/Public Use/Activity/Obstructions**

**Work information**

Start Date: 10/24/2016	Obstruction Permit Type: Short Term (Max 14 Days)
End Date: 10/25/2016	Number of Meters (Metered Area):
	Length Of Obstruction (Unmetered Area): 100

APPLICATION

**TOTAL FEES TO BE PAID AT FILING: \$236.39**

Application Fee	\$70.00	Records Management Fee	\$19.57	Short Term Permits	\$136.00
Technology Enhancement Fee	\$10.82				

**SPECIAL NOTE**

- SL; X; and CGS permits: prior to start, email pwa\_inspections@oaklandnet.com or call 510-238-3651
- SL and X permits valid 90 days; CGS permit valid 30 days

Permits for which no major inspection has been approved within 180 days shall expire by limitation. No refund more than 180 days after expiration or final.



Permit No: OB1601228

Parcel No: 023 041800100

Job Site: 3026 LAKESHORE AVE

Page 2 of 4

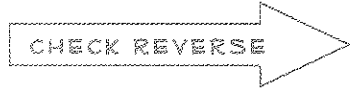
Plans Checked By \_\_\_\_\_ Date \_\_\_\_\_

Permit Issued By \_\_\_\_\_  Date 10.19

Finalized By \_\_\_\_\_ Date \_\_\_\_\_



SL and X permits valid 90 days  
CGS permit valid 30 days



**CITY OF OAKLAND**

DEPARTMENT OF PUBLIC WORKS 4th FLOOR

250 FRANK H. OGAWA PLAZA ▪ 2ND FLOOR ▪ OAKLAND, CA 94612

Planning and Building Department  
www.oaklandnet.com

To schedule inspection  
Email: [pwa\\_inspections@oaklandnet.com](mailto:pwa_inspections@oaklandnet.com) or call 510-238-3651

PH: 510-238-3265  
FX: 510-238-3265  
TELE: 510-238-3265

Permit No: X1602373 OPW - Excavation Filed Date: 10/19/2016

Job Site: 3026 LAKESHORE AVE Schedule Inspection by calling: 510-238-3444

Parcel No: 023 041800100

District: For SL; X; and CGS permits see **SPECIAL NOTE** below

**Project Description:** Excavate to install three additional monitoring wells (MW-10, -11, -12) east of Beacon Street on Lakeshore Avenue. Do Not Cut Into Pavement Unless And Until Ready To Commence Work. If working within 25' feet of a monument you must comply with State Law 8771, contact the Inspector prior to starting excavation: minimum \$5,800.00 fine for non-compliance. Comply with all terms of City of Oakland Public Works Standards, Street Excavation Rules, Revised March 2015 and City Council Ordinance No. 13300 C.M.S. Five day prior notice required for work lasting five days or less in business/commercial districts; 72 hour notice in residential districts. Ten day prior notice required for work lasting six days or more in all districts. Permit valid 90 days. Provide USA Ticket # prior to start work. Separate Obstruction permit required to reserve/block parking lane. Set up PWA PRE-CON and provide USA Ticket # prior to start work: 510-238-3651.

Re: Petition to allow three additional monitoring wells (MW-10, -11, -12) on Lakeshore near Beacon Street.

Contact: C McLean, GHD, 225 907-5910.

Re: Record only to establish historical event: In June, 1992 Chevron USA, inc. applied for permission to place four monitoring wells. Agreement recorded July 17, 1992, doc #: 92-232809. Unfortunately, no record of the application was created in PTS. One well in each location: on Lakeshore Ave; MacArthur Bl; Excelsior Ct; Beacon St. No fee charged at this time for this record.

**Related Permits:** X1602372

	<u>Name</u>	<u>Applicant</u>	<u>Address</u>	<u>Phone</u>	<u>License #</u>
<b>Owner:</b>	CHEVRON USA, INC			5555555	
<b>Contractor:</b>	GREGG DRILLING & TESTING INC		2726 WALNUT AVENUE SIGNAL HILL, CA	(562) 427-6899	485165
<b>Owner-Agent:</b>	CHEVRON USA, INC/ K HOEY, GHD	X		510 420-3347	

CITY OF OAKLAND

**SPECIAL NOTE**

- SL; X; and CGS permits: prior to start, email [pwa\\_inspections@oaklandnet.com](mailto:pwa_inspections@oaklandnet.com) or call 510-238-3651
- SL and X permits valid 90 days; CGS permit valid 30 days

ADDRESS

APPLICATION



Permits for which no major inspection has been approved within 180 days shall expire by limitation. No refund more than 180 days after expiration or final.



Permit No: X1602373

Parcel No: 023 041800100

Job Site: 3026 LAKESHORE AVE

Page 2 of 4

**PERMIT DETAILS: Building/Public Infrastructure/Excavation/NA**

**General Information**

Excavation Type: Private Party

Special Paving Detail Required:

Tree Removal Involved:

Date Street Last Resurfaced:

Holiday Restriction (Nov 1 - Jan 1):

Worker's Compensation Company Name:

Limited Operation Area (7AM-9AM) And (4PM-6PM):

Worker's Compensation Policy #:

**Key Dates**

Approximate Start Date:

Approximate End Date:

**TOTAL FEES TO BE PAID AT FILING: \$449.09**

Application Fee	\$70.00	Excavation - Private Party Type	\$321.36	Records Management Fee	\$37.18
Technology Enhancement Fee	\$20.55				

Plans Checked By \_\_\_\_\_ Date \_\_\_\_\_

Permit Issued By [Signature] Date 10.12

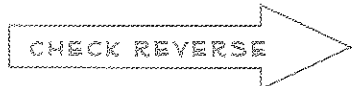
Finalized By \_\_\_\_\_ Date \_\_\_\_\_

Permits for which no major inspection has been approved within 180 days shall expire by limitation. No refund more than 180 days prior expiration of final.

JOB SITE



SL and X permits valid 90 days  
CGS permit valid 30 days

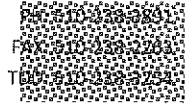


**CITY OF OAKLAND** DEPARTMENT OF PUBLIC WORKS 4th FLOOR

250 FRANK H. OGAWA PLAZA ▪ 2ND FLOOR ▪ OAKLAND, CA 94612

Planning and Building Department  
www.oaklandnet.com

To schedule inspection  
Email: pwa\_inspections@oaklandnet.com or call 510-238-3651



Permit No: X1602372 OPW - Excavation

Filed Date: 10/19/2016

Job Site: 3026 LAKESHORE AVE

Schedule Inspection by calling: 510-238-3444

Parcel No: 023 041800100

District:

For SL; X; and CGS permits see **SPECIAL NOTE** below

**Project Description:** Excavate to install three additional monitoring wells (MW-10, -11, -12) on Lakeshore near Beacon Street.  
Do Not Cut Into Pavement Unless And Until Ready To Commence Work. If working within 25' feet of a monument you must comply with State Law 8771, contact the Inspector prior to starting excavation: minimum \$5,800.00 fine for non-compliance. Comply with all terms of City of Oakland Public Works Standards, Street Excavation Rules, Revised March 2015 and City Council Ordinance No. 13300 C.M.S. Five day prior notice required for work lasting five days or less in business/commercial districts; 72 hour notice in residential districts. Ten day prior notice required for work lasting six days or more in all districts. Permit valid 90 days. Provide USA Ticket # prior to start work. Separate Obstruction permit required to reserve/block parking lane. Set up PWA PRE-CON and provide USA Ticket # prior to start work: 510-238-3651.  
Re: Petition to allow three additional monitoring wells (MW-10, -11, -12) on Lakeshore near Beacon Street.

Contact: C McLean, GHD, 225 907-5910.

Re: Record only to establish historical event: In June, 1992 Chevron USA, Inc. applied for permission to place four monitoring wells. Agreement recorded July 17, 1992, doc #: 92-232809. Unfortunately, no record of the application was created in PTS. One well in each location: on Lakeshore Ave; MacArthur Bl; Excelsior Ct; Beacon St. No fee charged at this time for this record.

**Related Permits:**

ENMI15176

	<u>Name</u>	<u>Applicant</u>	<u>Address</u>	<u>Phone</u>	<u>License #</u>
<b>Owner:</b>	CHEVRON USA, INC			5555555	
<b>Contractor:</b>	GREGG DRILLING & TESTING INC		2726 WALNUT AVENUE SIGNAL HILL, CA	(562) 427-6899	485165
<b>Owner-Agent:</b>	CHEVRON USA, INC/ K HOEY, GHD	X		510 420-3347	

CITY OF OAKLAND

**SPECIAL NOTE**

- SL; X; and CGS permits: prior to start, email pwa\_inspections@oaklandnet.com or call 510-238-3651
- SL and X permits valid 90 days; CGS permit valid 30 days

ADDRESS

APPLICATION



Permit No: X1602372

Parcel No: 023 041800100

Job Site: 3026 LAKESHORE AVE

Page 2 of 4

**PERMIT DETAILS:** Building/Public Infrastructure/Excavation/NA

**General Information**

Excavation Type: Private Party

Special Paving Detail Required:

Tree Removal Involved:

Date Street Last Resurfaced:

Holiday Restriction (Nov 1 - Jan 1):

Worker's Compensation Company Name:

Limited Operation Area (7AM-9AM) And (4PM-6PM):

Worker's Compensation Policy #:

**Key Dates**


Approximate Start Date:

Approximate End Date:

**TOTAL FEES TO BE PAID AT FILING: \$800.61**

Application Fee	\$70.00	Excavation - Private Party Type	\$321.36	Records Management Fee	\$37.18
Technology Enhancement Fee	\$20.55	Transportation Service	\$351.52		

Plans Checked By \_\_\_\_\_ Date \_\_\_\_\_

Permit Issued By  Date 10.19

Finalized By \_\_\_\_\_ Date \_\_\_\_\_

PWA\_inspections@oaklandnet.com

\$1486.09



**GHD SERVICES INC.**

▼ PLEASE DETACH AND RETAIN FOR YOUR RECORDS ▼

INVOICE NUMBER	DATE		VOUCHER NO.	AMOUNT
Account Number: CR91115	8/26/2015	340CITYOA	400969720	426367 2,124.03
<b>TOTAL:</b>				<b>2,124.03</b>

311973

City of Oakland

Planning and Building Department

250 Frank H. Ogawa Plaza  
510-238-4774

=====  
844 Extra Monies  
2,124.03  
2,124.03

Payer Name: GHD SERVICES INC

=====  
SubTotal: 2,124.03  
Total: 2,124.03  
=====

Check 2,124.03  
Other : ENMI15176 3026 LAKESHORE AVE  
Number : 426367

10/2/2015 11:16  
#0562149 /77/24~

Thank You

Applications for which no permit is issued within 180 days shall expire by limitation. No refund more than 180 days after expiration or final.

JOB SITE



# CITY OF OAKLAND

250 FRANK H. OGAWA PLAZA ▪ 2ND FLOOR ▪ OAKLAND, CA 94612

Planning and Building Department  
www.oaklandnet.com

PH: 510-238-3891  
FAX: 510-238-2263  
TDD: 510-238-3254

**APPLICATION ONLY  
NOT A PERMIT**

**Permit No:** ENMI15176 Minor Encroachment  
**Job Site:** 3026 LAKESHORE AVE  
**Parcel No:** 023 041800100  
**District:**

**Filed Date:** 10/2/2015

**Schedule Inspection by calling:** 510-238-3444

**Project Description:** Petition to allow three additional monitoring wells (MW-10, -11, -12) on Lakeshore near Beacon Street.  
Contact: C McLean, GHD, 225 907-5910.  
Re: Record only to establish historical event: In June, 1992 Chevron USA, Inc. applied for permission to place four monitoring wells. Agreement recorded July 17, 1992, doc #: 92-232809. Unfortunately, no record of the application was created in PTS. One well in each location: on Lakeshore Ave; MacArthur Bl; Excelsior Ct; Beacon St. No fee charged at this time for this record.

**Related Permits:** ENMI13127

	<u>Name</u>	<u>Applicant</u>	<u>Address</u>	<u>Phone</u>	<u>License #</u>
<b>Owner:</b>	CHEVRON USA, INC			5555555	3891
<b>Owner-Agent:</b>	CHEVRON USA, INC/ C McLean, GHD	X		225 907-5910	3254

<b>PERMIT DETAILS:</b> Building/Public Use/Facility/Minor Encroachment					
<b>Required Documents And Information</b>					
Encroachment Type:	New Encroachment	Request Letter Submitted?:	Yes		
Carrier:		Site Plan Submitted?:	Yes		
Insurance Expiration Date:		Certificate of Insurance Submitted?:	Yes		
		Copy of Recorded Grant Deed with Legal Description Submitted?:	Yes		

<b>TOTAL FEES TO BE PAID AT FILING: \$2,124.03</b>					
Application Fee	\$70.00	Processing Fee (New Encroachment)	\$1,781.00	Records Management Fee	\$175.85
Technology Enhancement Fee	\$97.18				

**APPLICATION ONLY  
NOT A PERMIT**

**APPLICATION ONLY  
NOT A PERMIT**

510-238-3891  
510-238-2263  
510-238-3254

510-238-3891

510-238-3891

Appendix D  
Standard Operating Procedures for Soil Boring  
and Monitoring Well Installation and for Hand  
Auger Boring and Sampling



## Appendix D

# STANDARD FIELD PROCEDURES FOR SOIL BORING AND MONITORING WELL INSTALLATION

This document presents standard field methods for drilling and sampling soil borings and installing, developing, and sampling groundwater monitoring wells. These procedures are designed to comply with Federal, State and local regulatory guidelines. Specific field procedures are summarized below.

### SOIL BORINGS

#### Objectives

Soil samples are collected to characterize subsurface lithology, assess whether the soils exhibit obvious hydrocarbon or other compound vapor or staining, and to collect samples for analysis at a State-certified laboratory. All borings are logged using the ASTM D2488-06 Unified Soil Classification System by a trained geologist working under the supervision of a California Professional Geologist (PG).

#### Soil Boring and Sampling

Prior to drilling, the first 8 feet of the boring are cleared using an air or water knife and vacuum extraction or hand auger. This minimizes the potential for impacting utilities. Soil borings are typically drilled using hollow-stem augers or direct-push technologies such as the Geoprobe®. Soil samples are collected at least every five ft to characterize the subsurface sediments and for possible chemical analysis. Additional soil samples are collected near the water table and at lithologic changes. Samples are collected using lined split-barrel or equivalent samplers driven into undisturbed sediments at the bottom of the borehole.

Drilling and sampling equipment is steam-cleaned prior to drilling and between borings to prevent cross-contamination. Sampling equipment is washed between samples with trisodium phosphate or an equivalent EPA-approved detergent.

#### Sample Analysis

Sampling tubes chosen for analysis are trimmed of excess soil and capped with Teflon tape and plastic end caps. Soil samples are labeled and stored at or below 4° C on either crushed or dry ice, depending upon local regulations. Samples are transported under chain-of-custody to a State-certified analytic laboratory.

#### Field Screening

One of the remaining tubes is partially emptied leaving about one-third of the soil in the tube. The tube is capped with plastic end caps and set aside to allow hydrocarbons to volatilize from the soil. After ten to fifteen minutes, a portable volatile vapor analyzer measures volatile hydrocarbon vapor concentrations in the tube headspace, extracting the vapor through a slit in the cap. Volatile vapor analyzer measurements are used along with the field observations, odors, stratigraphy and groundwater depth to select soil samples for analysis.

#### Water Sampling

Water samples, if they are collected from the boring, are either collected using a driven Hydropunch® type sampler or are collected from the open borehole using bailers. The groundwater samples are decanted into the appropriate containers supplied by the analytic laboratory. Samples are labeled, placed in

protective foam sleeves, stored on crushed ice at or below 4°C, and transported under chain-of-custody to the laboratory. Laboratory-supplied trip blanks accompany the samples and are analyzed to check for cross-contamination. An equipment blank may be analyzed if non-dedicated sampling equipment is used.

### **Grouting**

If the borings are not completed as wells, the borings are filled to the ground surface with cement grout poured or pumped through a tremie pipe.

## **MONITORING WELL INSTALLATION, DEVELOPMENT AND SAMPLING**

### **Well Construction and Surveying**

Groundwater monitoring wells are installed to monitor groundwater quality and determine the groundwater elevation, flow direction and gradient. Well depths and screen lengths are based on groundwater depth, occurrence of hydrocarbons or other compounds in the borehole, stratigraphy and State and local regulatory guidelines. Well screens typically extend 10 to 15 feet below and 5 feet above the static water level at the time of drilling. However, the well screen will generally not extend into or through a clay layer that is at least three feet thick.

Well casing and screen are flush-threaded, Schedule 40 PVC. Screen slot size varies according to the sediments screened, but slots are generally 0.010 or 0.020 inches wide. A rinsed and graded sand occupies the annular space between the boring and the well screen to about one to two feet above the well screen. A two feet thick hydrated bentonite seal separates the sand from the overlying sanitary surface seal composed of Portland type I, II cement.

Well-heads are secured by locking well-caps inside traffic-rated vaults finished flush with the ground surface. A stovepipe may be installed between the well-head and the vault cap for additional security.

The well top-of-casing elevation is surveyed with respect to mean sea level and the well is surveyed for horizontal location with respect to an onsite or nearby offsite landmark.

### **Well Development**

Wells are generally developed using a combination of groundwater surging and extraction. Surging agitates the groundwater and dislodges fine sediments from the sand pack. After about ten minutes of surging, groundwater is extracted from the well using bailing, pumping and/or reverse air-lifting through an eductor pipe to remove the sediments from the well. Surging and extraction continue until at least ten well-casing volumes of groundwater are extracted and the sediment volume in the groundwater is negligible. This process usually occurs prior to installing the sanitary surface seal to ensure sand pack stabilization. If development occurs after surface seal installation, then development occurs 24 to 72 hours after seal installation to ensure that the Portland cement has set up correctly.

All equipment is steam-cleaned prior to use and air used for air-lifting is filtered to prevent oil entrained in the compressed air from entering the well. Wells that are developed using air-lift evacuation are not sampled until at least 24 hours after they are developed.

### **Groundwater Sampling**

Depending on local regulatory guidelines, three to four well-casing volumes of groundwater are purged prior to sampling. Purging continues until groundwater pH, conductivity, and temperature have stabilized.

Groundwater samples are collected using bailers or pumps and are decanted into the appropriate containers supplied by the analytic laboratory. Samples are labeled, placed in protective foam sleeves, stored on crushed ice at or below 4°C, and transported under chain-of-custody to the laboratory. Laboratory-supplied trip blanks accompany the samples and are analyzed to check for cross-contamination. An equipment blank may be analyzed if non-dedicated sampling equipment is used.

### **Waste Handling and Disposal**

Soil cuttings from drilling activities are usually stockpiled onsite and covered by plastic sheeting. At least three individual soil samples are collected from the stockpiles and composited at the analytic laboratory. The composite sample is analyzed for the same constituents analyzed in the borehole samples in addition to any analytes required by the receiving disposal facility. Soil cuttings are transported by licensed waste haulers and disposed in secure, licensed facilities based on the composite analytic results.

Groundwater removed during development and sampling is typically stored onsite in sealed 55-gallon drums. Each drum is labeled with the drum number, date of generation, suspected contents, generator identification and consultant contact. Upon receipt of analytic results, the water is either pumped out using a vacuum truck for transport to a licensed waste treatment/disposal facility or the individual drums are picked up and transported to the waste facility where the drum contents are removed and appropriately disposed.

## Appendix D

## STANDARD FIELD PROCEDURES FOR HAND AUGER BORING AND SAMPLING

This document presents standard field procedures for drilling and sampling soil borings using a hand auger. These procedures are designed to comply with Federal, State and local regulatory guidelines. Specific field procedures are summarized below.

### ***Objectives***

Soil samples are collected to characterize subsurface lithology, assess whether the soils exhibit obvious hydrocarbon or other compound vapor odor or staining, estimate ground water depth and quality, and to submit samples for chemical analysis.

### ***Soil Classification/Logging***

All soil samples are classified according to the Unified Soil Classification System by a trained geologist or engineer working under the supervision of a California Professional Geologist (PG) or a Certified Engineering Geologist (CEG). The following soil properties are noted for each soil sample:

- Principal and secondary grain size category (i.e. sand, silt, clay, or gravel)
- Approximate percentage of each grain size category
- Color
- Approximate water or product saturation percentage
- Observed odor and/or discoloration
- Other significant observations (i.e. cementation, presence of marker horizons, mineralogy)
- Estimated permeability

### ***Soil Boring and Sampling***

Hand-auger borings are typically drilled using a hand-held bucket auger to remove soil to the desired sampling depth. Samples are collected using lined split-barrel or equivalent samplers driven into undisturbed sediments beyond the bottom of the augered hole. The vertical location of each soil sample is determined using a tape measure. All sample depths use the ground surface immediately adjacent to the boring as a datum. The horizontal location of each boring is measured in the field from an onsite permanent reference using a measuring wheel or tape measure.

Augering and sampling equipment is steam-cleaned prior to drilling and between borings to prevent cross-contamination. Sampling equipment is washed between samples with trisodium phosphate or an equivalent EPA-approved detergent.

### ***Sample Storage, Handling, and Transport***

Sampling tubes chosen for analysis are trimmed of excess soil and capped with Teflon tape and plastic end caps. Soil samples are labeled and stored at or below 4°C on either crushed or dry ice, depending upon local regulations. Samples are transported under chain-of-custody to a State-certified analytic laboratory.

### ***Field Screening***

One of the remaining tubes is partially emptied leaving about one-third of the soil in the tube. The tube is capped with plastic end caps and set aside to allow hydrocarbons to volatilize from the soil. After ten to fifteen minutes, a portable photoionization detector (PID) measures volatile hydrocarbon vapor concentrations in the tube headspace, extracting the vapor through a slit in the cap. PID measurements are used along with the field observations, odors, stratigraphy and ground water depth to select soil samples for analysis.

### ***Water Sampling***

Water samples, if they are collected from the boring, are collected from the open borehole using bailers. The ground water samples are decanted into the appropriate containers supplied by the analytic laboratory. Samples are labeled, placed in protective foam sleeves, stored on crushed ice at or below 4°C, and transported under chain-of-custody to the laboratory.

### ***Duplicates and Blanks***

Blind duplicate water samples are usually collected only for monitoring well sampling programs, at a rate of one blind sample for every 10 wells sampled. Laboratory-supplied trip blanks accompany samples collected for all sampling programs to check for cross-contamination caused by sample handling and transport. These trip blanks are analyzed if the internal laboratory QA/QC blanks contain the suspected field contaminants. An equipment blank may also be analyzed if non-dedicated sampling equipment is used.

### ***Grouting***

The borings are filled to the ground surface with cement grout poured or pumped through a tremie pipe.

### ***Waste Handling and Disposal***

Soil cuttings from drilling activities are usually stockpiled onsite on top of and covered by plastic sheeting. At least four individual soil samples are collected from the stockpiles for later compositing at the analytic laboratory. The composite sample is analyzed for the same constituents analyzed in the borehole samples. Soil cuttings are transported by licensed waste haulers and disposed in secure, licensed facilities based on the composite analytic results.

Ground water removed during sampling and/or rinsate generated during decontamination procedures are stored onsite in sealed 55-gallon drums. Each drum is labeled with the drum number, date of generation, suspected contents, generator identification and consultant contact. Disposal of the water is based on the analytic results for the well samples. The water is either pumped out using a vacuum truck for transport to a licensed waste treatment/disposal facility or the individual drums are picked up and transported to the waste facility where the drum contents are removed and appropriately disposed.

# Appendix E Boring Logs



GHD Services Inc.  
 5900 Hollis Street, Suite A  
 Emeryville, California  
 Telephone: 510-420-0700  
 Fax: 510-420-9170

# BORING / WELL LOG

<b>CLIENT NAME</b> <b>JOB/SITE NAME</b> <b>LOCATION</b> <b>PROJECT NUMBER</b> <b>DRILLER</b> <b>DRILLING METHOD</b> <b>BORING DIAMETER</b> <b>LOGGED BY</b> <b>REVIEWED BY</b> <b>REMARKS</b>	Chevron EMC 90121 Oakland 3026 Lakeshore Avenue, Oakland, CA 311973 Gregg Drilling and Testing, Inc., C-57 #485165 Hand Auger 3-inch B. Sandor G. Barclay, PG# 6260	<b>BORING/WELL NAME</b> <b>DRILLING STARTED</b> <b>DRILLING COMPLETED</b> <b>WELL DEVELOPMENT DATE (YIELD)</b> <b>GROUND SURFACE ELEVATION</b> <b>TOP OF CASING ELEVATION</b> <b>SCREENED INTERVALS</b> <b>DEPTH TO WATER (First Encountered)</b> <b>DEPTH TO WATER (Static)</b>	B-8 24-Oct-16 24-Oct-16 NA NA NA NA NA
--	---	--	---



PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
1.7		B-8-3				<p><b>CONCRETE</b></p> <p><b>FILL:</b> Olive gray; damp; fine to coarse sand, small gravel.  <b>@ 1.0 fbg:</b> Fine to medium sand.</p>	0.5	<p>Bottom of Boring  <b>@ 4 fbg</b></p>
						<p><b>@ 4.0 fbg:</b> Encountered concrete obstruction.</p>	4.0	

WELL LOG (PID) I:\CHEVRON\3119--\311973-9-0121 OAKLAND\311973-GINT\311973-BORING LOGS.GPJ DEFAULT.GDT 29/11/16



GHD Services Inc.  
 5900 Hollis Street, Suite A  
 Emeryville, California  
 Telephone: 510-420-0700  
 Fax: 510-420-9170

# BORING / WELL LOG

<b>CLIENT NAME</b>	Chevron EMC	<b>BORING/WELL NAME</b>	B-9
<b>JOB/SITE NAME</b>	90121 Oakland	<b>DRILLING STARTED</b>	25-Oct-16
<b>LOCATION</b>	3026 Lakeshore Avenue, Oakland, CA	<b>DRILLING COMPLETED</b>	25-Oct-16
<b>PROJECT NUMBER</b>	311973	<b>WELL DEVELOPMENT DATE (YIELD)</b>	NA
<b>DRILLER</b>	Gregg Drilling and Testing, Inc., C-57 #485165	<b>GROUND SURFACE ELEVATION</b>	NA
<b>DRILLING METHOD</b>	Hand Auger	<b>TOP OF CASING ELEVATION</b>	NA
<b>BORING DIAMETER</b>	3-inch	<b>SCREENED INTERVALS</b>	NA
<b>LOGGED BY</b>	B. Sandor	<b>DEPTH TO WATER (First Encountered)</b>	12.00 fbg (25-Oct-16)
<b>REVIEWED BY</b>	G. Barclay, PG# 6260	<b>DEPTH TO WATER (Static)</b>	NA
<b>REMARKS</b>			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
				0.0			<b>GRAVEL</b> <b>FILL:</b> Dark brown; damp; fine to coarse sand, small gravel, silt.	0.2	Bottom of Boring @ 12.5 fbg
							<b>Silty SAND:</b> Dark brown; damp; fine sand, small gravel; loose.	1.0	
					SM			2.0	
		B-9-3			SW SM		<b>SAND with silt:</b> Light brown; damp; fine to medium sand; loose.	3.0	
							<b>Sandy SILT:</b> Light brown; damp; fine to medium sand; soft; slight plasticity.		
					ML				
				0.1			<b>SILT with sand:</b> Yellow orange with light gray mottling; damp; fine sand; soft; low plasticity	5.0	
		B-9-5			ML				
				0.3			<b>CLAY:</b> Greenish gray with dark gray mottling; moist; fine sand; very soft; medium plasticity.	8.0	
		B-9-8			CL		@ 9 fbg: dark brown/dark gray; trace vegetative matter.		
							<b>SILT:</b> Greenish gray; moist; fine sand; very soft; low plasticity.	10.0	
					ML		<b>SILT with sand:</b> Greenish gray; moist; fine sand, clay; very soft; low plasticity.	10.5	
				0.2			<b>Silty SAND:</b> Greenish grey; damp; fine sand; loose.	12.0	
		B-9-12			SM			12.5	

WELL LOG (PID) I:\CHEVRON\3119--\311973 9-0121 OAKLAND\311973-GINT\311973-BORING LOGS.GPJ DEFAULT.GDT 29/11/16





GHD Services Inc.  
 5900 Hollis Street, Suite A  
 Emeryville, California  
 Telephone: 510-420-0700  
 Fax: 510-420-9170

# BORING / WELL LOG

<b>CLIENT NAME</b>	Chevron EMC	<b>BORING/WELL NAME</b>	B-10
<b>JOB/SITE NAME</b>	90121 Oakland	<b>DRILLING STARTED</b>	25-Oct-16
<b>LOCATION</b>	3026 Lakeshore Avenue, Oakland, CA	<b>DRILLING COMPLETED</b>	25-Oct-16
<b>PROJECT NUMBER</b>	311973	<b>WELL DEVELOPMENT DATE (YIELD)</b>	NA
<b>DRILLER</b>	Gregg Drilling and Testing, Inc., C-57 #485165	<b>GROUND SURFACE ELEVATION</b>	NA
<b>DRILLING METHOD</b>	Hand Auger	<b>TOP OF CASING ELEVATION</b>	NA
<b>BORING DIAMETER</b>	3-inch	<b>SCREENED INTERVALS</b>	NA
<b>LOGGED BY</b>	B. Sandor	<b>DEPTH TO WATER (First Encountered)</b>	11.50 fbg (25-Oct-16)
<b>REVIEWED BY</b>	G. Barclay, PG# 6260	<b>DEPTH TO WATER (Static)</b>	NA
<b>REMARKS</b>			

WELL LOG (PID) I:\CHEVRON\3119--\311973 9-0121 OAKLAND\311973-GINT\311973-BORING LOGS.GPJ DEFAULT.GDT 29/11/16

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							<b>FILL:</b> Dark brown; dry; fine to coarse grained sand, gravel, silt; loose.		
0.0		B-10-3			SM		<b>Silty SAND:</b> Light brown; dry; fine sand; loose.	2.0	
0.0		B-10-5		5	ML		<b>Sandy SILT:</b> Yellowish orange; dry; fine sand; soft; non-plastic.  @ 7 fbg: Yellowish orange with brown mottling.	5.0	
0.0		B-10-8			ML		<b>SILT:</b> Light brown; damp; fine sand; soft; medium plasticity.	8.0	
0.0		B-10-10		10	ML		<b>SILT with sand:</b> Greenish gray; damp; fine sand, trace vegetative matter; soft; low plasticity.	9.0	
0.0		B-10-12			ML		<b>Sandy SILT:</b> Greenish gray; moist; fine sand; soft; low plasticity.  @ 11.5 fbg: Wet.	10.0	
								12.5	Bottom of Boring @ 12.5 fbg



GHD Services Inc.  
 5900 Hollis Street, Suite A  
 Emeryville, California  
 Telephone: 510-420-0700  
 Fax: 510-420-9170

# BORING / WELL LOG

<b>CLIENT NAME</b>	Chevron EMC	<b>BORING/WELL NAME</b>	B-11
<b>JOB/SITE NAME</b>	90121 Oakland	<b>DRILLING STARTED</b>	25-Oct-16
<b>LOCATION</b>	3026 Lakeshore Avenue, Oakland, CA	<b>DRILLING COMPLETED</b>	25-Oct-16
<b>PROJECT NUMBER</b>	311973	<b>WELL DEVELOPMENT DATE (YIELD)</b>	NA
<b>DRILLER</b>	Gregg Drilling and Testing, Inc., C-57 #485165	<b>GROUND SURFACE ELEVATION</b>	NA
<b>DRILLING METHOD</b>	Direct push	<b>TOP OF CASING ELEVATION</b>	NA
<b>BORING DIAMETER</b>	3-inch	<b>SCREENED INTERVALS</b>	NA
<b>LOGGED BY</b>	B. Sandor	<b>DEPTH TO WATER (First Encountered)</b>	10.00 fbg (25-Oct-16)
<b>REVIEWED BY</b>	G. Barclay, PG# 6260	<b>DEPTH TO WATER (Static)</b>	NA
<b>REMARKS</b>			

WELL LOG (PID) I:\CHEVRON\3119--\311973 9-0121 OAKLAND\311973-GINT\311973-BORING LOGS.GPJ DEFAULT.GDT 29/11/16

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
0.4		B-11-3	0 - 5			<p><b>FILL:</b> Dark brown; dry; fine to coarse sand, small gravel, silt; loose.</p> <p>@ 1 fbg: Brown with light brown mottling; dry; silt, fine to medium grained sand, small gravel.</p> <p>@ 4 fbg: Gray; dry; small grevel (pea gravel); loose</p>	5.0	
			5 - 10			<b>NO RECOVERY</b>		
7.0		B-11-10	10 - 11	SW		<b>SAND with gravel:</b> Dark gray and light gray; wet; fine to coarse sand, small gravel; loose.	10.0	
			11 - 12	SM		<b>Silty SAND:</b> Olive gray; wet; fine to medium sand; loose.	11.0	
			12 - 13	CL		<b>CLAY:</b> Olive gray; wet; very soft; medium plasticity.	12.0	
			13 - 14	ML		<b>Sandy SILT:</b> Olive gray; wet; fine sand; soft; low plasticity.	13.0	
			14 - 15	SM		<b>Silty SAND:</b> Olive gray; wet; fine sand; loose.	14.0	
5.2		B-11-15	15 - 15				15.0	
								Bottom of Boring @ 15 fbg



GHD Services Inc.  
 5900 Hollis Street, Suite A  
 Emeryville, California  
 Telephone: 510-420-0700  
 Fax: 510-420-9170

# BORING / WELL LOG

<b>CLIENT NAME</b>	Chevron EMC	<b>BORING/WELL NAME</b>	B-12
<b>JOB/SITE NAME</b>	90121 Oakland	<b>DRILLING STARTED</b>	25-Oct-16
<b>LOCATION</b>	3026 Lakeshore Avenue, Oakland, CA	<b>DRILLING COMPLETED</b>	25-Oct-16
<b>PROJECT NUMBER</b>	311973	<b>WELL DEVELOPMENT DATE (YIELD)</b>	NA
<b>DRILLER</b>	Gregg Drilling and Testing, Inc., C-57 #485165	<b>GROUND SURFACE ELEVATION</b>	NA
<b>DRILLING METHOD</b>	Direct push	<b>TOP OF CASING ELEVATION</b>	NA
<b>BORING DIAMETER</b>	3-inch	<b>SCREENED INTERVALS</b>	NA
<b>LOGGED BY</b>	B. Sandor	<b>DEPTH TO WATER (First Encountered)</b>	7.00 fbg (25-Oct-16)
<b>REVIEWED BY</b>	G. Barclay, PG# 6260	<b>DEPTH TO WATER (Static)</b>	NA
<b>REMARKS</b>			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
74.2		B-12-3	0 - 4.0			<p><b>FILL:</b> Dark brown; dry; fine to coarse sand, small gravel, silt; loose.</p> <p>@ 1 fbg: Brown; dry; silt, fine to medium grained sand, small gravel; soft; non-plastic.</p> <p>@ 3.5 fbg: Gray; small gravel (pea gravel); very loose.</p> <p><b>NO RECOVERY</b></p>	4.0	
6.0		B-12-15	14.0 - 15.0	GP		<p><b>GRAVEL with sand:</b> Gray; wet; small gravel, medium to coarse sand; angular gravel; very loose.</p>	15.0	Bottom of Boring @ 15 fbg

WELL LOG (PID) I:\CHEVRON\3119--\311973-9-0121 OAKLAND\311973-GINT\311973-BORING LOGS.GPJ DEFAULT.GDT 29/11/16



GHD Services Inc.  
 5900 Hollis Street, Suite A  
 Emeryville, California  
 Telephone: 510-420-0700  
 Fax: 510-420-9170

# BORING / WELL LOG

<b>CLIENT NAME</b>	Chevron EMC	<b>BORING/WELL NAME</b>	B-13
<b>JOB/SITE NAME</b>	90121 Oakland	<b>DRILLING STARTED</b>	25-Oct-16
<b>LOCATION</b>	3026 Lakeshore Avenue, Oakland, CA	<b>DRILLING COMPLETED</b>	25-Oct-16
<b>PROJECT NUMBER</b>	311973	<b>WELL DEVELOPMENT DATE (YIELD)</b>	NA
<b>DRILLER</b>	Gregg Drilling and Testing, Inc., C-57 #485165	<b>GROUND SURFACE ELEVATION</b>	NA
<b>DRILLING METHOD</b>	Direct push	<b>TOP OF CASING ELEVATION</b>	NA
<b>BORING DIAMETER</b>	3-inch	<b>SCREENED INTERVALS</b>	NA
<b>LOGGED BY</b>	B. Sandor	<b>DEPTH TO WATER (First Encountered)</b>	9.00 fbg (25-Oct-16)
<b>REVIEWED BY</b>	G. Barclay, PG# 6260	<b>DEPTH TO WATER (Static)</b>	NA
<b>REMARKS</b>			

WELL LOG (PID) I:\CHEVRON\3119--\311973-9-0121 OAKLAND\311973-GINT\311973-BORING LOGS.GPJ DEFAULT.GDT 29/11/16

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
			0 - 1.5			<b>FILL:</b> Brown; dry; fine to coarse sand, small gravel, silt, loose.  @ 1fbg: Gray; small gravel; very loose.	1.5	
			1.5 - 6.0			<b>NO RECOVERY</b>		
1.8		B-13-6	6.0 - 8.9	CL		<b>CLAY:</b> Olive gray; moist; fine sand; medium soft; medium plasticity.	6.0	
8.9		B-13-10	8.9 - 10.0	ML		<b>Sandy SILT:</b> Olive gray; wet; fine sand; soft; low plasticity.	9.0	
			10.0 - 14.0	CL		<b>CLAY:</b> Olive gray; moist; trace vegetative matter; very soft; medium plasticity.	10.0	
4.6		B-13-15	14.0 - 15.0	ML		<b>Sandy SILT:</b> Olive gray; wet; fine sand; soft; low plasticity.	14.0	
			15.0 - 15.0				15.0	Bottom of Boring @ 15 fbg



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 Telephone: 510-420-0700  
 Fax: 510-420-9170

# BORING / WELL LOG

**CLIENT NAME** Chevron EMC  
**JOB/SITE NAME** 90121 Oakland  
**LOCATION** 3026 Lakeshore Avenue, Oakland, CA  
**PROJECT NUMBER** 311973  
**DRILLER** Gregg Drilling and Testing, Inc., C-57 #485165  
**DRILLING METHOD** Direct push  
**BORING DIAMETER** 3-inch  
**LOGGED BY** B. Sandor  
**REVIEWED BY** G. Barclay, PG# 6260  
**REMARKS**

**BORING/WELL NAME** MW-10  
**DRILLING STARTED** 24-Oct-16  
**DRILLING COMPLETED** 24-Oct-16  
**WELL DEVELOPMENT DATE (YIELD)** NA  
**GROUND SURFACE ELEVATION** NA  
**TOP OF CASING ELEVATION** NA  
**SCREENED INTERVALS** 10 to 20 fbg  
**DEPTH TO WATER (First Encountered)** 13.50 fbg (24-Oct-16) ▽  
**DEPTH TO WATER (Static)** NA ▼

WELL LOG (PID) I:\CHEVRON\3119--311973-9-0121 OAKLAND\311973-GINT\311973-BORING LOGS.GPJ DEFAULT.GDT 29/11/16

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							<b>CONCRETE</b>	0.5	
							<b>FILL:</b> Light brown; dry; fine to medium sand, gravel, silt; very loose.		
1.2		MW-10-3			ML		<b>SILT with sand:</b> Brown; dry; fine sand.	2.0	
0.7		MW-10-5		5	CL		<b>CLAY:</b> Dark gray; damp; soft; medium plasticity.	5.0	Portland Type I/II
					CL		<b>CLAY with sand:</b> Greenish gray; damp; fine sand; soft; medium plasticity.	6.0	1"-diam., Schedule 40 PVC
					CL		<b>CLAY:</b> Dark brown; damp; fine sand; soft; medium plasticity	8.0	Hydrated Bentonite Chips
0.8		MW-10-10		10	CL		@ 9 fbg: Dark gray		Monterey Sand #3
					SW		<b>SAND with gravel:</b> Dark gray; wet; medium to coarse sand, small gravel; loose.	13.0	
7.5		MW-10-15		15	SM		<b>Silty SAND:</b> Dark gray; moist; fine sand; loose.	14.0	
					SW SM		<b>SAND with silt:</b> Dark gray; wet; fine to coarse sand, gravel; very loose.	18.0	1"-diam., 0.020" Slotted Schedule 40 PVC
					CL		<b>CLAY:</b> Light greenish gray; damp; stiff; low plasticity.	19.0	
5.5		MW-10-20		20	CL			20.0	Bottom of Boring @ 20 fbg

# Appendix F

## Laboratory Analytical Reports

## ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental  
2425 New Holland Pike  
Lancaster, PA 17601

Prepared for:

ChevronTexaco  
6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Report Date: December 06, 2016

### Project: 90121

Submittal Date: 10/26/2016  
Group Number: 1726107  
PO Number: 0015194749  
Release Number: HORNE  
State of Sample Origin: CA

#### Client Sample Description

B-8-S-3-161024 Grab Soil  
MW-10-S-3-161024 Grab Soil  
MW-10-S-5-161024 Grab Soil  
MW-10-S-10-161024 Grab Soil  
MW-10-S-15-161024 Grab Soil  
MW-10-S-20-161024 Grab Soil

Lancaster Labs

(LL) #

8666721  
8666722  
8666723  
8666724  
8666725  
8666726

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at <http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/>. To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To GHD

Attn: Kiersten Hoey

Respectfully Submitted,



Amek Carter  
Specialist

(717) 556-7252

Sample Description: B-8-S-3-161024 Grab Soil  
Facility# 90121 CRAW  
3025 Lakeshore Ave-Oakland T0600100328

LL Sample # SW 8666721  
LL Group # 1726107  
Account # 10880

Project Name: 90121

Collected: 10/24/2016 10:30 by BS

ChevronTexaco

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/26/2016 09:40

Reported: 12/06/2016 09:29

B83--

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles</b>						
	<b>SW-846 8260B</b>		<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.02
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.02
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.02
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1.02
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.02
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.02
<b>GC Volatiles</b>						
	<b>SW-846 8015B modified</b>		<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.5	0.9	23.32
<b>GC Miscellaneous</b>						
	<b>SW-846 8015B</b>		<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10941	TPH-DRO soil C10-C28 microwave	n.a.	63	4.0	12	1
<b>GC Petroleum Hydrocarbons</b>						
	<b>SW-846 8015B modified</b>		<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
02516	Total TPH	n.a.	100	9.9	30	1
02516	TPH Motor Oil C16-C36	n.a.	100	9.9	30	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B163071AA	11/02/2016 16:04	Angela D Sneeringer	1.02
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201630643223	11/01/2016 04:11	Jesse L Mertz	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201630643223	11/01/2016 04:11	Jesse L Mertz	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	3	201630643223	11/01/2016 04:11	Jesse L Mertz	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	4	201630643223	11/01/2016 04:11	Jesse L Mertz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201630643223	11/01/2016 01:51	Jesse L Mertz	n.a.

\*=This limit was used in the evaluation of the final result



Sample Description: B-8-S-3-161024 Grab Soil  
Facility# 90121 CRAW  
3025 Lakeshore Ave-Oakland T0600100328

LL Sample # SW 8666721  
LL Group # 1726107  
Account # 10880

Project Name: 90121

Collected: 10/24/2016 10:30 by BS

ChevronTexaco  
6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/26/2016 09:40

Reported: 12/06/2016 09:29

B83--

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	2	201630643223	11/01/2016 03:46	Jesse L Mertz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	3	201630643223	11/01/2016 03:47	Jesse L Mertz	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	16308A34A	11/03/2016 16:53	Marie D Beamenderfer	23.32
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201630643223	11/01/2016 01:51	Jesse L Mertz	n.a.
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	2	201630643223	11/01/2016 03:48	Jesse L Mertz	n.a.
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	3	201630643223	11/01/2016 03:48	Jesse L Mertz	n.a.
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	4	201630643223	11/01/2016 03:49	Jesse L Mertz	n.a.
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	5	201630643223	11/01/2016 03:49	Jesse L Mertz	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	163100007A	11/11/2016 00:26	Thomas C Wildermuth	1
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	163100008A	11/29/2016 03:22	Timothy Emrick	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	163100007A	11/06/2016 08:00	Kayla A Yuditsky	1
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	163100008A	11/06/2016 08:00	Kayla A Yuditsky	1

\*=This limit was used in the evaluation of the final result

Sample Description: MW-10-S-3-161024 Grab Soil  
Facility# 90121 CRAW  
3025 Lakeshore Ave-Oakland T0600100328

LL Sample # SW 8666722  
LL Group # 1726107  
Account # 10880

Project Name: 90121

Collected: 10/24/2016 12:20 by BS

ChevronTexaco

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/26/2016 09:40

Reported: 12/06/2016 09:29

M103-

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles</b>						
		<b>SW-846 8260B</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.02
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.02
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.02
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1.02
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.02
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.02
<b>GC Volatiles</b>						
		<b>SW-846 8015B modified</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.5	0.9	22.79
<b>GC Miscellaneous</b>						
		<b>SW-846 8015B</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10941	TPH-DRO soil C10-C28 microwave	n.a.	N.D.	3.9	12	1
<b>GC Petroleum Hydrocarbons</b>						
		<b>SW-846 8015B modified</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
02516	Total TPH	n.a.	N.D.	9.9	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	9.9	30	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B163071AA	11/02/2016 17:11	Angela D Sneeringer	1.02
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201630643223	11/01/2016 04:11	Jesse L Mertz	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201630643223	11/01/2016 04:11	Jesse L Mertz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201630643223	11/01/2016 01:54	Jesse L Mertz	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	16308A34A	11/03/2016 19:00	Marie D Beamenderfer	22.79
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201630643223	11/01/2016 01:55	Jesse L Mertz	n.a.

\*=This limit was used in the evaluation of the final result

Sample Description: MW-10-S-3-161024 Grab Soil  
Facility# 90121 CRAW  
3025 Lakeshore Ave-Oakland T0600100328

LL Sample # SW 8666722  
LL Group # 1726107  
Account # 10880

Project Name: 90121

Collected: 10/24/2016 12:20 by BS

ChevronTexaco  
6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/26/2016 09:40

Reported: 12/06/2016 09:29

M103-

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	163100007A	11/10/2016 23:05	Thomas C Wildermuth	1
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	163100008A	11/29/2016 04:27	Timothy Emrick	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	163100007A	11/06/2016 08:00	Kayla A Yuditsky	1
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	163100008A	11/06/2016 08:00	Kayla A Yuditsky	1

\*=This limit was used in the evaluation of the final result

Sample Description: MW-10-S-5-161024 Grab Soil  
Facility# 90121 CRAW  
3025 Lakeshore Ave-Oakland T0600100328

LL Sample # SW 8666723  
LL Group # 1726107  
Account # 10880

Project Name: 90121

Collected: 10/24/2016 12:25 by BS

ChevronTexaco

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/26/2016 09:40

Reported: 12/06/2016 09:29

-M105

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles</b>						
		<b>SW-846 8260B</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10237	Benzene	71-43-2	N.D.	0.0005	0.005	0.96
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.96
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.96
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	0.96
10237	Toluene	108-88-3	N.D.	0.001	0.005	0.96
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	0.96
<b>GC Volatiles</b>						
		<b>SW-846 8015B modified</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.5	1	24.2
<b>GC Miscellaneous</b>						
		<b>SW-846 8015B</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10941	TPH-DRO soil C10-C28 microwave	n.a.	N.D.	4.0	12	1
<b>GC Petroleum Hydrocarbons</b>						
		<b>SW-846 8015B modified</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
02516	Total TPH	n.a.	N.D.	9.9	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	9.9	30	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B163071AA	11/02/2016 17:34	Angela D Sneeringer	0.96
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201630643223	11/01/2016 04:11	Jesse L Mertz	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201630643223	11/01/2016 04:11	Jesse L Mertz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201630643223	11/01/2016 01:57	Jesse L Mertz	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	16308A34A	11/03/2016 19:42	Marie D Beamenderfer	24.2
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201630643223	11/01/2016 01:58	Jesse L Mertz	n.a.

\*=This limit was used in the evaluation of the final result

Sample Description: MW-10-S-5-161024 Grab Soil  
Facility# 90121 CRAW  
3025 Lakeshore Ave-Oakland T0600100328

LL Sample # SW 8666723  
LL Group # 1726107  
Account # 10880

Project Name: 90121

Collected: 10/24/2016 12:25 by BS

ChevronTexaco  
6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/26/2016 09:40

Reported: 12/06/2016 09:29

-M105

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	163100007A	11/10/2016 23:26	Thomas C Wildermuth	1
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	163100008A	11/29/2016 04:48	Timothy Emrick	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	163100007A	11/06/2016 08:00	Kayla A Yuditsky	1
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	163100008A	11/06/2016 08:00	Kayla A Yuditsky	1

\*=This limit was used in the evaluation of the final result

Sample Description: MW-10-S-10-161024 Grab Soil  
Facility# 90121 CRAW  
3025 Lakeshore Ave-Oakland T0600100328

LL Sample # SW 8666724  
LL Group # 1726107  
Account # 10880

Project Name: 90121

Collected: 10/24/2016 13:20 by BS

ChevronTexaco

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/26/2016 09:40

Reported: 12/06/2016 09:29

M1010

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles</b>						
		<b>SW-846 8260B</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.01
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.01
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.01
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1.01
10237	Toluene	108-88-3	0.001 J	0.001	0.005	1.01
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.01
<b>GC Volatiles</b>						
		<b>SW-846 8015B modified</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.5	1.1	26.37
<b>GC Miscellaneous</b>						
		<b>SW-846 8015B</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10941	TPH-DRO soil C10-C28 microwave	n.a.	55	4.0	12	1
<b>GC Petroleum Hydrocarbons</b>						
		<b>SW-846 8015B modified</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
02516	Total TPH	n.a.	N.D.	10	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	10	30	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B163071AA	11/02/2016 17:57	Angela D Sneeringer	1.01
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201630643223	11/01/2016 04:11	Jesse L Mertz	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201630643223	11/01/2016 04:11	Jesse L Mertz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201630643223	11/01/2016 02:01	Jesse L Mertz	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	16308A34A	11/04/2016 04:51	Marie D Beamenderfer	26.37
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201630643223	11/01/2016 02:02	Jesse L Mertz	n.a.

\*=This limit was used in the evaluation of the final result

Sample Description: MW-10-S-10-161024 Grab Soil  
Facility# 90121 CRAW  
3025 Lakeshore Ave-Oakland T0600100328

LL Sample # SW 8666724  
LL Group # 1726107  
Account # 10880

Project Name: 90121

Collected: 10/24/2016 13:20 by BS

ChevronTexaco  
6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/26/2016 09:40

Reported: 12/06/2016 09:29

M1010

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	163100007A	11/10/2016 23:46	Thomas C Wildermuth	1
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	163100008A	11/29/2016 05:09	Timothy Emrick	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	163100007A	11/06/2016 08:00	Kayla A Yuditsky	1
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	163100008A	11/06/2016 08:00	Kayla A Yuditsky	1

\*=This limit was used in the evaluation of the final result

Sample Description: MW-10-S-15-161024 Grab Soil  
Facility# 90121 CRAW  
3025 Lakeshore Ave-Oakland T0600100328

LL Sample # SW 8666725  
LL Group # 1726107  
Account # 10880

Project Name: 90121

Collected: 10/24/2016 13:25 by BS

ChevronTexaco

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/26/2016 09:40

Reported: 12/06/2016 09:29

M1015

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles</b>						
	<b>SW-846 8260B</b>		<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.01
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.01
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.01
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1.01
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.01
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.01
<b>GC Volatiles</b>						
	<b>SW-846 8015B modified</b>		<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.6	1.1	27.69
<b>GC Miscellaneous</b>						
	<b>SW-846 8015B</b>		<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10941	TPH-DRO soil C10-C28 microwave	n.a.	11 J	4.0	12	1
<b>GC Petroleum Hydrocarbons</b>						
	<b>SW-846 8015B modified</b>		<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
02516	Total TPH	n.a.	N.D.	9.9	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	9.9	30	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B163081AA	11/03/2016 13:03	Angela D Sneeringer	1.01
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201630643223	11/01/2016 04:11	Jesse L Mertz	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201630643223	11/01/2016 04:11	Jesse L Mertz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201630643223	11/01/2016 02:04	Jesse L Mertz	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	16308A34A	11/03/2016 20:24	Marie D Beamenderfer	27.69
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201630643223	11/01/2016 02:04	Jesse L Mertz	n.a.

\*=This limit was used in the evaluation of the final result



Sample Description: MW-10-S-15-161024 Grab Soil  
Facility# 90121 CRAW  
3025 Lakeshore Ave-Oakland T0600100328

LL Sample # SW 8666725  
LL Group # 1726107  
Account # 10880

Project Name: 90121

Collected: 10/24/2016 13:25 by BS

ChevronTexaco  
6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/26/2016 09:40

Reported: 12/06/2016 09:29

M1015

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	163100007A	11/11/2016 00:06	Thomas C Wildermuth	1
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	163100008A	11/29/2016 05:31	Timothy Emrick	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	163100007A	11/06/2016 08:00	Kayla A Yuditsky	1
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	163100008A	11/06/2016 08:00	Kayla A Yuditsky	1

\*=This limit was used in the evaluation of the final result

Sample Description: MW-10-S-20-161024 Grab Soil  
Facility# 90121 CRAW  
3025 Lakeshore Ave-Oakland T0600100328

LL Sample # SW 8666726  
LL Group # 1726107  
Account # 10880

Project Name: 90121

Collected: 10/24/2016 13:30 by BS

ChevronTexaco

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/26/2016 09:40

Reported: 12/06/2016 09:29

M1020

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles</b>						
		<b>SW-846 8260B</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.01
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.01
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.01
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1.01
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.01
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.01
<b>GC Volatiles</b>						
		<b>SW-846 8015B modified</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.5	0.9	22.79
<b>GC Miscellaneous</b>						
		<b>SW-846 8015B</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10941	TPH-DRO soil C10-C28 microwave	n.a.	10 J	4.0	12	1
<b>GC Petroleum Hydrocarbons</b>						
		<b>SW-846 8015B modified</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
02516	Total TPH	n.a.	N.D.	9.9	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	9.9	30	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B163081AA	11/03/2016 13:25	Angela D Sneeringer	1.01
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201630643223	11/01/2016 04:11	Jesse L Mertz	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201630643223	11/01/2016 04:11	Jesse L Mertz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201630643223	11/01/2016 02:07	Jesse L Mertz	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	16308A34A	11/03/2016 21:06	Marie D Beamenderfer	22.79
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201630643223	11/01/2016 02:07	Jesse L Mertz	n.a.

\*=This limit was used in the evaluation of the final result

Sample Description: MW-10-S-20-161024 Grab Soil  
Facility# 90121 CRAW  
3025 Lakeshore Ave-Oakland T0600100328

LL Sample # SW 8666726  
LL Group # 1726107  
Account # 10880

Project Name: 90121

Collected: 10/24/2016 13:30 by BS

ChevronTexaco  
6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/26/2016 09:40

Reported: 12/06/2016 09:29

M1020

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	163100007A	11/10/2016 22:45	Thomas C Wildermuth	1
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	163100008A	11/29/2016 05:52	Timothy Emrick	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	163100007A	11/06/2016 08:00	Kayla A Yuditsky	1
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	163100008A	11/06/2016 08:00	Kayla A Yuditsky	1

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: ChevronTexaco  
Reported: 12/06/2016 09:29

Group Number: 1726107

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

### Method Blank

Analysis Name	Result	MDL**	LOQ
	mg/kg	mg/kg	mg/kg
Batch number: B163071AA	Sample number(s): 8666721-8666724		
Benzene	N.D.	0.0005	0.005
Ethylbenzene	N.D.	0.001	0.005
Methyl Tertiary Butyl Ether	N.D.	0.0005	0.005
Naphthalene	N.D.	0.001	0.005
Toluene	N.D.	0.001	0.005
Xylene (Total)	N.D.	0.001	0.005
Batch number: B163081AA	Sample number(s): 8666725-8666726		
Benzene	N.D.	0.0005	0.005
Ethylbenzene	N.D.	0.001	0.005
Methyl Tertiary Butyl Ether	N.D.	0.0005	0.005
Naphthalene	N.D.	0.001	0.005
Toluene	N.D.	0.001	0.005
Xylene (Total)	N.D.	0.001	0.005
Batch number: 16308A34A	Sample number(s): 8666721-8666726		
TPH-GRO N. CA soil C6-C12	N.D.	0.5	1.0
Batch number: 163100007A	Sample number(s): 8666721-8666726		
TPH-DRO soil C10-C28 microwave	N.D.	4.0	12
Batch number: 163100008A	Sample number(s): 8666721-8666726		
Total TPH	N.D.	10	30
TPH Motor Oil C16-C36	N.D.	10	30

### LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: B163071AA	Sample number(s): 8666721-8666724								
Benzene	0.0200	0.0219	0.0200	0.0174	109	87	80-120	23	30
Ethylbenzene	0.0200	0.0223	0.0200	0.0176	111	88	80-120	23	30
Methyl Tertiary Butyl Ether	0.0200	0.0241	0.0200	0.0200	120	100	72-120	19	30
Naphthalene	0.0200	0.0228	0.0200	0.0190	114	95	53-120	18	30
Toluene	0.0200	0.0228	0.0200	0.0181	114	91	80-120	23	30
Xylene (Total)	0.0600	0.0675	0.0600	0.0538	113	90	80-120	23	30

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

## Quality Control Summary

Client Name: ChevronTexaco  
Reported: 12/06/2016 09:29

Group Number: 1726107

### LCS/LCSD (continued)

Analysis Name	LCS Spike Added mg/kg	LCS Conc mg/kg	LCSD Spike Added mg/kg	LCSD Conc mg/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B163081AA	Sample number(s): 8666725-8666726								
Benzene	0.0200	0.0181	0.0200	0.0194	91	97	80-120	7	30
Ethylbenzene	0.0200	0.0183	0.0200	0.0199	92	99	80-120	8	30
Methyl Tertiary Butyl Ether	0.0200	0.0197	0.0200	0.0207	98	103	72-120	5	30
Naphthalene	0.0200	0.0194	0.0200	0.0207	97	104	53-120	7	30
Toluene	0.0200	0.0188	0.0200	0.0202	94	101	80-120	7	30
Xylene (Total)	0.0600	0.0556	0.0600	0.0604	93	101	80-120	8	30
	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 16308A34A	Sample number(s): 8666721-8666726								
TPH-GRO N. CA soil C6-C12	11	10.44			95		58-120		
	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 163100007A	Sample number(s): 8666721-8666726								
TPH-DRO soil C10-C28 microwave	133	113.29			85		74-117		
	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 163100008A	Sample number(s): 8666721-8666726								
Total TPH	133	90.29			68		64-122		

### MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc mg/kg	MS Spike Added mg/kg	MS Conc mg/kg	MSD Spike Added mg/kg	MSD Conc mg/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: B163071AA	Sample number(s): 8666721-8666724 UNSPK: 8666721									
Benzene	N.D.	0.0193	0.0194	0.0194	0.0189	101	97	80-120	3	30
Ethylbenzene	N.D.	0.0193	0.0185	0.0194	0.0166	96	86	80-120	11	30
Methyl Tertiary Butyl Ether	N.D.	0.0193	0.0199	0.0194	0.0202	103	104	72-120	1	30
Naphthalene	N.D.	0.0193	0.0141	0.0194	0.0134	73	69	53-120	5	30
Toluene	N.D.	0.0193	0.0200	0.0194	0.0187	104	97	80-120	6	30
Xylene (Total)	N.D.	0.0578	0.0556	0.0581	0.0499	96	86	80-120	11	30
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 16308A34A	Sample number(s): 8666721-8666726 UNSPK: 8666721									
TPH-GRO N. CA soil C6-C12	N.D.	10.3	11.79	12.2	14.81	114	121*	58-120	23	30
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 163100007A	Sample number(s): 8666721-8666726 UNSPK: 8666721									

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

## Quality Control Summary

Client Name: ChevronTexaco  
Reported: 12/06/2016 09:29

Group Number: 1726107

### MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc mg/kg	MS Spike Added mg/kg	MS Conc mg/kg	MSD Spike Added mg/kg	MSD Conc mg/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
TPH-DRO soil C10-C28 microwave	63.11	132	206.62			109		74-117		
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 163100008A	Sample number(s): 8666721-8666726 UNSPK: 8666721									
Total TPH	101.2	132	163.46			47*		64-122		

### Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/kg	DUP Conc mg/kg	DUP RPD	DUP RPD Max
Batch number: 163100007A	Sample number(s): 8666721-8666726 BKG: 8666721			
TPH-DRO soil C10-C28 microwave	63.11	82.57	27*	20
	mg/kg	mg/kg		
Batch number: 163100008A	Sample number(s): 8666721-8666726 BKG: 8666721			
Total TPH	101.2	108.89	7 (1)	20
TPH Motor Oil C16-C36	101.2	108.89	7 (1)	20

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: VOCs 8260 BTEX/MTBE/Naph Soil  
Batch number: B163071AA

	D	a	12-Dc	a - 4	T - 8	4-B
8666721	63		105		99	94
8666722	101		102		100	91
8666723	101		101		101	91
8666724	102		100		105	88
Blank	102		107		98	94
LCS	101		102		101	99
LCSD	102		105		101	99
MS	55		104		101	98
MSD	61		108		101	100

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

## Quality Control Summary

Client Name: ChevronTexaco  
Reported: 12/06/2016 09:29

Group Number: 1726107

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: VOCs 8260 BTEX/MTBE/Naph Soil  
Batch number: B163071AA

Limits: 50-141 54-135 52-141 50-131

Analysis Name: VOCs 8260 BTEX/MTBE/Naph Soil  
Batch number: B163081AA

	D	a	12-Dc	a - 4	T - 8	4B
8666725	101		105		98	94
8666726	98		100		101	95
Blank	101		110		98	94
LCS	101		105		101	99
LCSD	99		101		100	99

Limits: 50-141 54-135 52-141 50-131

Analysis Name: TPH-GRO N. CA soil C6-C12  
Batch number: 16308A34A

	T	-F
8666721	98	
8666722	100	
8666723	103	
8666724	68	
8666725	101	
8666726	92	
Blank	94	
LCS	98	
MS	99	
MSD	103	

Limits: 50-142

Analysis Name: TPH-DRO soil C10-C28 microwave  
Batch number: 163100007A

	O
8666721	103
8666722	89
8666723	93
8666724	84
8666725	101
8666726	79
Blank	103
DUP	117
LCS	104
MS	106

Limits: 34-147

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

## Quality Control Summary

Client Name: ChevronTexaco  
Reported: 12/06/2016 09:29

Group Number: 1726107

### Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: TPH Fuels by GC (Soils)  
Batch number: 163100008A

	C	O
8666721	74	84
8666722	60	68
8666723	66	71
8666724	75	87
8666725	65	61
8666726	62	57
Blank	68	77
DUP	67	77
LCS	70	82
MS	80	92
Limits:	58-129	50-126

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.



# Chevron California Region Analysis Request/Chain of Custody



Lancaster Laboratories  
Environmental

Acct. # 10880      For Eurofins Lancaster Laboratories Environmental use only  
 Group # 1726107      Sample # 8666721-26  
 Instructions on reverse side correspond with circled numbers.

102416-02

1 Client Information				4 Matrix				5 Analyses Requested												6 Remarks						
Facility # <u>90121</u> WBS Site Address <u>3026 LAKESHORE AVE, OAKLAND, CA</u> Chevron PM <u>MARK HORNE</u> Lead Consultant <u>GHD</u> Consultant/Office <u>GHD - 5900 HOLLIS ST, SUITE A, EMERYVILLE CA</u> Consultant Project Mgr. <u>KIERSTEN HOEY</u> Consultant Phone # <u>510 420 3347</u> Sampler <u>BRYAN SANDOR, ERIL CHODOROFF</u>				<input type="checkbox"/> Sediment <input type="checkbox"/> Potable <input type="checkbox"/> Ground <input type="checkbox"/> NPDES <input type="checkbox"/> Surface <input type="checkbox"/> Oil <input type="checkbox"/> Air				Total Number of Containers BTEX + MTBE 8021 <input type="checkbox"/> 8260 <input checked="" type="checkbox"/> TPH-GRO 8015 <input type="checkbox"/> 8260 <input checked="" type="checkbox"/> TPH-DRO 8015 without Silica Gel Cleanup <input checked="" type="checkbox"/> TPH-DRO 8015 with Silica Gel Cleanup <input type="checkbox"/> 8260 Full Scan Oxygenates Total Lead Dissolved Lead TPHMO BY EPA METHOD 8015 NAPHTHALENE BY 8260 PAHs BY EPA 8270												SCR #: _____ <input type="checkbox"/> Results in Dry Weight <input type="checkbox"/> J value reporting needed <input type="checkbox"/> Must meet lowest detection limits possible for 8260 compounds <input type="checkbox"/> 8021 MTBE Confirmation <input type="checkbox"/> Confirm highest hit by 8260 <input type="checkbox"/> Confirm all hits by 8260 <input type="checkbox"/> Run _____ oxy's on highest hit <input type="checkbox"/> Run _____ oxy's on all hits						
2 Sample Identification		3 Soil Depth	Collected		Grab	Composite	Soil	Water	Oil	Total	BTEX + MTBE	8021	8260	TPH-GRO	8015	TPH-DRO 8015 without Silica Gel Cleanup	TPH-DRO 8015 with Silica Gel Cleanup	8260 Full Scan	Oxygenates	Total Lead	Method	Dissolved Lead	Method	TPHMO BY EPA METHOD 8015	NAPHTHALENE BY 8260	PAHs BY EPA 8270
			Date	Time																						
<u>B-8-3</u>		<u>3</u>	<u>10-24-16</u>	<u>1030</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<u>1</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<u>MW-10-3</u>		<u>3</u>	<u>10-24-16</u>	<u>1220</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<u>1</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<u>MW-10-5</u>		<u>5</u>	<u>10-24-16</u>	<u>1225</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<u>1</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<u>MW-10-10</u>		<u>10</u>	<u>10-24-16</u>	<u>1320</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<u>1</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<u>MW-10-15</u>		<u>15</u>	<u>10-24-16</u>	<u>1325</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<u>1</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<u>MW-10-20</u>		<u>20</u>	<u>10-24-16</u>	<u>1330</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<u>1</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
7 Turnaround Time Requested (TAT) (please circle)					Relinquished by <u>Eric Kabanoff</u> Date <u>10-24-16</u> Time <u>1536</u>			Received by <u>[Signature]</u> Date <u>10/24/16</u> Time <u>1536</u>																		
Standard <input checked="" type="checkbox"/> 5 day      4 day 72 hour      48 hour      24 hour					Relinquished by <u>A. Salazar</u> Date <u>10-25-16</u> Time <u>1630</u>			Received by <u>FX</u>																		
8 Data Package (circle if required) Type I - Full      Type VI (Raw Data)					Relinquished by _____      Date _____      Time _____			Received by _____      Date _____      Time _____																		
EDD (circle if required) EDFFLAT (default)      Other: _____					Relinquished by Commercial Carrier: UPS _____ FedEx <input checked="" type="checkbox"/> Other _____			Received by <u>[Signature]</u> Date <u>10-26-16</u> Time <u>940</u>																		
Temperature Upon Receipt <u>0.3 - 3.2</u> °C										Custody Seals Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																

## Amek Carter

---

**From:** US19\_USR\_AutomatedChangeForms  
**Sent:** Wednesday, November 02, 2016 5:32 PM  
**To:** Amek Carter  
**Subject:** Change Form for Group 1726107 (ChevronTexaco - 10880)

Group Number:1726107

Client: ChevronTexaco

Account: 10880

Project: 90121

CSR: Loran Carter

Entry Date: 10/28/16 03:55

Change Reasons:

SDGs:

Change Dates: 11/02/16 16:53

Changing Employee: Loran Carter;

Changed Samples: 8666721-8666726

Standard Group Forms:

Standard Sample Forms:

Recipients:

[DP32Contacts@eurofinsus.com](mailto:DP32Contacts@eurofinsus.com);[ChadwickHershey@eurofinsus.com](mailto:ChadwickHershey@eurofinsus.com);[DP36Contacts@eurofinsus.com](mailto:DP36Contacts@eurofinsus.com);[eddcontacts@eurofinsus.com](mailto:eddcontacts@eurofinsus.com);

---

### Analysis Changes

Sample = 8666721

Master Analysis = 02002;

Analysis Added

Sample = 8666721-8666726

Master Analysis = 02222;11210;11681;

Deleted

Master Analysis = 10941;10942;

Analysis Added

## Amek Carter

---

**From:** US19\_USR\_AutomatedChangeForms  
**Sent:** Tuesday, November 01, 2016 12:56 AM  
**To:** Amek Carter  
**Subject:** Change Form for Group 1726107 (ChevronTexaco - 10880)

Group Number:1726107

Client: ChevronTexaco

Account: 10880

Project: 90121

CSR: Loran Carter

Entry Date: 10/28/16 03:55

Change Reasons: LAB: Technical Decision

SDGs:

Change Dates: 11/01/16 00:21

Changing Employee: Jesse Mertz;

Changed Samples: 8666721-8666726

Standard Group Forms:

Standard Sample Forms:

Recipients: [DP55Contacts@eurofinsus.com](mailto:DP55Contacts@eurofinsus.com);[ChadwickHershey@eurofinsus.com](mailto:ChadwickHershey@eurofinsus.com);[eddcontacts@eurofinsus.com](mailto:eddcontacts@eurofinsus.com);

---

### Analysis Changes

Sample = 8666721-8666726

Master Analysis = 01238;01565;

Deleted

## Amek Carter

---

**From:** US19\_USR\_AutomatedChangeForms  
**Sent:** Friday, October 28, 2016 11:30 PM  
**To:** Amek Carter  
**Subject:** Change Form for Group 1726107 (ChevronTexaco - 10880)

Group Number:1726107

Client: ChevronTexaco

Account: 10880

Project: 90121

CSR: Loran Carter

Entry Date: 10/28/16 03:55

Change Reasons: LAB: Technical Decision

SDGs:

Change Dates: 10/28/16 22:56

Changing Employee: Jesse Mertz;

Changed Samples: 8666721-8666726

Standard Group Forms:

Standard Sample Forms:

Recipients: [DP55Contacts@eurofinsus.com](mailto:DP55Contacts@eurofinsus.com);[ChadwickHershey@eurofinsus.com](mailto:ChadwickHershey@eurofinsus.com);[eddcontacts@eurofinsus.com](mailto:eddcontacts@eurofinsus.com);

---

### Analysis Changes

Sample = 8666721-8666726

Master Analysis = 11968;

Deleted

Client: CA Office

**Delivery and Receipt Information**

Delivery Method: BASC                      Arrival Timestamp: 10/26/2016 9:40  
 Number of Packages: 4                      Number of Projects: 5  
 State/Province of Origin: CA

**Arrival Condition Summary**

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	N/A
Samples Chilled:	Yes	Total Trip Blank Qty:	0
Paperwork Enclosed:	Yes	Air Quality Samples Present:	No
Samples Intact:	Yes		
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

*Unpacked by Timothy Cubberley (6520) at 12:13 on 10/26/2016*

**Samples Chilled Details**

Thermometer Types:    *DT = Digital (Temp. Bottle)    IR = Infrared (Surface Temp)*    *All Temperatures in °C.*

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT131	0.5	DT	Wet	Y	Bagged	N
2	DT131	0.3	DT	Wet	Y	Bagged	N
3	DT131	1.8	DT	Wet	Y	Bagged	N
4	DT131	3.2	DT	Wet	Y	Bagged	N

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

<b>BMQL</b>	Below Minimum Quantitation Level	<b>mg</b>	milligram(s)
<b>C</b>	degrees Celsius	<b>mL</b>	milliliter(s)
<b>cfu</b>	colony forming units	<b>MPN</b>	Most Probable Number
<b>CP Units</b>	cobalt-chloroplatinate units	<b>N.D.</b>	none detected
<b>F</b>	degrees Fahrenheit	<b>ng</b>	nanogram(s)
<b>g</b>	gram(s)	<b>NTU</b>	nephelometric turbidity units
<b>IU</b>	International Units	<b>pg/L</b>	picogram/liter
<b>kg</b>	kilogram(s)	<b>RL</b>	Reporting Limit
<b>L</b>	liter(s)	<b>TNTC</b>	Too Numerous To Count
<b>lb.</b>	pound(s)	<b>µg</b>	microgram(s)
<b>m3</b>	cubic meter(s)	<b>µL</b>	microliter(s)
<b>meq</b>	milliequivalents	<b>umhos/cm</b>	micromhos/cm
<b>&lt;</b>	less than		
<b>&gt;</b>	greater than		
<b>ppm</b>	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
<b>ppb</b>	parts per billion		
<b>Dry weight basis</b>	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

## Laboratory Data Qualifiers:

- B - Analyte detected in the blank
- C - Result confirmed by reanalysis
- E - Concentration exceeds the calibration range
- J (or G, I, X) - estimated value  $\geq$  the Method Detection Limit (MDL or DL) and  $<$  the Limit of Quantitation (LOQ or RL)
- P - Concentration difference between the primary and confirmation column  $>40\%$ . The lower result is reported.
- U - Analyte was not detected at the value indicated
- V - Concentration difference between the primary and confirmation column  $>100\%$ . The reporting limit is raised due to this disparity and evident interference...
- W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

**Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.**

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

## ANALYTICAL RESULTS

Prepared by:

Prepared for:

Eurofins Lancaster Laboratories Environmental  
2425 New Holland Pike  
Lancaster, PA 17601

ChevronTexaco  
6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Report Date: December 06, 2016

### Project: 90121

Submittal Date: 10/27/2016  
Group Number: 1726411  
PO Number: PENDING  
Release Number: HORNE  
State of Sample Origin: CA

#### Client Sample Description

	Lancaster Labs (LL) #
B-11-S-3-161025 Grab Soil	8667759
B-11-S-10-161025 Grab Soil	8667760
B-11-S-15-161025 Grab Soil	8667761
B-12-S-3-161025 Grab Soil	8667762
B-12-S-15-161025 Grab Soil	8667763
B-13-S-6-161025 Grab Soil	8667764
B-13-S-10-161025 Grab Soil	8667765
B-13-S-15-161025 Grab Soil	8667766
B-9-W-161025 Grab Groundwater	8667767
B-10-W-161025 Grab Groundwater	8667768
B-9-S-3-161025 Grab Soil	8667769
B-9-S-5-161025 Grab Soil	8667770
B-9-S-8-161025 Grab Soil	8667771
B-9-S-10-161025 Grab Soil	8667772
B-9-S-12-161025 Grab Soil	8667773
B-10-S-3-161025 Grab Soil	8667774
B-10-S-5-161025 Grab Soil	8667775
B-10-S-8-161025 Grab Soil	8667776
B-10-S-10-161025 Grab Soil	8667777
B-10-S-12-161025 Grab Soil	8667778
QA-T-161025 Water	8667779

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at <http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/>. To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To GHD  
Electronic Copy To Chevron

Attn: Kiersten Hoey  
Attn: GHD EDD

Respectfully Submitted,



Amek Carter  
Specialist

(717) 556-7252



Sample Description: B-11-S-3-161025 Grab Soil  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667759  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 11:15 by BS

ChevronTexaco

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

LO113

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles</b>						
		<b>SW-846 8260B</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.04
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.04
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.04
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1.04
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.04
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.04
<b>GC Volatiles</b>						
		<b>SW-846 8015B modified</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.5	0.9	23.5
<b>GC Miscellaneous</b>						
		<b>SW-846 8015B</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10941	TPH-DRO soil C10-C28 microwave	n.a.	N.D.	4.0	12	1
<b>GC Petroleum Hydrocarbons</b>						
		<b>SW-846 8015B modified</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
02516	Total TPH	n.a.	N.D.	9.9	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	9.9	30	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B163101AA	11/05/2016 15:35	Patrick T Herres	1.04
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 04:11	Jesse L Mertz	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201630643224	11/01/2016 04:11	Jesse L Mertz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:10	Jesse L Mertz	n.a.
10814	BNA Soil Microwave PAH	SW-846 3546	1	16313SLA026	11/08/2016 22:55	Karen L Beyer	1
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	16308A34A	11/03/2016 22:31	Marie D Beamenderfer	23.5

\*=This limit was used in the evaluation of the final result

Sample Description: B-11-S-3-161025 Grab Soil  
 Facility# 90121 CRAW  
 3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667759  
 LL Group # 1726411  
 Account # 10880

Project Name: 90121

Collected: 10/25/2016 11:15 by BS

ChevronTexaco  
 6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

LO113

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:11	Jesse L Mertz	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	163100005A	11/10/2016 17:21	Thomas C Wildermuth	1
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	163100006A	11/07/2016 22:42	Heather E Williams	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	163100005A	11/06/2016 08:00	David S Schrum	1
11218	TPH Fuels Soils Extraction	SW-846 3550C	1	163100006A	11/06/2016 08:00	David S Schrum	1

\*=This limit was used in the evaluation of the final result

Sample Description: B-11-S-10-161025 Grab Soil  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667760  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 14:00 by BS

ChevronTexaco

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

O1110

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles</b>						
		<b>SW-846 8260B</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.08
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.08
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.012	0.0005	0.005	1.08
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1.08
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.08
10237	Xylene (Total)	1330-20-7	0.002 J	0.001	0.005	1.08
<b>GC Volatiles</b>						
		<b>SW-846 8015B modified</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
01725	TPH-GRO N. CA soil C6-C12	n.a.	3.2	0.5	1.0	25.08
<b>GC Miscellaneous</b>						
		<b>SW-846 8015B</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10941	TPH-DRO soil C10-C28 microwave	n.a.	8.2 J	4.0	12	1
<b>GC Petroleum Hydrocarbons</b>						
		<b>SW-846 8015B modified</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
02516	Total TPH	n.a.	N.D.	9.9	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	9.9	30	1
TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.						

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B163101AA	11/05/2016 15:58	Patrick T Herres	1.08
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 04:11	Jesse L Mertz	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201630643224	11/01/2016 04:12	Jesse L Mertz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:13	Jesse L Mertz	n.a.
10814	BNA Soil Microwave PAH	SW-846 3546	1	16313SLA026	11/08/2016 22:55	Karen L Beyer	1
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	16308A34A	11/03/2016 23:13	Marie D Beamenderfer	25.08

\*=This limit was used in the evaluation of the final result

Sample Description: B-11-S-10-161025 Grab Soil  
 Facility# 90121 CRAW  
 3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667760  
 LL Group # 1726411  
 Account # 10880

Project Name: 90121

Collected: 10/25/2016 14:00 by BS

ChevronTexaco  
 6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

O1110

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:14	Jesse L Mertz	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	163100005A	11/10/2016 14:39	Thomas C Wildermuth	1
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	163100006A	11/07/2016 20:12	Heather E Williams	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	163100005A	11/06/2016 08:00	David S Schrum	1
11218	TPH Fuels Soils Extraction	SW-846 3550C	1	163100006A	11/06/2016 08:00	David S Schrum	1

\*=This limit was used in the evaluation of the final result

Sample Description: B-11-S-15-161025 Grab Soil  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667761  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 14:05 by BS

ChevronTexaco

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

O1115

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>						
10237	Benzene	71-43-2	N.D.	0.0005	0.005	0.94
10237	Ethylbenzene	100-41-4	N.D.	0.0009	0.005	0.94
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.13	0.0005	0.005	0.94
10237	Naphthalene	91-20-3	N.D.	0.0009	0.005	0.94
10237	Toluene	108-88-3	N.D.	0.0009	0.005	0.94
10237	Xylene (Total)	1330-20-7	N.D.	0.0009	0.005	0.94
<b>GC Volatiles SW-846 8015B modified</b>						
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.5	1.0	25.75
<b>GC Miscellaneous SW-846 8015B</b>						
10941	TPH-DRO soil C10-C28 microwave	n.a.	N.D.	4.0	12	1
<b>GC Petroleum SW-846 8015B modified</b>						
<b>Hydrocarbons</b>						
02516	Total TPH	n.a.	N.D.	10	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	10	30	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B163101AA	11/05/2016 16:20	Patrick T Herres	0.94
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 04:12	Jesse L Mertz	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201630643224	11/01/2016 04:12	Jesse L Mertz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:16	Jesse L Mertz	n.a.
10814	BNA Soil Microwave PAH	SW-846 3546	1	16313SLA026	11/08/2016 22:55	Karen L Beyer	1
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	16308A34A	11/03/2016 23:55	Marie D Beamenderfer	25.75

\*=This limit was used in the evaluation of the final result

Sample Description: B-11-S-15-161025 Grab Soil  
 Facility# 90121 CRAW  
 3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667761  
 LL Group # 1726411  
 Account # 10880

Project Name: 90121

Collected: 10/25/2016 14:05 by BS

ChevronTexaco  
 6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

O1115

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:17	Jesse L Mertz	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	163100005A	11/10/2016 12:35	Thomas C Wildermuth	1
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	163100006A	11/07/2016 18:04	Heather E Williams	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	163100005A	11/06/2016 08:00	David S Schrum	1
11218	TPH Fuels Soils Extraction	SW-846 3550C	1	163100006A	11/06/2016 08:00	David S Schrum	1

\*=This limit was used in the evaluation of the final result

Sample Description: B-12-S-3-161025 Grab Soil  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667762  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 12:10 by BS

ChevronTexaco

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

LO123

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>						
10237	Benzene	71-43-2	N.D.	0.0005	0.005	0.99
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.99
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.99
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	0.99
10237	Toluene	108-88-3	N.D.	0.001	0.005	0.99
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	0.99
<b>GC Volatiles SW-846 8015B modified</b>						
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.5	1.0	25.91
<b>GC Miscellaneous SW-846 8015B</b>						
10941	TPH-DRO soil C10-C28 microwave	n.a.	9.8 J	3.9	12	1
<b>GC Petroleum SW-846 8015B modified</b>						
<b>Hydrocarbons</b>						
02516	Total TPH	n.a.	27 J	9.9	30	1
02516	TPH Motor Oil C16-C36	n.a.	27 J	9.9	30	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B163101AA	11/05/2016 16:43	Patrick T Herres	0.99
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 04:12	Jesse L Mertz	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201630643224	11/01/2016 04:12	Jesse L Mertz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:19	Jesse L Mertz	n.a.
10814	BNA Soil Microwave PAH	SW-846 3546	1	16313SLA026	11/08/2016 22:55	Karen L Beyer	1
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	16308A34A	11/04/2016 00:38	Marie D Beamenderfer	25.91

\*=This limit was used in the evaluation of the final result

Sample Description: B-12-S-3-161025 Grab Soil  
 Facility# 90121 CRAW  
 3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667762  
 LL Group # 1726411  
 Account # 10880

Project Name: 90121

Collected: 10/25/2016 12:10 by BS

ChevronTexaco  
 6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

LO123

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:20	Jesse L Mertz	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	163100005A	11/10/2016 19:02	Thomas C Wildermuth	1
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	163100006A	11/07/2016 23:25	Heather E Williams	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	163100005A	11/06/2016 08:00	David S Schrum	1
11218	TPH Fuels Soils Extraction	SW-846 3550C	1	163100006A	11/06/2016 08:00	David S Schrum	1

\*=This limit was used in the evaluation of the final result



Sample Description: B-12-S-15-161025 Grab Soil  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667763  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 15:00 by BS

ChevronTexaco

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

01215

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles</b>						
		<b>SW-846 8260B</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10237	Benzene	71-43-2	N.D.	0.0005	0.005	0.97
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.97
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.001 J	0.0005	0.005	0.97
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	0.97
10237	Toluene	108-88-3	N.D.	0.001	0.005	0.97
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	0.97
<b>GC Volatiles</b>						
		<b>SW-846 8015B modified</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
01725	TPH-GRO N. CA soil C6-C12	n.a.	78	2.0	3.9	98.43
<b>GC Miscellaneous</b>						
		<b>SW-846 8015B</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10941	TPH-DRO soil C10-C28 microwave	n.a.	N.D.	4.0	12	1
<b>GC Petroleum Hydrocarbons</b>						
		<b>SW-846 8015B modified</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
02516	Total TPH	n.a.	N.D.	10	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	10	30	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B163131AA	11/08/2016 20:02	Angela D Sneeringer	0.97
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 04:12	Jesse L Mertz	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201630643224	11/01/2016 04:12	Jesse L Mertz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:22	Jesse L Mertz	n.a.
10814	BNA Soil Microwave PAH	SW-846 3546	1	16313SLA026	11/08/2016 22:55	Karen L Beyer	1
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	16308A34A	11/04/2016 05:33	Marie D Beamenderfer	98.43

\*=This limit was used in the evaluation of the final result

Sample Description: B-12-S-15-161025 Grab Soil  
 Facility# 90121 CRAW  
 3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667763  
 LL Group # 1726411  
 Account # 10880

Project Name: 90121

Collected: 10/25/2016 15:00 by BS

ChevronTexaco  
 6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

O1215

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:23	Jesse L Mertz	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	163100005A	11/10/2016 16:00	Thomas C Wildermuth	1
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	163100006A	11/07/2016 20:34	Heather E Williams	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	163100005A	11/06/2016 08:00	David S Schrum	1
11218	TPH Fuels Soils Extraction	SW-846 3550C	1	163100006A	11/06/2016 08:00	David S Schrum	1

\*=This limit was used in the evaluation of the final result

Sample Description: B-13-S-6-161025 Grab Soil  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667764  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 15:20 by BS

ChevronTexaco

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

LO135

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>						
10237	Benzene	71-43-2	0.0006 J	0.0005	0.005	0.95
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.95
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.01	0.0005	0.005	0.95
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	0.95
10237	Toluene	108-88-3	N.D.	0.001	0.005	0.95
10237	Xylene (Total)	1330-20-7	0.003 J	0.001	0.005	0.95
<b>GC Volatiles SW-846 8015B modified</b>						
01725	TPH-GRO N. CA soil C6-C12	n.a.	7.6	0.5	1.0	25.15
<b>GC Miscellaneous SW-846 8015B</b>						
10941	TPH-DRO soil C10-C28 microwave	n.a.	13	4.0	12	1
<b>GC Petroleum SW-846 8015B modified</b>						
<b>Hydrocarbons</b>						
02516	Total TPH	n.a.	N.D.	10	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	10	30	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B163101AA	11/05/2016 17:05	Patrick T Herres	0.95
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 04:12	Jesse L Mertz	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201630643224	11/01/2016 04:12	Jesse L Mertz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:25	Jesse L Mertz	n.a.
10814	BNA Soil Microwave PAH	SW-846 3546	1	16313SLA026	11/08/2016 22:55	Karen L Beyer	1
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	16308A34A	11/04/2016 01:20	Marie D Beamenderfer	25.15

\*=This limit was used in the evaluation of the final result

Sample Description: B-13-S-6-161025 Grab Soil  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667764  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 15:20 by BS

ChevronTexaco  
6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

LO135

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:26	Jesse L Mertz	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	163100005A	11/10/2016 14:16	Thomas C Wildermuth	1
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	163100006A	11/07/2016 18:25	Heather E Williams	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	163100005A	11/06/2016 08:00	David S Schrum	1
11218	TPH Fuels Soils Extraction	SW-846 3550C	1	163100006A	11/06/2016 08:00	David S Schrum	1

\*=This limit was used in the evaluation of the final result

Sample Description: B-13-S-10-161025 Grab Soil  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667765  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 15:20 by BS

ChevronTexaco

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

01310

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles</b> SW-846 8260B						
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.06
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.06
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.004 J	0.0005	0.005	1.06
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1.06
10237	Toluene	108-88-3	0.001 J	0.001	0.005	1.06
10237	Xylene (Total)	1330-20-7	0.003 J	0.001	0.005	1.06
<b>GC Volatiles</b> SW-846 8015B modified						
01725	TPH-GRO N. CA soil C6-C12	n.a.	2.2	0.5	1.1	26.82
<b>GC Miscellaneous</b> SW-846 8015B						
10941	TPH-DRO soil C10-C28 microwave	n.a.	N.D.	4.0	12	1
<b>GC Petroleum Hydrocarbons</b> SW-846 8015B modified						
02516	Total TPH	n.a.	N.D.	10	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	10	30	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B163122AA	11/08/2016 01:58	Patrick T Herres	1.06
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 04:12	Jesse L Mertz	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201630643224	11/01/2016 04:12	Jesse L Mertz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:29	Jesse L Mertz	n.a.
10814	BNA Soil Microwave PAH	SW-846 3546	1	16313SLA026	11/08/2016 22:55	Karen L Beyer	1
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	16308A34A	11/04/2016 02:02	Marie D Beamenderfer	26.82

\*=This limit was used in the evaluation of the final result

Sample Description: B-13-S-10-161025 Grab Soil  
 Facility# 90121 CRAW  
 3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667765  
 LL Group # 1726411  
 Account # 10880

Project Name: 90121

Collected: 10/25/2016 15:20 by BS

ChevronTexaco  
 6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

O1310

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:29	Jesse L Mertz	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	163100005A	11/10/2016 12:55	Thomas C Wildermuth	1
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	163100006A	11/07/2016 18:47	Heather E Williams	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	163100005A	11/06/2016 08:00	David S Schrum	1
11218	TPH Fuels Soils Extraction	SW-846 3550C	1	163100006A	11/06/2016 08:00	David S Schrum	1

\*=This limit was used in the evaluation of the final result

Sample Description: B-13-S-15-161025 Grab Soil  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667766  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 15:25 by BS

ChevronTexaco

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

01315

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles</b>						
		<b>SW-846 8260B</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10237	Benzene	71-43-2	0.022	0.0005	0.005	1.03
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.03
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.029	0.0005	0.005	1.03
10237	Naphthalene	91-20-3	0.002 J	0.001	0.005	1.03
10237	Toluene	108-88-3	0.001 J	0.001	0.005	1.03
10237	Xylene (Total)	1330-20-7	0.004 J	0.001	0.005	1.03
<b>GC Volatiles</b>						
		<b>SW-846 8015B modified</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
01725	TPH-GRO N. CA soil C6-C12	n.a.	4.4	0.5	1.1	27.44
<b>GC Miscellaneous</b>						
		<b>SW-846 8015B</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10941	TPH-DRO soil C10-C28 microwave	n.a.	N.D.	4.0	12	1
<b>GC Petroleum Hydrocarbons</b>						
		<b>SW-846 8015B modified</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
02516	Total TPH	n.a.	N.D.	9.9	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	9.9	30	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B163101AA	11/05/2016 17:51	Patrick T Herres	1.03
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 04:12	Jesse L Mertz	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201630643224	11/01/2016 04:12	Jesse L Mertz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:31	Jesse L Mertz	n.a.
10814	BNA Soil Microwave PAH	SW-846 3546	1	16313SLA026	11/08/2016 22:55	Karen L Beyer	1
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	16308A34A	11/04/2016 06:15	Marie D Beamenderfer	27.44

\*=This limit was used in the evaluation of the final result

Sample Description: B-13-S-15-161025 Grab Soil  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667766  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 15:25 by BS

ChevronTexaco  
6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

O1315

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:32	Jesse L Mertz	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	163100005A	11/10/2016 13:15	Thomas C Wildermuth	1
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	163100006A	11/07/2016 19:08	Heather E Williams	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	163100005A	11/06/2016 08:00	David S Schrum	1
11218	TPH Fuels Soils Extraction	SW-846 3550C	1	163100006A	11/06/2016 08:00	David S Schrum	1

\*=This limit was used in the evaluation of the final result



Sample Description: B-9-W-161025 Grab Groundwater  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # WW 8667767  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 12:45 by BS

ChevronTexaco

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

LOB9-

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Volatiles</b>	<b>SW-846 8260B</b>		<b>ug/l</b>	<b>ug/l</b>	
10945	Benzene	71-43-2	N.D.	0.5	1	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	3	0.5	1	1
10945	Naphthalene	91-20-3	N.D.	1	4	1
10945	Toluene	108-88-3	N.D.	0.5	1	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C</b>		<b>ug/l</b>	<b>ug/l</b>	
14249	Acenaphthene	83-32-9	N.D.	0.1	0.5	1
14249	Acenaphthylene	208-96-8	N.D.	0.1	0.5	1
14249	Anthracene	120-12-7	N.D.	0.1	0.5	1
14249	Benzo(a)anthracene	56-55-3	N.D.	0.1	0.5	1
14249	Benzo(a)pyrene	50-32-8	N.D.	0.1	0.5	1
14249	Benzo(b)fluoranthene	205-99-2	N.D.	0.1	0.5	1
14249	Benzo(g,h,i)perylene	191-24-2	N.D.	0.1	0.5	1
14249	Benzo(k)fluoranthene	207-08-9	N.D.	0.1	0.5	1
14249	Chrysene	218-01-9	N.D.	0.1	0.5	1
14249	Dibenz(a,h)anthracene	53-70-3	N.D.	0.1	0.5	1
14249	Fluoranthene	206-44-0	N.D.	0.1	0.5	1
14249	Fluorene	86-73-7	N.D.	0.1	0.5	1
14249	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.1	0.5	1
14249	Naphthalene	91-20-3	N.D.	0.1	0.5	1
14249	Phenanthrene	85-01-8	N.D.	0.1	0.5	1
14249	Pyrene	129-00-0	N.D.	0.1	0.5	1

The surrogate QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

<b>GC Volatiles</b>	<b>SW-846 8015B</b>		<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	100	1

<b>GC Petroleum Hydrocarbons</b>	<b>SW-846 8015B</b>		<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
12899	DRO C10-C28	n.a.	N.D.	46	100	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

<b>GC Petroleum Hydrocarbons</b>	<b>SW-846 8015B modified</b>		<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
02500	Total TPH	n.a.	75 J	38	110	1
02500	TPH Motor Oil C16-C36	n.a.	75 J	38	110	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

\*=This limit was used in the evaluation of the final result

Sample Description: B-9-W-161025 Grab Groundwater  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # WW 8667767  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 12:45 by BS

ChevronTexaco

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

LOB9-

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	BTEX/MTBE/Naphthalene - Water	SW-846 8260B	1	D163072AA	11/02/2016 21:25	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D163072AA	11/02/2016 21:25	Hu Yang	1
14249	PAHs 8270C Water	SW-846 8270C	1	16303WAT026	11/01/2016 23:12	Brandon H Smith	1
07807	BNA Water Extraction	SW-846 3510C	1	16303WAT026	11/01/2016 12:00	David S Schrum	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	16307B20A	11/02/2016 19:23	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	16307B20A	11/02/2016 19:23	Brett W Kenyon	1
12899	TPH-DRO C10-C28	SW-846 8015B	1	163030025A	11/04/2016 01:34	Thomas C Wildermuth	1
02500	TPH Fuels by GC (Waters)	SW-846 8015B modified	1	163030035A	11/02/2016 13:58	Timothy Emrick	1
12906	Mini-extraction DRO (waters)	SW-846 3510C	1	163030025A	11/01/2016 12:00	Jessica M Cook	1
11191	TPH Fuels Waters Extraction	SW-846 3510C	1	163030035A	11/01/2016 09:00	Bradley W VanLeuven	1

\*=This limit was used in the evaluation of the final result

Sample Description: B-10-W-161025 Grab Groundwater  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # WW 8667768  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 13:15 by BS

ChevronTexaco

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

LOB10

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B ug/l</b>						
10945	Benzene	71-43-2	N.D.	0.5	1	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	2	0.5	1	1
10945	Naphthalene	91-20-3	N.D.	1	4	1
10945	Toluene	108-88-3	N.D.	0.5	1	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
<b>GC/MS Semivolatiles SW-846 8270C ug/l</b>						
14249	Acenaphthene	83-32-9	N.D.	0.1	0.5	1
14249	Acenaphthylene	208-96-8	N.D.	0.1	0.5	1
14249	Anthracene	120-12-7	N.D.	0.1	0.5	1
14249	Benzo(a)anthracene	56-55-3	N.D.	0.1	0.5	1
14249	Benzo(a)pyrene	50-32-8	N.D.	0.1	0.5	1
14249	Benzo(b)fluoranthene	205-99-2	N.D.	0.1	0.5	1
14249	Benzo(g,h,i)perylene	191-24-2	N.D.	0.1	0.5	1
14249	Benzo(k)fluoranthene	207-08-9	N.D.	0.1	0.5	1
14249	Chrysene	218-01-9	N.D.	0.1	0.5	1
14249	Dibenz(a,h)anthracene	53-70-3	N.D.	0.1	0.5	1
14249	Fluoranthene	206-44-0	N.D.	0.1	0.5	1
14249	Fluorene	86-73-7	N.D.	0.1	0.5	1
14249	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.1	0.5	1
14249	Naphthalene	91-20-3	N.D.	0.1	0.5	1
14249	Phenanthrene	85-01-8	N.D.	0.1	0.5	1
14249	Pyrene	129-00-0	N.D.	0.1	0.5	1

The surrogate QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

<b>GC Volatiles SW-846 8015B ug/l</b>						
01728	TPH-GRO N. CA water C6-C12	n.a.	79 J	50	100	1

<b>GC Petroleum SW-846 8015B ug/l</b>						
<b>Hydrocarbons</b>						
12899	DRO C10-C28	n.a.	560	45	100	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

<b>GC Petroleum SW-846 8015B modified ug/l</b>						
<b>Hydrocarbons</b>						
02500	Total TPH	n.a.	820	38	110	1
02500	TPH Motor Oil C16-C36	n.a.	820	38	110	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

\*=This limit was used in the evaluation of the final result

Sample Description: B-10-W-161025 Grab Groundwater  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # WW 8667768  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 13:15 by BS

ChevronTexaco

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

LOB10

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	BTEX/MTBE/Naphthalene - Water	SW-846 8260B	1	D163072AA	11/02/2016 21:47	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D163072AA	11/02/2016 21:47	Hu Yang	1
14249	PAHs 8270C Water	SW-846 8270C	1	16303WAT026	11/01/2016 23:42	Brandon H Smith	1
07807	BNA Water Extraction	SW-846 3510C	1	16303WAT026	11/01/2016 12:00	David S Schrum	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	16307B20A	11/02/2016 19:50	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	16307B20A	11/02/2016 19:50	Brett W Kenyon	1
12899	TPH-DRO C10-C28	SW-846 8015B	1	163030025A	11/04/2016 01:58	Thomas C Wildermuth	1
02500	TPH Fuels by GC (Waters)	SW-846 8015B modified	1	163030035A	11/02/2016 14:19	Timothy Emrick	1
12906	Mini-extraction DRO (waters)	SW-846 3510C	1	163030025A	11/01/2016 12:00	Jessica M Cook	1
11191	TPH Fuels Waters Extraction	SW-846 3510C	1	163030035A	11/01/2016 09:00	Bradley W VanLeuven	1

\*=This limit was used in the evaluation of the final result

Sample Description: B-9-S-3-161025 Grab Soil  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667769  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 08:25 by BS

ChevronTexaco

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

LOB93

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>						
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1
10237	Toluene	108-88-3	N.D.	0.001	0.005	1
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1
<b>GC Volatiles SW-846 8015B modified</b>						
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.5	0.9	23.02
<b>GC Miscellaneous SW-846 8015B</b>						
10941	TPH-DRO soil C10-C28 microwave	n.a.	18	3.9	12	1
<b>GC Petroleum SW-846 8015B modified</b>						
<b>Hydrocarbons</b>						
02516	Total TPH	n.a.	58	9.9	30	1
02516	TPH Motor Oil C16-C36	n.a.	58	9.9	30	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B163101AA	11/05/2016 18:14	Patrick T Herres	1
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 04:12	Jesse L Mertz	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201630643224	11/01/2016 04:12	Jesse L Mertz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:35	Jesse L Mertz	n.a.
10814	BNA Soil Microwave PAH	SW-846 3546	1	16313SLA026	11/08/2016 22:55	Karen L Beyer	1
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	16308A34A	11/04/2016 02:44	Marie D Beamenderfer	23.02

\*=This limit was used in the evaluation of the final result

Sample Description: B-9-S-3-161025 Grab Soil  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667769  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 08:25 by BS

ChevronTexaco  
6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

LOB93

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:35	Jesse L Mertz	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	163100005A	11/10/2016 20:44	Thomas C Wildermuth	1
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	163100006A	11/08/2016 01:12	Heather E Williams	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	163100005A	11/06/2016 08:00	David S Schrum	1
11218	TPH Fuels Soils Extraction	SW-846 3550C	1	163100006A	11/06/2016 08:00	David S Schrum	1

\*=This limit was used in the evaluation of the final result

Sample Description: B-9-S-5-161025 Grab Soil  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667770  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 08:35 by BS

ChevronTexaco

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

LOB95

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles</b>						
	<b>SW-846 8260B</b>		<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10237	Benzene	71-43-2	N.D.	0.0005	0.005	0.99
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.99
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.99
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	0.99
10237	Toluene	108-88-3	N.D.	0.001	0.005	0.99
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	0.99
<b>GC Volatiles</b>						
	<b>SW-846 8015B modified</b>		<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.5	0.9	22.87
<b>GC Miscellaneous</b>						
	<b>SW-846 8015B</b>		<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10941	TPH-DRO soil C10-C28 microwave	n.a.	N.D.	3.9	12	1
<b>GC Petroleum Hydrocarbons</b>						
	<b>SW-846 8015B modified</b>		<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
02516	Total TPH	n.a.	N.D.	9.8	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	9.8	30	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B163101AA	11/05/2016 18:36	Patrick T Herres	0.99
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 04:12	Jesse L Mertz	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201630643224	11/01/2016 04:12	Jesse L Mertz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:37	Jesse L Mertz	n.a.
10814	BNA Soil Microwave PAH	SW-846 3546	1	16313SLA026	11/08/2016 22:55	Karen L Beyer	1
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	16308A34A	11/04/2016 06:58	Marie D Beamenderfer	22.87

\*=This limit was used in the evaluation of the final result

Sample Description: B-9-S-5-161025 Grab Soil  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667770  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 08:35 by BS

ChevronTexaco  
6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

LOB95

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:38	Jesse L Mertz	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	163100005A	11/10/2016 15:40	Thomas C Wildermuth	1
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	163100006A	11/07/2016 21:38	Heather E Williams	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	163100005A	11/06/2016 08:00	David S Schrum	1
11218	TPH Fuels Soils Extraction	SW-846 3550C	1	163100006A	11/06/2016 08:00	David S Schrum	1

\*=This limit was used in the evaluation of the final result



Sample Description: B-9-S-8-161025 Grab Soil  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667771  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 08:45 by BS

ChevronTexaco

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

LOB98

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles</b>						
		<b>SW-846 8260B</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10237	Benzene	71-43-2	N.D.	0.0005	0.005	0.98
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.98
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.0008 J	0.0005	0.005	0.98
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	0.98
10237	Toluene	108-88-3	N.D.	0.001	0.005	0.98
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	0.98
<b>GC Volatiles</b>						
		<b>SW-846 8015B modified</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.5	1.0	25.8
<b>GC Miscellaneous</b>						
		<b>SW-846 8015B</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10941	TPH-DRO soil C10-C28 microwave	n.a.	22	3.9	12	1
<b>GC Petroleum Hydrocarbons</b>						
		<b>SW-846 8015B modified</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
02516	Total TPH	n.a.	69	9.9	30	1
02516	TPH Motor Oil C16-C36	n.a.	69	9.9	30	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B163122AA	11/08/2016 02:20	Patrick T Herres	0.98
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 04:12	Jesse L Mertz	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201630643224	11/01/2016 04:12	Jesse L Mertz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:40	Jesse L Mertz	n.a.
10814	BNA Soil Microwave PAH	SW-846 3546	1	16313SLA026	11/08/2016 22:55	Karen L Beyer	1
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	16308A34A	11/04/2016 07:40	Marie D Beamenderfer	25.8

\*=This limit was used in the evaluation of the final result

Sample Description: B-9-S-8-161025 Grab Soil  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667771  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 08:45 by BS

ChevronTexaco  
6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

LOB98

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:41	Jesse L Mertz	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	163100005A	11/10/2016 19:43	Thomas C Wildermuth	1
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	163100006A	11/08/2016 00:08	Heather E Williams	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	163100005A	11/06/2016 08:00	David S Schrum	1
11218	TPH Fuels Soils Extraction	SW-846 3550C	1	163100006A	11/06/2016 08:00	David S Schrum	1

\*=This limit was used in the evaluation of the final result

Sample Description: B-9-S-10-161025 Grab Soil  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667772  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 09:00 by BS

ChevronTexaco

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

LO910

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles</b>			<b>SW-846 8260B</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.02
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.02
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.002 J	0.0005	0.005	1.02
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1.02
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.02
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.02

The recovery for the sample internal standard is outside the QC acceptance limits. The following corrective action was taken: The sample was re-analyzed and the QC is again outside of the acceptance limits, indicating a matrix effect. The data is reported from the initial trial.

GC Volatiles	SW-846 8015B modified	mg/kg	mg/kg	mg/kg	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.5	25.99

GC Miscellaneous	SW-846 8015B	mg/kg	mg/kg	mg/kg	
10941	TPH-DRO soil C10-C28 microwave	n.a.	15	4.0	1

GC Petroleum Hydrocarbons	SW-846 8015B modified	mg/kg	mg/kg	mg/kg	
02516	Total TPH	n.a.	31	9.9	1
02516	TPH Motor Oil C16-C36	n.a.	31	9.9	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B163101AA	11/05/2016 19:21	Patrick T Herres	1.02
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 04:12	Jesse L Mertz	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201630643231	11/01/2016 04:16	Jesse L Mertz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:43	Jesse L Mertz	n.a.

\*=This limit was used in the evaluation of the final result

Sample Description: B-9-S-10-161025 Grab Soil  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667772  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 09:00 by BS

ChevronTexaco  
6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

LO910

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10814	BNA Soil Microwave PAH	SW-846 3546	1	16313SLA026	11/08/2016 22:55	Karen L Beyer	1
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	16308A34A	11/04/2016 08:22	Marie D Beamenderfer	25.99
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:44	Jesse L Mertz	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	163100005A	11/10/2016 17:42	Thomas C Wildermuth	1
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	163100006A	11/07/2016 23:04	Heather E Williams	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	163100005A	11/06/2016 08:00	David S Schrum	1
11218	TPH Fuels Soils Extraction	SW-846 3550C	1	163100006A	11/06/2016 08:00	David S Schrum	1

\*=This limit was used in the evaluation of the final result

Sample Description: B-9-S-12-161025 Grab Soil  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667773  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 09:20 by BS

ChevronTexaco

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

LO912

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>						
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.06
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.06
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.001 J	0.0005	0.005	1.06
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1.06
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.06
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.06
<b>GC Volatiles SW-846 8015B modified</b>						
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.5	1.0	25.15
<b>GC Miscellaneous SW-846 8015B</b>						
10941	TPH-DRO soil C10-C28 microwave	n.a.	N.D.	3.9	12	1
<b>GC Petroleum SW-846 8015B modified</b>						
<b>Hydrocarbons</b>						
02516	Total TPH	n.a.	N.D.	9.8	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	9.8	30	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B163122AA	11/08/2016 03:06	Patrick T Herres	1.06
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 04:12	Jesse L Mertz	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201630643224	11/01/2016 04:12	Jesse L Mertz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:48	Jesse L Mertz	n.a.
10814	BNA Soil Microwave PAH	SW-846 3546	1	16313SLA026	11/08/2016 22:55	Karen L Beyer	1
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	16308A34A	11/04/2016 09:04	Marie D Beamenderfer	25.15

\*=This limit was used in the evaluation of the final result

Sample Description: B-9-S-12-161025 Grab Soil  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667773  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 09:20 by BS

ChevronTexaco  
6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

LO912

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:48	Jesse L Mertz	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	163100005A	11/10/2016 16:41	Thomas C Wildermuth	1
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	163100006A	11/07/2016 21:59	Heather E Williams	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	163100005A	11/06/2016 08:00	David S Schrum	1
11218	TPH Fuels Soils Extraction	SW-846 3550C	1	163100006A	11/06/2016 08:00	David S Schrum	1

\*=This limit was used in the evaluation of the final result

Sample Description: B-10-S-3-161025 Grab Soil  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667774  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 10:00 by BS

ChevronTexaco

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

LO103

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles</b>						
		<b>SW-846 8260B</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10237	Benzene	71-43-2	N.D.	0.0005	0.005	0.99
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.99
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.99
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	0.99
10237	Toluene	108-88-3	N.D.	0.001	0.005	0.99
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	0.99
<b>GC Volatiles</b>						
		<b>SW-846 8015B modified</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.5	0.9	23.43
<b>GC Miscellaneous</b>						
		<b>SW-846 8015B</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10941	TPH-DRO soil C10-C28 microwave	n.a.	N.D.	4.0	12	1
<b>GC Petroleum Hydrocarbons</b>						
		<b>SW-846 8015B modified</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
02516	Total TPH	n.a.	N.D.	9.9	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	9.9	30	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B163101AA	11/05/2016 20:07	Patrick T Herres	0.99
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 04:12	Jesse L Mertz	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201630643224	11/01/2016 04:13	Jesse L Mertz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:50	Jesse L Mertz	n.a.
10814	BNA Soil Microwave PAH	SW-846 3546	1	16313SLA026	11/08/2016 22:55	Karen L Beyer	1
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	16308A34A	11/04/2016 03:26	Marie D Beamenderfer	23.43

\*=This limit was used in the evaluation of the final result

Sample Description: B-10-S-3-161025 Grab Soil  
 Facility# 90121 CRAW  
 3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667774  
 LL Group # 1726411  
 Account # 10880

Project Name: 90121

Collected: 10/25/2016 10:00 by BS

ChevronTexaco  
 6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

LO103

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:51	Jesse L Mertz	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	163100005A	11/10/2016 17:01	Thomas C Wildermuth	1
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	163100006A	11/07/2016 22:21	Heather E Williams	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	163100005A	11/06/2016 08:00	David S Schrum	1
11218	TPH Fuels Soils Extraction	SW-846 3550C	1	163100006A	11/06/2016 08:00	David S Schrum	1

\*=This limit was used in the evaluation of the final result



Sample Description: B-10-S-5-161025 Grab Soil  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667775  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 10:10 by BS

ChevronTexaco

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

LO105

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles</b>						
		<b>SW-846 8260B</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.04
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.04
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.04
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1.04
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.04
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.04
<b>GC Volatiles</b>						
		<b>SW-846 8015B modified</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.5	1	23.81
<b>GC Miscellaneous</b>						
		<b>SW-846 8015B</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10941	TPH-DRO soil C10-C28 microwave	n.a.	N.D.	4.0	12	1
<b>GC Petroleum Hydrocarbons</b>						
		<b>SW-846 8015B modified</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
02516	Total TPH	n.a.	N.D.	9.9	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	9.9	30	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B163122AA	11/08/2016 03:28	Patrick T Herres	1.04
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 04:13	Jesse L Mertz	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201630643224	11/01/2016 04:13	Jesse L Mertz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:53	Jesse L Mertz	n.a.
10814	BNA Soil Microwave PAH	SW-846 3546	1	16313SLA026	11/08/2016 22:55	Karen L Beyer	1
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	16311A34A	11/06/2016 20:47	Marie D Beamenderfer	23.81

\*=This limit was used in the evaluation of the final result

Sample Description: B-10-S-5-161025 Grab Soil  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667775  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 10:10 by BS

ChevronTexaco  
6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

LO105

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:53	Jesse L Mertz	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	163100005A	11/10/2016 13:35	Thomas C Wildermuth	1
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	163100006A	11/07/2016 19:30	Heather E Williams	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	163100005A	11/06/2016 08:00	David S Schrum	1
11218	TPH Fuels Soils Extraction	SW-846 3550C	1	163100006A	11/06/2016 08:00	David S Schrum	1

\*=This limit was used in the evaluation of the final result

Sample Description: B-10-S-8-161025 Grab Soil  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667776  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 10:20 by BS

ChevronTexaco

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

LO108

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>						
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.1
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.1
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.1
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1.1
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.1
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.1
<b>GC Volatiles SW-846 8015B modified</b>						
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.5	1	24.06
<b>GC Miscellaneous SW-846 8015B</b>						
10941	TPH-DRO soil C10-C28 microwave	n.a.	7.7 J	4.0	12	1
<b>GC Petroleum SW-846 8015B modified</b>						
<b>Hydrocarbons</b>						
02516	Total TPH	n.a.	23 J	9.9	30	1
02516	TPH Motor Oil C16-C36	n.a.	23 J	9.9	30	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B163122AA	11/08/2016 03:51	Patrick T Herres	1.1
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 04:13	Jesse L Mertz	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201630643224	11/01/2016 04:13	Jesse L Mertz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:56	Jesse L Mertz	n.a.
10814	BNA Soil Microwave PAH	SW-846 3546	1	16313SLA026	11/08/2016 22:55	Karen L Beyer	1
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	16311A34A	11/06/2016 21:29	Marie D Beamenderfer	24.06

\*=This limit was used in the evaluation of the final result

Sample Description: B-10-S-8-161025 Grab Soil  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667776  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 10:20 by BS

ChevronTexaco  
6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

LO108

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:56	Jesse L Mertz	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	163100005A	11/10/2016 19:23	Thomas C Wildermuth	1
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	163100006A	11/07/2016 23:47	Heather E Williams	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	163100005A	11/06/2016 08:00	David S Schrum	1
11218	TPH Fuels Soils Extraction	SW-846 3550C	1	163100006A	11/06/2016 08:00	David S Schrum	1

\*=This limit was used in the evaluation of the final result

Sample Description: B-10-S-10-161025 Grab Soil  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667777  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 10:30 by BS

ChevronTexaco

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

L1010

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles</b>						
		<b>SW-846 8260B</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.1
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.1
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0006	0.006	1.1
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1.1
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.1
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.1
<b>GC Volatiles</b>						
		<b>SW-846 8015B modified</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.6	1.1	27.62
<b>GC Miscellaneous</b>						
		<b>SW-846 8015B</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10941	TPH-DRO soil C10-C28 microwave	n.a.	18	3.9	12	1
<b>GC Petroleum Hydrocarbons</b>						
		<b>SW-846 8015B modified</b>	<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
02516	Total TPH	n.a.	19 J	9.8	30	1
02516	TPH Motor Oil C16-C36	n.a.	19 J	9.8	30	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B163131AA	11/08/2016 15:53	Angela D Sneeringer	1.1
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 04:13	Jesse L Mertz	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201630643224	11/01/2016 04:13	Jesse L Mertz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:59	Jesse L Mertz	n.a.
10814	BNA Soil Microwave PAH	SW-846 3546	1	16313SLA026	11/08/2016 22:55	Karen L Beyer	1
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	16311A34A	11/06/2016 22:11	Marie D Beamenderfer	27.62

\*=This limit was used in the evaluation of the final result

Sample Description: B-10-S-10-161025 Grab Soil  
 Facility# 90121 CRAW  
 3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667777  
 LL Group # 1726411  
 Account # 10880

Project Name: 90121

Collected: 10/25/2016 10:30 by BS

ChevronTexaco  
 6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

L1010

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 02:59	Jesse L Mertz	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	163100005A	11/10/2016 13:56	Thomas C Wildermuth	1
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	163100006A	11/07/2016 19:51	Heather E Williams	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	163100005A	11/06/2016 08:00	David S Schrum	1
11218	TPH Fuels Soils Extraction	SW-846 3550C	1	163100006A	11/06/2016 08:00	David S Schrum	1

\*=This limit was used in the evaluation of the final result

Sample Description: B-10-S-12-161025 Grab Soil  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667778  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 10:40 by BS

ChevronTexaco

6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

L1012

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles</b>						
	<b>SW-846 8260B</b>		<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.08
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.08
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.08
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1.08
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.08
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.08
<b>GC Volatiles</b>						
	<b>SW-846 8015B modified</b>		<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.5	1	24.25
<b>GC Miscellaneous</b>						
	<b>SW-846 8015B</b>		<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
10941	TPH-DRO soil C10-C28 microwave	n.a.	N.D.	3.9	12	1
<b>GC Petroleum Hydrocarbons</b>						
	<b>SW-846 8015B modified</b>		<b>mg/kg</b>	<b>mg/kg</b>	<b>mg/kg</b>	
02516	Total TPH	n.a.	N.D.	9.9	30	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	9.9	30	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B163122AA	11/08/2016 04:36	Patrick T Herres	1.08
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 04:13	Jesse L Mertz	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201630643224	11/01/2016 04:13	Jesse L Mertz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 03:02	Jesse L Mertz	n.a.
10814	BNA Soil Microwave PAH	SW-846 3546	1	16313SLA026	11/08/2016 22:55	Karen L Beyer	1
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	16311A34A	11/06/2016 22:54	Marie D Beamenderfer	24.25

\*=This limit was used in the evaluation of the final result

Sample Description: B-10-S-12-161025 Grab Soil  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # SW 8667778  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016 10:40 by BS

ChevronTexaco  
6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

Submitted: 10/27/2016 09:40

Reported: 12/06/2016 12:44

L1012

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201630643224	11/01/2016 03:02	Jesse L Mertz	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	163100005A	11/10/2016 16:21	Thomas C Wildermuth	1
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	163100006A	11/07/2016 20:55	Heather E Williams	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	163100005A	11/06/2016 08:00	David S Schrum	1
11218	TPH Fuels Soils Extraction	SW-846 3550C	1	163100006A	11/06/2016 08:00	David S Schrum	1

\*=This limit was used in the evaluation of the final result



Sample Description: QA-T-161025 Water  
Facility# 90121 CRAW  
3026 Lakeshore-Oakland T0600100328

LL Sample # WW 8667779  
LL Group # 1726411  
Account # 10880

Project Name: 90121

Collected: 10/25/2016

ChevronTexaco

Submitted: 10/27/2016 09:40

6001 Bollinger Canyon Rd L4310

Reported: 12/06/2016 12:44

San Ramon CA 94583

LTTB-

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>						
10945	Benzene	71-43-2	N.D.	ug/l 0.5	ug/l 1	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
10945	Toluene	108-88-3	N.D.	0.5	1	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
<b>GC Volatiles SW-846 8015B</b>						
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	ug/l 50	ug/l 100	1

### Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	BTEX/MTBE	SW-846 8260B	1	D163072AA	11/02/2016 19:24	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D163072AA	11/02/2016 19:24	Hu Yang	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	16307B20A	11/02/2016 13:24	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	16307B20A	11/02/2016 13:24	Brett W Kenyon	1

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: ChevronTexaco  
Reported: 12/06/2016 12:44

Group Number: 1726411

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

### Method Blank

Analysis Name	Result	MDL**	LOQ
	mg/kg	mg/kg	mg/kg
Batch number: B163101AA	Sample number(s): 8667759-8667762, 8667764, 8667766, 8667769-8667770, 8667772, 8667774		
Benzene	N.D.	0.0005	0.005
Ethylbenzene	N.D.	0.001	0.005
Methyl Tertiary Butyl Ether	N.D.	0.0005	0.005
Naphthalene	N.D.	0.001	0.005
Toluene	N.D.	0.001	0.005
Xylene (Total)	N.D.	0.001	0.005
Batch number: B163122AA	Sample number(s): 8667765, 8667771, 8667773, 8667775-8667776, 8667778		
Benzene	N.D.	0.0005	0.005
Ethylbenzene	N.D.	0.001	0.005
Methyl Tertiary Butyl Ether	N.D.	0.0005	0.005
Naphthalene	N.D.	0.001	0.005
Toluene	N.D.	0.001	0.005
Xylene (Total)	N.D.	0.001	0.005
Batch number: B163131AA	Sample number(s): 8667763, 8667777		
Benzene	N.D.	0.0005	0.005
Ethylbenzene	N.D.	0.001	0.005
Methyl Tertiary Butyl Ether	N.D.	0.0005	0.005
Naphthalene	N.D.	0.001	0.005
Toluene	N.D.	0.001	0.005
Xylene (Total)	N.D.	0.001	0.005
	ug/l	ug/l	ug/l
Batch number: D163072AA	Sample number(s): 8667767-8667768, 8667779		
Benzene	N.D.	0.5	1
Ethylbenzene	N.D.	0.5	1
Methyl Tertiary Butyl Ether	N.D.	0.5	1
Naphthalene	N.D.	1	4
Toluene	N.D.	0.5	1
Xylene (Total)	N.D.	0.5	1
Batch number: 16303WAT026	Sample number(s): 8667767-8667768		
Acenaphthene	N.D.	0.1	0.5
Acenaphthylene	N.D.	0.1	0.5
Anthracene	N.D.	0.1	0.5
Benzo(a)anthracene	N.D.	0.1	0.5
Benzo(a)pyrene	N.D.	0.1	0.5
Benzo(b)fluoranthene	N.D.	0.1	0.5
Benzo(g,h,i)perylene	N.D.	0.1	0.5
Benzo(k)fluoranthene	N.D.	0.1	0.5
Chrysene	N.D.	0.1	0.5

\*- Outside of specification

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## Quality Control Summary

Client Name: ChevronTexaco  
Reported: 12/06/2016 12:44

Group Number: 1726411

### Method Blank (continued)

Analysis Name	Result	MDL**	LOQ
	ug/l	ug/l	ug/l
Dibenz (a, h) anthracene	N.D.	0.1	0.5
Fluoranthene	N.D.	0.1	0.5
Fluorene	N.D.	0.1	0.5
Indeno (1, 2, 3-cd) pyrene	N.D.	0.1	0.5
Naphthalene	N.D.	0.1	0.5
Phenanthrene	N.D.	0.1	0.5
Pyrene	N.D.	0.1	0.5
	mg/kg	mg/kg	mg/kg
Batch number: 16308A34A	Sample number(s): 8667759-8667766, 8667769-8667774		
TPH-GRO N. CA soil C6-C12	N.D.	0.5	1.0
Batch number: 16311A34A	Sample number(s): 8667775-8667778		
TPH-GRO N. CA soil C6-C12	N.D.	0.5	1.0
	ug/l	ug/l	ug/l
Batch number: 16307B20A	Sample number(s): 8667767-8667768, 8667779		
TPH-GRO N. CA water C6-C12	N.D.	50	100
	mg/kg	mg/kg	mg/kg
Batch number: 163100005A	Sample number(s): 8667759-8667766, 8667769-8667778		
TPH-DRO soil C10-C28 microwave	N.D.	4.0	12
Batch number: 163100006A	Sample number(s): 8667759-8667766, 8667769-8667778		
Total TPH	N.D.	10	30
TPH Motor Oil C16-C36	N.D.	10	30
	ug/l	ug/l	ug/l
Batch number: 163030025A	Sample number(s): 8667767-8667768		
DRO C10-C28	N.D.	45	100
Batch number: 163030035A	Sample number(s): 8667767-8667768		
Total TPH	N.D.	40	120
TPH Motor Oil C16-C36	N.D.	40	120

### LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: B163101AA	Sample number(s): 8667759-8667762, 8667764, 8667766, 8667769-8667770, 8667772, 8667774								
Benzene	0.0200	0.0178	0.0200	0.0174	89	87	80-120	3	30
Ethylbenzene	0.0200	0.0183	0.0200	0.0174	91	87	80-120	5	30
Methyl Tertiary Butyl Ether	0.0200	0.0192	0.0200	0.0183	96	92	72-120	4	30
Naphthalene	0.0200	0.0195	0.0200	0.0181	97	91	53-120	7	30
Toluene	0.0200	0.0187	0.0200	0.0179	94	89	80-120	5	30

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## Quality Control Summary

Client Name: ChevronTexaco  
Reported: 12/06/2016 12:44

Group Number: 1726411

### LCS/LCSD (continued)

Analysis Name	LCS Spike Added mg/kg	LCS Conc mg/kg	LCSD Spike Added mg/kg	LCSD Conc mg/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Xylene (Total)	0.0600	0.0555	0.0600	0.0530	92	88	80-120	4	30
Batch number: B163122AA	Sample number(s): 8667765,8667771,8667773,8667775-8667776,8667778								
Benzene	0.0200	0.0181	0.0200	0.0182	90	91	80-120	1	30
Ethylbenzene	0.0200	0.0184	0.0200	0.0185	92	92	80-120	1	30
Methyl Tertiary Butyl Ether	0.0200	0.0188	0.0200	0.0188	94	94	72-120	0	30
Naphthalene	0.0200	0.0179	0.0200	0.0177	90	88	53-120	2	30
Toluene	0.0200	0.0189	0.0200	0.0188	95	94	80-120	1	30
Xylene (Total)	0.0600	0.0562	0.0600	0.0562	94	94	80-120	0	30
Batch number: B163131AA	Sample number(s): 8667763,8667777								
Benzene	0.0200	0.0199	0.0200	0.0175	99	87	80-120	13	30
Ethylbenzene	0.0200	0.0198	0.0200	0.0173	99	87	80-120	13	30
Methyl Tertiary Butyl Ether	0.0200	0.0221	0.0200	0.0195	110	97	72-120	13	30
Naphthalene	0.0200	0.0207	0.0200	0.0182	104	91	53-120	13	30
Toluene	0.0200	0.0204	0.0200	0.0181	102	90	80-120	12	30
Xylene (Total)	0.0600	0.0605	0.0600	0.0531	101	89	80-120	13	30
	ug/l	ug/l	ug/l	ug/l					
Batch number: D163072AA	Sample number(s): 8667767-8667768,8667779								
Benzene	20	16.3			82		78-120		
Ethylbenzene	20	16.33			82		78-120		
Methyl Tertiary Butyl Ether	20	16.97			85		75-120		
Naphthalene	20	14.06			70		59-120		
Toluene	20	16.64			83		80-120		
Xylene (Total)	60	49.43			82		80-120		
	ug/l	ug/l	ug/l	ug/l					
Batch number: 16303WAT026	Sample number(s): 8667767-8667768								
Acenaphthene	50	45.28			91		70-130		
Acenaphthylene	50	43.67			87		70-130		
Anthracene	50	50.06			100		70-130		
Benzo(a)anthracene	50	45.69			91		70-130		
Benzo(a)pyrene	50	42.43			85		70-130		
Benzo(b)fluoranthene	50	41.26			83		70-130		
Benzo(g,h,i)perylene	50	39.8			80		70-130		
Benzo(k)fluoranthene	50	45.54			91		70-130		
Chrysene	50	52.01			104		70-130		
Dibenz(a,h)anthracene	50	38.86			78		70-130		
Fluoranthene	50	49.58			99		70-130		
Fluorene	50	46.47			93		70-130		
Indeno(1,2,3-cd)pyrene	50	39.1			78		70-130		
Naphthalene	50	37.34			75		70-130		
Phenanthrene	50	48.69			97		70-130		
Pyrene	50	48.92			98		70-130		
	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 16308A34A	Sample number(s): 8667759-8667766,8667769-8667774								

\*- Outside of specification

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## Quality Control Summary

Client Name: ChevronTexaco  
Reported: 12/06/2016 12:44

Group Number: 1726411

### LCS/LCSD (continued)

Analysis Name	LCS Spike Added mg/kg	LCS Conc mg/kg	LCSD Spike Added mg/kg	LCSD Conc mg/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
TPH-GRO N. CA soil C6-C12	11	10.44			95		58-120		
Batch number: 16311A34A	Sample number(s): 8667775-8667778								
TPH-GRO N. CA soil C6-C12	11	11.58	11	11.83	105	108	58-120	2	30
	ug/l	ug/l	ug/l	ug/l					
Batch number: 16307B20A	Sample number(s): 8667767-8667768,8667779								
TPH-GRO N. CA water C6-C12	1100	1071.42	1100	1040	97	95	77-120	3	30
	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 163100005A	Sample number(s): 8667759-8667766,8667769-8667778								
TPH-DRO soil C10-C28 microwave	133	125.22			94		74-117		
	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 163100006A	Sample number(s): 8667759-8667766,8667769-8667778								
Total TPH	133	114.56			86		64-122		
	ug/l	ug/l	ug/l	ug/l					
Batch number: 163030025A	Sample number(s): 8667767-8667768								
DRO C10-C28	600	351.61	600	431.87	59*	72	70-130	20	20
Batch number: 163030035A	Sample number(s): 8667767-8667768								
Total TPH	801	542.35	801	516.12	68	64	44-115	5	20

### MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc mg/kg	MS Spike Added mg/kg	MS Conc mg/kg	MSD Spike Added mg/kg	MSD Conc mg/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: B163131AA	Sample number(s): 8667763,8667777 UNSPK: P674619									
Benzene	N.D.	0.0186	0.0201			108		80-120		
Ethylbenzene	N.D.	0.0186	0.0183			98		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.0186	0.0201			108		72-120		
Naphthalene	N.D.	0.0186	0.0107			58		53-120		
Toluene	N.D.	0.0186	0.0203			109		80-120		
Xylene (Total)	N.D.	0.0558	0.0547			98		80-120		
	ug/l	ug/l	ug/l	ug/l	ug/l					
Batch number: D163072AA	Sample number(s): 8667767-8667768,8667779 UNSPK: P667035									
Benzene	N.D.	20	17.88	20	18.23	89	91	78-120	2	30
Ethylbenzene	N.D.	20	18.02	20	18.25	90	91	78-120	1	30

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## Quality Control Summary

Client Name: ChevronTexaco  
Reported: 12/06/2016 12:44

Group Number: 1726411

### MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Methyl Tertiary Butyl Ether	N.D.	20	17.34	20	17.66	87	88	75-120	2	30
Naphthalene	N.D.	20	13.84	20	13.84	69	69	59-120	0	30
Toluene	N.D.	20	18.28	20	18.83	91	94	80-120	3	30
Xylene (Total)	N.D.	60	55.25	60	56.27	92	94	80-120	2	30
<p>Batch number: 16303WAT026      Sample number(s): 8667767-8667768      UNSPK: P668353</p>										
Acenaphthene	N.D.	51.23	50.77	50.4	48.88	99	97	70-130	4	30
Acenaphthylene	N.D.	51.23	49.04	50.4	47.76	96	95	70-130	3	30
Anthracene	N.D.	51.23	51.96	50.4	49.39	101	98	70-130	5	30
Benzo(a)anthracene	N.D.	51.23	51.98	50.4	49.25	101	98	70-130	5	30
Benzo(a)pyrene	N.D.	51.23	46.1	50.4	44.25	90	88	70-130	4	30
Benzo(b)fluoranthene	N.D.	51.23	47.47	50.4	43.75	93	87	70-130	8	30
Benzo(g,h,i)perylene	N.D.	51.23	45.7	50.4	43.64	89	87	70-130	5	30
Benzo(k)fluoranthene	N.D.	51.23	47.95	50.4	47.39	94	94	70-130	1	30
Chrysene	N.D.	51.23	57.62	50.4	54.76	112	109	70-130	5	30
Dibenz(a,h)anthracene	N.D.	51.23	45.79	50.4	43.47	89	86	70-130	5	30
Fluoranthene	N.D.	51.23	52.92	50.4	51.32	103	102	70-130	3	30
Fluorene	N.D.	51.23	51.07	50.4	49.01	100	97	70-130	4	30
Indeno(1,2,3-cd)pyrene	N.D.	51.23	44.33	50.4	42.76	87	85	70-130	4	30
Naphthalene	N.D.	51.23	43.09	50.4	42.19	84	84	70-130	2	30
Phenanthrene	N.D.	51.23	52.22	50.4	49.78	102	99	70-130	5	30
Pyrene	N.D.	51.23	51.89	50.4	48.09	101	95	70-130	8	30
<p>Batch number: 16308A34A      Sample number(s): 8667759-8667766,8667769-8667774      UNSPK: P666721</p>										
TPH-GRO N. CA soil C6-C12	N.D.	10.3	11.79	12.2	14.81	114	121*	58-120	23	30
<p>Batch number: 163100005A      Sample number(s): 8667759-8667766,8667769-8667778      UNSPK: 8667771</p>										
TPH-DRO soil C10-C28 microwave	22.2	132	129.15			81		74-117		
<p>Batch number: 163100006A      Sample number(s): 8667759-8667766,8667769-8667778      UNSPK: 8667771</p>										
Total TPH	68.51	132	92.8			18*		64-122		

### Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc	DUP Conc	DUP RPD	DUP RPD Max
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\*- Outside of specification

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## Quality Control Summary

Client Name: ChevronTexaco  
Reported: 12/06/2016 12:44

Group Number: 1726411

### Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/kg	DUP Conc mg/kg	DUP RPD	DUP RPD Max
Batch number: 163100005A TPH-DRO soil C10-C28 microwave	Sample number(s): 8667759-8667766,8667769-8667778 22.2	BKG: 8667771 5.76	118* (1)	20
Batch number: 163100006A Total TPH TPH Motor Oil C16-C36	Sample number(s): 8667759-8667766,8667769-8667778 68.51 68.51	BKG: 8667771 17.71 17.71	118* (1) 118* (1)	20 20

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: VOCs 8260 BTEX/MTBE/Naph Soil  
Batch number: B163101AA

	D	a	12-Dc	a - 4	T - 8	4-B
8667759	98		103		101	93
8667760	96		96		106	96
8667761	101		109		98	98
8667762	98		100		100	92
8667764	99		99		103	99
8667766	121		132		141	113
8667769	96		102		101	94
8667770	99		106		99	94
8667772	97		100		101	92
8667774	100		107		98	94
Blank	100		103		98	93
LCS	100		105		101	98
LCSD	100		105		100	97
Limits:	50-141		54-135		52-141	50-131

Analysis Name: VOCs 8260 BTEX/MTBE/Naph Soil  
Batch number: B163122AA

	D	a	12-Dc	a - 4	T - 8	4-B
8667765	99		101		104	99
8667771	99		101		104	87
8667773	100		100		106	83
8667775	101		102		99	93
8667776	102		108		98	94
8667778	101		101		100	92
Blank	100		104		98	94
LCS	100		103		101	98

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## Quality Control Summary

Client Name: ChevronTexaco  
Reported: 12/06/2016 12:44

Group Number: 1726411

### Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: VOCs 8260 BTEX/MTBE/Naph Soil  
Batch number: B163122AA

	D	a	12-Dc	a - 4	T - 8	4-B
LCSD	100		102		101	99
Limits:	50-141		54-135		52-141	50-131

Analysis Name: VOCs 8260 BTEX/MTBE/Naph Soil  
Batch number: B163131AA

	D	a	12-Dc	a - 4	T - 8	4-B
8667763	99		101		105	115
8667777	102		103		99	91
Blank	102		107		97	94
LCS	100		106		100	99
LCSD	99		104		101	99
MS	102		107		102	96
Limits:	50-141		54-135		52-141	50-131

Analysis Name: BTEX/MTBE/Naphthalene - Water  
Batch number: D163072AA

	D	a	12-Dc	a - 4	T - 8	4-B
8667767	101		99		95	97
8667768	101		99		95	94
8667779	103		102		96	96
Blank	104		99		99	95
LCS	101		102		96	98
MS	101		104		95	98
MSD	101		101		96	99
Limits:	80-116		77-113		80-113	78-113

Analysis Name: PAHs 8270C Water  
Batch number: 16303WAT026

	N - 5	2-F	T - 14
8667767	47*	54*	62*
8667768	51*	56*	56*
Blank	67*	76	79
LCS	60*	70	71
MS	68*	77	75
MSD	67*	76	66*
Limits:	70-130	70-130	70-130

Analysis Name: TPH-GRO N. CA water C6-C12  
Batch number: 16307B20A

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## Quality Control Summary

Client Name: ChevronTexaco  
Reported: 12/06/2016 12:44

Group Number: 1726411

### Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: TPH-GRO N. CA water C6-C12  
Batch number: 16307B20A

	T	-F
8667767	86	
8667768	88	
8667779	88	
Blank	88	
LCS	83	
LCSD	94	

Limits: 63-135

Analysis Name: TPH-GRO N. CA soil C6-C12  
Batch number: 16308A34A

	T	-F
8667759	98	
8667760	98	
8667761	100	
8667762	99	
8667763	106	
8667764	97	
8667765	97	
8667766	100	
8667769	101	
8667770	95	
8667771	94	
8667772	96	
8667773	92	
8667774	101	
Blank	94	
LCS	98	
MS	99	
MSD	103	

Limits: 50-142

Analysis Name: TPH-GRO N. CA soil C6-C12  
Batch number: 16311A34A

	T	-F
8667775	95	
8667776	93	
8667777	97	
8667778	94	
Blank	97	
LCS	99	
LCSD	99	

\*- Outside of specification

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## Quality Control Summary

Client Name: ChevronTexaco  
Reported: 12/06/2016 12:44

Group Number: 1726411

### Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: TPH-GRO N. CA soil C6-C12  
Batch number: 16311A34A

Limits: 50-142

Analysis Name: TPH-DRO C10-C28  
Batch number: 163030025A

	O
8667767	52
8667768	50
Blank	92
LCS	90
LCSD	92

Limits: 50-150

Analysis Name: TPH Fuels by GC (Waters)  
Batch number: 163030035A

	C	O
8667767	82	83
8667768	70	87
Blank	61	80
LCS	71	90
LCSD	66	82

Limits: 35-135                      48-122

Analysis Name: TPH-DRO soil C10-C28 microwave  
Batch number: 163100005A

	O
8667759	94
8667760	81
8667761	95
8667762	95
8667763	96
8667764	90
8667765	86
8667766	89
8667769	99
8667770	82
8667771	81
8667772	84
8667773	86
8667774	89
8667775	84
8667776	91
8667777	83
8667778	78

\*- Outside of specification

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## Quality Control Summary

Client Name: ChevronTexaco  
Reported: 12/06/2016 12:44

Group Number: 1726411

### Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: TPH-DRO soil C10-C28 microwave  
Batch number: 163100005A

	O
Blank	107
DUP	70
LCS	109
MS	87

Limits: 34-147

Analysis Name: TPH Fuels by GC (Soils)  
Batch number: 163100006A

	C	O
8667759	121	89
8667760	110	74
8667761	117	85
8667762	120	90
8667763	122	93
8667764	123	89
8667765	119	78
8667766	122	86
8667769	120	92
8667770	114	79
8667771	119	78
8667772	119	82
8667773	126	84
8667774	116	84
8667775	118	81
8667776	119	86
8667777	112	77
8667778	113	74
Blank	120	96
DUP	113	67
LCS	90	101
MS	126	85

Limits: 58-129                      50-126

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

# Chevron California Region Analysis Request/Chain of Custody

**eurofins** P.10F3  
**Lancaster Laboratories**  
**Environmental**

Acct. # 10880

For Eurofins Lancaster Laboratories Environmental use only

Group # 1726411 Sample # 8667759-79

Instructions on reverse side correspond with circled numbers.

182616-06

1 Client Information				4 Matrix				5 Analyses Requested												6 Remarks						
Facility # <u>90121</u> WBS Site Address <u>3026 LAKEBROOK AVE, OAKLAND</u> Chevron PM <u>MARK HORNE</u> Lead Consultant <u>GHD</u> Consultant/Office <u>GHD 5900 HOLLIS ST, SUITE A, EMERYVILLE, CA</u> Consultant Project Mgr. <u>KIERSTEN HOEY</u> Consultant Phone # <u>510 420 3347</u> Sampler <u>BRYAN SANDOR ERIC CHODOROFF</u>				<input type="checkbox"/> Sediment <input checked="" type="checkbox"/> Potable Ground <input type="checkbox"/> NPDES Surface <input type="checkbox"/> Oil Air				Total Number of Containers BTEX + MTBE 8021 <input type="checkbox"/> 8260 <input checked="" type="checkbox"/> TPH-GRO 8015 <input type="checkbox"/> 8260 <input checked="" type="checkbox"/> TPH-DRO 8015 without Silica Gel Cleanup <input checked="" type="checkbox"/> TPH-DRO 8015 with Silica Gel Cleanup <input type="checkbox"/> 8260 Full Scan Oxygenates Total Lead Method Dissolved Lead Method TPH MD BY EPA 8015 NAPHTHALENE BY EPA 8260 PAHs BY GC/MS TPH DRO - MINI EXTRACTION												SCR #: _____ <input type="checkbox"/> Results in Dry Weight <input type="checkbox"/> J value reporting needed <input type="checkbox"/> Must meet lowest detection limits possible for 8260 compounds <input type="checkbox"/> 8021 MTBE Confirmation <input type="checkbox"/> Confirm highest hit by 8260 <input type="checkbox"/> Confirm all hits by 8260 <input type="checkbox"/> Run _____ oxy's on highest hit <input type="checkbox"/> Run _____ oxy's on all hits						
2 Sample Identification		3 Soil		4 Matrix		5 Analyses Requested												6 Remarks								
Sample ID	Depth	Date	Time	Grab	Composite	Soil	Water	Oil	Total Containers	BTEX + MTBE	8021	8260	TPH-GRO	8015	TPH-DRO 8015 without Silica Gel Cleanup	TPH-DRO 8015 with Silica Gel Cleanup	8260 Full Scan	Oxygenates	Total Lead	Dissolved Lead	TPH MD BY EPA 8015	NAPHTHALENE BY EPA 8260	PAHs BY GC/MS	TPH DRO - MINI EXTRACTION	Remarks	
B-11-3	3	10-25-16	1115	X	X	X			1	X	X	X	X	X								X	X		SOIL CONTINGENCY ANALYSIS FOR PAHs BY 8270 IF TPH MD IS DETECTED	
B-11-10	10		1400	X	X	X			1	X	X	X	X	X								X	X			
B-11-15	15		1405	X	X	X			1	X	X	X	X	X								X	X			
B-12-3	3		1210	X	X	X			1	X	X	X	X	X								X	X			
B-12-15	15		1500	X	X	X			1	X	X	X	X	X								X	X			
B-13-6	6		1520	X	X	X			1	X	X	X	X	X								X	X			
B-13-10	10		1520	X	X	X			1	X	X	X	X	X								X	X			
B-13-15	15		1525	X	X	X			1	X	X	X	X	X								X	X			
B-9-W	-		1245	X			X		12	X	X	X	X	X								X	X	X		
B-10-W	-		1315	X			X		12	X	X	X	X	X								X	X	X		
7 Turnaround Time Requested (TAT) (please circle)				Relinquished by <u>Eric Chodoroff</u> Date <u>10-25-16</u> Time <u>1700</u> Received by <u>GHD EMERYVILLE FRIDGE</u> Date <u>10-25-16</u> Time <u>1700</u>				Relinquished by <u>GHD EMERYVILLE FRIDGE</u> Date <u>10-26-16</u> Time <u>1000</u> Received by <u>Eric Chodoroff</u> Date <u>10-26-16</u> Time <u>1000</u>				Relinquished by <u>Eric Chodoroff</u> Date <u>10-26-16</u> Time <u>1200</u> Received by <u>A. Salyer</u> Date <u>26 Oct 16</u> Time <u>1200</u>				Relinquished by <u>Commercial Carrier</u> Date <u>26 Oct 16</u> Time <u>1634</u> Received by <u>A. Salyer</u> Date <u>26 Oct 16</u> Time <u>1634</u>										
Standard 5 day 4 day 72 hour 48 hour 24 hour				Temperature Upon Receipt <u>6.2-1.7</u> °C				Custody Seals Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																		

# Chevron California Region Analysis Request/Chain of Custody



*P.20F3*  
**Lancaster Laboratories  
 Environmental**

Acct. # **10880**

For Eurofins Lancaster Laboratories Environmental use only

Group # **1726411** Sample # **8667759-79**

Instructions on reverse side correspond with circled numbers.

<b>1 Client Information</b>				<b>4 Matrix</b>				<b>5 Analyses Requested</b>							
Facility # <b>40121</b> WBS				Sediment <input type="checkbox"/> Potable <input type="checkbox"/> Ground <input type="checkbox"/> Surface <input type="checkbox"/> NPDES <input type="checkbox"/> Air <input type="checkbox"/> Oil <input type="checkbox"/>				Total Number of Containers BTEX + MTBE 8021 <input type="checkbox"/> 8260 <input checked="" type="checkbox"/> TPH-GRO 8015 <input type="checkbox"/> 8260 <input checked="" type="checkbox"/> TPH-DRO 8015 without Silica Gel Cleanup <input checked="" type="checkbox"/> TPH-DRO 8015 with Silica Gel Cleanup <input checked="" type="checkbox"/> 8260 Full Scan <input type="checkbox"/> Oxygenates <input type="checkbox"/> Total Lead Method <input type="checkbox"/> Dissolved Lead Method <input type="checkbox"/> TPH MO BY EPA 8015 NAPHTHALENE BY EPA 8260 PAHs BY 8270							
Site Address <b>3026 LAKESHORE AVE, OAKLAND, CA.</b>															
Chevron PM <b>MARK HORNE</b> Lead Consultant <b>GHD</b>															
Consultant/Office <b>GHD 5900 HOLLIS ST, SUITE A, EMERYVILLE, CA</b>															
Consultant Project Mgr. <b>KIERSTEN HOEY</b>															
Consultant Phone # <b>510 420 3347</b>															
Sampler <b>BRYAN SANDOR, ERIL CHOOROFF</b>															

SCR #: \_\_\_\_\_

- Results in Dry Weight
- J value reporting needed
- Must meet lowest detection limits possible for 8260 compounds
- 8021 MTBE Confirmation
- Confirm highest hit by 8260
- Confirm all hits by 8260
- Run \_\_\_\_\_ oxy's on highest hit
- Run \_\_\_\_\_ oxy's on all hits

Sample Identification	Soil Depth	Collected		Grab	Composite	Soil	Water	Oil	Total Number of Containers	BTEX + MTBE	8021	8260	TPH-GRO	8015	TPH-DRO 8015 without Silica Gel Cleanup	TPH-DRO 8015 with Silica Gel Cleanup	8260 Full Scan	Oxygenates	Total Lead	Method	Dissolved Lead	Method	TPH MO BY EPA 8015	NAPHTHALENE BY EPA 8260	PAHs BY 8270
		Date	Time																						
B-9-3	3	10-25-16	0825	X		X			1	X		X	X	X									X	X	
B-9-5	5	10-25-16	0835	X		X			1	X		X	X	X									X	X	
B-9-8	8	10-25-16	0845	X		X			1	X		X	X	X									X	X	
B-9-10	10	10-25-16	0900	X		X			1	X		X	X	X									X	X	
B-9-12	12	10-25-16	0920	X		X			1	X		X	X	X									X	X	
B-10-3	3	10-25-16	1000	X		X			1	X		X	X	X									X	X	
B-10-5	5	10-25-16	1010	X		X			1	X		X	X	X									X	X	
B-10-8	8	10-25-16	1020	X		X			1	X		X	X	X									X	X	
B-10-10	10	10-25-16	1030	X		X			1	X		X	X	X									X	X	
B-10-12	12	10-25-16	1040	X		X			1	X		X	X	X									X	X	

**6 Remarks**

CONTINGENCY ANALYSIS FOR PAHs BY EPA 8270 IF TPH MO IS DETECTED

**7 Turnaround Time Requested (TAT) (please circle)**

Standard (circled)      5 day      4 day  
 72 hour      48 hour      24 hour

Relinquished by <i>[Signature]</i>	Date <b>10-25-16</b>	Time <b>1700</b>	Received by <b>GHD EMERYVILLE FRIDGE</b>	Date <b>10-25-16</b>	Time <b>1700</b>
Relinquished by <b>GHD EMERYVILLE FRIDGE</b>	Date <b>10-26-16</b>	Time <b>1000</b>	Received by <i>[Signature]</i>	Date <b>10-26-16</b>	Time <b>1000</b>

**8 Data Package (circle if required)**

Type I - Full      Type VI (Raw Data)

**EDD (circle if required)**

EDFFLAT (default)      Other: \_\_\_\_\_

Relinquished by <i>[Signature]</i>	Date <b>10-26-16</b>	Time <b>1200</b>	Received by <i>[Signature]</i>	Date <b>26 OCT 16</b>	Time <b>1200</b>
Relinquished by Commercial Carrier <b>UPS</b>	FedEx _____ Other <b>26 OCT 16 - 1630 - FX</b>		Received by	Date	Time
Temperature Upon Receipt <b>02-1.7 °C</b>			Custody Seals Intact? <b>Yes</b> No		

# Chevron California Region Analysis Request/Chain of Custody



**P130F3**  
Lancaster Laboratories  
Environmental

Acct. # 10880

For Eurofins Lancaster Laboratories Environmental use only

Group # 1726411 Sample # 8667759-79

Instructions on reverse side correspond with circled numbers.

142616-96

1 Client Information				4 Matrix			5 Analyses Requested										SCR #: _____				
Facility # <u>40121</u>		WBS		<input type="checkbox"/> Sediment <input type="checkbox"/> Potable <input type="checkbox"/> Ground <input type="checkbox"/> NPDES <input type="checkbox"/> Surface <input type="checkbox"/> Oil <input type="checkbox"/> Air	<input type="checkbox"/> Composite <input type="checkbox"/> Soil <input type="checkbox"/> Water <input type="checkbox"/> NPDES <input type="checkbox"/> Oil <input type="checkbox"/> Air	Total Number of Containers BTEX + MTBE 8021 <input type="checkbox"/> 8260 <input checked="" type="checkbox"/> TPH-GRO 8015 <input type="checkbox"/> 8260 <input checked="" type="checkbox"/> TPH-DRO 8015 without Silica Gel Cleanup <input type="checkbox"/> TPH-DRO 8015 with Silica Gel Cleanup <input type="checkbox"/> 8260 Full Scan Oxygenates Total Lead Dissolved Lead											<input type="checkbox"/> Results in Dry Weight <input type="checkbox"/> J value reporting needed <input type="checkbox"/> Must meet lowest detection limits possible for 8260 compounds <input type="checkbox"/> 8021 MTBE Confirmation <input type="checkbox"/> Confirm highest hit by 8260 <input type="checkbox"/> Confirm all hits by 8260 <input type="checkbox"/> Run ____ oxy's on highest hit <input type="checkbox"/> Run ____ oxy's on all hits				
Site Address <u>3825 LAKESHORE AVE, OAKLAND, CA</u>		Chevron PM <u>MARK HORNE</u>					Lead Consultant														
Consultant/Office <u>GHD EMERYVILLE</u>		Consultant Project Mgr. <u>KIERSTEN HOEY</u>					Consultant Phone # <u>510-420-3347</u>														
Sampler <u>ERIK CHODOROFF</u>		Grab					Composite														
2 Sample Identification		Soil Depth	Collected				3	4	5										6		
			Date						Time												
<u>TRIP BLANK</u>		<u>-</u>	<u>10-25-16</u>	<u>-</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>											9 Remarks				
7 Turnaround Time Requested (TAT) (please circle)				Relinquished by		Date	Time	Received by		Date	Time	9									
Standard (circled) 72 hour				<u>Er Chodoroff</u>		<u>10-25-16</u>	<u>1700</u>	<u>GHD EMERYVILLE BRIDGE</u>		<u>10-25-16</u>	<u>1700</u>										
5 day				GHD EMERYVILLE BRIDGE		<u>10-26-16</u>	<u>1000</u>	<u>Er Chodoroff</u>		<u>10-26-16</u>	<u>1000</u>										
4 day				Er Chodoroff		<u>10-26-16</u>	<u>1200</u>	<u>A. Salazar</u>		<u>26 Oct 16</u>	<u>1200</u>										
72 hour				Commercial Carrier:		<u>UPS</u>		<u>26 Oct 16 - 1638 - FX</u>													
48 hour				Temperature Upon Receipt		<u>0.2 - 1.7 °C</u>		Custody Seals Intact?		<u>Yes</u>		No									
24 hour				EDD (circle if required)																	
				EDFFLAT (default)																	

## Amek Carter

---

**From:** US19\_USR\_AutomatedChangeForms  
**Sent:** Wednesday, November 02, 2016 6:07 PM  
**To:** Amek Carter  
**Subject:** Change Form for Group 1726411 (ChevronTexaco - 10880)

Group Number:1726411  
Client: ChevronTexaco  
Account: 10880  
Project: 90121  
CSR: Loran Carter  
Entry Date: 10/28/16 13:12  
Change Reasons:  
SDGs:  
Change Dates: 11/02/16 17:24  
Changing Employee: Loran Carter;  
Changed Samples: 8667759  
Standard Group Forms:  
Standard Sample Forms:  
Recipients: [eddcontacts@eurofinsus.com](mailto:eddcontacts@eurofinsus.com);

---

Analysis Changes  
Sample = 8667759  
Master Analysis = 02002;  
Analysis Added

## Amek Carter

---

**From:** US19\_USR\_AutomatedChangeForms  
**Sent:** Wednesday, November 02, 2016 9:41 AM  
**To:** Amek Carter  
**Subject:** Change Form for Group 1726411 (ChevronTexaco - 10880)

Group Number:1726411  
Client: ChevronTexaco  
Account: 10880  
Project: 90121  
CSR: Loran Carter  
Entry Date: 10/28/16 13:12  
Change Reasons:  
SDGs:  
Change Dates: 11/02/16 08:58  
Changing Employee: Holly Trego;  
Changed Samples: 8667767; 8667768  
Standard Group Forms:  
Standard Sample Forms:  
Recipients: [DP26Contacts@eurofinsus.com](mailto:DP26Contacts@eurofinsus.com); [ChadwickHershey@eurofinsus.com](mailto:ChadwickHershey@eurofinsus.com);

---

### Analysis Changes

Sample = 8667767; 8667768  
Master Analysis = 14249;  
List Index            Old = 826 New = 20665



## Amek Carter

---

**From:** US19\_USR\_AutomatedChangeForms  
**Sent:** Tuesday, November 01, 2016 7:32 AM  
**To:** Amek Carter  
**Subject:** Change Form for Group 1726411 (ChevronTexaco - 10880)

Group Number:1726411  
Client: ChevronTexaco  
Account: 10880  
Project: 90121  
CSR: Loran Carter  
Entry Date: 10/28/16 13:12  
Change Reasons:  
SDGs:  
Change Dates: 11/01/16 06:43  
Changing Employee: ADMIN;  
Changed Samples: 8667767; 8667768  
Standard Group Forms:  
Standard Sample Forms:  
Recipients: [DP26Contacts@eurofinsus.com](mailto:DP26Contacts@eurofinsus.com); [ChadwickHershey@eurofinsus.com](mailto:ChadwickHershey@eurofinsus.com);

---

### Analysis Changes

Sample = 8667767; 8667768  
Master Analysis = 07805(826);  
Deleted

## Amek Carter

---

**From:** US19\_USR\_AutomatedChangeForms  
**Sent:** Tuesday, November 01, 2016 12:57 AM  
**To:** Amek Carter  
**Subject:** Change Form for Group 1726411 (ChevronTexaco - 10880)

Group Number:1726411

Client: ChevronTexaco

Account: 10880

Project: 90121

CSR: Loran Carter

Entry Date: 10/28/16 13:12

Change Reasons: LAB: Technical Decision

SDGs:

Change Dates: 11/01/16 00:27

Changing Employee: Jesse Mertz;

Changed Samples: 8667759-8667766; 8667769-8667778 Standard Group Forms:

Standard Sample Forms:

Recipients: [DP55Contacts@eurofinsus.com](mailto:DP55Contacts@eurofinsus.com); [ChadwickHershey@eurofinsus.com](mailto:ChadwickHershey@eurofinsus.com); [eddcontacts@eurofinsus.com](mailto:eddcontacts@eurofinsus.com);

---

### Analysis Changes

Sample = 8667759-8667766; 8667769-8667778

Master Analysis = 01238;

Deleted

## Amek Carter

---

**From:** US19\_USR\_AutomatedChangeForms  
**Sent:** Friday, October 28, 2016 11:30 PM  
**To:** Amek Carter  
**Subject:** Change Form for Group 1726411 (ChevronTexaco - 10880)

Group Number:1726411

Client: ChevronTexaco

Account: 10880

Project: 90121

CSR: Loran Carter

Entry Date: 10/28/16 13:12

Change Reasons: LAB: Technical Decision

SDGs:

Change Dates: 10/28/16 22:58

Changing Employee: Jesse Mertz;

Changed Samples: 8667759-8667766; 8667769-8667778 Standard Group Forms:

Standard Sample Forms:

Recipients: [DP55Contacts@eurofinsus.com](mailto:DP55Contacts@eurofinsus.com); [ChadwickHershey@eurofinsus.com](mailto:ChadwickHershey@eurofinsus.com); [eddcontacts@eurofinsus.com](mailto:eddcontacts@eurofinsus.com);

---

### Analysis Changes

Sample = 8667759-8667766; 8667769-8667778

Master Analysis = 01434;11968;

Deleted

Client: CA Office

**Delivery and Receipt Information**

Delivery Method:	<u>BASC</u>	Arrival Timestamp:	<u>10/27/2016 9:40</u>
Number of Packages:	<u>5</u>	Number of Projects:	<u>4</u>
State/Province of Origin:	<u>CA</u>		

**Arrival Condition Summary**

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	No
Samples Chilled:	Yes	Total Trip Blank Qty:	4
Paperwork Enclosed:	Yes	Trip Blank Type:	HCL
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Timothy Cubberley (6520) at 13:43 on 10/27/2016

**Samples Chilled Details**

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT131	1.5	DT	Wet	Y	Bagged	N
2	DT131	1.7	DT	Wet	Y	Bagged	N
3	DT131	0.9	DT	Wet	Y	Bagged	N
4	DT131	0.2	DT	Wet	Y	Bagged	N
5	DT131	1.0	DT	Wet	Y	Bagged	N

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

<b>BMQL</b>	Below Minimum Quantitation Level	<b>mg</b>	milligram(s)
<b>C</b>	degrees Celsius	<b>mL</b>	milliliter(s)
<b>cfu</b>	colony forming units	<b>MPN</b>	Most Probable Number
<b>CP Units</b>	cobalt-chloroplatinate units	<b>N.D.</b>	none detected
<b>F</b>	degrees Fahrenheit	<b>ng</b>	nanogram(s)
<b>g</b>	gram(s)	<b>NTU</b>	nephelometric turbidity units
<b>IU</b>	International Units	<b>pg/L</b>	picogram/liter
<b>kg</b>	kilogram(s)	<b>RL</b>	Reporting Limit
<b>L</b>	liter(s)	<b>TNTC</b>	Too Numerous To Count
<b>lb.</b>	pound(s)	<b>µg</b>	microgram(s)
<b>m3</b>	cubic meter(s)	<b>µL</b>	microliter(s)
<b>meq</b>	milliequivalents	<b>umhos/cm</b>	micromhos/cm
<b>&lt;</b>	less than		
<b>&gt;</b>	greater than		
<b>ppm</b>	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
<b>ppb</b>	parts per billion		
<b>Dry weight basis</b>	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

## Laboratory Data Qualifiers:

- B - Analyte detected in the blank
- C - Result confirmed by reanalysis
- E - Concentration exceeds the calibration range
- J (or G, I, X) - estimated value  $\geq$  the Method Detection Limit (MDL or DL) and  $<$  the Limit of Quantitation (LOQ or RL)
- P - Concentration difference between the primary and confirmation column  $>40\%$ . The lower result is reported.
- U - Analyte was not detected at the value indicated
- V - Concentration difference between the primary and confirmation column  $>100\%$ . The reporting limit is raised due to this disparity and evident interference...
- W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

**Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.**

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

# Appendix G Well Survey

# Monitoring Well Exhibit

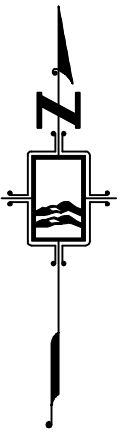
Prepared For:  
GHD

DESC.	NORTHING	EASTING	LATITUDE	LONGITUDE	EL. PVC	EL. RIM
MW-1	2121790.1	6057018.3	37.8091174	-122.2469622	12.42	12.67
MW-2A	2121828.9	6057023.9	37.8092243	-122.2469455	11.92	12.07
MW-3A	2121815.6	6057132.9	37.8091933	-122.2465672	14.04	14.38
MW-4A	2121841.3	6057118.5	37.8092631	-122.2466188	13.11	13.34
MW-5	2121737.9	6057060.1	37.8089761	-122.2468142	19.73	20.08
MW-6	2121728.6	6056842.2	37.8089395	-122.2475677	9.99	10.83
MW-8	2121841.8	6057167.0	37.8092670	-122.2464508	14.46	14.80
MW-9	2121817.0	6056990.2	37.8091898	-122.2470611	10.73	11.13
MW-10	2121715.0	6056772.5	37.8088985	-122.2478081	10.37	10.72

**BASIS OF COORDINATES AND ELEVATIONS:**

COORDINATES ARE CALIFORNIA STATE PLANE ZONE 3 COORDINATES FROM GPS OBSERVATIONS USING CSDS VIRTUAL SURVEY NETWORK.

VERTICAL DATUM IS NAVD 88 FROM GPS OBSERVATIONS.



<p>Former Chevron 90121 3026 Lakeshore Ave. Oakland Alameda County California</p>	 <p><b>Morrow</b> <b>Surveying</b> <small>LAND SURVEYORS</small></p>	<p>1255 Starboard Drive West Sacramento California 95691 (916) 372-8124 matt@morrrowsurveying.com</p>	<p>Date: November 4, 2016 Scale: 1"=40' Revised: Field Book: Dwg. No. 0857-198 MM</p>
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