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TRANSMITTAL

DATE: May 15, 2015 REFERENCE NO.: 311642
PROJECT NAME: Chevron 91153
TO: Mr. Mark Detterman ACEH RO#0341
Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

RECEIVED

By Alameda County Environmental Health 3:26 pm, May 18, 2015

Please find enclosed: Draft Final
 Originals Other
 Prints

Sent via: Mail Same Day Courier
 Overnight Courier Other Alameda County FTP Upload and GeoTracker

QUANTITY	DESCRIPTION
1	Draft Feasibility Study, Corrective Action Options and Data Gap Work Plan

As Requested For Review and Comment
 For Your Use _____

COMMENTS:

Please contact Nathan Lee at (925)849-1003 or nlee@craworld.com with any questions or comments regarding the contents of this report.

Copy to: Mr. Mark Horne, Chevron EMC
(electronic only)
Mr. Mark Hom (Property Owner)
Completed by: Nathan Lee Signed: Nathan Lee
[Please Print]

Filing: **Correspondence File**



Mark Horne
Project Manager
Marketing Business Unit

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Alameda County Health Care Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Chevron Service Station No. 91153
3135 Gibbons Drive (3126 Fernside Blvd)
Alameda, CA

I have reviewed the attached report titled *Draft Feasibility, Corrective Action Options and Data Gap Work Plan*.

The information in this report is accurate to the best of my knowledge and all local Agency/Regional Board guidelines have been followed. This report was prepared by Conestoga-Rovers & Associates, upon whose assistance and advice I have relied.

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

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

Sincerely,

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

Mark Horne
Project Manager

Attachment: *Draft Feasibility, Corrective Action Options and Data Gap Work Plan*



DRAFT FEASIBILITY STUDY, CORRECTIVE ACTION OPTIONS AND DATA GAP WORK PLAN

**FORMER CHEVRON STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD)
ALAMEDA, CALIFORNIA
ACEH CASE RO #0341**

Prepared For:

**Mr. Mark Detterman
Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Suite 250**

**Prepared by:
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MAY 15, 2015

REF. NO. 311642 (40)

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DRAFT FEASIBILITY STUDY, CORRECTIVE ACTION OPTIONS AND DATA GAP WORK PLAN

**FORMER CHEVRON STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD)
ALAMEDA, CALIFORNIA
ACEH CASE RO #0341**

Nathan Lee

Nathan Lee PG 8486



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Section 1.0 Introduction

Conestoga Rovers & Associates (CRA) is submitting this Draft Feasibility Study, Corrective Action Options, and Data Gap Work Plan on behalf of Chevron Environmental Management Company (EMC). In a letter dated December 16, 2014 (Appendix A), Alameda County Environmental Health (ACEH) requested an Updated Draft Feasibility Study/Corrective Action Options and Data Gap Work Plan. Presented below are the site background, feasibility study/corrective action plan options, and a work plan for additional assessment.

Section 2.0 Site Background

2.1 Site Description

The site is located on a triangularly shaped lot at the intersections of Gibbons Drive, Fernside Boulevard, and High Street in Alameda, California (Figure 1). A former service station operated until June 1986, and in 1989 a residence was built on the property (Figure 2). Surrounding area use is residential and commercial.

2.2 Previous Environmental Work

Environmental investigations began in 1986 with the underground storage tank (UST) removals. Since 1986, a total of twelve confirmation samples have been collected, twenty six soil borings, ten groundwater monitoring wells (well C 2 has been destroyed), one extraction trench/well, one temporary well, fifty-one temporary soil vapor probes, and two sub-slab vapor probes have been installed. Crawl space, indoor, outdoor, and sub-slab air samples have been collected. Groundwater has been monitored since 1986. Remediation conducted has included an excavation during UST removal and during the foundation construction for the house, a groundwater pump and treat system, oxygen releasing compound (ORC) and hydrogen peroxide injections, groundwater extraction events, and light non aqueous phase liquid (LNAPL) removal by bailing and sorbent socks. Two water supply well surveys and preferential pathway studies have also been conducted. A summary of previous environmental investigation and remediation is included in Appendix B.

2.3 Site Geology

Soil beneath the site consists primarily of sand with some silt and clay to the total depth explored of approximately 23 feet below grade (fbg).

2.4 Site Hydrogeology

The site is approximately 8 feet above mean sea level. Depth to water in the monitoring wells ranges from approximately 0 to 6.5 fbg. Groundwater beneath the site is designated as an existing or potential drinking water resource by the Regional Water Quality Control Board – San Francisco Bay Region (RWQCB SF). Groundwater flow direction is typically east southeast toward the Oakland Alameda Estuary. The estuary is the closest surface water and is approximately 550 feet downgradient. Since 2010, LNAPL has been measured in well C-1, ranging in thickness from 0.01 to 0.25 foot.

Section 3.0 Hydrocarbon Distribution

The primary constituents of concern (COCs) are total petroleum hydrocarbons as gasoline (TPHg) and benzene. Other COCs are toluene, ethylbenzene, and xylenes. No methyl tertiary butyl ether (MTBE) has been detected in groundwater and has only once been detected in soil; therefore MTBE is not considered a COC.

3.1 Soil

Soil samples have been collated at depths between the surface and 12 fbg. The highest benzene concentration detected in soil is 45 mg/kg benzene in boring SB2 at 4 fbg. As shown on Figure 3, the extent of benzene in soil is primarily in the property's southern and eastern portion and in a limited area near the former northern dispenser island. Hydrocarbons in soil are vertically defined to below State Water Resource Control Board's Low Threat Closure Policy (LTCP) criteria by samples collected from borings B 1 through B 8 at 9.5 fbg, and horizontally defined in all directions, except toward the southwest, which is the source area's upgradient direction. Source area delineation has been inhibited onsite, due to the house and other improvements limiting access to drilling locations. Cumulative analytical data in soil is presented in Table 1.

Since 1986, 71 soil samples were collected between 0 and 5 fbg, and 19 soil samples were collected between 5 and 10 fbg. The number of soil samples that exceed the LTCP criteria for residential direct exposure between 0 and 5 fbg, 11 were above 1.9 mg/kg of benzene and 10 were above 21 mg/kg of ethylbenzene. Five benzene concentrations between 0 and 10 fbg exceed the LTCP criteria of 14 mg/kg for direct contact by a utility worker.

3.2 Groundwater

Groundwater has been monitored and sampled since 1986 by ten wells (well C 2 has been destroyed). The top of all well screens is 2 or 3 fbg, but the bottom of the well screens range from 9 to 22 fbg. Groundwater data are presented in Table 2.

LNAPL has historically been detected in well C-1, located in the driveway on the property's southeast side, which is discussed further in the next section. Residual dissolved hydrocarbons are detected in offsite well MW-7, located southeast (downgradient) of C-1. TPHg and benzene concentrations in MW-7 fluctuate based on the depth to water. Although concentrations are fluctuating, the dissolved hydrocarbon plume is shrinking overall as indicated by the declining dissolved concentration trends observed in well MW-7, and the fact that dissolved hydrocarbons historically detected in wells MW-5 and MW-6 have decreased to below laboratory detection limits. Furthermore, the dissolved hydrocarbon plume is delineated downgradient by wells MW-8, MW-9 and MW-10. This indicates that source mass flux to groundwater is decreasing as the hydrocarbon source mass is depleting. Therefore, no additional wells are needed and the plume is adequately delineated by the current well network.

3.3 Light Non-Aqueous Phase Liquid

LNAPL has historically been detected in well C-1 at a maximum thickness of 2.20 feet in 1995. Since 2010, LNAPL has been measured in well C-1, ranging in thickness from 0.01 to 0.25 foot. Since 2011, an absorbent sock has been installed in C-1 to remove LNAPL.

3.4 Soil Vapor

Soil vapor samples were collected in 1987, 1989, 2012, and 2013. The cumulative soil vapor data is summarized in Table 3 and the soil vapor sampling locations are included on Figure 2.

To assess soil vapor conditions beneath the garage slab and to assess ambient air on the property, in September 2013, CRA installed and sampled two sub slab vapor probes within the garage and collected ambient indoor, crawl space, and outdoor air (Table 3). Indoor ambient air hydrocarbon concentrations are significantly higher than both outdoor and crawl space ambient air; however the concentrations of both outside and crawl space ambient air are very similar. The detected outside and crawl space ambient air concentrations likely have a significant contribution from vehicle emissions from the heavily traveled High Street and Fernside Boulevard intersection. The outdoor, crawl space, and indoor ambient air concentrations are similar to the concentrations detected and reported in CRA's Subsurface and Crawl Space, Indoor and Ambient Air Investigation dated April 18, 2012. The highest indoor ambient air concentrations were detected in sample IA 3 which was inside the garage used to

house vehicles. CRA inquired that all vehicles be removed from and remain outside of the garage during sampling; however at least one vehicle was in the garage during the sampling. Although concentrations detected in the garage sub slab vapor probes were elevated, the benzene concentration in IA 3 is four orders of magnitude lower than sub slab vapor concentrations. Though ambient air concentrations are above ESL levels for residential occupation, the factors used to confirm that the source of vapor intrusion is from a sub-surface hydrocarbon source have not been met. Therefore the concentrations detected in indoor air are likely due to sources other than sub surface hydrocarbons, such as an indoor or garage source.

On August 17, 2010, CRA met with the property owners and determined that the house was constructed with a ventilated crawl space. Therefore, the vapor intrusion pathway for the residence portion of the home is incomplete and no additional soil vapor assessment is warranted. However, vapor intrusion through the concrete slab in the garage could possibly present a complete pathway; therefore CRA submitted a Vapor Mitigation Plan dated October 3, 2014 that proposed to apply a vapor intrusion coating system to the garage floor which will prevent any potential future vapor risks that may occur if an unforeseen change of conditions were to happen. ACEH approved the Vapor Mitigation Plan and February 13, 2015 Construction Quality Assurance Plan in a letter dated April 13, 2015. CRA is currently coordinating the vapor coating system application with the property owners.

Section 4.0 Feasibility Study and Corrective Action Options

4.1 Remedial Action Cleanup Goals

Cleanup goals will be established based on the following:

- Applicable LTCP criteria based on human health and environmental risk
- Technologic and economic feasibility
- Eliminate or mitigate direct exposure risks

As discussed in Section 3.4, potential vapor intrusion to the onsite residential home is being mitigated with engineering controls. Therefore, the proposed soil cleanup goals are the LTCP screening levels for residential direct contact to soil. Maximum historical soil concentrations (0-5 fbg) were compared to residential LTCP criteria for benzene, ethylbenzene, and naphthalene. The results are presented in the Table 4.1.

Table 4.1 Concentrations in Soil		
COC	Maximum Concentrations 0-5 fbg (a)	Residential LTCP Direct Contact (b)
Concentrations in milligrams per kilogram (mg/kg)		
Benzene	45	1.9
Ethylbenzene	180	21
Naphthalene	--	9.7
Notes:		
(a)	Soil concentrations based on highest historical detection beneath the site.	
(b)	California State Water Resources Control Board's 2012 Low Threat Underground Storage Tank Case Closure Policy	
--	Not analyzed	

4.2 Remedial Action Objectives

Reduction of COC concentrations in soil may not be technically or economically feasible, due mainly to the existing residential home, and the proposed remediation objectives are based on implementing the most cost effective remedial approach that will protect human health. Therefore, given site conditions and the cleanup goals, the remediation objective is to

- Eliminate the benzene and ethylbenzene direct exposure risks in soil.

The hydrocarbons in groundwater do not pose a risk, as the LNAPL is limited in extent and does not extend offsite. Also the dissolved hydrocarbons in groundwater are defined and do not pose a threat to any receptors. Furthermore there are no vapor intrusion risks that may occur from the volatilization of hydrocarbons in groundwater, based on the vapor assessments conducted and the placement of a vapor coating system. The vapor coating will prevent any potential future vapor risks that may occur due to an unforeseen change of conditions. Therefore, no further groundwater remedial actions are required except for the use of sorbent socks in C-1 to mitigate the presence of free product.

In conclusion, the elimination of benzene and ethylbenzene direct exposure risks in soil is the sole remedial objective. The remediation alternatives reviewed have been evaluated based on their potential to meet this objective.

4.3 Remedial Alternatives

To eliminate the risk of direct exposure to benzene and ethylbenzene in soil, the remedial technologies selected for evaluation include:

- Excavating the exposed grass and landscaped areas to the northeast and southwest of the residence, and beneath the walkway and driveway.
- Multi-phase extraction
- Capping the exposed soil containing elevated benzene concentrations with hardscape and artificial landscaping to eliminate the direct exposure risk
- Monitored natural attenuation

These four alternatives have been evaluated below on the basis of technical feasibility and cost effectiveness to meet the remedial objective. Before a remedial option can be selected, CRA proposes an additional assessment onsite that is outlined in a work plan presented in Section 7.0.

4.3.1 Excavation

Excavation is often the quickest method to remediate hydrocarbons in soil and can be used to remove saturated sediments containing petroleum hydrocarbons. The excavated soil is then hauled offsite for treatment and/or disposal, and replaced with clean backfill material.

Standard earth moving equipment (excavators, backhoes, bobcats, loaders, etc.) would be utilized for excavation activities. Shoring would be required to prevent sidewall collapse and to prevent damage or undermining to the house, garage, walls, utilities, and sidewalks. Additionally the excavation area would likely need dewatering depending on groundwater levels (depth to water is typically 2 to 4 fbg) and recharge rates. The maximum excavation depth to remove benzene and ethylbenzene direct exposure risks is approximately 6 fbg. All excavated areas would be back filled to approximately two fbg with imported fill and then imported soil and top soil to grade. Landscaping would be replaced to original conditions.

An excavation would be a major disruption to the residents and would result in the home being inaccessible during excavation. This could require the residents be relocated during the work, likely for more than one month.

Feasibility and Cost Effectiveness:

This method would likely eliminate the risk of direct contact to shallow soil; however it would not address the soil beneath the house or garage. Also the exact excavation area will not be known until a structural engineer determines the safe distance in which the excavation can be placed next to the residence in order to maintain the house's structural integrity. Due to structural integrity setbacks, a volume of soil with concentrations that exceed direct exposure criteria may have to be left in place. Excavating in close proximity to the residence increases costs due to the required shoring and additional efforts/precautionary measures needed to insure the residence's structural integrity. Due to the high costs, the disruption to the

residents, and the potential that not all soils exceeding LTCP direct exposure criteria would be removed, CRA considers this an infeasible option.

Recommendation:

This method would likely eliminate the risk of direct contact to shallow soil; however it would not address the soil beneath the house or garage. Also the exact excavation area will not be known until a structural engineer determines the safe distance in which the excavation can be placed next to the residence in order to maintain the house's structural integrity. Due to structural integrity setbacks, a volume of soil with concentrations that exceed direct exposure criteria may have to be left in place. Excavating in close proximity to the residence increases costs due to the required shoring and additional efforts/precautionary measures needed to insure the residence's structural integrity. Due to the high costs, the disruption to the residents, and the potential that not all soils exceeding LTCP direct exposure criteria would be removed, CRA considers this an infeasible option.

4.3.2 Multi-Phase Extraction (MPE)

Multi-phase extraction (MPE) uses submersible pumps to extract groundwater, while a blower or vacuum pump is used to apply a vacuum to well casings to simultaneously extract soil vapor from the saturated zone and the smear zone exposed by the groundwater dewatering. The saturated zone's extended dewatering combined with vapor extraction can effectively remediate residual gasoline hydrocarbons in the source area. A soil vapor treatment device (oxidizer, carbon adsorption, or internal combustion engine) is used to abate volatile organic compounds in extracted vapor. Extracted groundwater is treated and discharged to the local sanitary sewer or storm drain with the appropriate authorization, or off hauled to a disposal facility.

A MPE system would require the installation of pilot test wells and a pilot test to determine if in fact MPE could be effective. MPE is limited in areas of shallow groundwater due to the volume of water which must be pumped from extraction wells to maintain vacuum contact with dewatered soil. Additionally, the feasibility of MPE at this site is limited by the shallow depth of soil impacts and the unfinished surface. These conditions allow the applied vacuum to easily short-circuit to the surface, which limits the radius of influence and effective hydrocarbon mass removal. A full scale MPE system would require the installation of extraction wells, underground pipe installation and the likely installation of three phase electrical power and natural gas service.

Feasibility and Cost Effectiveness:

Although MPE might be effective in removing hydrocarbons from soil and groundwater, the site is currently an inhabited residence and there is not enough available space to feasibly place a full-scale MPE system. The system would also create a noise nuisance for nearby residents even with noise abatement equipment. Given the space and noise constraints, MPE is not considered a feasible option.

Recommendation

MPE is not technically feasible due to inadequate space for installation of a MPE system and noise constraints; therefore, CRA does not recommend MPE.

4.3.3 Hardscaping and Artificial Landscaping

To eliminate the risk of direct exposure to shallow soil affected by benzene and ethylbenzene, the exposed grass/landscaped areas that have LTCP direct exposure exceedances, would be replaced with hardscaping and/or artificial landscaping. Hardscaping is a constructed surface that includes, but is not limited to, the use of concrete, tile, bricks, rocks, cement, sidewalks, fountains and/or pavement. The hardscape will create a barrier on the surface that will prevent exposure to the soils that exceed the LTCP criteria for residential direct contact exposure for benzene and ethylbenzene. Therefore, the direct contact soil risks would be mitigated with the use of hardscaping.

Feasibility and Cost Effectiveness:

The proposed hardscaping and/or artificial landscaping would protect residents from direct contact with benzene and ethylbenzene affected soil. This approach is both feasible and cost effective.

Recommendation:

The installation of hardscaping and/or artificial landscaping would protect the residents from direct contact with the affected soil. This option would be effective, of relatively low cost, and have a relatively low impact on the family living in the residence. The hardscaping and artificial landscaping around the house would replace all the lawn areas that have LTCP direct exposure exceedances and be completed by a professional landscape architect, with the approval of the property owners.

4.3.4 Monitored Natural Attenuation and Sorbant Sock in Well C-1

Biodegradation, adsorption, chemical reactions, and volatilization can all naturally degrade hydrocarbons. Monitored natural attenuation (MNA) is the process of monitoring hydrocarbon

concentrations in groundwater to confirm that the concentrations are decreasing and will reach water quality objectives (WQO) in a reasonable timeframe. Dissolved hydrocarbon concentration reduction is the primary indicator of natural attenuation.

Since 2011, a hydrocarbon adsorbent sock has been in monitoring well C-1 and changed out quarterly during monitoring and sampling events to remove LNAPL present in the well.

Feasibility and Cost Effectiveness:

Dissolved TPHg and benzene concentrations have already decreased one order of magnitude, indicating hydrocarbons are naturally attenuating. CRA calculated dissolved phase TPHg and benzene concentration trends in downgradient well MW-7 (Appendix C). Trends were generated using the historical peak concentrations, which occurred in 2003. To estimate the time to meet WQOs³, CRA used the following first order exponential decay rate calculation:⁴

$$y = be^{(ax)};$$

Where “a” is the decay rate constant, “b” is a concentration at time (x), y is the target concentration (e.g. ESL), and “x” is time. Projections to meet the drinking WQOs for MW-7 are summarized in Table 4.2 below.

Well ID	Analyte	Maximum Concentrations ($\mu\text{g/L}$)	Current Concentrations ($\mu\text{g/L}$)	WQO ($\mu\text{g/L}$)	Date to Reach WQO	Years to Reach WQO
MW-7	TPHg	29,000	1,600	100	2037	22
	Benzene	7,300	110	1	2020	5
Note:						
< Indicates constituent was not detected at or above laboratory reporting limit.						
Bold indicates results above the drinking water environmental screening level (ESL).						
WQO Water Quality Objective (Regional Water Quality Control Board – San Francisco Bay Region, Water Quality Control Plan (Basin Plan): dated December 31, 2011.)						

WQOs are calculated to be reached for TPHg in 22 years and benzene in 5 years. Based on this evaluation, MNA is feasible to cleanup dissolved hydrocarbons. Historical groundwater analytical data used for predictions are presented Table 2. Degradation calculations are presented in Appendix C.

³ WQOs are the San Francisco RWQCB drinking water environmental screening levels

⁴ EPA-Groundwater Issue; *Calculation and Use of First-Order Rate Constants for Monitored Natural Attenuation Studies*; Charles J. Newell, et al., 2003.

The MNA costs and continued quarterly monitoring and sampling is estimated to be approximately \$11,750 per year. The cost of quarterly change out and disposal of a sorbent sock in well C-1 is estimated to be approximately \$8,300 per year. Dissolved hydrocarbon concentrations are defined and are decreasing in well C 7. Although CRA cannot predict a timeframe for which MNA would be required for LNAPL to attenuate in C-1, sampling and monitoring will occur quarterly until LNAPL is no longer detected for four continuous quarterly, in which case monitoring and sampling will occur annually. A cost for this alternative has been estimated.

Recommendations

MNA is not recommended because it alone does not address the residential direct exposure risk to soil. However, MNA has been retained as an element of each of the technically feasible remedies evaluated below. A sorbent sock will continue to be used in well C-1 and changed out quarterly until LNAPL is no longer detected for four continuous quarterly monitoring and sampling events.

4.4 Summary of Remedial Alternatives

The predicted effectiveness and estimated costs for each of remediation alternatives discussed above are shown in Table 4.3.

Of the four remedial alternatives evaluated, excavation will have the greatest chance of success reaching the goal of removing LNAPL and eliminating the direct exposure risk to the residents; however it is the costliest, has low feasibility given the limitations posed by the existing onsite residence, and causes the most disruption to the residents. Capping the lawn areas described above with hardscape and/or artificial landscape would eliminate direct exposure to benzene and ethylbenzene affected soil and is both feasible and cost effective.

<i>Alternative</i>	<i>Excavate Landscape and Pavement</i>	<i>Cap with Clay and Hardscape/ Artificial Landscape</i>	<i>DPE</i>	<i>MNA</i>
Effectiveness	Moderate to Good	Good	Poor	Poor
Feasibility	Poor	Good	Poor	Poor
Pilot Testing	NA	NA	\$75,000	NA
Design and Permitting	\$50,000	\$30,000	\$40,000	NA
Equipment and Installation*	\$1.29M	\$150,000	\$500,000	NA
Operational Duration	NA	10 Years	1 year	20 years
Average Annual Operational Cost	NA	\$8,300**	\$109,000	\$8,300**
Total Operational Cost	NA	\$83,000	\$109,000	\$166,000
Annual Groundwater Monitoring Cost	\$11,750	\$11,750	\$11,750	\$11,750
Total Groundwater Monitoring Duration	5 year	10 year	4 years	20 years
Total Groundwater Monitoring Cost	\$58,750	\$117,750	\$47,000	\$235,000
System Demo	NA	NA	\$45,000	NA
Closure Request/Well Destructions	\$25,000	\$25,000	\$40,000	\$25,000
Total Cost	1.42M	\$405,750	\$856,000	\$426,000
* Excavation, landscape and concrete removal/disposal/replacement costs assumed to be \$1,000/ton for landscaped areas, \$1,100/ton for concrete areas and \$2,000/ton for the garage.				
** Well C-1 hydrocarbon adsorbent sock management, change out, transportation, and disposal costs				

Section 5.0 Conclusions

Based on the historical data and site configuration, CRA makes the following conclusions:

- LNAPL remains beneath the site in the vicinity of C-1; however, LNAPL thickness has reduced with time from 2.22 feet to 0.02 feet and is limited in extent onsite.
- Residual hydrocarbon remains in shallow soils

- The installation of a vapor barrier over the garage floor will mitigate potential vapor intrusion through the garage floor
- Excavation around the home would cause a major disruption to the residents and may not be effective given the limited space for excavation equipment and a treatment system to treat the shallow groundwater, which would have to be pumped, treated and discharged to the sanitary sewer.
- There is no risk from vapor intrusion due to the ventilated crawl space and additional soil vapor assessment is not warranted.
- The property's western side will require additional assessment to determine the extent of LTCP direct exposure exceedances prior to selecting a remedial option to insure that all exposure risks are known.

Section 6.0 Recommendations

Due to the presence of shallow benzene and ethylbenzene affected soils, CRA evaluated four remedial options to eliminate or mitigate direct exposure risks. Based on the evaluations above, CRA recommends the following.

- Continue to use a hydrocarbon adsorbent sock in monitoring well C-1 and change the sock out quarterly during the monitoring and sampling events.
- As proposed in CRA's *Vapor Mitigation Plan* dated October 3, 2014 and *Construction Quality Assurance Plan* dated February 13, 2015, and approved by ACEH in a letter dated April 13, 2015, a vapor intrusion coating system will be applied to the garage floor which will prevent any potential future vapor risks that may occur if an unforeseen change of conditions were to happen.
- To assess the extent of benzene and ethylbenzene in shallow soil on the property's southwest portion and adjacent to the former used oil UST, CRA recommends advancing six hand auger borings as shown on Figure 4. CRA's proposed work plan is discussed in Section 7.0 below.
- After the extent of benzene and ethylbenzene in shallow soil has been assessed, CRA can recommend a remedial option.
- CRA with EMC will continue to work with the home owners in determining a remedial option.

Section 7.0 Work Plan for Additional Subsurface Investigation

To assess soil conditions on the property's southwestern portion and the former used-oil UST, CRA proposes advancing at least 6 borings onsite (Figure 4) to approximately 10 fbg. The scope of work for the proposed investigation is discussed below.

7.1 Permits and Inspection

CRA will obtain the necessary permits and coordinate inspections with Alameda County Public Works Agency (ACPW).

7.2 Site Specific Health and Safety Plan

CRA will prepare a site specific health and safety plan to protect site workers. The plan will be reviewed and signed by all site workers and visitors and remain onsite during all field activities.

7.3 Utility Location and Clearance

CRA will contact Underground Service Alert (USA) to coordinate location of subsurface utilities no less than 48 hours prior to the start of field activities. CRA will subcontract a licensed geophysicist to confirm the locations of underground utilities using various geophysical equipment.

7.4 Soil Sampling

Six soil borings are proposed to complete data gaps or further investigate source areas (Figure 2):

- 2 soil borings proposed adjacent to former used-oil UST
- 4 soil borings on property's western side

Soil borings will be advanced using a hand auger to approximately 10 fbg. Soils will be logged using the ASTM D2488-06 Unified Soil Classification System. Soil samples will be collected from each boring at approximately 3, 5, 8 and 10 fbg or at changes in lithology, where staining is observed or elevated photo-ionization detector (PID) readings are noted, using a slide hammer and clean brass/steel sleeves at the depth interval selected. All soil samples will be screened using a PID and all PID measurements will be recorded on the boring log. Samples will be sealed, labeled, logged on a chain-of-custody, placed on ice, and transported to a Chevron and California State-approved laboratory for analysis. After sample collection, the boreholes will be tremie-grouted with neat Portland cement and completed to surface to match existing grade. CRA's standard procedures for soil boring advancement are presented in Appendix D.

7.5 Chemical Analysis

Select soil samples will be analyzed for the following:

- TPHg by Environmental Protection Agency (EPA) Method 8015M
- Benzene, toluene, ethylbenzene, and xylene (BTEX), MTBE, and naphthalene by EPA Method 8260B

Soil samples collected adjacent to the former used-oil UST will be additionally analyzed for

- Total petroleum hydrocarbons as diesel (TPHd) by EPA Method 8015M with silica gel
- Total petroleum hydrocarbons as motor oil (TPHmo) by EPA Method 8015M with silica gel
- 16 priority pollutant Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270 SIM: naphthalene, acenaphthene, acenaphthylene, anthracene, phenanthrene, fluorine, chrysene, fluoranthene, pyrene, benzo(b)fluoranthene, benzo(a)pyrene, benzo(k)fluoranthene, benzo(a)anthracene, indeno(1,2,3-c,d)pyrene, dibenz(a,h)anthracene, and benzo(g,h,i)perylene
- Five LUFT Metals by 6010

7.6 Waste Disposal

Soil cuttings and rinsate water generated during soil borings will be placed in DOT approved drums, sampled for profile analysis, labeled appropriately, and temporarily stored onsite pending analysis. The waste will be transported by licensed waste haulers to a Chevron approved California licensed disposal facility following receipt of the analytical profile.

7.7 Reporting

Upon completion of field activities and review of the analytical results, CRA will prepare a report incorporating all available data that, at a minimum, will contain:

- Description of hand augering and sampling
- Soil boring logs
- Tabulated soil analytical results
- Analytical reports and chain of custody forms
- Waste disposal details
- An evaluation of the extent of hydrocarbons in the subsurface
- Conclusions and recommendations

Figures

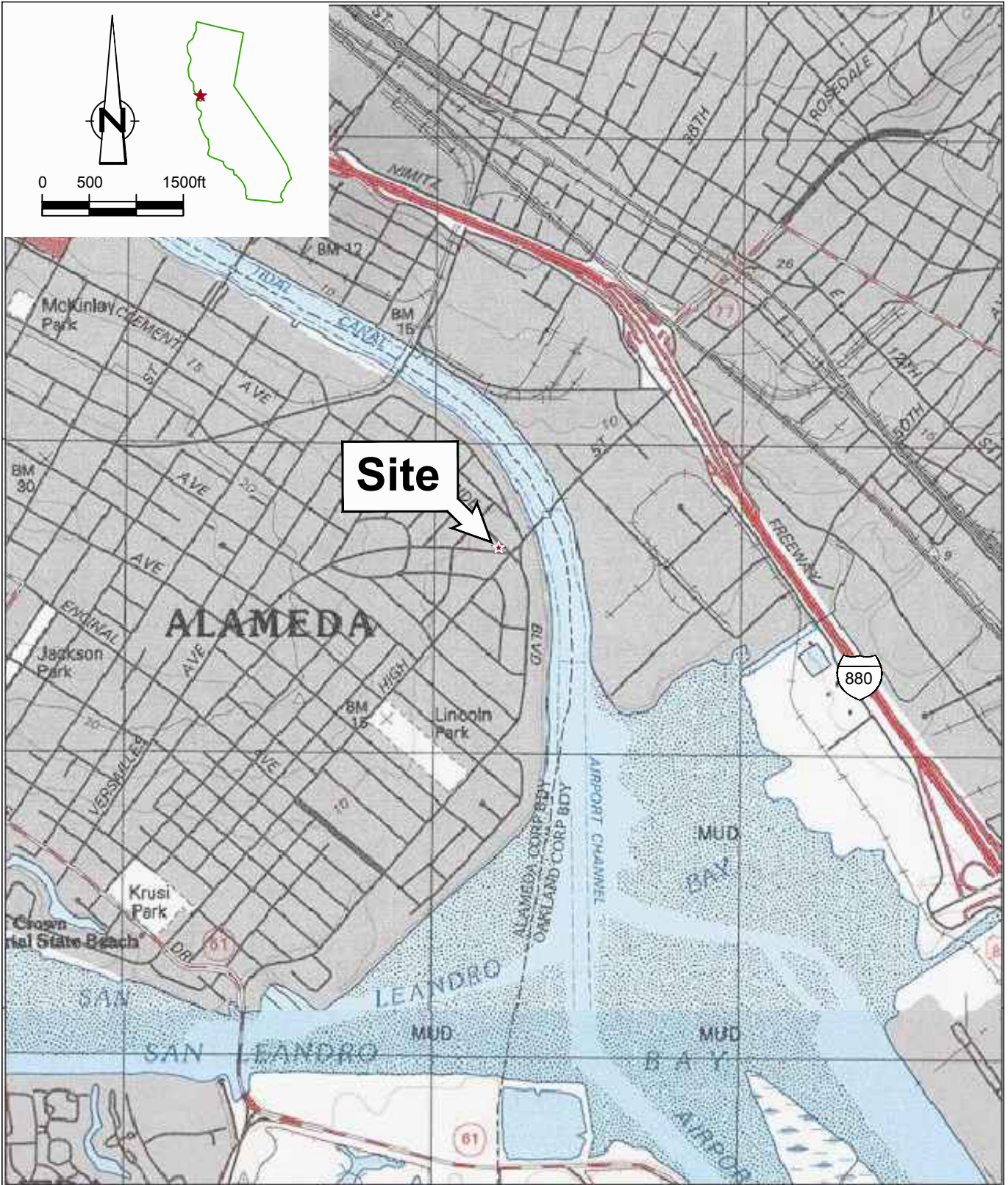
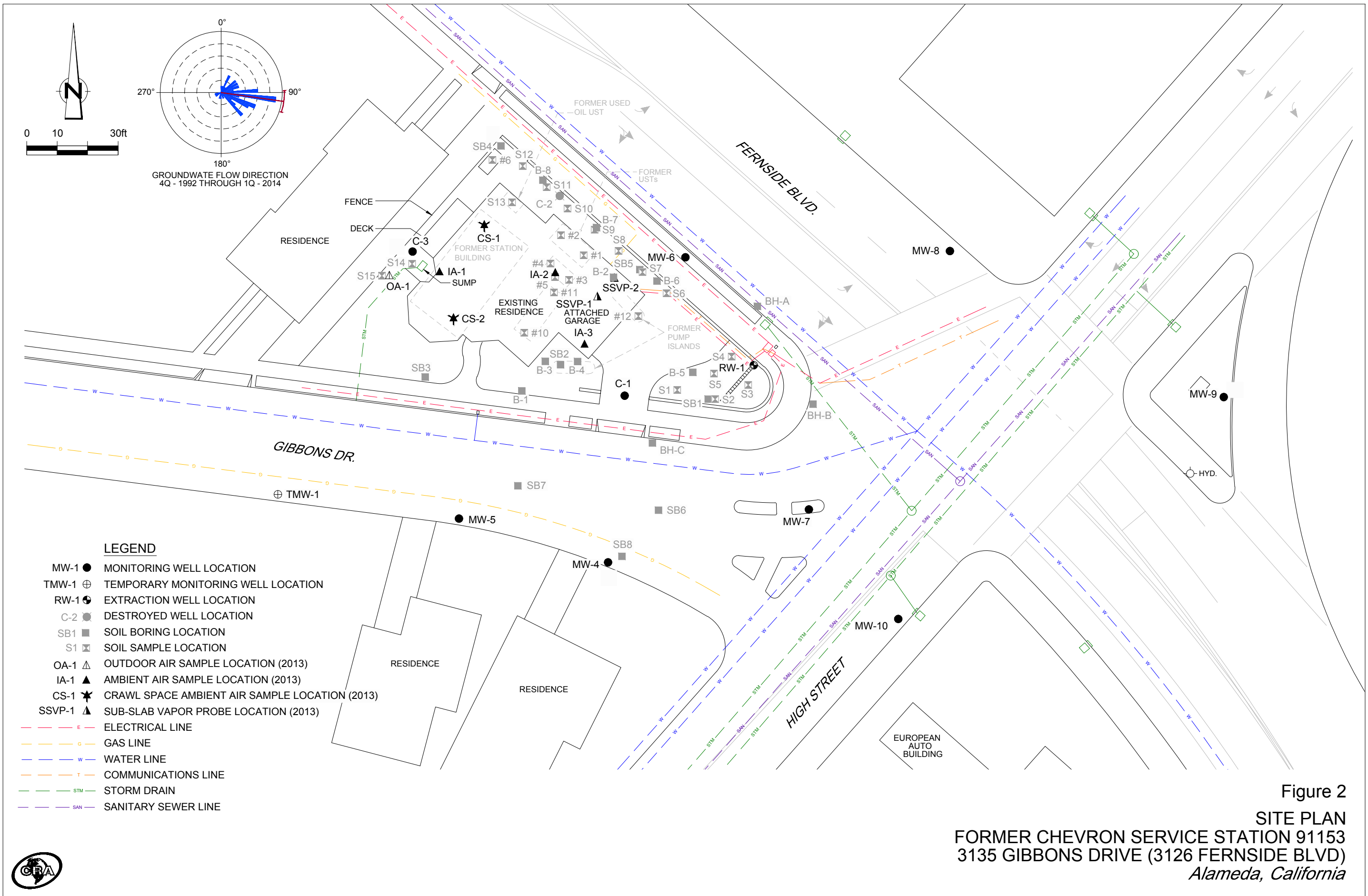
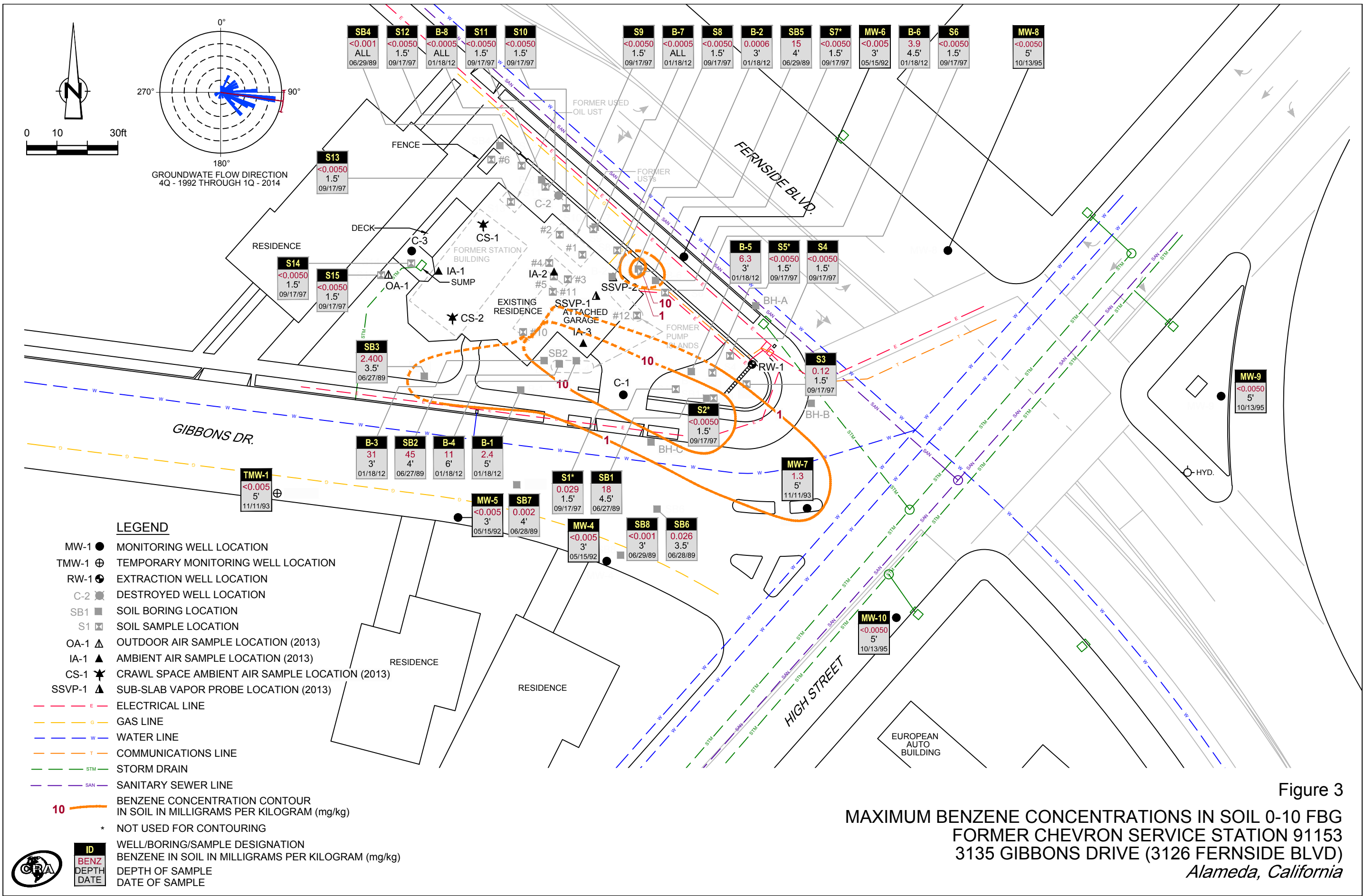


Figure 1
 VICINITY MAP
 FORMER CHEVRON SERVICE STATION 91153
 3135 GIBBONS DRIVE (3126 FERNSIDE BLVD)
 Alameda, California







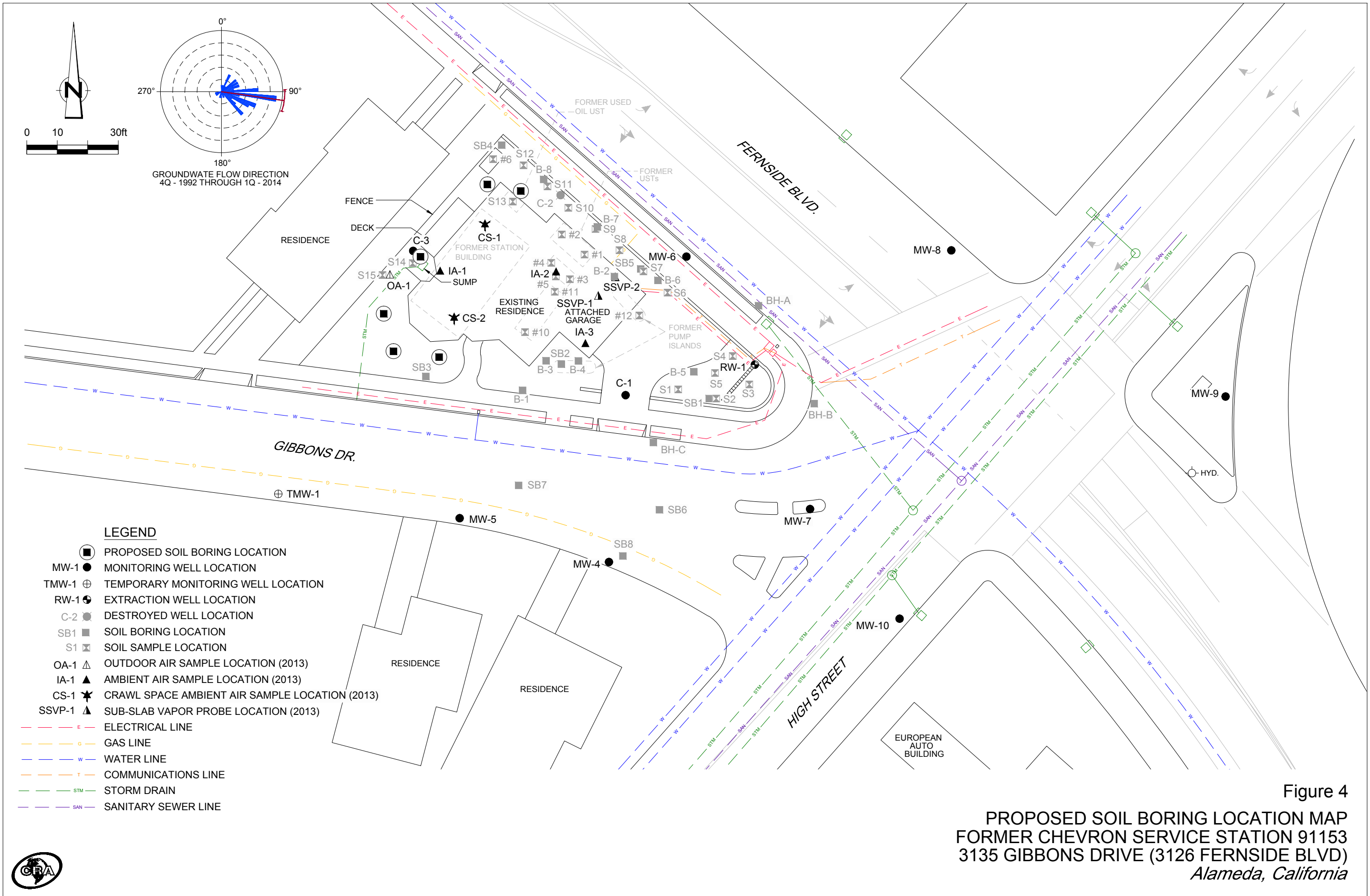


Figure 4
PROPOSED SOIL BORING LOCATION MAP
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNside BLVD)
Alameda, California



Tables

TABLE 1
CUMULATIVE SOIL ANALYTICAL DATA
FORMER CHEVRON STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA

Sample ID	Date	Depth (fbg)	TPH Used-Oil	TPH	TPHd	TPHg	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	Lead	EDB	1,2-DCA	Naph- thalene	PAHs
<i>Low-Threat Underground Storage Tank Case Closure Criteria^b</i>																
Vapor Intrusion to Indoor Air (0-10 fbg) (No LNAPL)			--	--	--	100	--	--	--	--	--	--	--	--	--	--
Direct Contact (0-5 fbg)		Residential	--	--	--	--	1.9	--	21	--	--	--	--	--	9.7	0.063
Volatilization to Outdoor Air (5-10 fbg)		Residential	--	--	--	--	8.2	--	89	--	--	--	--	--	45	0.68
Direct Contact (0-10 fbg)		Utility Worker	--	--	--	--	14	--	314	--	--	--	--	--	219	4.5

Soil Borings

B-1	1/18/2012	3	<10	<10	6.2	<9.3	<0.0005	<0.001	<0.001	<0.001	<0.0005	--	<0.001	<0.001		
B-1	1/18/2012	5	31	31	850	2,900	2.4	1.1	100	290	<0.023	--	<0.046	<0.046		
B-1	1/18/2012	9.5	<10	<10	<4.0	8.2	0.027	<0.050	0.11	0.27	<0.025	--	<0.050	<0.050		
B-2	1/18/2012	3	<10	<10	5.7	<1.0	0.0006	<0.001	<0.001	<0.001	<0.0006	--	<0.001	<0.001		
B-2	1/18/2012	4.5	110	110	41	2.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	--	<0.001	<0.001		
B-3	1/18/2012	3	16	16	440	3,200	31	350	110	630	<0.25	--	<0.50	<0.50		
B-3	1/18/2012	4.5	<10	<10	110	1,700	25	240	72	370	<0.05	--	<0.50	<0.50		
B-3	1/18/2012	7.5	<10	<10	<4.0	110	1.2	2.6	1.4	7.1	<0.025	--	<0.051	<0.051		
B-3	1/18/2012	9.5	<10	<10	4.4	24	0.29	2.2	0.86	4.7	<0.024	--	<0.048	<0.048		
B-4	1/18/2012	3	<10	<10	59	600	5.9	4.4	6.6	24	<0.026	--	<0.053	<0.053		
B-4	1/18/2012	6	<10	<10	540	980	11	0.15	1.1	0.81	<0.028	--	<0.055	<0.055		
B-4	1/18/2012	9.5	<10	<10	<4.0	7.4	0.074	0.13	0.2	0.81	<0.026	--	<0.051	<0.051		
B-5	1/18/2012	3	51	51	1,300	5,200	6.3	43	110	570	<0.26	--	<0.52	<0.52		
B-5	1/18/2012	4.5	36	36	1,600	6,000	1.4	1.8	180	240	<0.47	--	<0.93	<0.93		
B-5	1/18/2012	6	<10	<10	19	160	0.034	0.77	1.3	401	<0.024	--	<0.048	<0.048		
B-5	1/18/2012	9.5	<10	<10	4.2	23	<0.026	0.024	0.028	1.1	<0.026	--	<0.051	<0.051		

TABLE 1
CUMULATIVE SOIL ANALYTICAL DATA
FORMER CHEVRON STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA

<i>Sample ID</i>	<i>Date</i>	<i>Depth (fbg)</i>	<i>TPH Used-Oil</i>	<i>TPH</i>	<i>TPHd</i>	<i>TPHg</i>	<i>Benzene</i>	<i>Toluene</i>	<i>Ethyl-benzene</i>	<i>Total Xylenes</i>	<i>MTBE</i>	<i>Lead</i>	<i>EDB</i>	<i>1,2-DCA</i>	<i>Naphthalene</i>	<i>PAHs</i>
Low-Threat Underground Storage Tank Case Closure Criteria ^b																
Vapor Intrusion to Indoor Air (0-10 fbg) (No LNAPL)			--	--	--	100	--	--	--	--	--	--	--	--	--	--
Direct Contact (0-5 fbg)		Residential	--	--	--	--	1.9	--	21	--	--	--	--	--	9.7	0.063
Volatilization to Outdoor Air (5-10 fbg)		Residential	--	--	--	--	8.2	--	89	--	--	--	--	--	45	0.68
Direct Contact (0-10 fbg)		Utility Worker	--	--	--	--	14	--	314	--	--	--	--	--	219	4.5
B-6	1/18/2012	3	37	37	420	2,100	3.1	64	59	350	<0.10	--	<0.20	<0.20		
B-6	1/18/2012	4.5	<10	<10	110	1,800	3.9	72	47	260	<0.10	--	<0.20	<0.20		
B-6	1/18/2012	6	<10	<10	<4.0	1.5	0.21	0.006	0.006	0.017	<0.0005	--	<0.001	<0.001		
B-6	1/18/2012	9.5	<10	<10	<4.0	24	0.1	2.2	2	12	<0.027	--	<0.053	<0.053		
B-7	1/18/2012	3.0	45	45	21	<1.0	<0.0005	<0.001	<0.001	0.001	<0.0005	--	<0.001	<0.001		
B-7	1/18/2012	6.0	67	67	28	<1.0	<0.0005	<0.001	<0.001	0.001	<0.0005	--	<0.001	<0.001		
B-8	1/18/2012	3.0	220	220	47	<10	<0.0005	<0.001	<0.001	<0.001	<0.0005	--	<0.001	<0.001		
B-8	1/18/2012	5.0	39	39	24	<1.0	<0.0005	<0.001	<0.001	1.001	<0.0005	--	<0.001	<0.001		
Soil Samples																
S1	9/17/1997	Surface	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	85	--	--		
S1	9/17/1997	1.5	--	--	--	<1.0	0.029	<0.0050	<0.0050	<0.0050	<0.025	13	--	--		
S2	9/17/1997	Surface	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	160	--	--		
S2	9/17/1997	1.5	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	6.7	--	--		
S3	9/17/1997	Surface	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	140	--	--		
S3	9/17/1997	1.5	--	--	--	19	0.12	0.28	0.3	1.4	0.11	12	--	--		
S4	9/17/1997	Surface	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	200	--	--		
S4	9/17/1997	1.5	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	16	--	--		
S5	9/17/1997	Surface	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	0.0078	<0.025	110	--	--		

**TABLE 1
CUMULATIVE SOIL ANALYTICAL DATA
FORMER CHEVRON STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Sample ID	Date	Depth (fbg)	TPH		TPHd	TPHg	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	Lead	EDB	1,2-DCA	Naph- thalene	PAHs
			Used-Oil	TPH												
<i>Low-Threat Underground Storage Tank Case Closure Criteria^b</i>																
Vapor Intrusion to Indoor Air (0-10 fbg) (No LNAPL)			--	--	--	100	--	--	--	--	--	--	--	--	--	--
Direct Contact (0-5 fbg)		Residential	--	--	--	--	1.9	--	21	--	--	--	--	--	9.7	0.063
Volatilization to Outdoor Air (5-10 fbg)		Residential	--	--	--	--	8.2	--	89	--	--	--	--	--	45	0.68
Direct Contact (0-10 fbg)		Utility Worker	--	--	--	--	14	--	314	--	--	--	--	--	219	4.5
S5	9/17/1997	1.5	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	15	--	--	--	--
S6	9/17/1997	Surface	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	38	--	--	--	--
S6	9/17/1997	1.5	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	15	--	--	--	--
S7	9/17/1997	Surface	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	35	--	--	--	--
S7	9/17/1997	1.5	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	a	--	--	--	--
S8	9/17/1997	Surface	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	a	--	--	--	--
S8	9/17/1997	1.5	--	--	--	4.9	<0.0050	<0.0050	0.011	0.048	<0.025	a	--	--	--	--
S9	9/17/1997	Surface	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	a	--	--	--	--
S9	9/17/1997	1.5	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	a	--	--	--	--
S10	9/17/1997	Surface	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	a	--	--	--	--
S10	9/17/1997	1.5	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	a	--	--	--	--
S11	9/17/1997	Surface	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	a	--	--	--	--
S11	9/17/1997	1.5	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	a	--	--	--	--
S12	9/17/1997	Surface	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	a	--	--	--	--
S12	9/17/1997	1.5	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	a	--	--	--	--
S13	9/17/1997	Surface	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	a	--	--	--	--
S13	9/17/1997	1.5	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	a	--	--	--	--
S14	9/17/1997	Surface	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	a	--	--	--	--
S14	9/17/1997	1.5	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	20	--	--	--	--
S15	9/17/1997	Surface	--	--	--	1.6	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	40	--	--	--	--
S15	9/17/1997	1.5	--	--	--	3.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	12	--	--	--	--

TABLE 1
CUMULATIVE SOIL ANALYTICAL DATA
FORMER CHEVRON STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA

Sample ID	Date	Depth (fbg)	TPH Used-Oil	TPH	TPHd	TPHg	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	Lead	EDB	1,2-DCA	Naph- thalene	PAHs
<i>milligrams per kilogram (mg/kg)</i>																
Low-Threat Underground Storage Tank Case Closure Criteria ^b																
Vapor Intrusion to Indoor Air (0-10 fbg) (No LNAPL)			--	--	--	100	--	--	--	--	--	--	--	--	--	--
Direct Contact (0-5 fbg)		Residential	--	--	--	--	1.9	--	21	--	--	--	--	--	9.7	0.063
Volatilization to Outdoor Air (5-10 fbg)		Residential	--	--	--	--	8.2	--	89	--	--	--	--	--	45	0.68
Direct Contact (0-10 fbg)		Utility Worker	--	--	--	--	14	--	314	--	--	--	--	--	219	4.5

Monitoring Wells

MW-4	5/15/1992	3	--	--	--	<1	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	--
MW-5	5/15/1992	3	--	--	--	<1	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	--
MW-6	5/15/1992	3	--	--	--	<1	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	--
MW-7	11/11/1993	5	--	--	--	63	1.3	0.67	1.6	4.6	--	--	--	--	--	--
TMW-1	11/11/1993	5	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	<0.017	--	--	--	--	--	--
MW-8	10/13/1995	5	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	--	--	--	--	--	--
MW-9	10/13/1995	5	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	--	--	--	--	--	--
MW-10	10/13/1995	5	--	--	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	--	--	--	--	--	--

Soil Borings

SB1	6/27/1989	1	--	0.43	--	--	0.002	<0.001	0.001	0.008	--	--	--	--	--	--
SB1 (Duplicate)	6/27/1989	1	--	--	--	--	0.001	<0.001	<0.001	0.008	--	--	--	--	--	--
SB1	6/27/1989	4.5	--	5,500	--	--	18	111	37	149	--	--	--	--	--	--
SB1	6/27/1989	6	--	65	--	--	1	2.200	0.540	1.930	--	--	--	--	--	--
SB1	6/27/1989	9.5	--	10	--	--	0.170	0.460	0.140	0.530	--	--	--	--	--	--
SB2	6/27/1989	1	--	<0.05	--	--	0.009	0.024	0.010	0.026	--	--	--	--	--	--
SB2 (Duplicate)	6/27/1989	1	--	<0.05	--	--	--	--	--	--	--	--	--	--	--	--
SB2	6/27/1989	4	--	1,500	--	--	45	230	78	283	--	--	--	--	--	--
SB2	6/27/1989	6	--	4.7	--	--	0.470	1.300	0.310	1.120	--	--	--	--	--	--

TABLE 1
CUMULATIVE SOIL ANALYTICAL DATA
FORMER CHEVRON STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA

Sample ID	Date	Depth (fbg)	TPH Used-Oil	TPH	TPHd	TPHg	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	Lead	EDB	1,2-DCA	Naph- thalene	PAHs
<i>Low-Threat Underground Storage Tank Case Closure Criteria^b</i>																
<i>Vapor Intrusion to Indoor Air (0-10 fbg) (No LNAPL)</i>			--	--	--	100	--	--	--	--	--	--	--	--	--	--
<i>Direct Contact (0-5 fbg)</i>		<i>Residential</i>	--	--	--	--	1.9	--	21	--	--	--	--	--	9.7	0.063
<i>Volatilization to Outdoor Air (5-10 fbg)</i>		<i>Residential</i>	--	--	--	--	8.2	--	89	--	--	--	--	--	45	0.68
<i>Direct Contact (0-10 fbg)</i>		<i>Utility Worker</i>	--	--	--	--	14	--	314	--	--	--	--	--	219	4.5
SB3	6/27/1989	0.5	--	0.07	--	--	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--
SB3	6/27/1989	3.5	--	850	--	--	2.400	3.200	5.300	17.8	--	--	--	--	--	--
SB4	6/29/1989	1	--	<0.05	--	--	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--
SB4 (Duplicate)	6/29/1989	1	--	<0.05	--	--	--	--	--	--	--	--	--	--	--	--
SB4	6/29/1989	4	--	<0.05	--	--	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--
SB4	6/29/1989	7	--	<0.05	--	--	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--
SB5	6/29/1989	0.5	--	0.25	--	--	0.019	0.017	0.019	0.153	--	--	--	--	--	--
SB5 (Duplicate)	6/29/1989	0.5	--	--	--	--	0.020	0.021	0.023	0.178	--	--	--	--	--	--
SB5	6/29/1989	4	--	1,700	--	--	15	81	30	108	--	--	--	--	--	--
SB5 (Duplicate)	6/29/1989	4	--	1,600	--	--	--	--	--	--	--	--	--	--	--	--
SB5	6/29/1989	6	--	470	--	--	0.260	1.900	1.400	5.200	--	--	--	--	--	--
SB6	6/28/1989	3.5	--	15	--	--	0.026	0.100	0.160	0.370	--	--	--	--	--	--
SB7	6/28/1989	4	--	<0.05	--	--	0.002	<0.001	<0.001	<0.001	--	--	--	--	--	--
SB7 (Duplicate)	6/28/1989	4	--	--	--	--	0.002	<0.001	<0.001	<0.001	--	--	--	--	--	--
SB8	6/29/1989	3	--	<0.05	--	--	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--

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CUMULATIVE SOIL ANALYTICAL DATA
FORMER CHEVRON STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA

Sample ID	Date	Depth (fbg)	TPH Used-Oil	TPH	TPHd	TPHg	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	Lead	EDB	1,2-DCA	Naph- thalene	PAHs
<i>milligrams per kilogram (mg/kg)</i>																
Low-Threat Underground Storage Tank Case Closure Criteria ^b																
Vapor Intrusion to Indoor Air (0-10 fbg) (No LNAPL)			--	--	--	100	--	--	--	--	--	--	--	--	--	--
Direct Contact (0-5 fbg)		Residential	--	--	--	--	1.9	--	21	--	--	--	--	--	9.7	0.063
Volatilization to Outdoor Air (5-10 fbg)		Residential	--	--	--	--	8.2	--	89	--	--	--	--	--	45	0.68
Direct Contact (0-10 fbg)		Utility Worker	--	--	--	--	14	--	314	--	--	--	--	--	219	4.5
UST/Excavation Samples																
1	6/4/1986	11	--	--	--	<1	--	--	--	--	--	--	--	--	--	--
2	6/4/1986	12	--	--	--	<1	--	--	--	--	--	--	--	--	--	--
3	6/4/1986	10	--	--	--	<1	--	--	--	--	--	--	--	--	--	--
4	6/4/1986	10.5	--	--	--	<1	--	--	--	--	--	--	--	--	--	--
6	6/4/1986	8	<11	--	--	--	--	--	--	--	--	--	--	--	--	--
10	6/4/1986	10	--	--	--	<1	--	--	--	--	--	--	--	--	--	--
11	6/4/1986	12	--	--	--	<1	--	--	--	--	--	--	--	--	--	--
12	6/4/1986	10	<11	--	--	--	--	--	--	--	--	--	--	--	--	--

Explanation:

fbg = feet below grade

TPHg = Total petroleum hydrocarbons as gasoline by EPA Method 8015

TPH used-oil by EPA Method 3510

BTEX = Benzene, toluene, ethylbenzene, xylene by EPA Method 8020

MTBE = methyl tertiary butyl ether

<x.xx = Not present above laboratory detection limit

a = results could not be located

b The Low Threat Underground Storage Tank Case Closure Policy was established in 2012 by the State Water Board to provide standard statewide closure criteria for low threat UST sites that are subject to Chapter 6.7 of Division 20 of the Health and Safety Code and Chapter 16 of Division 3 of Title 23 of the California Code of Regulations

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
C-1	08/18/1986	-	4.10	-	-	-	-	-	-	-	-	-
C-1	09/04/1986	-	-	-	-	-	15,000	760	820	1,500	-	-
C-1	07/22/1987	-	-	-	-	-	1,100	250	7.0	40	-	-
C-1	05/03/1989	-	4.46	-	-	-	6,900	3,800	190	229	-	-
C-1	12/04/1989	-	4.16	-	-	-	17,000	8,000	490	470	-	-
C-1	02/14/1990	-	3.64	-	-	-	19,000	12,000	990	1,050	-	-
C-1	03/07/1990	-	3.36	-	-	-	-	4,260	261	430	-	-
C-1	09/06/1991	-	4.43	-	-	-	21,000	10,000	100	240	560	-
C-1	12/15/1991	-	4.78	-	-	-	20,000	4,900	43	110	330	-
C-1	03/03/1992	-	2.39	-	-	-	13,000	5,800	730	340	1,200	-
C-1	06/04/1992	4.08	4.08	0.00	0.00	-	34,000	9,400	350	290	1,200	-
C-1	10/13/1992	4.08	4.75	-0.67	0.00	-	24,000	11,000	98	280	530	-
C-1	01/11/1993	4.08	2.26	1.82	Sheen	-	7,100	1,500	130	150	700	-
C-1	04/14/1993	4.08	2.90	1.18	Sheen	-	29,000	7,300	4,000	640	2,300	-
C-1	07/13/1993	4.08	3.97	0.11	Sheen	-	650,000	27,000	18,000	6,300	29,000	-
C-1	10/19/1993	4.08	4.50	-0.42	0.00	-	40,000	12,000	730	1,100	3,600	-
C-1	11/30/1993	7.50	4.27	3.23	0.00	-	-	-	-	-	-	-
C-1	01/27/1994	7.50	3.35	4.15	0.00	-	36,000	8,600	220	670	1,900	-
C-1	04/07/1994	7.50	3.42	4.08	0.00	-	53,000	12,000	3,500	480	3,300	-
C-1	07/01/1994	7.50	3.96	3.54	0.00	-	65,000	19,000	5,900	1,000	9,000	-
C-1	10/05/1994	7.50	4.39	3.11	0.00	-	160,000	23,000	12,000	2,200	11,000	-
C-1	01/12/1995	7.50	1.52	6.38	0.50	-	-	-	-	-	-	-
C-1	04/26/1995	7.50	4.40	4.86	2.20	-	-	-	-	-	-	-
C-1	07/12/1995	7.50	4.85	4.10	1.81	-	-	-	-	-	-	-
C-1	10/30/1995	7.50	5.67	3.13	1.63	-	-	-	-	-	-	-

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
C-1	01/04/1996	7.50	3.92	3.68	0.12	-	-	-	-	-	-	-
C-1	01/10/1996	7.50	3.48	4.12	0.13	-	-	-	-	-	-	-
C-1	01/17/1996	7.50	3.40	4.12	0.02	-	-	-	-	-	-	-
C-1	01/22/1996	7.50	2.90	4.60	0.00	-	82,000	18,000	4,400	1,400	5,200	<1,000
C-1	02/23/1996	7.50	4.10	4.89	1.86	-	-	-	-	-	-	-
C-1	02/28/1996	7.50	-	-	0.83 >	-	-	-	-	-	-	-
C-1	03/08/1996	7.50	2.86	6.10	1.83	-	-	-	-	-	-	-
C-1	03/26/1996	7.50	3.96	4.56	1.28	-	-	-	-	-	-	-
C-1	04/11/1996	7.50	5.61	3.29	1.75	-	-	-	-	-	-	-
C-1	04/19/1996	7.50	3.09	4.44	0.04	-	-	-	-	-	-	-
C-1	04/24/1996	7.50	3.04	4.48	0.03	-	-	-	-	-	-	-
C-1	05/03/1996	7.50	4.02	3.85	0.46	-	-	-	-	-	-	-
C-1	05/08/1996	7.50	4.25	3.53	0.35	-	-	-	-	-	-	-
C-1	05/17/1996	7.50	3.24	4.29	0.04	-	-	-	-	-	-	-
C-1	05/22/1996	7.50	3.10	4.46	0.07	-	-	-	-	-	-	-
C-1	06/18/1996	7.50	4.68	3.20	0.48	-	-	-	-	-	-	-
C-1	07/03/1996	7.50	5.03	2.57	0.13	-	-	-	-	-	-	-
C-1	07/09/1996	7.50	4.63	3.05	0.23	-	-	-	-	-	-	-
C-1	07/17/1996	7.50	4.73	2.89	0.15	-	-	-	-	-	-	-
C-1	07/29/1996	7.50	5.10	2.47	0.09	-	-	-	-	-	-	-
C-1	08/02/1996	7.50	5.68	1.84	0.03	-	-	-	-	-	-	-
C-1	08/07/1996	7.50	5.16	2.35	0.01	-	-	-	-	-	-	-
C-1	08/23/1996	7.50	5.75	1.77	0.03	-	-	-	-	-	-	-
C-1	08/28/1996	7.50	5.53	1.99	0.03	-	-	-	-	-	-	-
C-1	09/06/1996	7.50	5.38	2.12	0.00	-	-	-	-	-	-	-

TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
C-1	09/12/1996	7.50	5.48	2.04	0.03	-	-	-	-	-	-	-
C-1	09/19/1996	7.50	6.32	1.20	0.03	-	-	-	-	-	-	-
C-1	10/10/1996	7.50	4.58	3.00	0.10	-	-	-	-	-	-	-
C-1	10/17/1996	7.50	5.61	1.90	0.01	-	-	-	-	-	-	-
C-1	10/29/1996	7.50	6.01	1.49	0.00	-	-	-	-	-	-	-
C-1	11/07/1996	7.50	5.56	1.94	0.04	-	-	-	-	-	-	-
C-1	11/11/1996	7.50	5.32	2.18	0.04	-	-	-	-	-	-	-
C-1	12/17/1996	7.50	3.73	3.77	0.01	-	-	-	-	-	-	-
C-1	12/20/1996	7.50	3.33	4.17	0.03	-	-	-	-	-	-	-
C-1	01/15/1997	7.50	2.74	4.76	0.00	-	47,000	16,000	2,800	1,300	4,900	<1,000
C-1	01/22/1997	7.50	1.37	6.13	0.19	-	-	-	-	-	-	-
C-1	02/04/1997	7.50	2.98	4.52	0.51	-	-	-	-	-	-	-
C-1	02/20/1997	7.50	4.09	3.41	0.13	-	-	-	-	-	-	-
C-1	03/06/1997	7.50	3.75	3.75	0.56	-	-	-	-	-	-	-
C-1	03/14/1997	7.50	3.82	3.68	0.03	-	-	-	-	-	-	-
C-1	03/20/1997	7.50	3.73	3.77	0.03	-	-	-	-	-	-	-
C-1	03/25/1997	7.50	4.32	3.18	0.01	-	-	-	-	-	-	-
C-1	03/31/1997	7.50	3.71	3.79	0.03	-	-	-	-	-	-	-
C-1	04/03/1997	7.50	4.60	2.92	0.03	-	-	-	-	-	-	-
C-1	04/09/1997	7.50	4.25	3.27	0.02	-	-	-	-	-	-	-
C-1	04/24/1997	7.50	4.65	2.87	0.02	-	-	-	-	-	-	-
C-1	04/30/1997	7.50	3.50	4.02	0.02	-	-	-	-	-	-	-
C-1	05/22/1997	7.50	4.97	2.53	0.00	-	-	-	-	-	-	-
C-1	06/03/1997	7.50	3.62	3.93	0.06	-	-	-	-	-	-	-
C-1	07/09/1997	7.50	4.30	3.25	0.06	-	-	-	-	-	-	-

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
C-1	08/12/1997	7.50	5.18	2.32	0.00	-	-	-	-	-	-	-
C-1	09/30/1997	7.50	5.25	2.65	0.50	-	-	-	-	-	-	-
C-1	10/29/1997	7.50	5.33	2.19	0.03	-	-	-	-	-	-	-
C-1	11/13/1997	7.50	4.86	2.66	0.02	-	-	-	-	-	-	-
C-1	12/18/1997	7.50	2.34	5.16	0.00	-	-	-	-	-	-	-
C-1	01/14/1998	7.50	0.25	7.27	0.02	-	-	-	-	-	-	-
C-1	02/02/1998	7.50	2.35	5.19	0.05	-	-	-	-	-	-	-
C-1	03/16/1998	7.50	2.50	5.40	0.50	-	-	-	-	-	-	-
C-1	04/17/1998	7.50	2.65	5.17	0.40	-	-	-	-	-	-	-
C-1	05/01/1998	7.50	2.39	5.14	0.04	-	-	-	-	-	-	-
C-1	06/17/1998	7.50	3.26	4.30	0.08	-	-	-	-	-	-	-
C-1	07/15/1998	7.50	3.55	3.95	0.00	-	110,000	22,000	22,000	1,000	10,000	<250
C-1	09/01/1998	7.50	4.00	3.50	0.00	-	-	-	-	-	-	-
C-1	10/27/1998	7.50	4.48	3.02	0.00	-	45,000	12,000	5,400	590	4,300	<500
C-1	11/19/1998	7.50	3.89	3.61	0.00	-	-	-	-	-	-	-
C-1	12/19/1998	7.50	2.13	5.39	0.02	-	-	-	-	-	-	-
C-1	01/20/1999	7.50	3.98	3.52	0.00	-	50,300	7,050	5,030	244	6,090	<40
C-1	02/24/1999	7.50	2.55	4.95	0.00	-	-	-	-	-	-	-
C-1	03/26/1999	7.50	2.14	5.97	0.76	-	-	-	-	-	-	-
C-1	04/19/1999	7.50	1.04	6.46	0.00	-	150,000	21,000	20,000	3,000	18,000	49 ² / _{<2.5}
C-1	07/29/1999	7.50	3.76	3.76	0.02	-	-	-	-	-	-	-
C-1	08/30/1999	7.50	4.30	3.20	0.00	-	-	-	-	-	-	-
C-1	09/23/1999	7.50	3.84	3.68	0.02	-	-	-	-	-	-	-
C-1	10/13/1999	7.50	1.27	6.23	0.00	-	136,000	23,900	30,000	2,390	17,300	<500
C-1	11/17/1999	7.50	3.59	3.91	0.00	-	-	-	-	-	-	-

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GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
C-1	12/08/1999	7.50	3.79	3.71	0.00	-	-	-	-	-	-	-
C-1	01/25/2000	7.50	1.99	5.54	0.04	-	-	-	-	-	-	-
C-1	04/03/2000**	7.50	2.20	5.38	0.10	-	-	-	-	-	-	-
C-1	05/26/2000**	7.50	2.52	5.16	0.23	-	-	-	-	-	-	-
C-1	06/19/2000**	7.50	2.89	4.76	0.19	-	-	-	-	-	-	-
C-1	07/03/2000**	7.50	3.45	4.25	0.25	-	-	-	-	-	-	-
C-1	08/01/2000**	7.50	3.78	3.85	0.16	-	-	-	-	-	-	-
C-1	09/30/2000**	7.50	4.03	3.50	0.04	-	-	-	-	-	-	-
C-1	10/23/2000**	7.50	4.15	3.37	0.03	-	-	-	-	-	-	-
C-1	11/21/2000	7.50	3.42	4.08	0.00	-	-	-	-	-	-	-
C-1	12/22/2000	7.50	2.96	4.54	0.00	-	-	-	-	-	-	-
C-1	01/08/2001	7.50	2.94	4.56	0.00	-	-	-	-	-	-	-
C-1	02/17/2001**	7.50	2.09	5.88	0.59	-	-	-	-	-	-	-
C-1	03/13/2001**	7.50	2.20	5.91	0.76	-	-	-	-	-	-	-
C-1	04/09/2001 ^{18,**}	7.50	2.45	5.26	0.26	-	-	-	-	-	-	-
C-1	05/18/2001**	7.50	2.70	5.27	0.59	-	-	-	-	-	-	-
C-1	06/12/2001**	7.50	3.50	4.78	0.97	-	-	-	-	-	-	-
C-1	07/19/2001**	7.50	4.25	4.01	0.95	-	-	-	-	-	-	-
C-1	08/23/2001 ^{18,**}	7.50	4.34	3.22	0.07	-	-	-	-	-	-	-
C-1	09/17/2001**	7.50	4.39	3.17	0.08	-	-	-	-	-	-	-
C-1	10/08/2001**	7.50	4.45	3.08	0.04	-	-	-	-	-	-	-
C-1	11/27/2001	7.50	3.89	3.61	0.00	-	330,000	9,800	5,300	3,800	22,000	<50
C-1	12/17/2001	7.50	1.81	5.69	0.00	-	-	-	-	-	-	-
C-1	01/07/2002**	7.50	2.27	5.64	0.51	-	-	-	-	-	-	-
C-1	02/26/2002 ^{18,**}	7.50	2.70	5.22	0.52	-	-	-	-	-	-	-

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GROUNDWATER MONITORING AND SAMPLING DATA
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3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
C-1	03/27/2002**	7.50	2.87	5.47	1.05	-	-	-	-	-	-	-
C-1	04/08/2002**	7.50	2.45	6.03	1.23	-	-	-	-	-	-	-
C-1	05/23/2002 ^{18,**}	7.50	3.57	4.35	0.52	-	-	-	-	-	-	-
C-1	06/17/2002**	7.50	3.90	3.88	0.35	-	-	-	-	-	-	-
C-1	07/31/2002**	7.50	4.12	3.54	0.20	-	-	-	-	-	-	-
C-1	08/09/2002 ^{18,**}	7.50	4.15	3.48	0.16	-	-	-	-	-	-	-
C-1	09/17/2002**	7.50	4.33	3.27	0.12	-	-	-	-	-	-	-
C-1	10/15/2002**	7.50	4.51	3.11	0.15	-	-	-	-	-	-	-
C-1	11/08/2002	7.50	4.11	3.39	0.00	-	51,000	7,000	510	820	5,800	<3.0
C-1	12/19/2002	7.50	1.14	6.36	0.00	-	-	-	-	-	-	-
C-1	01/14/2003	7.50	1.80	5.70	0.00	-	-	-	-	-	-	-
C-1	02/07/2003 ^{18,**}	7.50	2.95	4.79	0.30	-	-	-	-	-	-	-
C-1	03/20/2003**	7.50	2.86	4.97	0.41	-	-	-	-	-	-	-
C-1	04/15/2003**	7.50	2.12	5.46	0.10	-	-	-	-	-	-	-
C-1	05/09/2003 ^{18,**}	7.50	2.95	5.11	0.70	-	-	-	-	-	-	-
C-1	06/27/2003**	7.50	3.97	3.93	0.50	-	-	-	-	-	-	-
C-1	07/16/2003**	7.50	3.68	4.04	0.28	-	-	-	-	-	-	-
C-1	08/15/2003 ^{18,**}	7.50	4.29	3.39	0.22	-	-	-	-	-	-	-
C-1	09/26/2003**	7.50	4.60	3.05	0.19	-	-	-	-	-	-	-
C-1	10/18/2003**	7.50	4.72	2.90	0.15	-	-	-	-	-	-	-
C-1	11/14/2003 ^{18,**}	7.50	4.31	3.35	0.20	-	-	-	-	-	-	-
C-1	12/23/2003	7.50	1.81	5.69	0.00	-	-	-	-	-	-	-
C-1	01/22/2004**	7.50	4.19	3.32	0.01	-	-	-	-	-	-	-
C-1	02/13/2004 ^{18,**}	7.50	3.04	4.49	0.04	-	-	-	-	-	-	-
C-1	03/11/2004**	7.50	1.85	5.97	0.40	-	-	-	-	-	-	-

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Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
C-1	04/22/2004**	7.50	3.08	4.60	0.22	-	-	-	-	-	-	-
C-1	05/14/2004 ^{18,**}	7.50	3.49	4.03	0.03	-	-	-	-	-	-	-
C-1	06/18/2004**	7.50	3.41	4.19	0.13	-	-	-	-	-	-	-
C-1	07/23/2004**	7.50	3.28	4.31	0.11	-	-	-	-	-	-	-
C-1	08/13/2004 ^{18,**}	7.50	3.14	4.40	0.05	-	-	-	-	-	-	-
C-1	09/13/2004**	7.50	4.53	3.04	0.09	-	-	-	-	-	-	-
C-1	10/22/2004**	7.50	3.19	4.33	0.03	-	-	-	-	-	-	-
C-1	11/12/2004 ^{18,**}	7.50	3.22	4.30	0.03	-	-	-	-	-	-	-
C-1	12/02/2004**	7.50	3.28	4.24	0.02	-	-	-	-	-	-	-
C-1	01/28/2005**	7.50	3.19	4.32	0.01	-	-	-	-	-	-	-
C-1	02/11/2005 ^{18,**}	7.50	2.75	4.78	0.04	-	-	-	-	-	-	-
C-1	03/11/2005**	7.50	2.94	4.58	0.03	-	-	-	-	-	-	-
C-1	04/26/2005**	7.50	3.03	4.49	0.02	-	-	-	-	-	-	-
C-1	05/13/2005 ^{18,**}	7.50	3.18	4.34	0.02	-	-	-	-	-	-	-
C-1	06/01/2005**	7.50	3.22	4.30	0.02	-	-	-	-	-	-	-
C-1	07/15/2005**	7.50	3.09	4.43	0.02	-	-	-	-	-	-	-
C-1	08/19/2005 ^{18,**}	7.50	2.88	4.64	0.03	-	-	-	-	-	-	-
C-1	09/23/2005**	7.50	2.95	4.57	0.02	-	-	-	-	-	-	-
C-1	10/14/2005**	7.50	3.01	4.50	0.01	-	-	-	-	-	-	-
C-1	11/18/2005 ^{18,**}	7.50	3.21	4.31	0.02	-	-	-	-	-	-	-
C-1	12/09/2005**	7.50	3.61	3.90	0.01	-	-	-	-	-	-	-
C-1	01/12/2006**	7.50	2.98	4.53	0.01	-	-	-	-	-	-	-
C-1	02/10/2006 ^{15,**}	7.50	2.69	4.82	0.01	-	100,000	11,000	2,500	2,900	15,000	<10
C-1	03/13/2006**	7.50	2.81	4.70	0.01	-	-	-	-	-	-	-
C-1	04/13/2006**	7.50	2.75	4.76	0.01	-	-	-	-	-	-	-

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
C-1	05/12/2006 ^{18,**}	7.50	3.02	4.49	0.01	-	-	-	-	-	-	-
C-1	06/12/2006 ^{**}	7.50	3.10	4.41	0.01	-	-	-	-	-	-	-
C-1	07/13/2006 ^{**}	7.50	3.14	4.38	0.02	-	-	-	-	-	-	-
C-1	08/11/2006 ^{15,**}	7.50	3.70	3.81	0.01	-	200,000	8,600	470	1,700	8,800	<10
C-1	09/11/2006 ^{**}	7.50	3.75	3.77	0.02	-	-	-	-	-	-	-
C-1	10/17/2006 ^{**}	7.50	3.82	3.69	0.01	-	-	-	-	-	-	-
C-1	11/17/2006 ^{18,**}	7.50	3.11	4.41	0.03	-	-	-	-	-	-	-
C-1	12/15/2006 ^{**}	7.50	2.95	4.57	0.02	-	-	-	-	-	-	-
C-1	01/16/2007 ^{**}	7.50	2.98	4.54	0.02	-	-	-	-	-	-	-
C-1	02/16/2007 ¹⁵	7.50	2.77	4.73	0.00	-	25,000	4,300	260	310	3,300	<5
C-1	03/16/2007 ^{**}	7.50	3.07	4.44	0.01	-	-	-	-	-	-	-
C-1	04/17/2007 ^{**}	7.50	2.98	4.53	0.01	-	-	-	-	-	-	-
C-1	05/17/2007 ^{15,**}	7.50	3.05	4.46	0.01	-	110,000 ¹⁶	12,000 ¹⁶	1,000 ¹⁶	2,000 ¹⁶	15,000 ¹⁶	<5
C-1	06/15/2007 ^{**}	7.50	3.08	4.43	0.01	-	-	-	-	-	-	-
C-1	07/17/2007 ^{**}	7.50	3.13	4.38	0.01	-	-	-	-	-	-	-
C-1	08/09/2007 ^{18,**}	7.50	3.24	4.28	0.02	-	-	-	-	-	-	-
C-1	09/14/2007 ^{**}	7.50	3.16	4.35	0.01	-	-	-	-	-	-	-
C-1	10/16/2007 ^{**}	7.50	3.04	4.47	0.01	-	-	-	-	-	-	-
C-1	11/08/2007 ^{15,**}	7.50	3.11	4.40	0.01	-	150,000	13,000	570	1,800	10,000	<13
C-1	12/07/2007 ^{**}	7.50	2.98	4.54	0.03	-	-	-	-	-	-	-
C-1	01/16/2008 ^{**}	7.50	2.95	4.57	0.02	-	-	-	-	-	-	-
C-1	02/06/2008 ^{15,**}	7.50	2.61	4.90	0.01	-	110,000	13,000	500	5,300	21,000	<10
C-1	03/07/2008 ^{**}	7.50	2.87	4.65	0.02	-	-	-	-	-	-	-
C-1	04/16/2008 ^{**}	7.50	3.06	4.46	0.02	-	-	-	-	-	-	-
C-1	05/07/2008 ^{18,**}	7.50	2.98	4.54	0.03	-	-	-	-	-	-	-

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
C-1	06/06/2008**	7.50	3.02	4.50	0.02	-	-	-	-	-	-	-
C-1	07/16/2008**	7.50	3.12	4.40	0.02	-	-	-	-	-	-	-
C-1	09/05/2008**	7.50	3.97	3.75	0.28	-	-	-	-	-	-	-
C-1	09/11/2008 ^{18,**}	7.50	4.22	3.61	0.41	-	-	-	-	-	-	-
C-1	10/17/2008**	7.50	4.16	3.60	0.33	-	-	-	-	-	-	-
C-1	11/10/2008 ^{18,**}	7.50	4.05	3.54	0.11	-	-	-	-	-	-	-
C-1	12/15/2008**	7.50	3.85	3.69	0.05	-	-	-	-	-	-	-
C-1	01/21/2009**	7.50	3.91	3.62	0.04	-	-	-	-	-	-	-
C-1	02/09/2009 ^{15,**}	7.50	3.72	3.79	0.01	-	53,000	3,100	66	660	3,700	<1
C-1	05/28/2009	7.50	3.48	4.02	0.02	-	-	-	-	-	-	-
C-1	08/18/2009	7.50	4.40	3.10	0.02	-	-	-	-	-	-	-
C-1	11/17/2009	7.50	4.21	3.29	0.03	-	-	-	-	-	-	-
C-1	03/31/2010	7.50	2.07	5.46	0.04	-	-	-	-	-	-	-
C-1	05/17/2010	7.50	2.87	4.83	0.25	-	-	-	-	-	-	-
C-1	08/26/2010 ¹⁸	7.50	4.03	3.50	0.04	-	-	-	-	-	-	-
C-1	11/11/2010 ^{18,**}	7.50	3.82	3.70	0.03	-	-	-	-	-	-	-
C-1	03/02/2011 ^{18,**}	7.50	1.12	6.41	0.04	-	-	-	-	-	-	-
C-1	06/17/2011 ^{18,**}	7.50	3.00	4.51	0.01	-	-	-	-	-	-	-
C-1	09/08/2011 ^{18,**}	7.50	3.60	3.92	0.02	-	-	-	-	-	-	-
C-1	12/29/2011 ^{18,**}	7.50	4.14	3.37	0.01	-	-	-	-	-	-	-
C-1	03/28/2012 ^{18,**}	7.50	1.01	6.52	0.04	-	-	-	-	-	-	-
C-1	05/31/2012 ^{18,**}	7.50	2.96	4.56	0.02	-	-	-	-	-	-	-
C-1	09/28/2012	7.50	4.50	3.00	0.00	-	48,000	8,600	81	1,800	3,300	<5
C-1	12/21/2012 ^{18,**}	7.50	2.20	5.32	0.02	-	-	-	-	-	-	-
C-1	03/29/2013 ^{18,**}	7.50	3.20	4.33	0.04	-	-	-	-	-	-	-

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
C-1	06/28/2013 ^{18,**}	7.50	3.90	3.61	0.01	-	-	-	-	-	-	-
C-1	09/20/2013 ^{18,**}	7.50	4.73	2.79	0.02	-	-	-	-	-	-	-
C-1	12/30/2013 ^{18,**}	7.50	4.41	3.10	0.01	-	-	-	-	-	-	-
C-1	03/31/2014 ^{18,**}	7.50	2.55	4.97	0.02	-	-	-	-	-	-	-
C-1	06/30/2014	7.50	3.82	3.68	0.00	-	25,000	6,700	72	710	310	<10
C-1	09/30/2014 ^{18,**}	7.50	5.84	1.68	0.02	-	-	-	-	-	-	-
C-1	12/30/2014	7.50	1.90	5.60	0.00	-	20,000	5,200	48	510	310	<5
C-1	03/20/2015	7.50	2.29	5.21	0.00	-	21,000	6,700	130	850	480	<5
C-3	08/18/1986	-	4.00	-	-	-	-	-	-	-	-	-
C-3	09/04/1986	-	-	-	-	-	50	3.2	5.4	5.8	-	-
C-3	07/22/1987	-	-	-	-	-	<50	<0.5	<1.0	<4.0	-	-
C-3	05/03/1989	-	4.15	-	-	-	<50	<0.5	<1.0	<2.0	-	-
C-3	12/04/1989	-	4.24	-	-	-	<250	<0.5	<0.5	<0.5	-	-
C-3	02/14/1990	-	3.57	-	-	-	<50	<0.5	<0.5	<0.5	-	-
C-3	03/07/1990	-	3.31	-	-	-	-	<5.0	<5.0	<5.0	-	-
C-3	09/06/1991	-	4.59	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-
C-3	12/15/1991	-	4.84	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-
C-3	03/03/1992	-	2.17	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-
C-3	06/04/1992	4.41	4.01	0.40	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	-
C-3	10/13/1992	4.41	4.79	-0.38	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	-
C-3	01/11/1993	4.41	2.01	2.40	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	-
C-3	04/14/1993	4.41	2.76	1.65	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	-
C-3	07/13/1993	4.41	3.96	0.45	0.00	-	<50	<0.5	<0.5	<0.5	<1.5	-
C-3	10/19/1993	4.41	4.53	-0.12	0.00	-	66	12	1.4	1.0	8.4	-

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
C-3	11/30/1993	7.83	4.04	3.79	0.00	-	-	-	-	-	-	-
C-3	01/27/1994	7.83	3.17	4.66	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	-
C-3	04/07/1994	7.83	3.20	4.63	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	-
C-3	07/01/1994	7.83	3.99	3.84	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	-
C-3	10/05/1994	7.83	4.54	3.29	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	-
C-3	01/12/1995	7.83	0.80	7.03	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	-
C-3	05/02/1995	7.83	2.15	5.68	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	-
C-3	07/12/1995	7.83	3.42	4.41	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	-
C-3	10/30/1995	7.83	4.46	3.37	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
C-3	01/22/1996	7.83	1.73	6.10	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
C-3	04/24/1996	7.83	2.62	5.21	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
C-3	07/29/1996	7.83	3.94	3.89	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
C-3	10/10/1996	7.83	4.06	3.77	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
C-3	01/15/1997	7.83	1.54	6.29	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
C-3	04/03/1997	7.83	3.23	4.60	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
C-3	07/09/1997	7.83	4.36	3.47	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
C-3	10/29/1997	7.83	4.65	3.18	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
C-3	01/14/1998	7.83	0.77	7.06	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
C-3	07/15/1998	7.83	3.72	4.11	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
C-3	01/20/1999	7.83	2.65	5.18	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.0
C-3	04/19/1999	7.83	1.78	6.05	0.00	-	-	-	-	-	-	-
C-3	04/03/2000 ¹⁹	7.83	-	-	-	-	-	-	-	-	-	-
C-3	07/03/2000	7.83	-	-	-	-	-	-	-	-	-	-
C-3	10/23/2000	7.83	-	-	-	-	-	-	-	-	-	-
C-3	01/08/2001 ¹¹	7.83	3.71	4.12	0.00	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
C-3	04/09/2001	7.83	-	-	-	-	-	-	-	-	-	-
C-3	08/23/2001 ¹⁹	7.83	-	-	-	-	-	-	-	-	-	-
C-3	11/27/2001 ¹⁹	7.83	-	-	-	-	-	-	-	-	-	-
C-3	02/26/2002	7.83	2.38	5.45	0.00	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5
C-3	05/23/2002 ¹⁹	7.83	-	-	-	-	-	-	-	-	-	-
C-3	08/09/2002 ¹⁹	7.83	-	-	-	-	-	-	-	-	-	-
C-3	11/08/2002 ¹⁹	7.83	-	-	-	-	-	-	-	-	-	-
C-3	02/07/2003	7.83	2.73	5.10	0.00	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5
C-3	05/09/2003 ¹⁹	7.83	-	-	-	-	-	-	-	-	-	-
C-3	08/15/2003 ¹⁹	7.83	-	-	-	-	-	-	-	-	-	-
C-3	11/14/2003 ¹⁹	7.83	-	-	-	-	-	-	-	-	-	-
C-3	02/13/2004 ¹⁵	7.83	2.81	5.02	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
C-3	05/14/2004 ¹⁹	7.83	-	-	-	-	-	-	-	-	-	-
C-3	11/12/2004 ¹⁹	7.83	-	-	-	-	-	-	-	-	-	-
C-3	02/11/2005 ¹⁵	7.83	2.58	5.25	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
C-3	05/13/2005 ¹⁹	7.83	-	-	-	-	-	-	-	-	-	-
C-3	08/19/2005 ¹⁹	7.83	-	-	-	-	-	-	-	-	-	-
C-3	11/18/2005 ¹⁹	7.83	-	-	-	-	-	-	-	-	-	-
C-3	02/10/2006 ¹⁵	7.83	2.52	5.31	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
C-3	05/12/2006 ¹⁹	7.83	-	-	-	-	-	-	-	-	-	-
C-3	08/11/2006 ¹⁹	7.83	-	-	-	-	-	-	-	-	-	-
C-3	11/17/2006 ¹⁹	7.83	-	-	-	-	-	-	-	-	-	-
C-3	02/16/2007 ¹⁵	7.83	2.63	5.20	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
C-3	05/17/2007 ¹⁹	7.83	-	-	-	-	-	-	-	-	-	-
C-3	08/09/2007 ¹⁹	7.83	-	-	-	-	-	-	-	-	-	-

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GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCs				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
C-3	11/08/2007 ¹⁹	7.83	-	-	-	-	-	-	-	-	-	-
C-3	02/06/2008 ¹⁵	7.83	2.91	4.92	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
C-3	05/07/2008 ¹⁹	7.83	-	-	-	-	-	-	-	-	-	-
C-3	09/11/2008 ¹⁹	7.83	-	-	-	-	-	-	-	-	-	-
C-3	11/10/2008 ¹⁹	7.83	-	-	-	-	-	-	-	-	-	-
C-3	02/09/2009 ¹⁵	7.83	2.95	4.88	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
C-3	03/31/2010	7.83	2.22	5.61	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
C-3	05/17/2010	7.83	3.07	4.76	0.00	-	-	-	-	-	-	-
C-3	08/26/2010 ¹⁹	7.83	4.29	3.54	0.00	-	-	-	-	-	-	-
C-3	11/11/2010 ¹⁹	7.83	4.48	3.35	0.00	-	-	-	-	-	-	-
C-3	03/02/2011 ¹⁹	7.83	1.45	6.38	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
C-3	06/17/2011 ¹⁹	7.83	3.24	4.59	0.00	-	-	-	-	-	-	-
C-3	09/08/2011 ¹⁹	7.83	4.02	3.81	0.00	-	-	-	-	-	-	-
C-3	12/29/2011 ¹⁹	7.83	4.42	3.41	0.00	-	-	-	-	-	-	-
C-3	03/28/2012	7.83	0.94	6.89	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
C-3	05/31/2012 ¹⁹	7.83	3.40	4.43	0.00	-	-	-	-	-	-	-
C-3	09/28/2012 ¹⁹	7.83	4.72	3.11	0.00	-	-	-	-	-	-	-
C-3	12/21/2012 ¹⁹	7.83	2.41	5.42	0.00	-	-	-	-	-	-	-
C-3	03/29/2013	7.83	3.45	4.38	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
C-3	06/28/2013	7.83	4.29	3.54	0.00	-	-	-	-	-	-	-
C-3	09/20/2013	7.83	4.81	3.02	0.00	-	-	-	-	-	-	-
C-3	12/30/2013	7.83	4.79	3.04	0.00	-	-	-	-	-	-	-
C-3	03/31/2014	7.83	2.79	5.04	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
C-3	06/30/2014	7.83	4.23	3.60	0.00	-	-	-	-	-	-	-
C-3	09/30/2014	7.83	5.00	2.83	0.00	-	-	-	-	-	-	-

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
C-3	12/30/2014	7.83	2.13	5.70	0.00	-	-	-	-	-	-	-
C-3	03/20/2015	7.83	3.36	4.47	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-4	06/04/1992	3.58	3.63	-0.05	0.00	-	<50	0.8	<0.5	<0.5	<0.5	-
MW-4	10/13/1992	3.58	-	-	-	-	-	-	-	-	-	-
MW-4	01/11/1993	3.58	1.89	1.69	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	-
MW-4	04/14/1993	3.58	2.20	1.38	0.00	-	<50	<0.5	<0.5	<0.5	<1.5	-
MW-4	07/13/1993	3.58	3.51	0.07	0.00	-	54	2.6	1.6	<0.5	<1.5	-
MW-4	10/19/1993	3.58	4.22	-0.64	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	-
MW-4	11/30/1993	7.01	4.01	3.00	0.00	-	-	-	-	-	-	-
MW-4	01/27/1994	7.01	2.89	4.12	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	-
MW-4	04/07/1994	7.01	3.06	3.95	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	-
MW-4	07/01/1994	7.01	3.59	3.42	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	-
MW-4	10/05/1994	7.01	4.33	2.68	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	-
MW-4	01/12/1995	7.01	1.20	5.81	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	-
MW-4	04/26/1995	7.01	1.15	5.86	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	-
MW-4	07/12/1995	7.01	2.72	4.29	0.00	-	<50	6.4	<0.5	0.63	0.72	-
MW-4	10/30/1995	7.01	4.08	2.93	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-4	01/22/1996	7.01	1.76	5.25	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-4	04/24/1996	7.01	1.95	5.06	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-4	07/29/1996	7.01	3.37	3.64	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-4	10/10/1996	7.01	3.96	3.05	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-4	01/15/1997	7.01	1.27	5.74	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-4	04/03/1997	7.01	2.11	4.90	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-4	07/09/1997	7.01	4.04	2.97	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCs				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-4	10/29/1997	7.01	4.56	2.45	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-4	01/14/1998	7.01	0.39	6.62	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-4	01/20/1999	7.01	2.83	4.18	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.0
MW-4	04/19/1999	7.01	2.91	4.10	0.00	-	-	-	-	-	-	-
MW-4	01/25/2000	7.01	1.92	5.09	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-4	04/03/2000 ¹⁹	7.01	-	-	-	-	-	-	-	-	-	-
MW-4	07/03/2000	7.01	-	-	-	-	-	-	-	-	-	-
MW-4	10/23/2000	7.01	-	-	-	-	-	-	-	-	-	-
MW-4	01/08/2001 ¹¹	7.01	3.02	3.99	0.00	-	87 ¹²	<0.50	<0.50	0.55	2.9	<2.5
MW-4	04/09/2001	7.01	-	-	-	-	-	-	-	-	-	-
MW-4	08/23/2001 ¹⁹	7.01	-	-	-	-	-	-	-	-	-	-
MW-4	11/27/2001 ¹⁹	7.01	-	-	-	-	-	-	-	-	-	-
MW-4	02/26/2002	7.01	1.37	5.64	0.00	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5
MW-4	05/23/2002 ¹⁹	7.01	-	-	-	-	-	-	-	-	-	-
MW-4	08/09/2002 ¹⁹	7.01	-	-	-	-	-	-	-	-	-	-
MW-4	11/08/2002 ¹⁹	7.01	-	-	-	-	-	-	-	-	-	-
MW-4	02/07/2003	7.01	1.72	5.29	0.00	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5
MW-4	05/09/2003 ¹⁹	7.01	-	-	-	-	-	-	-	-	-	-
MW-4	08/15/2003 ¹⁹	7.01	-	-	-	-	-	-	-	-	-	-
MW-4	11/14/2003 ¹⁹	7.01	-	-	-	-	-	-	-	-	-	-
MW-4	02/13/2004 ¹⁵	7.01	1.82	5.19	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-4	05/14/2004 ¹⁹	7.01	-	-	-	-	-	-	-	-	-	-
MW-4	11/12/2004 ¹⁹	7.01	-	-	-	-	-	-	-	-	-	-
MW-4	02/11/2005 ¹⁵	7.01	1.46	5.55	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-4	05/13/2005 ¹⁹	7.01	-	-	-	-	-	-	-	-	-	-

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-4	08/19/2005 ¹⁹	7.01	-	-	-	-	-	-	-	-	-	-
MW-4	11/18/2005 ¹⁹	7.01	-	-	-	-	-	-	-	-	-	-
MW-4	02/10/2006 ¹⁵	7.01	1.35	5.66	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-4	05/12/2006 ¹⁹	7.01	-	-	-	-	-	-	-	-	-	-
MW-4	08/11/2006 ¹⁹	7.01	-	-	-	-	-	-	-	-	-	-
MW-4	11/17/2006 ¹⁹	7.01	-	-	-	-	-	-	-	-	-	-
MW-4	02/16/2007 ¹⁵	7.01	1.48	5.53	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-4	05/17/2007 ¹⁹	7.01	-	-	-	-	-	-	-	-	-	-
MW-4	08/09/2007 ¹⁹	7.01	-	-	-	-	-	-	-	-	-	-
MW-4	11/08/2007 ¹⁹	7.01	-	-	-	-	-	-	-	-	-	-
MW-4	02/06/2008 ¹⁵	7.01	1.27	5.74	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-4	05/07/2008 ¹⁹	7.01	-	-	-	-	-	-	-	-	-	-
MW-4	09/11/2008 ¹⁹	7.01	-	-	-	-	-	-	-	-	-	-
MW-4	11/10/2008 ¹⁹	7.01	-	-	-	-	-	-	-	-	-	-
MW-4	02/09/2009 ¹⁵	7.01	2.33	4.68	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-4	03/31/2010	7.01	2.13	4.88	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-4	05/17/2010	7.01	2.05	4.96	0.00	-	-	-	-	-	-	-
MW-4	08/26/2010 ¹⁹	7.01	3.70	3.31	0.00	-	-	-	-	-	-	-
MW-4	11/11/2010 ¹⁹	7.01	3.98	3.03	0.00	-	-	-	-	-	-	-
MW-4	03/02/2011 ¹⁹	7.01	0.75	6.26	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-4	06/17/2011 ¹⁹	7.01	2.36	4.65	0.00	-	-	-	-	-	-	-
MW-4	09/08/2011 ¹⁹	7.01	3.36	3.65	0.00	-	-	-	-	-	-	-
MW-4	12/29/2011 ¹⁹	7.01	3.65	3.36	0.00	-	-	-	-	-	-	-
MW-4	03/28/2012	7.01	1.20	5.81	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-4	05/31/2012 ¹⁹	7.01	1.62	5.39	0.00	-	-	-	-	-	-	-

TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-4	09/28/2012 ¹⁹	7.01	3.70	3.31	0.00	-	-	-	-	-	-	-
MW-4	12/21/2012 ¹⁹	7.01	1.31	5.70	0.00	-	-	-	-	-	-	-
MW-4	03/29/2013	7.01	2.35	4.66	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-4	06/28/2013	7.01	3.46	3.55	0.00	-	-	-	-	-	-	-
MW-4	09/20/2013	7.01	4.29	2.72	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-4	12/30/2013	7.01	4.00	3.01	0.00	-	-	-	-	-	-	-
MW-4	03/31/2014	7.01	3.11	3.90	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-4	06/30/2014	7.01	3.67	3.34	0.00	-	-	-	-	-	-	-
MW-4	09/30/2014	7.01	4.41	2.60	0.00	-	-	-	-	-	-	-
MW-4	12/30/2014	7.01	2.44	4.57	0.00	-	-	-	-	-	-	-
MW-4	03/20/2015	7.01	2.14	4.87	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-5	06/04/1992	3.61	3.25	0.36	0.00	-	560	110	0.5	37	2.2	-
MW-5	10/13/1992	3.61	4.20	-0.59	0.00	-	1,200	150	<2.5	84	8.6	-
MW-5	01/11/1993	3.61	1.30	2.31	0.00	-	1,300	48	1.0	83	33	-
MW-5	04/14/1993	3.61	1.20	2.41	0.00	-	2,600	240	6.1	250	170	-
MW-5	07/13/1993	3.61	3.15	0.46	0.00	-	1,700	260	7.8	160	100	-
MW-5	10/19/1993	3.61	3.82	-0.21	0.00	-	1,900	190	3.3	200	93	-
MW-5	11/30/1993	7.04	3.56	3.48	0.00	-	-	-	-	-	-	-
MW-5	01/27/1994	7.04	2.42	4.62	0.00	-	4,000	100	12	210	110	-
MW-5	04/07/1994	7.04	2.33	4.71	0.00	-	2,600	170	10	150	88	-
MW-5	07/01/1994	7.04	3.18	3.86	0.00	-	2,300	350	9.1	110	76	-
MW-5	10/05/1994	7.04	3.98	3.06	0.00	-	11,000	840	150	130	340	-
MW-5	01/12/1995	7.04	0.40	6.64	0.00	-	2,300	82	<2.5	54	20	-
MW-5	04/26/1995	7.04	0.50	6.54	0.00	-	1,600	52	<5.0	36	61	-

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-5	07/12/1995	7.04	2.41	4.63	0.00	-	2,800	150	<5.0	34	38	-
MW-5	10/30/1995	7.04	3.78	3.26	0.00	-	1,100	81	<5.0	<5.0	<5.0	35
MW-5	01/22/1996	7.04	0.78	6.26	0.00	-	880	7.3	<2.0	15	4.8	<10
MW-5	04/24/1996	7.04	1.65	5.39	0.00	-	1,600	51	3.8	14	5.6	56
MW-5	07/29/1996 ²¹	7.04	-	-	-	-	-	-	-	-	-	-
MW-5	10/10/1996	7.04	3.60	3.44	0.00	-	1,000	18	<1.2	1.5	<1.2	<6.2
MW-5	01/15/1997	7.04	0.45	6.59	0.00	-	520	0.84	<0.5	3.1	1.2	8.4
MW-5	04/03/1997	7.04	2.11	4.93	0.00	-	1,400	13	<2.0	4.3	8.4	32
MW-5	07/09/1997	7.04	3.71	3.33	0.00	-	810	3.6	0.97	<0.5	<0.5	9.7
MW-5	10/29/1997	7.04	4.20	2.84	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-5	01/14/1998	7.04	0.00	7.04	0.00	-	430	5.8	2.4	<0.5	1.6	17
MW-5	04/17/1998 ²⁰	7.04	0.71	6.33	0.00	-	-	-	-	-	-	-
MW-5	07/15/1998	7.04	0.00	7.04	0.00	-	990	11	3.9	0.56	2.2	61
MW-5	10/27/1998	7.04	4.23	2.81	0.00	-	-	-	-	-	-	-
MW-5	01/20/1999	7.04	2.58	4.46	0.00	-	168	<0.5	<0.5	<0.5	0.692	<2.0
MW-5	04/19/1999	7.04	2.07	4.97	0.00	-	-	-	-	-	-	-
MW-5	07/29/1999	7.04	3.43	3.61	0.00	-	246	1.54	<0.5	<0.5	<0.5	<2.0 ² / ^{5.0}
MW-5	10/13/1999 ²¹	7.04	-	-	-	-	-	-	-	-	-	-
MW-5	01/25/2000	7.04	1.51	5.53	0.00	-	169	1.94	<0.5	<0.5	<0.5	201
MW-5	04/03/2000	7.04	1.20	5.84	0.00	-	-	-	-	-	-	-
MW-5	07/03/2000	7.04	2.98	4.06	0.00	-	320 ^{6,10}	5.3	1.1	<0.50	<0.50	5.0
MW-5	10/23/2000	7.04	4.18	2.86	0.00	-	-	-	-	-	-	-
MW-5	01/08/2001 ¹¹	7.04	2.92	4.12	0.00	-	220 ⁶	3.9	<0.50	<0.50	<0.50	7.7
MW-5	04/09/2001	7.04	1.01	6.03	0.00	-	-	-	-	-	-	-
MW-5	08/23/2001	7.04	3.48	3.56	0.00	-	630	40	3.5	<2.5	<2.5	43

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-5	11/27/2001 ²⁰	7.04	3.05	3.99	0.00	-	-	-	-	-	-	-
MW-5	02/26/2002	7.04	1.00	6.04	0.00	-	410	4.3	<0.50	<0.50	<1.5	<2.5
MW-5	05/23/2002 ²⁰	7.04	2.21	4.83	0.00	-	-	-	-	-	-	-
MW-5	08/09/2002	7.04	3.38	3.66	0.00	-	240	1.3	<0.50	<0.50	<1.5	<2.5
MW-5	11/08/2002 ²⁰	7.04	4.56	2.48	0.00	-	-	-	-	-	-	-
MW-5	02/07/2003	7.04	1.42	5.62	0.00	-	380	3.2	<0.50	0.64	<1.5	<2.5
MW-5	05/09/2003 ²⁰	7.04	1.25	5.79	0.00	-	-	-	-	-	-	-
MW-5	08/15/2003 ¹⁵	7.04	3.61	3.43	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-5	11/14/2003 ²⁰	7.04	3.57	3.47	0.00	-	-	-	-	-	-	-
MW-5	02/13/2004 ¹⁵	7.04	1.50	5.54	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-5	05/14/2004 ²⁰	7.04	2.47	4.57	0.00	-	-	-	-	-	-	-
MW-5	08/13/2004 ¹⁵	7.04	5.46	1.58	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-5	11/12/2004 ²⁰	7.04	4.65	2.39	0.00	-	-	-	-	-	-	-
MW-5	02/11/2005 ¹⁵	7.04	1.20	5.84	0.00	-	130	<0.5	<0.5	<0.5	<0.5	<0.5
MW-5	05/13/2005 ²⁰	7.04	4.36	2.68	0.00	-	-	-	-	-	-	-
MW-5	08/19/2005 ¹⁵	7.04	2.78	4.26	0.00	-	96	<0.5	<0.5	<0.5	<0.5	<0.5
MW-5	11/18/2005 ²⁰	7.04	4.51	2.53	0.00	-	-	-	-	-	-	-
MW-5	02/10/2006 ¹⁵	7.04	1.12	5.92	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-5	05/12/2006 ²⁰	7.04	2.23	4.81	0.00	-	-	-	-	-	-	-
MW-5	08/11/2006 ¹⁵	7.04	3.40	3.64	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-5	11/17/2006 ²⁰	7.04	4.16	2.88	0.00	-	-	-	-	-	-	-
MW-5	02/16/2007 ¹⁵	7.04	1.22	5.82	0.00	-	<50	<0.5	<0.7	<0.8	<0.8	<0.5
MW-5	05/17/2007 ²⁰	7.04	4.06	2.98	0.00	-	-	-	-	-	-	-
MW-5	08/09/2007 ¹⁵	7.04	3.61	3.43	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-5	11/08/2007 ²⁰	7.04	3.70	3.34	0.00	-	-	-	-	-	-	-

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-5	02/06/2008 ¹⁵	7.04	1.06	5.98	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-5	05/07/2008 ²⁰	7.04	3.57	3.47	0.00	-	-	-	-	-	-	-
MW-5	09/11/2008 ¹⁵	7.04	4.58	2.46	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-5	11/10/2008 ²⁰	7.04	4.26	2.78	0.00	-	-	-	-	-	-	-
MW-5	02/09/2009 ¹⁵	7.04	2.15	4.89	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-5	05/28/2009	7.04	2.76	4.28	0.00	-	-	-	-	-	-	-
MW-5	08/18/2009 ¹⁵	7.04	3.81	3.23	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-5	11/17/2009	7.04	4.02	3.02	0.00	-	-	-	-	-	-	-
MW-5	03/31/2010	7.04	1.86	5.18	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-5	05/17/2010	7.04	1.57	5.47	0.00	-	-	-	-	-	-	-
MW-5	08/26/2010	7.04	3.25	3.79	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-5	11/11/2010 ²⁰	7.04	3.52	3.52	0.00	-	-	-	-	-	-	-
MW-5	03/02/2011 ²⁰	7.04	1.55	5.49	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-5	06/17/2011 ²⁰	7.04	1.84	5.20	0.00	-	-	-	-	-	-	-
MW-5	09/08/2011 ²⁰	7.04	2.50	4.54	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-5	12/29/2011 ²⁰	7.04	3.40	3.64	0.00	-	-	-	-	-	-	-
MW-5	03/28/2012	7.04	1.72	5.32	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-5	05/31/2012 ²⁰	7.04	0.20	6.84	0.00	-	-	-	-	-	-	-
MW-5	09/28/2012	7.04	3.90	3.14	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-5	12/21/2012 ²⁰	7.04	1.59	5.45	0.00	-	-	-	-	-	-	-
MW-5	03/29/2013	7.04	2.00	5.04	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-5	06/28/2013	7.04	3.35	3.69	0.00	-	-	-	-	-	-	-
MW-5	09/20/2013	7.04	4.04	3.00	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-5	12/30/2013	7.04	3.80	3.24	0.00	-	-	-	-	-	-	-
MW-5	03/31/2014	7.04	1.90	5.14	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-5	06/30/2014	7.04	3.41	3.63	0.00	-	-	-	-	-	-	-
MW-5	09/30/2014	7.04	4.34	2.70	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-5	12/30/2014	7.04	2.15	4.89	0.00	-	-	-	-	-	-	-
MW-5	03/20/2015	7.04	1.78	5.26	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6	06/04/1992	3.85	3.89	-0.04	0.00	-	210	54	<0.5	1.9	2.4	-
MW-6	10/13/1992	3.85	4.56	-0.71	0.00	-	10,000	5,300	<10	70	<10	-
MW-6	01/11/1993	3.85	2.36	1.49	0.00	-	100	50	<0.5	<0.5	<0.5	-
MW-6	04/14/1993	3.85	3.15	0.70	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	-
MW-6	07/13/1993	3.85	3.94	-0.09	0.00	-	<50	1.8	<0.5	<0.5	<1.5	-
MW-6	10/19/1993	3.85	4.40	-0.55	0.00	-	320	150	<0.5	0.8	<0.5	-
MW-6	11/30/1993	7.27	4.16	3.11	0.00	-	-	-	-	-	-	-
MW-6	01/27/1994	7.27	3.33	3.94	0.00	-	120	45	<0.5	<0.5	<0.5	-
MW-6	04/07/1994	7.27	3.43	3.84	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	-
MW-6	07/01/1994	7.27	3.94	3.33	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	-
MW-6	10/05/1994	7.27	4.38	2.89	0.00	-	8,300	2,400	160	42	190	-
MW-6	01/12/1995 ¹	7.27	2.43	4.84	0.00	-	<50	12	<0.5	<0.5	<0.5	-
MW-6	04/26/1995	7.27	2.06	5.21	0.00	-	<50	5.5	0.67	<0.5	1.3	-
MW-6	07/12/1995	7.27	3.53	3.74	0.00	-	65	27	<0.5	<0.5	<0.5	-
MW-6	10/30/1995	7.27	4.34	2.93	0.00	-	<50	3.9	<0.5	<0.5	<0.5	<2.5
MW-6	01/22/1996	7.27	2.61	4.66	0.00	-	<50	0.93	<0.5	<0.5	<0.5	<2.5
MW-6	04/24/1996	7.27	2.50	4.77	0.00	-	260	110	<1.2	<1.2	<1.2	<6.2
MW-6	07/29/1996	7.27	3.85	3.42	0.00	-	<50	23	<0.5	<0.5	<0.5	<2.5
MW-6	10/10/1996	7.27	4.37	2.90	0.00	-	79	31	<0.5	<0.5	<0.5	<2.5
MW-6	01/15/1997	7.27	2.63	4.64	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-6	04/03/1997	7.27	3.42	3.85	0.00	-	670	360	<5.0	<5.0	<5.0	<25
MW-6	07/09/1997	7.27	4.29	2.98	0.00	-	330	140	<2.0	<2.0	<2.0	<10
MW-6	10/29/1997	7.27	4.56	2.71	0.00	-	400	260	<2.0	<2.0	<2.0	5.8
MW-6	01/14/1998	7.27	1.01	6.26	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-6	04/17/1998	7.27	2.94	4.33	0.00	-	<50	1.7	<0.5	<0.5	<0.5	<2.5
MW-6	07/15/1998	7.27	4.72	2.55	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-6	10/27/1998 ²¹	7.27	-	-	-	-	-	-	-	-	-	-
MW-6	11/25/1998	7.27	4.16	3.11	0.00	-	110 ³	54	<0.5	<0.5	<0.5	<2.5
MW-6	01/20/1999	7.27	3.45	3.82	0.00	-	<50	10	<0.5	<0.5	<0.5	<2.0
MW-6	04/19/1999	7.27	3.39	3.88	0.00	-	<50	2.6	<0.5	<0.5	<0.5	<2.0/<2.5 ²
MW-6	07/29/1999 ⁴	7.27	4.34	2.93	0.00	-	<5,000	2,590	<50	<50	<50	<500
MW-6	10/13/1999	7.27	5.89	1.38	0.00	-	9,270	4,610	44.2	<25	<25	<125
MW-6	01/25/2000	7.27	4.11	3.16	0.00	-	529	289	<0.5	<0.5	<0.5	738
MW-6	04/03/2000 ^{7,8}	7.27	2.84	4.43	0.00	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5
MW-6	07/03/2000 ⁷	7.27	3.77	3.50	0.00	-	91 ⁶	89	0.77	<0.50	<0.50	<2.5
MW-6	10/12/2000	7.27	6.32	0.95	0.00	-	<50	8.0	<0.50	<0.50	<0.50	<2.5
MW-6	01/08/2001 ^{7,11}	7.27	3.74	3.53	0.00	-	400 ⁶	640	8.2	8.0	5.0	10
MW-6	04/09/2001 ⁷	7.27	3.03	4.24	0.00	-	91.3	22.0	3.36	0.751	2.14	<0.500
MW-6	08/23/2001 ⁷	7.27	4.70	2.57	0.00	-	53 ¹³	23	0.50	<0.50	1.1	<2.5
MW-6	11/27/2001 ¹⁴	7.27	4.43	2.84	0.00	-	<50	4.1	<0.50	<0.50	<1.5	<2.5
MW-6	02/26/2002 ¹⁴	7.27	2.50	4.77	0.00	-	100	53	<0.50	<0.50	<1.5	<2.5
MW-6	05/23/2002	7.27	3.27	4.00	0.00	-	610	260	4.2	1.7	2.1	<2.5
MW-6	08/09/2002	7.27	4.11	3.16	0.00	-	<50	1.1	<0.50	<0.50	<1.5	<2.5
MW-6	11/08/2002	7.27	4.12	3.15	0.00	2.10	<50	<0.50	<0.50	<0.50	<1.5	<2.5
MW-6	02/07/2003	7.27	2.60	4.67	0.00	2.60	<50	0.65	<0.50	<0.50	<1.5	<2.5

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-6	05/09/2003	7.27	2.57	4.70	0.00	3.10	<50	1.9	<0.5	<0.5	<1.5	<2.5
MW-6	08/15/2003 ¹⁵	7.27	4.15	3.12	0.00	2.90	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6	11/14/2003 ¹⁵	7.27	4.10	3.17	0.00	3.41	<50	<0.5	0.6	<0.5	<0.5	1
MW-6	02/13/2004 ¹⁵	7.27	2.66	4.61	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6	05/14/2004 ¹⁵	7.27	3.55	3.72	0.00	-	<50	3	<0.5	<0.5	<0.5	<0.5
MW-6	08/13/2004 ¹⁵	7.27	4.32	2.95	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6	11/12/2004 ¹⁵	7.27	4.20	3.07	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6	02/11/2005 ¹⁵	7.27	2.18	5.09	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6	05/13/2005 ¹⁵	7.27	4.11	3.16	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6	08/19/2005 ¹⁵	7.27	3.70	3.57	0.00	1.90	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6	11/18/2005 ¹⁵	7.27	3.98	3.29	0.00	1.70	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6	02/10/2006 ¹⁵	7.27	2.11	5.16	0.00	2.20	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6	05/12/2006 ¹⁵	7.27	3.18	4.09	0.00	2.80	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6	08/11/2006 ¹⁵	7.27	3.80	3.47	0.00	2.50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6	11/17/2006 ¹⁵	7.27	3.78	3.49	0.00	2.20	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6	02/16/2007 ¹⁵	7.27	2.08	5.19	0.00	1.80	<50	1	<0.5	<0.5	<0.5	<0.5
MW-6	05/17/2007 ¹⁵	7.27	3.61	3.66	0.00	2.0	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6	08/09/2007 ¹⁵	7.27	4.05	3.22	0.00	2.6	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6	11/08/2007 ¹⁵	7.27	4.12	3.15	0.00	2.2	<50	5	<0.5	<0.5	<0.5	<0.5
MW-6	02/06/2008 ¹⁵	7.27	1.85	5.42	0.00	2.4	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6	05/07/2008 ¹⁵	7.27	3.91	3.36	0.00	2.3	63	18	<0.5	<0.5	<0.5	<0.5
MW-6	09/11/2008 ¹⁵	7.27	4.93	2.34	0.00	1.9	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6	11/10/2008 ¹⁵	7.27	4.30	2.97	0.00	2.2	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6	02/09/2009 ¹⁵	7.27	2.97	4.30	0.00	2.0	<50	2	<0.5	<0.5	<0.5	<0.5
MW-6	05/28/2009 ¹⁵	7.27	3.53	3.74	0.00	1.77	<50	4	<0.5	<0.5	<0.5	<0.5

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-6	08/18/2009 ¹⁵	7.27	3.38	3.89	0.00	1.81	560	130	3	<0.5	0.7 J	<0.5
MW-6	11/17/2009	7.27	4.00	3.27	0.00	-	-	-	-	-	-	-
MW-6	03/31/2010	7.27	2.44	4.83	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6	05/17/2010	7.27	3.30	3.97	0.00	-	-	-	-	-	-	-
MW-6	08/26/2010	7.27	4.15	3.12	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6	11/11/2010 ²⁰	7.27	4.16	3.11	0.00	-	-	-	-	-	-	-
MW-6	03/02/2011 ²⁰	7.27	2.27	5.00	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6	06/17/2011 ²⁰	7.27	3.69	3.58	0.00	-	-	-	-	-	-	-
MW-6	09/08/2011 ²⁰	7.27	3.82	3.45	0.00	-	<50	2	<0.5	<0.5	<0.5	<0.5
MW-6	12/29/2011 ²⁰	7.27	3.90	3.37	0.00	-	-	-	-	-	-	-
MW-6	03/28/2012	7.27	1.99	5.28	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6	05/31/2012 ²⁰	7.27	3.28	3.99	0.00	-	-	-	-	-	-	-
MW-6	09/28/2012	7.27	4.47	2.80	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6	12/21/2012 ²⁰	7.27	2.68	4.59	0.00	-	-	-	-	-	-	-
MW-6	03/29/2013	7.27	3.73	3.54	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6	06/28/2013	7.27	4.17	3.10	0.00	-	-	-	-	-	-	-
MW-6	09/20/2013	7.27	4.48	2.79	0.00	-	-	-	-	-	-	-
MW-6	12/30/2013	7.27	4.27	3.00	0.00	-	-	-	-	-	-	-
MW-6	03/31/2014	7.27	3.05	4.22	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6	06/30/2014	7.27	4.24	3.03	0.00	-	-	-	-	-	-	-
MW-6	09/30/2014	7.27	4.70	2.57	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6	12/30/2014	7.27	2.56	4.71	0.00	-	-	-	-	-	-	-
MW-6	03/20/2015	7.27	3.61	3.66	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-7	11/30/1993	8.22	5.33	2.89	0.00	-	480	110	41	4.4	38	-

TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-7	01/27/1994	8.22	4.50	3.72	0.00	-	120	21	1.1	2.2	4.8	-
MW-7	04/07/1994	8.22	4.62	3.60	0.00	-	2,600	630	39	56	94	-
MW-7	07/01/1994	8.22	5.13	3.09	0.00	-	2,200	770	42	<10	92	-
MW-7	10/05/1994	8.22	5.61	2.61	0.00	-	15,000	3,300	90	130	320	-
MW-7	01/12/1995	8.22	2.83	5.39	0.00	-	340	57	<1.3	18	6.4	-
MW-7	04/26/1995	8.22	2.35	5.87	0.00	-	15,000	3,700	210	520	800	-
MW-7	07/12/1995	8.22	4.66	3.56	0.00	-	7,700	1,800	59	130	370	-
MW-7	10/30/1995	8.22	5.48	2.74	0.00	-	770	260	<5.0	33	48	25
MW-7	01/22/1996	8.22	3.34	4.88	0.00	-	290	63	<1.0	6.4	5.7	<5.0
MW-7	04/24/1996	8.22	4.12	4.10	0.00	-	12,000	2,500	510	380	810	<125
MW-7	07/29/1996	8.22	5.03	3.19	0.00	-	2,600	650	<25	61	150	<125
MW-7	10/10/1996	8.22	5.52	2.70	0.00	-	5,800	1,700	28	170	210	<62
MW-7	01/15/1997	8.22	2.92	5.30	0.00	-	1,000	230	<2.5	28	11	63
MW-7	04/03/1997	8.22	4.65	3.57	0.00	-	6,000	1,800	100	140	170	<100
MW-7	07/09/1997	8.22	5.39	2.83	0.00	-	5,500	2,200	<20	41	30	<100
MW-7	10/29/1997	8.22	5.58	2.64	0.00	-	220	40	0.61	3.0	2.4	7.6
MW-7	01/14/1998	8.22	2.80	5.42	0.00	-	140	5.1	<0.5	<0.5	1.4	<2.5
MW-7	04/17/1998	8.22	3.00	5.22	0.00	-	13,000	4,200	98	250	240	250
MW-7	07/15/1998 ²¹	8.22	-	-	-	-	-	-	-	-	-	-
MW-7	08/17/1998 ⁵	7.92	5.52	2.40	0.00	-	1,600	380	51	68	280	22
MW-7	10/27/1998	7.92	7.51	0.41	0.00	-	190	2.3	0.53	<0.5	<0.5	33
MW-7	01/20/1999	7.92	3.45	4.47	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.0
MW-7	04/19/1999	7.92	4.61	3.31	0.00	-	6,500	3,000	<0.5	110	210	150 ² /310
MW-7	07/29/1999 ⁴	7.92	5.00	2.92	0.00	-	8,390	2,100	129	222	729	248
MW-7	10/13/1999	7.92	5.61	2.31	0.00	-	14,300	6,600	58.8	117	190	<125

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-7	01/25/2000	7.92	3.32	4.60	0.00	-	1,100	184	<5.0	13.5	33.7	151
MW-7	04/03/2000 ^{7,9}	7.92	3.38	4.54	0.00	-	2,600 ⁶	780	12	<5.0	61	95
MW-7	07/03/2000 ⁷	7.92	4.34	3.58	0.00	-	4,100 ⁶	2,600	72	240	690	<50
MW-7	10/23/2000	7.92	6.11	1.81	0.00	-	12,000 ⁶	2,600	<50	150	290	<250
MW-7	01/08/2001 ^{7,11}	7.92	4.32	3.60	0.00	-	3,900 ⁶	2,200	61	140	350	<25
MW-7	04/09/2001 ⁷	7.92	3.63	4.29	0.00	-	25,100	4,590	1,200	843	1,920	48.1
MW-7	08/23/2001 ⁷	7.92	4.83	3.09	0.00	-	27,000	4,100	970	1,100	3,500	<500
MW-7	11/27/2001	7.92	4.30	3.62	0.00	-	12,000	1,800	50	450	830	91
MW-7	02/26/2002	7.92	3.00	4.92	0.00	-	15,000	3,100	260	380	860	<10
MW-7	05/23/2002	7.92	3.69	4.23	0.00	-	28,000	6,000	120	820	1,900	42
MW-7	08/09/2002	7.92	4.38	3.54	0.00	-	24,000	3,700	81	710	1,300	56
MW-7	11/08/2002	7.92	4.43	3.49	0.00	-98.00	18,000	2,300	150	660	1,400	<100
MW-7	02/07/2003	7.92	3.20	4.72	0.00	2.90	13,000	2,300	200	310	620	<25
MW-7	05/09/2003	7.92	3.18	4.74	0.00	2.60	17,000	4,200	36	350	360	<50
MW-7	08/15/2003 ¹⁵	7.92	4.75	3.17	0.00	2.30	29,000	7,300	140	780	1,900	<5
MW-7	11/14/2003 ¹⁵	7.92	4.95	2.97	0.00	1.87	7,200	950	3	45	20	7
MW-7	02/13/2004 ¹⁵	7.92	3.29	4.63	0.00	-	3,300	360	4	82	130	3
MW-7	05/14/2004 ¹⁵	7.92	3.98	3.94	0.00	-	17,000	3,100	480	510	1,300	3
MW-7	08/13/2004 ¹⁵	7.92	5.94	1.98	0.00	-	10,000	2,000	4	130	150	4
MW-7	11/12/2004 ¹⁵	7.92	4.50	3.42	0.00	-	680	4	<0.5	1	0.7	0.8
MW-7	02/11/2005 ¹⁵	7.92	3.07	4.85	0.00	-	4,600	680	6	80	44	4
MW-7	05/13/2005 ¹⁵	7.92	4.51	3.41	0.00	-	4,200	380	3	38	13	2
MW-7	08/19/2005 ¹⁵	7.92	4.03	3.89	0.00	0.80	7,900	1,300	3	190	310	<1
MW-7	11/18/2005 ¹⁵	7.92	4.62	3.30	0.00	0.90	3,900	4	1	16	8	2
MW-7	02/10/2006 ¹⁵	7.92	3.12	4.80	0.00	1.30	3,200	320	2	14	8	2

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-7	05/12/2006 ¹⁵	7.92	4.25	3.67	0.00	1.40	3,600	1,000	2	65	27	<1
MW-7	08/11/2006 ¹⁵	7.92	4.45	3.47	0.00	1.10	6,700	1,900	6	280	300	<1
MW-7	11/17/2006 ¹⁵	7.92	4.71	3.21	0.00	0.70	1,200	0.6	<0.5	1	0.8	<0.5
MW-7	02/16/2007 ¹⁵	7.92	3.26	4.66	0.00	1.10	110	<0.5	<0.5	<0.5	<0.5	<0.5
MW-7	05/17/2007 ¹⁵	7.92	4.62	3.30	0.00	1.7	6,400	1,400	4	130	26	<1
MW-7	08/09/2007 ¹⁵	7.92	4.61	3.31	0.00	1.2	10,000	1,400	4	230	12	<3
MW-7	11/08/2007 ¹⁵	7.92	4.72	3.20	0.00	0.9	2,300	4	1	3	7	0.9
MW-7	02/06/2008 ¹⁵	7.92	2.98	4.94	0.00	0.5	190	<0.5	<0.5	<0.5	<0.5	<0.5
MW-7	05/07/2008 ¹⁵	7.92	4.48	3.44	0.00	1.2	8,000	1,500	15	380	260	<1
MW-7	09/11/2008 ¹⁵	7.92	5.95	1.97	0.00	1.0	5,100	530	4	47	12	0.7
MW-7	11/10/2008 ¹⁵	7.92	5.81	2.11	0.00	0.6	2,800	13	1	1	7	<0.5
MW-7	02/09/2009 ¹⁵	7.92	4.06	3.86	0.00	0.8	3,900	190	2	51	11	0.5
MW-7	05/28/2009 ^{15,17}	7.92	3.84	4.08	0.00	0.45	5,800	870	8	220	27	<0.5
MW-7	08/18/2009 ¹⁵	7.92	4.80	3.12	0.00	0.57	6,700	660	4	110	13	0.7 J
MW-7	11/17/2009	7.92	4.52	3.40	0.00	-	-	-	-	-	-	-
MW-7	03/31/2010	7.92	3.11	4.81	0.00	-	2,000	110	1	2	3	0.7 J
MW-7	05/17/2010	7.92	3.41	4.51	0.00	-	-	-	-	-	-	-
MW-7	08/26/2010	7.92	4.60	3.32	0.00	-	5,100	470	3	150	9	<0.5
MW-7	11/11/2010 ²⁰	7.92	4.68	3.24	0.00	-	-	-	-	-	-	-
MW-7	03/02/2011 ²⁰	7.92	2.53	5.39	0.00	-	1,100	<0.5	<0.5	<0.5	<0.5	<0.5
MW-7	06/17/2011 ²⁰	7.92	4.02	3.90	0.00	-	-	-	-	-	-	-
MW-7	09/08/2011 ²⁰	7.92	4.12	3.80	0.00	-	5,700	650	7	140	31	<0.5
MW-7	12/29/2011 ²⁰	7.92	4.12	3.80	0.00	-	-	-	-	-	-	-
MW-7	03/28/2012	7.92	2.61	5.31	0.00	-	370	<0.5	<0.5	<0.5	<0.5	<0.5
MW-7	05/31/2012 ²⁰	7.92	3.79	4.13	0.00	-	-	-	-	-	-	-

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-7	09/28/2012	7.92	4.90	3.02	0.00	-	3,600	14	<5	<5	5 J	<5
MW-7	12/21/2012 ²⁰	7.92	3.09	4.83	0.00	-	-	-	-	-	-	-
MW-7	03/29/2013	7.92	3.70	4.22	0.00	-	5,000	770	11	57	12	<0.5
MW-7	06/28/2013	7.92	4.59	3.33	0.00	-	-	-	-	-	-	-
MW-7	09/20/2013	7.92	4.96	2.96	0.00	-	4,400	1	2	1	4	<0.5
MW-7	12/30/2013	7.92	4.60	3.32	0.00	-	-	-	-	-	-	-
MW-7	03/31/2014	7.92	3.68	4.24	0.00	-	350	<0.5	<0.5	<0.5	<0.5	<0.5
MW-7	06/30/2014	7.92	4.52	3.40	0.00	-	-	-	-	-	-	-
MW-7	09/30/2014 ²²	7.92	5.10	2.82	0.00	-	-	-	-	-	-	-
MW-7	12/30/2014	7.92	2.97	4.95	0.00	-	-	-	-	-	-	-
MW-7	03/20/2015	7.92	3.83	4.09	0.00	-	1,600	110	1	15	1	<0.5
MW-8	10/17/1995	6.96	4.40	2.56	0.00	-	-	-	-	-	-	-
MW-8	10/30/1995	6.96	4.44	2.52	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-8	01/22/1996	6.96	2.24	4.72	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-8	04/24/1996	6.96	2.97	3.99	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-8	07/29/1996	6.96	3.37	3.59	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-8	10/10/1996	6.96	4.12	2.84	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-8	01/15/1997	6.96	0.94	6.02	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-8	04/03/1997	6.96	2.20	4.76	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-8	07/09/1997	6.96	4.30	2.66	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-8	10/29/1997	6.96	4.57	2.39	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-8	01/14/1998	6.96	0.83	6.13	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-8	01/20/1999	6.96	2.69	4.27	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.0
MW-8	04/19/1999	6.96	3.76	3.20	0.00	-	-	-	-	-	-	-

TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCs				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-8	01/25/2000	6.96	1.41	5.55	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-8	04/03/2000 ¹⁹	6.96	-	-	-	-	-	-	-	-	-	-
MW-8	07/03/2000	6.96	-	-	-	-	-	-	-	-	-	-
MW-8	10/23/2000	6.96	-	-	-	-	-	-	-	-	-	-
MW-8	01/08/2001 ¹¹	6.96	3.58	3.38	0.00	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5
MW-8	04/09/2001	6.96	-	-	-	-	-	-	-	-	-	-
MW-8	08/23/2001 ¹⁹	6.96	-	-	-	-	-	-	-	-	-	-
MW-8	11/27/2001 ¹⁹	6.96	-	-	-	-	-	-	-	-	-	-
MW-8	02/26/2002	6.96	2.91	4.05	0.00	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5
MW-8	05/23/2002 ¹⁹	6.96	-	-	-	-	-	-	-	-	-	-
MW-8	08/09/2002 ¹⁹	6.96	-	-	-	-	-	-	-	-	-	-
MW-8	11/08/2002 ¹⁹	6.96	-	-	-	-	-	-	-	-	-	-
MW-8	02/07/2003	6.96	3.13	3.83	0.00	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5
MW-8	05/09/2003 ¹⁹	6.96	-	-	-	-	-	-	-	-	-	-
MW-8	08/15/2003 ¹⁹	6.96	-	-	-	-	-	-	-	-	-	-
MW-8	11/14/2003 ¹⁹	6.96	-	-	-	-	-	-	-	-	-	-
MW-8	02/13/2004 ¹⁵	6.96	3.20	3.76	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-8	05/14/2004 ¹⁹	6.96	-	-	-	-	-	-	-	-	-	-
MW-8	11/12/2004 ¹⁹	6.96	-	-	-	-	-	-	-	-	-	-
MW-8	02/11/2005 ¹⁵	6.96	2.85	4.11	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-8	05/13/2005 ¹⁹	6.96	-	-	-	-	-	-	-	-	-	-
MW-8	08/19/2005 ¹⁹	6.96	-	-	-	-	-	-	-	-	-	-
MW-8	11/18/2005 ¹⁹	6.96	-	-	-	-	-	-	-	-	-	-
MW-8	02/10/2006 ¹⁵	6.96	2.74	4.22	<50	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-8	05/12/2006 ¹⁹	6.96	-	-	-	-	-	-	-	-	-	-

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-8	08/11/2006 ¹⁹	6.96	-	-	-	-	-	-	-	-	-	-
MW-8	11/17/2006 ¹⁹	6.96	-	-	-	-	-	-	-	-	-	-
MW-8	02/16/2007 ¹⁵	6.96	2.69	4.27	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-8	05/17/2007 ¹⁹	6.96	-	-	-	-	-	-	-	-	-	-
MW-8	08/09/2007 ¹⁹	6.96	-	-	-	-	-	-	-	-	-	-
MW-8	11/08/2007 ¹⁹	6.96	-	-	-	-	-	-	-	-	-	-
MW-8	02/06/2008 ¹⁵	6.96	2.57	4.39	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-8	05/07/2008 ¹⁹	6.96	-	-	-	-	-	-	-	-	-	-
MW-8	09/11/2008 ¹⁹	6.96	-	-	-	-	-	-	-	-	-	-
MW-8	11/10/2008 ¹⁹	6.96	-	-	-	-	-	-	-	-	-	-
MW-8	02/09/2009 ¹⁵	6.96	3.28	3.68	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-8	03/31/2010	6.96	2.85	4.11	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-8	05/17/2010	6.96	3.33	3.63	0.00	-	-	-	-	-	-	-
MW-8	08/26/2010 ¹⁹	6.96	4.27	2.69	0.00	-	-	-	-	-	-	-
MW-8	11/11/2010 ¹⁹	6.96	3.82	3.14	0.00	-	-	-	-	-	-	-
MW-8	03/02/2011 ¹⁹	6.96	1.66	5.30	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-8	06/17/2011 ¹⁹	6.96	3.79	3.17	0.00	-	-	-	-	-	-	-
MW-8	09/08/2011 ¹⁹	6.96	2.97	3.99	0.00	-	-	-	-	-	-	-
MW-8	12/29/2011 ¹⁹	6.96	3.70	3.26	0.00	-	-	-	-	-	-	-
MW-8	03/28/2012	6.96	0.48	6.48	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-8	05/31/2012 ¹⁹	6.96	1.66	5.30	0.00	-	-	-	-	-	-	-
MW-8	09/28/2012 ¹⁹	6.96	4.87	2.09	0.00	-	-	-	-	-	-	-
MW-8	12/21/2012 ¹⁹	6.96	2.28	4.68	0.00	-	-	-	-	-	-	-
MW-8	03/29/2013	6.96	3.73	3.23	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-8	06/28/2013	6.96	3.99	2.97	0.00	-	-	-	-	-	-	-

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-8	09/20/2013	6.96	4.44	2.52	0.00	-	-	-	-	-	-	-
MW-8	12/30/2013	6.96	4.62	2.34	0.00	-	-	-	-	-	-	-
MW-8	03/31/2014	6.96	2.73	4.23	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-8	06/30/2014	6.96	4.69	2.27	0.00	-	-	-	-	-	-	-
MW-8	09/30/2014	6.96	4.50	2.46	0.00	-	-	-	-	-	-	-
MW-8	12/30/2014	6.96	2.52	4.44	0.00	-	-	-	-	-	-	-
MW-8	03/20/2015	6.96	3.70	3.26	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-9	10/17/1995	7.21	4.80	2.41	0.00	-	-	-	-	-	-	-
MW-9	10/30/1995	7.21	4.97	2.24	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-9	01/22/1996	7.21	3.40	3.81	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-9	04/24/1996	7.21	4.18	3.03	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-9	07/29/1996	7.21	4.69	2.52	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-9	10/10/1996	7.21	5.20	2.01	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-9	01/15/1997	7.21	3.31	3.90	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-9	04/03/1997	7.21	4.57	2.64	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-9	07/09/1997	7.21	5.04	2.17	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-9	10/29/1997	7.21	4.96	2.25	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-9	01/14/1998	7.21	2.40	4.81	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-9	01/20/1999	7.21	4.31	2.90	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.0
MW-9	04/19/1999	7.21	3.92	3.29	0.00	-	-	-	-	-	-	-
MW-9	01/25/2000	7.21	2.95	4.26	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-9	04/03/2000 ¹⁹	7.21	-	-	-	-	-	-	-	-	-	-
MW-9	07/03/2000	7.21	-	-	-	-	-	-	-	-	-	-
MW-9	10/23/2000	7.21	-	-	-	-	-	-	-	-	-	-

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCs				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-9	01/08/2001 ¹¹	7.21	4.59	2.62	0.00	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5
MW-9	04/09/2001	7.21	-	-	-	-	-	-	-	-	-	-
MW-9	08/23/2001 ¹⁹	7.21	-	-	-	-	-	-	-	-	-	-
MW-9	11/27/2001 ¹⁹	7.21	-	-	-	-	-	-	-	-	-	-
MW-9	02/26/2002	7.21	3.75	3.46	0.00	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5
MW-9	05/23/2002 ¹⁹	7.21	-	-	-	-	-	-	-	-	-	-
MW-9	08/09/2002 ¹⁹	7.21	-	-	-	-	-	-	-	-	-	-
MW-9	11/08/2002 ¹⁹	7.21	-	-	-	-	-	-	-	-	-	-
MW-9	02/07/2003	7.21	3.97	3.24	0.00	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5
MW-9	05/09/2003 ¹⁹	7.21	-	-	-	-	-	-	-	-	-	-
MW-9	08/15/2003 ¹⁹	7.21	-	-	-	-	-	-	-	-	-	-
MW-9	11/14/2003 ¹⁹	7.21	-	-	-	-	-	-	-	-	-	-
MW-9	02/13/2004 ¹⁵	7.21	3.94	3.27	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-9	05/14/2004 ¹⁹	7.21	-	-	-	-	-	-	-	-	-	-
MW-9	11/12/2004 ¹⁹	7.21	-	-	-	-	-	-	-	-	-	-
MW-9	02/11/2005 ¹⁵	7.21	3.66	3.55	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-9	05/13/2005 ¹⁹	7.21	-	-	-	-	-	-	-	-	-	-
MW-9	08/19/2005 ¹⁹	7.21	-	-	-	-	-	-	-	-	-	-
MW-9	11/18/2005 ¹⁹	7.21	-	-	-	-	-	-	-	-	-	-
MW-9	02/10/2006 ¹⁵	7.21	3.53	3.68	0.00	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-9	05/12/2006 ¹⁹	7.21	-	-	-	-	-	-	-	-	-	-
MW-9	08/11/2006 ¹⁹	7.21	-	-	-	-	-	-	-	-	-	-
MW-9	11/17/2006 ¹⁹	7.21	-	-	-	-	-	-	-	-	-	-
MW-9	02/16/2007 ¹⁵	7.21	3.50	3.71	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-9	05/17/2007 ¹⁹	7.21	-	-	-	-	-	-	-	-	-	-

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-9	08/09/2007 ¹⁹	7.21	-	-	-	-	-	-	-	-	-	-
MW-9	11/08/2007 ¹⁹	7.21	-	-	-	-	-	-	-	-	-	-
MW-9	02/06/2008 ¹⁵	7.21	3.14	4.07	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-9	05/07/2008 ¹⁹	7.21	-	-	-	-	-	-	-	-	-	-
MW-9	09/11/2008 ¹⁹	7.21	-	-	-	-	-	-	-	-	-	-
MW-9	11/10/2008 ¹⁹	7.21	-	-	-	-	-	-	-	-	-	-
MW-9	02/09/2009 ¹⁵	7.21	3.91	3.30	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-9	03/31/2010	7.21	3.16	4.05	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-9	05/17/2010	7.21	3.44	3.77	0.00	-	-	-	-	-	-	-
MW-9	08/26/2010 ¹⁹	7.21	4.77	2.44	0.00	-	-	-	-	-	-	-
MW-9	11/11/2010 ¹⁹	7.21	4.29	2.92	0.00	-	-	-	-	-	-	-
MW-9	03/02/2011 ¹⁹	7.21	2.75	4.46	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-9	06/17/2011 ¹⁹	7.21	3.86	3.35	0.00	-	-	-	-	-	-	-
MW-9	09/08/2011 ¹⁹	7.21	4.28	2.93	0.00	-	-	-	-	-	-	-
MW-9	12/29/2011 ¹⁹	7.21	4.58	2.63	0.00	-	-	-	-	-	-	-
MW-9	03/28/2012	7.21	2.32	4.89	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-9	05/31/2012 ¹⁹	7.21	4.15	3.06	0.00	-	-	-	-	-	-	-
MW-9	09/28/2012 ¹⁹	7.21	4.96	2.25	0.00	-	-	-	-	-	-	-
MW-9	12/21/2012 ¹⁹	7.21	2.32	4.89	0.00	-	-	-	-	-	-	-
MW-9	03/29/2013	7.21	4.20	3.01	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-9	06/28/2013	7.21	4.61	2.60	0.00	-	-	-	-	-	-	-
MW-9	09/20/2013	7.21	4.71	2.50	0.00	-	-	-	-	-	-	-
MW-9	12/30/2013	7.21	5.12	2.09	0.00	-	-	-	-	-	-	-
MW-9	03/31/2014	7.21	3.16	4.05	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-9	06/30/2014	7.21	4.51	2.70	0.00	-	-	-	-	-	-	-

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-9	09/30/2014	7.21	4.80	2.41	0.00	-	-	-	-	-	-	-
MW-9	12/30/2014	7.21	2.67	4.54	0.00	-	-	-	-	-	-	-
MW-9	03/20/2015	7.21	4.02	3.19	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-10	10/17/1995	7.28	5.05	2.23	0.00	-	-	-	-	-	-	-
MW-10	10/30/1995	7.28	5.11	2.17	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	5.1
MW-10	01/22/1996	7.28	4.03	3.25	0.00	-	<50	<0.5	<0.5	<0.5	0.70	17
MW-10	04/24/1996	7.28	4.30	2.98	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	12
MW-10	07/29/1996	7.28	4.70	2.58	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	14
MW-10	10/10/1996	7.28	5.24	2.04	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-10	01/15/1997	7.28	3.35	3.93	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-10	04/03/1997	7.28	4.64	2.64	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	8.2
MW-10	07/09/1997	7.28	5.12	2.16	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-10	10/29/1997	7.28	5.10	2.18	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	5.3
MW-10	01/14/1998	7.28	3.08	4.20	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	8.6
MW-10	04/17/1998 ²⁰	7.28	3.79	3.49	0.00	-	-	-	-	-	-	-
MW-10	07/15/1998	7.28	4.55	2.73	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	7.5
MW-10	10/27/1998	7.28	5.32	1.96	0.00	-	-	-	-	-	-	-
MW-10	01/20/1999	7.28	4.24	3.04	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<2.0
MW-10	04/19/1999	7.28	4.07	3.21	0.00	-	-	-	-	-	-	-
MW-10	07/29/1999	7.28	4.82	2.46	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0/2.4 ²
MW-10	10/13/1999	7.28	4.86	2.42	0.00	-	-	-	-	-	-	-
MW-10	01/25/2000	7.28	3.00	4.28	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	4.33
MW-10	04/03/2000	7.28	3.04	4.24	0.00	-	-	-	-	-	-	-
MW-10	07/03/2000	7.28	4.00	3.28	0.00	-	<50	<0.50	<0.50	<0.50	<0.50	4.7

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-10	10/23/2000	7.28	5.86	1.42	0.00	-	-	-	-	-	-	-
MW-10	01/08/2001 ¹¹	7.28	3.98	3.30	0.00	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5
MW-10	04/09/2001	7.28	3.74	3.54	0.00	-	-	-	-	-	-	-
MW-10	08/23/2001 ²¹	7.28	-	-	-	-	-	-	-	-	-	-
MW-10	11/27/2001 ²⁰	7.28	4.13	3.15	0.00	-	-	-	-	-	-	-
MW-10	02/26/2002	7.28	3.54	3.74	0.00	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5
MW-10	05/23/2002 ²⁰	7.28	3.82	3.46	0.00	-	-	-	-	-	-	-
MW-10	08/09/2002	7.28	4.18	3.10	0.00	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5
MW-10	11/08/2002 ²⁰	7.28	3.91	3.37	0.00	-	-	-	-	-	-	-
MW-10	02/07/2003	7.28	3.61	3.67	0.00	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5
MW-10	05/09/2003 ²⁰	7.28	3.25	4.03	0.00	-	-	-	-	-	-	-
MW-10	08/15/2003 ¹⁵	7.28	4.35	2.93	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-10	11/14/2003 ²⁰	7.28	4.30	2.98	0.00	-	-	-	-	-	-	-
MW-10	02/13/2004 ¹⁵	7.28	4.27	3.01	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-10	05/14/2004 ²⁰	7.28	4.08	3.20	0.00	-	-	-	-	-	-	-
MW-10	08/13/2004 ¹⁵	7.28	3.92	3.36	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-10	11/12/2004 ²⁰	7.28	3.98	3.30	0.00	-	-	-	-	-	-	-
MW-10	02/11/2005 ¹⁵	7.28	4.07	3.21	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-10	05/13/2005 ²⁰	7.28	4.01	3.27	0.00	-	-	-	-	-	-	-
MW-10	08/19/2005 ¹⁵	7.28	3.69	3.59	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-10	11/18/2005 ²⁰	7.28	3.86	3.42	0.00	-	-	-	-	-	-	-
MW-10	02/10/2006 ¹⁵	7.28	3.94	3.34	0.00	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-10	05/12/2006 ²⁰	7.28	4.07	3.21	0.00	-	-	-	-	-	-	-
MW-10	08/11/2006 ¹⁵	7.28	4.21	3.07	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-10	11/17/2006 ²⁰	7.28	3.83	3.45	0.00	-	-	-	-	-	-	-

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-10	02/16/2007 ¹⁵	7.28	3.87	3.41	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-10	05/17/2007 ²⁰	7.28	3.71	3.57	0.00	-	-	-	-	-	-	-
MW-10	08/09/2007 ²¹	7.28	-	-	-	-	-	-	-	-	-	-
MW-10	11/08/2007 ²¹	7.28	-	-	-	-	-	-	-	-	-	-
MW-10	02/06/2008 ²¹	7.28	-	-	-	-	-	-	-	-	-	-
MW-10	05/07/2008 ²¹	7.28	-	-	-	-	-	-	-	-	-	-
MW-10	09/11/2008 ¹⁵	7.28	4.63	2.65	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-10	11/10/2008 ²⁰	7.28	4.28	3.00	0.00	-	-	-	-	-	-	-
MW-10	02/09/2009 ¹⁵	7.28	2.17	5.11	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-10	05/28/2009	7.28	3.69	3.59	0.00	-	-	-	-	-	-	-
MW-10	08/18/2009 ¹⁵	7.28	4.07	3.21	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-10	11/17/2009	7.28	4.12	3.16	0.00	-	-	-	-	-	-	-
MW-10	03/31/2010	7.28	3.43	3.85	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-10	05/17/2010	7.28	3.53	3.75	0.00	-	-	-	-	-	-	-
MW-10	08/26/2010	7.28	4.33	2.95	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-10	11/11/2010 ²⁰	7.28	4.34	2.94	0.00	-	-	-	-	-	-	-
MW-10	03/02/2011 ²⁰	7.28	3.33	3.95	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-10	06/17/2011 ²⁰	7.28	3.92	3.36	0.00	-	-	-	-	-	-	-
MW-10	09/08/2011 ²⁰	7.28	3.95	3.33	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-10	12/29/2011 ²⁰	7.28	4.00	3.28	0.00	-	-	-	-	-	-	-
MW-10	03/28/2012	7.28	2.96	4.32	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-10	05/31/2012 ²⁰	7.28	3.90	3.38	0.00	-	-	-	-	-	-	-
MW-10	09/28/2012	7.28	3.60	3.68	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-10	12/21/2012 ²⁰	7.28	3.44	3.84	0.00	-	-	-	-	-	-	-
MW-10	03/29/2013	7.28	2.95	4.33	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPLT	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-10	06/28/2013	7.28	3.50	3.78	0.00	-	-	-	-	-	-	-
MW-10	09/20/2013	7.28	3.37	3.91	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-10	12/30/2013	7.28	3.09	4.19	0.00	-	-	-	-	-	-	-
MW-10	03/31/2014	7.28	3.35	3.93	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-10	06/30/2014	7.28	3.52	3.76	0.00	-	-	-	-	-	-	-
MW-10	09/30/2014	7.28	3.20	4.08	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-10	12/30/2014	7.28	3.18	4.10	0.00	-	-	-	-	-	-	-
MW-10	03/20/2015	7.28	3.16	4.12	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
C-2	09/04/1986	-	-	-	-	-	1,100	49	18	84	-	-
C-2	07/22/1987	-	-	-	-	-	<50	1.8	<1.0	<4.0	-	-
TMW-1	11/11/1993	-	-	-	-	-	<1.0	<0.5	<0.5	<0.5	<0.5	-
3115A GIBBONS DR.	01/14/1998	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
QA	02/14/1990	-	-	-	-	-	<50	<0.5	1.1	<0.5	<0.5	-
QA	09/06/1991	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-
QA	12/15/1991	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-
QA	03/03/1992	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-
QA	06/04/1992	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-
QA	10/13/1992	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-
QA	01/11/1993	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-
QA	04/14/1993	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-
QA	07/13/1993	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCs				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
QA	10/19/1993	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<1.5	-
QA	01/27/1994	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-
QA	04/07/1994	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-
QA	07/01/1994	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-
QA	10/05/1994	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-
QA	01/12/1995	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-
QA	04/26/1995	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-
QA	07/12/1995	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-
QA	10/30/1995	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-
QA	01/22/1996	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
QA	04/24/1996	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
QA	07/29/1996	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
QA	01/15/1997	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
QA	04/03/1997	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
QA	07/09/1997	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
QA	10/29/1997	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
QA	01/14/1998	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
QA	04/17/1998	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
QA	07/15/1998	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
QA	10/27/1998	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
QA	01/20/1999	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.0
QA	04/19/1999	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
QA	07/29/1999	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0
QA	10/13/1999	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5
QA	01/25/2000	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.5

TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
QA	04/03/2000	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5
QA	07/03/2000	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5
QA	10/23/2000	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5
QA	01/08/2001 ¹¹	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5
QA	04/09/2001	-	-	-	-	-	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
QA	08/23/2001	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<0.50	<2.5
QA	11/27/2001	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5
QA	02/26/2002	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5
QA	05/23/2002	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5
QA	08/09/2002	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5
QA	11/08/2002	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5
QA	02/07/2003	-	-	-	-	-	<50	<0.50	<0.50	<0.50	<1.5	<2.5
QA	05/09/2003	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<1.5	<2.5
QA	08/15/2003 ¹⁵	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	11/14/2003	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	02/13/2004 ¹⁵	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	05/14/2004 ¹⁵	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	08/13/2004 ¹⁵	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	11/12/2004 ¹⁵	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	02/11/2005 ¹⁵	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	05/13/2005 ¹⁵	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	08/19/2005 ¹⁵	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	11/18/2005 ¹⁵	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	02/10/2006 ¹⁵	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	05/12/2006 ¹⁵	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCs				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
QA	08/11/2006 ¹⁵	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	11/17/2006 ¹⁵	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	02/16/2007 ¹⁵	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	05/17/2007 ¹⁵	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	08/09/2007 ¹⁵	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	11/08/2007 ¹⁵	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	02/06/2008 ¹⁵	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	05/07/2008 ¹⁵	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	09/11/2008 ¹⁵	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	11/10/2008 ¹⁵	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	02/09/2009 ¹⁵	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	05/28/2009 ¹⁵	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	08/18/2009 ¹⁵	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	03/31/2010	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	08/26/2010	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	03/02/2011	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	09/08/2011	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	03/28/2012	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	09/28/2012	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	03/29/2013	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	09/20/2013	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	03/31/2014	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	06/30/2014	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	03/20/2015	-	-	-	0.00	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	09/30/2014	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPLT	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
	Units	ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
QA	12/30/2014	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
QA	03/20/2015	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5

Abbreviations and Notes:

TOC = Top of casing

DTW = Depth to water

GWE = Groundwater elevation

LNAPL - Light Non-Aqueous Phase Liquid

LNAPLT - Light Non-Aqueous Phase Liquid

(ft-amsl) = Feet above mean sea level

ft = Feet

mg/L - Milligrams per liter

µg/L = Micrograms per liter

TPH-GRO = Total petroleum hydrocarbons - gasoline range organics

VOCS = Volatile organic compounds

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylenes (Total)

MTBE = Methyl tert butyl ether

J = Estimated value (the result ≥ the method detection limit < the limit of quantitation)

-- = Not available / not applicable

<x = Not detected above laboratory method detection limit

** GWE has been corrected due to the presence of LNAPL; correction factor: [(TOC - DTW) + (LNAPLT x 0.80)].

1 Laboratory report indicates EPA 8010 were not detected (ND)

**TABLE 2
GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	FIELD PARAMETERS	HYDROCARBONS	PRIMARY VOCS				
						Dissolved Oxygen	TPH-GRO	B	T	E	X	MTBE by SW8260
Units		ft	ft	ft-amsl	ft	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L

2 MTBE confirmed

3 Chromatogram report indicates an unidentified hydrocarbon

4 ORC installed

5 TOC elevation altered due to well head maintenance

6 Laboratory report indicates gasoline C6-C12

7 ORC in well

8 Laboratory report indicates Dissolved Oxygen was 1.50 parts per million (ppm) by EPA Method 360.1

9 Laboratory report indicates Dissolved Oxygen was 0.300 ppm by EPA Method 360.1

10 Laboratory report indicates sample originally shot in hold time at a raise D.L. re-analyzed and reported past hold time

11 Laboratory report indicates this sample was analyzed outside of the EPA recommended holding time

12 Laboratory report indicates unidentified hydrocarbons C6-C12

13 Laboratory report indicates hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel

14 ORC removed

15 BTEX and MTBE by EPA Method 8260

16 Laboratory confirmed analytical result

17 The vial submitted did not have pH<2. The pH of this sample used for the undiluted analysis was pH = 3

18 Not sampled due to the presence of LNAPL in the well.

19 Sampled annually.

20 Sampled semi-annually

21 Inaccessible

22 Insufficient Water

**TABLE 3
CUMULATIVE AIR AND SOIL GAS ANALYTICAL DATA
FORMER CHEVRON STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Sample ID	Date	Sample Depth (fbg)	TPHg	Benzene	Toluene	Ethyl-benzene	m,p-Xylene	o-Xylene	Total Xylenes ¹	MTBE	Naphthalene	(% Volume)				
												Oxygen	N ₂	CO ₂	Methane	He
ESL Table E-3 Ambient and Indoor Air Screening Levels, Lowest Residential²			290	0.084	310	0.97	100	100	100	9.4	0.072	NE	NE	NE	NE	NE
LTCP Soil Gas Criteria - Residential³			NE	85	NE	1,100	NE	NE	NE	NE	93	NE	NE	NE	NE	NE
CRA - Indoor Air/ Outdoor Air/ Crawl Space Air and Soil Vapor Sampling																
OA-1	09/19/13	--	<66	0.25 J	1.0	0.17	0.61	0.22	--	0.0075 J	<4.2	21	79	0.041	0.00020	<0.080
OA-1 DUP	09/19/13	--	<67	0.24 J	0.96	0.17	0.61	0.23	--	0.0062 J	<4.3	21	79	0.041	0.00022	<0.082
IA-1	09/19/13	--	150	0.60	3.4	0.95	2.9	0.98	--	0.0094 J	<4.4	21	79	0.064	0.00048	<0.084
IA-2	09/19/13	--	190	1.7	6.3	1.1	3.8	1.2	--	0.013 J	<4.6	21	79	0.052	0.00031	<0.087
IA-3	09/19/13	--	270	4.0	12	1.8	6.1	2.0	--	0.028 J	<4.8	21	79	0.048	0.00028	<0.091
CS-1	09/19/13	--	<67	0.18 J	0.52	0.089 J	0.30	0.12 J	--	<0.59	<4.3	21	79	0.039	0.00017	<0.082
CS-2	09/19/13	--	<67	0.28	0.94	0.16	0.54	0.21	--	0.012 J	<4.3	22	78	0.043	0.00022	<0.082
TB (6L)	09/19/13	--	<41	0.019J	0.011J	<0.087	<0.17	<0.087	--	<0.36	<2.6	22	78	0.043	0.00022	<0.082
SSVP-1	09/20/13	0.8	98,000,000	10,000 J	<36,000	<41,000	<41,000	<41,000	--	<34,000	13,000 J	1.5	69	15	12	<0.12
SSVP-2	09/20/13	0.8	120,000,000	20,000 J	8,700 J	<56,000	<56,000	<56,000	--	<47,000	10,000 J	1.3	66	15	15	<0.13
TB (1L)	09/20/13	--	<100	<1.6	1.8 J	<2.2	0.57J	<2.2	--	<1.8	<10	21	79	0.052J	<0.00070	<0.35
OA-1	01/26/12	--	<72	0.88	2.5	0.49	1.6	0.54	--	<0.63	<4.6	--	--	--	--	--
OA-1 DUP	01/26/12	--	<71	0.86	2.7	0.46	1.6	0.58	--	<0.62	<4.5	--	--	--	--	--
IA-1	01/26/12	--	410	5.1	21	3.4	11	3.4	--	<0.68	<4.9	--	--	--	--	--
IA-2	01/26/12	--	1,100	20	85	13	40	12	--	<0.59	<4.3	--	--	--	--	--
CS-1	01/26/12	--	<66	0.98	2.6	0.51	1.6	0.57	--	<0.58	<4.2	--	--	--	--	--
CS-2	01/26/12	--	94	1.0	3.0	0.59	1.9	0.68	--	<0.57	<4.1	--	--	--	--	--

**TABLE 3
CUMULATIVE AIR AND SOIL GAS ANALYTICAL DATA
FORMER CHEVRON STATION 91153
3135 GIBBONS DRIVE (3126 FERNSIDE BOULEVARD), ALAMEDA, CALIFORNIA**

Sample ID	Date	Sample Depth (fbg)	TPHg	Benzene	Toluene	Ethyl-benzene	m,p-Xylene	o-Xylene	Total Xylenes ¹	MTBE	Naphthalene	(% Volume)				
												Oxygen	N ₂	CO ₂	Methane	He
ESL Table E-3 Ambient and Indoor Air Screening Levels, Lowest Residential²			290	0.084	310	0.97	100	100	100	9.4	0.072	NE	NE	NE	NE	NE
LTCP Soil Gas Criteria - Residential³			NE	85	NE	1,100	NE	NE	NE	NE	93	NE	NE	NE	NE	NE

Previous Consultants - Soil Vapor Sampling

Sample ID	Date	Sample Depth (fbg)	TPHg	Reported in ppm						Reported in ppm						
				Benzene	Toluene	Ethyl-benzene	m,p-Xylene	o-Xylene	Total Xylenes ¹	MTBE	Naphthalene	Oxygen	N ₂	CO ₂	Methane	He
V1/A	05/04/89	2.5	--	25	<1	<1	--	--	23	--	--	--	--	--	--	--
V1/B	05/04/89	4.5	--	<1	16	<1	--	--	1	--	--	--	--	--	--	--
V2/A	05/04/89	2.5	--	80	69	<1	--	--	17	--	--	--	--	--	--	--
V2/B	05/04/89	4.5	--	<1	<1	<1	--	--	<1	--	--	--	--	--	--	--
V3/A	05/04/89	2.5	--	<1	70	<1	--	--	1	--	--	--	--	--	--	--
V3/B	05/04/89	4.5	--	<1	<1	<1	--	--	<1	--	--	--	--	--	--	--
V4/A	05/04/89	2.5	--	<1	<1	<1	--	--	<1	--	--	--	--	--	--	--
V4/B	05/04/89	4.5	--	<1	<1	<1	--	--	<1	--	--	--	--	--	--	--
V5/A	05/04/89	2.5	--	250	2,400	450	--	--	2,400	--	--	--	--	--	--	--
V5/B	05/04/89	2.5	--	8	83	<1	--	--	51	--	--	--	--	--	--	--
V6/A	05/04/89	2	--	<1	<1	3	--	--	<1	--	--	--	--	--	--	--
V6/B	05/04/89	3	--	34	39	10	--	--	12	--	--	--	--	--	--	--
V7	05/04/89	2.5	--	2,200	2,700	43	--	--	200	--	--	--	--	--	--	--
V8/A	05/04/89	2.5	--	1	<1	<1	--	--	<1	--	--	--	--	--	--	--
V8/B	05/04/89	4.5	--	1	<1	--	--	--	--	--	--	--	--	--	--	--
V9-HS	05/04/89	3	--	<1	<1	<1	--	--	<1	--	--	--	--	--	--	--
V10/A	05/04/89	2.5	--	1	1	<1	--	--	<1	--	--	--	--	--	--	--
V10/B	05/04/89	4.5	--	1	1	<1	--	--	<1	--	--	--	--	--	--	--
V11/A	05/04/89	3	--	0.5	1	<1	--	--	<1	--	--	--	--	--	--	--
V11/B	05/04/89	4.5	--	2	5	<1	--	--	2	--	--	--	--	--	--	--
V12/A	05/04/89	2.5	--	<1	<1	<1	--	--	<1	--	--	--	--	--	--	--

**TABLE 3
 CUMULATIVE AIR AND SOIL GAS ANALYTICAL DATA
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ESL Table E-3 Ambient and Indoor Air Screening Levels, Lowest Residential²			290	0.084	310	0.97	100	100	100	9.4	0.072	NE	NE	NE	NE	NE
LTCP Soil Gas Criteria - Residential³			NE	85	NE	1,100	NE	NE	NE	NE	93	NE	NE	NE	NE	NE
V12/B	05/04/89	4.5	--	<1	<1	<1	--	--	<1	--	--	--	--	--	--	--
V13/A	05/04/89	3	--	<1	<1	<1	--	--	<1	--	--	--	--	--	--	--
V13/B	05/04/89	4.5	--	<1	1	<1	--	--	<1	--	--	--	--	--	--	--
V14	05/04/89	2.5	--	360	310	69	--	--	340	--	--	--	--	--	--	--
V15	05/04/89	2.5	--	8	7	<1	--	--	<1	--	--	--	--	--	--	--
V16	05/04/89	2.25	--	<1	<1	<1	--	--	<1	--	--	--	--	--	--	--
V17	05/10/89	2.5	--	2,300	2,500	150	--	--	670	--	--	--	--	--	--	--
V18	05/10/89	2.5	--	490	220	10	--	--	32	--	--	--	--	--	--	--
V19/A	05/10/89	25	--	<1	<1	<1	--	--	<1	--	--	--	--	--	--	--
V19/B	05/10/89	4.5	--	<1	<1	<1	--	--	<1	--	--	--	--	--	--	--
V20/A	05/10/89	2.5	--	<1	<1	<1	--	--	<1	--	--	--	--	--	--	--
V20/B	05/10/89	4	--	<1	<1	<1	--	--	<1	--	--	--	--	--	--	--
V21/A	05/10/89	2.5	--	<1	<1	<1	--	--	<1	--	--	--	--	--	--	--
V21/B	05/10/89	4	--	<1	<1	<1	--	--	<1	--	--	--	--	--	--	--
V22	05/10/89	2.5	--	7	3	<1	--	--	<1	--	--	--	--	--	--	--
V23	05/10/89	2	--	<1	1	<1	--	--	<1	--	--	--	--	--	--	--
V24/A	05/10/89	2.5	--	<1	<1	<1	--	--	<1	--	--	--	--	--	--	--
V24/B	05/10/89	4	--	<1	<1	<1	--	--	<1	--	--	--	--	--	--	--
V24-HS	05/10/89	4	--	140	500	48	--	--	340	--	--	--	--	--	--	--
V24/C	05/10/89	3.5	--	<1	<1	<1	--	--	<1	--	--	--	--	--	--	--
V25	05/10/89	2.5	--	<1	<1	<1	--	--	<1	--	--	--	--	--	--	--
V26	05/10/89	2	--	1	<1	<1	--	--	<1	--	--	--	--	--	--	--
V27	05/10/89	0	--	<1	<1	<1	--	--	<1	--	--	--	--	--	--	--

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ESL Table E-3 Ambient and Indoor Air Screening Levels, Lowest Residential²			290	0.084	310	0.97	100	100	100	9.4	0.072	NE	NE	NE	NE	NE
LTCP Soil Gas Criteria - Residential³			NE	85	NE	1,100	NE	NE	NE	NE	93	NE	NE	NE	NE	NE
V27/A	05/10/89	2	--	<1	<1	<1	--	--	<1	--	--	--	--	--	--	--
V27/B	05/10/89	4	--	<1	15	<1	--	--	<1	--	--	--	--	--	--	--
V28/A	05/10/89	2	--	10	25	<1	--	--	42	--	--	--	--	--	--	--
V28/B	05/10/89	2.5	--	<1	1	<1	--	--	6	--	--	--	--	--	--	--
V29	05/10/89	2.5	--	5	49	<1	--	--	<1	--	--	--	--	--	--	--
V30	05/10/89	2	--	<1	<1	<1	--	--	<1	--	--	--	--	--	--	--
V31	05/10/89	2.5	--	<1	<1	<1	--	--	<1	--	--	--	--	--	--	--
V32	05/10/89	2.5	--	<1	<1	<1	--	--	<1	--	--	--	--	--	--	--
V1	07/21/87	3	--	110	30	--	--	--	--	--	--	--	--	--	--	--
V2	07/21/87	3	--	1,900	500	--	--	--	--	--	--	--	--	--	--	--
V3	07/21/87	3	--	120	50	--	--	--	--	--	--	--	--	--	--	--
V4	07/21/87	3	--	70	180	--	--	--	--	--	--	--	--	--	--	--
V5	07/21/87	3	--	<1	<1	--	--	--	--	--	--	--	--	--	--	--
V6	07/21/87	3	--	10	10	--	--	--	--	--	--	--	--	--	--	--
V7	07/21/87	3	--	<1	<1	--	--	--	--	--	--	--	--	--	--	--
V8	07/21/87	3	--	5	5	--	--	--	--	--	--	--	--	--	--	--
V9	07/21/87	3	--	<1	<1	--	--	--	--	--	--	--	--	--	--	--
V10	07/21/87	3	--	<1	<1	--	--	--	--	--	--	--	--	--	--	--
V11	07/21/87	3	--	<1	<1	--	--	--	--	--	--	--	--	--	--	--
V12	07/21/87	3	--	<1	<1	--	--	--	--	--	--	--	--	--	--	--

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FORMER CHEVRON STATION 91153
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Sample ID	Date	Sample Depth (fbg)	TPHg	Benzene	Toluene	Ethyl-benzene	m,p-Xylene	o-Xylene	Total Xylenes ¹	MTBE	Naphthalene	(% Volume)				
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ESL Table E-3 Ambient and Indoor Air Screening Levels, Lowest Residential²			290	0.084	310	0.97	100	100	100	9.4	0.072	NE	NE	NE	NE	NE
LTCP Soil Gas Criteria - Residential³			NE	85	NE	1,100	NE	NE	NE	NE	93	NE	NE	NE	NE	NE

Abbreviations/Notes:

Total petroleum hydrocarbons as gasoline (TPHg) by EPA Method TO-15 or EPA Method TO-15 SIM

Benzene, toluene, ethylbenzene, xylenes (BTEX), methyl tertiary butyl ether (MTBE), and naphthalene by EPA Method TO-15 or EPA Method TO-15 SIM.

Oxygen, nitrogen (N₂), carbon dioxide (CO₂), methane, and helium (He) by ASTM D-1946.

fbg = Feet below grade.

Micrograms per meter cubed (µg/m³).

Percent Volume (%).

Parts per million (ppm).

TB = Trip blank

<X = Not detected above method detection limit x.

-- = not analyzed or not applicable.

1 = total xylene, m,p-xylene plus o-xylene, concentration reported.

2 = Environmental Screening Levels (ESLs) for shallow soil gas from Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater prepared by the California Regional Water Quality Control Board, San Francisco Bay Region Interim Final November 2007, revised May 2008, revised May 2013, Table E-3.

3 = Low-Threat Underground Storage Tank Case Closure Policy - Soil Gas Criteria No Bioattenuation Zone - prepared by the California State Water Resources Control Board, August 17, 2012.

1989 soil vapor samples collected analyzed using a chromatograph equipped with a flame ionization detector

1987 soil vapor samples collected analyzed using a chromatograph equipped with a photo ionization detector

J = Estimated value

Bold = Concentration exceeds applicable ESL.

Appendix A

Regulatory Letter

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY

ALEX BRISCOE, Agency Director



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

December 16, 2014

Ms. Alexis Coulter
Chevron Environmental Management Co.
6101 Bollinger Canyon Road
San Ramon, CA 94583
(sent via electronic mail to
acoulter@chevron.com)

Mr. Mark Hom and Anna Cheng
3135 Gibbons Drive
Alameda, CA, 94501-1749
(sent via electronic mail to
mark@galvinhom.com)

JL and Jane Bolton
Address Unknown

John Thompson
Address Unknown

Shirley & Ruben Cohen
Address Unknown

Gary & Jerri Fenstermaker
Address Unknown

Claire Cepollina & Fred Martini
Address Unknown

Subject: Request for IRAP Addendum, Data Gap Work Plan, and Updated Draft Feasibility Study / Corrective Action Plan; Fuel Leak Case No. RO0000341; (Global ID # T0600100330); Chevron #9-1153, (3126 Fernside Blvd), 3135 Gibbons Drive, Alameda, CA 94501

Dear Ms. Fischer, Mr. Hom, and Ms. Cheng:

Alameda County Environmental Health (ACEH) staff has reviewed the case file including the *Vapor Mitigation Plan*, dated October 3, 2014, and the *Third Quarter 2014 Groundwater Monitoring and Sampling Report*, dated November 21, 2014. Both reports were prepared and submitted on your behalf by Conestoga-Rovers & Associates (CRA). Thank you for the submittal of the reports.

To further discuss the proposed work and refine the path forward at the site, ACEH requested a meeting with you and CRA, and met on December 11, 2014. Based on the review of the case file and the results of the meeting, ACEH requests that you address the following technical comments and send us the documents requested below.

TECHNICAL COMMENTS

1. Interim Remedial Action Plan Addendum - The Interim Remedial Action Plan (IRAP) proposes to mitigate vapor intrusion with the use of the Retro-Coat™ barrier by Land Science Technologies in order to seal the concert garage floor from subsurface vapors. Because the process requires the filling of slab cracks and the destruction of existing vapor wells, collection of subslab vapors will not be possible after use of the product. As discussed at the meeting, Land Science created the product to mitigate vapor intrusion of Tetrachloroethene (PCE) and Trichloroethene (TCE) through concrete, and has not specifically evaluated the product against vapor intrusion of petroleum hydrocarbon compounds (especially benzene, toluene, ethylbenzene, total xylenes, and etc.). However, CRA has indicated that Land Science Technologies has stated that the product is expected to similarly block petroleum hydrocarbon volatile compounds based on the chemical properties of the compounds.

ACEH is in general agreement with the proposed use of the product as a mitigation tool; however, requests a Construction Quality Assurance (CQA) Plan (as a IRAP Addendum) by the date identified below. The CQA Plan is intended to guide construction of the barrier in order to ensure the installation of the product is to the manufacture's specifications.

2. Data Gap Work Plan – As discussed in the December 11, 2014 meeting, a data gap work plan is required to fill Low Threat Closure Policy (LTCP) data gaps remaining at the site, including those identified in the July 10, 2014 Site Conceptual Model, and those identified in the meeting, including but not limited to:

- **Extent of Free Phase** – To determine if Free Phase (FP) extends offsite with the installation of a well in the vicinity of the existing unused recovery trench. The recovery trench and well RW-1 were discussed in the meeting, and it was agreed are not capable of filling this data gap.
- **Naphthalene and PAH Analytical Data** – A waste oil underground storage tank (UST) was removed from the subject site and analysis for naphthalene and poly-aromatic hydrocarbons (PAHs) have not been conducted in accordance with the LTCP policy. Analysis for naphthalene has additionally not been conducted in association with the former gasoline USTs at the site.

Please submit a work plan by the date identified below. This request can be combined with pilot studies required for the next technical comment.

3. **Updated Draft Feasibility Study / Corrective Action Plan** - As additionally discussed in the December 11, 2014 meeting and several previous letters (March 24, 2014 and August 29, 2014), an updated draft Feasibility Study / Corrective Action Plan (FS/CAP) is requested to address corrective actions required at the site due to the inability of the site to meet the Vapor Intrusion to Indoor Air and the Direct Contact and Outdoor Air Exposure criteria. Please submit a draft FS/CAP by the date identified below.

TECHNICAL REPORT REQUEST

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

- **February 16, 2015** – Construction Quality Assurance Plan
File to be named: RO341_IRAP_ADEND_R_yyyy-mm-dd
- **March 16, 2015** – Data Gap Work Plan
File to be named: RO341_WP_R_yyyy-mm-dd
- **March 16, 2015** – Draft FS/CAP (If appropriate, the Work Plan be combined with the draft FS/CAP)
File to be named: RO341_FEASSTUD_R_yyyy-mm-dd

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

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

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

Sincerely,



Digitally signed by Mark E. Detterman
DN: cn=Mark E. Detterman, o, ou, email, c=US
Date: 2014.12.16 14:00:59 -08'00'

Mark E. Detterman, PG, CEG
Senior Hazardous Materials Specialist

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

cc: N. Scott MacLeod, Conestoga-Rovers & Assoc., 5900 Hollis Street, Suite A, Emeryville, CA 94608
(sent via electronic mail to smacleod@croworld.com)
Nathan Lee, Conestoga-Rovers & Assoc., 5900 Hollis Street, Suite A, Emeryville, CA 94608
(sent via electronic mail to nlee@croworld.com)

Dilan Roe, ACEH (sent via electronic mail to dilan.roe@acgov.org)
Mark Detterman, ACEH (sent via electronic mail to mark.detterman@acgov.org)
Electronic File, GeoTracker

Attachment 1

Responsible Party(ies) Legal Requirements / Obligations

REPORT REQUESTS

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

ELECTRONIC SUBMITTAL OF REPORTS

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

PERJURY STATEMENT

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

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

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

UNDERGROUND STORAGE TANK CLEANUP FUND

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

AGENCY OVERSIGHT

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

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

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

REQUIREMENTS

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

RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Submission Instructions

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

Appendix B

Summary of Environmental Investigation and Remediation

SUMMARY OF ENVIRONMENTAL INVESTIGATION AND REMEDIATION
Former Chevron Service Station 91153
3135 Gibbons Drive (3126 Fernside Boulevard), Alameda, California

1986 UST Removal and Excavation

The underground storage tanks (USTs) were removed and an unreported volume of soil was excavated from the former UST pit and product line trenches. Excavated soil was aerated onsite and used as backfill. Additional information is available in Blaine Tech Services, Inc.'s June 19, 1986 *Field Sampling* report and Weiss Associates' (Weiss) December 20, 1994 *Comprehensive Site Evaluation and Proposed Future Action Plan*.

1986 Well Installation

Wells C-1 through C-3 were installed onsite. Additional information is available in Emcon Associates' September 18, 1986 *Well Installation Memorandum*.

1987 Area Well Survey

In August 1987, Pacific Environmental Group, Inc. (PEG) conducted a well survey and identified wells within approximately 0.5 mile of the site. The majority of these wells were used for groundwater monitoring or cathodic protection and some were used for irrigation. None of the wells were listed as municipal drinking water supply wells. Additional information is available in PEG's August 12, 1987 *Well Survey Report*.

1989 House Construction and Destruction of Monitoring Well C-2

According to Weiss' December 20, 1994 *Comprehensive Site Evaluation and Proposed Future Action Plan*, a majority of the soil beneath the planned residence footprint was removed for construction in early 1989. Groundwater monitoring well C-2 was apparently destroyed during construction prior to May 1989. Additional information is available in Weiss' December 20, 1994 *Comprehensive Site Evaluation and Proposed Future Action Plan*.

1987 and 1989 Soil Vapor Survey

Soil vapor surveys were conducted to quantify vapor intrusion to indoor air risks for onsite residents. Based on vapor concentrations from samples collected from the southeastern portion of the site, a vapor barrier was recommended for any structures. Additional information is available in EA Engineering's August 19, 1987 *Risk Assessment* and June 9, 1989 *Soil vapor Contaminant Assessment Report of Investigation*.

1989 Subsurface Investigation

In July 1989, EA collected soil samples from between 0.5 and 9.5 feet below grade (fbg) in five shallow onsite borings and three shallow offsite borings (SB1 through SB8). The highest concentrations of total petroleum hydrocarbons as gasoline (TPHg) and benzene, toluene, ethylbenzene and xylenes (BTEX)

were found in the areas east of the UST complex and pump islands. Additional information is available in Weiss' December 20, 1994 *Comprehensive Site Evaluation and Proposed Future Action Plan*.

1991 Groundwater Treatment

A groundwater pump and treat system was installed and operated by EA from 1991 to 1994. The system extracted groundwater from a recovery trench and extraction well RW-1. Additional information is available in Weiss' December 20, 1994 *Comprehensive Site Evaluation and Proposed Future Action Plan*.

1992 Well Installations

Offsite wells MW-4 through MW-6 were installed to further delineate the lateral extent of dissolved hydrocarbons. Additional information is available in Groundwater Technology Inc.'s (GTI) July 16, 1992 *Environmental Assessment Report*.

1993 Offsite Groundwater Sampling

Weiss collected groundwater samples from temporary offsite borings BH-A, BH-B, and BH-C, located crossgradient and downgradient of the groundwater extraction trench. Additional information is available in Weiss' December 20, 1994 *Comprehensive Site Evaluation and Proposed Future Action Plan*.

1993 Monitoring Well Installation

On November 11, 1993 GTI installed groundwater monitoring well MW-7 and temporary monitoring well TMW-1 to further characterize the distribution of hydrocarbons in soil and groundwater upgradient and downgradient of the site. Additional information is available in GTI's January 31, 1994 *Additional Environmental Assessment Report*.

1994 Site Evaluation and Proposed Further Action

At Chevron's request, Weiss prepared a site evaluation to summarize all investigative and remedial actions performed to date and to outline a recommended future action plan. Additional information is available in WA's December 20, 1994 *Site Evaluation and Proposed Further Action Plan*.

1995 Well Installations

Wells MW-8 through MW-10 were installed to further delineate the downgradient extent of hydrocarbons in groundwater. Additional information is available in GTI's October 31, 1995 *Additional Site Assessment Report*.

1996 Evaluation for Potential Migration Pathway via Buried Utility Pipelines

Fluor Daniel GTI (FD-GTI) compiled utility location and depth information to analyze the potential for offsite migration of dissolved hydrocarbons in utility trenches. The report concluded that several utilities penetrated groundwater, but that these utilities were not acting as preferential pathways. The report states that the buried utilities were installed in materials similar to native soil and were unlikely

to result in preferential flow. In addition, monitoring well data near the utilities was not consistent with preferential flow. Additional information is available in FD-GTI's May 15, 1996 *Evaluation for Potential Migration Pathway via Buried Utility Pipelines*.

1996 Geophysical Investigation for Buried Underground Storage Tanks

FD-GTI performed a geophysical survey of approximately 70 feet of sidewalk along Gibbons Boulevard and near monitoring well C-1. Both ground penetrating radar and vertical magnetic gradiometer were used. No buried underground storage tanks were identified within the survey areas. Additional information is available in FD-GTI's July 8, 1996 *Geophysical Investigation for Buried Underground Storage Tanks*.

1997 Shallow Soil Investigation

Shallow soil samples S-1 through S-15 were collected along the north, west, and east property boundaries to assess lead concentrations in onsite soil. Additional information is available in Gettler-Ryan's (G-R) October 22, 1997 *Soil Sampling Report*.

1997 ORC and Peroxide Injection

Oxygen releasing compound (ORC) was placed in well MW-6 and MW-7 and hydrogen peroxide was injected in well MW-1 to remediate light non-aqueous phase liquids. Additional information is available in ChevronTexaco Energy Research and Technology Company's (Chevron ETC) May 2003 *Risk-Based Corrective Action Evaluation of Vapor Intrusion to Indoor Air from Soil Vapor*,

1998 Bio-Parameter Evaluation

Three samples collected during the third quarter 1998 groundwater monitoring event were analyzed for bio-parameter data to evaluate biodegradation processes. The report concluded that not enough parameters indicated biodegradation was occurring. However, the report states that the recently added ORC and hydrogen peroxide would potentially increase bioremediation. Additional information is available in Chevron's September 29, 1998 *Bio-Remediation Evaluation Letter*.

1999 Hydrogen Peroxide Injection

In July 1999, Cambria Environmental Technology, Inc. (Cambria) injected a hydrogen peroxide solution into well C-1 to oxidize residual hydrocarbons. Additional information is available in Cambria's July 12, 1999 *Hydrogen Peroxide Injection* report.

2001 to 2002 Groundwater Batch Extraction Events

Five groundwater batch extraction events were conducted. These events were discontinued because of inconvenience to the resident. Additional Information available in Chevron ETC's May 2003 *Risk-Based Corrective Action Evaluation of Vapor Intrusion to Indoor Air from Soil Vapor*.

2002-2003 Vapor Intrusion Study and Risk-Based Correction Action Evaluation of Vapor Intrusion to Indoor Air from Soil Vapor

Borings SV-1 through SV-7 were hand-augered along the edges of the current building and soil-vapor samples were collected from temporary probes. These data were used to evaluate potential indoor air risks to onsite residents. Data was compared to the United States Environmental Protection Agency's established target risk levels for adults and children. The report concludes that vapor intrusion risks from soil vapor intrusion to indoor air were below the established guidelines. Additional information is available in Chevron ETC's May 2003 *Risk-Based Corrective Action Evaluation of Vapor Intrusion to Indoor Air from Soil Vapor*.

2010 Preferential Pathway and Well Survey

In 2010, Conestoga-Rovers & Associates (CRA) completed another preferential pathway analysis and well survey. CRA located electric, natural gas, water, communication, storm drain sewer, and sanitary sewer lines near the site. Although some of these utilities periodically intersect the groundwater table, hydrocarbon concentrations in monitoring wells indicate that utilities are not acting as significant pathways for hydrocarbon migration. This is consistent with previous assessments. The closest water supply wells are over 1,000 feet from the site. These wells are either upgradient or located in Oakland across the Oakland Alameda Estuary. The wells identified in the survey are not at risk from hydrocarbons originating from the site. Additional information is available in CRA's September 30, 2010 *Preferential Pathway Study and Well Survey Report*.

2011 Subsurface and Crawl Space and Indoor Ambient Air Investigation

In 2011, Conestoga-Rovers & Associates (CRA) collected 2 indoor ambient air samples from inside the residence, 2 ambient air samples from within the crawl space, and 1 outdoor ambient air sample. Also 8 soil borings B-1 through B-8 were advanced onsite. Additional information is available in CRA's April 18, 2012 *Subsurface and Crawl Space, Indoor and Ambient Air Investigation Report*.

2013 Crawl Space, Indoor Ambient Air and Sub-Slab Soil Gas Investigation

In 2013 -Rovers & Associates (CRA) installed 2 sub-slab vapor probes and collected 2 sub-slab vapor probe samples, 2 indoor ambient air samples from inside the residence, 2 ambient air samples from within the crawl space, and 1 outdoor ambient air sample. Additional information is available in CRA's December 20, 2013 *Crawl Space, Indoor Ambient Air and Sub-slab Soil Gas Investigation Report*.

Appendix C

Degradation Trends and Calculations

Table A - Summary of Degradation Rate Calculations
Former Chevron Service Station #91153, 3135 Gibbons Boulevard, Alameda, California

Well	Analyte	Maximum Concentration (ug/L)	Current Concentration (ug/L)	Half-Life (years)	Date to Reach ESL	Years to Reach ESL
MW-7	TPHg	29,000	1,600	5.81	Mar 2037	22
	Benzene	7,300	110	1.83	Mar 2020	5

Notes and Abbreviations:

TPHg = Total petroleum hydrocarbons as gasoline

ug/L = Micrograms per liter

ESL = Environmental Screening Level

Predicted Time to Reach Environmental Screening Levels (ESL) in Well MW-7

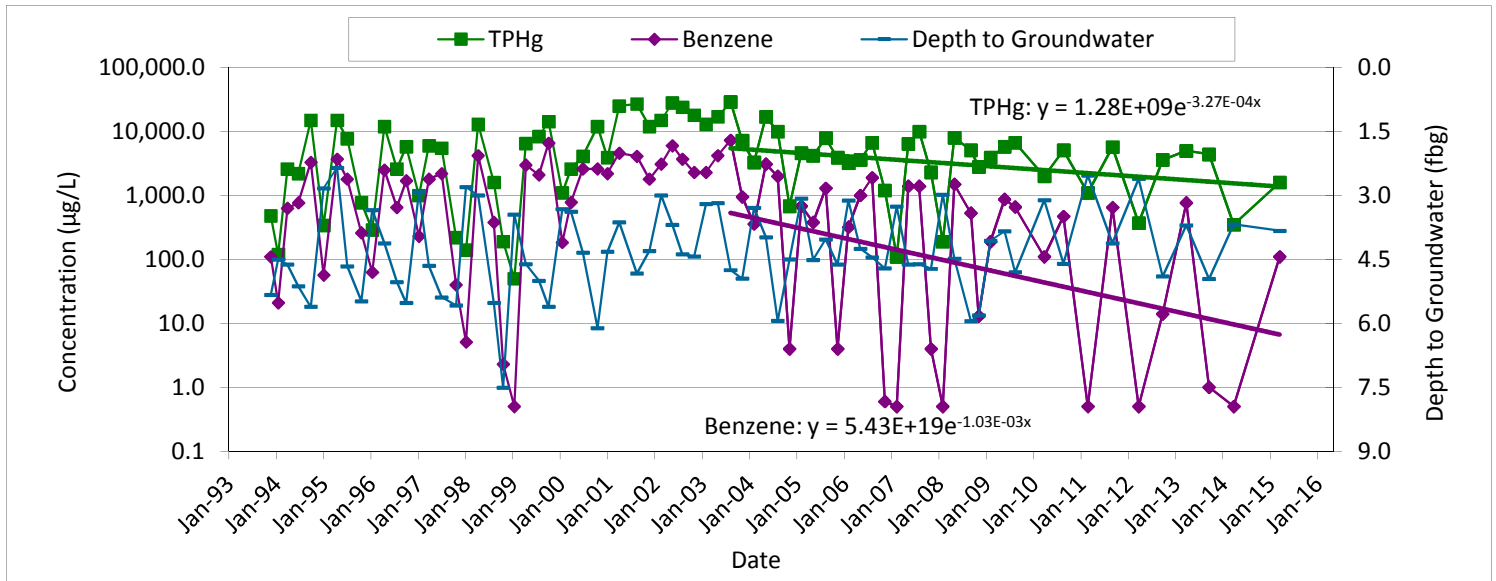
Former Chevron Service Station #91153, 3135 Gibbons Boulevard, Alameda, California

$$y = b e^{ax} \quad \implies \quad x = \ln(y/b) / a$$

where: y = concentration in µg/L a = decay constant
 b = concentration at time (x) x = time (x) in days

Given	Constituent	Total Petroleum Hydrocarbons as Gasoline (TPHg)	Benzene
Environmental Screening Levels (ESL):	y	100	1
Constant:	b	1.28E+09	5.43E+19
Constant:	a	-3.27E-04	-1.03E-03
Starting date for current trend:		8/15/2003	8/15/2003

Calculate		TPHg	Benzene
Attenuation Half Life (years):	$(-\ln(2)/a)/365.25$	5.81	1.83
Estimated Date to Reach ESL:	$(x = \ln(y/b) / a)$	Mar 2037	Mar 2020



FORMER CHEVRON SERVICE STATION #91153
 3135 GIBBONS BOULEVARD
 ALAMEDA, CALIFORNIA



MW-7: TPHg AND BENZENE CONCENTRATIONS
 AND DEPTH TO GROUNDWATER

Appendix D

Standard Field Procedures for Soil Borings

CONESTOGA-ROVERS & ASSOCIATES

STANDARD FIELD PROCEDURES FOR SOIL BORINGS

This document describes Conestoga-Rovers & Associates (CRA) standard field methods for drilling and sampling soil borings. These procedures are designed to comply with Federal, State and local regulatory guidelines. Specific field procedures are summarized below.

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

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

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

Soil Boring and Sampling: Soil borings are typically drilled using hollow-stem augers or hydraulic push technologies. Prior to drilling, the first 8 feet of the boring are cleared using an air or water knife and vacuum extraction. This minimizes the potential for impacting utilities.

At least 1½ feet of the soil column is collected for every 5 feet of drilled depth. Additional soil samples are collected near the water table and at lithologic changes. Samples are collected using lined split-barrel or equivalent samplers driven into undisturbed sediments beyond the bottom of the borehole. The vertical location of each soil sample is determined by measuring the distance from the middle of the soil sample tube to the end of the drive rod used to advance the split barrel sampler. All sample depths use the ground surface immediately adjacent to the boring as a datum. The horizontal location of each boring is measured in the field from an onsite permanent reference using a measuring wheel or tape measure.

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

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

CONESTOGA-ROVERS & ASSOCIATES

Field Screening: One of the remaining tubes is partially emptied leaving about one-third of the soil in the tube. The tube is capped with plastic end caps and set aside to allow hydrocarbons to volatilize from the soil. After 10 to 15 minutes, a portable photoionization detector (PID) measures volatile hydrocarbon vapor concentrations in the tube headspace, extracting the vapor through a slit in the cap. PID measurements are used along with the field observations, odors, stratigraphy and ground water depth to select soil samples for analysis.

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

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

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

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

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