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April 28, 2014

Mr. Mark Detterman
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Dear Mr. Detterman:

Attached for your review is the *Site Conceptual Model* for Chevron-branded service station 90504, located at 15900 Hesperian Boulevard in San Lorenzo, California. This report was prepared by Stantec Consulting Services Inc. (Stantec), upon whose assistance and advice I have relied. I declare under penalty of perjury that the information and/or recommendations contained in the attached report are true and correct, to the best of my knowledge.

If you have any further questions, please do not hesitate to contact me or the Stantec project manager, Travis Flora, at (408) 356-6124 ext. 238, or travis.flora@stantec.com.

Sincerely,

Carryl MacLeod

Carryl MacLeod
Project Manager

Site Conceptual Model

Chevron-branded Service
Station 90504
15900 Hesperian Boulevard
San Lorenzo, California

Prepared for:
Chevron Environmental
Management Company
6101 Bollinger Canyon Road
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Prepared by:
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April 28, 2014

SITE CONCEPTUAL MODEL
Chevron-branded Service Station 90504, 15900 Hesperian Boulevard, San Lorenzo, California
April 28, 2014

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Prepared by Erin O'Malley
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Erin O'Malley
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28 April 2014

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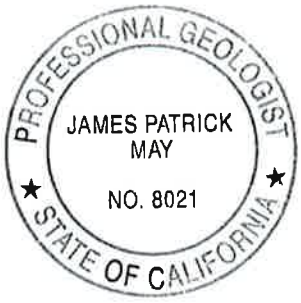

James P. May, P.G.
Senior Geologist

Stantec

Table of Contents

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

1.0 Introduction

On behalf of Chevron Environmental Management Company (Chevron), Stantec Consulting Services Inc. (Stantec) is pleased to submit this *Site Conceptual Model* for Chevron-branded service station 90504, which is located at 15900 Hesperian Boulevard, San Lorenzo, Alameda County, California (the Site - shown on **Figure 1**). This report was prepared at the request of Alameda County Environmental Health (ACEH) in an email dated October 10, 2013. ACEH subsequently approved extensions for the report in correspondence dated December 5, 2013 and January 23, 2014. ACEH correspondence is presented as **Appendix A**.

This report is organized into the following sections summarizing:

- Site background;
- Extent of petroleum hydrocarbons;
- Potential receptors and exposure pathways;
- Low-Threat Underground Storage Tank (UST) Case Closure Policy (LTCP) evaluation;
- Data gap analysis; and
- Conclusions and recommendations.

A focused Site conceptual model (SCM) was requested by ACEH and is included in **Appendix B**. This SCM includes many of the elements that would normally be described in the sections indicated above. To avoid duplication, the majority of the information is included in the focused SCM, with references to the appendix included in this text. In addition, ACEH provided guidance on sensitive receptor surveys, preferential pathways, and focused SCMs. Information from that guidance that is relevant to the LTCP evaluation has been included in the focused SCM and this report.

2.0 Site Background

2.1 SITE DESCRIPTION AND LAND USE

The Site is an active Chevron-branded service station located on the eastern corner at the intersection of Hesperian Boulevard and Post Office Road in San Lorenzo, California. The Site has been occupied by a gasoline service station since approximately 1969. Current Site features include three 10,000-gallon fiberglass gasoline USTs, one 10,000-gallon fiberglass diesel UST, three fuel dispenser islands, and a station building with three service bays. The USTs are located in the southern portion of the Site, the fuel dispenser islands are located in the central portion of the Site, and the station building is located in the northeastern portion of the Site. In 1983, two 10,000-gallon and one 5,000-gallon steel USTs were replaced with the existing fiberglass USTs (Cambria Environmental Technology, Inc. [Cambria], 2004). In January 1994, the fuel dispenser islands were replaced (Weiss Associates [Weiss], 1994a), and in March 1994, a 1,000-gallon steel waste oil UST located northeast of the station building was replaced with a 1,000-gallon fiberglass UST (Touchstone Developments [Touchstone], 1994). The 1,000-gallon fiberglass UST was later removed in 2001 (Gettler-Ryan Inc. [G-R], 2001). A Site Plan is shown on **Figure 2**.

Land use near the Site consists of a mixture of commercial and residential properties. The Site is bounded on the northwest by Post Office Road followed by a parking lot for a strip mall, to the northeast by a parking lot for the post office, to the southeast by a commercial building, and on the southwest by Hesperian Boulevard followed by residential properties.

2.2 REGIONAL AND LOCAL GEOLOGY AND HYDROGEOLOGY

Soil boring and well construction logs are included in **Appendix C**. Well construction details and an assessment of whether First Quarter 2014 groundwater samples were collected when groundwater elevations were measured across the well screen intervals are presented in **Table 1**. Historical groundwater elevation data are presented in **Table 2**. A groundwater elevation contour map (based on First Quarter 2014 data) is shown on **Figure 3** and a Rose Diagram illustrating the direction of groundwater flow from Fourth Quarter 1989 to First Quarter 2014 is shown on **Figure 4**. A description of the regional and local geology and hydrogeology is included in the focused SCM in **Appendix B**.

As requested by ACEH, the Rose Diagram (shown on **Figure 4**) was revised to include additional historical data beginning with Fourth Quarter 1989 data, when preparation of groundwater elevation contour maps began. With the inclusion of additional historical data beginning in 1989, the vector mean groundwater flow direction varies by approximately 5 degrees from what it was utilizing historical data from 2009 to present.

2.3 RELEASE HISTORY

The release history is described in the focused SCM included in **Appendix B**.

2.4 PREVIOUS INVESTIGATIONS AND REMEDIATION

Historical groundwater monitoring data and analytical results are summarized in **Table 2** and **Table 3**. Historical soil analytical results are summarized in **Table 4**. Historical soil vapor analytical results are summarized in **Table 5**. Locations of historical soil borings, soil samples, groundwater monitoring wells, and soil vapor wells are shown on **Figure 2**. Soil boring and well construction logs are included in **Appendix C**.

In December 1983, one of the 10,000-gallon steel USTs failed a tank tightness test. Following the UST inspection, two 10,000-gallon and one 5,000-gallon steel USTs (first-generation) were replaced with the existing fiberglass USTs (second-generation), along with associated product lines. A hole of unknown diameter was observed in the 10,000-gallon unleaded gasoline UST and approximately 120 cubic yards of impacted soil was excavated and removed from the Site (Cambria, 2004). No other details regarding the replacement of the USTs have been located.

Also in December 1983, G-R oversaw installation of five on-site monitoring wells (C-1 through C-5) to total depths of 20 feet below ground surface (bgs). Soil samples were not collected for laboratory analysis during this investigation (G-R, 1984; GeoStrategies Inc. [GSI], 1990a).

In November 1989, GSI oversaw installation of one on-site monitoring well (C-6) and two off-site monitoring wells (C-7 and C-8) to total depths of 25 feet bgs (boreholes advanced to 25.5 feet bgs). Soil samples were collected from each of the three boreholes and analyzed for total petroleum hydrocarbons as gasoline range organics (TPH-GRO) and benzene, toluene, ethylbenzene, and total xylenes (BTEX compounds). TPH-GRO and BTEX compounds were not detected in any of the samples collected from borehole C-6. Benzene was only detected above laboratory reporting limits (LRLs) in the soil sample collected from borehole C-7 at 20.5 feet bgs, at a concentration of 0.11 milligrams per kilogram (mg/kg). The maximum concentration of TPH-GRO in soil (37 mg/kg) was detected in the sample collected from borehole C-8 at 15.5 feet bgs (GSI, 1990a).

In December 1989, 0.01 and 0.15 feet of light non-aqueous phase liquid (LNAPL) were measured in wells C-1 and C-2, respectively. Sheen was also observed in well C-3. LNAPL was again observed in wells C-1 and C-2 in September 1990, at thicknesses of 0.03 and 0.10 feet, respectively. The wells were subsequently monitored and LNAPL was removed on a weekly basis (GSI, 1990b). The timeframe of LNAPL monitoring and amount removed were not documented; however, historical groundwater monitoring data indicates LNAPL was observed in well C-1 through December 1990 (maximum thickness of 0.03 feet) and well C-2 through March 1991 (maximum thickness of 0.15 feet).

In August 1990, GSI oversaw installation of three off-site monitoring wells (C-9 through C-11) to total depths of 25 feet bgs (boreholes advanced to 25.5 feet bgs). Soil samples were collected from each of the three boreholes and analyzed for TPH-GRO and BTEX compounds, which were not detected above LRLs (GSI, 1990a; GSI, 1990c).

In July 1992, Weiss oversaw advancement of four on-site soil borings (BH-A through BH-D) to total depths of 11.5 feet bgs. Boring logs were not prepared for these borings. Soil samples were collected from each of the four borings and analyzed for TPH-GRO and BTEX compounds. Maximum concentrations of TPH-GRO and benzene in soil (660 mg/kg and 0.82 mg/kg, respectively) were detected in the sample collected from boring BH-C at 10 feet bgs. Groundwater samples were not collected from these borings (Weiss, 1992).

In August 1992, Weiss installed a groundwater extraction and treatment (GWET) system at the Site. Groundwater was extracted from wells C-1 and C-2 and treated using 1,000-pound aqueous-phase carbon vessels in series, prior to being discharged to the sanitary sewer (Weiss, 1994b). The system was shut down in July 1994 when benzene concentrations in groundwater approached the maximum contaminant level (MCL) for drinking water of 1.0 micrograms per liter (µg/L). From August 1992 through July 1994, the GWET system extracted approximately 1,290,430 gallons of groundwater and removed approximately 26 pounds of petroleum hydrocarbons (Conestoga-Rovers & Associates [CRA], 2007).

In January 1994, the three fuel dispenser islands located in the central portion of the Site and associated product piping were replaced. Four soil samples (D-1, D-2, D-3A, and D-3B) were collected from beneath the fuel dispenser islands and two soil samples (T-1 and T-2) were collected from beneath the product piping. The depths of these soil samples were not reported. The samples were analyzed for TPH-GRO and BTEX compounds and these constituents were only detected in samples D-2 and D-3A, with maximum concentrations of TPH-GRO and benzene in sample D-3A, at concentrations of 5 mg/kg and 0.018 mg/kg, respectively. Soils in the area of samples D-2 and D-3A were later over-excavated during installation of the new dispenser islands. Approximately 310 cubic yards of soil was removed and disposed of off Site following these activities (Weiss, 1994a).

On March 29, 1994, Touchstone oversaw replacement of the 1,000-gallon steel waste oil UST located northeast of the station building with a 1,000-gallon fiberglass waste oil UST. No obvious holes or cracks were observed in the steel UST. Two soil samples (WO-E and WO-W) were collected from beneath the waste oil UST at depths of 9 feet bgs. These samples were analyzed for TPH-GRO, total petroleum hydrocarbons as diesel range organics (TPH-DRO), BTEX compounds, total oil and grease (TOG), halogenated volatile organic compounds (HVOCs), semi-volatile organic compounds (SVOCs), including polynuclear aromatic hydrocarbons (PAHs), and wear metals. TPH-GRO, TPH-DRO, BTEX compounds, and SVOCs were not detected above LRLs in either of the samples collected; however, TOG and wear metals chromium, nickel, and zinc were detected at maximum concentrations of 110 mg/kg, 37 mg/kg, 39 mg/kg, and 48 mg/kg, respectively. Dichloromethane was the only HVOC detected, and it was only detected in sample WO-E at a concentration of 0.006 mg/kg. Following initial soil sampling, over-excavation was conducted to a depth of 11 feet bgs (approximately 15 cubic yards of soil) in the area of sample WO-E and a confirmation soil sample (XWO-E) was collected. This sample was analyzed for TOG and HVOCs only and these compounds were not detected above LRLs. Approximately 45 to 50 cubic yards of soil were removed and disposed of off Site following these activities (Touchstone, 1994).

On June 8, 2001, G-R oversaw removal of the 1,000-gallon fiberglass waste oil UST. The integrity of the UST was reported in good condition and no holes or cracks were observed. One soil sample WOT-11 was collected from beneath the waste oil UST at a depth of 11 feet bgs and was analyzed for TPH-GRO, TPH-DRO, BTEX compounds, methyl *tertiary*-butyl ether (MtBE), TOG, wear metals, volatile organic compounds (VOCs), and SVOCs including PAHs. With the exception of TOG and wear metals chromium, nickel, and zinc, which were detected at concentrations of 63 mg/kg, 29 mg/kg, 25 mg/kg, and 33 mg/kg, respectively, all constituents analyzed were below LRLs. With approval from ACEH, the excavated soil was used as backfill (G-R, 2001).

In May 2010, CRA installed four permanent on-site soil vapor wells (VP-1 through VP-4) to a depth of approximately 6 feet bgs. Soil samples were collected from each of the boreholes at a depth of 5.5 feet bgs and analyzed for TPH-GRO, BTEX compounds, and MtBE and no constituent was detected above LRLs. In June 2010, CRA collected soil vapor samples from each of the vapor wells. These samples were analyzed for TPH-GRO, BTEX compounds, and MtBE, along with fixed gases. The maximum concentration of TPH-GRO in soil vapor (3,900 micrograms per cubic meter [µg/m^3]) was detected in the sample collected from vapor well VP-1, while benzene and MtBE were not detected above LRLs in any soil vapor sample (CRA, 2010). All petroleum hydrocarbon concentrations in soil vapor samples were below existing California Regional Water Quality Control Board – San Francisco Bay Region Environmental Screening Levels (ESLs) for shallow soil gas with commercial land use, and did not indicate a vapor intrusion risk at the Site.

During the groundwater monitoring and sampling event on March 23, 2012, LNAPL was measured in well C-2 at a thickness of 0.3 feet. This was the first occurrence of LNAPL in well C-2 since March 1991. A follow-up visit to the Site on May 3, 2012 confirmed the presence of LNAPL in well C-2, again measured at a thickness of 0.3 feet (CRA, 2012). In a letter dated July 13, 2012, ACEH requested continuation of appropriate and timely efforts to abate and recover the LNAPL from well C-2 and a LNAPL recovery status report summarizing activities. The Light Non-Aqueous Phase Liquid *(LNAPL) Recovery Status Report* was submitted on August 31, 2012, and described the LNAPL recovery efforts conducted during August 2012, which consisted of weekly monitoring of well C-2 and recovery of LNAPL, if present. A new absorbent sock was placed in the well following each recovery event. During August 2012, approximately 200 milliliters (mL) of LNAPL and approximately 5 liters (L) of total fluids (LNAPL and groundwater mixture) were recovered from well C-2.

Due to the decreasing volume of LNAPL recovered in well C-2, Stantec recommended reducing the LNAPL monitoring and recovery events from weekly to monthly. During Fourth Quarter 2012, First Quarter 2013, Second Quarter 2013, and Third Quarter 2013, LNAPL monitoring and recovery events were conducted monthly at well C-2. No measurable LNAPL was observed during any of the events conducted during Fourth Quarter 2012 and First Quarter 2013. During Second Quarter 2013, no measurable LNAPL was observed during events conducted in April and May 2013. Following the May 2013 event, Stantec proceeded with removal of the absorbent sock from well C-2 as recommended in the *First Quarter 2013 Quarterly Groundwater Monitoring and LNAPL Recovery Status Report*, dated May 31, 2013. During the June 2013 event, a LNAPL thickness of 0.01 feet was measured; however, no LNAPL or sheen was noted by G-R in well C-2 four days

later on June 11, 2013, during the quarterly groundwater monitoring and sampling event. During Third Quarter 2013, no measurable LNAPL or sheen was observed during any of the events and therefore no LNAPL recovery was conducted; however, sheen was noted by G-R during the groundwater monitoring and sampling event on September 10, 2013. Quarterly LNAPL monitoring and recovery events were conducted in Fourth Quarter 2013 and First Quarter 2014, and no measurable LNAPL or sheen was observed during those events; therefore, no LNAPL recovery was conducted. In addition, LNAPL or sheen was not observed during the Fourth Quarter 2013 and First Quarter 2014 quarterly groundwater monitoring and sampling events (Stantec, 2014).

3.0 Extent of Petroleum Hydrocarbons

3.1 VERTICAL EXTENT OF PETROLEUM HYDROCARBONS

3.1.1 Vertical Extent of Petroleum Hydrocarbons in Soil

Historical soil sample analytical results are presented in **Table 4**. A description of the vertical extent of petroleum hydrocarbons in soil is included in the focused SCM in **Appendix B**.

3.1.2 Vertical Extent of Petroleum Hydrocarbons in Groundwater

Historical groundwater elevation data and analytical results are included in **Table 2** and **Table 3**. A description of the vertical extent of petroleum hydrocarbons in groundwater is included in the focused SCM in **Appendix B**.

3.2 LATERAL EXTENT OF PETROLEUM HYDROCARBONS

3.2.1 Lateral Extent of Petroleum Hydrocarbons in Soil

A description of the lateral extent of petroleum hydrocarbons in soil is included in the focused SCM in **Appendix B**.

3.2.2 Lateral Extent of Petroleum Hydrocarbons in Groundwater

A figure showing the First Quarter 2014 groundwater analytical data plotted on a Site map is included as **Figure 5**. A TPH-GRO isoconcentration map is shown on **Figure 6**. A TPH-DRO isoconcentration map is shown on **Figure 7**. A total petroleum hydrocarbons as motor oil (TPH-MO) isoconcentration map is shown on **Figure 8**. These maps illustrate the approximate lateral extent of these compounds in groundwater based on the current groundwater monitoring well network. A description of the lateral extent of petroleum hydrocarbons in groundwater is included in the focused SCM in **Appendix B**.

3.2.2.1 Plume Stability

Hydrographs based on current and historical groundwater elevations and analytical results are included in **Appendix D**. Plume stability is described in the focused SCM included in **Appendix B**.

4.0 Potential Receptors and Exposure Pathways

An evaluation was conducted to identify complete and potentially complete exposure pathways relevant to human health risks at the Site based on analyses of the following components:

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

4.1 CURRENT AND FUTURE LAND USES

A description of current and future land uses for the Site is included in the focused SCM in **Appendix B**.

4.2 WATER SURVEY

The Site is located in the East Bay Plain groundwater basin, which has been designated as having existing beneficial uses for municipal, domestic, industrial process, industrial service, and agricultural water supply (RWQCB, 2011).

4.2.1 Groundwater Wells

Information on the most recent well survey is included in the focused SCM in **Appendix B**.

4.2.2 Surface Water Bodies

A description of the surface water bodies located within a 0.5-mile radius of the Site Is included in the focused SCM in **Appendix B**.

4.3 CONDUIT SURVEY

Information on historical conduit surveys is included in the focused SCM in **Appendix B**.

4.4 POTENTIALLY EXPOSED POPULATIONS

4.4.1 On-Site Current or Potential Populations

A description of on-site current or potential populations is included in the focused SCM in **Appendix B**.

4.4.2 Off-Site Current or Potential Populations

A description of off-site current or potential populations is included in the focused SCM in **Appendix B**.

4.4.3 Potential Sensitive Populations

A description of the potential sensitive populations located within 0.5-miles of the Site is included in the focused SCM in **Appendix B**. Additionally, the potential sensitive populations located within a 0.5-mile radius of the Site are listed in the following table:

Potential Sensitive Population	Address	Distance from Site (miles)	Direction from Site
Lollipop Lane Preschool	341 Paseo Grande	0.11	SE
Franskin Day Care	16113 Hesperian Blvd.	0.24	S-SE
Dorothy's Day Care	81 Via Diego	0.39	E
Grant Elementary School	879 Grant Ave.	0.42	W
Calvary Lutheran Church and School	17200 Via Magdalena	0.44	S
Community Church Preschool	945 Paseo Grande	0.45	SW
San Lorenzo High School	50 E. Lewelling Blvd.	0.47	NE
Tikes and Tots Childcare	17490 Via Arriba	0.48	S-SE
International Christian School	562 Lewelling Blvd.	0.50	NW

4.5 EXPOSURE PATHWAY ANALYSIS

The exposure pathway analysis for the Site is detailed in the focused SCM in **Appendix B** and a graphical representation is shown on **Figure 9**.

4.6 RISK EVALUATION

A risk evaluation is included in the focused SCM included in **Appendix B**.

5.0 Low-Threat UST Case Closure Policy Evaluation

This section presents the low-risk general and media-specific criteria defined by the State Water Resource Control Board's (SWRCB's) LTCP, effective August 17, 2012, under Resolution No. 2012-0016 (SWRCB, 2012) and includes an evaluation of the Site compared to these criteria. The completed SWRCB LTCP Checklist is included as **Appendix E**.

5.1 GENERAL CRITERIA

- **The unauthorized release is located within the service area of a public water system?**

  Yes. The Site is located within the service area of the East Bay Municipal Utility District.

- **The unauthorized release consists only of petroleum?**

  Yes. The constituents of concern (COCs) at the Site are petroleum hydrocarbons associated with gasoline, diesel, and waste oil hydrocarbons from an active service station, including TPH-GRO, TPH-DRO, TPH-MO, and BTEX compounds. Additionally, LNAPL has previously been measured in on-site wells C-1 and C-2.

- **The unauthorized ("primary") release from the UST system has been stopped?**

  Yes. In December 1983, one of the 10,000-gallon steel USTs failed a tank tightness test. Following the UST inspection, two 10,000-gallon and one 5,000-gallon steel USTs (first-generation) were replaced with the existing fiberglass USTs (second-generation), along with associated product lines. A hole of unknown diameter was observed in the 10,000-gallon unleaded gasoline UST and approximately 120 cubic yards of impacted soil was excavated and removed from the Site (Cambria, 2004).

  There is limited information on the source of the 2012 LNAPL release besides that it is believed to be due to problems with the diesel turbine pump; however, free product is no longer observed in Site wells and dissolved-phase petroleum hydrocarbon concentrations associated with the Site now appear to be decreasing, which would indicate that there is no longer a continuous petroleum hydrocarbon source at the Site.

- **Free product has been removed to the maximum extent practicable (per CCR Chapter 16 Section 2655 a-c)?**

  Yes. Measureable LNAPL has not been observed at the Site since Second Quarter 2013. It appears that any residual LNAPL in the subsurface is not present in significant quantity to overcome capillary forces to mobilize the LNAPL through the pore space. Per the LTCP paper, *Technical Justification for Groundwater Plume Lengths, Indicator Constituents, Concentrations, and Buffer Distances (Separation Distances) to Receptors*, dated July 12, 2011, LNAPL in this state is referred to as residual or immobile LNAPL. The paper also states

that, "the term "free product" in the State regulation is primarily equivalent to "migrating LNAPL (which is a subset of "mobile LNAPL")" (SWRCB, 2011). Based on this definition, it appears the residual/immobile LNAPL at the Site should no longer be considered free product and that free product has been removed to the maximum extent possible.

- **A Conceptual Site Model (CSM) that assesses the nature, extent, and mobility of the release has been developed?**

  Yes. The focused SCM in **Appendix B** is the CSM assessing the nature, extent, and mobility of the release.

- **Secondary source has been removed to the extent practicable?**

  No. Historical remedial efforts are described in Section 2.4. Dissolved-phase petroleum hydrocarbon concentrations associated with the Site are decreasing, indicating that there is no longer a petroleum hydrocarbon source contributing to dissolved-phase petroleum hydrocarbon concentrations on Site; however, the extent of the soil source area from the LNAPL release in 2012 has not been defined, and it is unknown if secondary source removal is needed.

- **Soil or groundwater has been tested for MtBE and results reported in accordance with Health and Safety Code section 25296.15?**

  Yes. MtBE was analyzed in soil samples collected in association with the Site beginning in June 2001. MtBE was routinely analyzed in groundwater during monitoring and sampling events since Fourth Quarter 1995. Results have been reported to ACEH and uploaded to GeoTracker™.

- **Nuisance as defined by Water Code section 13050 does not exist at the site? A "nuisance" is defined as anything which meets the following (1) Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property; (2) Affects at the same time an entire community or neighborhood; (3) Occurs during, or as a result of, the treatment or disposal of wastes.**

  No. The conditions of "nuisance" as defined by Water Code section 13050 do not exist at the Site.

- **Are there unique site attributes or site-specific conditions that demonstrably increase the risk associated with residual petroleum constituents?**

  No.

5.2 MEDIA-SPECIFIC CRITERIA

5.2.1 Groundwater-Specific Criteria

Current Site conditions do not satisfy any of the LTCP groundwater-specific criteria scenarios as the dissolved-phase petroleum hydrocarbon plume is not defined to the southwest (down-gradient) of well C-2, and the plume length in this direction is unknown.

5.2.2 Petroleum Vapor Intrusion to Indoor Air

The Site is exempt from satisfying the vapor intrusion scenarios because the Site is an active, commercial petroleum fueling facility and it is reasonably believed there are no unacceptable health risks resulting from exposure to indoor air.

5.2.3 Direct Contact and Outdoor Air Exposure

Current Site conditions do not satisfy the LTCP direct contact and outdoor air exposure criteria as shallow soil samples were not collected following the LNAPL release in 2012; therefore, current concentrations of benzene, ethylbenzene, and naphthalene in soil near the suspected release area are unknown.

In samples collected prior to the LNAPL release in 2012, concentrations of benzene and ethylbenzene in the upper 10 feet of soil were less than the limits for direct contact and outdoor air exposure specified in Table 1 of the LTCP. These criteria are likely still met across the majority of the Site with the exception of the suspected release area.

Soil samples collected during replacement of the 1,000-gallon steel waste oil UST with the 1,000-gallon fiberglass waste oil UST and subsequent over-excavation in March 1994 were analyzed for SVOCs, including naphthalene and other PAHs, and all were below LRLs (Touchstone, 1994). In addition, the soil sample collected during removal of the 1,000-gallon fiberglass waste oil UST in June 2001 was analyzed for SVOCs, including naphthalene and other PAHs, and all were below LRLs (G-R, 2001).

6.0 Data Gap Analysis

Based on a review of the data associated with the Site, the following data gaps were identified, and are also presented in **Appendix B** (Table 2):

- 2012 LNAPL release information. The source mechanism, location, and volume of the LNAPL release in 2012 have not been identified. With service station construction plans, the configuration and contents of each UST can be evaluated, and the location and depth of the diesel turbine pump that reportedly led to the release may be identified. By consulting with Chevron and the owner/operator of the station, it may be possible to determine the volume of the release.

- Current on-site soil data. Soil samples have not been collected following the LNAPL release in 2012. These data are needed to define the extent of the soil source area and evaluate whether Site conditions meet LTCP criteria for direct contact and outdoor air exposure. Once the extent of the soil source area is defined, a determination can be made on whether secondary source removal is needed.

- Full-range carbon chain analysis. With a direct release of diesel suspected, there is no explanation for the occurrence of TPH-MO in groundwater at the Site, and the compound may have been incorrectly identified in the past. A full-range carbon chain analysis (C_6 to C_{40}) is needed to more accurately identify the specific petroleum hydrocarbon constituents in groundwater and to evaluate whether TPH-MO should continue to be considered a COC.

- Additional groundwater assessment. The dissolved-phase petroleum hydrocarbon plume is not defined to the southwest (down-gradient) of well C-2. Additional groundwater assessment is needed to evaluate the extent of the dissolved-phase petroleum hydrocarbon plume in this direction and to evaluate whether Site conditions meet LTCP criteria for groundwater.

7.0 Conclusions and Recommendations

7.1 CONCLUSIONS

Release history, the extent of petroleum hydrocarbons, and potential receptors and the exposure pathway evaluation are included in the focused SCM in **Appendix B**.

7.1.1 Low-Threat UST Case Closure Policy Evaluation

Current Site conditions do not satisfy any of the LTCP groundwater-specific criteria scenarios as the dissolved-phase petroleum hydrocarbon plume is not defined to the southwest (down-gradient) of well C-2, and the plume length in this direction is unknown.

The Site is exempt from satisfying the vapor intrusion scenarios, because the Site is an active, commercial petroleum fueling facility and it is reasonably believed there are no unacceptable health risks resulting from exposure to indoor air.

Current Site conditions do not satisfy the LTCP direct contact and outdoor air exposure criteria as shallow soil samples were not collected following the LNAPL release in 2012.

7.1.2 Data Gap Analysis

Based on a review of the data associated with the Site, the following data gaps were identified:

- 2012 LNAPL release information.
- Current on-site soil data.
- Full-range carbon chain analysis.
- Additional groundwater assessment.

7.2 RECOMMENDATIONS

Based on the results and conclusions presented herein, Stantec recommends the following:

- Work with Chevron and the service station owner/operator to obtain information on the source mechanism, location, and volume of the LNAPL release in 2012.
- Once information on the mechanism, location, and volume of the LNAPL release is obtained, prepare a work plan for an on-site soil assessment to define the soil source area based on the specific release information, and determine if secondary source removal is needed. The work plan cannot be prepared at this time as locations and depths for the soil assessment are dependent on the location and depth of the diesel

turbine pump that reportedly led to the release.

- The proposed work plan will also include advancement of one off-site soil boring and collection of a representative groundwater sample to define the dissolved-phase petroleum hydrocarbon plume southwest (down-gradient) of well C-2.

- During Second Quarter 2014, request full-range carbon chain (C_6 to C_{40}) analysis on all groundwater samples collected to more accurately identify the specific petroleum hydrocarbon constituents in groundwater and to evaluate whether TPH-MO should continue to be considered a COC.

8.0 References

Cambria, 2004. *Site Closure Request*. March 26.

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TABLES

Table 1

Well Details / Screen Interval Assessment

First Quarter 2014

Chevron-branded Service Station 90504

15900 Hesperian Boulevard

San Lorenzo, California

Well ID	Date Installed	Well Type	Casing Diameter (inches)	Top of Casing (feet above msl)	Construction Well Depth (feet bgs)	Current Well Depth[1] (feet bgs)	Current Depth to Groundwater[1] (feet below TOC)	Screen Interval (feet bgs)	Screen Interval Assessment
C-1	12/29/83	Monitoring	2	32.80	20.00	18.62	10.30	5-20	Depth-to-groundwater within screen interval.
C-2	12/29/83	Monitoring	2	33.46	20.00	19.34	10.30	5-20	Depth-to-groundwater within screen interval.
C-3	12/29/83	Monitoring	2	35.46	20.00	19.40	12.51	5-20	Depth-to-groundwater within screen interval.
C-4	12/29/83	Monitoring	3	35.23	20.00	19.90	12.28	5-20	Depth-to-groundwater within screen interval.
C-5	12/29/83	Monitoring	3	34.61	20.00	19.90	11.62	5-20	Depth-to-groundwater within screen interval.
C-6	11/27/89	Monitoring	2	36.57	25.50	24.51	13.61	5-25	Depth-to-groundwater within screen interval.
C-7	11/28/89	Monitoring	2	32.32	25.50	24.84	9.77	8-25	Depth-to-groundwater within screen interval.
C-8	11/27/89	Monitoring	2	33.25	25.50	24.86	11.08	5-25	Depth-to-groundwater within screen interval.
C-9	08/28/90	Monitoring	2	32.97	25.50	24.70	11.15	12-25	Depth-to-groundwater above screen interval.
C-10	10/28/90	Monitoring	2	31.16	25.50	24.75	9.38	12-25	Depth-to-groundwater above screen interval.
C-11	08/28/90	Monitoring	2	31.23	25.50	24.66	9.10	12-25	Depth-to-groundwater above screen interval.

Notes:

bgs = below ground surface

msl = mean sea level

TOC = top of casing

[1] = As measured prior to groundwater sampling on Febraury 7, 2014.

Table 2

Groundwater Monitoring Data and Analytical Results

Chevron-branded Service Station 90504

15900 Hesperian Boulevard

San Lorenzo, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	LNAPL Thickness (ft.)	TOTAL TPH (µg/L)	TPH-MO (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)	HVOCs (µg/L)
C-1														
06/06/89	--	--	--	--	--	--	--	5,100	250	170	200	990	--	--
12/08/89	--	--	13.14	0.01	--	--	--	--	--	--	--	--	--	--
09/07/90	33.93	19.91	14.04	0.03	--	--	--	--	--	--	--	--	--	--
12/20/90	33.93	20.07	13.87	0.01	--	--	--	--	--	--	--	--	--	--
03/15/91	33.93	22.53	11.40	--	--	--	--	37,000	220	53	53	1,900	--	--
06/28/91	33.93	21.68	12.25	--	--	--	--	3,300	110	6.2	6.2	350	--	--
09/26/91	33.93	19.91	14.02	--	--	--	--	3,200	220	6.9	6.9	710	--	--
01/27/92	33.93	21.30	12.63	--	--	--	--	330	20	0.6	0.6	48	--	--
04/20/92	33.93	23.50	10.43	--	--	--	--	2,700	130	3.4	3.4	690	--	--
07/17/92	33.93	21.32	12.61	--	--	--	--	490	17	<0.5	<0.5	52	--	--
01/20/93	33.93	24.51	9.42	--	--	--	--	--	--	--	--	--	--	--
07/28/93	33.93	23.45	10.48	--	--	--	--	--	--	--	--	--	--	--
10/27/93	32.80	21.48	11.32	--	--	--	--	240	3.6	<0.5	11	23	--	--
03/31/94	32.80	23.35	9.45	--	--	--	--	530	23	1.2	10	120	--	--
06/08/94	32.80	22.87	9.93	--	--	--	--	990	15	1.5	42	89	--	--
09/29/94	32.80	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--	--
11/09/94	32.80	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--	--
12/14/94	32.80	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--	--
03/30/95	32.80	24.79	8.01	--	--	--	--	3,900	21	7.2	190	250	--	--
06/30/95	32.80	22.98	9.82	--	--	--	--	1,400	3.1	0.8	54	95	--	--
09/22/95	32.80	22.20	10.60	--	--	--	--	620[7]	0.7	<0.5	3.3	3.5	--	--
12/11/95	32.80	22.50	10.30	--	--	--	--	210	2.4	<0.5	43	85	79	--
03/08/96	32.80	25.15	7.65	--	--	--	--	750	2.1	<0.5	22	34	330	--
06/21/96	32.80	23.52	9.28	--	--	--	--	2,800	9.0	<0.5	94	83	1,300	--
09/27/96	32.80	22.52	10.28	--	--	--	--	770	0.5	<0.5	5.1	6.1	580	--
01/03/97	32.80	24.95	7.85	--	--	--	--	1,800	2.8	<0.5	51	41	110	--
03/28/97	32.80	23.43	9.37	--	--	--	--	720	0.6	<0.5	4.7	3.7	200	--
09/30/97	32.80	MONITORED ANNUALLY			--	--	--	--	--	--	--	--	--	--
03/28/98	32.80	25.08	7.72	--	--	--	--	940[8]	3.9	<0.5	17	4.7	290	--
03/19/99	32.80	24.29	8.51	--	--	--	--	320	<0.5	<0.5	8.5	2.5	350	--
03/21/00	32.80	24.72	8.08	--	--	--	--	432	<0.5	2.04	5.33	0.658	154	--
08/28/00	32.80	MONITORED /SAMPLED ANNUALLY					--	--	--	--	--	--	--	--
03/02/01	32.80	24.09	8.71	0.00	--	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	32.8	--
09/04/01	32.80	MONITORED /SAMPLED ANNUALLY					--	--	--	--	--	--	--	--
03/21/02	32.80	24.18	8.62	0.00	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	20	--
09/04/02	32.80	MONITORED /SAMPLED ANNUALLY					--	--	--	--	--	--	--	--
03/31/03	32.80	23.93	8.87	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	40	--
09/17/03	32.80	MONITORED /SAMPLED ANNUALLY					--	--	--	--	--	--	--	--

Table 2
Groundwater Monitoring Data and Analytical Results
Chevron-branded Service Station 90504
15900 Hesperian Boulevard
San Lorenzo, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	LNAPL Thickness (ft.)	TOTAL TPH (µg/L)	TPH-MO (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)	HVOCs (µg/L)
C-1 (cont)														
03/05/04[12]	32.80	24.46	8.34	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	15	--
09/03/04	32.80	MONITORED /SAMPLED ANNUALLY					--	--	--	--	--	--	--	--
03/02/05[12]	32.80	24.76	8.04	0.00	--	--	--	<50	<0.5	<0.5	<0.5	0.5	1	--
09/02/05	32.80	MONITORED /SAMPLED ANNUALLY					--	--	--	--	--	--	--	--
03/24/06[12]	32.80	25.04	7.76	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	4	--
03/05/07[12]	32.80	24.00	8.80	0.00	--	--	--	160	<0.5	<0.5	<0.5	<0.5	14	--
03/17/08[12]	32.80	23.89	8.91	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	0.9	--
03/03/09[12]	32.80	24.13	8.67	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	0.8	--
03/17/10[12]	32.80	24.43	8.37	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	0.5	--
03/04/11[12]	32.80	24.09	8.71	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/23/12[12]	32.80	23.46	9.34	0.00	--	--	230/73[14]	<50	<0.5	1	<0.5	<0.5	0.6	--
09/04/12[12]	32.80	19.51	13.29	0.00	590[16]/ 320[14,15,16,17]	590[16]/ 320[14,15,16,17]	720/ 740[14,15,18]	<50	<0.5	<0.5	<0.5	<0.5	0.7	--
12/07/12[12]	32.80	23.81	8.99	0.00	330[16]/ 51[14,15,16]	330[16]/ 51[14,15,16]	95/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/12/13[12]	32.80	23.35	9.45	0.00	650[16]/ 320[14,15,16]	650[16]/ 320[14,15,16]	220/ 70[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
06/11/13[12]	32.80	22.70	10.10	0.00	400[16]	400[16]	54/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/10/13[12]	32.80	22.05	10.75	0.00	48[16]	48[16]	130/ 100[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
12/04/13[12]	32.80	22.35	10.45	0.00	590[16]	590[16]	410/ 290[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
02/07/14[25]	**32.80**	**22.50**	**10.30**	**0.00**	**290[16]**	**290[16]**	**100/ 110[14,15]**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**--**	**--**
C-2														
06/06/89	--	--	--	--	--	--	--	130,000	14,000	28,000	3,400	24,000	--	--
12/08/89	--	--	13.44	0.15	--	--	--	--	--	--	--	--	--	--
09/07/90	34.21	20.01	14.28	0.10	--	--	--	--	--	--	--	--	--	--
12/20/90	34.21	20.16	14.06	0.01	--	--	--	--	--	--	--	--	--	--
03/15/91	34.21	22.63	11.59	0.01	--	--	--	1,200,000	4,700	16,000	13,000	140,000	--	--
06/28/91	34.21	21.66	12.55	--	--	--	--	150,000	3,500	4,200	2,100	16,000	--	--
09/26/91	34.21	20.01	14.20	--	--	--	--	4,900	220	290	130	880	--	--
01/27/92	34.21	21.75	12.46	--	--	--	--	8,200	510	590	230	1,300	--	--
04/20/92	34.21	23.97	10.24	--	--	--	--	19,000	1,700	1,700	930	4,700	--	--
07/17/92	34.21	21.40	12.81	--	--	--	--	20,000	950	950	1,300	4,700	--	--
01/20/93	34.21	25.42	8.79	--	--	--	--	--	--	--	--	--	--	--
10/27/93	33.46	21.10	12.36	--	--	--	--	1,600	63	5.8	5.9	190	--	--
03/31/94	33.46	23.84	9.62	--	--	--	--	12,000	300	96	510	2,700	--	--
06/08/94	33.46	23.48	9.98	--	--	--	--	8,700	140	35	250	1,500	--	--
09/28/94	33.46	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--	--
11/09/94	33.46	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--	--
12/14/94	33.46	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--	--
03/30/95	33.46	25.77	7.69	--	--	--	--	1,400	17	5.4	52	240	--	--

Table 2
Groundwater Monitoring Data and Analytical Results
Chevron-branded Service Station 90504
15900 Hesperian Boulevard
San Lorenzo, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	LNAPL Thickness (ft.)	TOTAL TPH (µg/L)	TPH-MO (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)	HVOCs (µg/L)
C-2 (cont)														
06/30/95	33.46	23.56	9.90	--	--	--	--	730	22	2.6	50	240	--	--
09/22/95	33.46	22.85	10.61	--	--	--	--	2,100[7]	66	7.3	140	550	--	--
12/11/95	33.46	23.08	10.38	--	--	--	--	3,700	23	<0.5	68	300	1,000	--
03/08/96	33.46	25.76	7.70	--	--	--	--	2,200	19	<5.0	63	290	1,300	--
06/21/96	33.46	24.09	9.37	--	--	--	--	2,200	23	1.1	70	260	2,300	--
09/27/96	33.46	22.88	10.58	--	--	--	--	5,500	12	0.6	30	110	2,200	--
01/03/97	33.46	25.56	7.90	--	--	--	--	750	4.2	<0.5	29	120	51	--
03/28/97	33.46	24.11	9.35	--	--	--	--	1,300	12	1.5	24	86	310	--
09/30/97	33.46	MONITORED ANNUALLY			--	--	--	--	--	--	--	--	--	--
03/28/98	33.46	25.46	8.00	--	--	--	--	1,100[8]	14	<5.0	34	79	710	--
03/19/99	33.46	25.01	8.45	--	--	--	--	1,400	15	<0.5	56	130	460	--
03/21/00	33.46	25.37	8.09	--	--	--	--	5,420	9.69	<0.5	76.5	125	168	--
08/28/00	33.46	MONITORED/SAMPLED ANNUALLY					--	--	--	--	--	--	--	--
03/02/01	33.46	24.68	8.78	0.00	--	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	--
09/04/01	33.46	MONITORED/SAMPLED ANNUALLY					--	--	--	--	--	--	--	--
03/21/02	33.46	24.75	8.71	0.00	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	4.5	--
09/04/02	33.46	MONITORED/SAMPLED ANNUALLY					--	--	--	--	--	--	--	--
03/31/03	33.46	24.53	8.93	0.00	--	--	--	<50	<0.5	1.0	<2.0	2.6	<2.5	--
09/17/03 †	32.80	MONITORED /SAMPLED ANNUALLY					--	--	--	--	--	--	--	--
03/05/04[12]	32.80	24.41	8.39	0.00	--	--	--	940	1	<0.5	21	10	45	--
09/03/04	32.80	MONITORED /SAMPLED ANNUALLY					--	--	--	--	--	--	--	--
03/02/05[12]	32.80	24.67	8.13	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/02/05	32.80	MONITORED /SAMPLED ANNUALLY					--	--	--	--	--	--	--	--
03/24/06[12]	32.80	24.99	7.81	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/05/07[12]	32.80	23.89	8.91	0.00	--	--	--	1,000	1	<0.5	8	1	<0.5	--
03/17/08[12]	33.46	25.35	8.11	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/03/09[12]	33.46	25.43	8.03	0.00	--	--	--	<50	<0.5	0.7	<0.5	0.5	<0.5	--
03/17/10[12]	33.46	24.95	8.51	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/04/11[12]	33.46	24.64	8.82	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/23/12	33.46	23.99**	9.71	0.30	NOT SAMPLED DUE TO THE PRESENCE OF SPH					--	--	--	--	--
09/04/12	33.46	23.09**	10.39	0.03	NOT SAMPLED DUE TO THE PRESENCE OF SPH					--	--	--	--	--
12/07/12[12]	33.46	24.34	9.12	0.00	27,000[16]/ 14,000[14,16,19]	27,000[16]/ 14,000[14,16,19]	18,000/ 14,000[14,20]	140	<0.5	<0.5	<0.5	0.6	<0.5	--
03/12/13[12]	33.46	23.85	9.61	0.00	18,000[16]/ 11,000[14,16,19]	18,000[16]/ 11,000[14,16,19]	26,000/ 20,000[14,23]	210	<0.5	<0.5	<0.5	0.7	<0.5	--
06/11/13[12]	33.46	23.26	10.20	0.00	2,600[16]	2,600[16]	11,000/ 7,100[14,23]	690	<0.5	<0.5	1	0.7	<0.5	--
09/10/13[12]	33.46	22.56	10.90	0.00	5,400[16]	5,400[16]	23,000/ 20,000[14,15]	1,100	<0.5	<0.5	1	0.6	<0.5	--
12/04/13[12]	33.46	22.86	10.60	0.00	8,300[16]	8,300[16]	11,000/ 8,500[14,15]	670	<0.5	<0.5	<0.5	0.6	<0.5	--
02/07/14[25]	**33.46**	**23.16**	**10.30**	**0.00**	**6,600[16]**	**6,600[16]**	**5,800/ 3,000[14,15]**	**420**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**--**	**--**

Table 2
Groundwater Monitoring Data and Analytical Results
Chevron-branded Service Station 90504
15900 Hesperian Boulevard
San Lorenzo, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	LNAPL Thickness (ft.)	TOTAL TPH (µg/L)	TPH-MO (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)	HVOCs (µg/L)
C-3														
06/06/89	--	--	--	--	--	--	--	2,600	63	20	390	370	--	--
12/08/89	--	--	--	--	--	--	--	680	6.0	1.0	31	58	--	--
09/07/90	35.46	20.15	15.31	--	--	--	--	490	6.0	<0.5	41	120	--	--
09/07/90 (D)	35.46	--	--	--	--	--	--	460	6.0	<0.5	40	110	--	--
12/20/90	35.46	20.29	15.17	--	--	--	--	100	5.0	<0.5	27	130	--	--
03/06/91	35.46	22.19	13.27	--	--	--	--	1,300	7.0	<0.5	75	250	--	--
03/06/91 (D)	35.46	--	--	--	--	--	--	1,400	8.0	<0.5	76	250	--	--
06/28/91	35.46	21.79	13.67	--	--	--	--	770	6.0	<0.5	81	71	--	--
06/28/91 (D)	35.46	--	--	--	--	--	--	990	5.5	<0.5	86	75	--	--
09/26/91	35.46	20.14	15.32	--	--	--	--	1,400	7.9	<0.5	98	340	--	--
01/27/92	35.46	21.55	13.91	--	--	--	--	150	0.7	<0.5	12	12	--	--
04/20/92	35.46	23.80	11.66	--	--	--	--	1,600	9.3	1.0	190	370	--	--
07/17/92	35.46	21.50	13.96	--	--	--	--	460	18	<0.5	20	52	--	--
10/29/92	35.46	19.95	15.51	--	--	--	--	520	2.4	1.0	30	79	--	--
01/20/93	35.46	24.47	10.99	--	--	--	--	4,200	7.4	<0.5	140	380	--	--
05/03/93	35.46	24.49	10.97	--	--	--	--	1,300	6.8	3.2	71	170	--	--
07/28/93	35.46	23.05	12.41	--	--	--	--	220	1.4	<0.5	17	39	--	--
10/27/93	35.46	21.78	13.37	--	--	--	--	1,800	5.5	0.7	68	290	--	--
03/31/94	35.46	23.90	11.56[1]	--	--	--	--	310	1.2	<0.5	19	54	--	--
06/08/94	35.46	23.39	12.07	--	--	--	--	300	2.7	1.6	19	48	--	--
09/29/94[2]	35.46	21.62	13.84	--	--	--	--	2,500	<25	<25	<25	220	--	--
11/09/94[5]	35.46	--	--	--	--	--	--	170	<0.5	0.8	3.3	16	--	--
12/14/94	35.46	23.61	11.85	--	--	--	--	510	3.2	1.4	28	60	--	--
03/30/95	35.46	25.85	9.61	--	--	--	--	66	<0.5	<0.5	1.1	2.4	--	--
06/30/95	35.46	23.96	11.50	--	--	--	--	1,500	1.9	8.1	100	300	--	--
09/22/95	35.46	22.88	12.58	--	--	--	--	600[7]	0.7	<0.5	43	110	--	--
12/11/95	35.46	22.91	12.55	--	--	--	--	670[8]	<0.5	<0.5	7.0	13	15	--
03/08/96	35.46	25.80	9.66	--	--	--	--	3,600	7.5	33	130	400	1,100	--
06/21/96	35.46	23.68	11.78	--	--	--	--	310	<0.5	<0.5	16	49	57	--
09/27/96	35.46	23.09	12.37	--	--	--	--	250	<0.5	<0.5	3.6	9.6	44	--
01/03/97	35.46	25.57	9.89	--	--	--	--	170	<0.5	1.2	4.5	15	15	--
03/28/97	35.46	24.50	10.96	--	--	--	--	60	<0.5	<0.5	1.7	1.8	23	--
09/30/97	35.46	MONITORED ANNUALLY			--	--	--	--	--	--	--	--	--	--
03/28/98	35.46	25.74	9.72	--	--	--	--	<50	0.88	<0.5	<0.5	<0.5	16	--
03/19/99	35.46	25.44	10.02	--	--	--	--	<50	<0.5	<0.5	<0.5	0.65	12	--
03/21/00	35.46	25.36	10.10	--	--	--	--	122	<0.5	<0.5	4.96	11.7	6.13	--
08/28/00	35.46	MONITORED/SAMPLED ANNUALLY					--	--	--	--	--	--	--	--
03/02/01	35.46	24.67	10.79	0.00	--	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	--
09/04/01	35.46	MONITORED/SAMPLED ANNUALLY					--	--	--	--	--	--	--	--

Table 2
Groundwater Monitoring Data and Analytical Results
Chevron-branded Service Station 90504
15900 Hesperian Boulevard
San Lorenzo, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	LNAPL Thickness (ft.)	TOTAL TPH (µg/L)	TPH-MO (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)	HVOCs (µg/L)
C-3 (cont)					--	--	--							
03/21/02	35.46	24.74	10.72	0.00	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--
09/04/02	35.46	MONITORED/SAMPLED ANNUALLY					--	--	--	--	--	--	--	--
03/31/03	35.46	24.31	11.15	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	<2.5	--
09/17/03 †	32.80	MONITORED /SAMPLED ANNUALLY					--	--	--	--	--	--	--	--
03/05/04[12]	32.80	22.42	10.38	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/03/04	32.80	MONITORED /SAMPLED ANNUALLY					--	--	--	--	--	--	--	--
03/02/05[12]	32.80	22.67	10.13	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/02/05	32.80	MONITORED /SAMPLED ANNUALLY					--	--	--	--	--	--	--	--
03/24/06[12]	32.80	22.95	9.85	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/05/07[12]	32.80	21.83	10.97	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/17/08[12]	35.46	24.23	11.23	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/03/09[12]	35.46	24.45	11.01	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/17/10[12]	35.46	24.79	10.67	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/04/11[12]	35.46	24.63	10.83	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/23/12[12]	35.46	23.99	11.47	0.00	--	--	<50/<50[14]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/04/12[12]	35.46	23.01	12.45	0.00	<41[16]/ <41[14,15,16]	<41[16]/ <41[14,15,16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
12/07/12[12]	35.46	24.32	11.14	0.00	64[16]/ <38[14,15,16]	64[16]/ <38[14,15,16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/12/13[12]	35.46	23.86	11.60	0.00	<41[16]/ <41[14,15,16]	<41[16]/ <41[14,15,16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
06/11/13[12]	35.46	23.21	12.25	0.00	<39[16]	<39[16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/10/13[12]	35.46	22.53	12.93	0.00	<38[16]	<38[16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
12/04/13[12]	35.46	21.53	13.93	0.00	<38[16]	<38[16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
02/07/14[25]	**35.46**	**22.95**	**12.51**	**0.00**	**<41[16]**	**<41[16]**	**<50/ <50[14,15]**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**--**	**--**
C-4														
06/06/89	--	--	--	--	--	--	--	<50	<0.05	<1.0	<1.0	<3.0	--	--
12/08/89	--	--	--	--	--	--	--	<500	<0.5	<0.5	<0.5	<0.5	--	--
09/07/90	35.78	20.20	15.58	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/20/90	35.78	20.36	15.42	--	--	--	--	170	1.0	<0.5	<0.5	4.0	--	--
03/06/91	35.78	22.24	13.54	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/28/91	35.78	21.85	13.93	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.8	--	--
09/26/91	35.78	20.14	15.64	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/26/91	35.78	--	15.64	--	--	--	--	<50	<0.5	<0.5	<0.5	--	--	--
01/27/92	35.78	21.82	13.96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
04/20/92	35.78	24.07	11.71	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
07/17/92	35.78	21.59	14.19	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
10/29/92	35.78	20.06	15.72	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
01/20/93	35.78	24.61	11.17	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
05/03/93	35.78	24.84	10.94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--

Table 2
Groundwater Monitoring Data and Analytical Results
Chevron-branded Service Station 90504
15900 Hesperian Boulevard
San Lorenzo, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	LNAPL Thickness (ft.)	TOTAL TPH (µg/L)	TPH-MO (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)	HVOCs (µg/L)
C-4 (cont)														
07/28/93	35.78	23.38	12.40	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
10/27/93	35.23	21.91	13.32	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
03/31/94	35.23	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--	--
06/08/94	35.23	23.31	11.92	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/29/94[2,4]	35.23	21.47	13.76	--	--	--	--	<2,500	<25	<25	<25	<25	--	ND[3]
11/09/94[4,5]	35.23	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	ND[3]
12/14/94[6]	35.23	23.44	11.79	--	--	--	--	<50	2.1	3.0	1.9	3.7	--	ND[3]
03/30/95	35.23	26.22	9.01	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/30/95	35.23	23.79	11.44	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/22/95	35.23	22.72	12.51	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/11/95	35.23	22.61	12.62	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/08/96	35.23	25.60	9.63	--	--	--	--	<50	<0.5	<0.5	<0.5	0.6	<5.0	--
06/21/96	35.23	23.99	11.24	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
09/27/96	35.23	22.92	12.31	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
01/03/97	35.23	25.54	9.69	--	--	--	--	<50	1.5	7.2	1.3	6.2	<5.0	--
03/28/97	35.23	24.23	11.00	--	--	--	--	<50	5.0	8.3	0.8	4.7	<5.0	--
NOT MONITORED/SAMPLED					--	--	--							
03/20/12[13]	35.23	24.01	11.22	--	--	--	--	--	--	--	--	--	--	--
03/23/12[12]	35.23	23.94	11.29	--	<39/<39[14]	<39/<39[14]	<50/<50[14]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/04/12[12]	35.23	23.00	12.23	--	<40[16]/ <40[14,15,16]	<40[16]/ <40[14,15,16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
12/07/12[12]	35.23	24.33	10.90	--	55[16]/ <40[14,15,16]	55[16]/ <40[14,15,16]	65/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/12/13[12]	35.23	23.82	11.41	--	<42[16]/ <42[14,15,16]	<42[16]/ <42[14,15,16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
06/11/13[12]	35.23	23.14	12.09	--	<42[16]	<42[16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/10/13[12]	35.23	22.53	12.70	--	<38[16]	<38[16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
12/04/13[12]	35.23	22.63	12.60	--	<38[16]	<38[16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
02/07/14[25]	**35.23**	**22.95**	**12.28**	**--**	**<40[16]**	**<40[16]**	**<50/ <50[14,15]**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**--**	**--**
C-5														
06/06/89	--	--	--	--	--	--	--	<50	<0.05	<0.05	<1.0	<3.0	--	--
12/08/89	--	--	--	--	--	--	--	<500	<0.5	<0.5	<0.5	<0.5	--	--
09/07/90	35.31	20.21	15.10	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/20/90	35.31	20.37	14.94	--	--	--	--	80	<0.5	<0.5	<0.5	<0.5	--	--
03/06/91	35.31	22.25	13.06	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/28/91	35.31	21.85	13.46	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/26/91	35.31	20.17	15.14	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
01/27/92	35.31	22.00	13.31	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
04/20/92	35.31	24.21	11.10	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
07/17/92	35.31	21.58	13.73	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--

Table 2
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Chevron-branded Service Station 90504
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San Lorenzo, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	LNAPL Thickness (ft.)	TOTAL TPH (µg/L)	TPH-MO (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)	HVOCs (µg/L)
C-5 (cont)														
10/29/92	35.31	20.11	15.20	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
01/20/93	35.31	24.59	10.72	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
05/03/93	35.31	24.88	10.43	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
07/28/93	35.31	23.50	11.81	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
10/27/93	34.61	21.93	12.68	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
03/31/94	34.61	23.61	11.00[1]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/08/94	34.61	23.35	11.26	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/29/94[2]	34.61	21.51	13.10	--	--	--	--	<2,500	<25	<25	<25	<25	--	--
11/09/94[5]	34.61	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/14/94	34.61	23.24	11.37	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
03/30/95	34.61	25.64	8.97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/30/95	34.61	23.78	10.83	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/22/95	34.61	22.72	11.89	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/11/95	34.61	22.83	11.78	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/08/96	34.61	25.59	9.02	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
06/21/96	34.61	23.97	10.64	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
09/27/96	34.61	23.04	11.57	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
01/03/97	34.61	25.59	9.02	--	--	--	--	<50	0.7	3.2	<0.5	2.2	<5.0	--
03/28/97	34.61	24.23	10.38	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
NOT MONITORED/SAMPLED														
03/20/12[13]	34.61	24.00	10.61	--	--	--	--	--	--	--	--	--	--	--
03/23/12[12]	34.61	23.94	10.67	--	--	--	<50/<50[14]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/04/12[12]	34.61	23.01	11.60	--	<41[16]/ <41[14,15,16]	<41[16]/ <41[14,15,16]	55/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
12/07/12[12]	34.61	24.35	10.26	--	350[16]/ <40[14,15,16]	350[16]/ <40[14,15,16]	99/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/12/13[12]	34.61	23.80	10.81	--	<41[16]/ <41[14,15,16]	<41[16]/ <41[14,15,16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
06/11/13[12]	34.61	23.16	11.45	--	<40[16]	<40[16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/10/13[12]	34.61	22.51	12.10	--	<38[16]	<38[16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
12/04/13[12]	34.61	22.67	11.94	--	<38[16]	<38[16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
02/07/14[25]	**34.61**	**22.99**	**11.62**	**--**	**<45[16]**	**<45[16]**	**<50/ <50[14,15]**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**--**	**--**
C-6														
12/08/89	--	--	--	--	--	--	--	<500	<0.5	<0.5	<0.5	<0.5	--	--
09/07/90	36.89	20.06	16.83	--	--	--	--	57	<0.5	<0.5	0.6	4.0	--	--
12/20/90	36.89	20.23	16.66	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
03/06/91	36.89	22.09	14.80	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/28/91	36.89	21.73	15.16	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/26/91	36.89	20.07	16.82	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
01/27/92	36.89	21.45	15.44	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--

Table 2
Groundwater Monitoring Data and Analytical Results
Chevron-branded Service Station 90504
15900 Hesperian Boulevard
San Lorenzo, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	LNAPL Thickness (ft.)	TOTAL TPH (µg/L)	TPH-MO (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)	HVOCs (µg/L)
C-6 (cont)														
04/20/92	36.89	23.72	13.17	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
07/17/92	36.89	21.45	15.44	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
10/29/92	36.89	19.91	16.98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
01/20/93	36.89	24.42	12.47	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
05/03/93	36.89	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
07/28/93	36.89	23.03	13.86	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
10/27/93	36.57	21.72	14.85	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
03/31/94	36.57	23.57	13.00	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/08/94	36.57	23.13	13.44	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/29/94[2]	36.57	21.69	14.88	--	--	--	--	<2,500	<25	<25	<25	<25	--	--
11/09/94[5]	36.57	--	--	--	--	--	--	<50	<0.5	0.5	<0.5	<0.5	--	--
12/14/94	36.57	23.58	12.99	--	--	--	--	<50	0.9	1.5	1.3	2.6	--	--
03/30/95	36.57	25.80	10.77	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/30/95	36.57	23.95	12.62	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/22/95	36.57	22.92	13.65	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/11/95	36.57	22.89	13.68	--	--	--	--	140[8]	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/08/96	36.57	25.84	10.73	--	--	--	--	<50	<0.5	0.6	<0.5	<0.5	<5.0	--
06/21/96	36.57	24.16	12.41	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
09/27/96	36.57	23.10	13.47	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
01/03/97	36.57	25.57	11.00	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
03/28/97	36.57	24.51	12.06	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
NOT MONITORED/SAMPLED														
03/20/12[13]	36.57	24.02	12.55	--	--	--	--	--	--	--	--	--	--	--
03/23/12[12]	36.57	23.99	12.58	--	--	--	<50/<50[14]	<50	<0.5	1	<0.5	<0.5	<0.5	--
09/04/12[12]	36.57	22.99	13.58	--	<40[16]/ <40[14,15,16]	<40[16]/ <40[14,15,16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
12/07/12[12]	36.57	24.30	12.27	--	<38[16]/ <38[14,15,16]	<38[16]/ <38[14,15,16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/12/13[12]	36.57	23.84	12.73	--	<40[16]/ <40[14,15,16]	<40[16]/ <40[14,15,16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
06/11/13[12]	36.57	23.19	13.38	--	<40[16]	<40[16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/10/13[12]	36.57	22.55	14.02	--	<38[16]	<38[16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
12/04/13[12]	36.57	22.64	13.93	--	<38[16]	<38[16]	500/ 510[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
02/07/14[25]	**36.57**	**22.96**	**13.61**	**--**	**<40[16]**	**<40[16]**	**<50/ <50[14,15]**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**--**	**--**
C-7														
12/08/89	--	--	--	--	--	--	--	1,700	32	12	17	150	--	--
09/07/90	32.75	19.73	13.02	--	--	--	--	880	84	23	46	180	--	--
12/20/90	32.75	20.47	12.28	--	--	--	--	560	24	3.0	19	21	--	--
03/06/91	32.75	15.83	16.92	--	--	--	--	240	25	2.0	4.0	26	--	--
06/28/91	32.75	21.44	11.31	--	--	--	--	2,400	130	13	82	220	--	--

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San Lorenzo, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	LNAPL Thickness (ft.)	TOTAL TPH (µg/L)	TPH-MO (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)	HVOCs (µg/L)
C-7 (cont)														
09/26/91	32.75	20.47	12.28	--	--	--	--	8,100	47	35	350	1,200	--	--
01/27/92	32.75	21.32	11.43	--	--	--	--	12,000	170	40	420	830	--	--
04/20/92	32.75	23.47	9.28	--	--	--	--	1,200	80	11	90	110	--	--
07/17/92	32.75	21.26	11.49	--	--	--	--	2,400	20	7.4	95	200	--	--
10/29/92	32.75	19.70	13.05	--	--	--	--	69	1.3	<0.5	3.8	7.2	--	--
01/20/93	32.75	24.06	8.69	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
05/03/93	32.75	24.07	8.68	--	--	--	--	2,400	29	8.6	140	210	--	--
07/28/93	32.75	22.76	9.99	--	--	--	--	3,600	38	16	290	920	--	--
10/27/93	32.32	21.60	10.72	--	--	--	--	22,000	23	26	990	2,600	--	--
03/31/94	32.32	23.21	9.11	--	--	--	--	2,300	45	7.0	130	190	--	--
06/08/94	32.32	23.10	9.22	--	--	--	--	6,900	46	11	380	820	--	--
09/29/94	32.32	21.00	11.32	--	--	--	--	11,000	10	11	620	810	--	--
11/09/94[5]	32.32	--	--	--	--	--	--	7,800	33	18	570	1,100	--	--
12/14/94	32.32	23.33	8.99	--	--	--	--	7,700	63	16	140	1,200	--	--
03/30/95	32.32	25.04	7.28	--	--	--	--	4,100	64	18	170	280	--	--
06/30/95	32.32	23.25	9.07	--	--	--	--	1,200	31	3.7	21	18	--	--
09/22/95	32.32	22.27	10.05	--	--	--	--	1,800	64	5.7	30	38	--	--
12/11/95	32.32	23.02	9.30	--	--	--	--	14,000	80	6.1	91	120	70	--
03/08/96	32.32	24.99	7.33	--	--	--	--	2,300	57	8.4	110	180	37	--
06/21/96	32.32	23.47	8.85	--	--	--	--	1,100	37	3.2	21	29	9.0	--
09/27/96	32.32	23.21	9.11	--	--	--	--	10,000	150	30	270	670	45	--
01/03/97	32.32	24.83	7.49	--	--	--	--	1,800	35	<0.5	34	72	15	--
03/28/97	32.32	23.75	8.57	--	--	--	--	2,200	38	4.1	31	56	19	--
09/30/97	32.32	MONITORED ANNUALLY			--	--	--	--	--	--	--	--	--	--
03/28/98	32.32	24.98	7.34	--	--	--	--	2,100[8]	28	7.8	70	170	<25	--
03/19/99	32.32	24.61	7.71	--	--	--	--	5,300	63	24	280	370	67[10]	--
03/21/00	32.32	24.57	7.75	--	--	--	--	2,830	19.5	5.14	116	206	11.7	--
08/28/00	32.32	MONITORED/SAMPLED ANNUALLY					--	--	--	--	--	--	--	--
03/02/01	32.32	24.06	8.26	0.00	--	--	--	7,620[11]	54.7	<25.0	522	945	<250	--
09/04/01	32.32	MONITORED/SAMPLED ANNUALLY					--	--	--	--	--	--	--	--
03/21/02	32.32	24.10	8.22	0.00	--	--	--	9,300	31	8.4	460	850	<20	--
09/04/02	32.32	MONITORED/SAMPLED ANNUALLY					--	--	--	--	--	--	--	--
03/31/03	32.32	23.67	8.65	0.00	--	--	--	3,300	17	3.9	92	190	31	--
09/17/03 †	32.80	MONITORED /SAMPLED ANNUALLY					--	--	--	--	--	--	--	--
03/05/04[12]	32.80	24.86	7.94	0.00	--	--	--	2,200	7	1	50	120	<0.5	--
09/03/04	32.80	MONITORED /SAMPLED ANNUALLY					--	--	--	--	--	--	--	--
03/02/05[12]	32.80	25.14	7.66	0.00	--	--	--	2,500	11	2	39	84	<0.5	--
09/02/05	32.80	MONITORED /SAMPLED ANNUALLY					--	--	--	--	--	--	--	--
03/24/06[12]	32.80	25.44	7.36	0.00	--	--	--	3,300	12	3	56	100	<0.5	--

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C-7 (cont)														
03/05/07[12]	32.80	24.46	8.34	0.00	--	--	--	1,600	5	0.8	13	30	<0.5	--
03/17/08[12]	32.32	23.69	8.63	0.00	--	--	--	750	2	<0.5	4	12	<0.5	--
03/03/09[12]	32.32	23.88	8.44	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/17/10[12]	32.32	24.21	8.11	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/04/11[12]	32.32	23.18	9.14	0.00	--	--	--	<50	<0.5	<0.5	0.6	<0.5	<0.5	--
03/23/12[12]	32.32	23.42	8.90	0.00	--	--	<50/<50[14]	<50	<3	<3	<3	<3	<3	--
09/04/12[12]	32.32	22.49	9.83	0.00	48[16]/ <40[14,15,16]	48[16]/ <40[14,15,16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
12/07/12[12]	32.32	23.77	8.55	0.00	140[16]/ <40[14,15,16]	140[16]/ <40[14,15,16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/12/13[12]	32.32	23.31	9.01	0.00	<40[16]/ <40[14,15,16]	<40[16]/ <40[14,15,16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
06/11/13[12]	32.32	22.71	9.61	0.00	<40[16]	<40[16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/10/13[12]	32.32	22.04	10.28	0.00	<38[16]	<38[16]	71/ 61[14,15]	87	<0.5	<0.5	3	<0.5	<0.5	--
12/04/13[12]	32.32	22.17	10.15	0.00	<38[16]	<38[16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
02/07/14[25]	**32.32**	**22.55**	**9.77**	**0.00**	**<40[16]**	**<40[16]**	**<50/ <50[14,15]**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**--**	**--**
C-8														
12/08/89	--	--	--	--	--	--	--	4,800	62	11	95	180	--	--
09/07/90	33.82	19.50	14.32	--	--	--	--	3,700	170	31	180	270	--	--
12/20/90	33.82	19.61	14.20	--	--	--	--	3,900	120	20	130	180	--	--
03/06/91	33.82	19.02	14.80	--	--	--	--	1,200	45	6.0	34	57	--	--
06/28/91	33.82	21.17	12.65	--	--	--	--	6,900	180	46	340	640	--	--
09/26/91	33.82	19.53	14.29	--	--	--	--	1,400	66	9.8	38	40	--	--
01/27/92	33.82	21.22	12.60	--	--	--	--	3,600	100	26	170	260	--	--
04/20/92	33.82	23.46	10.36	--	--	--	--	2,600	110	32	180	260	--	--
07/17/92	33.82	20.94	12.88	--	--	--	--	1,100	34	5.9	35	52	--	--
10/29/92	33.82	19.43	14.39	--	--	--	--	820	29	4.8	23	27	--	--
01/20/93	33.82	23.80	10.02	--	--	--	--	6,000	81	22	200	310	--	--
05/03/93	33.82	24.07	9.75	--	--	--	--	11,000	75	96	880	2,600	--	--
07/28/93	33.82	22.68	11.14	--	--	--	--	2,800	60	13	92	150	--	--
10/27/93	33.25	21.24	12.01	--	--	--	--	2,700	49	17	60	90	--	--
03/31/94	33.25	22.98	10.27	--	--	--	--	190	8.6	1.7	9.1	11	--	--
06/08/94	33.25	22.69	10.56	--	--	--	--	2,800	52	110	78	110	--	--
09/29/94	33.25	20.83	12.42	--	--	--	--	3,700	120	20	120	85	--	--
11/09/94[5]	33.25	--	--	--	--	--	--	3,200	82	44	160	110	--	--
12/14/94	33.25	22.74	10.51	--	--	--	--	5,300	140	30	170	310	--	--
03/30/95	33.25	24.81	8.44	--	--	--	--	3,900	86	19	180	210	--	--
06/30/95	33.25	23.11	10.14	--	--	--	--	1,500	75	21	72	72	--	--
09/22/95	33.25	22.05	11.20	--	--	--	--	3,400	94	24	110	110	--	--
12/11/95	33.25	22.26	10.99	--	--	--	--	7,500	100	<0.5	160	120	130	--

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C-8 (cont)														
03/08/96	33.25	24.79	8.46	--	--	--	--	3,600	93	8.9	110	88	82	--
06/21/96	33.25	23.28	9.97	--	--	--	--	3,200	69	6.8	100	88	19	--
09/27/96	33.25	22.47	10.78	--	--	--	--	7,000	98	12	150	130	53	--
01/03/97	33.25	24.43	8.82	--	--	--	--	5,700	43	9.3	110	95	17	--
03/28/97	33.25	23.60	9.65	--	--	--	--	4,900	52	4.7	70	47	50	--
09/30/97	33.25	MONITORED ANNUALLY			--	--	--	--	--	--	--	--	--	--
03/28/98	33.25	24.78	8.47	--	--	--	--	3,300[8]	33	4.2	110	61	<25	--
03/19/99	33.25	24.34	8.91	--	--	--	--	2,600	34	16	34	19	76[10]	--
03/21/00	33.25	24.43	8.82	--	--	--	--	4,300	8.45	42.3	61.1	20.3	33.8	--
08/28/00	33.25	MONITORED/SAMPLED ANNUALLY					--	--	--	--	--	--	--	--
03/02/01	33.25	23.75	9.50	0.00	--	--	--	2,980[11]	37.4	4.12	22.3	11.3	40.4	--
09/04/01	33.25	MONITORED/SAMPLED ANNUALLY					--	--	--	--	--	--	--	--
03/21/02	33.25	23.86	9.39	0.00	--	--	--	3,500	<20	2.0	15	8.3	<10	--
09/04/02	33.25	MONITORED/SAMPLED ANNUALLY					--	--	--	--	--	--	--	--
03/31/03	33.25	23.45	9.80	0.00	--	--	--	4,700	<20	2.1	22	11	<50	--
09/17/03 †	32.80	MONITORED /SAMPLED ANNUALLY					--	--	--	--	--	--	--	--
03/05/04[12]	32.80	23.70	9.10	0.00	--	--	--	5,500	3	2	58	17	<0.5	--
09/03/04	32.80	MONITORED /SAMPLED ANNUALLY					--	--	--	--	--	--	--	--
03/02/05[12]	32.80	23.94	8.86	0.00	--	--	--	3,300	1	0.8	17	9	<0.5	--
09/02/05	32.80	MONITORED /SAMPLED ANNUALLY					--	--	--	--	--	--	--	--
03/24/06[12]	32.80	25.13	7.67	0.00	--	--	--	4,000	0.9	0.7	18	8	<0.5	--
03/05/07[12]	32.80	23.26	9.54	0.00	--	--	--	8,100	1	1	66	19	<0.5	--
03/17/08[12]	33.25	23.45	9.80	0.00	--	--	--	8,800	2	1	62	18	<0.5	--
03/03/09[12]	33.25	23.52	9.73	0.00	--	--	--	7,400	0.8	0.7	56	11	<0.5	--
03/17/10[12]	33.25	23.98	9.27	0.00	--	--	--	8,700	1	0.8	51	11	<0.5	--
03/04/11[12]	33.25	23.32	9.93	0.00	--	--	--	8,900	1	0.6	37	8	<0.5	--
03/23/12[12]	33.25	23.06	9.93	0.00	--	--	2,900/ 2,000[14]	8,900	0.8	5	33	0.5	<0.5	--
09/04/12[12]	33.25	22.19	11.06	0.00	59[16]/ <40[14,15,16]	59[16]/ <40[14,15,16]	3,000/ 2,800[14,15,18]	11,000	1	0.5	35	4	<0.5	--
12/07/12[12]	33.25	23.45	9.80	0.00	65[16]/ <41[14,15,16]	65[16]/ <41[14,15,16]	3,100/ 3,000[14,15]	7,800	<5[21]	<5[21]	26[21]	<5[21]	<5[21]	--
03/12/13[12]	33.25	23.07	10.18	0.00	<42[16]/ <42[14,15,16]	<42[16]/ <42[14,15,16]	2,200/ 1,800[14,15]	8,300	<5	<5	21	<5	<5	--
06/11/13[12]	33.25	22.45	10.80	0.00	<40[16]	<40[16]	3,000/ 2,000[14,15]	7,800	0.6	<0.5	31	4	<0.5	--
09/10/13[12]	33.25	21.75	11.50	0.00	<38[16,24]	<38[16,24]	2,900/ 2,700[14,15]	10,000[21]	<1[21]	1[21]	26[21]	5[21]	<1[21]	--
12/04/13[12]	33.25	21.85	11.40	0.00	<38[16,24]	<38[16,24]	3,500/ 2,600[14,23]	8,900	<0.5	<0.5	28	3	<0.5	--
02/07/14[25]	**33.25**	**22.17**	**11.08**	**0.00**	**52[16,24]**	**52[16,24]**	**2,600/ 2,300[14,15]**	**9,100**	**0.8**	**0.5**	**27**	**3**	**--**	**--**

Table 2

Groundwater Monitoring Data and Analytical Results

Chevron-branded Service Station 90504

15900 Hesperian Boulevard

San Lorenzo, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	LNAPL Thickness (ft.)	TOTAL TPH (µg/L)	TPH-MO (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)	HVOCs (µg/L)
C-9														
09/07/90	33.43	19.37	14.06	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/20/90	33.43	19.40	14.03	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
03/06/91	33.43	21.31	12.12	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/28/91	33.43	21.02	12.41	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/26/91	33.43	19.41	14.02	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
01/27/92	33.43	20.90	12.53	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
04/20/92	33.43	23.21	10.22	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
07/17/92	33.43	20.79	12.64	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
10/29/92	33.43	19.23	14.20	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
01/20/93	33.43	23.71	9.72	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
05/03/93	33.43	23.66	9.55	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
07/28/93	33.43	22.45	10.98	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
10/27/93	32.97	20.99	11.98	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
03/31/94	32.97	22.80	10.17	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/08/94	32.97	22.44	10.53	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/29/94[2]	32.97	20.57	12.40	--	--	--	--	<5,000	<50	<50	<50	<50	--	--
11/09/94[5]	32.97	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	0.7	--	--
12/14/94	32.97	22.48	10.49	--	--	--	--	69	1.1	2.2	3.4	7.8	--	--
03/30/95	32.97	24.77	8.20	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/30/95	32.97	23.00	9.97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/22/95	32.97	21.90	11.07	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/11/95	32.97	21.89	11.08	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/08/96	32.97	24.77	8.20	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
06/21/96	32.97	23.16	9.81	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
09/27/96	32.97	22.06	10.91	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
01/03/97	32.97	24.30	8.67	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
03/28/97	32.97	23.50	9.47	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
09/30/97	32.97	21.36	11.61	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
03/28/98	32.97	24.71	8.26	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
09/08/98	32.97	22.73	10.24	--	--	--	--	<50	5.7	1.4	1.4	1.8	4.9	--
03/19/99	32.97	24.27	8.70	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
09/21/99	32.97	22.00	10.97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
03/21/00	32.97	24.38	8.59	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
08/28/00	32.97	22.02	10.95	0.00	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
03/02/01	32.97	23.57	9.40	0.00	--	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	--
09/04/01	32.97	21.66	11.31	0.00	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--
03/21/02	32.97	23.72	9.25	0.00	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--
09/04/02	32.97	21.93	11.04	0.00	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--
03/31/03	32.97	23.29	9.68	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	<2.5	--

Table 2
Groundwater Monitoring Data and Analytical Results
Chevron-branded Service Station 90504
15900 Hesperian Boulevard
San Lorenzo, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	LNAPL Thickness (ft.)	TOTAL TPH (µg/L)	TPH-MO (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)	HVOCs (µg/L)
C-9 (cont)														
09/17/03[12]	32.97	21.99	10.98	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/05/04[12]	32.97	24.07	8.90	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/03/04[12]	32.97	21.54	11.43	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/02/05[12]	32.97	24.24	8.73	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/02/05[12]	32.97	22.38	10.59	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/24/06	32.97	24.30	8.67	0.00	--	--	--	--	--	--	--	--	--	--
03/05/07	32.97	23.49	9.48	0.00	--	--	--	--	--	--	--	--	--	--
03/17/08	32.97	23.27	9.70	0.00	--	--	--	--	--	--	--	--	--	--
03/03/09	32.97	23.37	9.60	0.00	--	--	--	--	--	--	--	--	--	--
03/17/10	32.97	23.83	9.14	0.00	--	--	--	--	--	--	--	--	--	--
03/04/11	32.97	23.71	9.26	0.00	--	--	--	--	--	--	--	--	--	--
03/20/12[13]	32.97	22.93	10.04	0.00	--	--	--	--	--	--	--	--	--	--
03/23/12[12]	32.97	22.94	10.03	0.00	--	--	<50/<50[14]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/04/12[12]	32.97	21.94	11.03	0.00	55[16]/ <40[14,15,16]	55[16]/ <40[14,15,16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
12/07/12[12]	32.97	23.17	9.80	0.00	43[16]/ <41[14,15,16]	43[16]/ <41[14,15,16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/12/13[12]	32.97	22.87	10.10	0.00	<40[16]/ <40[14,15,16]	<40[16]/ <40[14,15,16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
06/11/13[12]	32.97	22.22	10.75	0.00	<42[16]	<42[16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/10/13[12]	32.97	21.47	11.50	0.00	<38[16]	<38[16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
12/04/13[12]	32.97	21.59	11.38	0.00	<38[16]	<38[16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
02/07/14[25]	**32.97**	**21.82**	**11.15**	**0.00**	**<40[16]**	**<40[16]**	**<50/ <50[14,15]**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**--**	**--**
C-10														
09/07/90	31.63	19.14	12.49	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/20/90	31.63	19.27	12.36	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
03/06/91	31.63	21.18	10.45	--	--	--	--	<50	<0.5	0.8	<0.5	0.8	--	--
06/28/91	31.63	20.69	10.74	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/26/91	31.63	19.21	12.42	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
01/27/92	31.63	20.79	10.84	--	--	--	--	<50	<0.5	1.3	<0.5	<0.5	--	--
01/27/92 (D)	31.63	--	--	--	--	--	--	<50	<0.5	1.3	<0.5	<0.5	--	--
04/20/92	31.63	23.06	8.55	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
07/17/92	31.63	20.61	11.02	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
10/29/92	31.63	19.23	12.40	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
01/20/93	31.63	23.49	8.14	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
05/03/93	31.63	23.71	7.92	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
07/28/93	31.63	22.27	9.36	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
10/27/93	31.16	20.86	10.30	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
03/31/94	31.16	22.71	8.45	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/08/94	31.16	22.31	8.85	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--

Table 2
Groundwater Monitoring Data and Analytical Results
Chevron-branded Service Station 90504
15900 Hesperian Boulevard
San Lorenzo, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	LNAPL Thickness (ft.)	TOTAL TPH (µg/L)	TPH-MO (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)	HVOCs (µg/L)
C-10 (cont)														
09/29/94[2]	31.16	20.46	10.70	--	--	--	--	<5,000	<50	<50	<50	<50	--	--
11/09/94[5]	31.16	--	--	--	--	--	--	<50	<0.5	1.4	0.8	1.2	--	--
12/14/94	31.16	22.55	8.61	--	--	--	--	110	3.9	5.4	4.3	11	--	--
03/30/95	31.16	24.51	6.65	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/30/95	31.16	22.86	8.30	--	--	--	--	<50	1.5	1.5	<0.5	2.2	--	--
09/22/95	31.16	21.75	9.41	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/11/95	31.16	21.89	9.27	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/08/96	31.16	24.53	6.63	--	--	--	--	<50	<0.5	<0.5	<0.5	0.5	<5.0	--
06/21/96	31.16	23.04	8.12	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
09/27/96	31.16	21.95	9.21	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
01/03/97	31.16	23.84	7.32	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
03/28/97	31.16	23.34	7.82	--	--	--	--	<50	1.2	1.8	<0.5	0.8	<5.0	--
09/30/97	31.16	21.34	9.82	--	--	--	--	<250[9]	<2.5	<2.5	<2.5	<2.5	<25	--
03/28/98	31.16	24.60	6.56	--	--	--	--	<50	<0.5	0.52	<0.5	<0.5	<2.5	--
09/08/98	31.16	22.65	8.51	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
03/19/99	31.16	24.00	7.16	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	9.2[10]	--
09/21/99	31.16	21.87	9.29	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	6.38	--
03/21/00	31.16	24.54	6.62	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	10.6	--
08/28/00	31.16	21.86	9.30	0.00	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	7.7	--
03/02/01	31.16	23.41	7.75	0.00	--	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	--
09/04/01	31.16	21.54	9.62	0.00	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--
03/21/02	31.16	23.56	7.60	0.00	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--
09/04/02	31.16	21.76	9.40	0.00	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--
03/31/03	31.16	23.14	8.02	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	<2.5	--
09/17/03[12]	31.16	21.85	9.31	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	0.8	--
03/05/04[12]	31.16	23.88	7.28	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	0.5	--
09/03/04[12]	31.16	21.50	9.66	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/02/05[12]	31.16	24.08	7.08	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/02/05[12]	31.16	22.35	8.81	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/24/06	31.16	23.54	7.62	0.00	--	--	--	--	--	--	--	--	--	--
03/05/07	31.16	23.39	7.77	0.00	--	--	--	--	--	--	--	--	--	--
03/17/08	31.16	21.56	9.60	0.00	--	--	--	--	--	--	--	--	--	--
03/03/09	31.16	23.26	7.90	0.00	--	--	--	--	--	--	--	--	--	--
03/17/10	31.16	23.69	7.47	0.00	--	--	--	--	--	--	--	--	--	--
03/04/11	31.16	22.84	8.32	0.00	--	--	--	--	--	--	--	--	--	--
03/20/12[13]	31.16	23.14	8.02	0.00	--	--	--	--	--	--	--	--	--	--
03/23/12[12]	31.16	22.85	8.31	0.00	--	--	<50/<50[14]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/04/12[12]	31.16	21.84	9.32	0.00	<40[16]/ <40[14,15,16]	<40[16]/ <40[14,15,16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
12/07/12[12]	31.16	22.72	8.44	0.00	470[16]/ 71[14,15,16]	470[16]/ 71[14,15,16]	150/ 64[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--

Table 2
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San Lorenzo, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	LNAPL Thickness (ft.)	TOTAL TPH (µg/L)	TPH-MO (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)	HVOCs (µg/L)
C-10 (cont)														
03/12/13[12]	31.16	22.89	8.27	0.00	<42[16]/ <42[14,15,16]	<42[16]/ <42[14,15,16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
06/11/13[12]	31.16	22.14	9.02	0.00	<41[16]	<41[16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/10/13[12]	31.16	21.41	9.75	0.00	<39[16]	<39[16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
12/04/13[12]	31.16	21.44	9.72	0.00	<38[16]	<38[16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
02/07/14[25]	**31.16**	**21.78**	**9.38**	**0.00**	**<40[16]**	**<40[16]**	**<50/ <50[14,15]**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**--**	**--**
C-11														
09/07/90	31.58	19.36	12.22	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/20/90	31.58	19.50	12.08	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
03/06/91	31.58	15.43	16.15	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/28/91	31.58	21.06	10.52	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/26/91	31.58	19.38	12.20	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
01/27/92	31.58	20.85	10.73	--	--	--	--	<50	<0.5	0.8	<0.5	<0.5	--	--
04/20/92	31.58	23.02	8.56	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
07/17/92	31.58	20.80	10.78	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
10/29/92	31.58	19.51	12.07	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
01/20/93	31.58	21.61	7.97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
05/03/93	31.58	23.63	7.95	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
07/28/93	31.58	22.27	9.31	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
10/27/93	31.23	21.06	10.17	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
03/31/94	31.23	22.80	8.43	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/08/94	31.23	22.47	8.76	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/29/94	31.23	20.69	10.54	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
11/09/94	--	--	--	--	--	--	--	<50	<0.5	0.6	<0.5	0.7	--	--
12/14/94	31.23	22.73	8.50	--	--	--	--	51	1.1	1.7	1.6	4.0	--	--
03/30/95	31.23	24.38	6.85	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/30/95	31.23	22.89	8.34	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/22/95	31.23	21.93	9.30	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/11/95	31.23	22.22	9.01	--	--	--	--	<50	<0.5	<0.5	<0.5	1.1	1.1	--
03/08/96	31.23	24.33	6.90	--	--	--	--	<50	<0.5	0.6	<0.5	1.6	<5.0	--
06/21/96	31.23	23.13	8.10	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
09/27/96	31.23	22.16	9.07	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
01/03/97	31.23	24.10	7.13	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
03/28/97	31.23	21.40	9.83	--	--	--	--	120	12	20	2.3	14	<5.0	--
09/30/97	31.23	21.56	9.67	--	--	--	--	<50	0.7	0.8	<0.5	0.6	<5.0	--
03/28/98	31.23	24.40	6.83	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
09/08/98	31.23	22.72	8.51	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
03/19/99	31.23	24.06	7.17	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--

Table 2
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Chevron-branded Service Station 90504
15900 Hesperian Boulevard
San Lorenzo, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	LNAPL Thickness (ft.)	TOTAL TPH (µg/L)	TPH-MO (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)	HVOCs (µg/L)
C-11 (cont)														
09/21/99	31.23	22.02	9.21	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
03/21/00	31.23	24.13	7.10	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
08/28/00	31.23	22.04	9.19	0.00	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
03/02/01	31.23	23.34	7.89	0.00	--	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	--
09/04/01	31.23	21.78	9.45	0.00	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--
03/21/02	31.23	23.66	7.57	0.00	--	--	--	<250	<1.0	<1.0	<1.0	<3.0	<2.5	--
09/04/02	31.23	21.98	9.25	0.00	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--
03/31/03	31.23	23.26	7.97	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	<2.5	--
09/17/03[12]	31.23	22.04	9.19	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/05/04[12]	31.23	23.88	7.35	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/03/04[12]	31.23	21.74	9.49	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/02/05[12]	31.23	24.18	7.05	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/02/05[12]	31.23	22.61	8.62	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/24/06	31.23	24.22	7.01	0.00	--	--	--	--	--	--	--	--	--	--
03/05/07	31.23	23.53	7.70	0.00	--	--	--	--	--	--	--	--	--	--
03/17/08	31.23	22.30	8.93	0.00	--	--	--	--	--	--	--	--	--	--
03/03/09	31.23	23.43	7.80	0.00	--	--	--	--	--	--	--	--	--	--
03/17/10	31.23	23.67	7.56	0.00	--	--	--	--	--	--	--	--	--	--
03/04/11	31.23	22.98	8.25	0.00	--	--	--	--	--	--	--	--	--	--
03/20/12[13]	31.23	23.07	8.16	0.00	--	--	--	--	--	--	--	--	--	--
03/23/12[12]	31.23	23.02	8.21	0.00	--	--	110/<50[14]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/04/12[12]	31.23	22.05	9.18	0.00	50[16]/ 60[14,15,16,17]	50[16]/ 60[14,15,16,17]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
12/07/12[12]	31.23	23.28	7.95	0.00	200[16]/ <40[14,15,16]	200[16]/ <40[14,15,16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/12/13[12]	31.23	22.85	8.38	0.00	<42[16]/ <42[14,15,16]	<42[16]/ <42[14,15,16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
06/11/13[12]	31.23	22.33	8.90	0.00	<41[16]	<41[16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/10/13[12]	31.23	21.63	9.60	0.00	<40[16]	<40[16]	<50/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
12/04/13[12]	31.23	21.59	9.64	0.00	410[16]	410[16]	56/ <50[14,15]	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
02/07/14[25]	**31.23**	**22.13**	**9.10**	**0.00**	**44[16]**	**44[16]**	**<50/ <50[14,15]**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**--**	**--**
TRIP BLANK														
09/07/90	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/20/90	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
03/06/91	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/28/91	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/26/91	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
01/27/92	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
04/20/92	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
07/17/92	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--

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15900 Hesperian Boulevard
San Lorenzo, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	LNAPL Thickness (ft.)	TOTAL TPH (µg/L)	TPH-MO (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)	HVOCs (µg/L)
TRIP BLANK (cont)														
10/29/92	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
01/20/93	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
05/03/93	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
07/28/93	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
10/27/93	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
03/31/94	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/08/94	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
11/09/94	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/14/94	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
03/30/95	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/30/95	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/22/95	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/11/95	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/08/96	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
06/21/96	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
09/27/96	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
01/03/97	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
03/28/97	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
09/30/97	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
03/28/98	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
09/08/98	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
03/19/99	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
09/21/99	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--
03/21/00	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
08/28/00	--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
03/02/01	--	--	--	--	--	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	--
09/04/01	--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--
QA														
03/21/02	--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--
09/04/02	--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--
03/31/03	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	<2.5	--
09/17/03[12]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/05/04[12]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/03/04[12]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/02/05[12]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/02/05[12]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/24/06[12]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/05/07[12]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
03/17/08[12]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--

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San Lorenzo, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	LNAPL Thickness (ft.)	TOTAL TPH (µg/L)	TPH-MO (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)	HVOCs (µg/L)
QA (cont)														
03/03/09[12]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/04/12[12]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
12/07/12[12]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5[22]	--
03/12/13[12]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
06/11/13[12]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
09/10/13[12]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
12/04/13[12]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
02/07/14[25]	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**--**	**--**

Table 2

Groundwater Monitoring Data and Analytical Results

Chevron-branded Service Station 90504
15900 Hesperian Boulevard
San Lorenzo, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to August 28, 2000, were compiled from reports prepared by Blaine Tech Services, Inc. Current groundwater monitoring data was provided by Gettler - Ryan Inc. Current laboratory analytical results were provided by Eurofins Lancaster Laboratories.

TOC = Top of Casing
(ft.) = Feet
GWE = Groundwater Elevation
(msl) = Mean sea level
DTW = Depth to Water
LNAPL = Light Non-Aqueous Phase Liquid
TPH = Total Petroleum Hydrocarbons
MO= Motor Oil

DRO = Total Petroleum Hydrocarbons as Diesel
GRO = Gasoline Range Organics
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
MtBE = Methyl Tertiary-Butyl Ether
HVOCs = Halogenated Volatile Organic Compounds

(µg/L) = Micrograms per liter
(ppb) = Parts per billion
(D) = Duplicate
ND = Not Detected
-- = Not Measured/Not Analyzed
QA = Quality Assurance/Trip Blank
QC = Quality Control

t TOC elevations for wells C-2, C-3, C-7, and C-8 were inadvertently switched from September 17, 2003, to March 5, 2007. TOC's have been corrected as of March 17, 2008, to reflect the current TOC data.

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

[1] Depth to water measured from top of well vault.

[2] Detection limit raised due to foaming sample.

[3] Other HVOCs were not detected at detection limits of 0.5-1.0 ppb.

[4] Chloroform detected at <0.5 ppb.

[5] All site monitoring wells were re-sampled due to an excessive number of foaming samples on the 09/29/94 event.

[6] Chloroform detected at 1.8 ppb.

[7] Laboratory report indicates uncategorized compounds are not included in gas concentration.

[8] Chromatogram pattern indicates an unidentified hydrocarbon.

[9] Laboratory report indicates sample diluted due to foaming.

[10] MTBE value was reported from a re-analyzation on 04/01/99.

[11] Laboratory report indicates weathered gasoline C6-C12.

[12] BTEX and MTBE by EPA Method 8260.

[13] Well redeveloped.

[14] Analyzed with Silica gel cleanup.

[15] Laboratory report indicates the reverse surrogate, capric acid, is present at <1%.

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

[17] Laboratory report indicates target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken: The sample was re-analyzed outside of the method required holding time, and the method blank results are outside the acceptance limits. The hold time had expired prior to the second analysis so the original results are reported. Similar results were obtained in both trials. from the first trial. Similar results were obtained in both trials.

[18] Laboratory report indicates target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken: The sample was re-extracted outside of the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.

[19] Laboratory report indicates due to the dilution of the sample extract, capric acid recovery can not be determined.

[20] Laboratory report indicates due to the matrix of the sample extract, capric acid recovery can not be determined.

[21] Laboratory report indicates reporting limits were raised due to interference from the sample matrix.

[22] Laboratory report indicates MtBE in the continuing calibration verification standard is outside the QC acceptance limits. The following corrective action was taken: This analysis was repeated using a previously opened container with headspace under a continuing calibration standard that was within the QC acceptance limits. MtBE was not detected in either analysis. Results reported are from the initial analysis.

[23] Laboratory report indicates due to the presence of fuel in the sample extract, capric acid recovery can not be determined.

[24] Laboratory report indicates the surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

[25] BTEX by EPA Method 8260.

Table 3

Additional Groundwater Analytical Results

Chevron-branded Service Station 90504

15900 Hesperian Boulevard

San Lorenzo, California

WELL ID	DATE	ETHANOL (µg/L)	TBA (µg/L)	DIPE (µg/L)	EtBE (µg/L)	TAME (µg/L)	NAPH (µg/L)
C-1	03/19/99	<2,500	<500	<10	<10	<10	--
	03/05/04	<50	--	--	--	--	--
	09/03/04	SAMPLED ANNUALLY		--	--	--	--
	03/02/05	<50	--	--	--	--	--
	03/24/06	<50	--	--	--	--	--
	03/05/07	<50	--	--	--	--	--
	03/17/08	<50	--	--	--	--	--
	03/03/09	<50	--	--	--	--	--
	02/07/14	**--**	**--**	**--**	**--**	**--**	**<1**
C-2	03/19/99	<2,500	<500	<10	<10	<10	--
	03/05/04	<50	--	--	--	--	--
	09/03/04	SAMPLED ANNUALLY		--	--	--	--
	03/02/05	<50	--	--	--	--	--
	03/24/06	<50	--	--	--	--	--
	03/05/07	<50	--	--	--	--	--
	03/17/08	<50	--	--	--	--	--
	03/03/09	<50	--	--	--	--	--
	02/07/14	**--**	**--**	**--**	**--**	**--**	**<1**
C-3	03/19/99	<500	<100	<2.0	<2.0	<2.0	--
	03/05/04	<50	--	--	--	--	--
	09/03/04	SAMPLED ANNUALLY		--	--	--	--
	03/02/05	<50	--	--	--	--	--
	03/24/06	<50	--	--	--	--	--
	03/05/07	<50	--	--	--	--	--
	03/17/08	<50	--	--	--	--	--
	03/03/09	<50	--	--	--	--	--
	02/07/14	**--**	**--**	**--**	**--**	**--**	**<1**
C-4	**02/07/14**	**--**	**--**	**--**	**--**	**--**	**<1**
C-5	**02/07/14**	**--**	**--**	**--**	**--**	**--**	**<1**

Table 3
Additional Groundwater Analytical Results
Chevron-branded Service Station 90504
15900 Hesperian Boulevard
San Lorenzo, California

WELL ID	DATE	ETHANOL (µg/L)	TBA (µg/L)	DIPE (µg/L)	EtBE (µg/L)	TAME (µg/L)	NAPH (µg/L)
C-6	**02/07/14**	**--**	**--**	**--**	**--**	**--**	**<1**
C-7	03/19/99	<500	<100	<2.0	<2.0	<2.0	--
	03/05/04	<50	--	--	--	--	--
	09/03/04	SAMPLED ANNUALLY		--	--	--	--
	03/02/05	<50	--	--	--	--	--
	03/24/06	<50	--	--	--	--	--
	03/05/07	<50	--	--	--	--	--
	03/17/08	<50	--	--	--	--	--
	03/03/09	<50	--	--	--	--	--
	02/07/14	**--**	**--**	**--**	**--**	**--**	**<1**
C-8	03/19/99	<500	<100	<2.0	<2.0	<2.0	--
	03/05/04	<50	--	--	--	--	--
	09/03/04	SAMPLED ANNUALLY		--	--	--	--
	03/02/05	<50	--	--	--	--	--
	03/24/06	<50	--	--	--	--	--
	03/05/07	<50	--	--	--	--	--
	03/17/08	<50	--	--	--	--	--
	03/03/09	<50	--	--	--	--	--
	02/07/14	**--**	**--**	**--**	**--**	**--**	**9**
C-9	09/17/03	<50	--	--	--	--	--
	03/05/04	<50	--	--	--	--	--
	09/03/04	<50	--	--	--	--	--
	03/02/05	<50	--	--	--	--	--
	09/02/05	<50	--	--	--	--	--
	02/07/14	**--**	**--**	**--**	**--**	**--**	**<1**
C-10	03/19/99	<500	<100	<2.0	<2.0	<2.0	--
	09/17/03	<50	--	--	--	--	--
	03/05/04	<50	--	--	--	--	--
	09/03/04	<50	--	--	--	--	--
	03/02/05	<50	--	--	--	--	--
	09/02/05	<50	--	--	--	--	--
	02/07/14	**--**	**--**	**--**	**--**	**--**	**<1**

Table 3

Additional Groundwater Analytical Results

Chevron-branded Service Station 90504

15900 Hesperian Boulevard

San Lorenzo, California

WELL ID	DATE	ETHANOL (µg/L)	TBA (µg/L)	DIPE (µg/L)	EtBE (µg/L)	TAME (µg/L)	NAPH (µg/L)
C-11	09/17/03	<50	--	--	--	--	--
	03/05/04	<50	--	--	--	--	--
	09/03/04	<50	--	--	--	--	--
	03/02/05	<50	--	--	--	--	--
	09/02/05	<50	--	--	--	--	--
	02/07/14	**--**	**--**	**--**	**--**	**--**	**<1**

Table 3

Additional Groundwater Analytical Results

Chevron-branded Service Station 90504
15900 Hesperian Boulevard
San Lorenzo, California

EXPLANATIONS:

Groundwater laboratory analytical results before September 17, 2003, were compiled from reports prepared by Blaine Tech Services, Inc. Groundwater monitoring data and laboratory analytical results between 2004 and 2009 and since 2014 were provided by Gettler-Ryan Inc. and Eurofins Lancaster Laboratories.

TBA = Tertiary-Butyl Alcohol
MtBE = Methyl Tertiary-Butyl Ether
DIPE = Di-Isopropyl Ether
ETBE = Ethyl Tertiary-Butyl Ether
TAME = Tertiary-Amyl Methyl Ether
NAPH = Naphthalene
(µg/L) = Micrograms per liter
-- = Not Analyzed

Table 4
Soil Analytical Results
Chevron-branded Service Station 90504
15900 Hesperian Boulevard
San Lorenzo, California

Borehole/ Sample ID	Sample Depth (feet bgs)	Date Collected	TPH-GRO (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	TOG (mg/kg)	Dichloro methane (mg/kg)	Chromium (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)
C-6	10.5	11/29/89	<1	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--
C-6	15.5	11/29/89	<1	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--
C-6	20.5	11/29/89	<1	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--
C-7	10.5	11/29/89	**3.7**	<0.05	<0.05	<0.05	**0.05**	--	--	--	--	--
C-7	15.5	11/29/89	<1	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--
C-7	20.5	11/29/89	**4.0**	**0.11**	<0.05	**0.05**	**0.11**	--	--	--	--	--
C-8	10.5	11/29/89	<1	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--
C-8	15.5	11/29/89	**37**	<0.05	<0.05	**0.14**	**0.24**	--	--	--	--	--
C-8	20.5	11/29/89	<1	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--
C-9	10.5	08/28/90	<1	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--
C-9	15.5	08/28/90	<1	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--
C-10	10.5	08/29/90	<1	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--
C-10	15.5	08/29/90	<1	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--
C-11	10.5	08/28/90	<1	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--
C-11	15.5	08/28/90	<1	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--
BH-A	5	07/28/92	**1**	**0.039**	**0.083**	**0.023**	**0.099**	--	--	--	--	--
BH-A	10	07/28/92	**5**	**0.052**	**0.013**	**0.14**	**0.066**	--	--	--	--	--
BH-B	5	07/28/92	<1.0	**0.010**	**0.005**	<0.005	**0.006**	--	--	--	--	--
BH-B	10	07/28/92	**6**	**0.043**	<0.005	**0.059**	**0.29**	--	--	--	--	--
BH-C	5	07/28/92	<1.0	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--
BH-C	10	07/28/92	**660**	**0.82**	**0.33**	**9.1**	**47**	--	--	--	--	--
BH-D	5	07/28/92	**1**	**0.019**	**0.005**	<0.005	**0.009**	--	--	--	--	--
BH-D	10	07/28/92	**11**	**0.057**	<0.005	**0.22**	**0.36**	--	--	--	--	--
T-1	--	01/06/94	<1	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--
T-2	--	01/06/94	<1	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--
D-1	--	01/06/94	<1	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--
D-2 (Soil Removed)	--	01/06/94	**2**	**0.01**	<0.005	**0.011**	**0.23**	--	--	--	--	--
D-3A (Soil Removed)	--	01/06/94	**5**	**0.018**	<0.005	**0.061**	**0.14**	--	--	--	--	--
D-3B	--	01/06/94	<1	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--
WO-E (Soil Removed)	9	03/29/94	<1	<0.005	<0.005	<0.005	<0.005	**110**	**0.006**	**30**	**34**	**35**
WO-W	9	03/29/94	<1	<0.005	<0.005	<0.005	<0.005	<50	--	**37**	**39**	**48**
XWO-E	11	03/31/94	--	--	--	--	--	<50	--	--	--	--
WOT-11	11	06/08/01	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	**63**	--	**29**	**25**	**33**
VP-1	5.5	05/25/10	<0.9	<0.0005	<0.0009	<0.0009	<0.0009	--	--	--	--	--
VP-2	5.5	05/25/10	<1	<0.0005	<0.001	<0.001	<0.001	--	--	--	--	--
VP-3	5.5	05/25/10	<1	<0.0005	<0.0009	<0.0009	<0.0009	--	--	--	--	--
VP-4	5.5	05/25/10	<1	<0.0005	<0.0009	<0.0009	<0.0009	--	--	--	--	--
ESLs - Shallow Soil [(1),(2)]			**500**	**0.044**	**2.9**	**3.3**	**2.3**	**500**	**0.077**	**2,500**	**150**	**600**
ESLs - Deep Soil [(1),(2)]			**770**	**0.044**	**2.9**	**3.3**	**2.3**	**1,000**	**0.077**	**5,000**	**5,000**	**5,000**

Notes:
(1) California Regional Water Quality Control Board, San Francisco Bay Region, *Screening For Environmental Concerns at Sites with Contaminated Soil and Groundwater* , Interim Final - December 2013
(2) Shallow soil refers to soil above 9.84 feet bgs and deep soil refers to soil below 9.84 feet bgs.
Bold text denotes detected concentrations. **Bold/blue** text denotes detected concentrations above ESLs for Commercial Land Use.
Only compounds that were detected in one or more historical soil samples are included in this table.

Abbreviations:
feet bgs = feet below ground surface
mg/kg = milligrams per kilogram
TPH-GRO = total petroleum hydrocarbons as gasoline range organics
TOG = total oil and grease
-- = not analyzed/information not available
ESL = Environmental Screening Level
NS = no standard

Table 5
Soil Vapor Analytical Results
Chevron-branded Service Station 90504
15900 Hesperian Boulevard
San Lorenzo, California

Borehole/ Sample ID	Date Collected	TPH-GRO (µg/m^3)	Benzene (µg/m^3)	Toluene (µg/m^3)	Ethylbenzene (µg/m^3)	Total Xylenes[(1)] (µg/m^3)	MtBE (µg/m^3)
VP-1	06/03/10	**3,900**	<3.4	**6.7**	<4.7	**16.5**	<3.9
VP-2	06/03/10	**1,500**	<3.7	**5.7**	<5.0	<5.0	<4.2
VP-3	06/03/10	**1,600**	<4.0	**5.6**	<5.5	<5.5	<4.6
VP-4	06/03/10	**2,600**	<4.0	**5.5**	<5.5	<5.5	<4.6
Environmental Screening Levels[(2)]		**2,500,000**	**420**	**1,300,000**	**4,900**	**440,000**	**47,000**

Notes:
(1) Total xylenes is the sum of m,p-xylene and o-xylene. If either m,p-xylene and o-xylene was non-detect, the detected value was used. If both were non-detect, the highest detection limit was used.
(2) California Regional Water Quality Control Board, San Francisco Bay Region, *Screening For Environmental Concerns at Sites with Contaminated Soil and Groundwater* , Interim Final - December 2013.
Bold text denotes detected concentrations. **Bold/blue** text denotes detected concentrations above Environmental Screening Levels for shallow soil gas with commercial land use.

Abbreviations:
µg/m^3 = micrograms per cubic meter
TPH-GRO = total petroleum hydrocarbons as gasoline range organics
MtBE = methyl *tertiary* -butyl ether

FIGURES

REFERENCE: USGS 7.5 MINUTE QUADRANGLES;
SAN LEANDRO, CALIFORNIA; 2012 AND HAYWARD, CALIFORNIA; 2012

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FOR:		FIGURE:
CHEVRON-BRANDED SERVICE STATION 90504 15900 HESPERIAN BOULEVARD SAN LORENZO, CALIFORNIA	SITE LOCATION MAP	1

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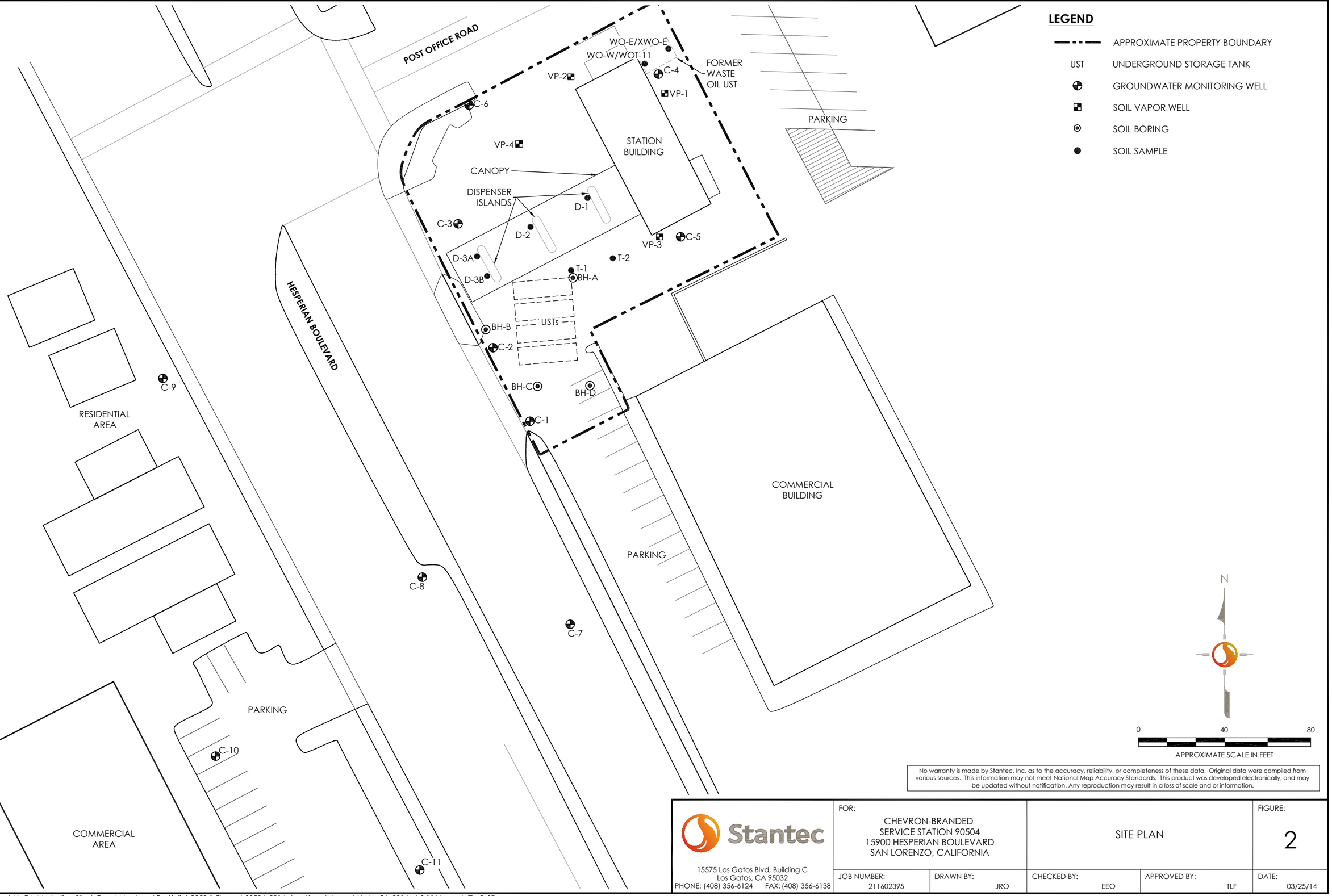
FILEPATH:P:\Chevron\N. CA Marketing Sites\Carryl MacLeod Portfolio\90504\SCM\Figures\90504_1Q14.dwg | jopalekopsahl | Mar 25, 2014 at 12:08 | Layout: Fig 1_SLM



LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- UST — UNDERGROUND STORAGE TANK
- GROUNDWATER MONITORING WELL
- SOIL VAPOR WELL
- SOIL BORING
- SOIL SAMPLE

N

0 40 80

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SAN LORENZO, CALIFORNIA

SITE PLAN

FIGURE: 2

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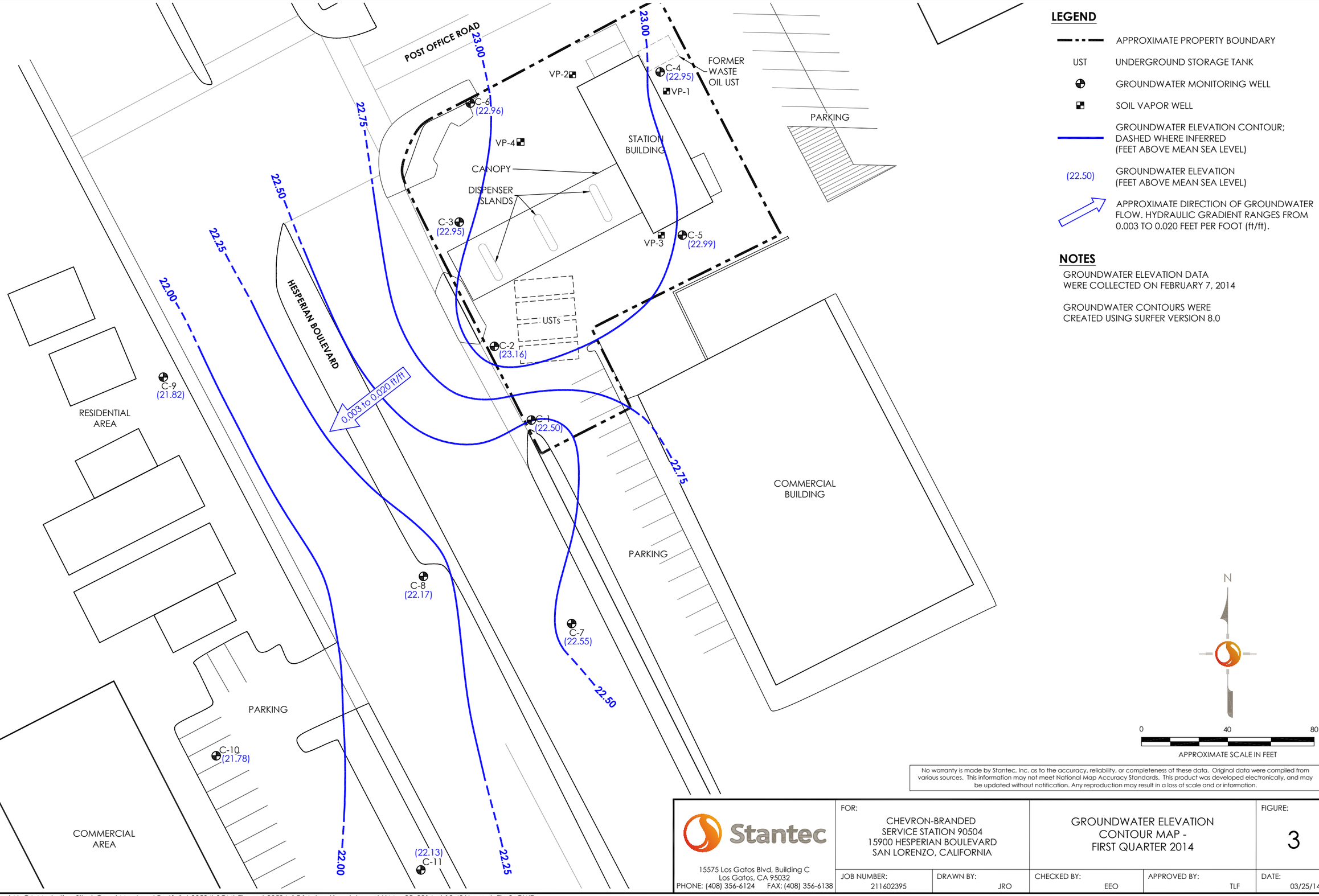

LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- UST — UNDERGROUND STORAGE TANK
- GROUNDWATER MONITORING WELL
- SOIL VAPOR WELL
- GROUNDWATER ELEVATION CONTOUR; DASHED WHERE INFERRED (FEET ABOVE MEAN SEA LEVEL)
- (22.50) — GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW. HYDRAULIC GRADIENT RANGES FROM 0.003 TO 0.020 FEET PER FOOT (ft/ft).

NOTES

GROUNDWATER ELEVATION DATA WERE COLLECTED ON FEBRUARY 7, 2014

GROUNDWATER CONTOURS WERE CREATED USING SURFER VERSION 8.0

N

0 40 80

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FOR: CHEVRON-BRANDED SERVICE STATION 90504 15900 HESPERIAN BOULEVARD SAN LORENZO, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR MAP - FIRST QUARTER 2014

FIGURE: 3

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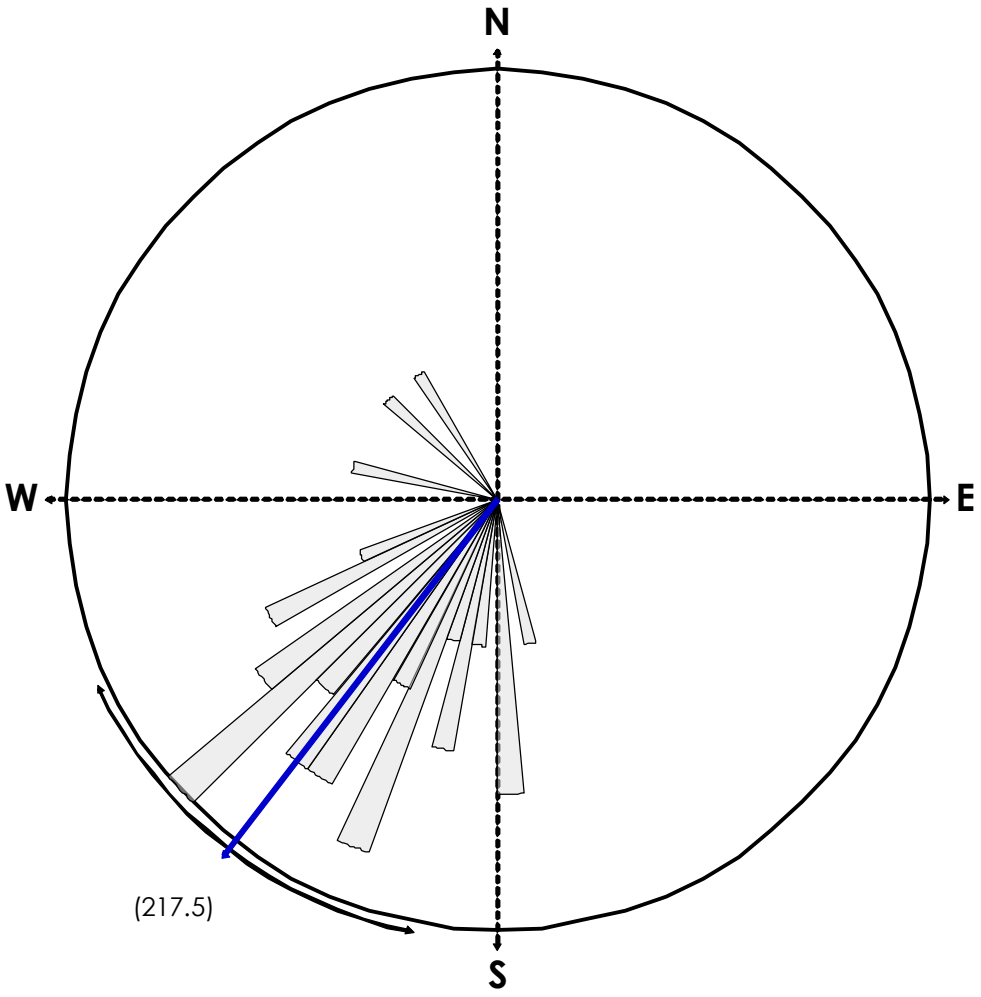

EQUAL AREA PLOT

Number of Points	52
Class Size	5
Vector Mean	217.51
Vector Magnitude	46.25
Consistency Ratio	0.89

NOTE: ROSE DIAGRAM IS BASED ON THE DIRECTION OF GROUNDWATER FLOW BEGINNING FOURTH QUARTER 1989.

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FOR:		FIGURE:
CHEVRON-BRANDED SERVICE STATION 90504 15900 HESPERIAN BOULEVARD SAN LORENZO, CALIFORNIA	ROSE DIAGRAM - FIRST QUARTER 2014	4

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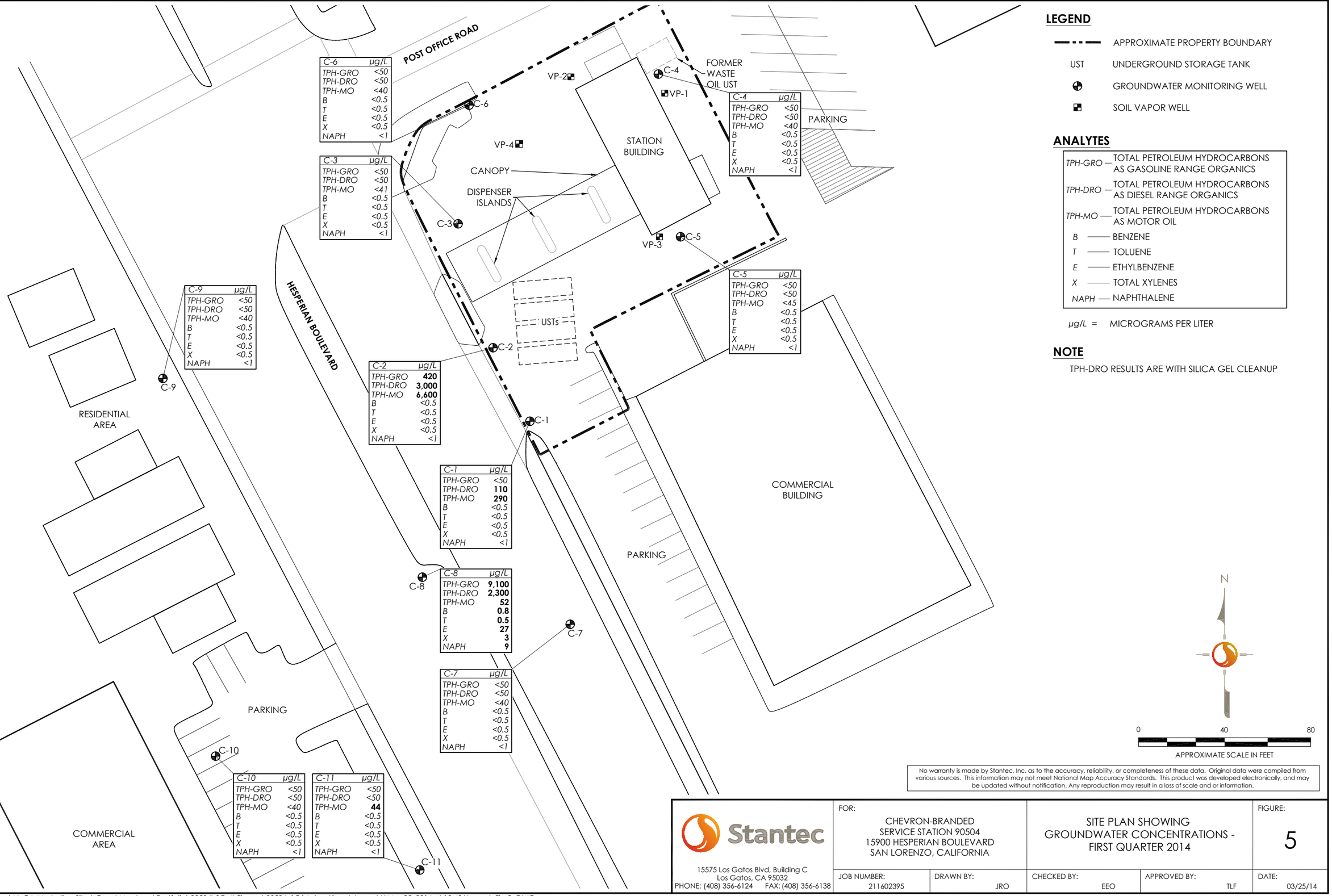

LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- UST — UNDERGROUND STORAGE TANK
- GROUNDWATER MONITORING WELL
- SOIL VAPOR WELL

ANALYTES

- *TPH-GRO* — TOTAL PETROLEUM HYDROCARBONS AS GASOLINE RANGE ORGANICS
- *TPH-DRO* — TOTAL PETROLEUM HYDROCARBONS AS DIESEL RANGE ORGANICS
- *TPH-MO* — TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL
- *B* — BENZENE
- *T* — TOLUENE
- *E* — ETHYLBENZENE
- *X* — TOTAL XYLENES
- *NAPH* — NAPHTHALENE

µg/L = MICROGRAMS PER LITER

NOTE

TPH-DRO RESULTS ARE WITH SILICA GEL CLEANUP

N

0 40 80

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FOR:
CHEVRON-BRANDED
SERVICE STATION 90504
15900 HESPERIAN BOULEVARD
SAN LORENZO, CALIFORNIA

SITE PLAN SHOWING
GROUNDWATER CONCENTRATIONS -
FIRST QUARTER 2014

FIGURE: 5

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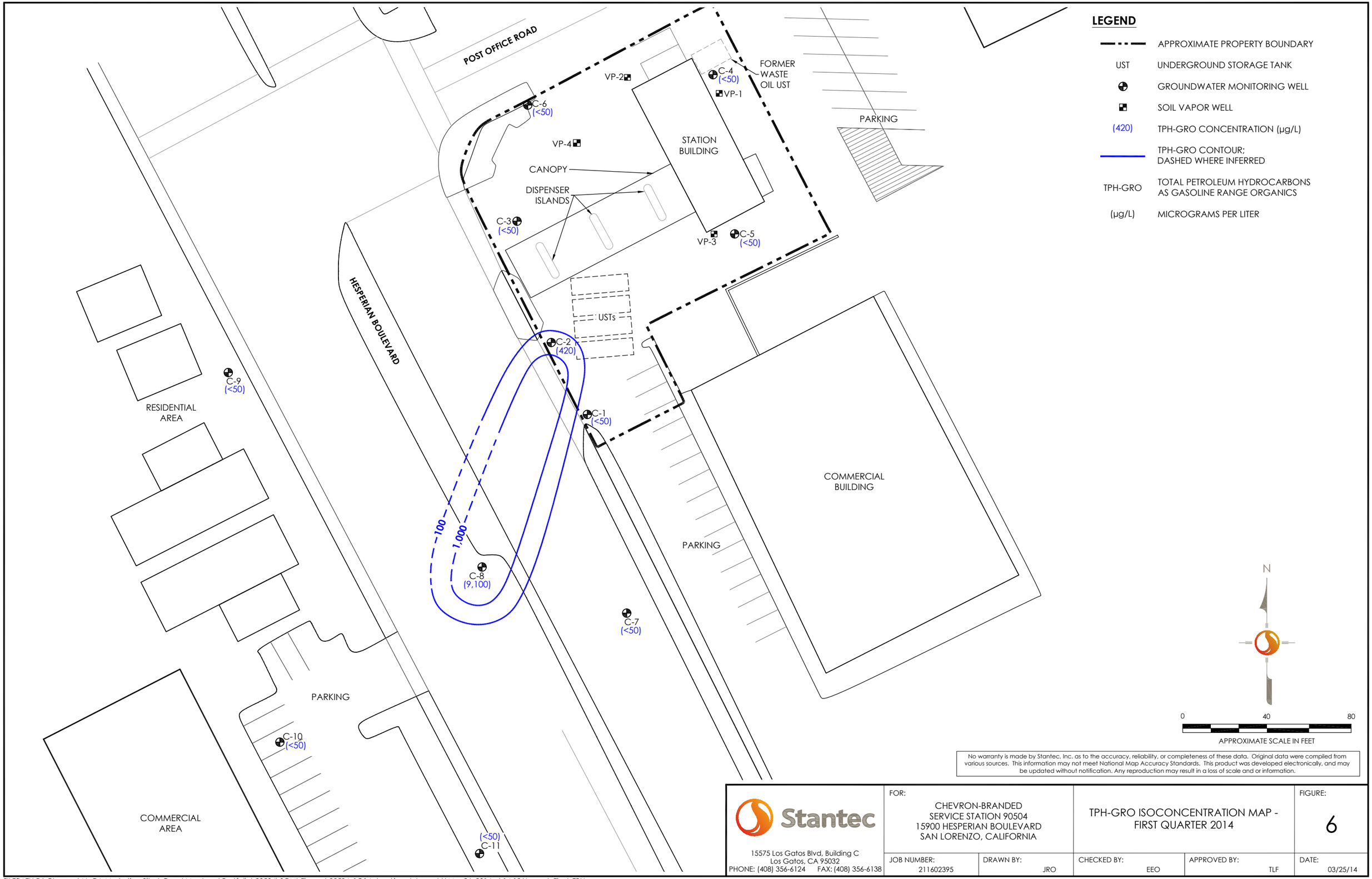

LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- UST — UNDERGROUND STORAGE TANK
- GROUNDWATER MONITORING WELL
- SOIL VAPOR WELL
- (420) — TPH-GRO CONCENTRATION (µg/L)
- TPH-GRO CONTOUR; DASHED WHERE INFERRED
- TPH-GRO — TOTAL PETROLEUM HYDROCARBONS AS GASOLINE RANGE ORGANICS
- (µg/L) — MICROGRAMS PER LITER

N

0 40 80

APPROXIMATE SCALE IN FEET

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FOR: CHEVRON-BRANDED SERVICE STATION 90504
15900 HESPERIAN BOULEVARD
SAN LORENZO, CALIFORNIA

TPH-GRO ISOCONCENTRATION MAP - FIRST QUARTER 2014

FIGURE: 6

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
211602395	JRO	EEO	TLF	03/25/14

FILEPATH:P:\Chevron\N. CA Marketing Sites\Carryl MacLeod Portfolio\90504\SCM\Figures\90504_1Q14.dwg | jopalekopsahl | Mar 26, 2014 at 14:18 | Layout: Fig 6_TPHg

POST OFFICE ROAD

VP-2

C-4 (<50)

FORMER WASTE OIL UST

VP-1

C-6 (<50)

PARKING

VP-4

STATION BUILDING

CANOPY

DISPENSER ISLANDS

C-3 (<50)

VP-3

C-5 (<50)

HESPERIAN BOULEVARD

USTs

C-2 (3,000)

C-1 (110)

100

1,000

C-9 (<50)

RESIDENTIAL AREA

COMMERCIAL BUILDING

PARKING

C-8 (2,300)

C-7 (<50)

PARKING

C-10 (<50)

COMMERCIAL AREA

(<50) C-11

LEGEND

	APPROXIMATE PROPERTY BOUNDARY
UST	UNDERGROUND STORAGE TANK
	GROUNDWATER MONITORING WELL
	SOIL VAPOR WELL
(110)	TPH-DRO CONCENTRATION (µg/L)
	TPH-DRO CONTOUR; DASHED WHERE INFERRED
TPH-DRO	TOTAL PETROLEUM HYDROCARBONS AS DIESEL RANGE ORGANICS
(µg/L)	MICROGRAMS PER LITER

NOTE

RESULTS ARE WITH SILICA GEL CLEANUP

N

0 40 80

APPROXIMATE SCALE IN FEET

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Stantec
15575 Los Gatos Blvd, Building C
Los Gatos, CA 95032
PHONE: (408) 356-6124 FAX: (408) 356-6138

FOR:
CHEVRON-BRANDED
SERVICE STATION 90504
15900 HESPERIAN BOULEVARD
SAN LORENZO, CALIFORNIA

TPH-DRO ISOCONCENTRATION MAP - FIRST QUARTER 2014

FIGURE: 7

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
211602395	JRO	EEO	TLF	03/25/14

FILEPATH:P:\Chevron\N. CA Marketing Sites\Carryl MacLeod Portfolio\90504\SCM\Figures\90504_1Q14.dwg | jopalekopsahl | Mar 26, 2014 at 14:18 | Layout: Fig 7_TPHd

POST OFFICE ROAD

HESPERIAN BOULEVARD

VP-2

C-4 (<40)

FORMER WASTE OIL UST

VP-1

C-6 (<40)

PARKING

VP-4

STATION BUILDING

CANOPY

DISPENSER ISLANDS

C-3 (<41)

VP-3

C-5 (<45)

USTs

100

1,000

C-2 (6,600)

C-1 (290)

C-9 (<40)

RESIDENTIAL AREA

COMMERCIAL BUILDING

PARKING

C-8 (52)

C-7 (<40)

PARKING

C-10 (<40)

COMMERCIAL AREA

(44)

C-11

LEGEND

	APPROXIMATE PROPERTY BOUNDARY
UST	UNDERGROUND STORAGE TANK
	GROUNDWATER MONITORING WELL
	SOIL VAPOR WELL
(290)	TPH-MO CONCENTRATION (µg/L)
	TPH-MO CONTOUR; DASHED WHERE INFERRED
TPH-MO	TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL
(µg/L)	MICROGRAMS PER LITER

N

0 40 80

APPROXIMATE SCALE IN FEET

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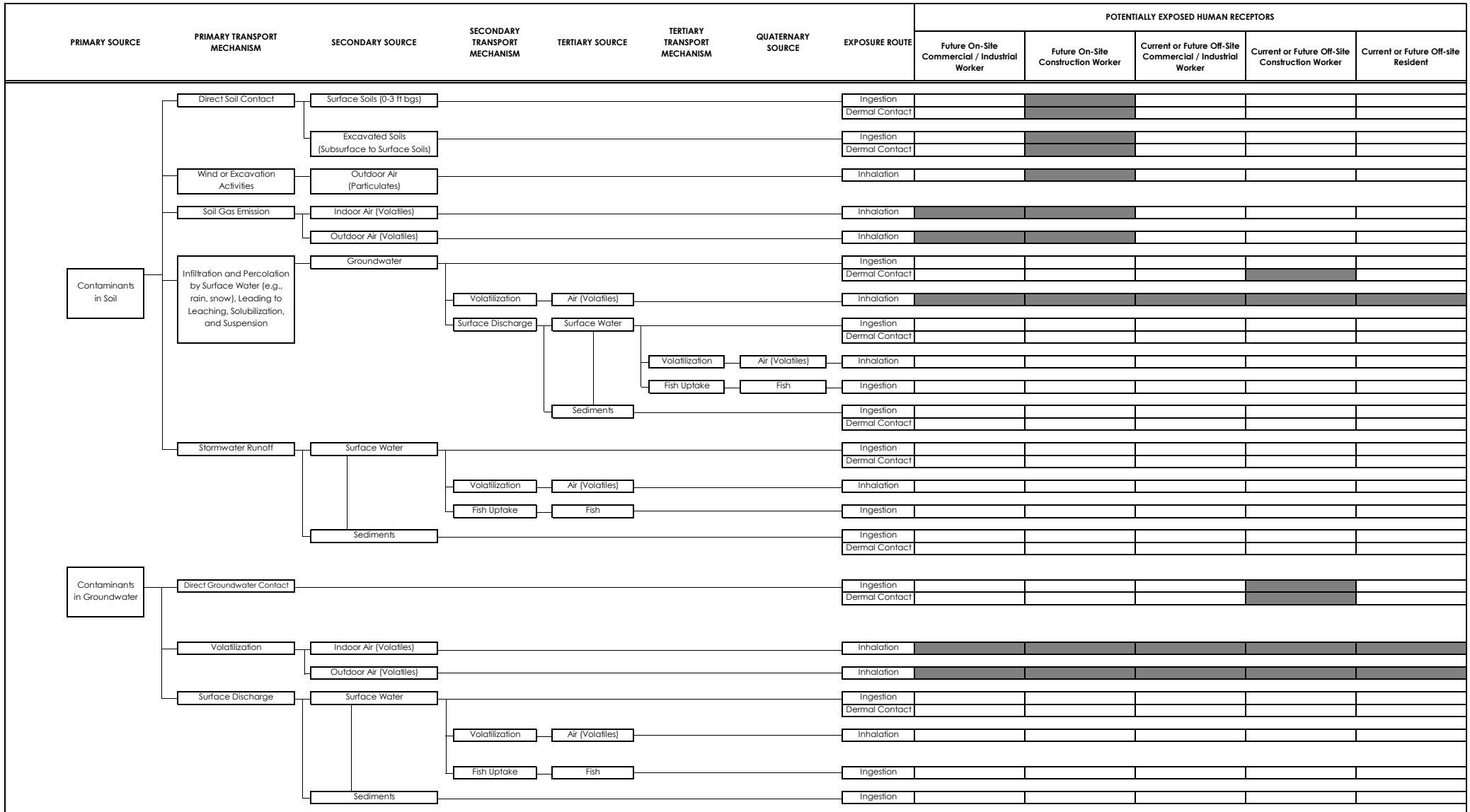
FOR:
CHEVRON-BRANDED
SERVICE STATION 90504
15900 HESPERIAN BOULEVARD
SAN LORENZO, CALIFORNIA

TPH-MO ISOCONCENTRATION MAP - FIRST QUARTER 2014

FIGURE: 8

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
211602395	JRO	EEO	TLF	03/25/14

FILEPATH:P:\Chevron\N. CA Marketing Sites\Carryl MacLeod Portfolio\90504\SCM\Figures\90504_1Q14.dwg | jopalekopsahl | Mar 26, 2014 at 14:19 | Layout: Fig 8_TPHm


PRIMARY SOURCE
PRIMARY TRANSPORT MECHANISM
SECONDARY SOURCE
SECONDARY TRANSPORT MECHANISM
TERTIARY SOURCE
TERTIARY TRANSPORT MECHANISM
QUATERNARY SOURCE
EXPOSURE ROUTE
POTENTIALLY EXPOSED HUMAN RECEPTORS
Future On-Site Commercial / Industrial Worker
Future On-Site Construction Worker
Current or Future Off-Site Commercial / Industrial Worker
Current or Future Off-Site Construction Worker
Current or Future Off-site Resident
Contaminants in Soil
Direct Soil Contact
Surface Soils (0-3 ft bgs)
Ingestion
Dermal Contact
Excavated Soils (Subsurface to Surface Soils)
Wind or Excavation Activities
Outdoor Air (Particulates)
Inhalation
Soil Gas Emission
Indoor Air (Volatiles)
Outdoor Air (Volatiles)
Infiltration and Percolation by Surface Water (e.g., rain, snow), Leading to Leaching, Solubilization, and Suspension
Groundwater
Volatilization
Air (Volatiles)
Surface Discharge
Surface Water
Fish Uptake
Fish
Sediments
Stormwater Runoff
Contaminants in Groundwater
Direct Groundwater Contact
Volatilization
Indoor Air (Volatiles)
Outdoor Air (Volatiles)
Surface Discharge
Surface Water
Volatilization
Air (Volatiles)
Fish Uptake
Fish
Sediments
LEGEND
Exposure pathway is complete or potentially complete.
Exposure pathway is incomplete.
DATE: 03/26/14
DRAWN BY: EEO
APPROVED BY: TLF
Chevron-Branded Service Station 90504
15900 Hesperian Boulevard
San Lorenzo, California
FIGURE 9
EXPOSURE PATHWAY FLOW CHART

APPENDIX A
ACEH Correspondence

Detterman, Mark, Env. Health

From: Detterman, Mark, Env. Health
Sent: Thursday, October 10, 2013 12:10 PM
To: 'Flora, Travis'
Cc: 'CMacleod@Chevron.com'; Roe, Dilan, Env. Health
Subject: RE: 90504 - 15900 Hesperian Blvd., San Lorenzo (RO0000007)
Attachments: RO7_DWR_ACPWA_Well_Forms.pdf; Attachment A Preferential Pathway and Sensitive Recptor Survey.pdf; Attachment B Site Conceptual Model.pdf; Attachment C Path to Closure Project Schedule.pdf

Travis,

Here are the signed DWR and ACPWA forms. Both information sources will help move the case along a Path to Closure.

In order to expedite that path, ACEH requests site information be organized when submitted in a limited and focused Site Conceptual Model that identifies site data gaps, evaluates potential conduits (utilities and wells), evaluates the site under the Low Threat Closure Policy, includes a Data Gap Work Plan as needed, and details a Path to Closure Schedule. As you are likely aware, initial LTCP reviews are available on Geotracker; ACEH does not believe the site meets the LTCP at this time. However, if you can provide information, reports, and data that fill some of the data gaps that ACEH has identified under the LTCP, ACEH will be able to review it and make any changes to its understanding of the site under the LTCP. This may (or may not) preclude the need for field work. Please see Attachment A (Preferential Pathway and Sensitive Receptor Survey), Attachment B (Site Conceptual Model) and Attachment C (Path to Closure Schedule) for the requisite detail for these items.

As noted before, and reiterated here, if you (Stantec) and Ms. MacLeod would like to come in to discuss this site or other sites that you are managing for Chevron in order to help identify Paths to Closure for the sites, ACEH would be interested. We have been holding a number of meetings that have substantially accelerated work at a number of Chevron sites with other Chevron case managers and their consultants. Let me know and we can arrange a day and time.

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:

- December 20, 2013 – Resulting Report
  File to be named RO342_SCM / WP / RFC_R_yyyy-mm-dd (as appropriate)

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.

Should you have questions, please let me know.

Mark Detterman
Senior Hazardous Materials Specialist, PG, CEG
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
Direct: 510.567.6876
Fax: 510.337.9335
Email: mark.detterman@acgov.org

PDF copies of case files can be downloaded at:

http://www.acgov.org/aceh/lop/ust.htm

From: Flora, Travis [mailto:Travis.Flora@stantec.com]
Sent: Thursday, September 26, 2013 2:08 PM
To: Detterman, Mark, Env. Health
Subject: 90504 - 15900 Hesperian Blvd., San Lorenzo (RO0000007)

Hi Mark,
Will you also please sign the well search forms for RO0000007, 15900 Hesperian Blvd., San Lorenzo?

Thanks,

Travis L. Flora
Associate Project Manager

Stantec
15575 Los Gatos Blvd, Building C, Los Gatos, CA 95032

Office: (408) 827-3876
Cell: (408) 458-6320

Travis.Flora@stantec.com

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Flora, Travis

From: Detterman, Mark, Env. Health <Mark.Detterman@acgov.org>
Sent: Thursday, 05 December, 2013 13:42
To: Flora, Travis
Cc: 'CMacleod@Chevron.com'; Roe, Dilan, Env. Health
Subject: RE: 90504 - 15900 Hesperian Blvd., San Lorenzo (RO0000007)

Travis,
This seems to be a reasonable approach to planned submittal date changes. I will use a March 3, 2014 delivery date to track them, with the intent of modifying as needed or decided.

Mark Detterman
Senior Hazardous Materials Specialist, PG, CEG
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
Direct: 510.567.6876
Fax: 510.337.9335
Email: mark.detterman@acgov.org

PDF copies of case files can be downloaded at:

http://www.acgov.org/aceh/lop/ust.htm

From: Flora, Travis [mailto:Travis.Flora@stantec.com]
Sent: Thursday, December 05, 2013 12:07 PM
To: Detterman, Mark, Env. Health
Cc: 'CMacleod@Chevron.com'; Roe, Dilan, Env. Health
Subject: RE: 90504 - 15900 Hesperian Blvd., San Lorenzo (RO0000007)

Hi Mark,
As discussed, we'd like to request postponement of the current deadline for a "Resulting Report" to be submitted to the County by December 20, 2013. We plan to prepare a conceptual site model and submit during First Quarter 2014 according to a schedule to be provided by Chevron at a later date, as was reportedly discussed during a recent meeting between the County and Chevron. Our understanding is that the schedule of deliverables will include various reports for multiple sites and will be staggered to allow the County sufficient time to review each deliverable.

Please let me know if this is acceptable.

Thanks,

Travis L. Flora
Associate Project Manager
Phone: (408) 827-3876
Cell: (408) 458-6320

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From: Detterman, Mark, Env. Health [mailto:Mark.Detterman@acgov.org]
Sent: Thursday, 10 October, 2013 12:10
To: Flora, Travis
Cc: 'CMacleod@Chevron.com'; Roe, Dilan, Env. Health
Subject: RE: 90504 - 15900 Hesperian Blvd., San Lorenzo (RO0000007)

Travis,

Here are the signed DWR and ACPWA forms. Both information sources will help move the case along a Path to Closure.

In order to expedite that path, ACEH requests site information be organized when submitted in a limited and focused Site Conceptual Model that identifies site data gaps, evaluates potential conduits (utilities and wells), evaluates the site under the Low Threat Closure Policy, includes a Data Gap Work Plan as needed, and details a Path to Closure Schedule. As you are likely aware, initial LTCP reviews are available on Geotracker; ACEH does not believe the site meets the LTCP at this time. However, if you can provide information, reports, and data that fill some of the data gaps that ACEH has identified under the LTCP, ACEH will be able to review it and make any changes to its understanding of the site under the LTCP. This may (or may not) preclude the need for field work. Please see Attachment A (Preferential Pathway and Sensitive Receptor Survey), Attachment B (Site Conceptual Model) and Attachment C (Path to Closure Schedule) for the requisite detail for these items.

As noted before, and reiterated here, if you (Stantec) and Ms. MacLeod would like to come in to discuss this site or other sites that you are managing for Chevron in order to help identify Paths to Closure for the sites, ACEH would be interested. We have been holding a number of meetings that have substantially accelerated work at a number of Chevron sites with other Chevron case managers and their consultants. Let me know and we can arrange a day and time.

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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:

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  File to be named RO342_SCM / WP / RFC_R_yyyy-mm-dd (as appropriate)

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.

Should you have questions, please let me know.

Mark Detterman
Senior Hazardous Materials Specialist, PG, CEG
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
Direct: 510.567.6876
Fax: 510.337.9335
Email: mark.detterman@acgov.org

PDF copies of case files can be downloaded at:

http://www.acgov.org/aceh/lop/ust.htm

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Sent: Thursday, September 26, 2013 2:08 PM
To: Detterman, Mark, Env. Health
Subject: 90504 - 15900 Hesperian Blvd., San Lorenzo (RO0000007)

Hi Mark,
Will you also please sign the well search forms for RO0000007, 15900 Hesperian Blvd., San Lorenzo?

Thanks,

Travis L. Flora
Associate Project Manager

Stantec
15575 Los Gatos Blvd, Building C, Los Gatos, CA 95032

Office: (408) 827-3876
Cell: (408) 458-6320

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Please consider the environment before printing this email.

Detterman, Mark, Env. Health

From: Detterman, Mark, Env. Health
Sent: Thursday, January 23, 2014 5:06 PM
To: MacLeod, Carryl G; Fischer, Alexis N; 'Flora, Travis'
Cc: Roe, Dilan, Env. Health
Subject: Meeting Followup: RO7 / Chevron 90504; 15900 Hesperian Blvd, San Leandro

Carryl and Travis,
This email is in followup to our meeting of January 21, 2014, to discuss the subject site and the strategy for addressing data gaps under the Low-Threat Closure Policy, A summary of the main points of our discussion is provided below for incorporation into the previously requested focused Site Conceptual Model (SCM). Items discussed include, but were not limited to the following.

TECHNICAL COMMENTS

1. **Evaluation of the Diesel LNAPL -** Diesel LNAPL was discovered in well C-2 near the tank pit in March 2012 during a groundwater monitoring event. The source mechanism, location, volume, and residual volume of the diesel LNAPL release has not been defined or identified. The lateral and downgradient dimensions of the LNAPL plume have not been defined. Tank tightness tests do not appear to have been submitted.
2. **Adequacy of the Groundwater Well Network to Define the LNAPL and Dissolved Phase Plumes** – The following data gaps were included in the discussion. Additional data gaps may be noted in your case review.
    - **a.** Only soil bore logs for wells C-1 to C-5 have been submitted; well logs have not been submitted to confirm well screen intervals, and that they are capable of capturing representative groundwater concentrations and LNAPL thicknesses.
    - **b.** Per LTCP policy papers, groundwater concentrations remain that are considered to be indirect evidence of LNAPL in well C-2.
    - **c.** Downgradient wells C-9 to C-11 are submerged and do not appear to delineate the extent of the groundwater plume.
    - **d.** Downgradient wells C-9 to C-11 appear to be widely spaced and the downgradient groundwater plume may not be capable of being detected with the current spacing interval.
    - **e.** The historic groundwater flow direction ranges substantially more than current rose diagrams suggest, and should be updated to allow an understanding of plume dimensions and delineation.
    - **f.** The potential for preference pathways (utilities, including storm drain, and flow line vs. trench total depth determinations) and vicinity water supply wells to affect the dissolved and LNAPL phase groundwater plumes has not been sufficiently evaluated.
    - **g.** The potential for other sensitive receptors (basements, crawl spaces, dewatering sump pumps, etc.) to be present in the downgradient direction above the groundwater plume has not been evaluated.
3. **Direct Contact and Outdoor Air Data Gaps -** Naphthalene concentrations in soil or groundwater do not appear to have been analyzed for in the recent diesel source area; and may not have been analyzed for in the waste oil source area.

TECHNICAL REPORT REQUEST

Per the discussion at the meeting and previous emails, ACEH will extend the submittal date for the SCM and Data Gap Work Plan (if appropriate) to **April 28, 2014**.

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.

I believe this captures the principal points of our discussions, if not all. If you believe I have left something off, please let me know.

Otherwise, should you have questions, please let me know.

Mark Detterman
Senior Hazardous Materials Specialist, PG, CEG
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
Direct: 510.567.6876
Fax: 510.337.9335
Email: mark.detterman@acgov.org

PDF copies of case files can be downloaded at:

http://www.acgov.org/aceh/lop/ust.htm

APPENDIX B
Focused Site Conceptual Model

TABLE 1
Focused Site Conceptual Model
Chevron-branded Service Station 90504
15900 Hesperian Boulevard, San Lorenzo, California

SCM Element	SCM Sub-Element	Description	Data Gap Item #	Resolution
Geology and Hydrogeology	Regional	15900 Hesperian Boulevard, San Lorenzo, Alameda County, California (the Site) is located atop unconsolidated Quaternary-age alluvial fan deposits, typically described as consisting of interbedded fine-grained materials (Conestoga-Rovers & Associates [CRA], 2007).	None	NA
Geology and Hydrogeology	Site	Soil boring and well construction logs are included in the *Site Conceptual Model*, dated April 28, 2014 (Stantec Consulting Services Inc. [Stantec], 2014a). Geologic cross-sections A-A' and B-B' are included in the *Site Conceptual Model and Closure Request*, dated September 14, 2007 (CRA, 2007). These cross sections show Site stratigraphy, the historical range of groundwater elevations, sample depths, and total petroleum hydrocarbons as gasoline range organics (TPH-GRO), benzene, and methyl *tertiary*-butyl ether (MtBE) analytical results for select soil and groundwater samples collected during historical assessments. As shown in the boring logs and cross-sections, soils beneath the Site generally consist of clay and silt to the maximum depth explored (25.5 feet below ground surface [bgs]), with a non-continuous sand lense in off-site boreholes C-7 and C-9 from approximately 4 to 6 feet bgs. Well construction details, an assessment of whether First Quarter 2014 groundwater samples were collected when groundwater elevations were measured across the well screen intervals, and historical groundwater elevation data are included in the *First Quarter 2014 Groundwater Monitoring Special Event and LNAPL Recovery Status Report*, dated April 8, 2014. The historical range of depth-to-groundwater (DTW) measurements for the Site is approximately 6.5 to 17 feet below top of casing (TOC). During	None	NA

TABLE 1
Focused Site Conceptual Model
Chevron-branded Service Station 90504
15900 Hesperian Boulevard, San Lorenzo, California

SCM Element	SCM Sub-Element	Description	Data Gap Item #	Resolution
		First Quarter 2014, DTW gauged in wells for the Site ranged from 9.10 to 13.61 feet below TOC and wells C-1 through C-8 were screened across the prevailing groundwater table, while the groundwater elevations in wells C-9 through C-11 were measured above the upper screen interval, and the screen intervals were entirely submerged. Further evaluation of wells C-9 through C-11, regarding their submerged screen intervals, is provided below in the "Petroleum Hydrocarbons in Groundwater" SCM element. The direction of groundwater flow during First Quarter 2014 was generally towards the southwest at an approximate hydraulic gradient ranging from 0.003 to 0.020 feet per foot (ft/ft). This is generally consistent with the historical direction of groundwater flow from Fourth Quarter 1989 to First Quarter 2014 (vector mean flow direction to the southwest) (Stantec, 2014b).		
Surface Water Bodies		The United States Geological Survey (USGS) 7.5-minute topographic map for the San Leandro Quadrangle, the adjoining Hayward Quadrangle to the east, and aerial photos from Google Earth® were reviewed and the nearest surface water body is San Lorenzo Creek, located approximately 1,200 feet north-northwest (cross-gradient) of the Site. Based on the distance to this surface water body and its location cross-gradient of the Site, it is unlikely that it will be impacted by the dissolved-phase petroleum hydrocarbon plume associated with the Site.	None	NA
Nearby Wells		Stantec conducted a well survey in November 2013 to identify all active, inactive, standby, decommissioned, unrecorded, and abandoned (improperly decommissioned or lost) wells within a 0.5-mile radius of the Site. The survey consisted of reviewing files	None	NA

TABLE 1
Focused Site Conceptual Model
Chevron-branded Service Station 90504
15900 Hesperian Boulevard, San Lorenzo, California

SCM Element	SCM Sub-Element	Description	Data Gap Item #	Resolution
		provided by the California Department of Water Resources (DWR) and Alameda County Public Works (ACPW). All files provided by the DWR and ACPW are confidential in nature and are not provided with this document. Information provided by the DWR indicated five wells with an unknown use, one cathodic protection well, three domestic wells, 11 extraction wells, four geophysical exploration wells, eight irrigation wells, 217 monitoring wells, one well for other use, four vapor extraction wells, and 12 unused wells. Information provided by ACPW indicated one well with an unknown use, one cathodic protection well, four domestic wells, two extraction wells, 15 irrigation wells, 102 monitoring wells, three test wells, eight borings, one recovery well, seven wells that have been abandoned and are not being used but were not properly destroyed through permitting, and 28 wells that were properly destroyed through permitting. Stantec reviewed the well information listed above to identify wells within a 0.25-mile radius of the Site that may have been abandoned and could be acting as preferential pathways for contaminant migration. All borings and soil sampling or exploration holes are assumed to have been sealed properly so as not to create a preferential pathway for contaminant migration. Of the wells identified by the DWR with an unknown use, only one is a potentially abandoned well and the location of that well is unknown. The well identified as for other use in the DWR list is not within 0.25 miles of the Site. Of the three unused wells that were not confirmed as destroyed in the DWR list, one is not within		

TABLE 1
Focused Site Conceptual Model
Chevron-branded Service Station 90504
15900 Hesperian Boulevard, San Lorenzo, California

SCM Element	SCM Sub-Element	Description	Data Gap Item #	Resolution
		0.25 miles of the Site and the locations of the other two wells are unknown. From ACPW information, of the seven abandoned wells, four are not located within 0.25 miles of the Site and the locations of the other three wells are unknown. The location of the one well with an unknown use in the ACPW list also has an unknown location. There is no evidence to suggest there are any abandoned wells that have the potential to act as preferential pathways for contaminant migration. To identify active water supply wells within a 0.25-mile radius of the Site, Stantec removed all cathodic protection, extraction, monitoring, other use, geophysical exploration, borings, recovery, test, unused, and abandoned and destroyed wells from the lists of wells provided by the DWR and ACPW. There were three wells identified that did not have a listed location and these wells were removed as well. All wells not within a 0.25-mile radius of the Site were then removed. One irrigation well was identified during the active water supply well survey and is located approximately 1,070 feet (0.20 miles) northeast (up-gradient) of the Site, with a total depth of 70 feet bgs and a screen interval from 50 to 70 feet bgs. Based on the distance of the irrigation well from the Site and its location up-gradient, this well is unlikely to be impacted by the dissolved-phase petroleum hydrocarbon plume associated with the Site. **Conduit Survey** In 2002, a sensitive receptor survey was conducted for the Site, which included locating any basements, man-sized utility vaults, or other utility conduits on Site or in the vicinity of the Site. No		

TABLE 1
Focused Site Conceptual Model
Chevron-branded Service Station 90504
15900 Hesperian Boulevard, San Lorenzo, California

SCM Element	SCM Sub-Element	Description	Data Gap Item #	Resolution
		basements or man-sized utility vaults were identified; however, several minor utility vaults were identified, with uses for water, telephone, gas, and electric lines. Storm drains and a sanitary sewer were identified adjacent to the Site. The sanitary sewer was located within Hesperian Boulevard and buried between 6 and 8 feet bgs. Storm drains were also identified on Site, at a depth of approximately 3.5 feet bgs (CRA, 2007). Based on historical DTW measurements for the Site (ranging from 6.5 to 17 feet below TOC), the storm drains are too shallow to be acting as preferential pathways for contaminant migration. Although the dissolved-phase petroleum hydrocarbon plume associated with the Site does appear to intersect the location of the sanitary sewer located within Hesperian Boulevard, DTW measurements in Site wells in the area of the sanitary sewer (wells C-1, C-2, C-8, and C-9) have only been at or above 8 feet bgs on a few occasions since groundwater monitoring began and not since March 2006. Therefore, the sanitary sewer is unlikely to be acting as a preferential pathway for contaminant migration. There is no evidence to suggest the utility trenches or vaults identified in the previous sensitive receptor survey in 2002 are acting as preferential pathways for contamination associated with the Site. It does not appear that additional assessment of utilities and other sensitive receptors (basements, crawl spaces, and dewatering sump pumps) is necessary, and this is not a requirement of the Low-Threat Underground Storage Tank (UST) Case Closure Policy (LTCP). The potential need for additional information on utilities and other sensitive receptors is not considered a data gap at this time.		

TABLE 1
Focused Site Conceptual Model
Chevron-branded Service Station 90504
15900 Hesperian Boulevard, San Lorenzo, California

SCM Element	SCM Sub-Element	Description	Data Gap Item #	Resolution
Release Source and Volume		In December 1983, one of the 10,000-gallon steel USTs failed a tank tightness test. Following the UST inspection, two 10,000-gallon and one 5,000-gallon steel USTs (first-generation) and associated product lines were replaced. A hole of unknown diameter was observed in the 10,000-gallon unleaded gasoline UST (Cambria Environmental Technology, Inc. [Cambria], 2004). No unauthorized release was documented; however, this is believed to be the first release associated with the Site and is when environmental activities began. No other details regarding the replacement of the USTs, including the depth of the excavation, have been located. During the groundwater monitoring and sampling event on March 23, 2012, light non-aqueous phase liquid (LNAPL) was measured in well C-2 at a thickness of 0.3 feet. This was the first occurrence of LNAPL in well C-2 since March 1991. A follow-up visit to the Site on May 3, 2012 confirmed the presence of LNAPL in well C-2, again measured at a thickness of 0.3 feet (CRA, 2012). In a letter dated July 13, 2012, Alameda County Environmental Health (ACEH) stated that in discussing the issue with the UST inspector, it was verbally communicated that there may have been trouble with the diesel turbine pump. Based on the history of non-detect results followed by the discovery of LNAPL in well C-2, ACEH concluded that this may have been a release; however, no official unauthorized release was documented as results of source testing against refinery products were inconclusive. Information regarding the mechanism, location, and volume of the LNAPL release remain unknown.	1. The source mechanism, location, and volume of the LNAPL release have not been identified.	Work with Chevron and the service station owner/operator to obtain information on the mechanism, location, and volume of the LNAPL release. Further details included in the data gap summary table.

TABLE 1
Focused Site Conceptual Model
Chevron-branded Service Station 90504
15900 Hesperian Boulevard, San Lorenzo, California

SCM Element	SCM Sub-Element	Description	Data Gap Item #	Resolution
LNAPL		In December 1989, 0.01 and 0.15 feet of LNAPL were measured in wells C-1 and C-2, respectively. Sheen was also observed in well C-3. LNAPL was again measured in wells C-1 and C-2 in September 1990, at thicknesses of 0.03 and 0.10 feet, respectively. The wells were subsequently monitored and LNAPL was removed on a weekly basis (GeoStrategies Inc. [GSI], 1990). The timeframe of LNAPL monitoring and amount removed were not documented; however, historic groundwater monitoring data indicate LNAPL was observed in well C-1 through December 1990 (maximum thickness of 0.03 feet) and well C-2 through March 1991 (maximum thickness of 0.15 feet). During the groundwater monitoring and sampling event on March 23, 2012, LNAPL was measured in well C-2 at a thickness of 0.3 feet. This was the first occurrence of LNAPL in well C-2 since March 1991. A follow-up visit to the Site on May 3, 2012 confirmed the presence of LNAPL in well C-2, again measured at a thickness of 0.3 feet (CRA, 2012). In a letter dated July 13, 2012, ACEH requested continuation of appropriate and timely efforts to abate and recover the LNAPL from well C-2 and a LNAPL recovery status report summarizing activities. The *LNAPL Recovery Status Report* was submitted on August 31, 2012, and described the LNAPL recovery efforts conducted during August 2012, which consisted of weekly monitoring of well C-2 and recovery of LNAPL, if present. A new absorbent sock was placed in the well following each recovery event. During August 2012, approximately 200 milliliters (mL) of LNAPL and approximately 5 liters (L) of total fluids (LNAPL and groundwater mixture) were recovered from well C-2. Due to decreasing volume of LNAPL recovered in well C-2, Stantec	1. The source mechanism, location, volume, and residual volume of the LNAPL release have not been defined or identified.	Work with Chevron and the service station owner/operator to obtain information on the mechanism, location, and volume of the LNAPL release. Once information on the source is obtained, conduct soil assessment to define the extent of the soil source area from the LNAPL release. Further details included in the data gap summary table.

TABLE 1
Focused Site Conceptual Model
Chevron-branded Service Station 90504
15900 Hesperian Boulevard, San Lorenzo, California

SCM Element	SCM Sub-Element	Description	Data Gap Item #	Resolution
		recommended included reducing the LNAPL monitoring and recovery events from weekly to monthly. During Fourth Quarter 2012, First Quarter 2013, Second Quarter 2013, and Third Quarter 2013, LNAPL monitoring and recovery events were conducted monthly at well C-2. No measurable LNAPL was observed during any of the events conducted during Fourth Quarter 2012 and First Quarter 2013. During Second Quarter 2013, no measurable LNAPL was observed during events conducted in April and May 2013. Following the May 2013 event, Stantec proceeded with removal of the absorbent sock from well C-2 as recommended in the *First Quarter 2013 Quarterly Groundwater Monitoring and LNAPL Recovery Status Report*, dated May 31, 2013. During the June 2013 event, a LNAPL thickness of 0.01 feet was measured; however, no LNAPL or sheen was noted by Gettler-Ryan Inc. (G-R) in well C-2 four days later on June 11, 2013, during the quarterly groundwater monitoring and sampling event. During Third Quarter 2013, no measurable LNAPL or sheen was observed during any of the events and therefore no LNAPL recovery was conducted; however, sheen was noted by G-R during the groundwater monitoring and sampling event on September 10, 2013. Quarterly LNAPL monitoring and recovery events were conducted in Fourth Quarter 2013 and First Quarter 2014 and no measurable LNAPL or sheen was observed during those events; therefore, no LNAPL recovery was conducted. In addition, LNAPL or sheen was not observed during the Fourth Quarter 2013 and First Quarter 2014 quarterly groundwater monitoring and sampling events (Stantec, 2014b). Information regarding the mechanism, location, and volume of the LNAPL release remain unknown and the extent of the soil source area from this release has not been defined.		

TABLE 1
Focused Site Conceptual Model
Chevron-branded Service Station 90504
15900 Hesperian Boulevard, San Lorenzo, California

SCM Element	SCM Sub-Element	Description	Data Gap Item #	Resolution
Source Removal Activities		In December 1983, two 10,000-gallon and one 5,000-gallon steel USTs (first-generation) were replaced with the existing fiberglass USTs (second-generation), along with associated product lines. A hole of unknown diameter was observed in the 10,000-gallon unleaded gasoline UST and approximately 120 cubic yards of impacted soil was excavated and removed from the Site (Cambria, 2004). In December 1989, 0.01 and 0.15 feet of LNAPL were measured in wells C-1 and C-2, respectively. Sheen was also observed in well C-3. LNAPL was again measured in wells C-1 and C-2 in September 1990, at thicknesses of 0.03 and 0.10 feet, respectively. The wells were subsequently monitored and LNAPL was removed on a weekly basis (GSI, 1990). The timeframe of LNAPL monitoring and amount removed were not documented; however, historical groundwater monitoring data indicate LNAPL was observed in well C-1 through December 1990 (maximum thickness of 0.03 feet) and well C-2 through March 1991 (maximum thickness of 0.15 feet). In August 1992, Weiss Associates (Weiss) installed a groundwater extraction and treatment (GWET) system at the Site. Groundwater was extracted from wells C-1 and C-2 and treated using 1,000-pound aqueous-phase carbon vessels in series, prior to being discharged to the sanitary sewer (Weiss, 1994a). The system was shut down in July 1994 when benzene concentrations in groundwater approached the maximum contaminant level (MCL) for drinking water of 1.0 micrograms per liter (µg/L). From August 1992 through July 1994, the GWET system extracted approximately 1,290,430 gallons of groundwater and removed approximately 26 pounds of petroleum hydrocarbons (CRA, 2007).	2. Soil samples have not been collected following the LNAPL release in 2012, the extent of the soil source area has not been defined, and it is unknown if secondary source removal is needed.	Once information on the source is obtained, conduct soil assessment to define the extent of the soil source area from the LNAPL release and determine if secondary source removal is needed.

TABLE 1
Focused Site Conceptual Model
Chevron-branded Service Station 90504
15900 Hesperian Boulevard, San Lorenzo, California

SCM Element	SCM Sub-Element	Description	Data Gap Item #	Resolution
		In January 1994, soil samples were collected prior to replacement of the fuel dispenser islands and associated product piping. Following soil sampling, soils were over-excavated. Approximately 310 cubic yards of soil was removed and disposed of off Site (Weiss, 1994b). On March 29, 1994, Touchstone oversaw replacement of a 1,000-gallon steel waste oil UST with a 1,000-gallon fiberglass waste oil UST. No obvious holes or cracks were observed in the steel UST. Following soil sampling, soils were over-excavated. Approximately 50 cubic yards of soil was removed and disposed of off Site (Touchstone Developments [Touchstone], 1994). On June 8, 2001, G-R oversaw removal of the 1,000-gallon fiberglass waste oil UST. The integrity of the UST was reported in good condition and no holes or cracks were observed. With approval from ACEH, the excavated soil was used as backfill (G-R, 2001). In August 2012, well C-2 was monitored for the presence of LNAPL on a weekly basis. Any measurable LNAPL was removed using a disposable bailer. In addition, an absorbent sock was installed in the well to aid in LNAPL recovery. In August 2012, approximately 0.053 gallons of LNAPL and 1.32 gallons of total fluids were recovered. The frequency of LNAPL monitoring events was then reduced from weekly to monthly (Stantec, 2012). During Fourth Quarter 2012, First Quarter 2013, Second Quarter 2013, and Third Quarter 2013, LNAPL monitoring and recovery events were conducted monthly at well C-2. No measurable LNAPL		

TABLE 1
Focused Site Conceptual Model
Chevron-branded Service Station 90504
15900 Hesperian Boulevard, San Lorenzo, California

SCM Element	SCM Sub-Element	Description	Data Gap Item #	Resolution
		was observed during any of the events conducted during Fourth Quarter 2012 and First Quarter 2013. During Second Quarter 2013, no measurable LNAPL was observed during events conducted in April and May 2013. Following the May 2013 event, Stantec proceeded with removal of the absorbent sock from well C-2 as recommended in the *First Quarter 2013 Quarterly Groundwater Monitoring and LNAPL Recovery Status Report*, dated May 31, 2013. During the June 2013 event, a LNAPL thickness of 0.01 feet was measured; however, no LNAPL or sheen was noted by G-R in well C-2 four days later on June 11, 2013, during the groundwater monitoring and sampling event. During Third Quarter 2013, no measurable LNAPL or sheen was observed during any of the events and therefore no LNAPL recovery was conducted; however, sheen was noted by G-R during the groundwater monitoring and sampling event on September 10, 2013. Quarterly LNAPL monitoring and recovery events were conducted in Fourth Quarter 2013 and First Quarter 2014 and no measurable LNAPL or sheen was observed during those events; therefore, no LNAPL recovery was conducted. In addition, LNAPL or sheen was not observed during the Fourth Quarter 2013 and First Quarter 2014 groundwater monitoring and sampling events (Stantec, 2014b). Measureable LNAPL has not been observed at the Site since Second Quarter 2013. It appears that any residual LNAPL remaining in the subsurface is not present in significant quantity to overcome capillary forces to mobilize the LNAPL through the pore space. Per the LTCP paper, *Technical Justification for Groundwater Plume Lengths, Indicator Constituents, Concentrations, and Buffer Distances (Separation Distances) to Receptors*, dated July 12, 2011, LNAPL in this state is referred to as residual or immobile LNAPL.		

TABLE 1
Focused Site Conceptual Model
Chevron-branded Service Station 90504
15900 Hesperian Boulevard, San Lorenzo, California

SCM Element	SCM Sub-Element	Description	Data Gap Item #	Resolution
		The paper also states that, "the term "free product" in the State regulation is primarily equivalent to "migrating LNAPL (which is a subset of "mobile LNAPL")" (California State Water Resources Control Board [SWRCB], 2011). Based on this definition, it appears the residual/immobile LNAPL at the Site should no longer be considered free product and that free product has been removed to the maximum extent possible. However, the extent of the soil source area has not been defined following this release and it is unknown if secondary source removal is needed.		
Contaminants of Concern		Only contaminants historically detected in soil, groundwater, or soil vapor are considered constituents of concern (COCs): TPH-GRO, total petroleum hydrocarbons as diesel range organics (TPH-DRO), total petroleum hydrocarbons as motor oil (TPH-MO), total TPH, benzene, toluene, ethylbenzene, and total xylenes (BTEX compounds), MtBE, total oil and grease (TOG), dichloromethane, chromium, nickel, and zinc.	3. With a direct release of diesel suspected, there is no explanation for the occurrence of TPH-MO in groundwater at the Site and the compound may have been incorrectly identified in the past.	During the next groundwater monitoring and sampling event (2Q14), run a full-range carbon chain (C_6 to C_{40}) analysis on all groundwater samples.
Petroleum Hydrocarbons in Soil		Soil analytical results are compared to California Regional Water Quality Control Board – San Francisco Bay Region (RWQCB) ESLs for commercial land use (RWQCB, 2013). Prior to the LNAPL release in 2012, soil samples collected at 10 feet bgs from borings BH-A, BH-C, and BH-D, located in the	2. Soil samples have not been collected following the LNAPL release in 2012 and the extent of the soil	Once information on the source is obtained, conduct soil assessment to define the extent of the soil source

TABLE 1
Focused Site Conceptual Model
Chevron-branded Service Station 90504
15900 Hesperian Boulevard, San Lorenzo, California

SCM Element	SCM Sub-Element	Description	Data Gap Item #	Resolution
		vicinity of the gasoline and diesel USTs, and 20.5 feet bgs from borehole C-7, are the only soil samples collected at the Site that exhibited concentrations of petroleum hydrocarbons above soil ESLs. These samples were collected at the greatest depth explored; however, they all appear to have been collected within or near the current saturated zone (based on First Quarter 2014 DTW readings ranging from 9.10 to 13.61 feet below TOC). Any soil samples collected deeper would be in the saturated zone and would likely be more indicative of groundwater conditions than actual soil conditions. Soil samples have not been collected on Site following the LNAPL release in 2012, which was proposed to have been caused by problems with the diesel turbine pump. These data are needed to define the extent of the LNAPL plume and source area. Soil samples collected during replacement of the 1,000-gallon steel waste oil UST with the 1,000-gallon fiberglass waste oil UST and subsequent over-excavation in March 1994 were analyzed for semi-volatile organic compounds (SVOCs), including polynuclear aromatic hydrocarbons (PAHs), and all were below laboratory reporting limits (LRLs). TOG was not detected in the confirmation soil sample collected following over-excavation (Touchstone, 1994). The soil sample collected during removal of the 1,000-gallon fiberglass waste oil UST in June 2001 was analyzed for SVOCs, including PAHs, and all were below LRLs. In this same sample, TOG was detected at a concentration of 63 milligrams per kilogram (mg/kg) (G-R, 2001). Based on TOG results from samples collected during replacement	source area has not been defined. 3. With a direct release of diesel suspected, there is no explanation for the occurrence of dissolved-phase TPH-MO in groundwater at the Site and the compound may have been incorrectly identified in the past.	area from the LNAPL release. During the next groundwater monitoring and sampling event (2Q14), run a full-range carbon chain (C_6 to C_{40}) analysis on all groundwater samples so that total petroleum hydrocarbon constituents can be clearly identified and TPH-MO can possibly be ruled out as a COC. Further details in the data gap summary table.

TABLE 1
Focused Site Conceptual Model
Chevron-branded Service Station 90504
15900 Hesperian Boulevard, San Lorenzo, California

SCM Element	SCM Sub-Element	Description	Data Gap Item #	Resolution
		of the waste oil UST in March 1994 and removal of the waste oil UST in June 2001, there is no explanation for the TPH-MO consistently detected in groundwater at wells C-1 and C-2. These wells are well away from the former waste oil UST and TPH-MO is not detected in wells near or down-gradient of the former waste oil UST (C-3, C-4, and C-6). Therefore, the TPH-MO concentrations may have been misidentified and are believed to be associated with the 2012 LNAPL release believed to be caused by problems with the diesel turbine pump.		
Petroleum Hydrocarbons in Groundwater		Soil Impacts extend vertically to groundwater and measurable LNAPL was most recently observed in well C-2 on June 7, 2013 (thickness of 0.01 feet), following removal of the absorbent sock; however, no LNAPL or sheen was noted by G-R in well C-2 four days later on June 11, 2013, during the groundwater monitoring and sampling event. DTW at the Site has historically ranged from approximately 6.5 to 17 feet below TOC. During First Quarter 2014, concentrations of TPH-GRO, TPH-DRO, TPH-MO, and naphthalene were observed above ESLs for groundwater that is a current or potential source of drinking water as follows: • TPH-GRO concentrations exceeded the ESL of 100 µg/L in wells C-2 and C-8; • TPH-DRO concentrations (with silica gel cleanup) exceeded the ESL of 100 µg/L in wells C-1, C-2, and C-8; • TPH-MO concentrations exceeded the ESL of 100 µg/L in wells C-1 and C-2; and • The naphthalene concentration exceeded the ESL of 6.1 µg/L in well C-8.	3. There is no explanation for the occurrence of TPH-MO in groundwater at the Site and the compound may have been incorrectly identified in the past. 4. The extent of the dissolved-phase petroleum hydrocarbon plume is not defined to the southwest (down-gradient) of well	During the next groundwater monitoring and sampling event (2Q14), run a full-range carbon chain (C_6 to C_{40}) analysis on all groundwater samples so that total petroleum hydrocarbon constituents can be clearly identified and TPH-MO can possibly be ruled out as a COC. Advance a soil boring southwest of well C-2 and

TABLE 1
Focused Site Conceptual Model
Chevron-branded Service Station 90504
15900 Hesperian Boulevard, San Lorenzo, California

SCM Element	SCM Sub-Element	Description	Data Gap Item #	Resolution
		During First Quarter 2014, maximum concentrations of TPH-GRO, BTEX compounds, and naphthalene were observed in off-site well C-8, located approximately 100 feet down-gradient of the Site, and maximum concentrations of TPH-DRO (with silica gel cleanup) and TPH-MO were observed in on-site well C-2 (Stantec, 2014b). Isoconcentration maps showing the estimated lateral extent of the dissolved-phase plume based on the current groundwater monitoring well network were prepared following the First Quarter 2014 groundwater monitoring and sampling event. Based on First Quarter 2014 concentrations, the dissolved-phase TPH-GRO, TPH-DRO, and TPH-MO plumes are defined by concentrations below LRLs or ESLs in wells C-1, and C-3 through C-7, and C-9 through C-11. These plumes do not appear to be defined southwest (down-gradient) of well C-2. As described in the "Petroleum Hydrocarbons in Soil" SCM section, there is no explanation for the occurrence of TPH-MO in groundwater at the Site and it is believed to have been misidentified and associated with the 2012 LNAPL release believed to be caused by problems with the diesel turbine pump. During Fourth Quarter 2013, TPH-DRO was observed above the ESL in well C-6, which is located up-gradient of the USTs and dispenser islands and cross-gradient of the former waste oil UST. The location of well C-6 in relation to current and former fueling features along with non-detect concentrations of TPH-DRO in well C-3 suggest that the TPH-DRO concentration observed in well C-6 is not associated with the USTs located on the Site. During the First Quarter 2014 special event, TPH-DRO was below the LRL in well C-6, so it appears the concentration observed during Fourth	C-2.	collect a groundwater sample and analyze for petroleum hydrocarbons. Further details included in the data gap summary table.

TABLE 1
Focused Site Conceptual Model
Chevron-branded Service Station 90504
15900 Hesperian Boulevard, San Lorenzo, California

SCM Element	SCM Sub-Element	Description	Data Gap Item #	Resolution
		Quarter 2013 was anomalous. In email correspondence dated January 23, 2014, ACEH expressed concern that wells C-9 through C-11 were not providing representative groundwater data. Although the screen intervals in wells C-9 through C-11 are often submerged, there is no evidence to suggest groundwater concentrations in wells C-9 through C-11 are not representative of actual groundwater concentrations. Groundwater elevations in wells C-9 through C-11 are similar to other Site wells. During First Quarter 2014, the groundwater elevations in all Site wells differed by a maximum of only 1.38 feet. In addition, petroleum hydrocarbon concentrations in wells C-9 through C-11 have generally been below LRLs and did not show significant change based on the status of the screen interval (submerged or not). Furthermore, the sand filter pack for wells C-9 through C-11 begins at approximately 10 feet bgs and allows the groundwater to infiltrate each well's filter pack at this depth. These observations suggest that groundwater concentrations in wells C-9 through C-11 are representative of actual groundwater conditions at the Site. Current and historical groundwater quality data indicate that the petroleum hydrocarbon plume associated with the Site is generally stable or decreasing in size and concentration. During First Quarter 2014, with the exception of a historical low concentration of TPH-DRO in well C-2, all groundwater concentrations were within historical limits at all wells sampled. Concentrations of TPH-GRO and TPH-DRO appear to have an inverse relationship with changes in groundwater elevation; however, overall stable or decreasing concentration trends are still observed (Stantec, 2014b).		

TABLE 1
Focused Site Conceptual Model
Chevron-branded Service Station 90504
15900 Hesperian Boulevard, San Lorenzo, California

SCM Element	SCM Sub-Element	Description	Data Gap Item #	Resolution
Risk Evaluation		**Current and Future Land Uses** The Site is an active Chevron-branded service station located on the eastern corner at the intersection of Hesperian Boulevard and Post Office Road in San Lorenzo, California. The Site has been occupied by a gasoline service station since approximately 1969. Land use near the Site consists of a mixture of commercial and residential properties. The Site is bounded on the northwest by Post Office Road followed by a parking lot for a strip mall, to the northeast by a parking lot for the post office, to the southeast by a commercial building, and on the southwest by Hesperian Boulevard followed by residential properties. The Site and the properties to the northwest, northeast, and southeast of the Site are zoned for commercial purposes, while the properties to the southwest of the Site are zoned as residential. Based on the land use and zoning of the Site and its location at a major intersection, the Site will likely continue to be used for commercial purposes in the future. **On-site Current or Potential Populations** Based on the current and likely future use of the Site as commercial, the current or future potentially exposed populations on Site include commercial workers, customers, and construction workers. **Off-site Current or Potential Populations** Based on the current and likely future use of the Site and down-gradient properties as commercial or residential, the current or future potentially exposed populations off Site include commercial workers, customers, construction workers, and residents.	5. Site conditions do not meet LTCP criteria for groundwater and direct contact and outdoor air exposure.	Conduct an assessment to evaluate the extent of the dissolved-phase plume and soil source area. Advance one off-site soil boring down-gradient of well C-2, and collect a representative groundwater sample for analysis. After obtaining release information, conduct an on-site soil assessment to evaluate current soil conditions on Site. Further details included in the data gap summary table.

TABLE 1
Focused Site Conceptual Model
Chevron-branded Service Station 90504
15900 Hesperian Boulevard, San Lorenzo, California

SCM Element	SCM Sub-Element	Description	Data Gap Item #	Resolution
		Potential Sensitive Populations Nine potentially sensitive populations (schools or child care facilities) were identified within a 0.5-mile radius of the Site. Distances ranged between 0.11 and 0.50 miles in northwest, northeast, east, south, south-southeast, southeast, southwest, and west directions. Only one of the identified sensitive populations within a 0.5-mile radius of the Site is located down-gradient. Community Church Preschool is located approximately 0.45 miles southwest (down-gradient) of the Site. Given its distance from the Site and the estimated extent of the plume based on the well network, Community Church Preschool is unlikely to be at risk from exposure to Site-related contaminants. **Exposure Pathway Analysis** Potentially complete pathways are summarized as follows: • The ingestion of groundwater and dermal contact with groundwater exposure pathways are considered potentially complete for off-site construction workers only, as the sewer lines located adjacent to the Site are buried at approximately 6 to 8 feet bgs and current DTW is approximately 9 to 14 feet bgs. Excavation work to access these lines may encounter groundwater. These exposure pathways are considered incomplete for all other on-site and off-site human receptors as there are no on-site or nearby down-gradient water supply wells. The closest water supply well is located up-gradient and is over 1,000 feet away from the Site. • The ingestion and dermal contact surface soil exposure pathways are considered potentially complete for on-site construction workers only, as shallow soil impacts may be		

TABLE 1
Focused Site Conceptual Model
Chevron-branded Service Station 90504
15900 Hesperian Boulevard, San Lorenzo, California

SCM Element	SCM Sub-Element	Description	Data Gap Item #	Resolution
		present on Site following the potential current release and confirmation soil samples have not been collected. The Site is paved, so customers and commercial workers are not likely to contact potentially impacted shallow soil. • The ingestion, dermal contact, and inhalation of outdoor particulates from excavated soil exposure pathways are considered potentially complete for on-site construction workers only. These pathways are considered incomplete for customers and commercial workers, as excavation work is unlikely while the service station is active. • The soil gas and groundwater emission pathways (inhalation of indoor and outdoor air) are considered potentially complete for all on-site human receptors. In addition, the groundwater emission pathways (inhalation of indoor and outdoor air) are considered potentially complete for off-site human receptors. On-site shallow (less than 10 feet bgs) soil samples collected to-date exhibited no detections of petroleum hydrocarbons above soil ESLs; however, current shallow soil data has not been obtained following the LNAPL release in 2012. A vapor intrusion evaluation was conducted at the Site in 2010, and concentrations of petroleum hydrocarbons in all soil vapor wells were below soil vapor ESLs for commercial land use, indicating that vapor intrusion risks are unlikely at the on-site station building; however, current shallow soil data are needed to verify current Site conditions following the LNAPL release in 2012. Vapor intrusion risk off Site is unlikely due to the estimated extents of the soil source area and dissolved-phase plumes based on the current groundwater monitoring well network; however, a		

TABLE 1
Focused Site Conceptual Model
Chevron-branded Service Station 90504
15900 Hesperian Boulevard, San Lorenzo, California

SCM Element	SCM Sub-Element	Description	Data Gap Item #	Resolution
		potential data gap has been identified in the area immediately down-gradient of well C-2 between wells MW-9 and MW-10. **Risk Assessment** Additional data are needed to complete a risk assessment beyond the initial evaluations provided within the previous section.		

TABLE 2
Focused Site Conceptual Model
Chevron-branded Service Station 90504
15900 Hesperian Boulevard, San Lorenzo, California

Item	Data Gap Item #	Proposed Investigation	Rationale	Analyses
1	The source mechanism, location, volume, and residual volume of the LNAPL release have not been defined or identified.	Work with Chevron and the service station owner/operator to obtain information on the mechanism, location, and volume of the LNAPL release. Once information on the source is obtained, conduct soil assessment to define the extent of the soil source area from the LNAPL release.	With service station construction plans, the configuration and contents of each UST can be evaluated and the location and depth of the diesel turbine pump that reportedly led to the release may be identified. By consulting with Chevron and the owner/operator of the station, it may be possible to determine the volume of the release and verify it has been stopped. The soil assessment will potentially define the extent of the soil source area from the LNAPL release. Locations and depths for the soil assessment are dependent on the location and depth of the diesel turbine pump which caused the release and cannot be determined until additional information on the diesel turbine pump is known.	TPH-GRO, TPH-DRO, BTEX compounds, naphthalene.
2	Soil samples have not been collected following the LNAPL release in 2012, the extent of the soil source area has not been defined, and it is	Once information on the source is obtained, conduct soil assessment to define the extent of the soil source area from the LNAPL release and determine if secondary source removal is	The soil assessment will potentially define the extent of the soil source area from the LNAPL release. A determination can be made on whether secondary source removal is needed.	TPH-GRO, TPH-DRO, BTEX compounds, naphthalene.

TABLE 2
Focused Site Conceptual Model
Chevron-branded Service Station 90504
15900 Hesperian Boulevard, San Lorenzo, California

Item	Data Gap Item #	Proposed Investigation	Rationale	Analyses
	unknown if secondary source removal is needed.	needed.	Locations and depths for the soil assessment are dependent on the location and depth of the diesel turbine pump which caused the release and cannot be determined until additional information on the diesel turbine pump is known.	
3	With a direct release of diesel suspected, there is no explanation for the occurrence of TPH-MO in groundwater at the Site and the compound may have been incorrectly identified in the past.	During the next groundwater monitoring and sampling event (2Q14), run a full-range carbon chain (C_6 to C_{40}) analysis on all groundwater samples.	By running a full-range carbon chain (C_6 to C_{40}) analysis, total petroleum hydrocarbon constituents can be more accurately identified. An evaluation on whether TPH-MO should continue to be considered a COC can then be made.	Full-range carbon chain (C_6 to C_{40}) analysis.
4	The extent of the dissolved-phase petroleum hydrocarbon plume is not defined to the southwest (down-gradient) of well C-2.	During the soil assessment, advance a soil boring southwest (down-gradient) of well C-2 and collect a groundwater sample and analyze for petroleum hydrocarbons.	Collecting a groundwater sample from the proposed boring will possibly define the extent of the dissolved-phase petroleum hydrocarbon plume and then the Site will likely meet LTCP groundwater-specific criteria. The exact location of this boring has not been determined at this time as the work is proposed to be conducted with the soil assessment, which cannot be planned until	TPH-GRO, TPH-DRO, BTEX compounds, naphthalene.

TABLE 2
Focused Site Conceptual Model
Chevron-branded Service Station 90504
15900 Hesperian Boulevard, San Lorenzo, California

Item	Data Gap Item #	Proposed Investigation	Rationale	Analyses
			information on the source of the LNAPL release is obtained.	
5	Site conditions do not meet LTCP criteria for groundwater and direct contact and outdoor air exposure.	Once information on the source is obtained, conduct an on-site assessment to evaluate the soil source area from the 2012 LNAPL release. Advance an off-site soil boring southwest (down-gradient) of well C-2 and collect a groundwater sample for analysis of dissolved-phase petroleum hydrocarbons.	The soil assessment will potentially define the extent of the soil source area from the LNAPL release and provide data to evaluate whether site conditions satisfy LTCP criteria for direct contact and outdoor air exposure. Locations and depths for the soil assessment are dependent on the location and depth of the diesel turbine pump which reportedly led to the release. Investigation details cannot be developed until information on the diesel turbine pump is known. Collecting a groundwater sample from a boring southwest (down-gradient) of well C-2 will help confirm whether the dissolved-phase petroleum hydrocarbon plume is defined and if the Site meets LTCP groundwater-specific criteria. The exact location of this boring has not been determined at this time as the work is proposed to be conducted with the on-site assessment,	TPH-GRO, TPH-DRO, BTEX compounds, naphthalene.

TABLE 2
Focused Site Conceptual Model
Chevron-branded Service Station 90504
15900 Hesperian Boulevard, San Lorenzo, California

Item	Data Gap Item #	Proposed Investigation	Rationale	Analyses
			which cannot be planned until information on the source of the LNAPL release is obtained.	

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APPENDIX C
Soil Boring and Well Construction Logs

Geotler - Ryan Inc. GENERAL CONTRACTORS

WELL BORING LOG

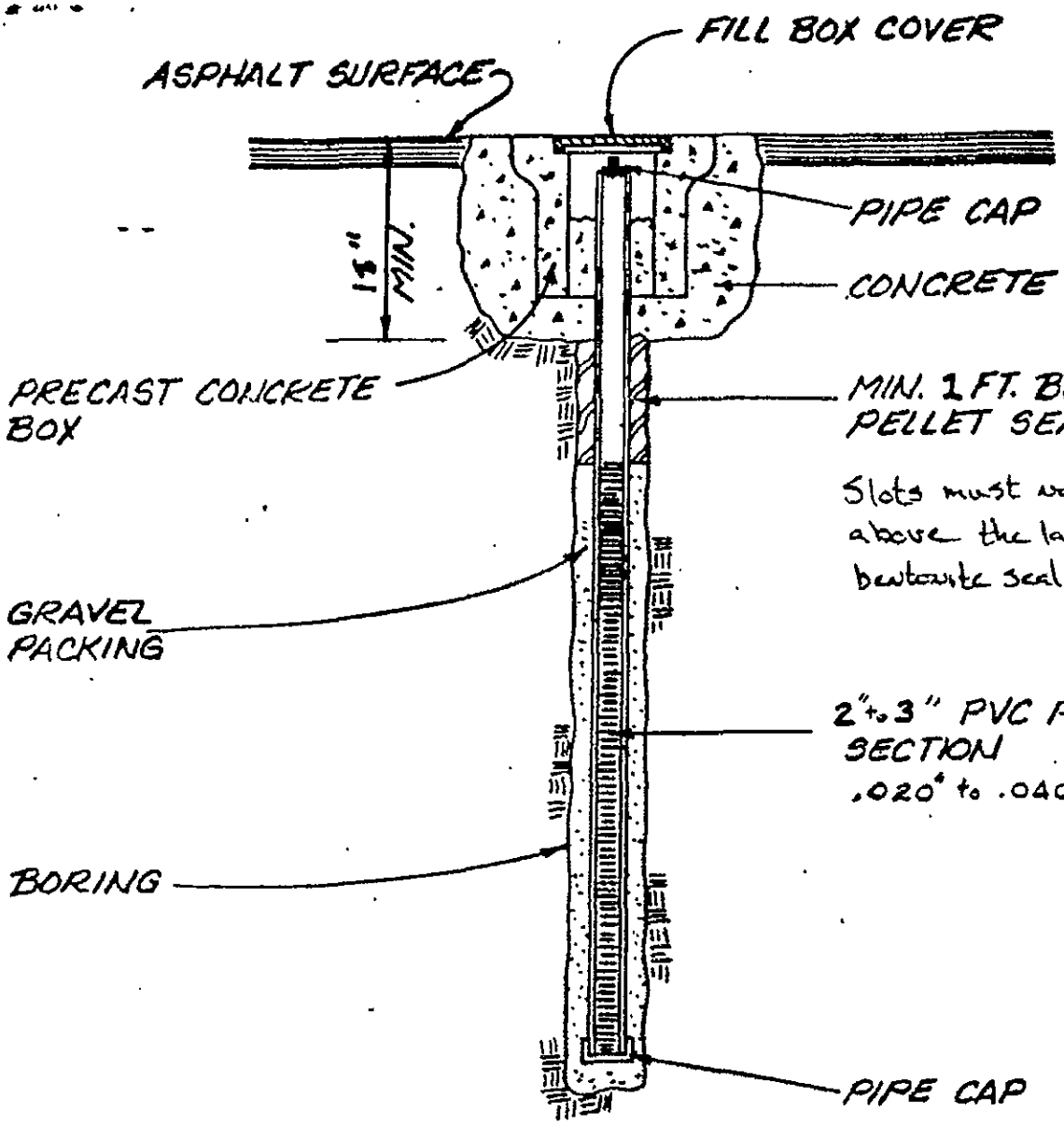
COMPANY: Chevron U.S.A. JOB NO: OR - 5107

LOCATION: 15900 Hesperian DATE: 12-29-83

CITY: San Lorenzo WELL #: 1

DEPTH	SAMPLE NO.	SOIL DESCRIPTION
0 ft.		
4"		Asphalt
1'		Black clay
3'		Brown Sandy clay
7'		Brown sandy clay (moist)
9'		Black clay
11'		Grey clay (Gasoline vapor)
14'		Tan mud (water)
20'		" "

FOREMAN: Mike Divita SHEET: 1 OF 1



DEPTH OF HOLE: 20'

TOTAL NUMBER OF HOLES REQUIRED: 5

REV

PLANS & SPECIFICATIONS
TYPICAL WELL PROFILE

2/1/83

DR RE CH.
DR APP.
ENGR.
OPR'G. DEPT. APPROVED
ENG'R. DEPT.

SCALE NONE DATE

W.O.
S.O.

Printed in U.S.A.

GC-680-A8 (CD-1-74)

Geiger - Ryan Inc. GENERAL CONTRACTORS

WELL BORING LOG

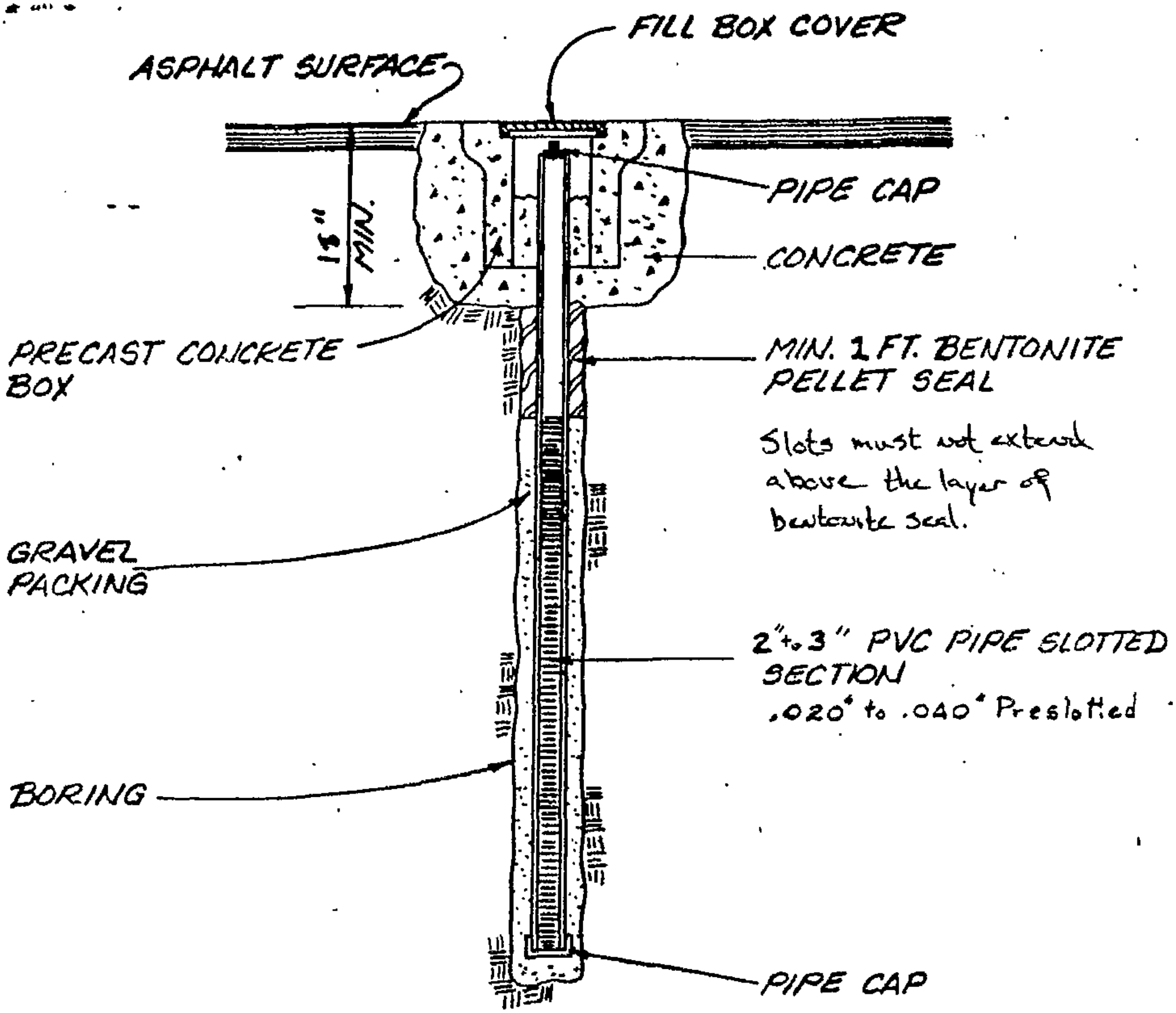
COMPANY: Chevron U.S.A JOB NO: OR - 5107

LOCATION: 15900 Hesperian DATE: 12-29-83

CITY: San Lorenzo WELL #: 2

DEPTH	SAMPLE NO.	SOIL DESCRIPTION
0 ft.		
4"		Asphalt
3½'		Black sandy clay
5'		Brown sandy clay
6'		Brown clay
8'		Light brown clay
12'		Black clay
15'		Tan sandy clay
20'		Tan mud

FOREMAN: Mike Divita SHEET: 1 OF 1



DEPTH OF HOLE: 20'

TOTAL NUMBER OF HOLES REQUIRED: 5

REV

PLANS & SPECIFICATIONS
TYPICAL WELL PROFILE

2/1/83

DR RB CH.
DR APP.
ENGR.
OPR'G. DEPT.
APPROVED
ENG'R. DEPT.

SCALE NONE DATE

W.O.
S.O.

Printed in U.S.A.

GC-880-A8 (CD-1-74)

Geiler - Ryan Inc. GENERAL CONTRACTORS

WELL BORING LOG

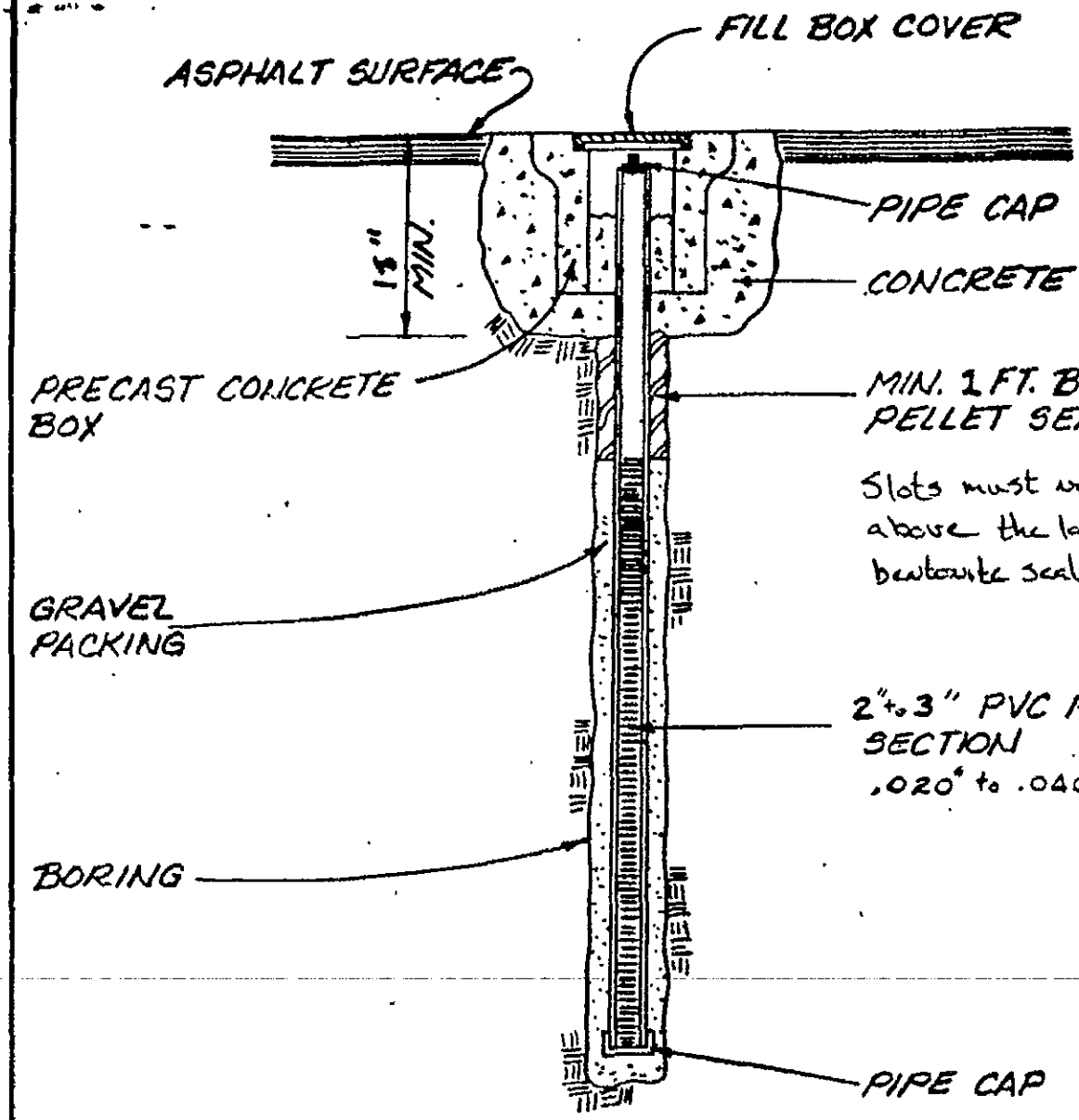
COMPANY: Chevron U.S.A. JOB NO: OR - 5107

LOCATION: 15900 Hesperian DATE: 12-29-83

CITY: San Lorenzo WELL #: 3

DEPTH	SAMPLE NO.	SOIL DESCRIPTION
0 ft.		
4"		Asphalt
2½'		Baserock
4½'		Reddish brown sandy clay
5'		Brown sandy clay
7'		Brown sand
8'		Brown sandy clay
11'		Dark brown clay
14'		Black clay
15[redacted]'		Tan sandy clay (water)
20'		" "

FOREMAN: Mike Davila SHEET: 1 OF 1



DEPTH OF HOLE: 20'

TOTAL NUMBER OF HOLES REQUIRED: 5

REV

PLANS & SPECIFICATIONS
TYPICAL WELL PROFILE

2/1/83

DR RE CH.
DR APP.
ENGR.
OPR'G. DEPT. APPROVED
ENG'R. DEPT.

SCALE NONE DATE

W.O.
S.O.

Printed in U.S.A.

GC-680-A8 (CD-1-74)

WELL BORING LOG

Gettler - Ryan Inc. GENERAL CONTRACTORS

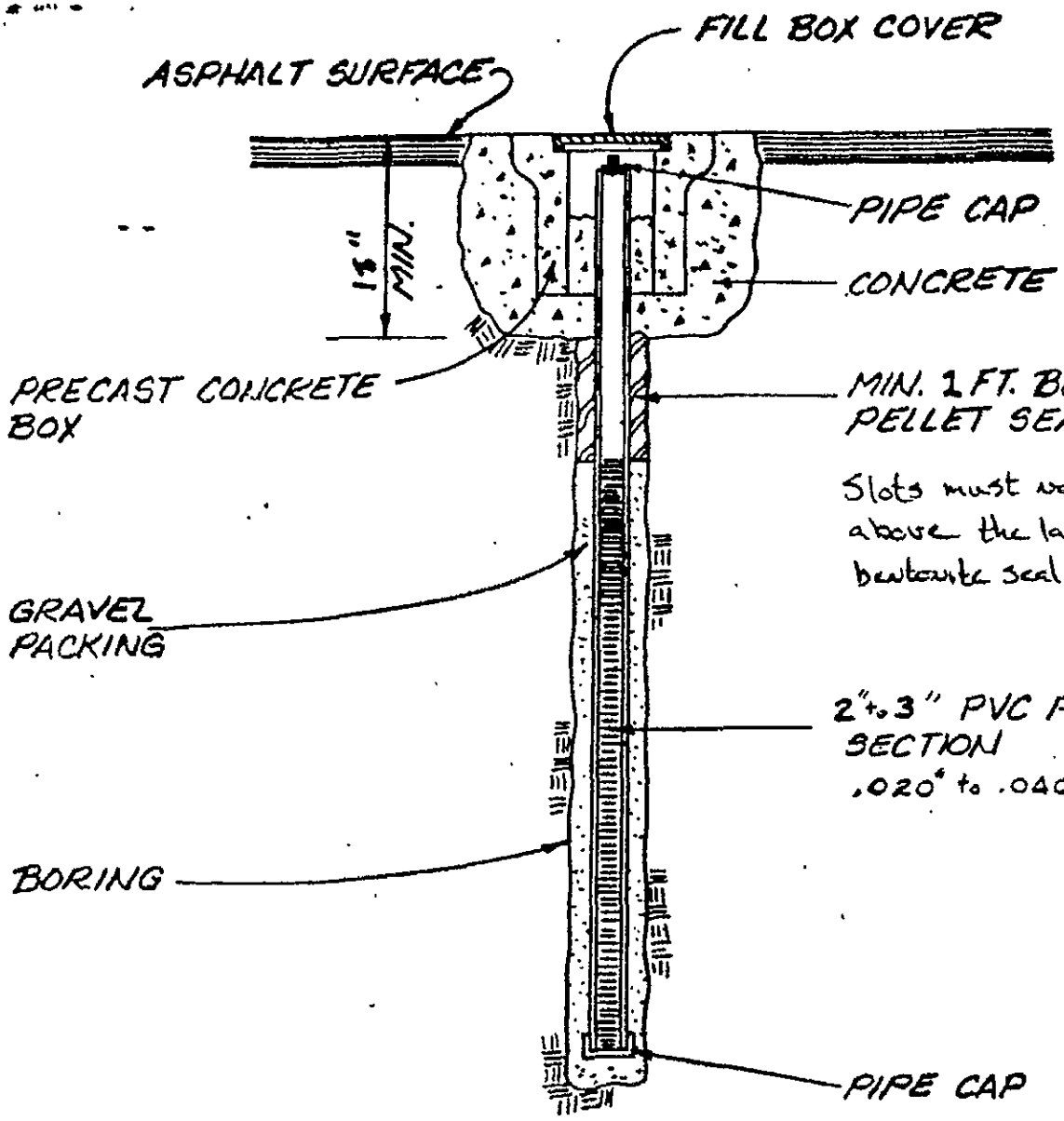
COMPANY: Chevron U.S.A. JOB NO: OR - 5107

LOCATION: 15900 Hesperian DATE: 12-29-83

CITY: San Lorenzo WELL #: #4

DEPTH	SAMPLE NO.	SOIL DESCRIPTION
0 ft.		
4"		Asphalt
3'		Baserock
4'		Sand
5'		Black clay
6'		Dark brown sandy clay
8'		Black clay
15'		Tan sandy clay (water)
17'		Tan mud
20'		" "

FOREMAN: Mike Davila SHEET: 1 OF 1



DEPTH OF HOLE: 20'

TOTAL NUMBER OF HOLES REQUIRED: 5

REV

PLANS & SPECIFICATIONS
TYPICAL WELL PROFILE

2/1/83

DR RB CH.
DR APP.
ENGR.
OPR'G. DEPT.
APPROVED
ENG'R. DEPT.

SCALE NONE DATE

W.O.
S.O.

Printed in U.S.A.
GC-680-AB (CD-1-74)

Gettler - Ryan Inc. — GENERAL CONTRACTORS

WELL BORING LOG

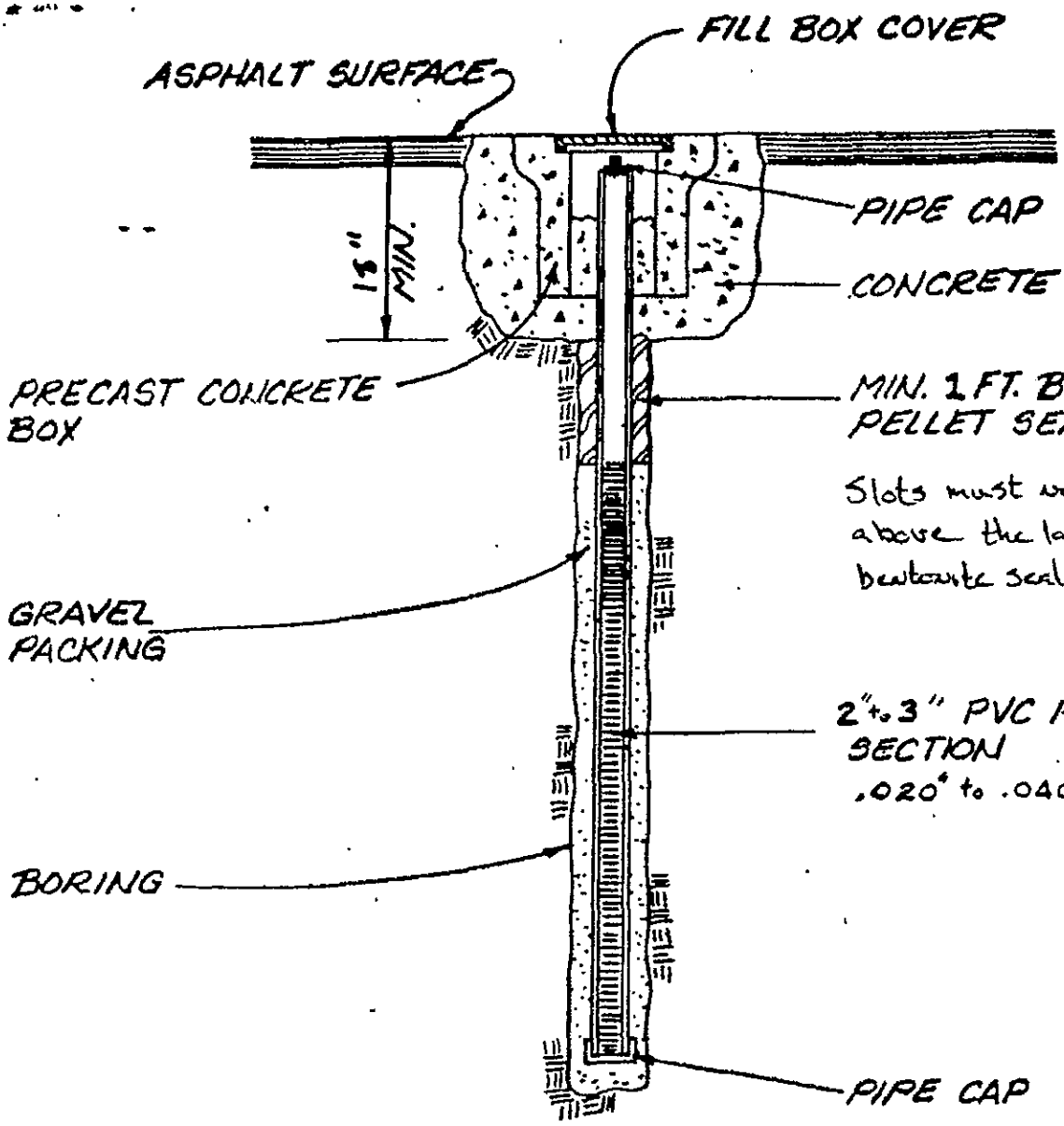
COMPANY: Chevron U.S.A. JOB NO: OR - 5107

LOCATION: 15900 Hesperian DATE: 12-29-83

CITY: San Lorenzo WELL #: 5

DEPTH	SAMPLE NO.	SOIL DESCRIPTION
0 ft.		
3"		Asphalt
1'		Baserock
3'		Top soil - silt
5'		Brown sandy clay
6½'		Dark brown sandy clay
13'		Dark tan clay
15'		Light tan sandy clay (water)
17'		Tan clay
20'		" "

FOREMAN: Mike Divita SHEET: 1 OF 1



DEPTH OF HOLE: 20'

TOTAL NUMBER OF HOLES REQUIRED: 5

REV

PLANS & SPECIFICATIONS
TYPICAL WELL PROFILE

2/1/83

DR RB CH.
DR APP.
ENGR.
OPR'G. DEPT.
APPROVED
ENG'R. DEPT.

SCALE NONE DATE

W.O.
S.O.

Printed in U.S.A.
GC-660-AB (CD-1-74)

Field location of boring: (See Plate 2)	Project No.: 7259	Date: 11/27/89	Boring No: C-6
	Client: Chevron Service Station #0504		
	Location: 15900 Hesperian Boulevard		
	City: San Lorenzo, California		Sheet 1 of 2
	Logged by: R.S.Y.	Driller: Bayland	
Drilling method: Hollow-Stem Auger	Casing installation data:		
Hole diameter: 8-Inches	Top of Box Elevation: 36.89		Datum: MSL

	Water Level			
	Time			
	Date			

PID (ppm)	Blows/ft. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
				1				PAVEMENT SECTION - 3.0 feet
				2				
				3				
				4				
2.6	100	S&H		5				SILT (ML) - dark yellow brown (10YR 4/4), medium stiff,
	100	push	C-6					moist; voids; low plasticity; no chemical odor.
	100		5.5					
				6				
				7				
				8				
				9				
0	100	S&H		10				COLOR CHANGE to very dark gray (7.5YR 3/0); at 9.0
	100	push	C-6					feet; rootlets; no chemical odor.
	100		10.5					
				11				
				12				
				13				
				14				
0	4	S&H		15		▽		COLOR CHANGE to dark yellow brown (10YR 4/4); at
	5		C-6					14.0 feet, stiff, moist; no chemical odor.
	8		15.5					
				16				
				17				
				18				SILTY CLAY (CL) - very dark gray (10YR 3/0), medium
				19				stiff, saturated; 35-40% silt; medium plasticity; no chemical odor.

Remarks:

GeoStrategies Inc.

Log of Boring

BORING NO. C-6

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7259		11/89		

Field location of boring: (See Plate 2)	Project No.: 7259	Date: 11/27/89	Boring No: C-6
	Client: Chevron Service Station #0504		
	Location: 15900 Hesperian Boulevard		
	City: San Lorenzo, California		Sheet 2 of 2
	Logged by: R.S.Y.	Driller: Bayland	
Drilling method: Hollow-Stem Auger	Casing installation data:		
Hole diameter: 8-Inches	Top of Box Elevation:		Datum:

	Water Level			
	Time			
	Date			

PID (ppm)	Blows/ft. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
6.2	2	S&H		20				
	3		C-6					
	5		20.5					
				21				
				22				
				23				
				24				
1.3	6	S&H						very stiff, caliche stringers; trace fine sand; no chemical odor.
	11		C-6	25				
	13		25.5					
				26				
								Bottom of sample 25.5 feet.
				27				Bottom of boring at 25.5 feet.
				28				
				29				
				30				
				31				
				32				
				33				
				34				
				35				
				36				
				37				
				38				
				39				

Remarks:

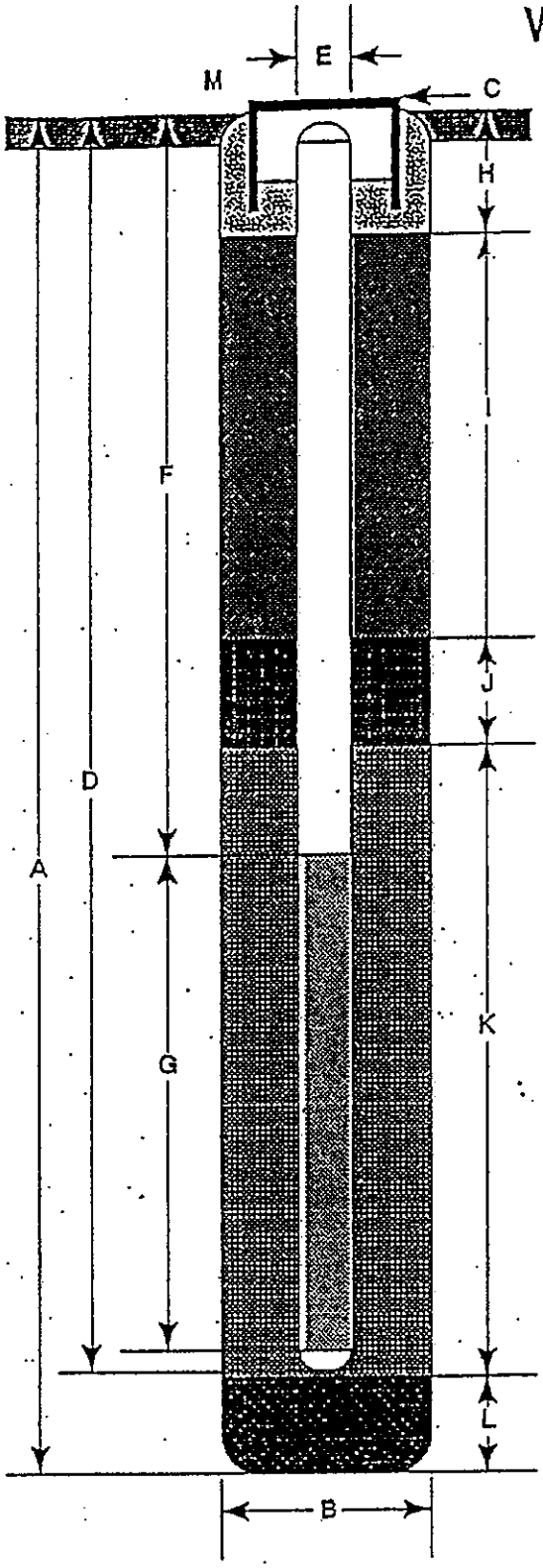
GeoStrategies Inc.

Log of Boring

BORING NO. C-6

JOB NUMBER	REVIEWED BY PG/CEG	DATE	REVISED DATE	REVISED DATE
7259		11/89		

WELL CONSTRUCTION DETAIL



A Total Depth of Boring 25.5 ft.

B Diameter of Boring 8 in.
Drilling Method Hollow-Stem Auger

C Top of Box Elevation 36.89 ft.
[X] Referenced to Mean Sea Level
[ ] Referenced to Project Datum

D Casing Length 25 ft.
Material Schedule 40 PVC

E Casing Diameter 2 in.

F Depth to Top Perforations 5 ft.

G Perforated Length 20 ft.
Perforated Interval from 5 to 25 ft.
Perforation Type Machine Slot
Perforation Size 0.020 in.

H Surface Seal from 0 to 1.5 ft.
Seal Material Concrete Grout

I Backfill from 1.5 to 3 ft.
Backfill Material Cement Grout

J Seal from 3 to 4 ft.
Seal Material Bentonite Pellets

K Gravel Pack from 4 to 25 ft.
Pack Material Lonestar 2/12 Sand

L Bottom Seal 0.5 ft.
Seal Material Native Soil

M Christy box with locking well cap and lock.

Note: Depths measured from initial ground surface.

GeoStrategies Inc.

Well Construction Detail

WELL NO.
C-6

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7259		11/89		

Field location of boring:

(See Plate 2)

Project No.: 7259	Date: 11/28/89	Boring No: C-7	
Client: Chevron Service Station #0504			
Location: 15900 Hesperian Boulevard			
City: San Lorenzo, California		Sheet 1 of 2	
Logged by: R.S.Y.	Driller: Bayland		

Casing installation data:

Drilling method: Hollow-Stem Auger

Hole diameter: 8-inches

Top of Box Elevation: 32.75 Datum: MSL

Water Level				
Time				
Date				

PID (ppm)	Blows/ft. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
				1				PAVEMENT SECTION - 3.5 feet
				2				
				3				
				4				FILL - Sand (SP) - trench backfill; loose, moist.
				5				
		S&H		6				
		push	C-7					
	150		6.5	7				SILT (ML) - olive gray (5Y 4/2), medium stiff, moist; rootlets; voids; low plasticity; low dry strength; trace fine sand; no chemical odor.
				8				
				9				
	100	S&H						
	150	push	C-7	10				SILTY CLAY (CL) - very dark gray (7.5YR 3/0), medium stiff, moist; trace fine sand; medium plasticity; weak chemical odor.
	150		10.5	11				
				12				
				13				
				14				COLOR CHANGE to dark gray (7.5YR 4/1); at 14.0 feet, saturated; caliche stringers; moderate chemical odor.
	3	S&H						
	4		C-7	15		▽		
	9		15.5	16				
				17				
				18				
				19				

Remarks:

GeoStrategies Inc.

Log of Boring

BORING NO. C-7

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7259		11/89		

Field location of boring:

(See Plate 2)

Project No.: 7259	Date: 11/28/89	Boring No: C-7	
Client: Chevron Service Station #0504			
Location: 15900 Hesperian Boulevard			
City: San Lorenzo, California		Sheet 2 of 2	
Logged by: R.S.Y.	Driller: Bayland		

Casing installation data:

Drilling method: Hollow-Stem Auger

Hole diameter: 8-Inches

Top of Box Elevation: Datum:

Water Level				
Time				
Date				

PID (ppm)	Blows/ft. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
	5	S&H		20				
	10		C-7					very stiff; decrease silt to 10%; no chemical odor.
	13		20.5	21				
				22				
				23				
				24				color change to yellow brown (10YR 4/1); at 24.0 feet, stiff.
	6	S&H		25				
	6		C-7					
	8		25.5	26				Bottom of sample at 25.5 feet.
								Bottom of boring at 25.5 feet.
				27				
				28				
				29				
				30				
				31				
				32				
				33				
				34				
				35				
				36				
				37				
				38				
				39				

Remarks:

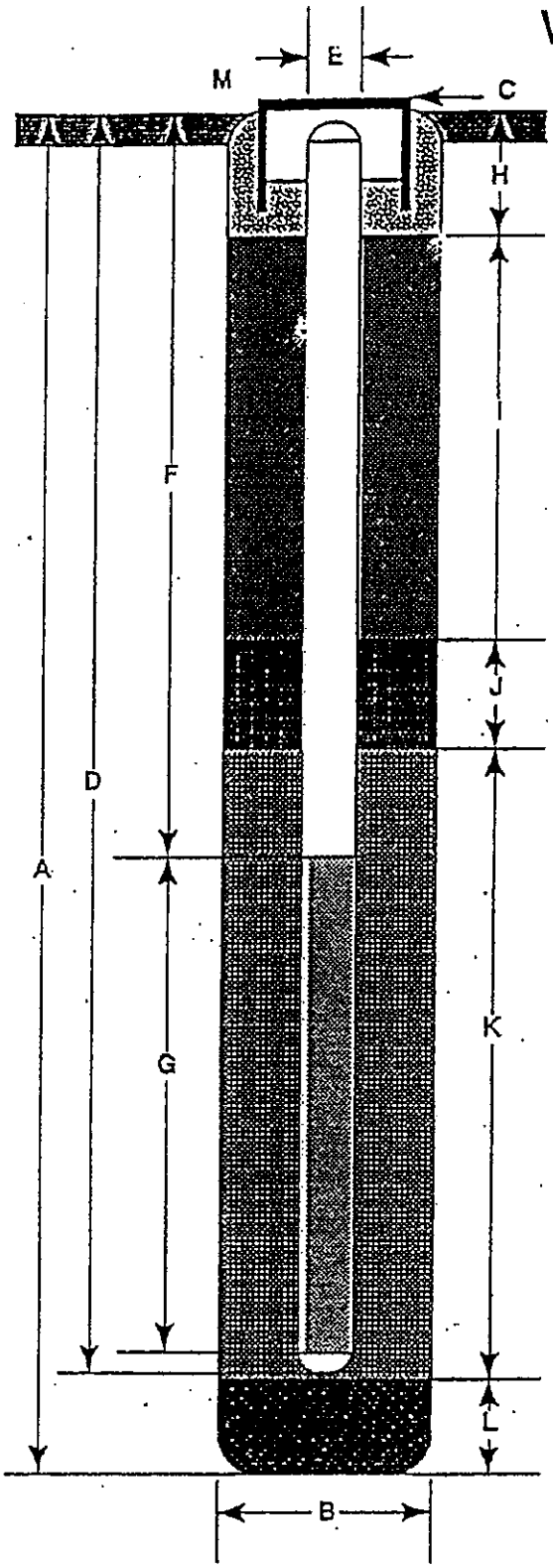
GeoStrategies Inc.

Log of Boring

BORING NO. C-7

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7259		11/89		

WELL CONSTRUCTION DETAIL



A Total Depth of Boring 25.5 ft.

B Diameter of Boring 8 in.
Drilling Method Hollow-Stem Auger

C Top of Box Elevation 32.75 ft.
[X] Referenced to Mean Sea Level
[ ] Referenced to Project Datum

D Casing Length 25 ft.
Material Schedule 40 PVC

E Casing Diameter 2 in.

F Depth to Top Perforations 8 ft.

G Perforated Length 17 ft.
Perforated Interval from 8 to 25 ft.
Perforation Type Machine Slot
Perforation Size 0.020 in.

H Surface Seal from 0 to 1.5 ft.
Seal Material Concrete Grout

I Backfill from 1.5 to 6 ft.
Backfill Material Cement Grout

J Seal from 6 to 7 ft.
Seal Material Bentonite Pellets

K Gravel Pack from 7 to 25 ft.
Pack Material Lonestar 2/12 Sand

L Bottom Seal 0.5 ft.
Seal Material Native Soil

M Christy box with locking well cap and lock.

Note: Depths measured from initial ground surface.

GeoStrategies Inc.

Well Construction Detail

WELL NO. C-7

JOB NUMBER	REVIEWED BY PG/CEG	DATE	REVISED DATE	REVISED DATE
7259		11/89		

Field location of boring: (See Plate 2)	Project No.: 7259	Date: 11/27/89	Boring No: C-8
	Client: Chevron Service Station #0504		
	Location: 15900 Hesperian Boulevard		
	City: San Lorenzo, California		Sheet 1 of 2
	Logged by: R.S.Y.	Driller: Bayland	
	Casing installation data:		
Drilling method: Hollow-Stem Auger			
Hole diameter: 8-Inches	Top of Box Elevation: 33.82		Datum: MSL

PID (ppm)	Blows/ft. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
								PAVEMENT SECTION - 3.0 feet
				1				
				2				
				3				
				4				
25.5	100	S&H						SILT (ML) - olive (5Y 4/3), medium stiff, moist; trace fine
	100	push	C-8	5				sand; low plasticity; no chemical odor.
	100		5.5					
				6				
				7				
				8				
				9				
6.2	150	S&H						COLOR CHANGE to very dark gray (7.5YR 3/0); at 9.0
	250	push	C-8	10				feet; weak chemical odor.
	250		10.5					
				11				
				12				
				13		▽		
				14				SILTY CLAY (CL) - dark gray (5Y 4/1), stiff, moist, low
195	3	S&H						plasticity; caliche stringers; strong chemical odor.
	5		C-8	15				
	7		15.5					
				16				
				17				
				18				
				19				

Remarks:

GeoStrategies Inc.

Log of Boring

BORING NO. C-8

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7259		11/89		

Field location of boring: (See Plate 2)	Project No.: 7259	Date: 11/27/89	Boring No: C-8
	Client: Chevron Service Station #0504		
	Location: 15900 Hesperian Boulevard		
	City: San Lorenzo, California		Sheet 2 of 2
	Logged by: R.S.Y.	Driller: Bayland	
Drilling method: Hollow-Stem Auger	Casing installation data:		
Hole diameter: 8-Inches	Top of Box Elevation:		Datum:
	Water Level		
	Time		
	Date		

PID (ppm)	Blows/ft. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
6	3	S&H		20				COLOR CHANGE to olive (5Y 4/3); at 19.0 feet; no chemical odor.
	6		C-8					
	8		21.5					
				21				
				22				
				23				
				24				COLOR CHANGE to yellow brown (10YR 5/6); at 24.0 feet; 25% very fine sand; no chemical odor.
	7	S&H						
	10		C-8	25				
	13		25.5					
				26				
				27				Bottom of sample at 25.5 feet. Bottom of boring at 25.5. feet.
				28				
				29				
				30				
				31				
				32				
				33				
				34				
				35				
				36				
				37				
				38				
				39				

Remarks:

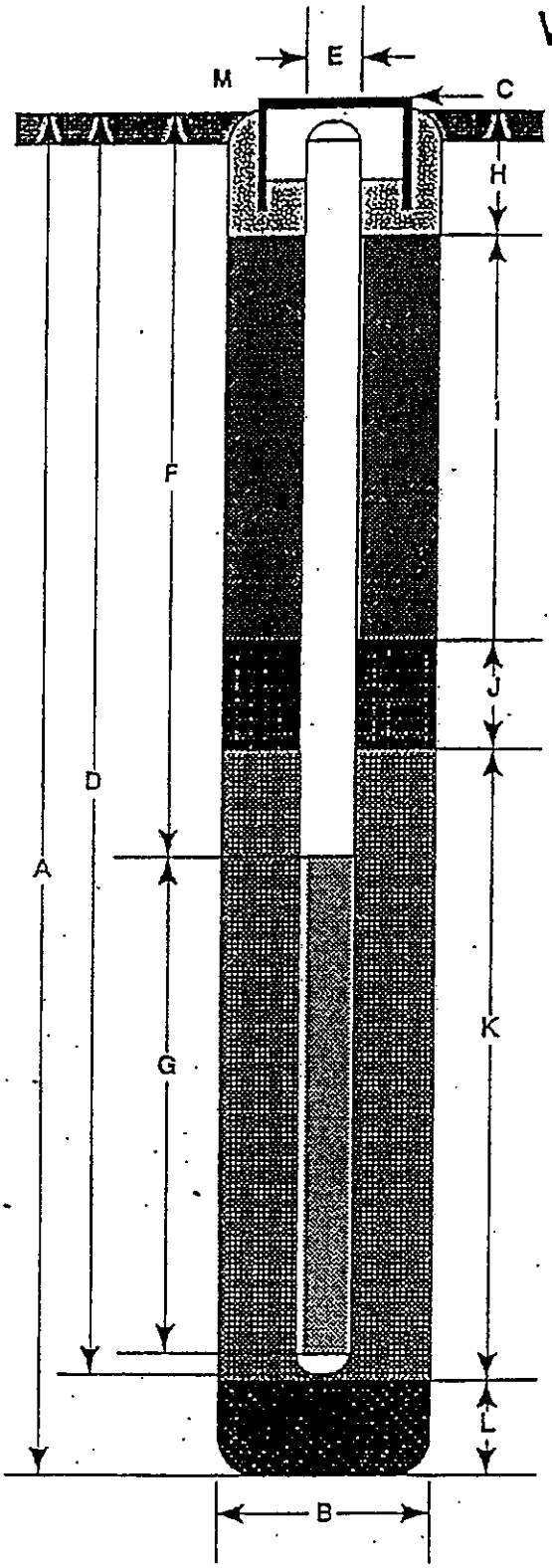
GeoStrategies Inc.

Log of Boring

BORING NO. C-8

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7259		11/89		

WELL CONSTRUCTION DETAIL



A Total Depth of Boring 25.5 ft.

B Diameter of Boring 8 in.
Drilling Method Hollow-Stem Auger

C Top of Box Elevation 33.82 ft.
[X] Referenced to Mean Sea Level
[ ] Referenced to Project Datum

D Casing Length 25 ft.
Material Schedule 40 PVC

E Casing Diameter 2 in.

F Depth to Top Perforations 5 ft.

G Perforated Length 20 ft.
Perforated Interval from 5 to 20 ft.
Perforation Type Machine Slot
Perforation Size 0.020 in.

H Surface Seal from 0 to 1.5 ft.
Seal Material Concrete Grout

I Backfill from 1.5 to 3 ft.
Backfill Material Cement Grout

J Seal from 3 to 4 ft.
Seal Material Bentonite Pellets

K Gravel Pack from 4 to 25 ft.
Pack Material Lonestar 2/12 Sand

L Bottom Seal 0.5 ft.
Seal Material Native Soil

M Christy box with locking well cap and lock.

Note: Depths measured from initial ground surface.

GeoStrategies Inc.

Well Construction Detail

WELL NO. C-8

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7259		11/89		

Field location of boring:

(See Plate 2)

Project No.: 7259	Date: 08/28/90	Boring No: C-9	
Client: Chevron Service Station #0504			
Location: 15900 Hesperian			
City: San Lorenzo, California		Sheet 1 of 2	
Logged by: R.S.Y.	Driller: Bayland		

Casing installation data:

Drilling method: Hollow Stem Auger

Hole diameter: 8-inches

Top of Box Elevation: 33.43' Datum: MSL

Water Level	15	15.5		
Time	10:35	11:20		
Date	08/28/90	08/28/90		

PID (ppm)	Blows/ft. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
				0				
				1				PAVEMENT SECTION - 2.5 feet thick
				2				
				3				SAND (SP) - dark grayish brown (10YR 3/2), medium dense, damp, 70% very fine sand; 10% silt and sand
				4				
	175	S&H						
	175	push	C-9-	5				no chemical odor
0	175		5.5					
				6				increase silt at 5.5 feet
				7				
				8				
				9				CLAY (CL) - black (7.5YR 2/0), stiff, moist, trace fine sand, medium plasticity, trace organics; no chemical odor
	200	S&H						
	200	push	C-9-	10				
0	200		10.5					
				11				
				12				gravel at 12 feet
				13				CLAYEY GRAVEL with SAND (GC) - dark yellowish brown (10YR 4/4), loose, saturated, 60% well rounded gravel; 35% medium coarse sand; 15% clay; no chemical odor
				14				
	3	S&H						
	2		C-9-	15				
0	2		15.5					
				16				
				17				SILT (ML) - yellowish brown (10YR 5/4), soft, saturated, rootholes, black organics fragments, trace sand; no chemical odor
				18				
				19				

Remarks:

GeoStrategies Inc.

Log of Boring

BORING NO. C-9

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7259	CEG 12/91	8/90		

Field location of boring:

(See Plate 2)

Project No.: 7259	Date: 08/28/90	Boring No: C-9	
Client: Chevron Service Station #0504			
Location: 15900 Hesperian			
City: San Lorenzo, California		Sheet 2 of 2	
Logged by: R.S.Y.	Driller: Bayland		

Drilling method: Hollow Stem Auger

Hole diameter: 8-inches

Casing installation data:

Top of Box Elevation: Datum:

Water Level				
Time				
Date				

PID (ppm)	Blows/ft. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
	4	S&H		20				
	7		C-9-					CLAYEY SILT (ML) - olive (5Y 5/4), very stiff, moist, 40%
0	10		20.5					clay; 60% silt; black organic nodules; no chemical odor
				21				
				22				
				23				
				24				
	6	S&H						
	8		C-9-	25				
0	8		25.5					Bottom of Borehole at 25.5 feet
				26				Bottom of Sample at 25.5 feet
				27				08/28/90
				28				
				29				
				30				
				31				
				32				
				33				
				34				
				35				
				36				
				37				
				38				
				39				

Remarks:

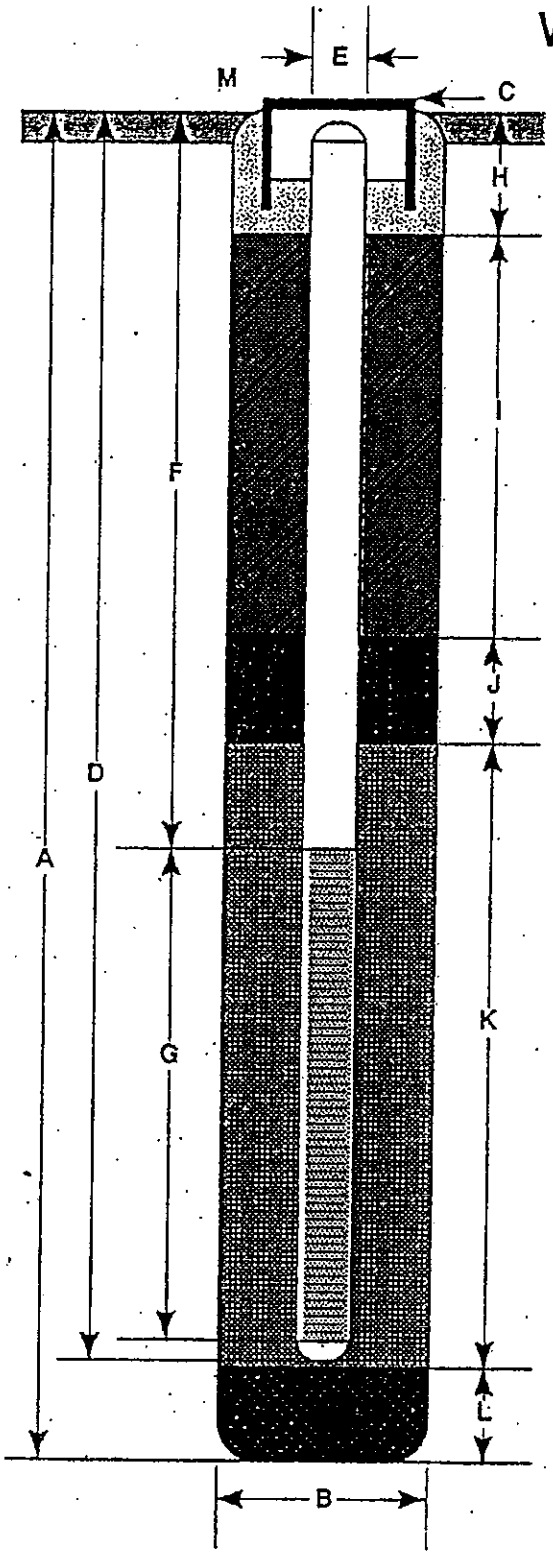
GeoStrategies Inc.

Log of Boring

BORING NO. C-9

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7259	[illegible] 9/4/90	8/90		

WELL CONSTRUCTION DETAIL



A Total Depth of Boring 25.5 ft.

B Diameter of Boring 8 in.
Drilling Method Hollow Stem Auger

C Top of Box Elevation ft.
[X] Referenced to Mean Sea Level
[ ] Referenced to Project Datum

D Casing Length 25 ft.
Material Schedule 40 PVC

E Casing Diameter 2 in.

F Depth to Top Perforations 12 ft.

G Perforated Length 13 ft.
Perforated Interval from 12 to 25 ft.
Perforation Type Factory Slot
Perforation Size 0.020 in.

H Surface Seal from 0 to 1.5 ft.
Seal Material Concrete

I Backfill from 1.5 to 8 ft.
Backfill Material Cement Grout

J Seal from 8 to 10 ft.
Seal Material Bentonite Pellets

K Gravel Pack from 10 to 25 ft.
Pack Material Lonestar #2/12 Sand

L Bottom Seal 0.5 ft.
Seal Material Native Material

M Traffic-rated box with locking well cap.

Note: Depths measured from initial ground surface.

GSI GeoStrategies Inc.

Well Construction Detail

WELL NO. C-9

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7259	RMP CEG 12/92	08/90		

Field location of boring: (See Plate 2)	Project No.: 7259	Date: 10/28/90	Boring No: C-10
	Client: Chevron Service Station #0504		
	Location: 15900 Hesperian		
	City: San Lorenzo, California		Sheet 1 of 2
	Logged by: R.S.Y.	Driller: Bayland	
Drilling method: Hollow Stem Auger	Casing installation data:		
Hole diameter: 8-inches	Top of Box Elevation: 31.63'		Datum: MSL
	Water Level: 15'		
	Time: 14:30		
	Date: 08/28/90		

PID (ppm)	Blows/ft. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
				0				
				1				PAVEMENT SECTION-9 inches thick
				2				SILT (ML) - dark olive gray (5Y 3/2), medium stiff, moist, trace organics; no chemical odor
				3				
				4				
	150	S&H		5				COLOR CHANGE at 4.0' to dark gray (7.5 YR 4/0), voids, caliche stringers, low plasticity; no chemical odor
	150	push	C-10-					
	150		5.5	6				
				7				
				8				
				9				CLAY (CL) - black (7.5 YR 2/0), stiff, moist, medium plasticity; roots, trace fine sand, voids; no chemical odor
	225	S&H		10				
	225	push	C-10-					
0	250		10.5	11				
				12				
				13				
				14		▽		
	2	S&H						CLAYEY SILT (ML) - dark brown (10YR 3/3), stiff, saturated, 20-25% clay; 75% silt; roots, voids, water occurring in voids, low plasticity; no chemical odor
	4		C-10-	15				
0	5		15.5					
				16				
				17				
				18				
				19				

Remarks:

GeoStrategies Inc.

Log of Boring

BORING NO. C-10

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7259		10/90		

Field location of boring: (See Plate 2)	Project No.: 7259	Date: 08/28/90	Boring No: C-10
	Client: Chevron Service Station #0504		
	Location: 15900 Hesperian		
	City: San Lorenzo, California		Sheet 2 of 2
	Logged by: R. Y.	Driller: Bayland	
Drilling method: Hollow Stem Auger	Casing installation data:		
Hole diameter:	Top of Box Elevation: 31.63'	Datum: MSL	

								Water Level	
								Time	
								Date	
PID (ppm)	Blows/ft. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description	
	4	S&H		20				shell fragments, medium plasticity	
	5		C-10-					no chemical odor	
0	5		20.5						
				21					
				22					
				23				CLAYEY SILT (ML) - dark grayish brown (10YR 4/2), stiff,	
								moist, 35% clay, low plasticity, iron staining, organic	
				24				fragments; no chemical odor	
	4	S&H							
	6		C-10-	25					
0	8		25.5						
				26					
								Bottom of Sample at 25.5 feet	
				27				Bottom of Borehole at 25.5 feet	
								08/28/90	
				28					
				29					
				30					
				31					
				32					
				33					
				34					
				35					
				36					
				37					
				38					
				39					

Remarks:

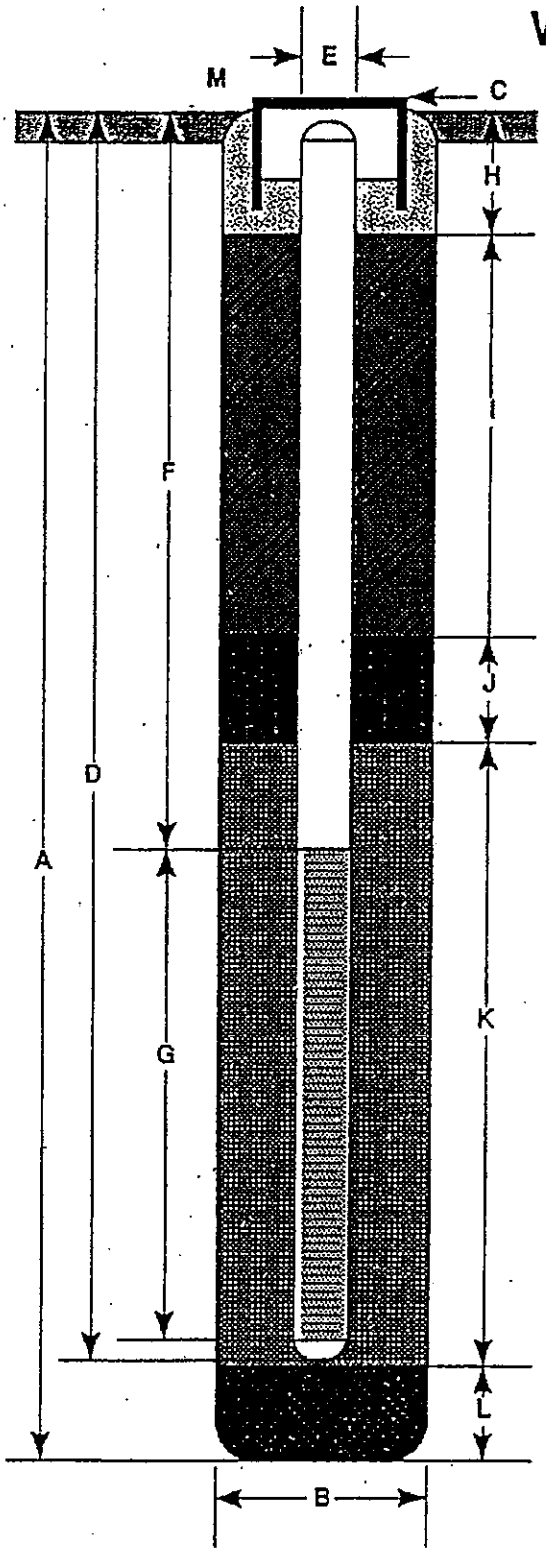
GeoStrategies Inc.

Log of Boring

BORING NO. C-10

JOB NUMBER	REVIEWED BY RS/CEG	DATE	REVISED DATE	REVISED DATE
7259	RSP CEG 12/92	8/90		

WELL CONSTRUCTION DETAIL



A Total Depth of Boring 25.5 ft.

B Diameter of Boring 8 in.
Drilling Method Hollow Stem Auger

C Top of Box Elevation ft.
[X] Referenced to Mean Sea Level
[ ] Referenced to Project Datum

D Casing Length 25 ft.
Material Schedule 40 PVC

E Casing Diameter 2 in.

F Depth to Top Perforations 12 ft.

G Perforated Length 13 ft.
Perforated Interval from 12 to 25 ft.
Perforation Type Factory Slot
Perforation Size 0.020 in.

H Surface Seal from 0 to 1.5 ft.
Seal Material Concrete

I Backfill from 1.5 to 8 ft.
Backfill Material Cement Grout

J Seal from 8 to 10 ft.
Seal Material Bentonite Pellets

K Gravel Pack from 10 to 25 ft.
Pack Material Lonestar #2/12 Sand

L Bottom Seal 0.5 ft.
Seal Material Native Material

M Traffic-rated box with locking well cap.

Note: Depths measured from initial ground surface.

GeoStrategies Inc.

Well Construction Detail

WELL NO.
C-10

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7259	CEG 12/92	08/90		

Field location of boring: (See Plate 2)	Project No.: 7259	Date: 08/28/90	Boring No: C-11
	Client: Chevron Service Station #0504		
	Location: 15900 Hesperian		
	City: San Lorenzo, California		Sheet: 1 of 2
	Logged by: R.S.Y.	Driller: Bayland	
	Casing installation data:		
Drilling method: Hollow Stem Auger			
Hole diameter: 8-inches	Top of Box Elevation: 31.58'		Datum: MSL

	Water Level	Time	Date
	15.5	12:00	08/28/90

PID (ppm)	Blows/ft. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
				0				
				1				
				2				PAVEMENT SECTION-2.5 feet thick
				3				
				4				
	150	S&H		5				
	150	push	C-11-					SILT (ML) - very dark gray (10YR 2/1), medium stiff,
0	150		5.5	6				moist, trace fine sand, low plasticity, organic fragments; no chemical odor
				7				
				8				
				9				
	200	S&H		10				
	200	push	C-11-					CLAY (CL) - black (7.5 YR 2/0) stiff, moist, 10% fine sand,
0	200		10.5	11				medium to high plasticity; no chemical odor
				12				
				13				
				14				
	5	S&H		15				
0	6		C-11-					CLAYEY SILT (ML) - olive gray (5Y 4/2), very stiff,
	10		15.5	16		▽		saturated, low plasticity, trace caliche stringers; no chemical odor
				17				
				18				
				19				

Remarks:

GeoStrategies Inc.

Log of Boring

BORING NO. C-11

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7259	[illegible] DEC 1990	8/90		

Field location of boring: (See Plate 2)	Project No.: 7259	Date: 08/28/90	Boring No: C-11
	Client: Chevron Service Station #0504		
	Location: 15900 Hesperian		
	City: San Lorenzo, California		Sheet 2 of 2
	Logged by: R.S.Y.	Driller: Bayland	
Drilling method: Hollow Stem Auger	Casing installation data:		
Hole diameter: 8-inches	Top of Box Elevation: 31.58'		Datum: MSL

Water Level								
Time								
Date								

PID (ppm)	Blows/ft. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
	3	S&H		20				
	5		C-11-					COLOR CHANGE to olive (5Y 5/3), voids, water
0	10		20.5					occurring in voids, no sample recovery; no chemical odor
				21				
				22				
				23				
				24				
	6	S&H						
	8		C-11-	25				COLOR CHANGE to yellowish brown (10YR 5/4); no chemical odor
0	9		25.5					
				26				
				27				Bottom of Borehole at 25.5 feet
								Bottom of Sample at 25.5 feet
				28				08/28/90
				29				
				30				
				31				
				32				
				33				
				34				
				35				
				36				
				37				
				38				
				39				

Remarks:

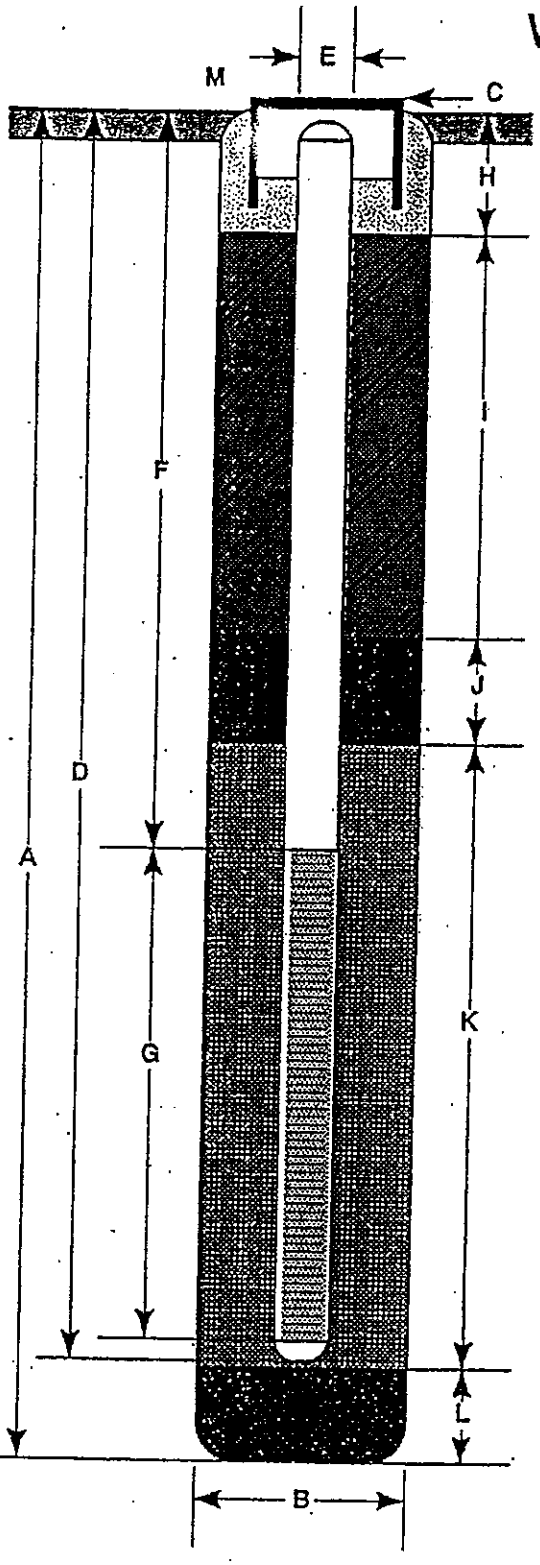
GeoStrategies Inc.

Log of Boring

BORING NO. C-11

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7258	[illegible]	8/90		

WELL CONSTRUCTION DETAIL



A Total Depth of Boring 25.5 ft.

B Diameter of Boring 8 in.
Drilling Method Hollow Stem Auger

C Top of Box Elevation _____ ft.
[X] Referenced to Mean Sea Level
[ ] Referenced to Project Datum

D Casing Length 25 ft.
Material Schedule 40 PVC

E Casing Diameter 2 in.

F Depth to Top Perforations 12 ft.

G Perforated Length 13 ft.
Perforated Interval from 12 to 25 ft.
Perforation Type Factory Slot
Perforation Size 0.020 in.

H Surface Seal from 0 to 1.5 ft.
Seal Material Concrete

I Backfill from 1.5 to 8 ft.
Backfill Material Cement Grout

J Seal from 8 to 10 ft.
Seal Material Bentonite Pellets

K Gravel Pack from 10 to 25 ft.
Pack Material Lonestar #2/12 Sand

L Bottom Seal 0.5 ft.
Seal Material Native Material

M Traffic-rated box with locking well cap.

Note: Depths measured from initial ground surface.

GSI GeoStrategies Inc.

Well Construction Detail

WELL NO.
C-11

JOB NUMBER	REVIEWED BY PG/CEG	DATE	REVISED DATE	REVISED DATE
7259	CMP CEG/HQL	08/90		

Conestoga-Rovers & Associates
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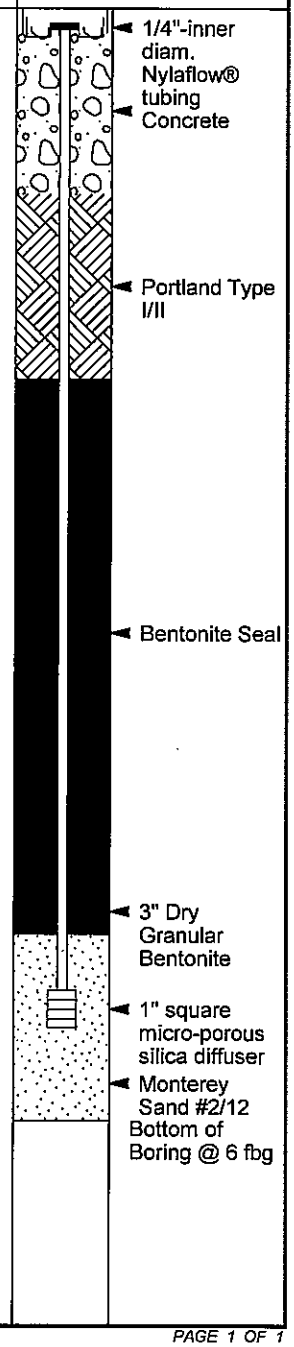
Fax: (916) 889-8999

BORING/WELL LOG

CLIENT NAME	Chevron Environmental Management Co.	**BORING/WELL NAME**	VP-1
JOB/SITE NAME	9-0504	**DRILLING STARTED**	25-May-10
LOCATION	15900 Hesperian Boulevard	**DRILLING COMPLETED**	25-May-10
PROJECT NUMBER	611641	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	PeneCore Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hand-auger	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	3.25-inch	**SCREENED INTERVAL**	5.3 to 5.5 fbg
LOGGED BY	C. Benedict	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	J. Kiernan, PE# C68498	**DEPTH TO WATER (Static)**	NA
REMARKS			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)
							3" Asphalt	0.3
				1	SM		**Silty SAND with gravel:** Brown; moist.	1.1
				2	ML		**SILT with sand:** Dark grey; moist; medium estimated plasticity; very fine sand.	2.5
				3			**Sandy SILT:** Dark grey; moist; low estimated plasticity; very fine sand.	
				4	ML			
0		VP-1- 5.5		5			Medium estimated plasticity	
				6				6.0

WELL DIAGRAM



WELL LOG (PID) I:\CHEVRON\6116--\611641--1\611641--3\611641-BORING LOGS.GPJ DEFAULT.GDT 7/16/10

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BORING/WELL LOG

CLIENT NAME	Chevron Environmental Management Co.	**BORING/WELL NAME**	VP-2
JOB/SITE NAME	9-0504	**DRILLING STARTED**	25-May-10
LOCATION	15900 Hesperian Boulevard	**DRILLING COMPLETED**	25-May-10
PROJECT NUMBER	611641	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	PeneCore Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hand-auger	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	3.25-inch	**SCREENED INTERVAL**	5.3 to 5.5 fbg
LOGGED BY	C. Benedict	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	J. Kiernan, PE# C68498	**DEPTH TO WATER (Static)**	NA
REMARKS			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							3" Asphalt	0.3	1/4"-inner diam. Nylaflow® tubing; Concrete
					SC		Clayey SAND with gravel: Brown; moist.		
				1			SILT with sand: Dark brown; moist; medium estimated plasticity.	0.9	Portland Type I/II
				2					
					ML				
				3			Color change to brown		Bentonite Seal
				4			Trace gravel, 1/4 to 1/2" sub-rounded		
							Sandy SILT: Light brown; moist; medium estimated plasticity.	4.5	3" Dry Granular Bentonite
0		VP-2- 5.5		5	ML				1" square micro-porous silica diffuser
				6				6.0	Monterey Sand #2/12; Bottom of Boring @ 6 fbg

WELL LOG (PID) I:\CHEVRON\6116--I\611641-1\611641-3\611641-BORING LOGS.GPJ DEFAULT.GDT 7/16/10

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BORING/WELL LOG

CLIENT NAME	Chevron Environmental Management Co.	**BORING/WELL NAME**	VP-3
JOB/SITE NAME	9-0504	**DRILLING STARTED**	25-May-10
LOCATION	15900 Hesperian Boulevard	**DRILLING COMPLETED**	25-May-10
PROJECT NUMBER	611641	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	PeneCore Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hand-auger	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	3.25-inch	**SCREENED INTERVAL**	5.3 to 5.5 fbg
LOGGED BY	C. Benedict	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	J. Kiernan, PE# C68498	**DEPTH TO WATER (Static)**	NA
REMARKS			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
				0			**3" Asphalt**	0.3	1/4"-inner diam. Nylaflow® tubing; Concrete
				1	SM		**Silty SAND with gravel:** Brown; moist.	1.2	
				2			**Gravelly SILT with sand:** Grey; moist; low estimated plasticity.		Portland Type I/II
				3	ML				Bentonite Seal
				4			Color change to brown		
0		VP-3- 5.5		5	ML		**Sandy SILT:** Grey; moist; low estimated plasticity.	5.0	3" Dry Granular Bentonite; 1" square micro-porous silica diffuser
				6				6.0	Monterey Sand #2/12; Bottom of Boring @ 6 fbg

WELL LOG (PID) I:\CHEVRON\611641-611641-3\611641-BORING LOGS.GPJ DEFAULT.GDT 7/16/10

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BORING/WELL LOG

CLIENT NAME	Chevron Environmental Management Co.	**BORING/WELL NAME**	VP-4
JOB/SITE NAME	9-0504	**DRILLING STARTED**	25-May-10
LOCATION	15900 Hesperian Boulevard	**DRILLING COMPLETED**	25-May-10
PROJECT NUMBER	611641	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	PeneCore Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hand-auger	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	3.25-inch	**SCREENED INTERVAL**	5.3 to 5.5 fbg
LOGGED BY	C. Benedict	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	J. Kiernan, PE# C68498	**DEPTH TO WATER (Static)**	NA
REMARKS			

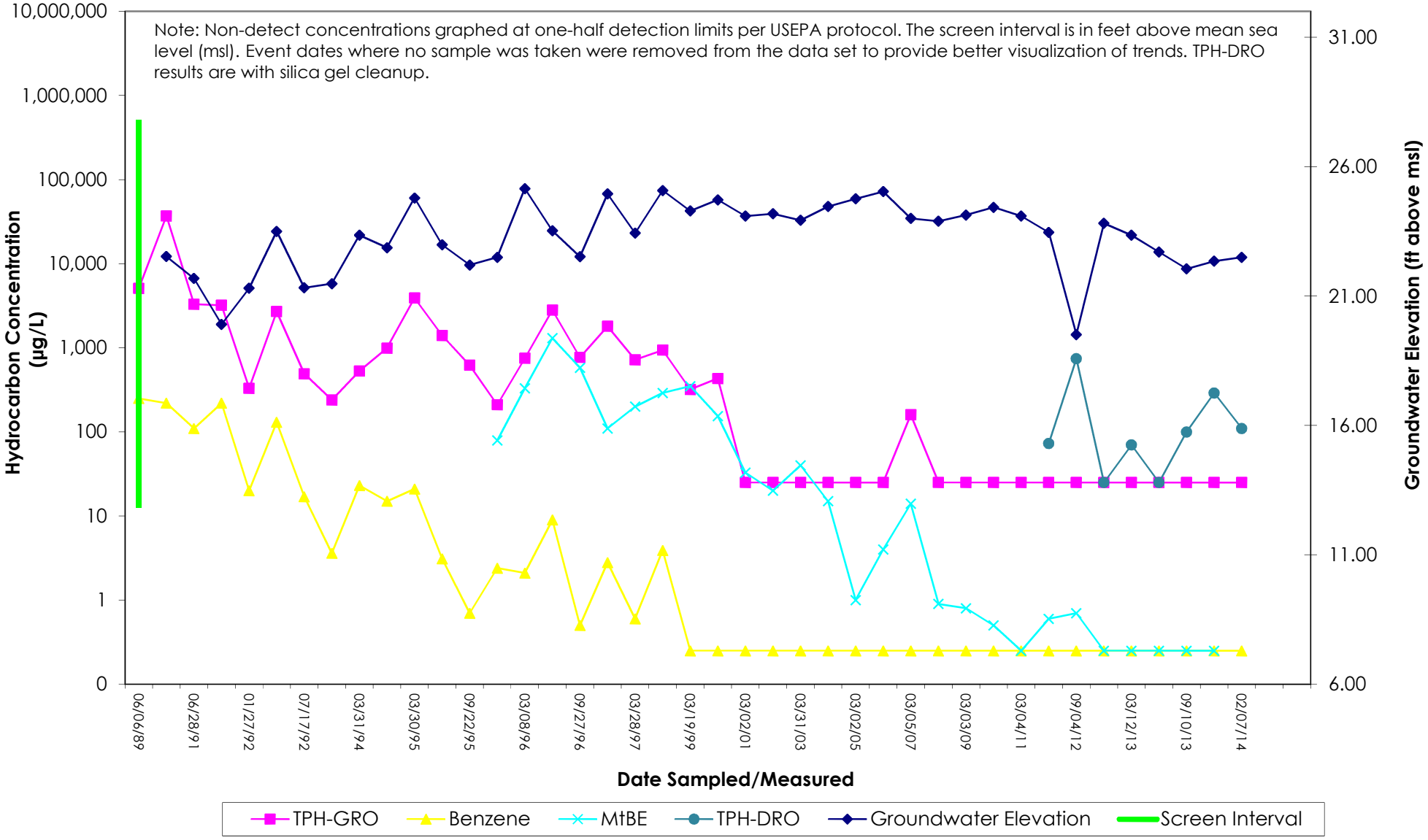
PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							3" Asphalt	0.3	1/4"-inner diam. Nylaflow® tubing; Concrete
				1	SM		**Silty SAND with gravel:** Brown; moist.		
				2			**SILT with sand:** Dark grey; moist; low estimated plasticity.	2.0	Portland Type I/II
				3					Bentonite Seal
				4	ML				
0		VP-4- 5.5		5					3" Dry Granular Bentonite; 1" square micro-porous silica diffuser
				6				6.0	Monterey Sand #2/12; Bottom of Boring @ 6 fbg

WELL LOG (PID) I:\CHEVRON\6116-\611641~1\611641~3\611641-BORING LOGS.GPJ DEFAULT.GDT 7/16/10

APPENDIX D
Hydrographs

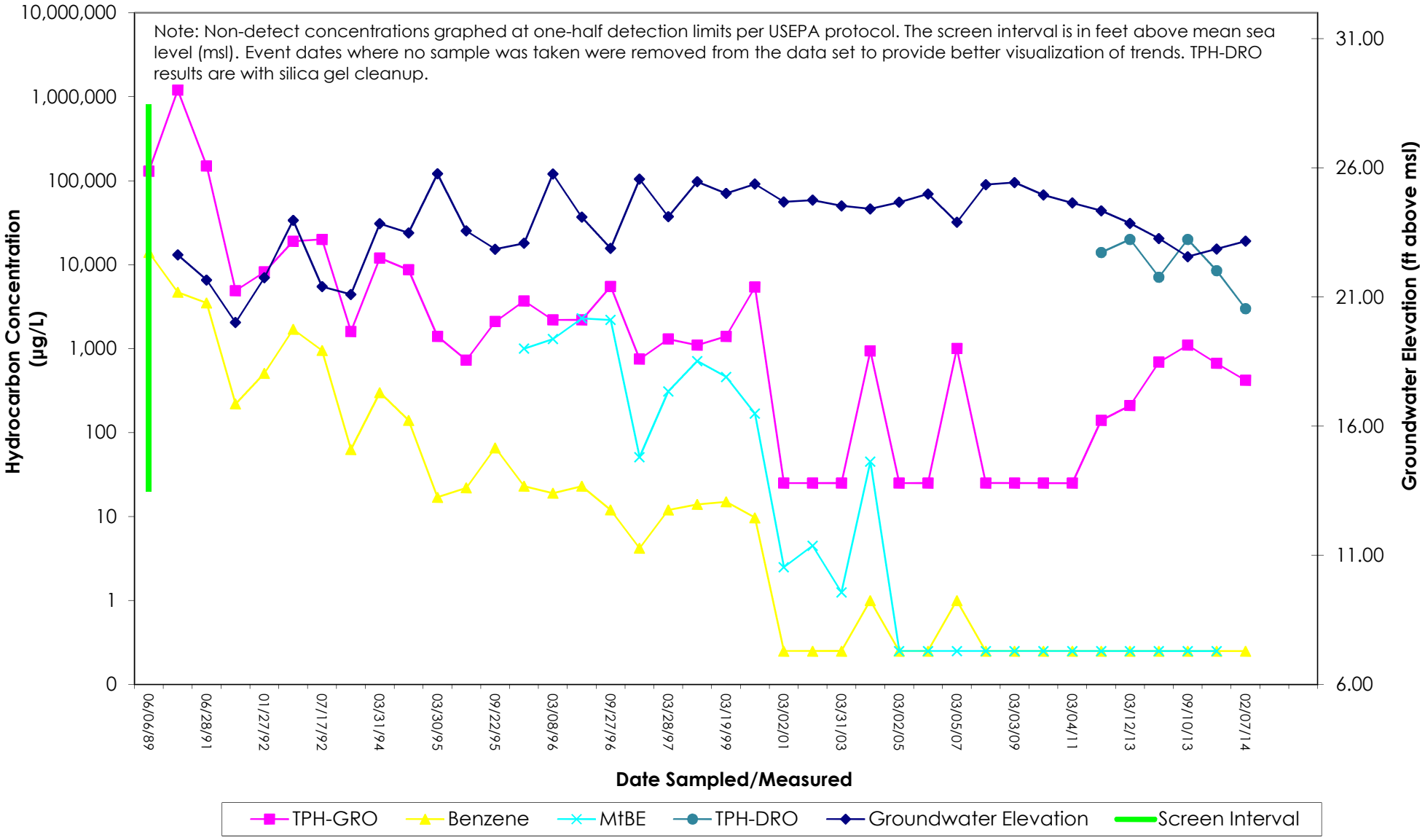
C-1 TPH-GRO, TPH-DRO, Benzene, & MtBE Concentrations and Groundwater Elevations vs. Time

Chevron-branded Service Station 90504
15900 Hesperian Boulevard
San Lorenzo, California



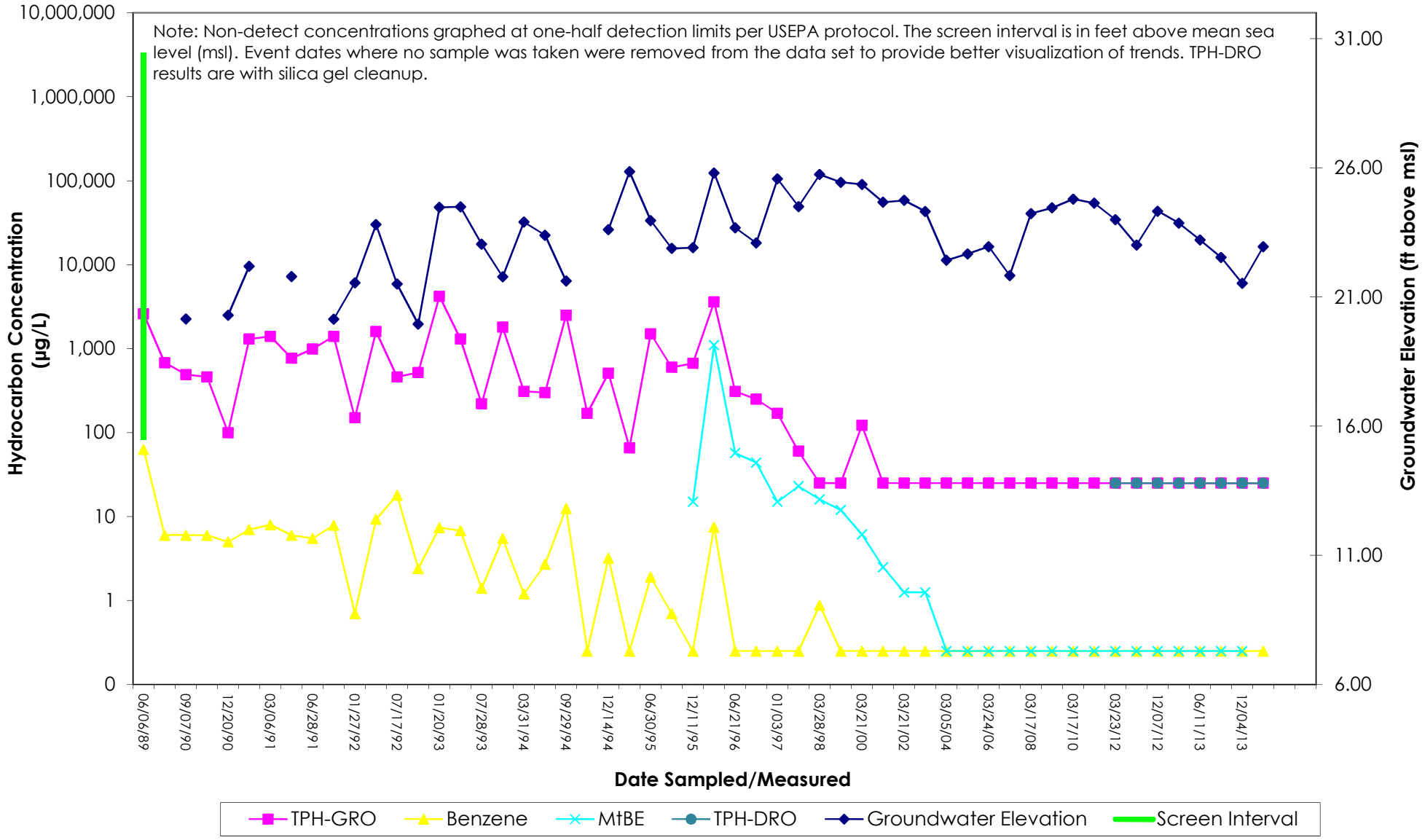
C-2 TPH-GRO, TPH-DRO, Benzene, & MtBE Concentrations and Groundwater Elevations vs. Time

Chevron-branded Service Station 90504
15900 Hesperian Boulevard
San Lorenzo, California



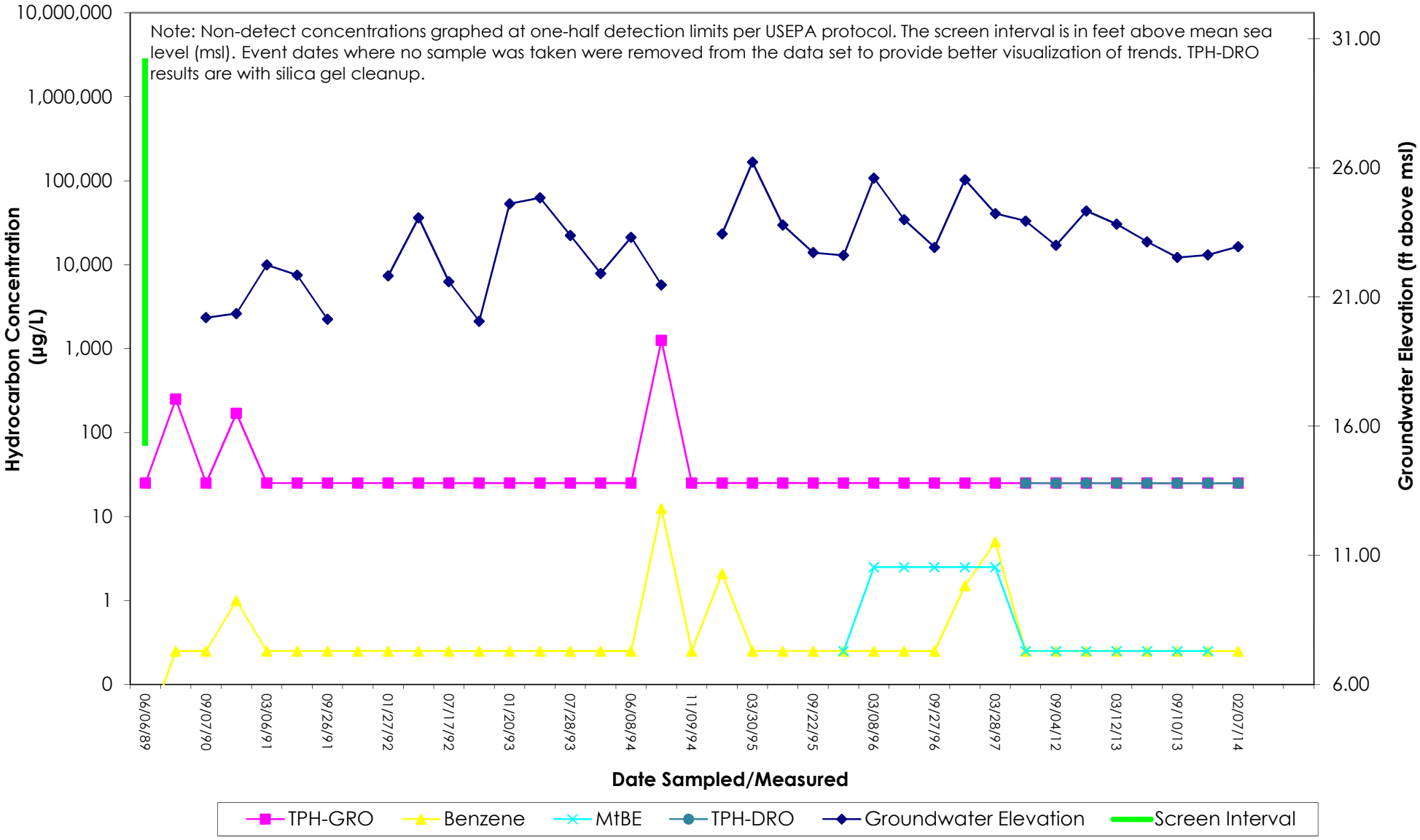
C-3 TPH-GRO, TPH-DRO, Benzene, & MtBE Concentrations and Groundwater Elevations vs. Time

Chevron-branded Service Station 90504
15900 Hesperian Boulevard
San Lorenzo, California



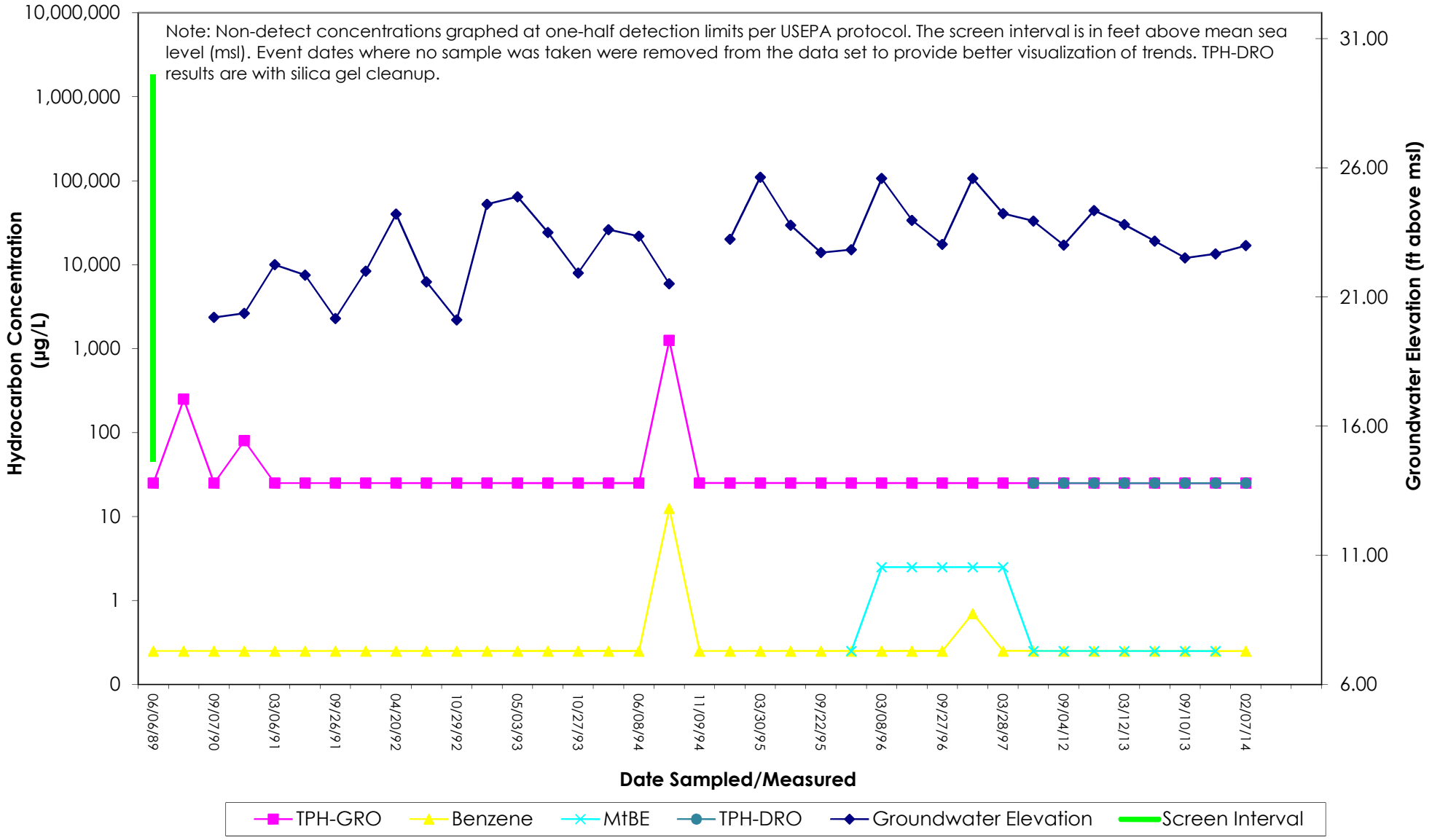
C-4 TPH-GRO, TPH-DRO, Benzene, & MtBE Concentrations and Groundwater Elevations vs. Time

Chevron-branded Service Station 90504
15900 Hesperian Boulevard
San Lorenzo, California



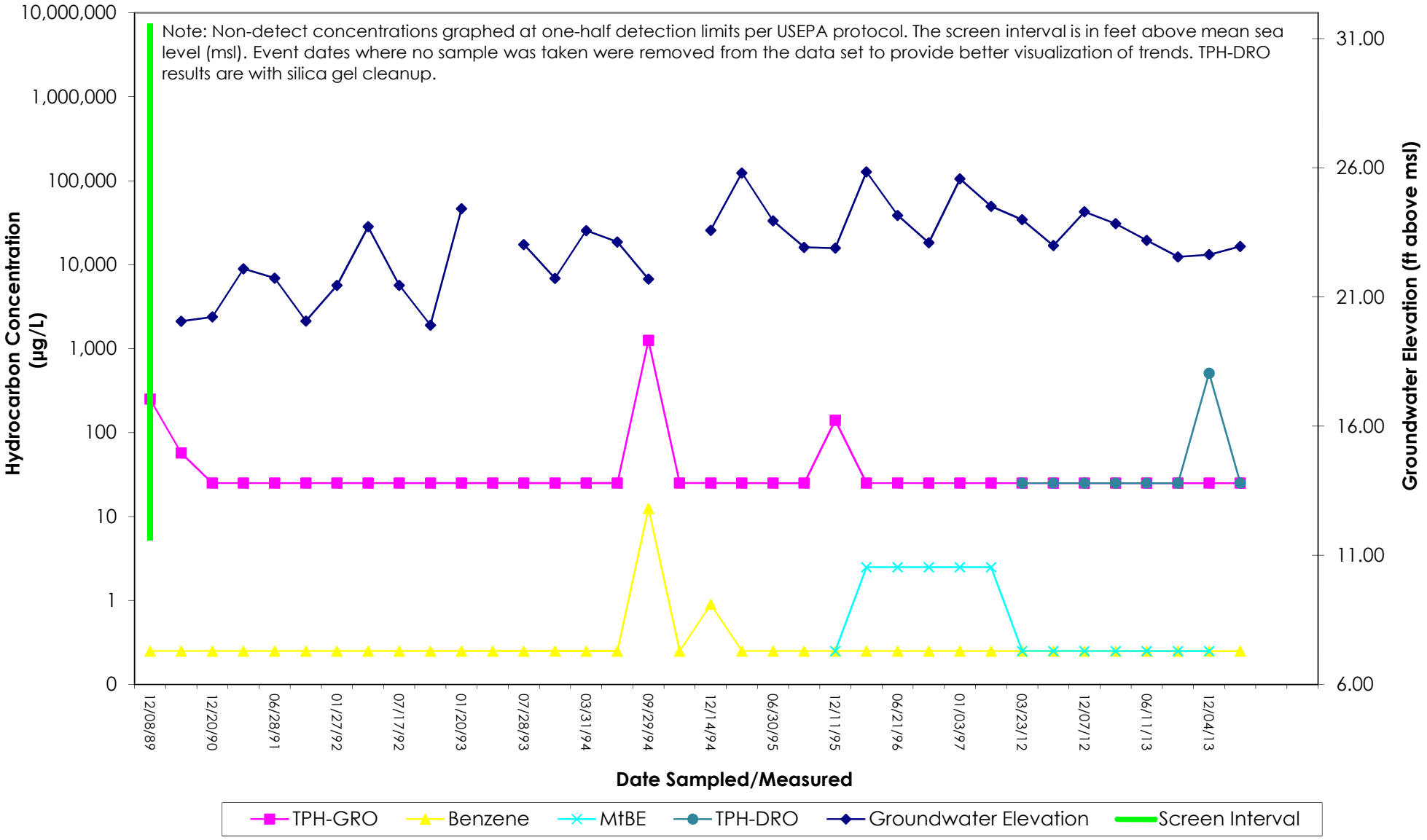
C-5 TPH-GRO, TPH-DRO, Benzene, & MtBE Concentrations and Groundwater Elevations vs. Time

Chevron-branded Service Station 90504
15900 Hesperian Boulevard
San Lorenzo, California



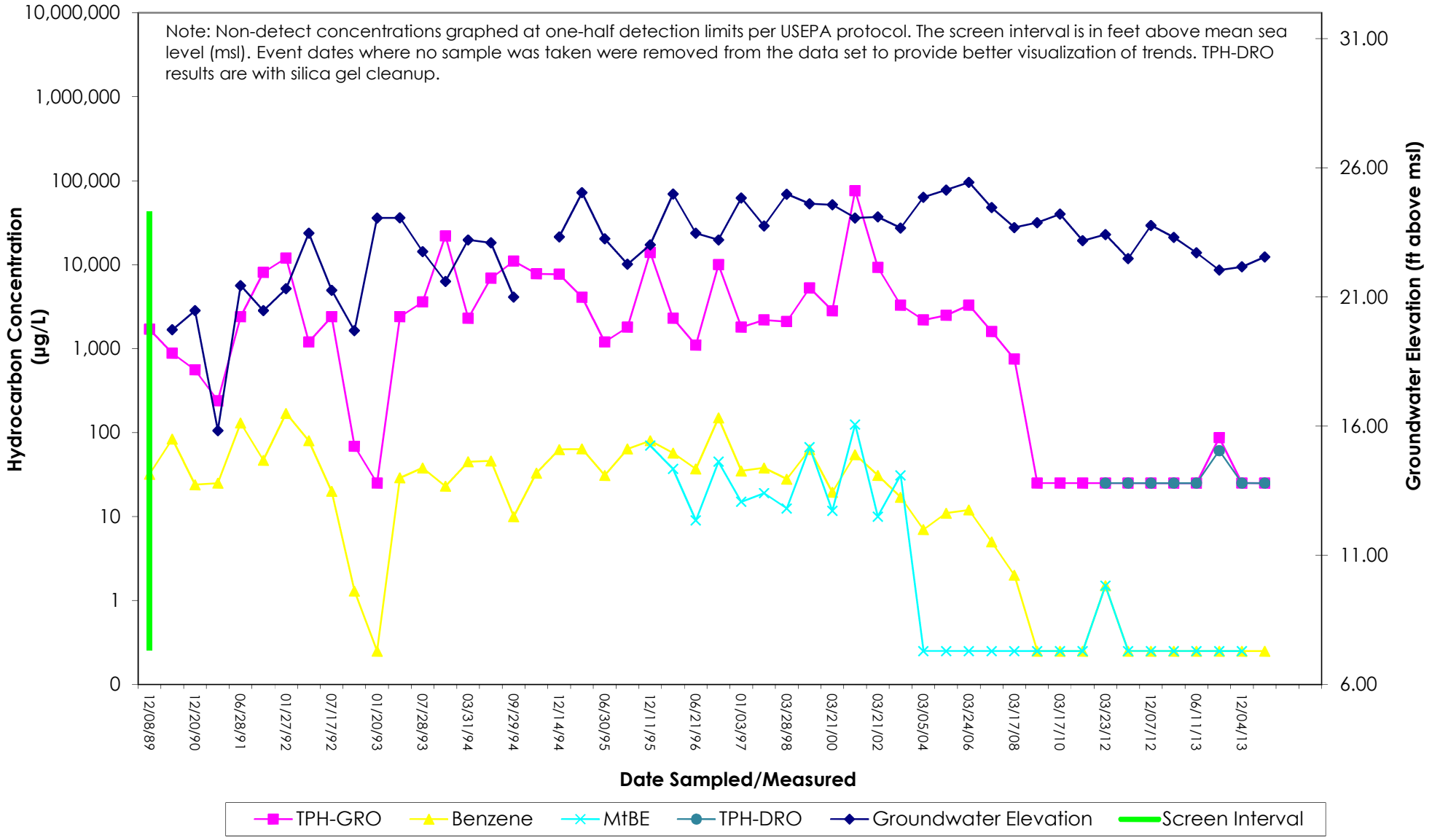
C-6 TPH-GRO, TPH-DRO, Benzene, & MtBE Concentrations and Groundwater Elevations vs. Time

Chevron-branded Service Station 90504
15900 Hesperian Boulevard
San Lorenzo, California



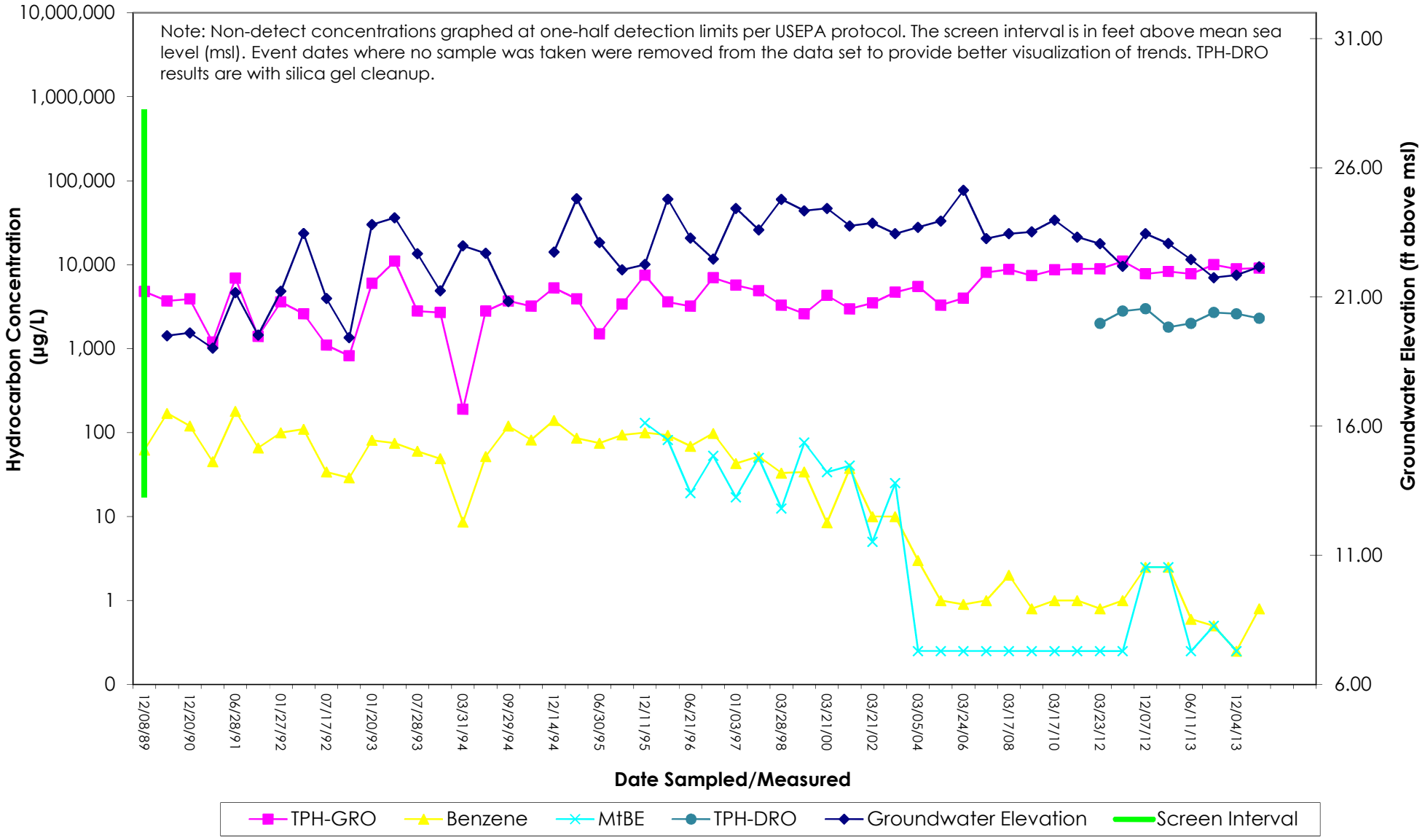
C-7 TPH-GRO, TPH-DRO, Benzene, & MtBE Concentrations and Groundwater Elevations vs. Time

Chevron-branded Service Station 90504
15900 Hesperian Boulevard
San Lorenzo, California



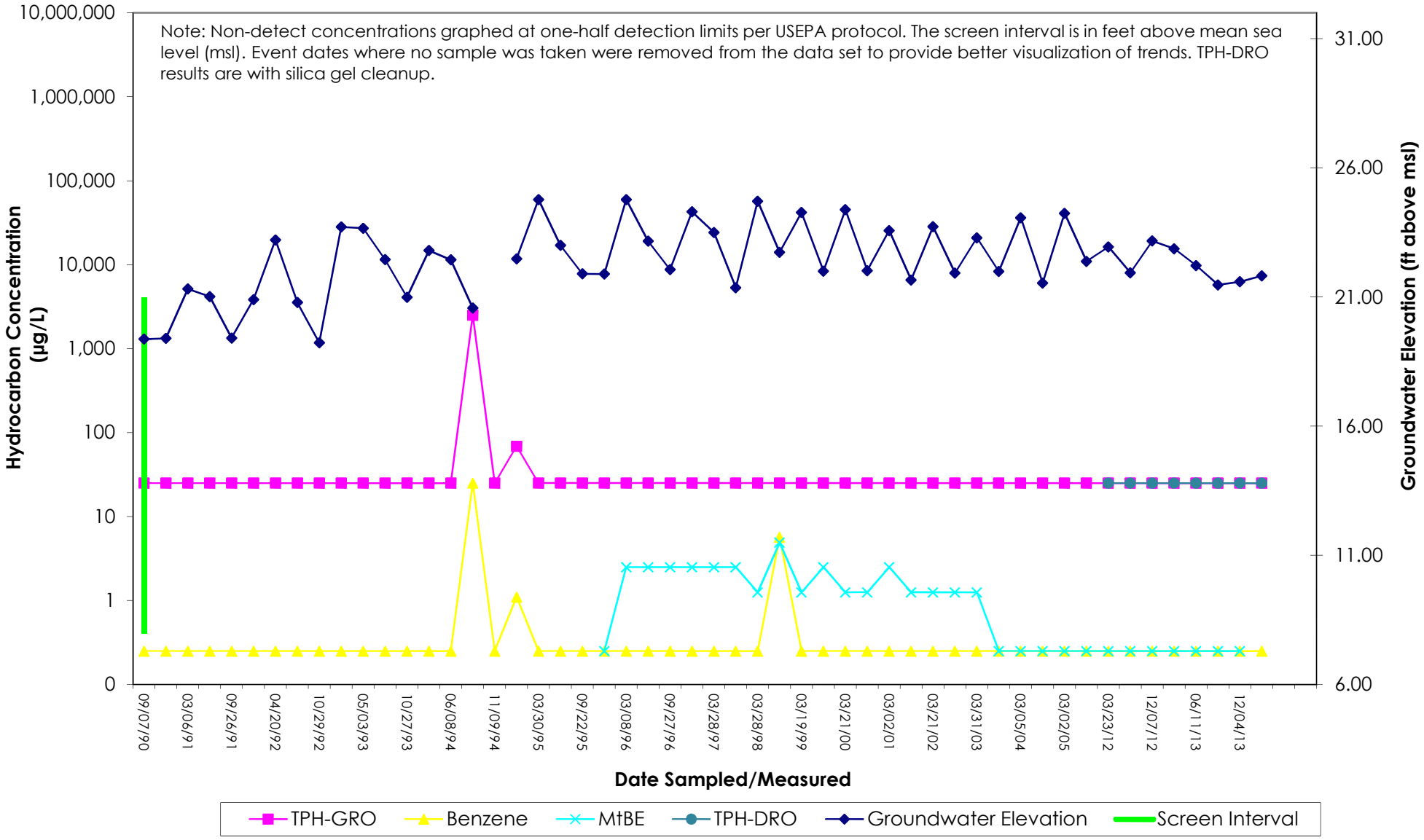
C-8 TPH-GRO, TPH-DRO, Benzene, & MtBE Concentrations and Groundwater Elevations vs. Time

Chevron-branded Service Station 90504
15900 Hesperian Boulevard
San Lorenzo, California



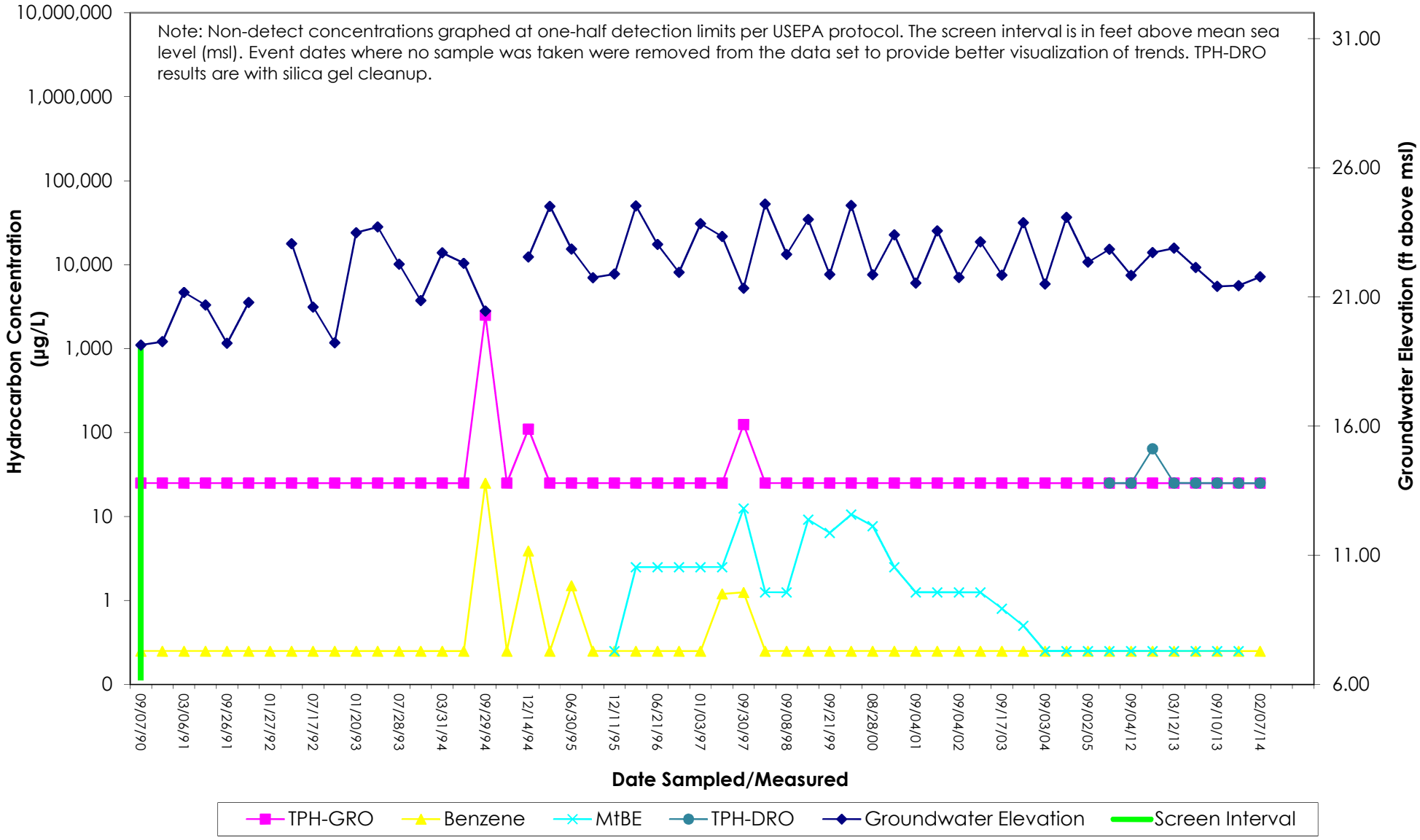
C-9 TPH-GRO, TPH-DRO, Benzene, & MtBE Concentrations and Groundwater Elevations vs. Time

Chevron-branded Service Station 90504
15900 Hesperian Boulevard
San Lorenzo, California



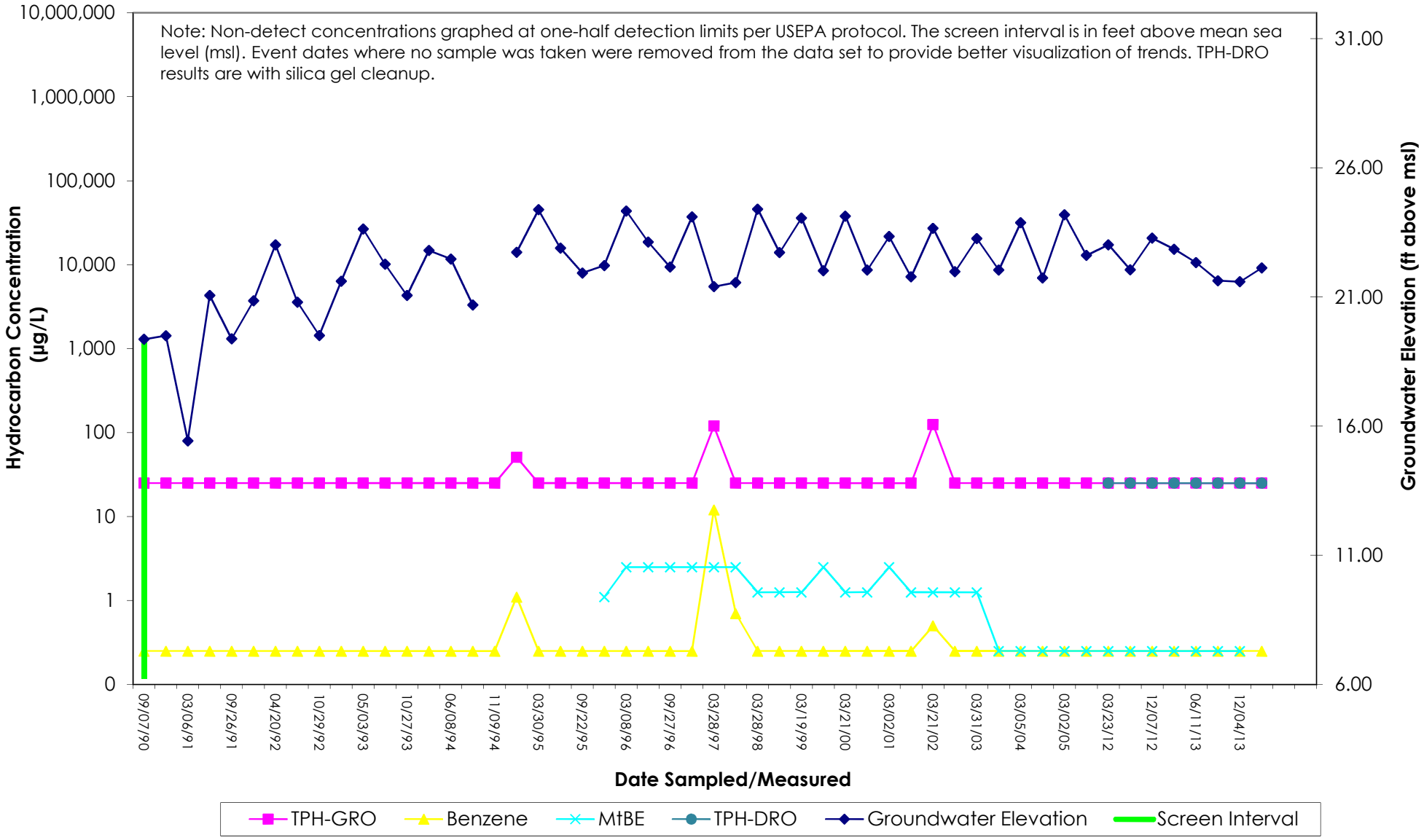
C-10 TPH-GRO, TPH-DRO, Benzene, & MtBE Concentrations and Groundwater Elevations vs. Time

Chevron-branded Service Station 90504
15900 Hesperian Boulevard
San Lorenzo, California



C-11 TPH-GRO, TPH-DRO, Benzene, & MtBE Concentrations and Groundwater Elevations vs. Time

Chevron-branded Service Station 90504
15900 Hesperian Boulevard
San Lorenzo, California



APPENDIX E
SWRCB LTCP Checklist

Site Name: Chevron-branded Service Station 90504
Site Address: 15900 Hesperian Boulevard, San Lorenzo, California

Site meets the criteria of the Low-Threat Underground Storage Tank (UST) Case Closure Policy as described below.[1]

General Criteria General criteria that must be satisfied by all candidate sites:	
Is the unauthorized release located within the service area of a public water system?	☒ Yes ☐ No
Does the unauthorized release consist only of petroleum?	☒ Yes ☐ No
Has the unauthorized ("primary") release from the UST system been stopped?	☒ Yes ☐ No
Has free product been removed to the maximum extent practicable?	☒ Yes ☐ No ☐ NA
Has a conceptual site model that assesses the nature, extent, and mobility of the release been developed?	☒ Yes ☐ No
Has secondary source been removed to the extent practicable?	☐ Yes ☒ No
Has soil or groundwater been tested for MTBE and results reported in accordance with Health and Safety Code Section 25296.15?	☒ Yes ☐ No
Does nuisance as defined by Water Code section 13050 exist at the site?	☐ Yes ☒ No
Are there unique site attributes or site-specific conditions that demonstrably increase the risk associated with residual petroleum constituents?	☐ Yes ☒ No
Media-Specific Criteria Candidate sites must satisfy all three of these media-specific criteria: **1. Groundwater:** To satisfy the media-specific criteria for groundwater, the contaminant plume that exceeds water quality objectives must be stable or decreasing in areal extent, and meet all of the additional characteristics of one of the five classes of sites:	
Is the contaminant plume that exceeds water quality objectives stable or decreasing in areal extent?	☒ Yes ☐ No ☐ NA
Does the contaminant plume that exceeds water quality objectives meet all of the additional characteristics of one of the five classes of sites? If YES, check applicable class: ☐ **1** ☐ **2** ☐ **3** ☐ **4** ☐ **5**	☐ Yes ☒ No ☐ NA

[1] Refer to the Low-Threat Underground Storage Tank Case Closure Policy for closure criteria for low-threat petroleum UST sites.

For sites with releases that have not affected groundwater, do mobile constituents (leachate, vapors, or light non-aqueous phase liquids) contain sufficient mobile constituents to cause groundwater to exceed the groundwater criteria?	☐ Yes ☐ No ☒ NA
2. Petroleum Vapor Intrusion to Indoor Air: The site is considered low-threat for vapor intrusion to indoor air if site-specific conditions satisfy all of the characteristics of one of the three classes of sites (a through c) or if the exception for active commercial fueling facilities applies. **Is the site an active commercial petroleum fueling facility?** Exception: Satisfaction of the media-specific criteria for petroleum vapor intrusion to indoor air is not required at active commercial petroleum fueling facilities, except in cases where release characteristics can be reasonably believed to pose an unacceptable health risk. **a. Do site-specific conditions at the release site satisfy all of the applicable characteristics and criteria of scenarios 1 through 3 or all of the applicable characteristics and criteria of scenario 4?** If YES, check applicable scenarios: ☐ **1** ☐ **2** ☐ **3** ☐ **4** **b. Has a site-specific risk assessment for the vapor intrusion pathway been conducted and demonstrates that human health is protected to the satisfaction of the regulatory agency?** **c. As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, has the regulatory agency determined that petroleum vapors migrating from soil or groundwater will have no significant risk of adversely affecting human health?**	☒ Yes ☐ No ☐Yes ☐ No ☒ NA ☐ Yes ☐ No ☒ NA ☐ Yes ☐ No ☒ NA
3. Direct Contact and Outdoor Air Exposure: The site is considered low-threat for direct contact and outdoor air exposure if site-specific conditions satisfy one of the three classes of sites (a through c). **a. Are maximum concentrations of petroleum constituents in soil less than or equal to those listed in Table 1 for the specified depth below ground surface (bgs)?** **b. Are maximum concentrations of petroleum constituents in soil less than levels that a site specific risk assessment demonstrates will have no significant risk of adversely affecting human health?** **c. As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, has the regulatory agency determined that the concentrations of petroleum constituents in soil will have no significant risk of adversely affecting human health?**	☐ Yes ☒ No ☐ NA ☐ Yes ☒ No ☐ NA ☐ Yes ☒ No ☐ NA