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May 9, 2013

Ms. Barbara Jakub
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: **Conceptual Site Model**
Former Exxon RAS #70234
3450 35th Avenue, Oakland, California
ACHCSA File No. RO0002515

Dear Ms. Jakub:

Attached for your review and comment is a copy of the *Conceptual Site Model* for the above-referenced site. The document, prepared by ETIC Engineering, Inc. of Pleasant Hill, California, is submitted in response to correspondence from the Alameda County Health Care Services Agency dated March 5, 2013.

Upon information and belief, I declare, under penalty of perjury, that the information contained in the attached document is true and correct.

If you have any questions or comments, please contact me at 510.547.8196.

Sincerely,

Jennifer C. Sedlachek
Project Manager

Attachment: ETIC Conceptual Site Model

c: w/ attachment:
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Mr. Shay Wideman, The Valero Companies, Environ. Liability Mgt., P.O. Box 696000, San Antonio, TX 78269

c: w/o attachment:
Mr. Thomas E. Neely, ETIC Engineering, Inc.

Conceptual Site Model

Former Exxon Service Station 70234
3450 35th Avenue
Oakland, California

Prepared for

ExxonMobil Oil Corporation

Prepared by

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5/9/13

Hamidou Barry
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Date

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May 2013

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Former Exxon Service Station 70234

SITE CONTACTS

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1. INTRODUCTION

At the request of ExxonMobil Environmental Services Company on behalf of ExxonMobil Oil Corporation (ExxonMobil), ETIC Engineering, Inc. (ETIC) has prepared this Conceptual Site Model (CSM) for Former Exxon Service Station 70234, located at 3450 35th Avenue in Oakland, California (Figure 1). This CSM was prepared in response to e-mail correspondence from the Alameda County Health Care Services Agency (ACHCSA) dated 5 March 2013. A copy of the correspondence from the ACHCSA is included in Appendix A.

This CSM provides a summary of hydrogeologic conditions and previous investigations and remedial activities performed at the site. Potential exposure pathways and receptors have also been evaluated, and recommendations for future site activities are also provided.

2. SITE BACKGROUND

2.1 SITE LOCATION AND LAND USE

Former Exxon Service Station 70234 is located at 3450 35th Avenue in Oakland, California. The site is situated on the eastern corner of the intersection of 35th Avenue and Quigley Street (Figures 1 and 2). Residential properties are northwest of the site across 35th Avenue and adjacent to the site on the northeastern and southeastern sides. An active ConocoPhillips 76 service station is located southwest of the site across Quigley Street.

An Exxon-branded service station was operated at the site and then sold to Valero Energy Corporation (Valero) in 2000. The underground fueling systems were removed in 2002; however, the station building and canopy remained at the site. The site is currently unoccupied and the perimeter is surrounded by a fence. The former UST excavation was reportedly filled with gravel and resurfaced (Cardno ERI 2012a).

The site topography slopes generally to the southwest toward San Francisco Bay. The site is located approximately 2 miles northeast of the Oakland Estuary, which connects to San Francisco Bay. The nearest surface water is Peralta Creek, which flows to the southwest (toward San Francisco Bay) and passes within approximately 600 feet northwest and cross-gradient of the site (Figure 1).

2.2 UNDERGROUND STORAGE TANKS AND HYDRAULIC LIFTS

In August 1991, three 8,000-gallon gasoline underground storage tanks (USTs) were excavated and removed from the site and were replaced with three 12,000-gallon gasoline USTs (Alton Geoscience 1992). In June 1997, one 500-gallon used-oil UST and two hydraulic hoists were removed from the site (ACHCSA 2000). In 2002, the three 12,000-gallon gasoline USTs and associated product piping were excavated and removed from the site (TRC 2002). The former UST excavation and product piping trenches were reportedly filled with gravel (Cardno ERI 2012a).

2.3 SUMMARY OF PREVIOUS INVESTIGATIONS

Various investigations were performed from 1986 to 2000 as part of the initial environmental case for the site. Soil borings B1 through B10, EB1, EB2, SB1, and SB2 were drilled and groundwater monitoring wells MW1 through MW3 were installed (Alton Geoscience 1991) (IT 1992) (Cardno ERI 2012a). Well construction details are presented in Table 1. Total Petroleum Hydrocarbons quantified as gasoline (TPH-g) and benzene were detected in soil samples from the borings at concentrations up to 440 milligrams per kilogram (mg/kg) and 0.7 mg/kg, respectively (boring B3 at 15.5 feet below ground surface [bgs]). TPH-g, benzene, and methyl tertiary butyl ether (MTBE) were detected in groundwater samples at concentrations up to 75.0 micrograms per liter (µg/L), 6.6 µg/L, and 1.87 µg/L, respectively (Cardno ERI 2012a). The ACHCSA closed the environmental case for the site, and the groundwater monitoring wells were subsequently destroyed in 2000 (ERI 2000).

In March 2007, the ACHCSA opened an environmental case for the site based upon the discovery of MTBE in groundwater samples collected from the UST excavation during removal of the tanks in 2002 (Cardno ERI 2012a).

In September and November 2007, Environmental Resolutions, Inc. (ERI) observed the drilling of borings B11 through B18 (ERI 2007). In March 2009, ERI observed the drilling of borings B19 through B21 and the installation of groundwater monitoring wells MW4 through MW9 (ERI 2009). TPH-g, benzene, toluene, ethylbenzene, xylenes, MTBE, tertiary butyl alcohol (TBA), and 1,2-dichloroethane (1,2-DCA) were detected in soil samples collected from the borings at concentrations up to 300 mg/kg (B15 at 20 feet bgs), 6.1 mg/kg (B15 at 20 feet bgs), 36 mg/kg (B15 at 20 feet bgs), 14 mg/kg (B15 at 20 feet bgs), 72 mg/kg (B15 at 20 feet bgs), 1.7 mg/kg (B17 at 35.5 feet bgs), 0.70 mg/kg (B18 at 35 feet bgs), and 0.011 mg/kg (B15 at 15.5 feet bgs), respectively. TPH-g, benzene, toluene, ethylbenzene, xylenes, MTBE, and TBA were detected at concentrations up to 18,000 µg/L, 3,400 µg/L, 2,500 µg/L, 330 µg/L, 2,000 µg/L, 12,000 µg/L, and 1,900 µg/L, respectively, in the grab groundwater sample collected at 38 feet below ground surface (bgs) from boring B15 situated near the southeastern edge of the former UST excavation (Cardno ERI 2012a).

In December 2011, Cardno ERI observed the installation of recovery well RW1 at the site. The purpose of installing well RW1 was to conduct feasibility testing, including a step-drawdown and a constant-rate groundwater pumping test to evaluate whether groundwater extraction and treatment would be a viable remediation strategy. TPH-g was detected at 440 mg/kg in the soil sample collected at 40 feet bgs from the boring for well RW1 (Cardno ERI 2012a).

Quarterly groundwater monitoring was performed at the site from 1992 to 1995. Groundwater monitoring was also performed once in 1999. Non-aqueous-phase liquid (NAPL) was not detected. TPH-g, BTEX, and MTBE were detected in groundwater samples collected from monitoring wells MW1 (located west of the UST area) and MW3 (located upgradient of the fueling system). Groundwater monitoring wells MW1 through MW3 were destroyed in 2000 when the ACHCSA closed the initial environmental case for the site (Cardno ERI 2012a).

Groundwater monitoring wells MW4 through MW9 have been monitored since March 2009. The highest concentrations of TPH-g, BTEX, and MTBE have been detected in samples collected from wells MW5 (located southeast of the former UST excavation), MW6 (located southwest of the former UST excavation), and RW1 (located inside the former UST excavation).

In February 2012, Cardno ERI performed a step-drawdown pumping test and attempted subsequent constant-rate pumping tests in well RW1. The tests indicated a sustainable pumping rate of no more than 0.2 gallons per minute. The data also yielded a corresponding transmissivity of 197.1 gallons per day per foot (gpd/ft) a storativity (specific yield) of 0.016, and a hydraulic conductivity of 5.8 x 10^{-4} centimeters per second (cm/sec). Based upon the data, the anticipated downgradient extent of the capture zone was approximately 14.5 feet and the anticipated cross-gradient extent of the capture zone was approximately 45 feet. Based upon the findings of the feasibility test, Cardno ERI indicated that groundwater extraction and treatment would not be an effective remedial alternative for the site (Cardno ERI 2012b).

2.4 SUMMARY OF PREVIOUS REMEDIAL MEASURES

In 1991, approximately 1,200 cubic yards of fill material and soil were excavated when the gasoline USTs, dispensers, and product piping were removed and the excavation was enlarged to

accommodate the larger replacement USTs. TPH-g and benzene were detected at concentrations up to 5 mg/kg and 0.36 mg/kg, respectively, in soil samples collected from the limits of the enlarged excavation (Cardno ERI 2012a).

In June 1997, one 500-gallon used-oil UST and two hydraulic hoists were removed from the site (ACHCSA 2000). Hydraulic oil was detected in the soil samples collected from the hydraulic lift excavations at concentrations up to 2,100 mg/kg. Total Petroleum Hydrocarbons quantified as motor oil (TPH-mo), diesel (TPH-d), TPH-g, toluene, ethylbenzene, and xylenes were detected in the soil sample collected from the used-oil UST excavation at 680 mg/kg, 200 mg/kg, 8.6 mg/kg, 0.038 mg/kg, 0.016 mg/kg, and 0.046 mg/kg, respectively.

In 2002, approximately 170 cubic yards of pea gravel and soil were excavated during removal of the 12,000-gallon USTs (Cardno ERI 2012a). Four soil samples were collected from the sidewalls of the UST excavation. TPH-g, BTEX, and MTBE were not detected in the samples. Four soil samples were collected beneath the product piping. TPH-g, BTEX, and MTBE were not detected in three of the four samples. TPH-g (24 mg/kg), benzene (0.057 mg/kg), toluene (0.11 mg/kg), ethylbenzene (0.12 mg/kg), total xylenes (1.2 mg/kg), and MTBE (0.020 mg/kg) were detected in soil sample B collected at approximately 4.9 feet bgs beneath the northeastern dispenser island (Cardno ERI 2012a).

2.5 REGIONAL GEOLOGY AND HYDROGEOLOGY

The site is located in the East Bay Plain Subbasin of the Santa Clara Valley Groundwater Basin. The East Bay Plain Subbasin is a northwest trending alluvial plain bounded on the north by San Pablo Bay, on the east by the contact with Franciscan Basement rock, and on the south by the Niles Cone Groundwater Basin. The East Bay Plain Basin extends beneath San Francisco Bay to the west. Numerous creeks including San Pablo Creek, Wildcat Creek, San Leandro Creek, and San Lorenzo Creek flow from the western slope of the Coast Ranges westward across the plain and into San Francisco Bay. The East Bay Plain Subbasin aquifer system consists of unconsolidated deposits of Quaternary age. Deposits include the early Pleistocene Santa Clara Formation, the late Pleistocene Alameda Formation, the early Holocene Temescal Formation, and Artificial Fill. The cumulative thickness of the unconsolidated deposits is about 1,000 feet (DWR 2003).

Early Pleistocene Santa Clara Formation

The Santa Clara Formation consists of alluvial fan deposits inter-fingered with lake, swamp, river channel, and flood plain deposits. The formation ranges from 300 to 600 feet thick (DWR 2003).

Late Pleistocene Alameda Formation

The Alameda Formation includes a sequence of alluvial fan deposits. The formation was deposited primarily in an estuarine environment and ranges from 26 to 245 feet thick (DWR 2003).

Early Holocene Temescal Formation

The Temescal Formation is an alluvial deposit consisting primarily of silt and clay with some gravel

layers. The formation ranges from 1 to 50 feet thick (DWR 2003).

Artificial Fill

Artificial fill is found mostly along the bay front and wetlands areas and is derived primarily from dredging as well as quarrying, construction, demolition debris, and municipal waste. The fill ranges in thickness from 1 to 50 feet with the thickest deposits found closer to San Francisco Bay (DWR 2003).

2.6 LOCAL GEOLOGY AND HYDROGEOLOGY

The geologic and hydrogeologic characteristics of the site have been evaluated using data from boring logs from previous site investigations. Soil beneath the site generally consists of clayey sand and sandy clay with varying amounts of silt and gravel to approximately 45 feet bgs (Cardno ERI 2012a). Groundwater was first encountered in the soil borings at depths ranging from approximately 29 to 38 feet bgs.

The depth to groundwater measured in wells at the site during the May 2012 monitoring event was approximately 26.5 to 30.5 feet bgs. However, historical data indicate that groundwater levels have fluctuated approximately 5 to 7 feet in some wells over time. Historical data also indicate that the predominant direction of groundwater flow beneath the site is to the southwest at a horizontal hydraulic gradient of approximately 0.013 to 0.016 foot/foot (Cardno ERI 2012a).

3. WELL SURVEY

A well survey was conducted by Cardno ERI in 2000. Records from the California Department of Water Resources (DWR) were reviewed to gather information about known wells within 1,000 feet of the site. An irrigation well was documented by DWR on Arkansas Street, approximately 800 feet west-southwest, downgradient and cross-gradient of the site. A cathodic protection well was noted on Redding Street, approximately 250 feet northeast and upgradient of the site.

4. CONCEPTUAL SITE MODEL

A CSM has been developed based on field and analytical data obtained from the site to date. The CSM documents potential sources, chemicals of concern, affected media, the extent of impacts, transport mechanisms, and potential exposure pathways and receptors at and in the vicinity of the site. Figure 5 is a schematic diagram that illustrates the various components of the CSM.

4.1 SOURCES OF CHEMICAL IMPACTS

Analytical data indicate the former gasoline UST systems located in the southwestern portion of the site were primary sources of petroleum hydrocarbons detected in the subsurface at the site. A source was identified beneath and around the former location of the gasoline USTs. Petroleum hydrocarbons were also detected near a former pump island in the eastern portion of the dispenser area, near the former hydraulic hoists, and near a former used-oil tank near the southeastern site boundary.

4.2 CHEMICALS OF CONCERN AND AFFECTED MEDIA

Analytical data from soil and groundwater samples indicate that the subsurface beneath the site has been impacted by the presence of petroleum hydrocarbons, primarily TPH-g, BTEX, and MTBE. TPH-mo and TPH-d were detected in soil samples collected from the used-oil UST excavation. Hydraulic oil was detected in soil samples collected from the hydraulic lift excavations. TBA was detected in some soil and groundwater samples, and 1,2-DCA was detected in one soil sample and one groundwater sample. Tertiary amyl methyl ether (TAME) and diisopropyl ether (DIPE) were each detected at relatively low concentrations in one groundwater sample. Due to the volatility of certain petroleum hydrocarbon compounds, soil vapor beneath the site may also be impacted.

4.3 EXTENT OF RESIDUAL PETROLEUM HYDROCARBONS AND MTBE

4.3.1 Lateral Extent of Petroleum Hydrocarbons and MTBE in Soil

Historical petroleum hydrocarbon data for soil samples collected at the site are listed in Tables 2 and 3. Elevated concentrations of TPH-g and BTEX were detected in soil samples collected from the former gasoline UST excavation and borings subsequently drilled in the vicinity. Elevated concentrations (up to 290 mg/kg TPH-g) were detected in excavation soil samples collected in August 1991 upon removing the USTs. TPH-g and benzene were detected at concentrations up to 5 mg/kg and 0.36 mg/kg, respectively, in soil samples collected from the limits of the enlarged excavation in August 1991. The lateral extent of TPH-g and BTEX in soil is generally defined by the analytical data for samples collected from borings MW6, MW7, B19, B20, and B21 to the southwest; B13 to the northwest; MW4 to the northeast; and MW8 and MW9 to the southeast, as shown in Figure 3. The lateral extent of TPH-g and BTEX is defined.

The lateral extent of MTBE in soil is generally defined by the analytical data for samples collected from borings MW7, B20, and B21 to the southwest; B13 to the northwest; MW4 to the northeast; and MW8 and MW9 to the southeast, as shown in Figure 4. MTBE was detected at concentrations up to 0.51 mg/kg in soil at approximately 35.5 feet bgs at boring B19 (southwest of the former

USTs), indicating that the extent of MTBE in soil may not be fully defined in the downgradient direction. However, the presence of MTBE in soil at boring B19 may be attributable to the presence of MTBE in groundwater in that area.

Relatively low concentrations of TPH-g and BTEX (TPH-g up to 24 mg/kg and benzene up to 0.057 mg/kg) were detected in shallow soil samples collected near the former pump island and product piping (sample B at approximately 4.9 feet bgs). These former sampling locations are illustrated on Figure 2 and the data are included in Tables 2 and 3. Additionally, TPH-mo (680 mg/kg) and TPH-d (200 mg/kg) were detected in a soil sample collected from the former used-oil tank excavation. Hydraulic oil (up to 2,100 mg/kg) was detected in the samples collected from the hydraulic lift excavations.

4.3.2 Vertical Extent of Petroleum Hydrocarbons and MTBE in Soil

At most locations, petroleum hydrocarbons were detected beneath and in the immediate vicinity of the former gasoline USTs at depths ranging from approximately 11 to 40 feet bgs. With the exception of well RW1, the highest concentrations of TPH-g and BTEX generally were detected between approximately 15 and 30.5 feet bgs. TPH-g was detected at 440 mg/kg in the soil sample collected at 40 feet bgs in the boring for well RW1. No soil samples were collected at depths greater than 40 feet bgs from boring RW1. Relatively low concentrations of TPH-g and BTEX (TPH-g up to 24 mg/kg and benzene up to 0.057 mg/kg) were detected in shallow soil samples collected near the former pump island and product piping (sample B at approximately 4.9 feet bgs). The vertical extent of TPH-g and benzene in soil has not been defined.

MTBE was detected beneath and in the immediate vicinity of the former gasoline USTs at depths ranging from approximately 11 to 39.5 feet bgs. The vertical extent of MTBE in soil has not been defined.

4.3.3 Lateral Extent of Petroleum Hydrocarbons and MTBE in Groundwater

Historical data provided by Cardno ERI is presented in Appendix B, and the data in Tables 4 and 5 provide information regarding the lateral extent of TPH-g, BTEX, and MTBE in groundwater at the site. Historically, the highest concentrations of petroleum hydrocarbons and MTBE have been detected in the groundwater samples collected in the vicinity of the former gasoline UST excavation. The concentrations of benzene in onsite downgradient well MW6 have been slightly higher than the Maximum Contaminant Level of 1 µg/L since March 2009. The lateral extent of benzene in groundwater has been generally delineated by offsite Unocal 76 wells MW1 and MW2 to the southwest, MW7 to the west, MW4 to the northwest, and MW8 and MW9 to the southeast. The extent of benzene in groundwater extends less than approximately 100 feet downgradient of the former gasoline USTs. Although analytical data from the most recent groundwater monitoring event in the fourth quarter of 2012 indicated the presence of benzene in some of the samples from the perimeter monitoring wells, the data were generally not consistent with historical values. Additional monitoring data will be evaluated to further assess the lateral extent of petroleum hydrocarbons and MTBE in groundwater.

The lateral extent of TPH-g and MTBE in groundwater has been generally defined by samples

collected from well MW4 (northwest of the former gasoline USTs) and MW8 and MW9 (southeast of the former gasoline USTs). TPH-g and MTBE have been detected in samples from well MW6 (southwest and downgradient of the former gasoline USTs) and in the three offsite monitoring wells (MW1, MW2, and MW3) at the Unocal 76 station site. The lateral extent of TPH-g and MTBE in groundwater has not been defined.

4.3.4 Vertical Extent of Petroleum Hydrocarbons and MTBE in Groundwater

The vertical extent of petroleum hydrocarbons and MTBE in groundwater has not been evaluated.

4.4 TRANSPORT MECHANISMS

The residual petroleum hydrocarbon and MTBE impacts have been primarily detected in soil and groundwater in the vicinity of the former UST excavation. Impacts to soil extend through the vadose zone and to the water-bearing zone.

The primary mechanisms for the residual impacts to mobilize or be retained by the soil matrix in the aquifer are advection, adsorption, desorption, and volatilization. Residual concentrations in the vicinity of the former UST excavation can migrate downgradient and offsite primarily through advection. The soil and groundwater data indicate that both media are affected and consequently adsorption and desorption between the two phases may be occurring. Petroleum hydrocarbons (particularly TPH-g and BTEX) may volatilize from soil and/or groundwater into soil vapor. Volatilization of petroleum hydrocarbons or MTBE from soil and groundwater into the vapor pore space may result in the subsequent migration to the ground surface in certain situations.

4.5 POTENTIAL EXPOSURE PATHWAYS AND RECEPTORS

Potential exposure pathways and receptors at the site were evaluated based on current and possible future reconfiguration of the land use and conditions at and in the vicinity of the site. The site is unoccupied and the station building and canopy remain. The surrounding land is used for commercial purposes and residential housing. Figure 5 illustrates a schematic diagram of the CSM.

Based on the above conditions, various exposure pathways and receptors have been evaluated for the site, recognizing that a complete exposure pathway consists of the following elements:

- a source and mechanism of chemical release
- one or more retention or transport media (e.g., soil, groundwater, or air)
- a point of potential contact with the impacted medium (referred to as the exposure point)
- an exposure route at the point of contact (e.g., inhalation, ingestion, or dermal contact)

Site-specific exposure pathways and receptors are depicted on the exposure pathway flow chart (Figure 6), and are summarized below:

- inhalation of volatiles from soil to outdoor air (onsite receptor)
- inhalation of volatiles from soil to indoor air (onsite receptor)
- inhalation of volatiles from groundwater to outdoor air (onsite receptor)

- inhalation of volatiles from groundwater to indoor air (onsite receptor)
- ingestion, dermal contact, and inhalation of volatiles and particulates from near surface soil (onsite receptor or construction worker)
- ingestion, dermal contact, and inhalation of volatiles and particulates from subsurface soil (future onsite construction worker)
- ingestion or dermal contact with impacted groundwater (onsite and offsite receptors and construction workers)
- inhalation of volatiles from groundwater to outdoor/indoor air (offsite receptors)

The receptors evaluated for the site include the following:

- Site Occupants
- Future Construction/Maintenance Workers
- Offsite Receptors

An evaluation of the exposure pathways is presented below:

Inhalation of Volatiles

Inhalation of vapors from the subsurface is a potentially complete exposure pathway. To date, an assessment of soil vapor concentrations and potential risks due to vapor intrusion and inhalation has not been performed. A soil vapor investigation (performed in accordance with the most recent regulatory guidance) may be necessary to further evaluate potential human health risk due to vapor intrusion.

Dermal Contact or Ingestion of Impacted Soil

Residual soil impacts are generally at least 11 feet bgs in the vicinity of the former gasoline USTs. Potential direct exposure to impacted soil at these depths would likely only occur by a construction worker. TPH-mo and TPH-d were detected in soil beneath the former used-oil tank, and hydraulic oil was detected in soil in the hydraulic lift excavations. A construction worker could be potentially exposed to impacted soil should excavation occur in these areas. This exposure pathway may be completed by construction workers excavating soil to at least 11 feet bgs. However, a site-specific health and safety plan could be prepared and implemented to address the dermal exposure pathway for potential future construction workers.

Relatively low concentrations of TPH-g and BTEX (e.g., TPH-g up to 24 mg/kg and benzene up to 0.057 mg/kg) were also detected at approximately 4.9 feet bgs in a soil sample collected near the former pump island. Due to the relatively shallow depth, potential direct exposure to the impacted soil is possible by an onsite occupant or construction worker. This exposure pathway may be completed by onsite occupants or construction workers excavating soil to at least 4.9 feet bgs. However, a site-specific health and safety plan could be prepared and implemented to address the dermal exposure pathway for potential future site occupants or construction workers.

Dermal Contact or Ingestion of Impacted Groundwater

Dermal contact or ingestion of impacted groundwater is a potentially complete exposure pathway for onsite and offsite occupants and construction workers. There is a potential irrigation well identified by Cardno ERI approximately 800 feet west-southwest, downgradient and cross-gradient of the site. An updated well survey should be performed to confirm the location and status of this well and to identify other potential wells in the area. Results from the well survey will determine whether a complete exposure pathway is present. Due to the depth to groundwater (approximately 25 feet bgs or more), exposure through excavation or construction dewatering activities is unlikely, and this exposure pathway may be incomplete for construction workers.

5. SUMMARY AND CONCLUSIONS

A CSM has been developed based on field and analytical data obtained from the site to date. The CSM documents potential sources, chemicals of concern, affected media, the extent of impacts, transport mechanisms, and potential exposure pathways and receptors at and in the vicinity of the site.

The primary chemicals of concern are TPH-g, BTEX, and MTBE in the vicinity of the former gasoline USTs. Also, relatively low concentrations of TPH-g and BTEX were detected near the former pump island. TPH-mo and TPH-d were detected in soil samples collected under the former used-oil tank excavation, and hydraulic oil was detected in soil samples collected from the hydraulic lift excavations.

Potential exposure pathways to residual impacts include volatilization and inhalation of vapors and dermal contact or ingestion of impacted soil or groundwater. Vapor intrusion and inhalation of volatiles is a potentially complete exposure pathway. A soil vapor investigation (performed in accordance with the most recent regulatory guidance) may be necessary to further evaluate potential human health risk due to vapor intrusion. With the exception of one sample collected near the former dispensers, the residual impacts in soil are at least 11 feet bgs. Dermal contact with impacted soil by site occupants is unlikely. A site-specific health and safety plan could be prepared and implemented to address the dermal exposure pathway for potential future construction workers.

Dermal contact with or ingestion of groundwater are potentially complete exposure pathways. An updated well survey is needed to evaluate the presence of water wells in the vicinity and whether the groundwater exposure pathway is complete.

The extent of TPH-g and MTBE impacts in soil and groundwater is not completely defined. Additional assessment of the extent of impacts is necessary to evaluate the potential risk to receptors in the area.

6. RECOMMENDATIONS

Based upon the data presented in this CSM, ETIC, on behalf of ExxonMobil, recommends that the activities listed below be performed for the site.

- Prepare and submit a project plan.
- Conduct a preferential pathway survey (including updated well survey).
- Perform a soil vapor investigation at the site, in accordance with current regulatory guidance, to further evaluate the vapor intrusion exposure pathway.
- Perform a subsurface investigation at the site to further evaluate the vertical extent of impacts in soil and groundwater.
- Following the completion of subsurface investigation activities by others at the downgradient 76 service station, evaluate whether an offsite investigation is warranted to further evaluate the downgradient extent of TPH-g and MTBE in groundwater.
- Collect groundwater samples from representative monitoring wells for laboratory analysis of natural attenuation parameters.
- Update the CSM.
- Evaluate the data obtained from the additional assessment activities with respect to the Low Threat Underground Storage Tank Case Closure Policy.
- Evaluate remedial alternatives, if warranted.
- Document the evaluation of remedial alternatives in a corrective action plan (CAP), if warranted.
- Implement the CAP, if warranted.

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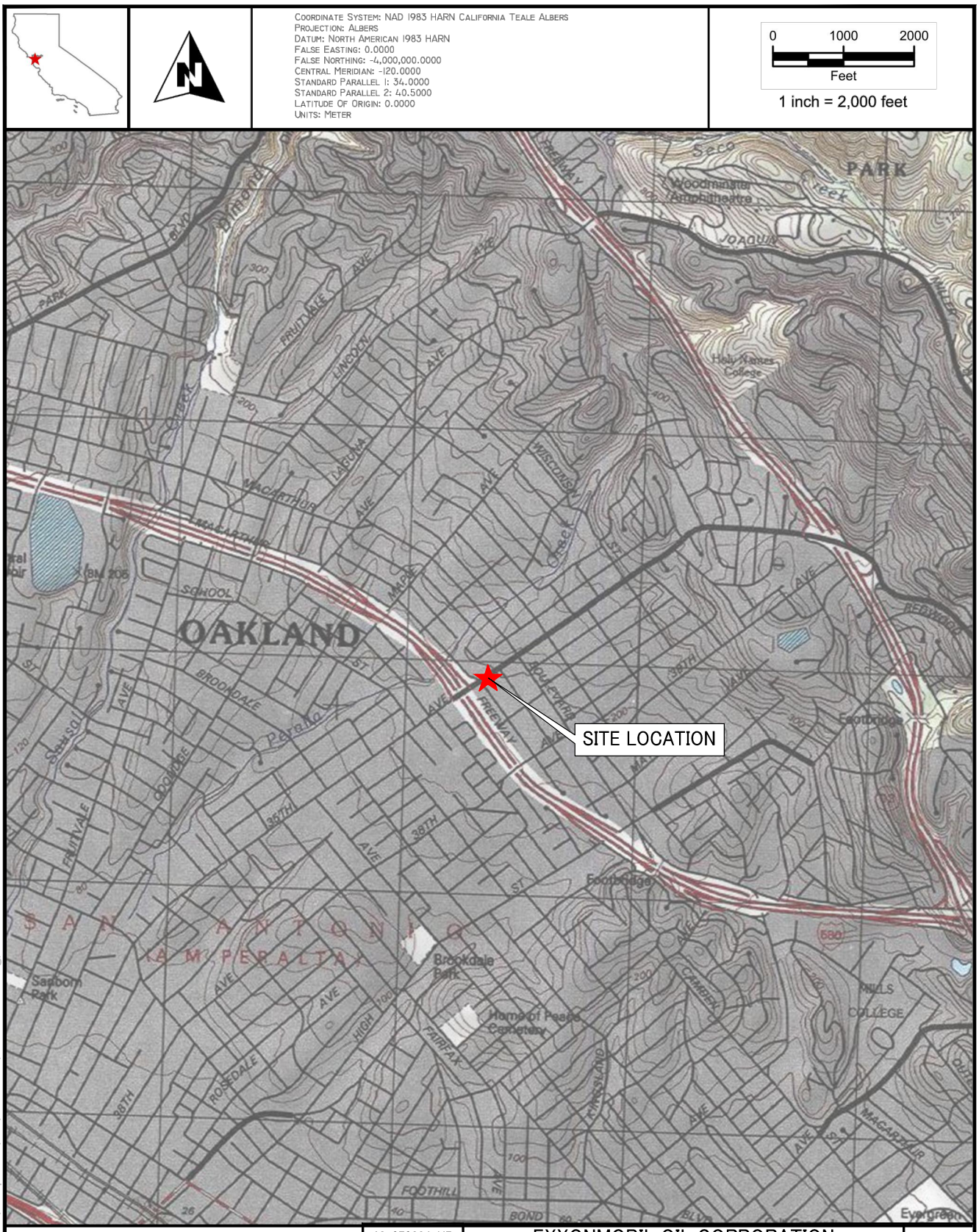
Figures



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	OR: TEN	SITE LOCATION AND TOPOGRAPHIC MAP FORMER EXXON SERVICE STATION 70234 3450 35th AVENUE	
	DR: AJW		FIGURE: 1
	CK:		
	FR:	OAKLAND, CALIFORNIA	

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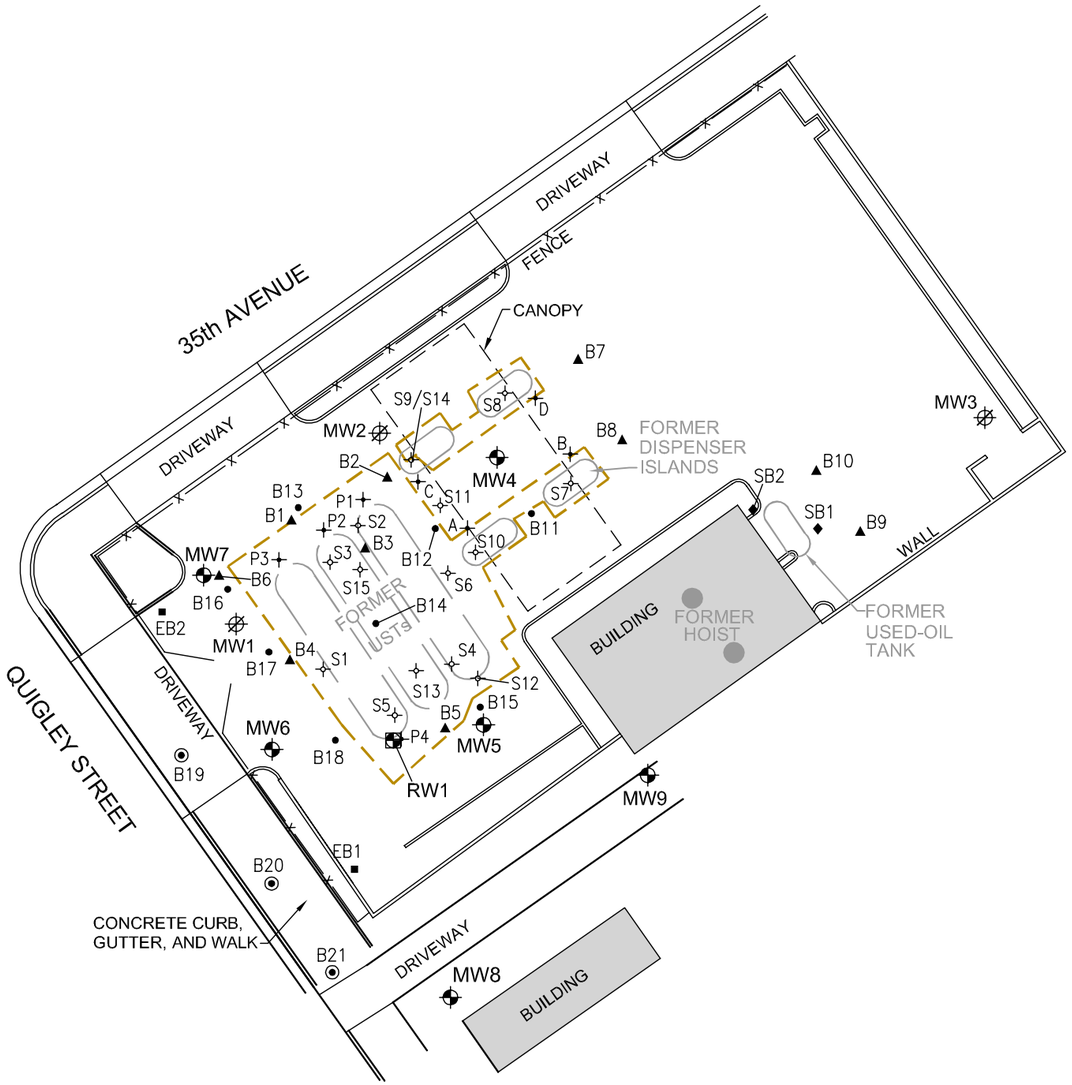

LEGEND:

- EXCAVATED AREA
- GROUNDWATER MONITORING WELL
- GROUNDWATER MONITORING WELL (by others)
- DESTROYED GROUNDWATER MONITORING WELL
- GROUNDWATER RECOVERY WELL
- SOIL BORING (GTI, 1986)
- SOIL BORING (HLA, 1988)
- SOIL BORING (Alton, 1991)
- SOIL SAMPLE (Alton, 1991)
- SOIL SAMPLE (TRC, 2002)
- SOIL BORING (ERI, 2007)
- SOIL BORING (ERI, 2009)

N

0 15 30

1″ = 30 FEET

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ETIC ENGINEERING

2285 MORELLO AVENUE
PLEASANT HILL, CA 94523
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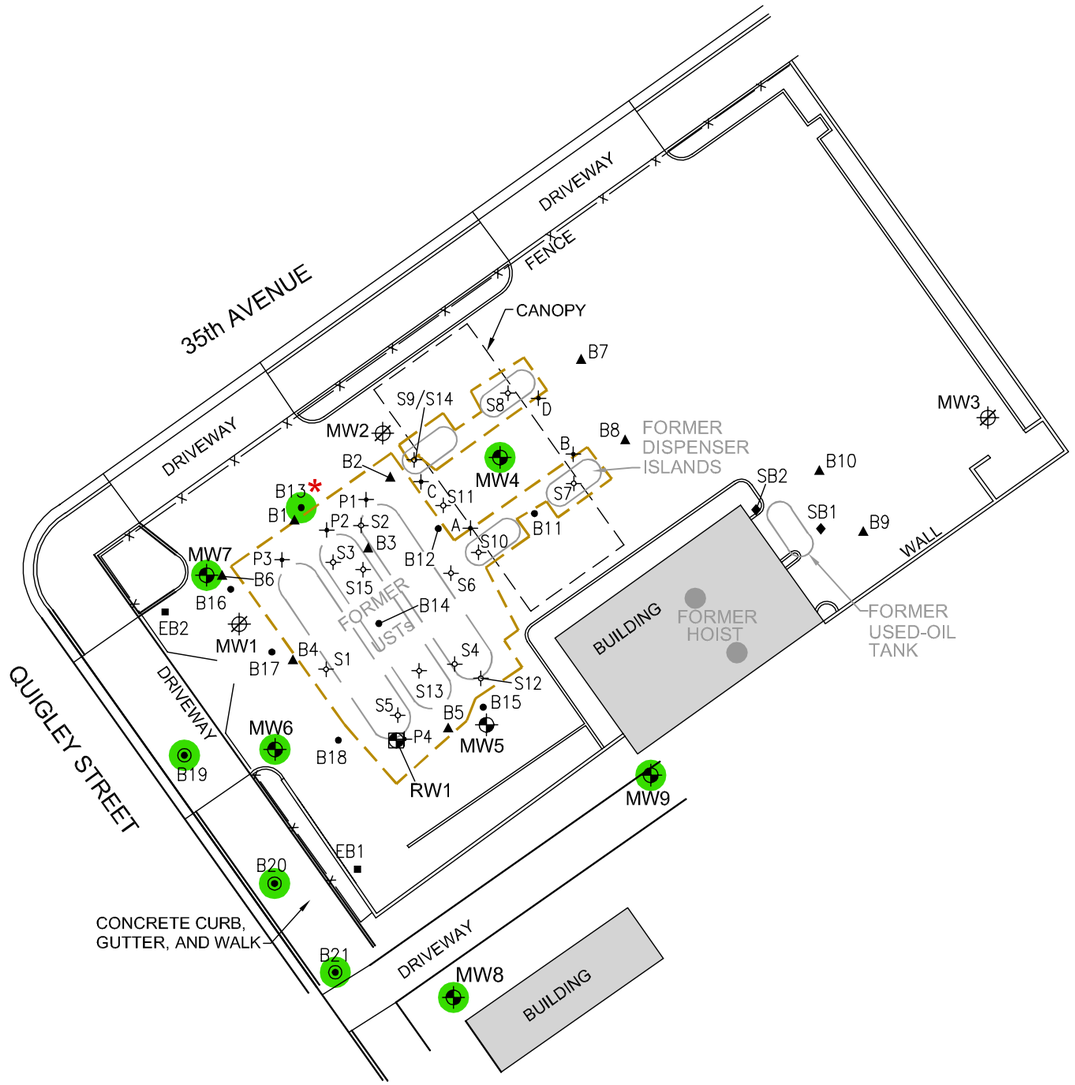
13-070234-UP	EXXONMOBIL OIL CORPORATION
OR: TEN	SITE MAP
DR: AJW	FORMER EXXON SERVICE STATION 70234
CK:	3450 35th AVENUE
FR:	OAKLAND, CALIFORNIA

FIGURE: 2



LEGEND:

- EXCAVATED AREA
- GROUNDWATER MONITORING WELL
- GROUNDWATER MONITORING WELL (by others)
- DESTROYED GROUNDWATER MONITORING WELL
- GROUNDWATER RECOVERY WELL
- SOIL BORING (GTI, 1986)
- SOIL BORING (HLA, 1988)
- SOIL BORING (Alton, 1991)
- SOIL SAMPLE (Alton, 1991)
- SOIL SAMPLE (TRC, 2002)
- SOIL BORING (ERI, 2007)
- SOIL BORING (ERI, 2009)
- HIGHLIGHTING INDICATES THAT TPHg AND BTEX WERE NOT DETECTED IN SOIL SAMPLES COLLECTED AT THIS LOCATION

TPHg	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
BTEX	BENZENE, TOLUENE, ETHYLBENZENE, XYLENES
*	TPHg WAS DETECTED AT 20 FEET BGS AT 4.3 mg/kg
BGS	BELOW GROUND SURFACE
mg/kg	MILLIGRAMS PER KILOGRAM

0 15 30

1″ = 30 FEET

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ETIC ENGINEERING

2285 MORELLO AVENUE
PLEASANT HILL, CA 94523
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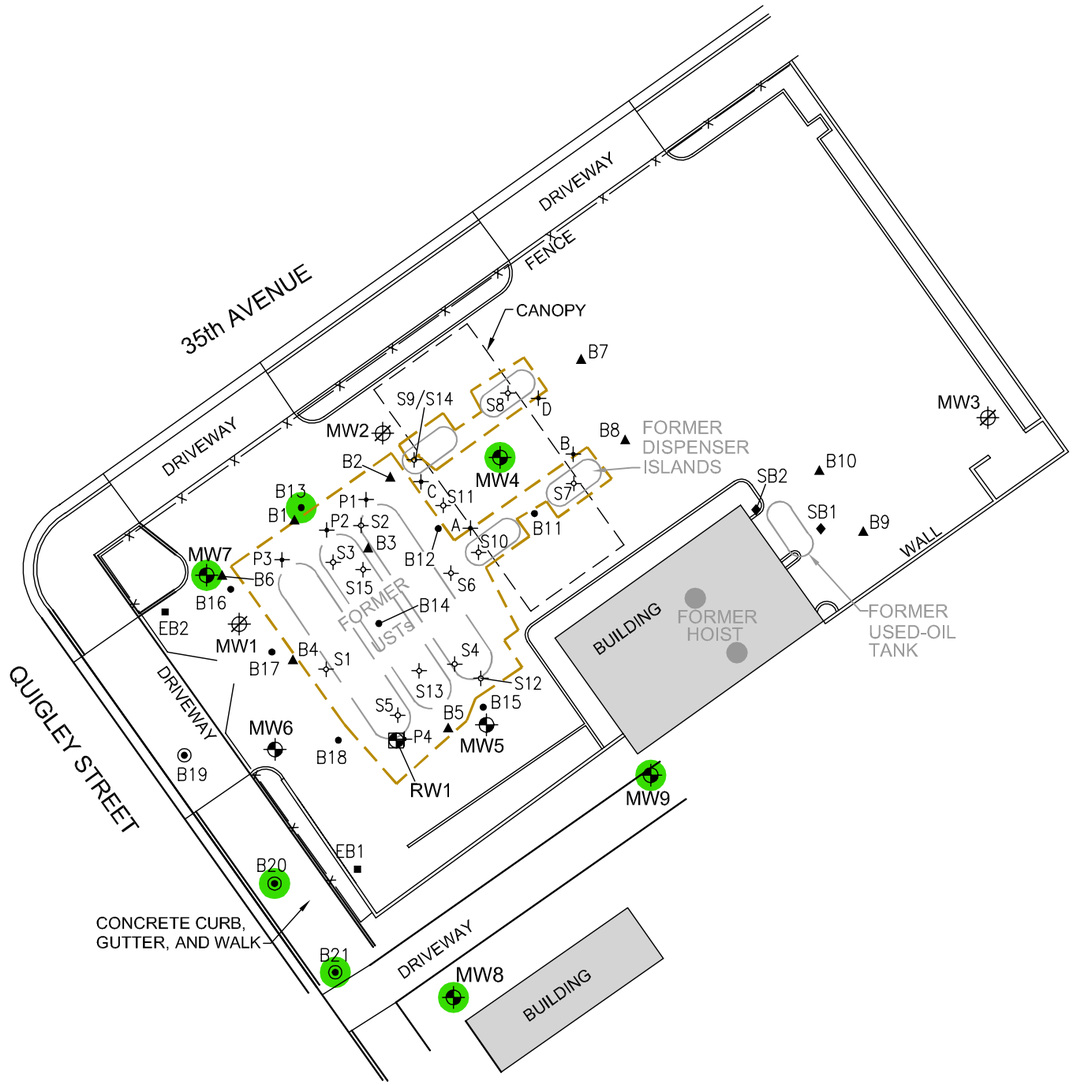
13-070234-UP	EXXONMOBIL OIL CORPORATION
OR: TEN	LATERAL EXTENT OF TPHg AND BTEX IN SOIL
DR: AJW	FORMER EXXON SERVICE STATION 70234
CK:	3450 35th AVENUE
FR:	OAKLAND, CALIFORNIA

FIGURE: 3



LEGEND:

- EXCAVATED AREA
- GROUNDWATER MONITORING WELL
- GROUNDWATER MONITORING WELL (by others)
- DESTROYED GROUNDWATER MONITORING WELL
- GROUNDWATER RECOVERY WELL
- SOIL BORING (GTI, 1986)
- SOIL BORING (HLA, 1988)
- SOIL BORING (Alton, 1991)
- SOIL SAMPLE (Alton, 1991)
- SOIL SAMPLE (TRC, 2002)
- SOIL BORING (ERI, 2007)
- SOIL BORING (ERI, 2009)
- HIGHLIGHTING INDICATES THAT MTBE WAS NOT DETECTED IN SOIL SAMPLES COLLECTED AT THIS LOCATION

MTBE METHYL TERTIARY BUTYL ETHER

0 15 30

1″ = 30 FEET

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ETIC ENGINEERING

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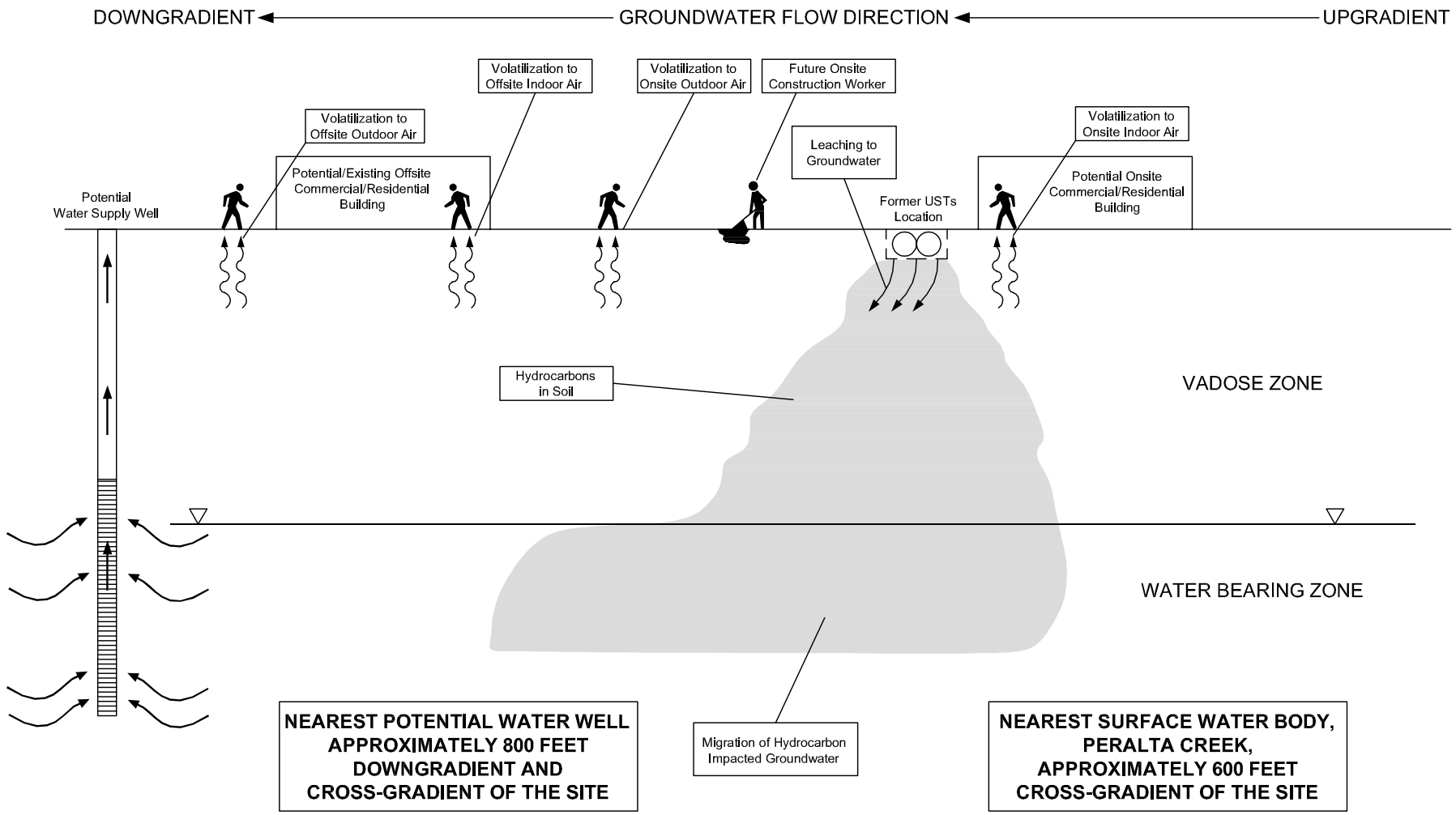
13-070234-UP	EXXONMOBIL OIL CORPORATION
OR: TEN	LATERAL EXTENT OF MTBE IN SOIL
DR: AJW	FORMER EXXON SERVICE STATION 70234
CK:	3450 35th AVENUE
FR:	OAKLAND, CALIFORNIA

FIGURE: 4



13-070234-UP	EXXONMOBIL OIL CORPORATION
	CONCEPTUAL SITE MODEL
OR: TEN	SCHEMATIC DIAGRAM
DR: AJW	FORMER EXXON SERVICE STATION 70234
CK:	3450 35th AVENUE
FR:	OAKLAND, CALIFORNIA

FIGURE: 5

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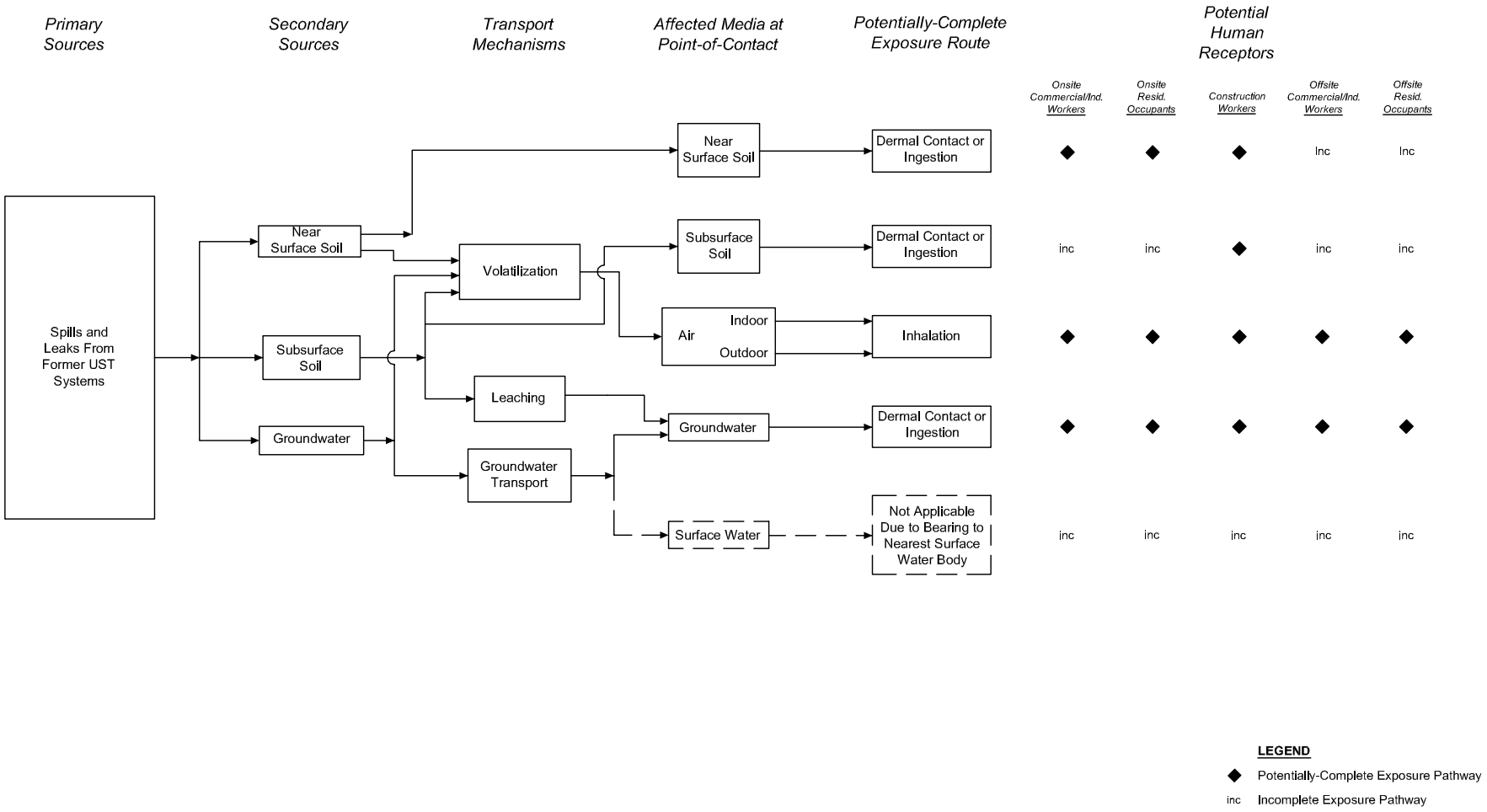

13-070234-UP	EXXONMOBIL OIL CORPORATION
OR: TEN	EXPOSURE PATHWAY FLOW CHART FORMER EXXON SERVICE STATION 70234 3450 35th AVENUE
DR: AJW	
CK:	
FR:	OAKLAND, CALIFORNIA

FIGURE: 6

ETIC ENGINEERING
2285 MORELLO AVENUE
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Tables

TABLE 1 WELL CONSTRUCTION DETAILS, FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date Installed	Date Destroyed	Elevation TOC (feet)	Borehole Diameter (inches)	Total Depth of Boring (feet bgs)	Well Depth (feet bgs)	Casing Diameter (inches)	Casing Material	Screened Interval (feet bgs)	Slot Size (inches)	Filter Pack Interval (feet bgs)	Filter Pack Material
MW1	07/15/92	Jun-00	192.00	11	45	45	4	Schedule 40 PVC	25-45	0.010	23-45	2/12 Lonestar Sand
MW2	07/15/92	Jun-00	194.85	11	45	45	4	Schedule 40 PVC	25-45	0.010	23-45	2/12 Lonestar Sand
MW3	07/15/92	Jun-00	196.90	11	45	45	4	Schedule 40 PVC	25-45	0.010	23-45	2/12 Lonestar Sand
MW4	03/02/09	---	197.62	8	45	45	2	Schedule 40 PVC	35-45	0.020	33-45	#3 Sand
MW5	03/06/09	---	196.35	8	40	40	2	Schedule 40 PVC	30-40	0.020	28-40	#3 Sand
MW6	03/09/09	---	192.41	8	40	39	2	Schedule 40 PVC	29-39	0.020	27-39	#3 Sand
MW7	03/09/09	---	194.34	8	40	40	2	Schedule 40 PVC	30-40	0.020	28-40	#3 Sand
MW8	03/04/09	---	192.96	8	40	40	2	Schedule 40 PVC	30-40	0.020	28-40	#3 Sand
MW9	03/05/09	---	195.16	8	40	40	2	Schedule 40 PVC	30-40	0.020	28-40	#3 Sand
RW1	12/22/11	---	195.15	10	40	40	4	Stainless Steel	25-39.5	0.020	23-40	#2/12 Sand

Notes: Data prior to 2013 provided by Cardno ERI.

TOC Top of well casing elevation; datum is mean sea level.
PVC Polyvinyl chloride.
feet bgs Feet below ground surface.
--- Not applicable.

TABLE 2 CUMULATIVE SOIL ANALYTICAL RESULTS, FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CA

Sample ID	Sampling Date	Depth (feet bgs)	TPH-g (mg/kg)	Kerosene (mg/kg)	TPH-d (mg/kg)	TPH-mo (mg/kg)	EHC-HO (mg/kg)	TOG (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	MTBE (mg/kg)	Lead (mg/kg)
Used-Oil UST Confirmation Soil Sample														
T1-12	06/18/97	---	8.6a	---	200b	680c	---	---	ND	0.038	0.016	0.046	---	8.8
Hydraulic Hoist Confirmation Samples														
H1-8	06/18/97	---	---	---	---	---	99d	---	---	---	---	---	---	---
H2-8	06/18/97	---	---	---	---	---	2,100d	---	---	---	---	---	---	---
Samples from the UST Cavity Sidewall														
Pit1@12'	06/14/02	12	<1.0	---	---	---	---	---	<0.005	<0.005	<0.005	<0.005	<0.005	---
Pit2@11.5'	06/14/02	11.5	<1.0	---	---	---	---	---	<0.005	<0.005	<0.005	<0.005	<0.005	---
Pit3@11'	06/14/02	11	<1.0	---	---	---	---	---	<0.005	<0.005	<0.005	<0.005	<0.005	---
Pit4@10'	06/14/02	10	<1.0	---	---	---	---	---	<0.005	<0.005	<0.005	<0.005	<0.005	---
Samples from Beneath Product Piping														
A-6.4	06/25/02	6.4	<1.0	---	---	---	---	---	<0.005	<0.005	<0.005	<0.005	<0.005	---
B-4.9	06/25/02	4.9	24	---	---	---	---	---	0.057	0.11	0.12	1.2	0.020	---
C-6.5	06/25/02	6.5	<1.0	---	---	---	---	---	<0.005	<0.005	<0.005	<0.005	<0.005	---
D-5.2	06/25/02	5.2	<1.0	---	---	---	---	---	<0.005	<0.005	<0.005	<0.005	<0.005	---
Soil Samples from 1991 UST Excavation														
S-1	08/28/91	10	<1.0	---	---	---	---	---	<0.005	<0.005	<0.005	<0.005	---	<5
S-2	08/28/91	10	<1.0	---	---	---	---	---	<0.005	<0.005	<0.005	<0.005	---	<5
S-3	08/28/91	10	<1.0	---	---	---	---	---	<0.005	<0.005	<0.005	<0.005	---	<5
S-4	08/28/91	10	290	---	---	---	---	---	2.8	6.5	5.2	27	---	<5
S-5	08/28/91	10	3.5	---	---	---	---	---	0.27	0.096	0.064	0.32	---	<5
S-6	08/28/91	11	4.1	---	---	---	---	---	0.19	0.13	0.056	0.23	---	<5
S-7	08/28/91	3	4.0	---	---	---	---	---	0.66	0.040	0.11	0.13	---	<5
S-8	08/28/91	3	<1.0	---	---	---	---	---	<0.005	<0.005	<0.005	<0.005	---	<5
S-9	08/28/91	3	210	---	---	---	---	---	1.4	7.2	3.0	18	---	<5
S-10	08/28/91	3	<1.0	---	---	---	---	---	<0.005	0.031	0.029	0.067	---	<5
S-11	08/28/91	1.5	<1.0	---	---	---	---	---	<0.005	<0.005	<0.005	<0.005	---	<5
S-12	08/28/91	15	3.1	---	---	---	---	---	0.36	0.048	0.052	0.16	---	---
S-13	08/28/91	15	1.8	---	---	---	---	---	0.26	0.008	0.009	0.041	---	---
S-14	08/28/91	4	5.0	---	---	---	---	---	0.047	0.063	0.009	0.041	---	---
S-15	08/28/91	15	<1.0	---	---	---	---	---	<0.005	<0.005	<0.005	<0.005	---	---
Soil Borings														
B-1	3/20/91	15.5	<1.0	---	---	---	---	---	0.011	0.007	0.011	0.04	---	---
B-1	3/20/91	20.5	<1.0	---	---	---	---	---	0.012	0.007	0.01	0.04	---	---
B-2	3/20/91	15.5	<1.0	---	---	---	---	---	0.036	0.026	0.012	0.055	---	---

TABLE 2 CUMULATIVE SOIL ANALYTICAL RESULTS, FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CA

Sample ID	Sampling Date	Depth (feet bgs)	TPH-g (mg/kg)	Kerosene (mg/kg)	TPH-d (mg/kg)	TPH-mo (mg/kg)	EHC-HO (mg/kg)	TOG (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	MTBE (mg/kg)	Lead (mg/kg)
B-2	3/20/91	20.5	<1.0	---	---	---	---	---	0.0073	0.0063	0.0098	0.038	---	---
B-3	3/20/91	10.5	1	---	---	---	---	---	0.006	0.006	0.008	0.036	---	---
B-3	3/20/91	15.5	440	---	---	---	---	---	0.7	5.4	4.7	24	---	---
B-4	3/20/91	10.5	5	---	---	---	---	---	0.013	0.019	0.014	0.082	---	<5
B-4	3/20/91	15.5	6.6	---	---	---	---	---	0.039	0.043	0.027	0.12	---	---
B-4	3/20/91	20.5	<1.0	---	---	---	---	---	0.0076	0.0073	0.011	0.054	---	---
B-5	3/20/91	10.5	26	---	---	---	---	---	0.055	0.061	0.17	0.67	---	---
B-6	3/20/91	10.5	240	---	---	---	---	---	0.28	2.2	2.8	13	---	---
B-6	3/20/91	15.5	1.4	---	---	---	---	---	0.0055	0.0054	0.009	0.034	---	---
B-7	3/20/91	10.5	<1.0	---	---	---	---	---	0.006	0.006	0.008	0.033	---	---
B-8	3/20/91	10.5	<1.0	---	---	---	---	---	0.006	0.005	0.008	0.035	---	---
B-9	3/20/91	10.5	---	---	---	---	---	<50	---	---	---	---	---	---
B-10	3/20/91	10.5	---	---	---	---	---	<50	---	---	---	---	---	---
S-5-B11	09/05/07	5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-10-B11	09/10/07	10	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-13.5-B11	09/10/07	13.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-18-B11	09/11/07	18	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-20-B11	09/11/07	20	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-25.5-B11	11/14/07	25.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-29.5-B11	11/14/07	29.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-34.5-B11	11/14/07	34.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-5-B12	09/04/07	5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-15.5-B12	11/13/07	15.5	43	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-20.5-B12	11/13/07	20.5	3.2	---	---	---	---	---	0.076	<0.0050	0.0053	<0.0050	0.15	---
S-5-B13	09/05/07	5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-10-B13	09/10/07	10	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-14.5-B13	09/10/07	14.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-20-B13	09/10/07	20	4.3	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-25-B13	11/12/07	25	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-30-B13	11/12/07	30	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---

TABLE 2 CUMULATIVE SOIL ANALYTICAL RESULTS, FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CA

Sample ID	Sampling Date	Depth (feet bgs)	TPH-g (mg/kg)	Kerosene (mg/kg)	TPH-d (mg/kg)	TPH-mo (mg/kg)	EHC-HO (mg/kg)	TOG (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	MTBE (mg/kg)	Lead (mg/kg)
S-35-B13	11/12/07	35	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-5.0-B14	09/06/07	5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-16-B14	11/13/07	16	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-20.5-B14	11/13/07	20.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	0.031	---
S-5-B15	09/04/07	5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-10.5-B15	11/15/07	10.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-15.5-B15	11/15/07	15.5	1.1	---	---	---	---	---	0.32	0.019	0.017	0.074	0.12	---
S-20-B15	11/15/07	20	300	---	---	---	---	---	6.1	36	14	72	<0.25	---
S-25.5-B15	11/15/07	25.5	220	---	---	---	---	---	3.1	18	6.8	36	<0.12	---
S-30.5-B15	11/15/07	30.5	59	---	---	---	---	---	2.9	5.6	1.5	20	<0.25	---
S-35.5-B15	11/15/07	35.5	3.3	---	---	---	---	---	0.28	0.21	0.26	0.79	0.26	---
S-5-B16	09/04/07	5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-11-B16	11/14/07	11	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-15.5-B16	11/14/07	15.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-21-B16	11/14/07	21	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-26-B16	11/14/07	26	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-30.5-B16	11/14/07	30.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-34.5-B16	11/14/07	34.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	0.021	---
S-38.5-B16	11/14/07	38.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-5-B17	09/05/07	5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-11-B17	11/13/07	11	90	---	---	---	---	---	0.052	<0.0050	0.086	0.020	0.036	---
S-16-B17	11/13/07	16	<0.50	---	---	---	---	---	0.0052	<0.0050	<0.0050	<0.0050	0.099	---
S-21-B17	11/13/07	21	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	0.011	---
S-24.5-B17	11/13/07	24.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	0.59	---
S-31-B17	11/13/07	31	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-35.5-B17	11/13/07	35.5	0.85	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	1.7	---
S-5-B18	09/04/07	5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-10-B18	11/12/07	10	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-15-B18	11/12/07	15	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	0.0051	---
S-20-B18	11/12/07	20	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	0.019	---
S-25-B18	11/12/07	25	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	0.18	---
S-30-B18	11/12/07	30	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	0.54	---
S-35-B18	11/12/07	35	24	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	0.53	---
S-5-B19	02/25/09	5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---

TABLE 2 CUMULATIVE SOIL ANALYTICAL RESULTS, FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CA

Sample ID	Sampling Date	Depth (feet bgs)	TPH-g (mg/kg)	Kerosene (mg/kg)	TPH-d (mg/kg)	TPH-mo (mg/kg)	EHC-HO (mg/kg)	TOG (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	MTBE (mg/kg)	Lead (mg/kg)
S-10-B19	03/02/09	10	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-15.5-B19	03/03/09	15.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-20.5-B19	03/03/09	20.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-25.5-B19	03/03/09	25.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-30.5-B19	03/03/09	30.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-35.5-B19	03/03/09	35.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	0.51	---
S-39.5-B19	03/03/09	39.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	0.048	---
S-5-B20	02/25/09	5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-10.5-B20	03/03/09	10.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-15.0-B20	03/03/09	15.0	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-20.5-B20	03/03/09	20.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-25.5-B20	03/03/09	25.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-30.5-B20	03/03/09	30.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-35.5-B20	03/03/09	35.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-39.5-B20	03/03/09	39.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-5-B21	02/25/09	5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-10.5-B21	03/04/09	10.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-15-B21	03/04/09	15	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-20.5-B21	03/04/09	20.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-25.5-B21	03/04/09	25.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-30.5-B21	03/04/09	30.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-35.5-B21	03/04/09	35.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-39.5-B21	03/04/09	39.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
Monitoring and Recovery Wells														
MW1	07/14/92	8	<1.0	---	---	---	---	---	<0.0050	<0.0050	<0.0050	0.0064	---	<10
MW1	07/14/92	29.5	<1.0	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	---	<10
MW2	07/14/92	28	<1.0	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	---	<10
MW3	07/14/92	29.5	<1.0	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	---	<10
S-5-MW4	02/25/09	5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-10.5-MW4	03/02/09	10.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-15.5-MW4	03/02/09	15.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-20.5-MW4	03/02/09	20.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-25.5-MW4	03/02/09	25.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-30.5-MW4	03/02/09	30.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-35.5-MW4	03/02/09	35.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-40-MW4	03/02/09	40	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---

TABLE 2 CUMULATIVE SOIL ANALYTICAL RESULTS, FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CA

Sample ID	Sampling Date	Depth (feet bgs)	TPH-g (mg/kg)	Kerosene (mg/kg)	TPH-d (mg/kg)	TPH-mo (mg/kg)	EHC-HO (mg/kg)	TOG (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	MTBE (mg/kg)	Lead (mg/kg)
S-44.5-MW4	03/02/09	44.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-5-MW5	02/27/09	5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-10-MW5	03/05/09	10	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-15-MW5	03/05/09	15	0.70	---	---	---	---	---	0.22	0.022	0.071	0.31	0.036	---
S-20-MW5	03/05/09	20	260	---	---	---	---	---	5.4	19	11	63	<5.0	---
S-25-MW5	03/06/09	25	41	---	---	---	---	---	<0.0050	0.069	0.15	0.75	<0.50	---
S-30-MW5	03/06/09	30	0.91	---	---	---	---	---	0.14	0.0061	0.011	0.036	<0.50	---
S-35-MW5	03/06/09	35	5.4	---	---	---	---	---	<0.050	3.9	1.5	15	<0.50	---
S-39.5-MW5	03/06/09	39.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-5-MW6	02/27/09	5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-10-MW6	03/09/09	10	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-15.5-MW6	03/09/09	15.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	0.011	---
S-20.5-MW6	03/09/09	20.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	0.015	---
S-25.5-MW6	03/09/09	25.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-30.5-MW6	03/09/09	30.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	0.063	---
S-35.5-MW6	03/09/09	35.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-39.5-MW6	03/09/09	39.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-5-MW7	02/27/09	5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-10.5-MW7	03/09/09	10.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-15.5-MW7	03/09/09	15.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-20.5-MW7	03/09/09	20.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-25.5-MW7	03/09/09	25.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-30.5-MW7	03/09/09	30	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-35.5-MW7	03/09/09	35.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-39.5-MW7	03/09/09	39.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-5-MW8	02/25/09	5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-10.5-MW8	03/04/09	10.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-15.5-MW8	03/04/09	15.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-20.5-MW8	03/04/09	20.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-25.5-MW8	03/04/09	25.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-30.5-MW8	03/04/09	30.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-35.5-MW8	03/04/09	35.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-39.5-MW8	03/04/09	39.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-5-MW9	02/25/09	5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-10-MW9	03/05/09	10	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---

TABLE 2 CUMULATIVE SOIL ANALYTICAL RESULTS, FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CA

Sample ID	Sampling Date	Depth (feet bgs)	TPH-g (mg/kg)	Kerosene (mg/kg)	TPH-d (mg/kg)	TPH-mo (mg/kg)	EHC-HO (mg/kg)	TOG (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	MTBE (mg/kg)	Lead (mg/kg)
S-15-MW9	03/05/09	15	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-20-MW9	03/05/09	20	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-25-MW9	03/05/09	25	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-30-MW9	03/05/09	30	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-35-MW9	03/05/09	35	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-40-MW9	03/05/09	40	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	---
S-5.0-RW1	12/22/11	5.0	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-15.0-RW1	12/22/11	15.0	1.3e	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	0.0053	---
S-25.0-RW1	12/22/11	25.0	6.5e	---	---	---	---	---	<0.0050	<0.0050	<0.0050	0.029	0.0066g	---
S-28.0-RW1	12/22/11	28.0	27e	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
S-31.0-RW1	12/22/11	31.0	1.7	---	---	---	---	---	<0.0050	0.0072	<0.0050	0.096	0.50	---
S-32.5-RW1	12/22/11	32.5	0.95	---	---	---	---	---	<0.0050	<0.0050	<0.0050	0.0087	0.72	---
S-34.0-RW1	12/22/11	34.0	2.3e	---	---	---	---	---	<0.0050	<0.0050	<0.0050	0.0053	0.94	---
S-37.0-RW1	12/22/11	37.0	420	---	---	---	---	---	<0.50	<0.50	0.88	10	<0.50	---
S-38.5-RW1	12/22/11	38.5	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	0.0071	---
S-40.0-RW1	12/22/11	40.0	440	---	---	---	---	---	<1.0	<1.0	2.1	29	<1.0	---
Soil Stockpile Samples														
SP-1(S-SP1-S-SP4)	09/12/07	---	<0.10	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	7.2
SP(1-4)	06/18/97	---	ND	---	47b	150c	---	---	ND	ND	ND	ND	---	8.7
SP-2	03/09/09	---	<0.50	---	---	---	---	---	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	5.83
S-SP1 (1,2,3,4)	12/22/11	---	40	8.0	<5.0	<25	---	---	0.0068	0.012	0.048	0.46	<0.50	4.50

Notes:

TPH-g	=	Total Petroleum Hydrocarbons as gasoline analyzed using EPA Method 8015M.
Kerosene	=	Kerosene analyzed using EPA Method 8015B.
TPH-d	=	Total Petroleum Hydrocarbons as diesel.
TPH-mo	=	Total Petroleum Hydrocarbons as motor oil.
EHC-HO	=	Extractable hydrocarbons as hydraulic oil.
TOG	=	Total oil and grease.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B/8260B.
MTBE	=	Methyl tertiary butyl ether analyzed using EPA Method 8021B/8260B
Lead	=	Lead analyzed using EPA Method 6010B.
feet bgs	=	Feet below ground surface.
mg/kg	=	Milligrams per kilogram.
ND	=	Not detected at or above the laboratory reporting limit.
<	=	Less than the stated laboratory reporting limit.
---	=	Not analyzed/not applicable.
a	=	Unidentified C8-C12.

TABLE 2 CUMULATIVE SOIL ANALYTICAL RESULTS, FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CA

Sample ID	Sampling Date	Depth (feet bgs)	TPH-g (mg/kg)	Kerosene (mg/kg)	TPH-d (mg/kg)	TPH-mo (mg/kg)	EHC-HO (mg/kg)	TOG (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	MTBE (mg/kg)	Lead (mg/kg)

b = Unidentified C9-C24.
c = Unidentified C16-C36.
d = Unidentified C16-C40.
e = Hydrocarbon pattern does not match that of the specified standard.
Analytical data prior to 2013 provided by Cardno ERI.

TABLE 3 ADDITIONAL CUMULATIVE SOIL ANALYTICAL RESULTS, FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CA

Sample ID	Sampling Date	Depth (feet bgs)	1,2-DCA (mg/kg)	EDB (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	TBA (mg/kg)	Ethanol (mg/kg)	VOCs (mg/kg)	SVOCs (mg/kg)	HVOCs (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)
Used-Oil UST Confirmation Soil Sample																
T1-12	06/18/97	---	---	---	---	---	---	---	---	---	ND	ND	ND	47	56	84
Hydraulic Hoist Confirmation Samples																
Not analyzed for these analytes.																
Samples from the UST Cavity Sidewall																
Not analyzed for these analytes.																
Samples from Beneath Product Piping																
Not analyzed for these analytes.																
Soil Samples from 1991 UST Excavation																
Not analyzed for these analytes.																
Soil Borings																
Soil borings sampled prior to 2007 not analyzed for these analytes.																
S-5-B11	09/05/07	5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-10-B11	09/10/07	10	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-13.5-B11	09/10/07	13.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-18-B11	09/11/07	18	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-20-B11	09/11/07	20	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-25.5-B11	11/14/07	25.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-29.5-B11	11/14/07	29.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-34.5-B11	11/14/07	34.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-5-B12	09/04/07	5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-15.5-B12	11/13/07	15.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-20.5-B12	11/13/07	20.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-5-B13	09/05/07	5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-10-B13	09/10/07	10	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-14.5-B13	09/10/07	14.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-20-B13	09/10/07	20	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-25-B13	11/12/07	25	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-30-B13	11/12/07	30	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-35-B13	11/12/07	35	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---

TABLE 3 ADDITIONAL CUMULATIVE SOIL ANALYTICAL RESULTS, FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CA

Sample ID	Sampling Date	Depth (feet bgs)	1,2-DCA (mg/kg)	EDB (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	TBA (mg/kg)	Ethanol (mg/kg)	VOCs (mg/kg)	SVOCs (mg/kg)	HVOCs (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)
S-5.0-B14	09/06/07	5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-16-B14	11/13/07	16	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-20.5-B14	11/13/07	20.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-5-B15	09/04/07	5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-10.5-B15	11/15/07	10.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-15.5-B15	11/15/07	15.5	0.011	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-20-B15	11/15/07	20	<0.25	<0.25	<0.50	<0.50	<0.50	<2.5	<12	---	---	---	---	---	---	---
S-25.5-B15	11/15/07	25.5	<0.12	<0.12	<0.25	<0.25	<0.25	<1.2	<6.2	---	---	---	---	---	---	---
S-30.5-B15	11/15/07	30.5	<0.25	<0.25	<0.50	<0.50	<0.50	<2.5	<12	---	---	---	---	---	---	---
S-35.5-B15	11/15/07	35.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	0.25	<0.25	---	---	---	---	---	---	---
S-5-B16	09/04/07	5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-11-B16	11/14/07	11	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-15.5-B16	11/14/07	15.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-21-B16	11/14/07	21	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-26-B16	11/14/07	26	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-30.5-B16	11/14/07	30.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-34.5-B16	11/14/07	34.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-38.5-B16	11/14/07	38.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-5-B117	09/05/07	5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-11-B17	11/13/07	11	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-16-B17	11/13/07	16	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-21-B17	11/13/07	21	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-24.5-B17	11/13/07	24.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	0.20	---	---	---	---	---	---	---	---
S-31-B17	11/13/07	31	<0.0050	<0.0050	<0.010	<0.010	<0.010	0.15	---	---	---	---	---	---	---	---
S-35.5-B17	11/13/07	35.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-5-B18	09/04/07	5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-10-B18	11/12/07	10	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-15-B18	11/12/07	15	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-20-B18	11/12/07	20	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-25-B18	11/12/07	25	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-30-B18	11/12/07	30	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-35-B18	11/12/07	35	<0.0050	<0.0050	<0.010	<0.010	<0.010	0.70	---	---	---	---	---	---	---	---
S-5-B19	02/25/09	5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---

TABLE 3 ADDITIONAL CUMULATIVE SOIL ANALYTICAL RESULTS, FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CA

Sample ID	Sampling Date	Depth (feet bgs)	1,2-DCA (mg/kg)	EDB (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	TBA (mg/kg)	Ethanol (mg/kg)	VOCs (mg/kg)	SVOCs (mg/kg)	HVOCs (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)
S-10-B19	03/02/09	10	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-15.5-B19	03/03/09	15.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-20.5-B19	03/03/09	20.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-25.5-B19	03/03/09	25.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-30.5-B19	03/03/09	30.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-35.5-B19	03/03/09	35.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-39.5-B19	03/03/09	39.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-5-B20	02/25/09	5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-10.5-B20	03/03/09	10.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-15.0-B20	03/03/09	15.0	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-20.5-B20	03/03/09	20.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-25.5-B20	03/03/09	25.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-30.5-B20	03/03/09	30.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-35.5-B20	03/03/09	35.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-39.5-B20	03/03/09	39.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-5-B21	02/25/09	5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-10.5-B21	03/04/09	10.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-15-B21	03/04/09	15	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-20.5-B21	03/04/09	20.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-25.5-B21	03/04/09	25.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-30.5-B21	03/04/09	30.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-35.5-B21	03/04/09	35.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-39.5-B21	03/04/09	39.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
Monitoring and Recovery Wells																
MW1	07/14/92	8	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	07/14/92	29.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	07/14/92	28	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	07/14/92	29.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5-MW4	02/25/09	5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-10.5-MW4	03/02/09	10.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-15.5-MW4	03/02/09	15.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-20.5-MW4	03/02/09	20.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-25.5-MW4	03/02/09	25.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-30.5-MW4	03/02/09	30.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---

TABLE 3 ADDITIONAL CUMULATIVE SOIL ANALYTICAL RESULTS, FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CA

Sample ID	Sampling Date	Depth (feet bgs)	1,2-DCA (mg/kg)	EDB (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	TBA (mg/kg)	Ethanol (mg/kg)	VOCs (mg/kg)	SVOCs (mg/kg)	HVOCs (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)
S-35.5-MW4	03/02/09	35.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-40-MW4	03/02/09	40	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-44.5-MW4	03/02/09	44.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-5-MW5	02/27/09	5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-10-MW5	03/05/09	10	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-15-MW5	03/05/09	15	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-20-MW5	03/05/09	20	<5.0	<5.0	<10	<10	<10	<50	<250	---	---	---	---	---	---	---
S-25-MW5	03/06/09	25	<0.50	<0.50	<1.0	<1.0	<1.0	<5.0	<25	---	---	---	---	---	---	---
S-30-MW5	03/06/09	30	<0.50	<0.50	<1.0	<1.0	<1.0	<5.0	<25	---	---	---	---	---	---	---
S-35-MW5	03/06/09	35	<0.50	<0.50	<1.0	<1.0	<1.0	<5.0	<25	---	---	---	---	---	---	---
S-39.5-MW5	03/06/09	39.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-5-MW6	02/27/09	5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-10-MW6	03/09/09	10	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-15.5-MW6	03/09/09	15.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-20.5-MW6	03/09/09	20.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-25.5-MW6	03/09/09	25.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-30.5-MW6	03/09/09	30.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-35.5-MW6	03/09/09	35.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	0.054	<0.25	---	---	---	---	---	---	---
S-39.5-MW6	03/09/09	39.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-5-MW7	02/27/09	5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-10.5-MW7	03/09/09	10.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-15.5-MW7	03/09/09	15.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-20.5-MW7	03/09/09	20.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-25.5-MW7	03/09/09	25.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-30.5-MW7	03/09/09	30	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-35.5-MW7	03/09/09	35.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-39.5-MW7	03/09/09	39.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-5-MW8	02/25/09	5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-10.5-MW8	03/04/09	10.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-15.5-MW8	03/04/09	15.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-20.5-MW8	03/04/09	20.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-25.5-MW8	03/04/09	25.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-30.5-MW8	03/04/09	30.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-35.5-MW8	03/04/09	35.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---

TABLE 3 ADDITIONAL CUMULATIVE SOIL ANALYTICAL RESULTS, FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CA

Sample ID	Sampling Date	Depth (feet bgs)	1,2-DCA (mg/kg)	EDB (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	TBA (mg/kg)	Ethanol (mg/kg)	VOCs (mg/kg)	SVOCs (mg/kg)	HVOCs (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)
S-39.5-MW8	03/04/09	39.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-5-MW9	02/25/09	5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-10-MW9	03/05/09	10	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-15-MW9	03/05/09	15	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-20-MW9	03/05/09	20	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-25-MW9	03/05/09	25	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-30-MW9	03/05/09	30	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-35-MW9	03/05/09	35	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-40-MW9	03/05/09	40	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	---	---	---	---	---
S-5.0-RW1	12/22/11	5.0	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-15.0-RW1	12/22/11	15.0	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-25.0-RW1	12/22/11	25.0	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-28.0-RW1	12/22/11	28.0	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-31.0-RW1	12/22/11	31.0	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-32.5-RW1	12/22/11	32.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	0.17	---	---	---	---	---	---	---	---
S-34.0-RW1	12/22/11	34.0	<0.0050	<0.0050	<0.010	<0.010	<0.010	0.42	---	---	---	---	---	---	---	---
S-37.0-RW1	12/22/11	37.0	<0.50	<0.50	<1.0	<1.0	<1.0	<5.0	---	---	---	---	---	---	---	---
S-38.5-RW1	12/22/11	38.5	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	---	---	---	---	---	---	---	---
S-40.0-RW1	12/22/11	40.0	<1.0	<1.0	<2.0	<2.0	<2.0	<10	---	---	---	---	---	---	---	---
Soil Stockpile Samples																
SP-1(S-SP1-S-SP4)	09/12/07	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.020	---	---	---	---	---	---	---	---
SP(1-4)	06/18/97	---	---	---	---	---	---	---	---	ND	ND	---	ND	55	53	43
SP-2	03/09/09	---	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.25	---	---	ND	---	---	---	---
S-SP1 (1,2,3,4)	12/22/11	---	<0.0050	<0.0050	<0.010	<0.010	<0.010	0.076	---	a	---	---	---	---	---	---

Notes:

1,2-DCA = 1,2-dichloroethane analyzed using EPA Method 8260B.

EDB = Ethylene dibromide (1,2-dibromoethane) analyzed using EPA Method 8260B.

DIPE = Di-isopropyl ether analyzed using EPA Method 8260B.

ETBE = Ethyl tertiary butyl ether analyzed using EPA Method 8260B.

TAME = Tertiary amyl methyl ether analyzed using EPA Method 8260B.

TBA = Tertiary butyl alcohol analyzed using EPA Method 8260B.

Ethanol = Ethanol analyzed using EPA Method 8260B.

Add'l SVOCs = Additional semi-volatile organic compounds.

TABLE 3 ADDITIONAL CUMULATIVE SOIL ANALYTICAL RESULTS, FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CA

Sample ID	Sampling Date	Depth (feet bgs)	1,2-DCA (mg/kg)	EDB (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	TBA (mg/kg)	Ethanol (mg/kg)	VOCs (mg/kg)	SVOCs (mg/kg)	HVOCs (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)

HVOCs	=	Halogenated volatile organic compounds analyzed using EPA Method 8260B.
feet bgs	=	Feet below ground surface.
mg/kg	=	Milligrams per kilogram.
ND	=	Not detected at or above the laboratory reporting limit.
<	=	Less than the stated laboratory reporting limit.
---	=	Not analyzed/not applicable.
a	=	1.1 mg/kg 1,2,4-trimethylbenzene; 0.16 mg/kg 1,3,5-trimethylbenzene; 0.022 mg/kg isopropyltoluene; 0.078 mg/kg naphthalene; 0.059 mg/kg n-butylbenzene; 0.091 mg/kg n-propylbenzene; 0.0070 p-isopropyltoluene; 0.012 sec-butylbenzene.

Analytical data prior to 2013 provided by Cardno ERI.

TABLE 4 GROUNDWATER MONITORING DATA, FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Depth (feet)	TOC Elev. (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	NAPL (feet)	Concentration (µg/L) TPH-g	MTBE 8260B	B	T	E	X	Total Pb (µg/L)	Organic Pb (mg/L)
Monitoring Well Samples														
MW1	07/15/92	---	---	Well installed.										
MW1	07/17/92	---	192.00	33.02	158.98	No	67	---	6.6	6.9	2.0	4.5	17	---
MW1	10/22/92	---	192.00	34.07	157.93	No	<50	---	2.9	<0.5	<0.5	<0.5	16	---
MW1	02/04/93	---	192.00	29.43	162.57	No	<50	---	0.8	<0.5	<0.5	<0.5	4	---
MW1	05/03/93	---	192.00	29.72	162.28	No	71	---	2.8	7.2	2.2	22	40	---
MW1	07/30/93	---	192.00	32.95	159.05	No	<50	---	<0.5	<0.5	<0.5	<0.5	5	---
MW1	10/19/93	---	192.00	34.34	157.66	No	<50	---	<0.5	<0.5	<0.5	<0.5	12	---
MW1	02/23/94	---	192.00	31.72	160.28	No	<50	---	<0.5	<0.5	<0.5	<0.5	4	---
MW1	06/06/94	---	192.00	31.77	160.23	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW1	08/18/94	---	192.00	33.76	158.24	No	<50	---	<0.5	<0.5	<0.5	<0.5	130	---
MW1	11/15/94	---	192.00	34.08	157.92	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3.0	<100
MW1	02/06/95	---	192.00	28.50	163.50	No	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
MW1	05/10/95	---	192.00	29.30	162.70	No	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
MW1	09/20/99	---	192.00	33.30	158.70	No	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<75	<50
MW1		---	Well destroyed in June 2000.											
MW2	07/15/92	---	---	Well installed.										
MW2	07/17/92	---	194.85	34.65	160.20	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW2	10/22/92	---	194.85	35.64	159.21	No	<50	---	<0.5	<0.5	<0.5	<0.5	--	---
MW2	02/04/93	---	194.85	31.13	163.72	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW2	05/03/93	---	194.85	31.08	163.77	No	<50	---	<0.5	<0.5	<0.5	<0.5	3	---
MW2	07/30/93	---	194.85	34.34	160.51	No	<50	---	<0.5	<0.5	<0.5	<0.5	14	---
MW2	10/19/93	---	194.85	36.00	158.85	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW2	02/23/94	---	194.85	33.92	160.93	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW2	06/06/94	---	194.85	33.50	161.35	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW2	08/18/94	---	194.85	35.38	159.47	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3.0	---
MW2	11/15/94	---	194.85	35.93	158.92	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3.0	<100
MW2	02/06/95	---	194.85	30.38	164.47	No	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
MW2	05/10/95	---	194.85	30.77	164.08	No	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
MW2	09/20/99	---	194.85	35.15	159.70	No	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<75	<0.5
MW2		---	Well destroyed in June 2000.											

TABLE 4 GROUNDWATER MONITORING DATA, FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date		Depth (feet)	TOC Elev. (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	NAPL (feet)	Concentration (µg/L) TPH-g	MTBE 8260B	B	T	E	X	Total Pb (µg/L)	Organic Pb (mg/L)
MW3	07/15/92		---	---	Well installed.										
MW3	07/17/92		---	196.90	37.24	159.66	No	<50	---	<0.5	<0.5	<0.5	<0.5	50	---
MW3	10/22/92		---	196.90	35.95	160.95	No	<50	---	<0.5	<0.5	<0.5	<0.5	9	---
MW3	02/04/93		---	196.90	29.85	167.05	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW3	05/03/93		---	196.90	29.87	167.03	No	<50	---	<0.5	<0.5	<0.5	<0.5	3	---
MW3	07/30/93		---	196.90	33.85	163.05	No	<50	---	<0.5	<0.5	<0.5	<0.5	22	---
MW3	10/19/93		---	196.90	35.89	161.01	No	<50	---	<0.5	<0.5	<0.5	<0.5	12	---
MW3	02/23/94		---	196.90	32.88	164.02	No	<50	---	<0.5	<0.5	<0.5	<0.5	25	---
MW3	06/06/94		---	196.90	32.40	164.50	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW3	08/18/94		---	196.90	35.07	161.83	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3.0	---
MW3	11/15/94		---	196.90	35.97	160.93	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3.0	<100
MW3	02/06/95		---	196.90	28.39	168.51	No	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
MW3	05/10/95		---	196.90	28.90	168.00	No	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
MW3	09/20/99		---	196.90	34.68	162.22	No	75.0	1.87	<0.5	11.5	1.8	18.0	<75	<0.5
MW3			---	Well destroyed in June 2000.											
MW4	03/02/09		---	---	Well installed.										
MW4	03/30/09		---	197.62	30.94	166.68	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW4	04/02/09		---	197.62	Well surveyed.										
MW4	05/28/09		---	197.62	32.00	165.62	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW4	08/31/09		---	197.62	35.43	162.19	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW4	12/11/09		---	197.62	35.01	162.61	No	<50	<0.50	<0.50	0.83	<0.50	1.1	---	---
MW4	05/07/10		---	197.62	29.11	168.51	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0	---	---
MW4	11/01/10		---	197.62	34.95	162.67	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0	---	---
MW4	05/27/11	d	---	197.62	30.65	166.97	No	---	---	---	---	---	---	---	---
MW4	11/23/11		---	197.62	33.49	164.13	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0	---	---
MW4	05/24/12		---	197.62	30.02	167.60	No	58	<0.50	0.84	4.4	0.64c	3.5	---	---
MW4	10/31/12		---	197.62	35.14	162.48	No	110	<0.50	5.3	45	4.2	21	---	---
MW5	03/06/09		---	---	Well installed.										
MW5	03/30/09		---	196.35	30.05	166.30	No	4,200	1,900	540	140	<12	310	---	---
MW5	04/02/09		---	196.35	Well surveyed.										
MW5	05/28/09		---	196.35	31.45	164.90	No	5,300	3,600	890	150	<25	140	---	---
MW5	08/31/09		---	196.35	34.70	161.65	No	5,800	3,500	550	<100	<100	<100	---	---

TABLE 4 GROUNDWATER MONITORING DATA, FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date		Depth (feet)	TOC Elev. (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	NAPL (feet)	Concentration (µg/L) TPH-g	MTBE 8260B	B	T	E	X	Total Pb (µg/L)	Organic Pb (mg/L)
MW5	12/11/09		---	196.35	34.52	161.83	No	4,000b	3,800	230	<100	<100	<100	---	---
MW5	05/07/10		---	196.35	30.84	165.51	No	2,700b	1,700	73	5.3	3.6	6.5	---	---
MW5	11/01/10		---	196.35	33.93	162.42	No	2,400b	3,400	320	71	21	40	---	---
MW5	05/27/11	d	---	196.35	31.65	164.70	No	---	---	---	---	---	---	---	---
MW5	11/23/11		---	196.35	32.58	163.77	No	1,900b	3,200	72	2.7	3.1	8.1	---	---
MW5	05/24/12		---	196.35	30.26	166.09	No	2,900b	1,700	54	31	5.2	17	---	---
MW5	10/31/12		---	196.35	33.94	162.41	No	2,200b	2,700	220	72	8.7	47	---	---
MW6	03/09/09		---	---	Well installed.										
MW6	03/30/09		---	192.41	26.94	165.47	No	2,800	4,800	0.91	<0.50	<0.50	<0.50	---	---
MW6	04/02/09		---	192.41	Well surveyed.										
MW6	05/28/09		---	192.41	28.04	164.37	No	2,800	6,000	<100	<100	<100	<100	---	---
MW6	08/31/09		---	192.41	30.57	161.84	No	4,900	6,600	<100	<100	<100	<100	---	---
MW6	12/11/09		---	192.41	30.78	161.63	No	4,900b	6,200	<100	<100	<100	<100	---	---
MW6	05/07/10		---	192.41	25.42	166.99	No	2,900b	3,700	2.7	<0.50	0.74c	<1.0	---	---
MW6	11/01/10		---	192.41	30.68	161.73	No	850b	6,100	2.1	<0.50	<0.50	<1.0	---	---
MW6	05/27/11	d	---	192.41	27.07	165.34	No	---	---	---	---	---	---	---	---
MW6	11/23/11		---	192.41	29.25	163.16	No	1,600b	6,400	<0.50	<0.50	<0.50	<1.0	---	---
MW6	05/24/12		---	192.41	26.36	166.05	No	2,000b	3,400	1.3c	9.7	0.97c	5.5	---	---
MW6	10/31/12		---	192.41	30.74	161.67	No	1,400b	5,400	3.8	28	2.2	11	---	---
MW7	03/09/09		---	---	Well installed.										
MW7	03/30/09		---	194.34	29.15	165.19	No	55	66	<0.50	<0.50	<0.50	<0.50	---	---
MW7	04/02/09		---	194.34	Well surveyed.										
MW7	05/28/09		---	194.34	30.16	164.18	No	50	67	<1.0	<1.0	<1.0	<1.0	---	---
MW7	08/31/09		---	194.34	33.31	161.03	No	<50	12	<0.50	0.60	<0.50	<0.50	---	---
MW7	12/11/09		---	194.34	32.71	161.63	No	<50	31	0.78	1.7	0.62	2.4	---	---
MW7	05/07/10		---	194.34	27.54	166.80	No	510b	700	<0.50	<0.50	<0.50	<1.0	---	---
MW7	11/01/10		---	194.34	32.82	161.52	No	68b	140	<0.50	<0.50	<0.50	<1.0	---	---
MW7	05/27/11	d	---	194.34	28.85	165.49	No	---	---	---	---	---	---	---	---
MW7	11/23/11		---	194.34	31.39	162.95	No	190b	300	<0.50	<0.50	<0.50	<1.0	---	---
MW7	05/24/12	d	---	194.34	28.31	166.03	No	---	---	---	---	---	---	---	---
MW7	10/31/12		---	194.34	32.86	161.48	No	230b	290	2.9	21	1.8	9.2	---	---

TABLE 4 GROUNDWATER MONITORING DATA, FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date		Depth (feet)	TOC Elev. (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	NAPL (feet)	Concentration (µg/L) TPH-g	MTBE 8260B	B	T	E	X	Total Pb (µg/L)	Organic Pb (mg/L)
MW8	03/04/09		---	---	Well installed.										
MW8	03/30/09		---	192.96	27.35	165.61	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW8	04/02/09		---	192.96	Well surveyed.										
MW8	05/28/09		---	192.96	28.72	164.24	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW8	08/31/09		---	192.96	31.93	161.03	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW8	12/11/09		---	192.96	31.24	161.72	No	<50	<0.50	0.74	1.6	0.59	2.3	---	---
MW8	05/07/10		---	192.96	25.68	167.28	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0	---	---
MW8	11/01/10		---	192.96	31.18	161.78	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0	---	---
MW8	05/27/11		---	192.96	27.55	165.41	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0	---	---
MW8	11/23/11		---	192.96	29.74	163.22	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0	---	---
MW8	05/24/12		---	192.96	26.93	166.03	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0	---	---
MW8	10/31/12		---	192.96	31.35	161.61	No	75	<0.50	2.5	19	1.7	8.7	---	---
MW9	03/05/09		---	---	Well installed.										
MW9	03/30/09		---	195.16	28.31	166.85	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW9	04/02/09		---	195.16	Well surveyed.										
MW9	05/28/09		---	195.16	29.69	165.47	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW9	08/31/09		---	195.16	33.20	161.96	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW9	12/11/09		---	195.16	32.62	162.54	No	<50	<0.50	0.73	1.7	0.54	2.2	---	---
MW9	05/07/10		---	195.16	26.59	168.57	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0	---	---
MW9	11/01/10		---	195.16	32.45	162.71	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0	---	---
MW9	05/27/11		---	195.16	29.62	165.54	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0	---	---
MW9	11/23/11		---	195.16	30.56	164.60	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0	---	---
MW9	05/24/12		---	195.16	27.94	167.22	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0	---	---
MW9	10/31/12		---	195.16	32.66	162.50	No	140	<0.50	6.9	38	2.7	13	---	---
RW1	12/22/11		---	---	Well installed.										
RW1	12/30/11		---	195.15	Well surveyed.										
RW1	05/24/12		---	195.15	28.55	166.60	No	5,500b	2,500	920	5.9c	51	14	---	---
RW1	10/31/12	d	---	195.15	---	---	---	---	---	---	---	---	---	---	---
Grab Groundwater Samples															
Pit Water	06/14/02		11.5a	---	---	---	---	5,600	12,000	140	840	100	530	---	---

TABLE 4 GROUNDWATER MONITORING DATA, FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Depth (feet)	TOC Elev. (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	NAPL (feet)	Concentration (µg/L) TPH-g	MTBE 8260B	B	T	E	X	Total Pb (µg/L)	Organic Pb (mg/L)
UST Pit	06/19/02	13.5a	---	---	---	---	680	640	2.7	36	18	130	---	---
W-38-B11	11/14/07	38	---	---	---	---	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
W-15-B12	11/13/07	15	---	---	---	---	8,400	78	67	<5.0	140	150	---	---
W-40-B13	11/12/07	40	---	---	---	---	<50	0.53	<0.50	<0.50	<0.50	<0.50	---	---
W-15-B14	11/13/07	15	---	---	---	---	2,500	16	1.7	3.0	26	13	---	---
W-38-B15	11/15/07	38	---	---	---	---	18,000	12,000	3,400	2,500	330	2,000	---	---
W-40-B16	11/15/07	40	---	---	---	---	<50	7.7	<0.50	<0.50	<0.50	<0.50	---	---
W-37-B17	11/13/07	37	---	---	---	---	630	2,200	1.8	<0.50	4.1	1.4	---	---
W-38-B18	11/12/07	38	---	---	---	---	4,300	1,400	52	<12	56	96	---	---
W-35-B19	03/03/09	35	---	---	---	---	4,400	7,100	<0.50	<0.50	<0.50	<1.0	---	---
W-35-B20	03/03/09	35	---	---	---	---	640	440	<0.50	<0.50	<0.50	<1.0	---	---
W-35-B21	03/03/09	35	---	---	---	---	<50	1.4	<0.50	<0.50	<0.50	<1.0	---	---

Notes: Data prior to 1999 provided by EA Engineering, Science, and Technology. Data prior to 2013 provided by Cardno ERI.
TOC Elev. Top of well casing elevation; datum is NAVD88.
DTW Depth to water.
GW Elev. Groundwater elevation; datum is NAVD88.
NAPL Non-aqueous phase liquid.
TPHg Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B.
MTBE Methyl tertiary butyl ether analyzed using EPA Method 8260B.
BTEX Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B; from April 2009 to October 2010, analyzed using EPA Method 8260B.
Total Pb Total lead analyzed using EPA Method 6010.
Organic Pb Organic lead analyzed using CA DHS LUFT method.
EDB 1,2-dibromoethane analyzed using EPA Method 8260B.
1,2-DCA 1,2-dicloroethane analyzed using EPA Method 8260B.
TBA Tertiary butyl alcohol analyzed using EPA Method 8260B.
TAME Tertiary amyl methyl ether analyzed using EPA Method 8260B.
ETBE Ethyl tertiary butyl ether analyzed using EPA Method 8260B.
DIPE Di-isopropyl ether analyzed using EPA Method 8260B.
Ethanol Ethanol analyzed using EPA Method 8260B.
µg/L Micrograms per liter.

TABLE 4 GROUNDWATER MONITORING DATA, FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Depth (feet)	TOC Elev. (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	NAPL (feet)	Concentration (µg/L) TPH-g	MTBE 8260B	B	T	E	X	Total Pb (µg/L)	Organic Pb (mg/L)

mg/L Milligrams per liter.
< Less than the stated laboratory reporting limit.
--- Not sampled/Not analyzed/Not measured/Not applicable.
a Approximate depth to groundwater surface at time of sampling.
b Hydrocarbon pattern does not match that of the specified standard.
c Analyte presence was not confirmed by second column or GC/MS analysis.
d Well inaccessible.

TABLE 5 ADDITIONAL GROUNDWATER MONITORING DATA,
FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Depth (feet)	Concentration (µg/L) EDB	1,2-DCA	TAME	TBA	ETBE	DIPE	Ethanol
MW1	07/17/92 - 09/20/99		Not analyzed for these analytes.						
MW1	Well destroyed in June 2000.								
MW2	07/17/92 - 09/20/99		Not analyzed for these analytes.						
MW2	Well destroyed in June 2000.								
MW3	07/17/92 - 09/20/99		Not analyzed for these analytes.						
MW3	Well destroyed in June 2000.								
MW4	03/30/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW4	05/28/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW4	08/31/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW4	12/11/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW4	05/07/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW4	11/01/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW4	05/27/11 d	---	---	---	---	---	---	---	---
MW4	11/23/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW4	05/24/12	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW4	10/31/12	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW5	03/30/09	---	<12	17	<12	450	<12	<12	---
MW5	05/28/09	---	<25	<25	<25	530	<25	<25	---
MW5	08/31/09	---	<100	<100	<100	<1,000	<100	<100	---
MW5	12/11/09	---	<100	<100	<100	2,000	<100	<100	---
MW5	05/07/10	---	<25	<25	<25	400	<25	<25	---
MW5	11/01/10	---	<50	<50	<50	1,500	<50	<50	---
MW5	05/27/11 d	---	---	---	---	---	---	---	---
MW5	11/23/11	---	<50	<50	<50	<500	<50	<50	---
MW5	05/24/12	---	<50	<50	<50	1,400	<50	<50	---
MW5	10/31/12	---	<50	<50	<50	730	<50	<50	---
MW6	03/30/09	---	<0.50	<0.50	1.3	410	<0.50	0.82	---
MW6	05/28/09	---	<100	<100	<100	<1,000	<100	<100	---
MW6	08/31/09	---	<100	<100	<100	1,100	<100	<100	---
MW6	12/11/09	---	<100	<100	<100	2,600	<100	<100	---
MW6	05/07/10	---	<100	<100	<100	<1,000	<100	<100	---
MW6	11/01/10	---	<50	<50	<50	2,400	<50	<50	---
MW6	05/27/11 d	---	---	---	---	---	---	---	---
MW6	11/23/11	---	<100	<100	<100	<1,000	<100	<100	---
MW6	05/24/12	---	<100	<100	<100	2,700	<100	<100	---
MW6	10/31/12	---	<100	<100	<100	<1,000	<100	<100	---
MW7	03/30/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW7	05/28/09	---	<1.0	<1.0	<1.0	<10	<1.0	<1.0	---
MW7	08/31/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---

TABLE 5 ADDITIONAL GROUNDWATER MONITORING DATA,
FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Depth (feet)	Concentration (µg/L) EDB	1,2-DCA	TAME	TBA	ETBE	DIPE	Ethanol
MW7	12/11/09	---	<0.50	<0.50	<0.50	12	<0.50	<0.50	---
MW7	05/07/10	---	<0.50	<0.50	<0.50	130	<0.50	<0.50	---
MW7	11/01/10	---	<2.5	<2.5	<2.5	27	<2.5	<2.5	---
MW7	05/27/11 d	---	---	---	---	---	---	---	---
MW7	11/23/11	---	<5.0	<5.0	<5.0	<50	<5.0	<5.0	---
MW7	05/24/12 d	---	---	---	---	---	---	---	---
MW7	10/31/12	---	<5.0	<5.0	<5.0	<50	<5.0	<5.0	---
MW8	03/30/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW8	05/28/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW8	08/31/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW8	12/11/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW8	05/07/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW8	11/01/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW8	05/27/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW8	11/23/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW8	05/24/12	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW8	10/31/12	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW9	03/30/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW9	05/28/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW9	08/31/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW9	12/11/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW9	05/07/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW9	11/01/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW9	05/27/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW9	11/23/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW9	05/24/12	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW9	10/31/12	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
RW1	05/24/12	---	<50	<50	<50	1,900	<50	<50	---
RW1	10/31/12 d	---	---	---	---	---	---	---	---
Grab Groundwater Samples									
Pit Water	06/14/02	11.5a	---	---	---	---	---	---	---
UST Pit	06/19/02	13.5a	---	---	---	---	---	---	---
W-38-B11	11/14/07	38	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<50
W-15-B12	11/13/07	15	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<500
W-40-B13	11/12/07	40	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<50
W-15-B14	11/13/07	15	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<100
W-38-B15	11/15/07	38	<25	<25	<25	1,900	<25	<25	<2,500
W-40-B16	11/15/07	40	<0.50	<0.50	<0.50	<10	<0.50	<0.50	85
W-37-B17	11/13/07	37	<0.50	<0.50	<0.50	58	<0.50	<0.50	<50

TABLE 5 ADDITIONAL GROUNDWATER MONITORING DATA,
FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Depth (feet)	Concentration (µg/L) EDB	1,2-DCA	TAME	TBA	ETBE	DIPE	Ethanol
W-38-B18	11/12/07	38	<12	<12	<12	<250	<12	<12	<1,200
W-35-B19	03/03/09	35	<50	<50	<50	<500	<50	<50	<5,000
W-35-B20	03/03/09	35	<0.50	<0.50	<0.50	12	<0.50	<0.50	<50
W-35-B21	03/03/09	35	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<50

Notes: Data prior to 1999 provided by EA Engineering, Science, and Technology.
Data prior to 2013 provided by Cardno ERI.
TOC Elev. Top of well casing elevation; datum is NAVD88.
DTW Depth to water.
GW Elev. Groundwater elevation; datum is NAVD88.
NAPL Non-aqueous phase liquid.
TPHg Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B.
MTBE Methyl tertiary butyl ether analyzed using EPA Method 8260B.
BTEX Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B; from April 2009 to October 2010, analyzed using EPA Method 8260B.
Total Pb Total lead analyzed using EPA Method 6010.
Organic Pb Organic lead analyzed using CA DHS LUFT method.
EDB 1,2-dibromoethane analyzed using EPA Method 8260B.
1,2-DCA 1,2-dicloroethane analyzed using EPA Method 8260B.
TBA Tertiary butyl alcohol analyzed using EPA Method 8260B.
TAME Tertiary amyl methyl ether analyzed using EPA Method 8260B.
ETBE Ethyl tertiary butyl ether analyzed using EPA Method 8260B.
DIPE Di-isopropyl ether analyzed using EPA Method 8260B.
Ethanol Ethanol analyzed using EPA Method 8260B.
µg/L Micrograms per liter.
mg/L Milligrams per liter.
< Less than the stated laboratory reporting limit.
--- Not sampled/not analyzed/not measured/not applicable.
a Approximate depth to groundwater surface at time of sampling.
b Hydrocarbon pattern does not match that of the specified standard.
c Analyte presence was not confirmed by second column or GC/MS analysis.
d Well inaccessible.

Appendix A

Regulatory Correspondence

Thomas Neely

From: Jakub, Barbara, Env. Health [barbara.jakub@acgov.org]
Sent: Friday, March 22, 2013 10:21 AM
To: Thomas Neely; jennifer.c.sedlachek@exxonmobil.com
Cc: Douglas Oram; Christa Marting; Hamidou Barry; Deborah Hensley
Subject: RE: RO2515, ExxonMobil 70234

Dear Ms. Sedlachek,

Your request for an extension is approved. However, please also submit a project plan for the site with the work plan. This baseline environmental project schedule should be prepared as described below.

1. **Baseline Environmental Project Schedule** – The State Water Resources Control Board passed Resolution No. 2012-0062 on November 6, 2012 which requires development of a Path to Closure Plan by December 31, 2013 that addresses the impediments to closure for the site. The Path to Closure must have milestone dates by calendar quarter which will achieve site cleanup and case closure in a timely and efficient manner that minimizes the cost of corrective action. The Project Schedule should include, but not be limited to, the following key environmental elements and milestones as appropriate:

    - Preferential Pathway Study
    - Soil, Groundwater, and Soil Vapor Investigations
    - Initial, Updated, and Final/Validated SCMs
    - Interim Remedial Actions
    - Feasibility Study/Corrective Action Plan
    - Pilot Tests
    - Remedial Actions
    - Soil Vapor and Groundwater Monitoring Well Installation and Monitoring
    - Public Participation Program (Fact Sheet Preparation/Distribution/Public Comment Period, Community Meetings, etc.)
    - Case Closure Tasks (Request for closure documents, ACEH Case Closure Summary Preparation and Review, Site Management Plan, Institutional Controls, Public Participation, Landowner Notification, Well Decommissioning, Waste Removal, and Reporting.)

    Please include time for regulatory and RP in house review, permitting, off-site access agreements, and utility connections, etc.

    Please use a critical path methodology/tool to construct a schedule with sufficient detail to support a realistic and achievable Path to Closure Schedule. The schedule is to include at a minimum:

    - Defined work breakdown structure including summary tasks required to accomplish the project objectives and required deliverables
    - Summary task decomposition into smaller more manageable components that can be scheduled, monitored, and controlled
    - Sequencing of activities to identify and document relationships among the project activities using logical relationships
    - Identification of critical paths, linkages, predecessor and successor activities, leads and lags, and key milestones

- Identification of entity responsible for executing work
- Estimated activity durations (60-day ACEH review times are based on calendar days)

Please submit an electronic copy of the Path to Closure Schedule with the work plan.. ACEH will review the schedule to ensure that all key elements are included.

Sincerely,
Barb Jakub

From: Thomas Neely [mailto:tneely@eticeng.com]
Sent: Tuesday, March 19, 2013 4:26 PM
To: Jakub, Barbara, Env. Health
Cc: Douglas Oram; Christa Marting; jennifer.c.sedlachek@exxonmobil.com; Hamidou Barry; Deborah Hensley
Subject: RO2515, ExxonMobil 70234

Hi Barbara:

Thank you for taking the time to discuss this site with me last Friday. During our conversation, you confirmed that the current required submittal is a conceptual site model (CSM) with a work plan, superseding your previous directive for submittal of the DGIT and project plan. As noted below, you requested that the CSM and work plan be submitted by April 15, 2013.

We respectfully request that the deadline for the CSM be extended to Friday, May 10, 2013, and the deadline for the work plan to assess data gaps be extended to Friday, May 24, 2013.

Thank you for your consideration of this request.

Tom
Thomas Neely, PG, CHG, QSD
Senior Project Manager
tneely@eticeng.com
www.eticeng.com
ETIC Engineering, Inc.
2285 Morello Ave.
Pleasant Hill, CA 94523
Tel: 925-602-4710 x2161
Fax: 925-602-4720
Mobile: 925-301-7125

From: Jakub, Barbara, Env. Health [mailto:barbara.jakub@acgov.org]
Sent: Tuesday, March 05, 2013 4:04 PM
To: jennifer.c.sedlachek@exxonmobil.com
Cc: Thomas Neely; Douglas Oram
Subject: RO2515, ExxonMobil 7-0234

Dear Ms. Sedlachek,
Please prepare a conceptual site model (CSM) for the site to comply with the Low-Threat Closure Policy. Prepare The CSM in accordance with the State Water Resources Control Board's Leaking Underground Fuel Tank Guidance Manual dated September 2012. Please identify any remaining data gaps and present a work plan to assess the data gaps that are identified.

Present your CSM with data gap work plan by April 15, 2013 (File to be named: SCM_WP_R_yyyy-mm-dd).

Regards,

Barbara Jakub, P.G.
Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Pky.
Alameda, CA 94502
Direct: 510-639-1287
Fax: 510-337-9335

PDF copies of case files can be downloaded at:

http://ehgis.acgov.org/dehpublic/dehpublic.jsp

Appendix B

Site Historical Data

Analyte Concentrations in ug/L
Sampled May 24, 2012

Total Petroleum Hydrocarbons as gasoline	
Benzene	
Methyl Tertiary Butyl Ether	

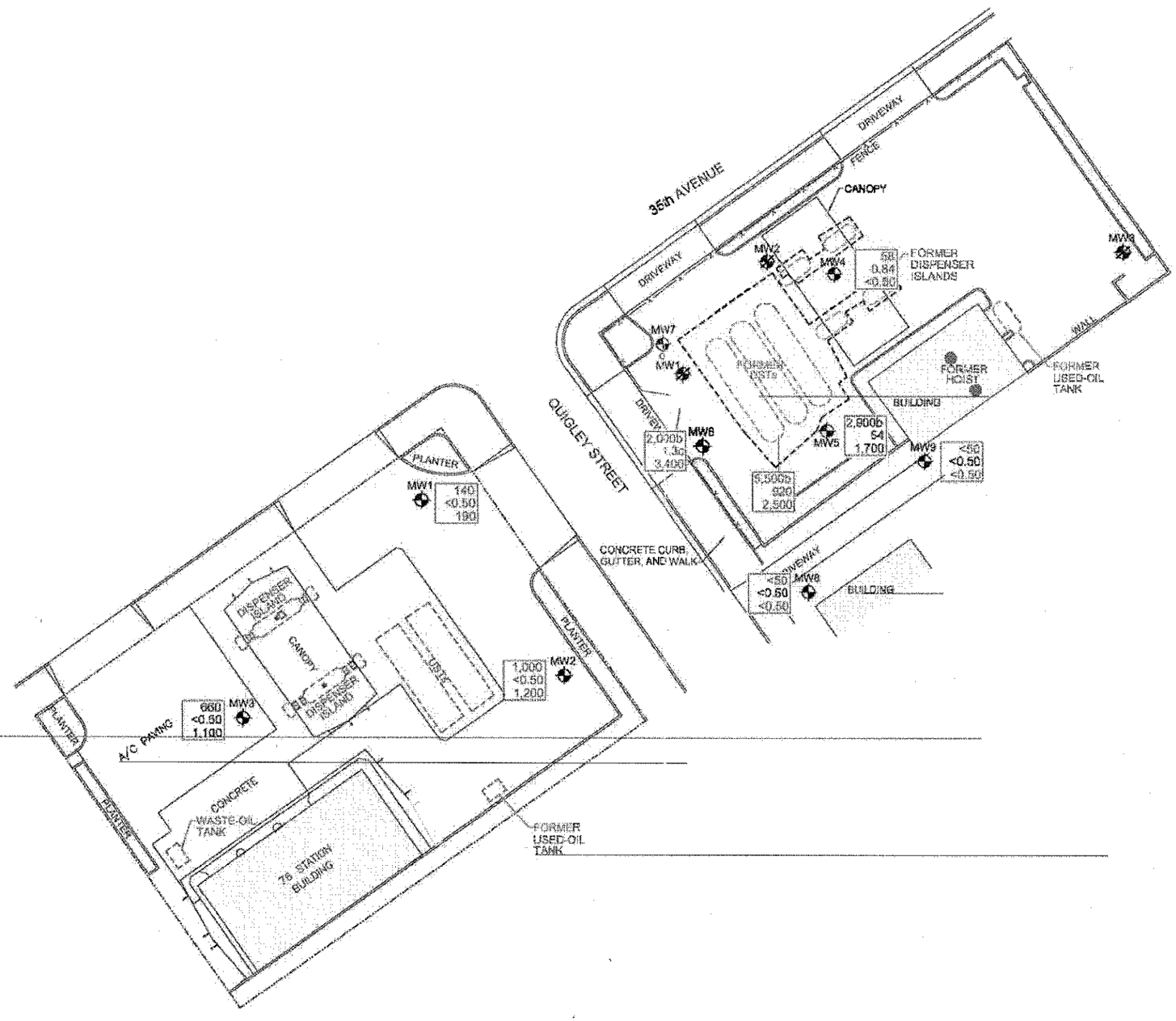
< Less Than the Stated Laboratory Reporting Limit

ug/L Micrograms per Liter

b Hydrocarbon pattern does not match the requested fuel.

c Analyte presence was not confirmed by second column or GC/MS analysis.

d Well inaccessible for sampling.



APPROXIMATE SCALE

0 40 80 Feet

FN 2476 12 2QTR QM

SOURCE: Modified from maps provided by MORROW SURVEING AND TRC

Cardno ERI
Shaping the Future

SELECT ANALYTICAL RESULTS
May 24, 2012

FORMER
EXXON SERVICE STATION 70234
3450 35th Avenue
Oakland, California

EXPLANATION

MW9 Groundwater Monitoring Well

MW3 Groundwater Monitoring Well By Others

MW1 Destroyed Groundwater Monitoring Well

Excavated Area

PROJECT NO. 2476

PLATE 2

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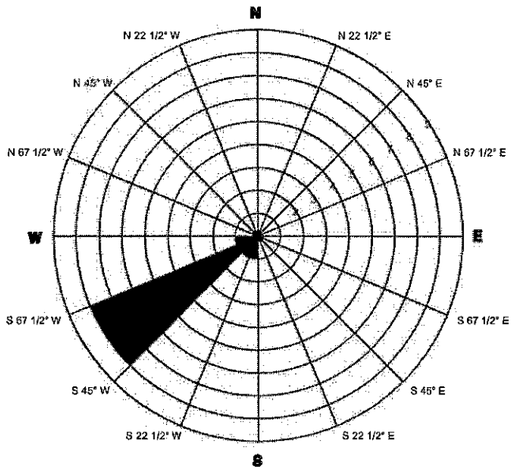
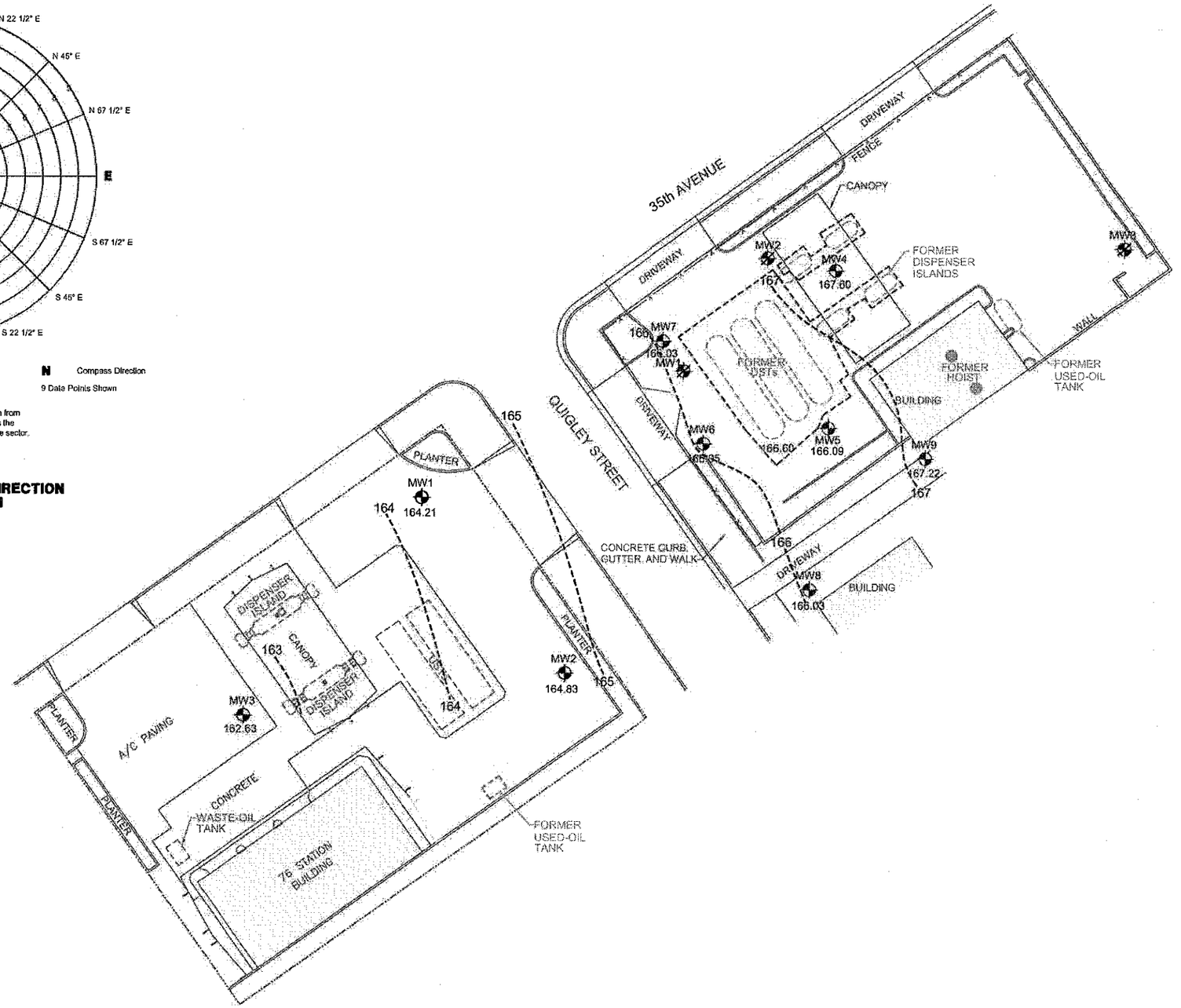


N Compass Direction

9 Data Points Shown

Rose diagram developed by evaluating the groundwater gradient direction from the quarterly monitoring data. Each circle on the rose diagram represents the number of monitoring events that the gradient plotted in that 22 1/2 degree sector. March 30, 2009 to May 24, 2012

GROUNDWATER FLOW DIRECTION ROSE DIAGRAM



APPROXIMATE SCALE

0 40 80 Feet

FN 2476 12 2QTR QM

SOURCE: Modified from maps provided by MORROW SURVEING AND TRC

Cardno ERI
Shaping the Future

GROUNDWATER ELEVATION MAP
May 24, 2012
FORMER
EXXON SERVICE STATION 70234
3450 35th Avenue
Oakland, California

EXPLANATION

MW9 Groundwater Monitoring Well

167.22 Groundwater elevation in feet; datum is mean sea level

MW1 Destroyed Groundwater Monitoring Well

MW3 Groundwater Monitoring Well By Others

Excavated Area

167 ----- Line of Equal Groundwater Elevation; datum is mean sea level

PROJECT NO. 2476

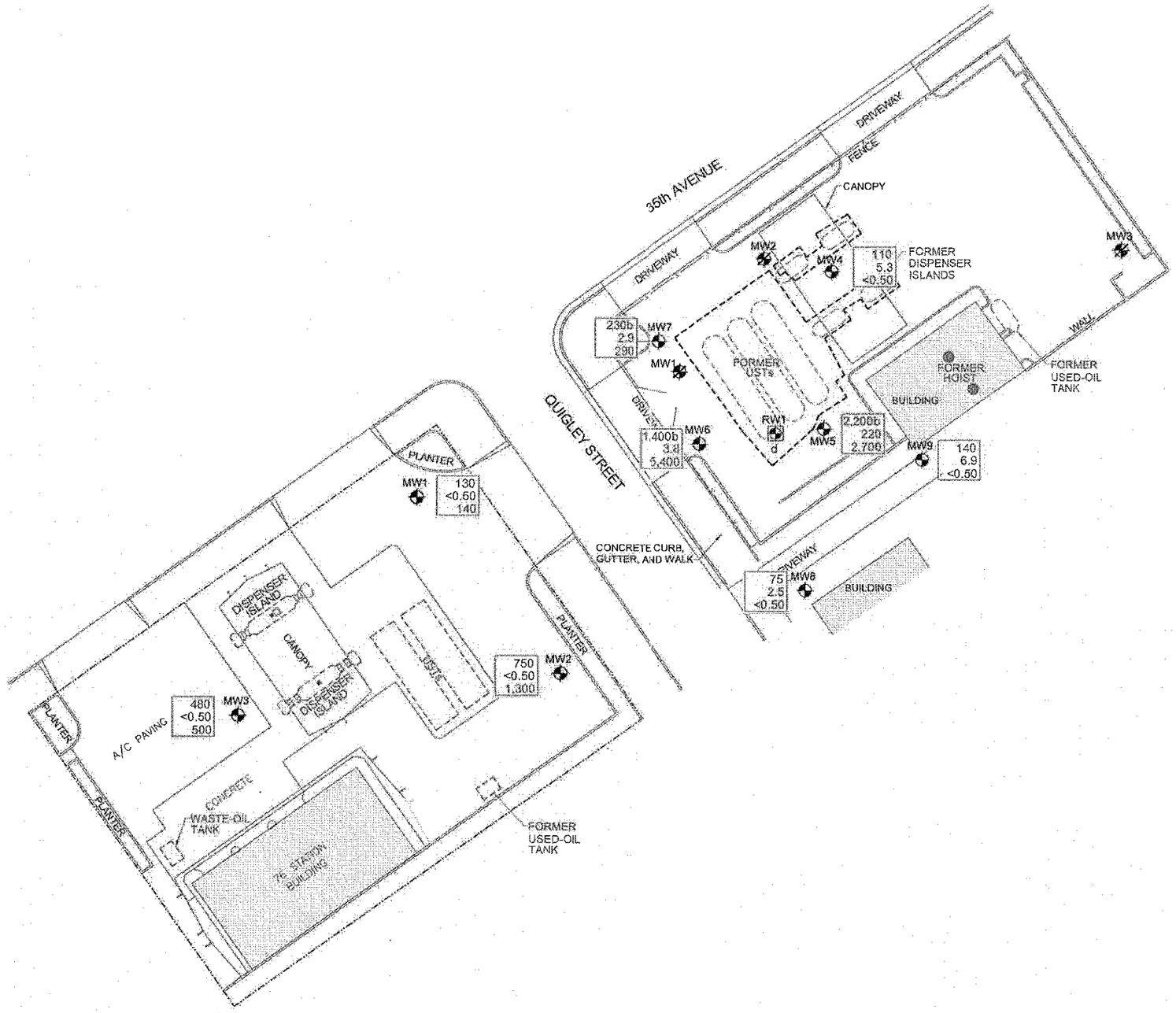
PLATE 3

L:\EXXONMOBIL\ExxonMobil Projects\022476 (70234) Oakland\2476 AutoCad\QM\2012\12 2QTR QM.dwg, mary.jones

Analyte Concentrations in ug/L
Sampled October 23 and 31, 2012

Total Petroleum Hydrocarbons as gasoline	
Benzene	
Methyl Tertiary Butyl Ether	

<	Less Than the Stated Laboratory Reporting Limit
ug/L	Micrograms per Liter
NS	Not Sampled
b	Hydrocarbon pattern does not match the requested fuel.
d	Well inaccessible for sampling.



APPROXIMATE SCALE

0 40 80 Feet

FN 2476 12 4QTR QM

SOURCE: Modified from maps provided by MORROW SURVEING AND TRC

Cardno ERI
Shaping the Future

SELECT ANALYTICAL RESULTS
October 23 and 31, 2012

FORMER
EXXON SERVICE STATION 70234
3450 35th Avenue
Oakland, California

EXPLANATION

MW9 Groundwater Monitoring Well

MW1 Destroyed Groundwater Monitoring Well

MW3 Groundwater Monitoring Well By Others

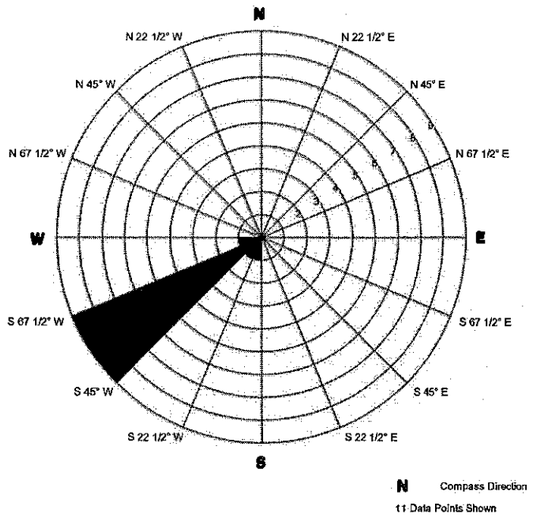
RW1 Recovery Groundwater Monitoring Well

Excavated Area

PROJECT NO. 2476

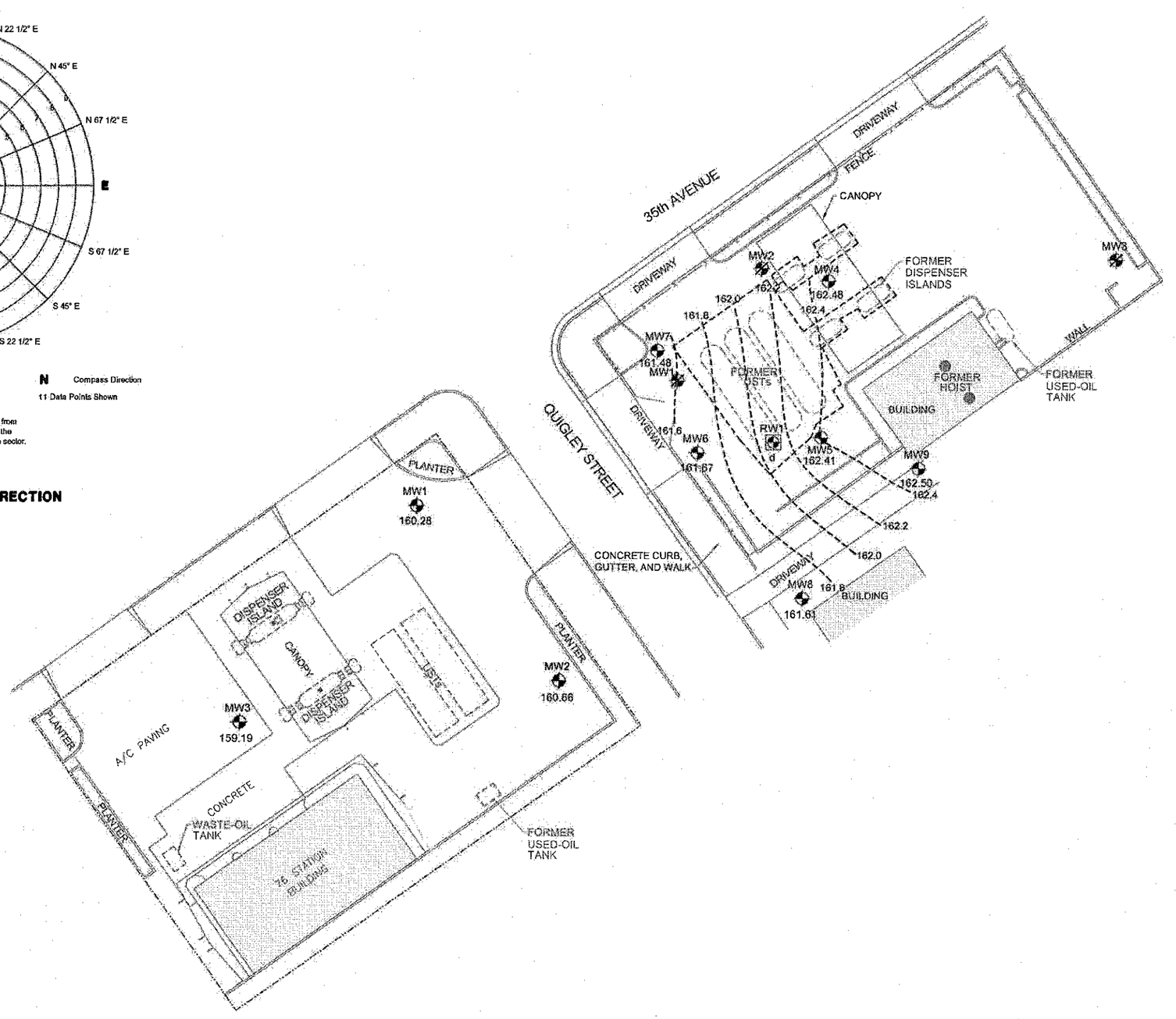
PLATE 2

L:\EXXONMOBIL\ExxonMobil Projects\022476 (70234) Oakland\2476 AutoCad\QM\2012\12 4QTR QM.dwg, mary.jones



Rose diagram developed by evaluating the groundwater gradient direction from the quarterly monitoring data. Each circle on the rose diagram represents the number of monitoring events that the gradient plotted in that 22 1/2 degree sector. March 30, 2009 to October 31, 2012

GROUNDWATER FLOW DIRECTION ROSE DIAGRAM



APPROXIMATE SCALE

0 40 80 Feet

FN 2476 12 4QTR QM

SOURCE: Modified from maps provided by MORROW SURVEING AND TRC

Cardno ERI
Shaping the Future

GROUNDWATER ELEVATION MAP
October 23 and 31, 2012

FORMER
EXXON SERVICE STATION 70234
3450 35th Avenue
Oakland, California

EXPLANATION

- MW9 — Groundwater Monitoring Well
- 162.50 — Groundwater elevation in feet; datum is mean sea level
- MW1 — Destroyed Groundwater Monitoring Well
- MW3 — Groundwater Monitoring Well By Others
- RW1 — Recovery Groundwater Monitoring Well
- d — Well inaccessible for sampling.
- Excavated Area
- 162.4 ----- Line of Equal Groundwater Elevation; datum is mean sea level

NOTE: Monitoring wells by others were gauged and sampled on 10/23/12 and, therefore; were not included in groundwater contouring.

PROJECT NO. 2476

PLATE 3

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