ALEX BRISCOE, Agency Director

ENVIRONMENTAL HEALTH DEPARTMENT ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250

Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

March 25, 2013

Hooshang & Simin Hadjian 16210 Foothill Boulevard San Leandro, CA 94578

(sent via electronic mail to: hooshanghadjian@sbcglobal.net)

Subject:

Closure Transmittal; Fuel Leak Case No. RO0000457 and Geotracker Global ID T0600102077;

Foothill Gas, 16210 Foothill Boulevard, San Leandro, CA 94578

## Dear Hadjian & Simin Hooshang:

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Environmental Health (ACEH) is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed.

## SITE INVESTIGATION AND CLEANUP SUMMARY

Please be advised that the following conditions exist at the site:

- A soil vapor survey has not conducted at the site. Redevelopment in proximity to the UST system will require
  evaluation of soil vapor, at a minimum.
- The disposition of UST excavation spoils, and the additionally excavated product line soil, is unknown.
- Review of the Creek & Watershed Map of Hayward & San Leandro, (Oakland Museum of California, 1997) indicates the sites sits over a former, filled, shallow swale and that a storm drain appears to directly underlie the site. The storm drain trends approximately south-southeast. The unusual flow direction observed at the site may in part be explained by this situation.
- MTBE was the only fuel oxygenate analyzed for in soil. DIPE, ETBE, TAME, TBA, EDB, and EDC were not analyzed for in soil.
- A preferential pathway, utility survey, or well survey report was not completed for this site. A well survey for the site at 16304 Foothill Blvd (Chevron: RO0000368) was used instead.
- Groundwater sampling of an unregistered residential well by the consultant for a nearby Chevron site documented the presence of 2.3 µg/l MTBE in groundwater. Contamination in this residential irrigation well has been principally ascribed to the Chevron case due to both the general groundwater flow direction at both sites, and due to the former presence of MTBE at significantly higher concentrations at the Chevron site (up to 24,000 µg/l).

Hadjian & Simin Hooshang: RO0000457 March 25, 2013, Page 2

- The case closure for this fuel leak site is granted for the current commercial land use as a gasoline service station. If a change in land use to any residential or other conservative land use scenario occurs at this site; Alameda County Environmental Health (ACEH) must be notified as required by Government Code Section 65850.2.2. A soil vapor survey has not been conducted as a part of this investigation. Redevelopment in proximity to the UST system will require evaluation of soil vapor, at a minimum. ACEH will re-evaluate the case upon receipt of approved development/construction plans.
- Excavation or construction activities in areas of residual contamination require planning and implementation of appropriate health and safety procedures by the responsible party prior to and during excavation and construction activities.

If you have any questions, please call Mark Detterman at (510) 567-6876. Thank you.

Sincerely,

Donna L. Drogos, P.E.

Division Chief

Enclosures: 1. Remedial Action Completion Certificate

2. Case Closure Summary

cc: Ms. Cherie McCaulou (w/enc.), SF- Regional Water Quality Control Board, 1515 Clay Street, Suite 1400, Oakland, CA 94612, (sent via electronic mail to CMacaulou@waterboards.ca.gov)

Donna Drogos, (sent via electronic mail to <a href="mailto:donna.drogos@acgov.org">donna.drogos@acgov.org</a>)
Mark Detterman (sent via electronic mail to <a href="mailto:mark.detterman@acgov.org">mark.detterman@acgov.org</a>)
Electronic File, GeoTracker

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



DEPARTMENT OF ENVIRONMENTAL HEALTH
OFFICE OF THE DIRECTOR
1131 HARBOR BAY PARKWAY
ALAMEDA, CA 94502
(510) 567-6777
FAX (510) 337-9135

#### REMEDIAL ACTION COMPLETION CERTIFICATION

March 25, 2013

Hooshang & Simin Hadjian 16210 Foothill Boulevard San Leandro, CA 94578

(sent via electronic mail to: hooshanghadjian@sbcglobal.net)

Subject: Case Closure for Fuel Leak Case No. RO0000457 and Geotracker Global ID T0600102077; Foothill Gas,

16210 Foothill Boulevard, San Leandro, CA 94578

Dear Hadjian & Simin Hooshang:

This letter confirms the completion of a site investigation and remedial action for the underground storage tanks formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25299.37 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.77 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

Claims for reimbursement of corrective action costs submitted to the Underground Storage Tank Cleanup Fund more than 365 days after the date of this letter or issuance or activation of the Fund's Letter of Commitment, whichever occurs later, will not be reimbursed unless one of the following exceptions applies:

- Claims are submitted pursuant to Section 25299.57, subdivision (k) (reopened UST case); or
- Submission within the timeframe was beyond the claimant's reasonable control, ongoing work is required
  for closure that will result in the submission of claims beyond that time period, or that under the
  circumstances of the case, it would be unreasonable or inequitable to impose the 365-day time period.

This notice is issued pursuant to subdivision (h) of Section 25299.37 of the Health and Safety Code. Please contact our office if you have any questions regarding this matter.

Sincerely,

Ariu Levi Director

## Alameda County Environmental Health

## CASE CLOSURE SUMMARY LEAKING UNDERGROUND FUEL STORAGE TANK - LOCAL OVERSIGHT PROGRAM

## I. AGENCY INFORMATION

Date: July 26, 2012

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway	
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 567-6876	
Responsible Staff Person: Mark Detterman	Title: Senior Hazardous Materials Specialist	

#### **II. CASE INFORMATION**

Site Facility Name: Foothill Gas				
Site Facility Address: 16210 Foothill Boulevard, San Leandro, CA 94578				
RB Case No.: 01-2261 STID No.: 1262 LOP Case No.: RO0000457				
URF Filing Date: 1/29/97	Geotracker ID: T0600102077 APN: 080A-0187-009-02		080A-0187-009-02	
Responsible Parties	Addresses		Phone Numbers	
Hadjian and Simin Hooshang	16210 Foothill Boulevard San Leandro, CA 94578-2105			

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
	5,000	Gasoline	Removed	1/28/1997
	5,000	Gasoline	Removed	1/28/1997
	8,000	Gasoline	Removed	1/28/1997
m = 47 m =	8,000	Gasoline	Removed	1/28/1997
	Piping		Removed	1/28/1997

## III. RELEASE AND SITE CHARACTERIZATION INFORMATION

one tank, and suspected in others.			
Site characterization complete? Yes Date Approved By Oversight Agency:			
Monitoring wells installed? Yes	Number: 3	Proper screened interval? Yes *	
Highest GW Depth: 9.66 ft bgs	Lowest GW Depth: 11.90 ft bgs	Flow Direction: East	

<sup>\*</sup> Well MW-1 appears to monitor a deeper zone of the same water-bearing zone monitored by wells MW-2 and MW-3.

Summary of Production Wells in Vicinity: Two historic residential wells were located by a well survey for a Chevron service station (16304 Foothill Blvd; RO0000368) at a distance of 940 feet and 1570 ft to the south-
southwest of the site. Since well installation both addresses have been redeveloped and the condition or existence
of the wells is unknown. Two additional unregistered residential wells were discovered in a door to door well survey conducted for the Chevron station. The discovered wells are located on Bevil Way, at an approximate distance of
1,450 feet south-southwest of the site. One was reported to be buried and unused. The second is reported to be used once a month for irrigation purposes only. Construction details for both are unknown. The remaining well was
sampled by Chevron for TPHg, BTEX, MTBE, ETBE, TAME, DIPE, and TBA on February 13, 2012. Groundwater in
the well contained 2.3 µg/l MTBE. While impacts are documented, Chevron's consultant has found that this concentration does not represent a significant risk, principally because the concentration is below existing
contaminant health risk goals at this time. While ultimately with some uncertainty, contamination in this residential irrigation well is principally ascribed to the Chevron case due to both the general groundwater flow direction at both
sites, and due to the former presence of MTBE at significantly higher concentrations at the Chevron site (up to
24,000 μg/l).

Are drinking water wells affected? No Aquifer Name: East Bay Plain			
Is surface water affected? No	Nearest SW Name: Lake Chabot, approximately 1.5 miles north		
Off-Site Beneficial Use Impacts (Addresses/	Locations): Residential irrigation well; 16308 Bevil Way, San Lorenzo		
Reports on file? Yes	Where are reports filed? Alameda County Environmental Health		

H				
TREATMENT AND DISPOSAL OF AFFECTED MATERIAL				
Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date	
Tank	2- 5,000 gallon 2-8,000 gallon	Reported disposed of at Erickson, Inc, Richmond, CA	1/28/1997	
Piping	Not reported	Reported disposed of at Erickson, Inc, Richmond, CA	1/28/1997	
Free Product	Not Reported			
Soil	Not Reported		pp group on provided the Market	
	45 000 vallens	Groundwater removed during tank excavation in January, 1997. Water was	1/27/1997	
Groundwater	15,000 gallons 127 gallons	disposed of at an unknown location.  • Groundwater removed during purging of wells and stored on site. Disposal location is unknown.	Purges occurred 10/26/1998 and 11/2/1998	

## MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS BEFORE AND AFTER CLEANUP (Please see Attachments 1 through 6 for additional information on contaminant locations and concentrations)

0	Soil (ppm)		Water (ppb)		
Contaminant	Before	After	Before	After	
TPH (Gas)	870 <sup>1</sup>	870	4,000 <sup>1</sup>	<50 <sup>2</sup>	
TPH (Diesel)	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	
TPH (Motor Oil)	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	
Oil and Grease	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	
Benzene	2.3 <sup>1</sup>	1.8 <sup>1</sup>	110 <sup>1</sup>	<0.5 <sup>2</sup>	
Toluene	10 <sup>1</sup>	2.3 <sup>1</sup>	88 <sup>1</sup>	<0.5 <sup>2</sup>	
Ethylbenzene	3.0 <sup>1</sup>	3.0 <sup>1</sup>	46 <sup>1</sup>	<0.5 <sup>2</sup>	
Xylenes	98 <sup>1</sup>	98 <sup>1</sup>	620 <sup>1</sup>	<0.5 <sup>2</sup>	
Heavy Metals (Cd, Cr, Pb, Ni, Zn)	4.8 <sup>1,*</sup>	4.8 <sup>1</sup> .*	Not Analyzed	Not Analyzed	
MTBE	9.4 <sup>3</sup> **	9,4 <sup>3</sup> **	2,800 <sup>3</sup> ***	1.4 4 ***	
Other (8240/8270)	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	

Sample was collected from the original tank or product line excavations on January 28 and 30, 1997.

<sup>&</sup>lt;sup>2</sup> Groundwater sample collected on July 19, 2000.

MTBE; result from the original tank excavation on January 30, 1997.

MTBE; result from groundwater monitoring event on July 19, 2000.

<sup>\*</sup> Lead was the only heavy metal analyzed in soil.

<sup>\*\*</sup>MTBE was the only fuel oxygenate analyzed in soil.

<sup>\*\*\*</sup>DIPE, ETBE, TAME, and TBA were only analyzed once in groundwater during a groundwater monitoring event on July 19, 2000 and reported as <1.0 ppb, <1.0 ppb, <5.0 ppb, respectively. EDB & EBC were not analyzed.

Site History and Description of Corrective Actions:

The site is currently a Valero gas station on the north side of Foothill Boulevard. The site is surrounded by residential and commercial properties, with the MacArthur Freeway located approximately 100 feet to the southwest. The current site topology has a slight slope toward the southwest; this appears to be in part due to the presence of fill soils beneath the site as interpreted from existing bore logs. Soils close to the surface are stiff, gravelly clays, while deeper soils are Cenozoic sandstone and shale deposits. Review of the *Creek & Watershed Map of Hayward & San Leandro*, (Oakland Museum of California, 1997) indicates the sites sits over a former, filled, shallow swale and that a storm drain appears to directly underlie the site. The storm drain trends approximately south-southeast. The unusual flow direction observed at the site may in part be explained by this situation.

Two 5,000 gallon and two 8,000 gallon USTs were removed from the site on January 28, 1997. During the excavation, product emulsion was observed on the surface of the water. Groundwater was encountered at approximately 11 feet below ground surface (fbgs). Soil samples were collected on January 28, 1997 under the former island locations and along the piping trench (P-1 through P-9) at depths between two to three fbgs. Additional soil samples (P-10 and P-11) were collected on January 30, 1997, at depths of 6 and 9.5 feet bgs, respectively. Soil samples were also collected from the tank pit (T-1 through T-5), and water sample W-1 was collected from the excavation. The greatest concentrations of contamination were found in the samples taken from beneath the islands and in the piping trench. Soil samples contained concentrations up to 870 mg/kg Total Petroleum Hydrocarbons as gasoline (TPHg) and 2.3 mg/kg benzene (P-3 and P-5, respectively). The water sample collected from the excavation pit contained 4,000 µg/l TPHg, 110 µg/L benzene, and 2,800 µg/l MTBE. Approximately 15,000 gallons of water were removed from the tank pit, but it is not known if groundwater extraction took place prior to groundwater sampling. The disposition of UST excavation spoils, and the additionally excavated product line soil, was not reported.

On October 13, 1998 three groundwater monitoring wells (MW-1 through MW-3) were installed. A total of eight soil samples were collected during the monitoring well installation at selected five-foot intervals. During drilling, a faint odor was noted at three feet bgs in MW-3; PID readings are not documented. Only the soil samples collected during MW-3 monitoring well installation contained contamination, with the highest concentrations at 5.5 feet bgs up to 1.8 mg/kg methyl tertiary-butyl ether (MTBE), 0.005 mg/kg ethylbenzene, and 0.019 mg/kg total xylenes. Groundwater in well MW-1 was encountered at a depth of 32 feet bgs, while groundwater was encountered in wells MW-2 and MW-3 at a depth of approximately 16 feet bgs. After drilling groundwater stabilized at approximately 11.5 feet bgs in all wells, and ranged between 9.66 and 11.68 ft bgs over the next year of groundwater monitoring. Analysis of the groundwater samples revealed that all analytes were non-detectable standards limits of reporting, except MTBE. Groundwater in well MW-3 contained 190 µg/l MTBE after installation.

Groundwater monitoring and sampling at the site occurred quarterly between November 1998 and July 2000. Monitoring well MW-3 consistently had the highest concentrations of MTBE, with a maximum of 340 ppb on February 2, 1999 and a minimum of 1.2 ppb on July 19, 2000. Ethylbenzene and xylenes were detected in groundwater samples from MW-1 on January 7, 2000 at concentrations of 0.52 ppb and 2.3 ppb, respectively.

#### IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes

Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes

Does corrective action protect public health for current land use? Alameda County Environmental Health staff does not make specific determinations concerning public health risk. However, based upon the information available in our files to date, it does not appear that the release would present a risk to human health based upon current land use and conditions.

Site Management Requirements: The case closure for this fuel leak site is granted for the current commercial land use as a gasoline service station. If a change in land use to any residential or other conservative land use scenario occurs at this site; Alameda County Environmental Health (ACEH) must be notified as required by Government Code Section 65850.2.2. A soil vapor survey has not been conducted as a part of this investigation. Redevelopment in proximity to the UST system will require evaluation of soil vapor, at a minimum. ACEH will reevaluate the case upon receipt of approved development/construction plans.

Excavation or construction activities in areas of residual contamination require planning and implementation of appropriate health and safety procedures by the responsible party prior to and during excavation and construction activities.

Should corrective action be reviewed if land use changes? Yes			
Was a deed restriction or deed notification file	ed? No	Date Recorded:	
Monitoring Wells Decommissioned: No Number Decommissioned: 0		Number Retained: 3	
List Enforcement Actions Taken: None			
List Enforcement Actions Rescinded: None			

#### V. ADDITIONAL COMMENTS, DATA, ETC.

#### Considerations and/or Variances:

- A soil vapor survey has not conducted at the site. Redevelopment in proximity to the UST system will require
  evaluation of soil vapor, at a minimum.
- The disposition of UST excavation spoils, and the additionally excavated product line soil, is unknown.
- Review of the Creek & Watershed Map of Hayward & San Leandro, (Oakland Museum of California, 1997) indicates the sites sits over a former, filled, shallow swale and that a storm drain appears to directly underlie the site. The storm drain trends approximately south-southeast. The unusual flow direction observed at the site may in part be explained by this situation.
- MTBE was the only fuel oxygenate analyzed for in soil. DIPE, ETBE, TAME, TBA, EDB, and EDC were not analyzed for in soil.
- A preferential pathway, utility survey, or well survey report was not completed for this site. A well survey for the site at 16304 Foothill Blvd (Chevron; RO0000368) was used instead.
- Groundwater sampling of an unregistered residential well by the consultant for a nearby Chevron site documented the presence of 2.3 µg/l MTBE in groundwater. Contamination in this residential irrigation well has been principally ascribed to the Chevron case due to both the general groundwater flow direction at both sites, and due to the former presence of MTBE at significantly higher concentrations at the Chevron site (up to 24,000 µg/l).

#### Conclusion:

Alameda County Environmental Health staff believe that the levels of residual contamination do not pose a significant threat to water resources, public health and safety, and the environment under the current commercial land use as a gasoline service station based upon the information available in our files to date. No further investigation or cleanup for the fuel leak case is necessary at this time. However, as specified in the Site Management Requirements, re-evaluation of this case may be required if land uses changes to any other commercial, residential, or other conservative land use scenario. ACEH staff recommend closure for this site.

## VI. LOCAL AGENCY REPRESENTATIVE DATA

Prepared by: Mark Detterman, P.G., C.E.G.	Title: Senior Hazardous Materials Specialist
Signature: Make	Date: 7/27/12
Approved by: Donna L. Drogos, P.E.	Title: Division Chief
Signature: Lorm Hills	Date: 07/27/12

This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions.

#### VII. REGIONAL BOARD NOTIFICATION

Regional Board Staff Name: Cherie I	VIcCaulou	Title: Engineering Geologist	18
Notification Date: 7	30/12		

## VIII. MONITORING WELL DECOMMISSIONING

Date Requested by ACEH:	Date of Well Decommissioning Report: 3 15 2013			
All Monitoring Wells Decommissioned: Ves No	Number Decommissioned:	3	Number Retained:	
Reason Wells Retained:				
Additional requirements for submittal of groundwater data from retained wells:				
ACEH Concurrence - Signature:	2/2	D	Date: 3/27/2013	
			. ,	

## Attachments:

- 1. Site Vicinity Maps (2 pp)
- 2. Site Plans (3 pp)
- 3. Soil Analytical Data (4 pp)
- 4. Groundwater Elevation and Analytical Data (3 pp)
- 5. Boring Logs (3 pp)

This document and the related CASE CLOSURE LETTER & REMEDIAL ACTION COMPLETION CERTIFICATE shall be retained by the lead agency as part of the official site file.

## Detterman, Mark, Env. Health

From:

MCcaulou, Cherie@Waterboards [Cherie.MCcaulou@waterboards.ca.gov]

Sent:

Monday, July 30, 2012 6:19 PM

To:

Detterman, Mark, Env. Health

Subject:

RE: Case Closure Summary for Foothill Gas (RO457)

Mark – I received your notification and recommendation for case closure of Case No. RO457. We have no comments. Thank you.

From: Mark Env. Health Detterman [mailto:Mark.Detterman@acgov.org]

**Sent:** Monday, July 30, 2012 4:14 PM **To:** MCcaulou, Cherie@Waterboards

Subject: Case Closure Summary for Foothill Gas (RO457)

Cherie,

Attached is a closure summary for RO0000457 Foothill Gas located at 16210 Foothill Blvd in San Leandro, CA to comply with the RWQCB's 30-day review period. If no comments from the RWQCB are received within the 30-day review period, ACEH will proceed with case closure.

Please contact me if you have any comments or questions regarding the subject site. Regards,

Mark Detterman

Senior Hazardous Materials Specialist, PG, CEG

Alameda County Environmental Health

1131 Harbor Bay Parkway

Alameda, CA 94502

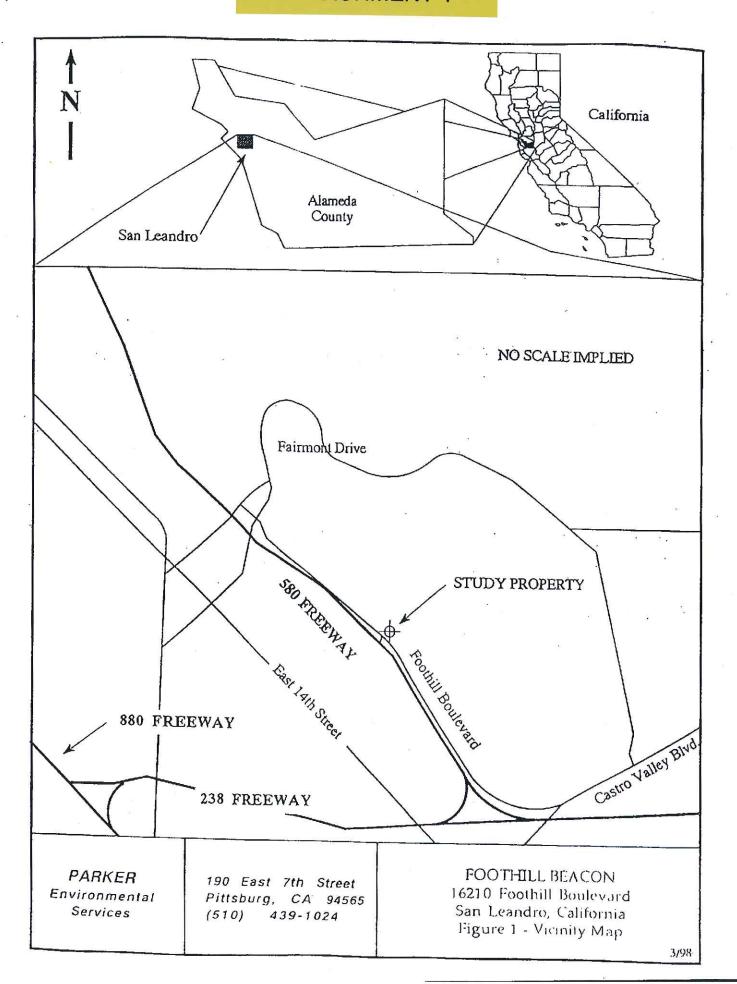
Direct: 510.567.6876 Fax: 510.337.9335

Email: mark.detterman@acgov.org

PDF copies of case files can be downloaded at:

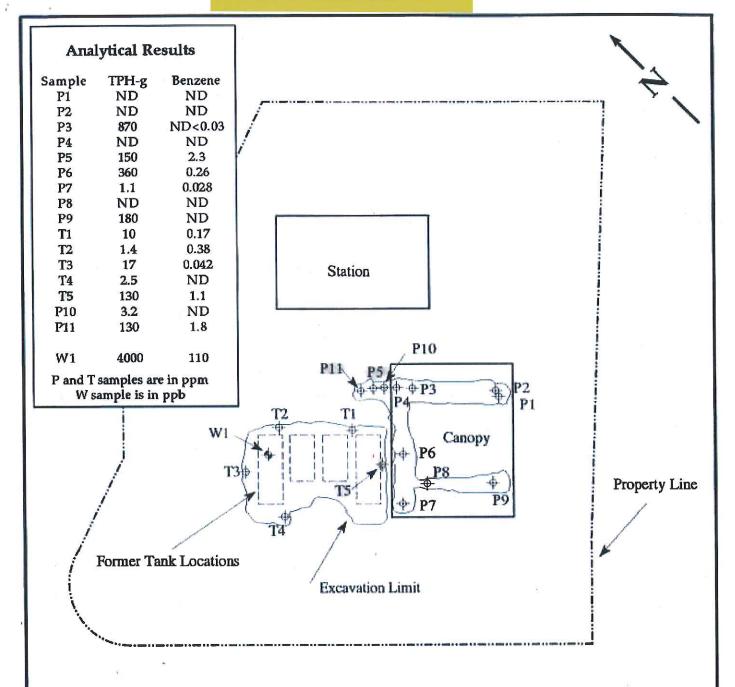
http://www.acgov.org/aceh/lop/ust.htm

## **ATTACHMENT 1**





## **ATTACHMENT 2**



## FOOTHILL BOULEVARD

Samples were obtained on January 28 and 30, 1997.

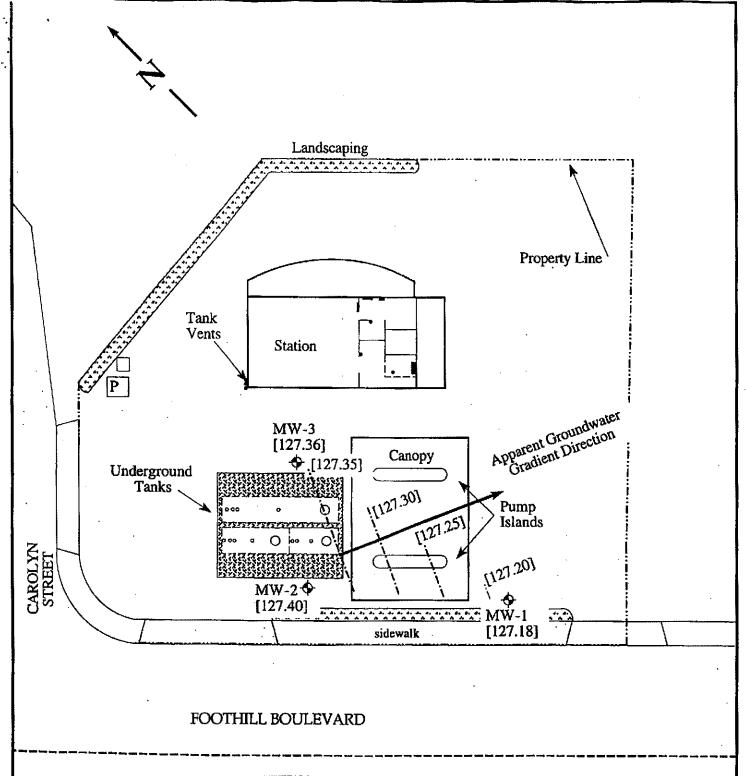
Scale: 1" = 30'
Locations of Site Features are Approximate

Project 130-05-01

PARKER . Environmental Services 190 East 7th Street Pittsburg, CA 94565 (510) 439-1024

UST Removal Sampling Points
Beacon Station
16210 Foothill Bouldvard
San Leandro, California

2/97



## 580 FREEWAY

= monitoring well

[X.X] = groundwater elevation

= line of equal elevation

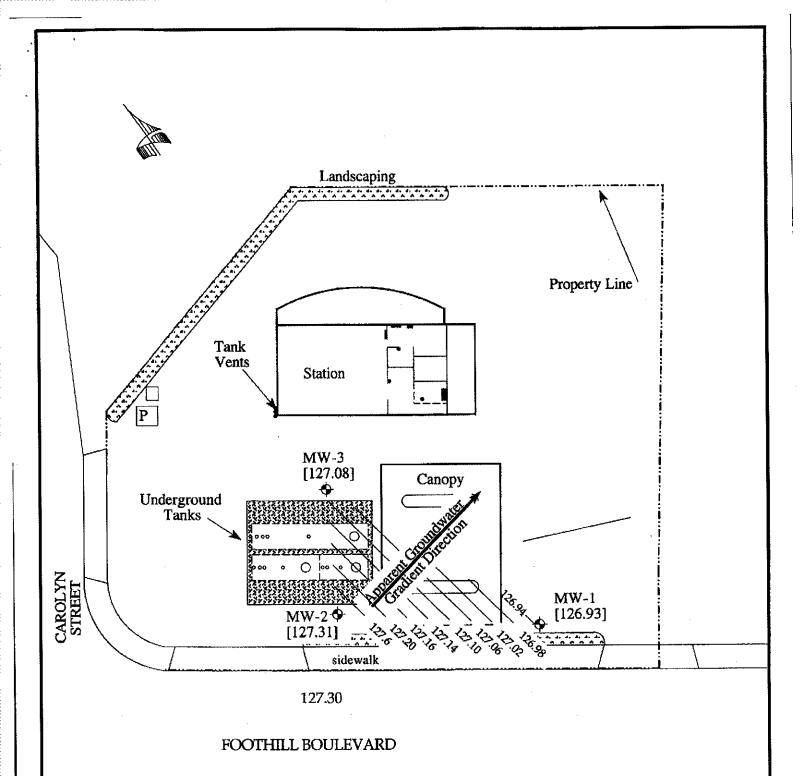
Location of site features are approximate.

Scale: 1'' = 30'

PARKER Environmental Services 190 East 7th Street Pittsburg, CA 94565 (925) 439-1024

Figure 3 - Groundwater Gradient Foothill Beacon 16210 Foothill Boulevard San Leandro, CA

12/98



## **580 FREEWAY**

Samples Taken on July 19, 2000

→ = monitoring well

[X.X] = groundwater elevation

= line of equal elevation

Location of site features are approximate.

Scale: 1'' = 30'

PARKER Environmental Services 190 East 7th Street Pittsburg, CA 94565 (925) 439-1024

Figure 2 - Groundwater Gradient Foothill Beacon 16210 Foothill Boulevard San Leandro, CA

7/00

## **ATTACHMENT 3**

California Petroleum Equipment Project 130-05-01

Table 1
Soil Sample Analytical Results
Foothill Beacon, 16210 Foothill Boulevard
San Leandro, California

Sample	TPH-gas	MTBE	benzene	toluene	ethyl-benzene	xylenes
1/28/97						
P-1@2'	ND	ND	ND	ND	ND	ND
P-2@2'	ND	ND	ND	ND	ND	0.011
P-3@2'	870	7.4	ND<0.03	0.59	ND<0.03	98
P-4@2'	ND	ND	ND	ND	ND	ND
P-5@3'	150	110	2.3	10	2.3	19
P-6@31	360	0.43	0.26	1.5	1.0	14
P-7@31	1.1	0.70	0.028	0.074	0.009	0.031
P-8@2'	ND	0.16	ND	ND	ND	0.012
P-9@2'	180	1.5	ND	0.093	0.16	0.32
1/30/97			50.00 o <u>mo</u>	0.000 <del>- 0</del> .000 <del>-</del>		
T-1@10.5'	10	9.4	0.17	0.23	0.074	0.68
T-2@10.5	1.4	1.3	0.38	0.008	ND	ND
T-3@10.5	17	0.24	0.042	0.027	0.026	0.056
T-4@10.5	2.5	0.10	ND	0.009	ND	0.044
T-5@10.5		0.48	1.1	0.19	3.0	5.8
P-10@6'	3.2	.38	ND	0.007	ND	0.005
P-11@9.5		2.6	1.8	2.3	3.0	18
det. lim. (		0.05	0.005	0.005	0.005	0.005
W-1@11'	4000	2800	110	88	46	620
det. lim. (		5.0	0.5	0.5	0.5	0.5

Soil results are in mg/kg or parts per million (ppm), Water results are in  $\mu$ g/L or parts per billion (ppb). ND = not detected at or above method detection limits

## IV. SAMPLE ANALYTICAL RESULTS

## Soil Sample Analytical Results

Eight soil samples from the three monitoring wells were analyzed for TPH as gasoline, MTBE, and BTEX (Figure 3 - Soil Sample Results). Two samples were analyzed from MW-1, while three samples were analyzed for both MW-2 and MW-3.

Laboratory analysis showed no hydrocarbons detected in the soil samples from MW-1 and MW-2, while MW-3 showed trace amounts of MTBE, Ethylbenzene and Xylenes. Table 3 shows sample results, and copies of the laboratory report are attached.

Table 4 - Soil Sample Analysis Results
Foothill Beacon
16210 Foothill Boulevard, San Leandro, California
Samples Collected October 13, 1998

Sample I.D.	TPH-gas	MTBE	benzene	toluene	ethylbenzene	xylenes	
MW-1 @ 25.5'	ND	ND	ND	ND	ND .	ND	
MW-1 @ 30.5'	ND	ND	ND	ND	ND	ND	
MW-2 @ 5.5'	ND	ND	ND	· ND	ND	ND	
MW-2 @10.5'	ND	ND	ND	ND	ND	ND .	
MW-2@15.5'	ND	ND	ND	ND	· ND	ND	
MW-3 @ 5.5'	ND	1.8	ND	ND	0.005	0.019	
MW-3 @ 10.5'	ND	0.38	ND	ND	ND	ND	
MW-3 @ 15.5'	ND	0.34	ND	ND	ND 0.005	ND	
Detect. limit	1.0	0.05	0.005	0.005	0.005	0.005	

<sup>\*</sup> Results are in mg/kg or parts per million (ppm). ND = not detected at or above method detection limits.

## **Groundwater Sample Analytical Results**

Groundwater samples were obtained from the wells on November 2, 1998 and analyzed for TPH as gasoline (EPA method 5030/8015) with BTEX and MTBE (method 602. Sample analysis shows no TPH-g, BTEX or MTBE detected in MW-1 and MW-2. TPH-g and BTEX were not detected in MW-3, but MTBE was detected at 190 parts per billion (ppb).

Parker Enviro 190 East 7th S			Project ID: m Equip	130-05-01; Calif.	Date Sampleo	
Pittsburg, CA	94565	Client Co	ontact: Jim Pai	rker	Date Extracte	ed: 01/30/97
		Client P.	0:	50	Date Analyze	d: 01/31/97
EPA analytical m	nethods 6010/200.7, 239.2	•	Lea	d <sup>*</sup>		
Lab ID	Client ID	Matrix	Extraction	Lea	ıd <sup>*</sup>	% Recovery Surrogate
73351	T1 @ 10.5'	S	TTLC	3.	0	106
73352	T2 @ 10.5'	S	TTLC	3.	1	105
73353	T3 @ 10.5'	S	TTLC	N)	D	106
73354	T4 @ 10.5'	S	TTLC	N	D	105
73355	T5 @ 10.5'	S	S TTLC 3.2			110
73356	P10 @ 6'	S	TTLC	4.	8	108
73357	P11 @ 9.5"	S	TTLC	3.	5	106
					S	
				1	V	
Reporting Limi	Reporting Limit unless otherwise stated;	S	TTLC	30 п	ng/kg	
	ND means not detected above the re- porting limit		TTLC	0.005	mg/L	
			STLC,TCLP	0.2 r	ng/L	

<sup>\*</sup> soil and sludge samples are reported in mg/kg, and water samples and all STLC & TCLP extracts in mg/L

<sup>&</sup>lt;sup>†</sup> Lead is analysed using EPA method 6010 (ICP) for soils, sludges, STLC & TCLP extracts and method 239.2 (AA Furnace) for water samples

<sup>&</sup>lt;sup>o</sup> EPA extraction methods 1311(TCLP), 3010/3020(water,TTLC), 3040(organic matrices,TTLC), 3050(solids,TTLC); STLC from CA Title

<sup>\*</sup> surrogate diluted out of range; N/A means surrogate not applicable to this analysis

<sup>&</sup>amp; reporting limit raised due matrix interference

i) liquid sample that contains greater than ~ 2 vol % sediment; this sediment is extracted with the liquid, in accordance with EPA methodologies and can significantly effect reported metal concentrations

110 Second Avenue South, #D7, Pacheco, CA 94553 Telephone: 925-798-1620 Fax: 925-798-1622 http://www.mccampbell.com E-mail: main@mccampbell.com

Parker Environm			it Project ID: Fo 0 Foothill Blvd.,	ot hill Beacon; San Leandro	Date Sampled: 10/13/98  Date Received: 10/14/98				
Pittsburg, CA 94		Clien	t Contact: Jim P	arker	Date Extracte				
		Clien	t P.O:	······································	Date Analyze				
EPA analytical meth	ods 6010/200.7, 23	9.2*	Lea	d*					
Lab ID	Client ID	Matrix	Extraction °	L	ead*	% Recovery Surrogate			
96943	MW-3/5.5	s	TTLC		104				
96944	MW-3/10.5	S	TTLC	, 1	100				
96945	MW-3/15.5	s	TTLC	1	AD .	99			
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Reporting Limit us		S	TTLC	3.0 7	ng/kg	,			
keporung Limit un stated; ND means no the reportin	it detected above	W	TTLC		5 mg/L				
	-g1w•		STLC,TCLP	0.2	2 mg/L				

<sup>\*</sup> soil and sludge samples are reported in mg/kg, wipe samples in ug/wipe, and water samples and all STLC / SPLP / TCLP extracts in mg/L \*Lead is analysed using EPA method 6010 (ICP)for soils, sludges, STLC & TCLP extracts and method 239.2 (AA Furnace) for water

<sup>&</sup>lt;sup>a</sup> EPA extraction methods 1311(TCLP), 3010/3020(water,TTLC), 3040(organic matrices,TTLC), 3050(solids,TTLC); STLC - CA Title 22 surrogate diluted out of range; N/A means surrogate not applicable to this analysis

a reporting limit raised due matrix interference

i) liquid sample that contains greater than -2 vol. % sediment; this sediment is extracted with the liquid, in accordance with EPA methodologies and can significantly effect reported metal concentrations.

## **ATTACHMENT 4**

Page 6
Foothill Beacon Well Installation Report
Project 192-01-03

bottles were sealed, labeled, and placed into a cooler with ice for transport to the state certified analytical lab. Chain of custody documentation was initiated.

At the lab, the samples were analyzed for TPH as gasoline by EPA methods 5030/8015, BTEX by EPA Method 602, and for the oxygenated compounds associated with gasoline by EPA Method 8260.

## Well Surveying, Groundwater Gradient

The marks at the top of the well casings were surveyed by a State Licensed Land Surveyor (Benchmark Consultants of Antioch, CA) to the nearest 0.001 foot, rounded to the nearest 0.01 foot (Table 2: Well Elevation Data). Elevations were shot from an established vertical datum taken from a 7.5 minute USGS Map. From the well elevations and depth to groundwater measurements, the elevation of the potentiometric surface was established relative to mean sea level (MSL). The top of casing elevations for the three monitor wells range from 137.94 feet at MW-2 to 138.88 feet above MSL at MW-3. Groundwater elevations at the wells range from 127.15' at MW-1 to 127.45' at MW-3 (Figure 3 - Potentiometric Surface Map).

Table 3 - Well Elevation Data
Foothill Beacon
16210 Foothill Boulevard, San Leandro, California
Groundwater levels measured October 26, 1998 and November 2, 1998

Well	Well Depth (Feet TOC)	T.O.C. Elev. (Feet MSL)	Depth (Feet T	to Water 'OC)	Water Elev. (Feet MSL)		
*		2 6	10/26	11/02	10/26	11/02	
MW-1	38. <mark>2</mark> 9	138.57	11.42	11.39	127.15	127.18	
MW-2	24.55	137.94	10.49	10.54	127.45	127.40	
MW-3	24.37	138.88	11.60	11.52	127.28	127.36	

TOC represents top of casing. From the survey and depth to groundwater measurement data, the site groundwater on October 26, 1998 gradient direction was N 79.83 °E, with an average gradient of 0.0082 ft./ft. while the gradient on November 2, 1998 was found to have an average gradient direction of S 69.30 °E, with an average gradient of 0.0036 ft./ft. A gradient representation is attached (Figure 3 – Groundwater Gradient Map For 11/2/98).

## Table 5 - Groundwater Sample Results, TPH-g and BTEX Foothill Beacon 16210 Foothill Boulevard, San Leandro, California Samples Collected on November 2, 1998

Sample I.D.	TPH-gas	MTBE	benzene	toluene	ethylbenzene	xylenes	
MW-1	ND	ND	ND	ND	ND	ND	
MW-2	ND	ND	ND	ND	ND	ND	
MW-3	ND	190	ND	ND	ND	ND	
Detect. limit	50	5.0	0.5	0.5	0.5	0.5	

<sup>\*</sup> Results are in µg/kg or parts per billion (ppb). ND = not detected at or above method detection limits.

## V. SUMMARY AND CONCLUSIONS

Three 2-inch monitoring wells were installed at this site. One well is 39 feet deep, while the other two wells are about 25 feet deep. No odors were detected during drilling and well installation of MW-1 and MW-2. A slight gasoline odor was noticed from the shallow soils of MW-3. Similarly, soil sample results show detectable petroleum hydrocarbons only in MW-3.

Groundwater at this site is about 10 to 11 feet BGS, at an elevation of about 127 feet above mean sea level (MSL). Apparent groundwater gradient direction is N 79.83° E, with a gradient of 0.0082 ft/ft. on October 26, 1998 while the gradient direction on November 2, 1998 was S 69.30 °E, with an average gradient of 0.0036 ft./ft.

Laboratory analyses of the groundwater samples show only detectable MTBE in MW-3 at 190 parts per billion. MW-1 and MW-2 samples were non-detect for all analytes tested.

## VI. RECOMMENDATIONS

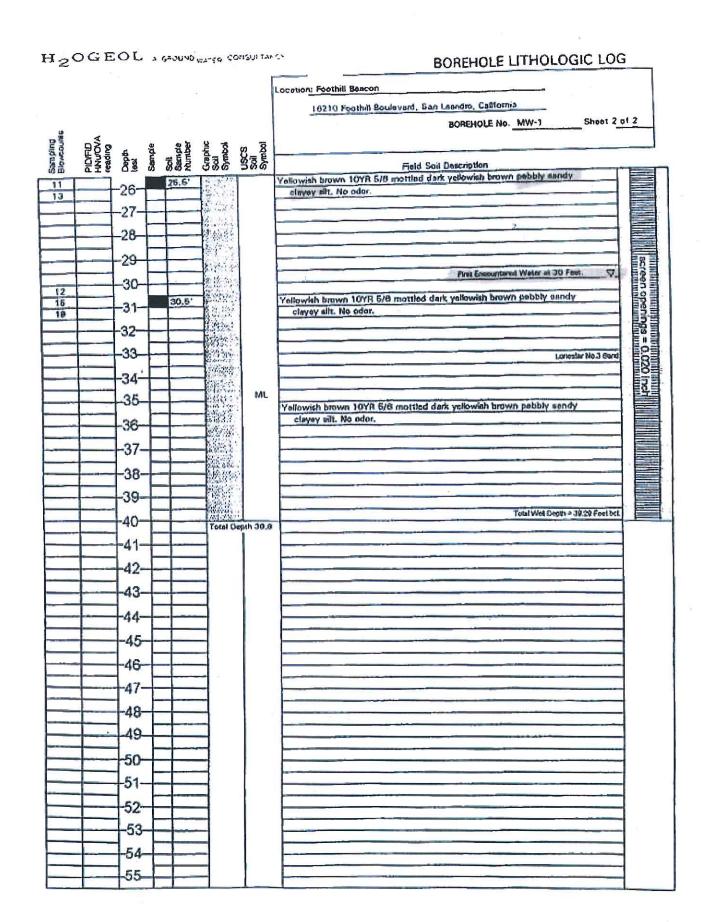
Parker Environmental Services recommends monitoring of the wells continue quarterly. This will provide information concerning seasonal variations of groundwater elevations and gradients. It will also provide a history of petroleum hydrocarbons amounts in the groundwater.

Copies of this and future reports will be sent to the Alameda County Environmental Health office and the California RWQCB, San Francisco Bay Region, Oakland.

## **Cumulative Table of Well Data and Analytical Results**

Vertical Me	easurements a	re in feet.	Analytical values are in parts ber billion (ppb)								
DATE	Well Head Elevation	Ground Water Elevation	Depth To Water	Notes	TPH- Gasoline	Benzene	Toluene	Ethyl- Benzene	Xylenes	MTBE	tert-Butanol
MW-1									·		
2/20/99 6/24/99 8/24/99 1/7/00 7/19/00	138.57 138.57 138.57 138.57 138.57	128.08 127.45 127.14 126.77 126.93	10.49 11.12 11.43 11.80 11.64		ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND 0.52 ND	ND ND ND 2.3 ND	ND ND ND ND 1.4	   
MW-2											
2/20/99 6/24/99 8/24/99 1/7/00 7/19/00	137.94 137.94 137.94 137.94 137.94	128.28 127.62 127.29 127.09 127.31	9.66 10.32 10.65 10.85 10.63		ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND 1.0	
MW-3								·			
2/20/99 6/24/99 8/24/99 1/7/00 7/19/00	138.88 138.88 138.88 138.88 138.88	128.27 127.60 127.30 126.98 127.08	10.61 10.61 11.58 11.90 11.68		ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND	340 86 81 67 1.2	   

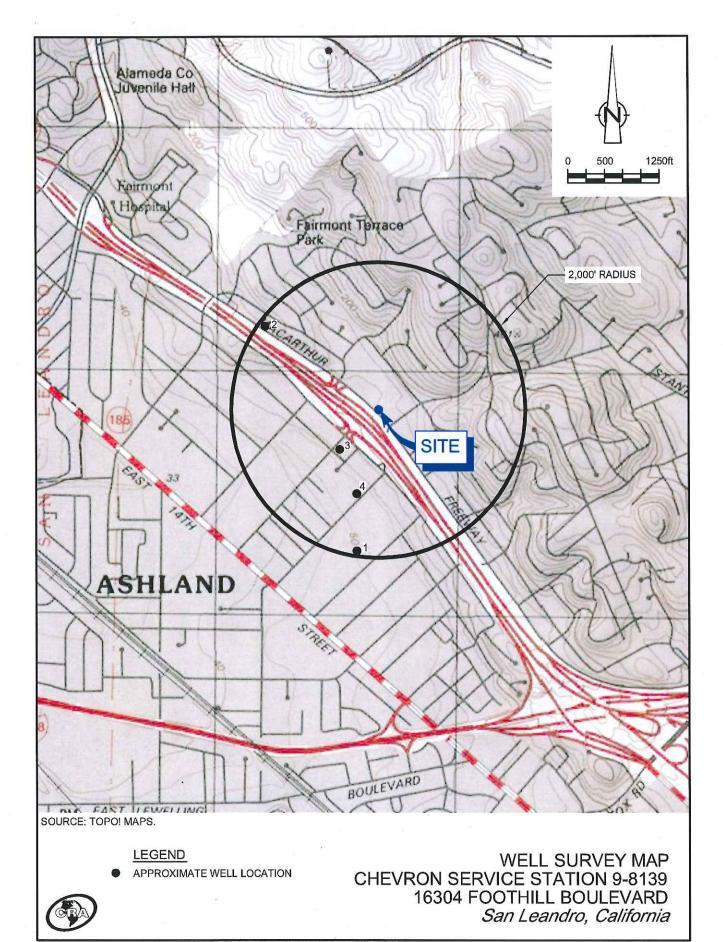
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## WELL SURVEY RESULTS CHEVRON STATION 9-8139 16304 FOOTHILL BLVD. SAN LEANDRO, CALIFORNIA

Well No√	Well Owner	Well Addr	ess	Total Well	Date	Distance/Direction from	Well Use
Figure ID		Street	City	Depth (ft)	Installed	Site (ft) (approx)	
1	S. Nieda	1537 165th Ave.	San Leandro	80	1928	2,000 S-SW	Irrigation
2	Umeki Nursery	16001 Foothill Blvd.	San Leandro	<i>7</i> 5	1937	2,000 NW	Irrigation
3	A. Quilici	1700 163rd Ave.	San Leandro	71	1934	750 SW	Irrigation
4	Woodward	1595 164th Ave.	San Leandro	40	1915	1,200 SW	Irrigation