

September 21, 2004

Mr. Robert Schultz  
Alameda County Environmental Health Services (ACEHS)  
1131 Harbor Bay Parkway  
Alameda, CA 94502

Alameda County

SEP 22 2004

Environmental Health

Re: **Additional Investigation Workplan**  
Former Chevron SS #9-0261 (Site #304291)  
3884 First Street  
Livermore, California  
Cambria Project No. 31E-2036



Dear Mr. Schultz:

Cambria Environmental Technology, Inc. (Cambria) has prepared this additional investigation workplan for the site referenced above on behalf of ChevronTexaco Environmental Management Company. This workplan is generated in response to your letter, dated June 10, 2004, to Mr. Bruce Qvale of First Street LLC. Your letter to Mr. Qvale requests additional investigation to define the source and extent of hydrocarbons in soil beneath the site referenced above in order to consider case closure under the low risk soil scenario. Additionally, an evaluation of the potential for groundwater impact has been requested, as well as a survey of all wells within ¼ mile of the site. In response to First Street LLP's request to have Standard Oil Company (Chevron) named as a responsible party to the hydrocarbon impacts beneath the site, your letter states that insufficient evidence currently exists to make such a declaration. However, in subsequent correspondence with you, Chevron explained that they would perform this next investigation phase for business reasons. The objective of the proposed work is to define the extent and characteristics of hydrocarbons in soil beneath the site and to evaluate whether impacts are from the former Standard Oil service station operations or from other potential sources. A copy of your June 10, 2004 letter is included at Attachment A for your reference. The site background and our proposed investigation scope of work are described below.

## SITE BACKGROUND

**Site Description:** The site is a former gasoline service station, occupying a triangular shaped lot at the intersection of Portola Avenue and First Street in Livermore, California. According to records presented to ACEH, ChevronTexaco (Chevron), doing business as Standard Oil Company, leased the property from 1945 through 1967, and possibly through 1975. Although no definite construction date is available, aerial photo evidence indicates that service station facilities were

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# C A M B R I A



present on the site from as early as 1939 through, at least, August 1973 in two separate configurations. Copies of aerial photographs spanning the time frame from 1957 and 1984 were previously sent to ACEHS in May 2004 (personal communication, S. Gallardo, Geomatrix). A poor quality photocopy of the aerial photograph from 1939, obtained from Whittier College and provided by Geomatrix, is included with this workplan as Attachment B. The 1939 photograph indicates that the facilities were built while the property was under the ownership of Coast Manufacturing and Supply, and operated as a service station for a minimum of six years prior to Chevron entering into a lease for the property. As indicated on the aerial photos, the original facilities were located at the eastern end of the lot, with another structure, possibly a residence, on the western portion of the site. This site configuration is seen through the May 1969 aerial photo and also on the 1971 Standard Oil Company Demolition Plan (Attachment C). Chevron also produced a March 1971 ground and grade plan (Attachment D) illustrating the proposed new facilities. The August 1973 photo shows the reconstructed service station and indicates a reconfiguration of the intersection of Portola Avenue and First Street. The redeveloped facilities incorporated the area previously occupied by the structure mentioned above. A May 1978 aerial photo indicates a vacant lot with all facilities removed. The site appears to have continuously operated as an auto dealership from 1979 through the present. Local topography is relatively flat, gradually sloping toward the southeast, and at an approximate elevation of 520 ft above mean sea level (Figure 1). The surrounding area is primarily commercial with residential to the north and west. The site is currently utilized as Livermore Honda's used car lot.

**December 1999 Soil Boring Investigation:** A series of six soil borings were advanced at locations across the site to investigate the extent of hydrocarbons in soils beneath the site. It was reported that boring locations were based on surface geophysical surveys. Soil samples were collected and analyzed for total petroleum hydrocarbons as gasoline (TPHg), total petroleum hydrocarbons as diesel (TPHd), total petroleum hydrocarbons as motor oil (TPHmo) and total recoverable petroleum hydrocarbons (TRPH). Additionally, three soil samples from one boring were selected for analysis of benzene, toluene, ethylbenzene and total xylenes (BTEX). Analytic results of soil samples indicated low concentrations of TPHg and TPHd in boring B-2, located near the eastern end of the triangular lot, within the area labeled as "SS BLDG" of the original station facilities. Maximum concentrations of 630 and 280 milligrams per kilogram (mg/kg) TPHg and TPHd, respectively, were detected in samples from 10 feet below grade (fbg). Maximum concentrations of TRPH and TPHmo were detected in shallow samples collected at 5 fbg at 40,000 and 39,000 mg/kg, respectively. These concentrations decreased to 10,000 and 14,000 mg/kg, respectively at 10 fbg and were, essentially, below detection limits at 15 fbg. BTEX constituents were detected in the 5-foot sample from this boring at concentrations of 0.03, 0.62, 1.2 and 6.8 mg/kg, respectively. Low concentrations of only ethylbenzene and xylenes were detected in the 10-foot sample from boring B-2 and no BTEX constituents were detected in the 15-foot sample from this boring.

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## PROPOSED SCOPE OF WORK

The objective of the proposed scope of work is to further investigate the extent of hydrocarbons in subsurface soils and also provide data to evaluate to what extent Chevron may be responsible for residual hydrocarbon impacts. In order to accomplish these goals, Chevron and Cambria intend to conduct the following activities.

**Underground Utility Location:** Cambria will contact Underground Services Alert (USA), an underground utility locating service, to identify utility locations on and near the site.

**Site Health and Safety Plan:** Cambria will prepare a site safety plan to protect site workers. The plan will be kept on site at all times, reviewed and signed by all site workers.

**Permits:** Cambria will obtain soil boring permits from the Alameda County Zone 7 Water District prior to beginning field operations.

**Soil Borings:** Cambria will advance up to 17 soil borings using Geoprobe direct push technology. The locations of these borings are illustrated on Figure 2 and were chosen to investigate former UST and dispenser island locations based on Chevron's 1971 site plans. Soil borings will be continuously cored and logged, and soil samples will be collected at five foot intervals, at lithologic changes and at zones of obvious hydrocarbon impacts. The presence of hydrocarbon impacts will be evaluated based on visual observations or vapor readings from a photoionization detector (PID). Borings will be advanced to at least 25 fbg in the vicinity of former USTs and previous borings, and at least 15 fbg in the vicinity of former dispenser islands. These borings will continue, and samples will be collected, to a depth at least 10 feet below any evidence of hydrocarbons in the subsurface. Cambria's standard field procedure for Geoprobe Sampling is presented as Attachment E.

**Sampling Protocol:** Soil samples will be collected from each boring at appropriate depths to accomplish the stated objectives of this workplan. These samples will be collected within a 4-foot polyethylene macrocore barrel driven into native material. The sample tube will be sealed, logged onto a chain-of-custody form and delivered to a state-certified laboratory. Soil samples will be analyzed for TPHg, TPHd, TPHmo, benzene, toluene, ethylbenzene, xylenes and lead scavengers 1,2-DCA and EDB. Soil samples collected from the boring located at the former used oil UST will also be analyzed for chlorinated hydrocarbons, semi-volatile organic compounds and cadmium, chromium, lead, nickel and zinc in conformance with the Tri-Regional Board Staff Guidelines.

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**Chemical Analysis:** Selected soil samples will be analyzed for the following:

- TPHg, TPHd and TPHmo by EPA Method 8015,
- Benzene, toluene, ethylbenzene, xylenes, 1,2-DCA, EBD and chlorinated hydrocarbons by EPA Method 8260,
- Semi-volatile organic compounds by EPA Method 8270 and
- And California LUFT metal cadmium, chromium, lead, nickel and zinc.



**Soil and Water Disposal:** Any soil cuttings generated during this investigation will be placed on and covered with plastic. All generated rinsewater will be stored in drums pending proper disposal. These wastes will be transported to the appropriate Chevron-approved disposal facility following receipt of profiling analytic results.

**Well Survey:** Chevron will conduct a well survey of all wells within ¼ mile of the subject site. Well locations will be plotted on a vicinity map and available well data will be presented in an accompanying table. This well survey will be submitted under separate cover no later than October 8, 2004.

**Reporting:** Upon completion of field activities and review of the analytical results, we will prepare an investigation report that, at a minimum, will contain:

- Descriptions of the drilling and sampling methods;
- Boring logs;
- Tabulated soil analytic results;
- Analytic reports and chain-of-custody forms;
- Soil and water disposal methods;
- Conclusions and recommendations.

## SCHEDULE


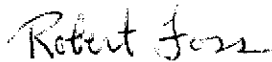
Cambria will proceed with the proposed scope of work upon receiving written approval from the ADEH. We will submit a report documenting our results approximately six weeks after receipt of sampling results.

# C A M B R I A

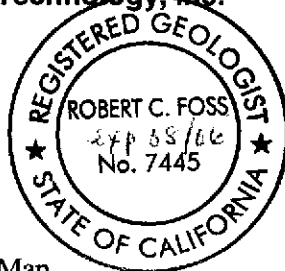
## CLOSING

We appreciate your review and comments regarding this workplan. We, along with representatives of First Street, LLC, are available to meet with you to discuss any components of this Workplan. Please contact Robert Foss at (510) 420-3348 if you have any questions or comments.

Sincerely,  
**Cambria Environmental Technology, Inc.**



Robert Foss, R.G.  
Associate Geologist

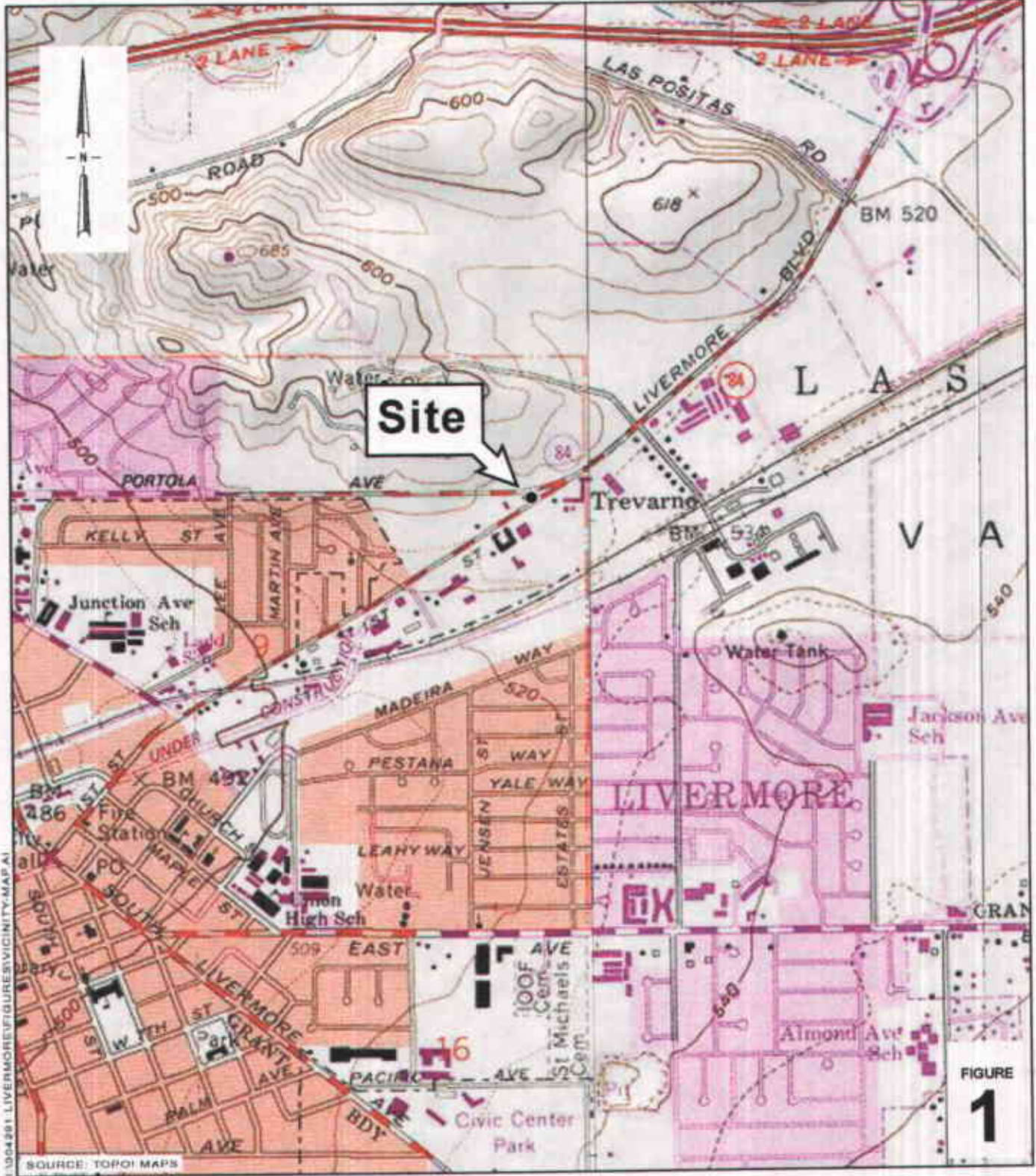


Figures:           1 – Vicinity Map  
                      2 – Proposed Soil Boring Locations

Attachments:    A – ACEHS letter of June 10, 2004  
                      B – 1939 Aerial Photograph, Source: Geomatrix, Inc.  
                      C – 1971 Standard Oil Company, Demolition Plan  
                      D – 1971 Standard Oil Company, Ground & Grade With Product Piping  
                      E – Standard Field Procedures for Geoprobe Sampling

cc:                Ms. Karen Streich, ChevronTexaco, P.O. Box 6012, San Ramon, CA 94583  
                      Ms. Sandi L. Nichols, Stoel Rives, 111 Sutter Street, Suite 700, San Francisco,  
                          CA 94104  
                      Mr. Jon Robbins, ChevronTexaco, P.O. Box 6012, San Ramon, CA 94583  
                      Ms. Susan Gallardo, GeoMatrix Consultants, Inc., 2101 Webster Street,  
                          12<sup>th</sup> Floor, Oakland, CA 94612

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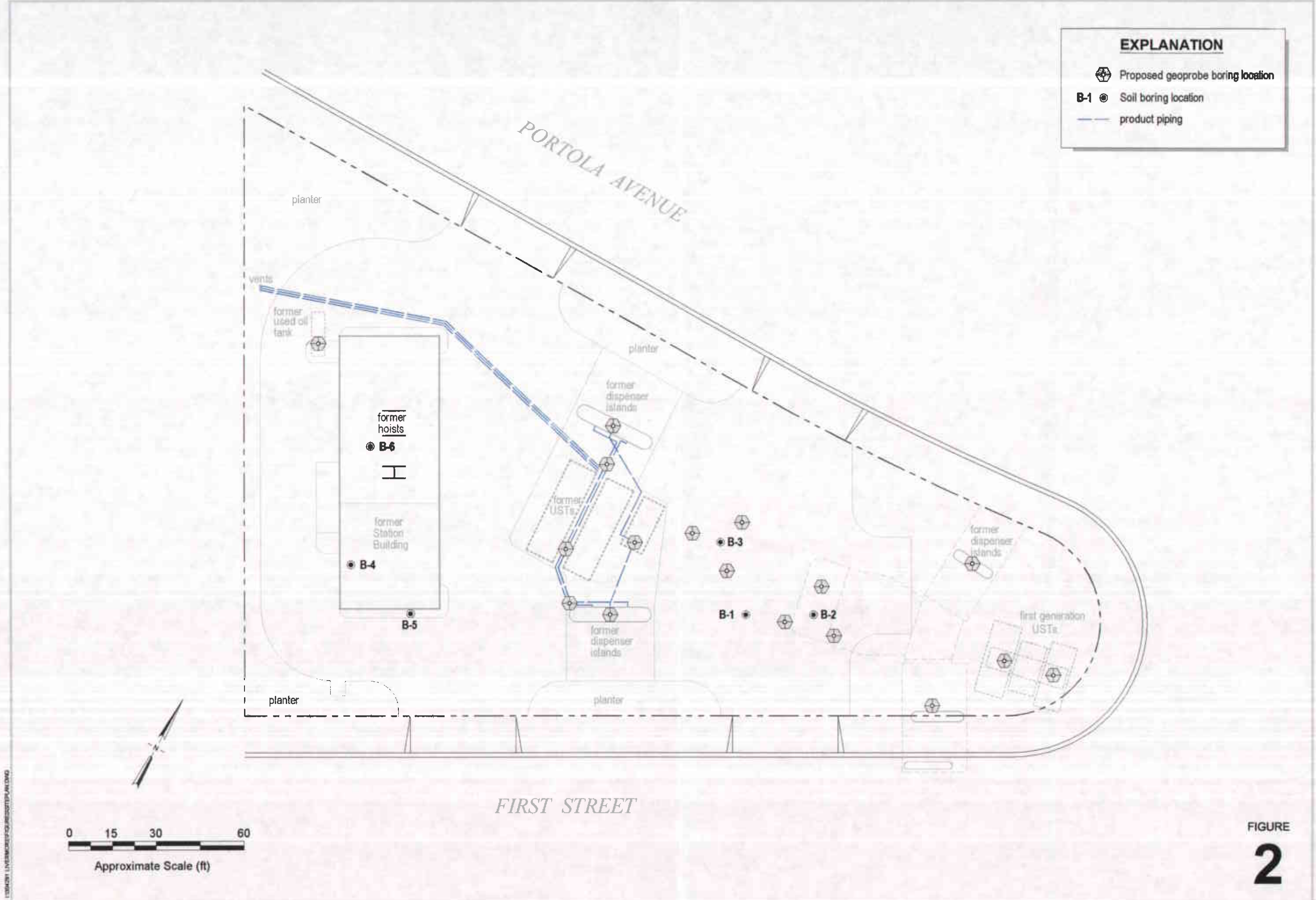
0 1/8 1/4 1/2 1  
SCALE : 1" = 1/4 MILE

**Former Standard Oil Service Station 9-0261 (Site No. 304291)**  
3884 First Street  
Livermore, California



C A M B R I A

Vicinity Map



EXPLANATION	
	Proposed geoprobe boring location
<b>B-1</b> ●	Soil boring location
	product piping

FIGURE  
**2**

**ATTACHMENT A**  
**ACEHS letter of June 10, 2004**



ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



June 10, 2004

Mr. Bruce H. Qvale  
First Street LLC  
3800 1<sup>st</sup> St.  
Livermore, CA 94551

Subject: Fuel Leak Case No. RO2611  
Livermore Honda  
3884 1<sup>st</sup> St.  
Livermore, California

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

Dear Mr. Qvale:

Alameda County Environmental Health (ACEH) staff have reviewed your February 18, 2004 *Request for Agency Consultation* (and the reports enclosed therewith) for the above-referenced site. Geomatrix Consultants, Inc. (Geomatrix) prepared the request on your behalf and stated that the site should qualify for "a no further action status under a low risk soil scenario." In addition and at your request, ACEH staff met with Geomatrix and representatives of First Street LLC on May 6, 2004, and reviewed the following documents:

- Geomatrix's *Summary of Site Information* submitted on May 6, 2004;
- Chain of title and lease agreement documents submitted electronically on May 11 and 12, 2004; and
- Historical aerial photographs of the site for the years 1957, 1959, 1966, 1973, 1978, 1980, 1984 submitted by Geomatrix on May 24, 2004.

ACEH has listed this case in our database of fuel leak sites, and sent Notice of Responsibility to First Street LLC. Please review the following technical comments and submit the requested report following the schedule below.

#### BACKGROUND INFORMATION

The site overlies a sensitive drinking water aquifer. No active, permitted drinking water wells have been located within 1/4-mile of the site; however, there is existing beneficial use of the underlying Livermore Valley groundwater basin (DWR No. 2-10) and the potential presence of improperly abandoned wells and other vertical conduits has not been evaluated. Currently the site is paved and is used as a car sales lot. The property is in the midst of a transaction, and redevelopment including a change of site use may be contemplated.

According to the documents submitted to ACEH, Coast Manufacturing & Supply Company purchased the site in 1917, and leased the property to Standard Oil Company in 1945 and again in 1965. Wells Fargo Bank purchased the site in 1967. The aerial photographs provided by Geomatrix suggest that an automotive service station was operated at the site between at least 1957 and 1969. The 1973 photograph submitted by Geomatrix shows an apparent change in the site development configuration. Based on City of Livermore records, Geomatrix states that Standard Oil occupied the site from 1967 until at least 1975.

To evaluate the potential presence of subsurface UST system components and to evaluate the associated environmental concern, Tom Edwards & Associates (TEA) performed a subsurface investigation of the site in December 1999. TEA's investigation included a geophysical survey to identify possible UST, former UST pit, and subsurface piping locations. Based on the geophysical survey results, TEA drilled six soil borings to 20 ft bgs at the site and analyzed soil samples for petroleum hydrocarbons. Results from this work detected up to 40,000 mg/kg TRPH, 39,000 TPHmo, 280 mg/kg TPHg, 0.03 mg/kg benzene, 0.62 mg/kg toluene, 0.62 mg/kg ethylbenzene, and 6.8 mg/kg xylenes in site soil. Geomatrix states that the petroleum impacted soil is limited vertically. According to TEA's December 1999 *Preliminary Subsurface Investigation Report*, the geophysical survey identified six possible UST or former UST pit locations and an associated 20-ft long piping run. The December 1999 investigation included four borings in potential former or current UST locations and one boring in a potential 20-ft long piping run location. No USTs or piping were encountered during drilling.

### RESPONSE TO RP DESIGNATION REQUEST

Geomatrix has requested that Alameda County name Standard Oil as a responsible party for the identified contamination. ACEH staff have considered this request and have the following concerns:

- No documentation has been provided indicating the location of the detected subsurface contamination in relation to the former site UST system or other features of the former service station. A map of the geophysical survey results with superimposed sampling locations was not submitted. Furthermore, the data presented to the County indicates that the highest soil impact is at 5 ft bgs in boring B-2 and that concentrations decrease with depth. This concentration pattern is not consistent with typical UST releases where concentrations are typically highest beneath the USTs (at least 8 ft bgs).
- The Preliminary ESA performed in 1999 did not rule out other potential sources of petroleum hydrocarbons that could have contributed to or been the source of the impacts detected in site soil. In particular, the Golder 1999 report states, "The nature of operations conducted by Coast Manufacturing and Supply Company on the subject property is unknown." Also the 1973 aerial photograph appears to suggest redevelopment of the service station prior to paving and use as a car sales lot.

Accordingly, there is insufficient information at this time for ACEH to name Standard Oil Company (currently ChevronTexaco) as a responsible party for the site. Please note that this finding also requires that ACEH reconsider placement of the case in the Local Oversight Program (LOP). ACEH will notify you once we have transferred your case to our Toxics Program.

### TECHNICAL COMMENTS

#### Site Characterization

In order to consider a site for case closure under a low risk soil scenario, ACEH requires that soil contamination be defined. At your site, the source of petroleum hydrocarbons needs to be identified, the vertical and horizontal extent of petroleum hydrocarbons need to be defined, and the potential for the site to impact groundwater needs to be evaluated. If you conclude that the former service station was the source of the reported petroleum hydrocarbons, all areas of the site susceptible to impact from the various components of the former UST system should be addressed (including former UST, piping and dispenser locations). Please include your site

conceptual model as background information supporting your proposed scope of work. Please submit a Work Plan describing your proposed investigation by the date specified below.

#### Well Survey

ACEH requests that you locate all wells (monitoring and production wells: active, inactive, standby, decommissioned, abandoned and dewatering, drainage and cathodic protection wells) within a 1/4-mile radius of the subject site. Submittal of map(s) showing the location of all wells identified in your study, and the use of tables to report the data collected as part of your survey are required. We recommend that you obtain well information from both Zone 7 Water Agency and the State of California Department of Water Resources, at a minimum. Please include an analysis and interpretation of your findings, and report your results in the work plan requested below.

#### Professional Certification and Cover Letters

Please note that to be considered a valid technical report you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature and statement of professional certification. In addition, all work plans and technical reports submitted to this office must be accompanied by a cover letter from the responsible party that states the following: "I declare under penalty of perjury, that the information and/or recommendations contained in the attached proposal or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company.

#### **REPORT SUBMITTAL**

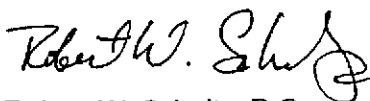
We request that you submit a **Work Plan** for additional subsurface investigation by **July 21, 2004**. ACEH requests this report pursuant to the Regional Water Quality Control Board's authority under Section 13267 of the California Water Code.

#### **AGENCY OVERSIGHT**

If it appears as though significant delays are occurring or reports are not submitted as requested we will consider referring your case to the County District Attorney or other appropriate agency, for enforcement. Enforcement may include administrative action or monetary penalties of up to \$10,000 per day for each day of violation of the California Health and Safety Code, Division 20, Chapter 6.75.

Please call me at (510) 567-6719 with any questions regarding this case.

Sincerely,



Robert W. Schultz, R.G.  
Hazardous Materials Specialist

Cc: Sandi Nichols, Stoel Rives, LLP, 111 Sutter St., Ste. 700, San Francisco, CA 94104  
Susan Gallardo, Geomatrix Consultants, Inc., 2101 Webster St., 12<sup>th</sup> Floor, Oakland, CA 94612  
Matt Katen, Zone 7 Water District, 5997 Parkside Drive, Pleasanton, CA 94588  
Karen Streich, ChevronTexaco, P.O. Box 6012 San Ramon, CA 94583-2324

**ATTACHMENT B**

**1939 Aerial Photograph, Source: Geomatrix, Inc.**



1939