

C A M B R I A

ENVIRONMENTAL  
PROTECTION

December 13, 1999

99 DEC 16 PM 2:13

Barney Chan  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

# 13

Re: **Letter Response and Work Plan**  
Shell-branded Service Station  
4411 Foothill Boulevard  
Oakland, California  
Incident #98995746  
Cambria Project# 241-0897



Dear Mr. Chan:

On behalf of Equiva Services LLC (Equiva), Cambria Environmental Technology, Inc. (Cambria) is submitting this response to the Alameda County Health Care Services Agency (ACHCSA) November 10, 1999 letter to Equiva. Following is summary of the site background and previous investigations, and a work plan to respond to specific items requested in the ACHCSA letter.

## BACKGROUND

**Site Location:** The subject site is located on the south corner at the intersection of Foothill Boulevard and High Street in Oakland California (Figure 1). The neighborhood in the immediate vicinity of the site is mixed commercial and residential, with service stations occupying the northern and western corners of the intersection. Fremont High School is located on the eastern corner.

**Soil Lithology:** The soil beneath the site has been logged as sandy clay to approximately 6-10 feet below ground surface (ft bgs), underlain by clayey sand with lenses of gravel to approximately 13 ft bgs, underlain by clay to sandy clay to a maximum onsite explored depth of 26 ft bgs.


**Groundwater Depth and Flow Direction:** Depth to groundwater has ranged from 6.0 to 10.5 ft bgs since groundwater monitoring was initiated in December of 1992. The groundwater gradient onsite has generally been to the <sup>east</sup> north to northwest; however, groundwater generally flows to the southwest in the vicinity of the site.

Oakland, CA  
Sonoma, CA  
Portland, OR  
Seattle, WA

**Cambria  
Environmental  
Technology, Inc.**

1144 65th Street  
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Tel (510) 420-0700  
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**1992 Waste Oil Tank Removal:** The environmental investigation at the Shell-branded site was initiated in November 1992, following the removal of an underground used oil tank. A soil sample collected at the bottom of the excavation, at a depth of approximately 11 ft bgs, reported concentrations below detection limits for total petroleum hydrocarbons as gasoline (TPHg), diesel (TPHd), benzene, toluene, ethylbenzene, xylenes (BTEX), oil and grease (O&G), halogenated volatile organics (CL HC) and metals. 6.7 parts per million (ppm) total lead were detected in the sample. Details of the waste oil tank removal and sampling activities are presented in the GeoStrategies Inc. report dated March 26, 1992.



**1992 Monitoring Well Installation:** A single monitoring well (S-1) was installed in the vicinity of the waste oil tank location. Details of the monitoring well installation are presented in GeoStrategies *Monitoring Well Installation Report* dated January 19, 1993. A summary of soil sampling data is included in Attachment A.

**1993 Monitoring Well Installations:** Monitoring wells S-2 and S-3 were installed by Hydro Environmental Technologies Inc. (HETI) on May 21, 1993. Details of the well installations are presented in HETI report dated July 22, 1993. A summary of soil sampling data is included in Attachment A.

**1995 Soil and Groundwater Investigation:** Pacific Environmental Group of San Jose, California (PEG) conducted a geoprobe investigation in June of 1995. The investigation consisted of advancing 8 onsite soil borings and two offsite borings for the collection of soil and groundwater samples. Details of the PEG investigation are presented in the PEG report *Site Investigation* dated September 12, 1995. A summary of soil and groundwater sampling data and geologic cross sections are included in Attachment B.

**1998 Product Equipment Upgrades:** Paradiso Mechanical of San Leandro, California (Paradiso) upgraded this Shell-branded service station in November 1998. Paradiso added secondary containment to the gasoline turbines and dispensers. Details of dispenser upgrade and sampling activities are presented in Cambria's *Dispenser Soil Sampling Report* dated November 30, 1998. Dispenser sample locations and a summary of analytical results is included in Attachment C.

**1999 Letter Responses and Work Plans:** In response to the Alameda County Health Care Services Agency (ACHCSA) letter to Equiva dated December 7, 1998, Cambria prepared a *Letter Response and Work Plan* dated January 11, 1999. In the January 1999 work plan, Cambria proposed an additional onsite groundwater monitoring well (S-4) and enhanced groundwater oxygenation via hydrogen peroxide injection into existing site wells.

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Additional information regarding the location of proposed well S-4 and the use of hydrogen peroxide was requested by the AHCSA in a phone conversation with Cambria on February 1, 1999. As a result, Cambria submitted a *Work Plan Addendum* dated March 18, 1999. In the March 1999 work plan, Cambria relocated proposed well S-4 to the location shown on Figure 1. Also, Cambria proposed the application of oxygen release compound (ORC) in lieu of hydrogen peroxide.

The ACHCSA requested further information regarding the application of ORC in the April 30, 1999 letter to Equiva. Cambria provided the requested information in the *Letter Response* dated June 15, 1999. Subsequently, in September 1999 ORC's were installed in wells S-1, S-2, and BW-A.

## SITE CONCEPTUAL MODEL DEVELOPMENT

In the November 10, 1999 letter to Equiva, the ACHCSA requested further development of a site conceptual model (SCM) for the subject site. While portions of a SCM exist for this site, the following specific elements of the SCM were requested:

***Provide a map indicating the source(s) of contamination. How can you verify that no ongoing source(s) exist?***

The highest concentrations of residual hydrocarbons in soil are from the areas beneath dispenser 1 and dispenser 2 (Figure 1). Concentrations of TPHg were 1,100 parts per million (ppm) from beneath dispenser 1 at 2-ft bgs, and 1,500 ppm from dispenser 2 at 2-ft bgs during the August 1998 dispenser soil sampling event. Soil analytical results for boring sampling and dispenser sampling are included in Attachment A.

Verification of UST and product line integrity is provided in Attachment D. Included are Simplicity Monthly Compliance Reports for October 1999, provided by the Veeder-Root Company, and Service Station Monitoring System Certification provided by Tanknology-NDE. The 1999 testing results indicate all tanks and lines to be tight. *< 1 gpm? v this*

***Identify the receptor(s), if any and include their locations, include a well survey.***

Cambria will identify potential sensitive receptors within a ¼-mile radius of the site. Department of Water Resources records will be reviewed to identify any vertical conduits and topographic

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maps will be reviewed to identify any surface bodies of water. Cambria will present the findings of the potential receptor survey in a forthcoming quarterly monitoring report. *what about conduits? utilities, sewer etc*

The Pacific Environmental Group conducted a basement survey in 1995 in order to identify basements downgradient of the site which could serve as potential sensitive receptors. A figure is included in Attachment E showing locations of basements in the site vicinity. There does not appear to be any immediate basement downgradient of the site which may serve as a sensitive receptor.

## *Please verify that no preferential pathways exist:*

Cambria reviewed City of Oakland engineering maps to identify utility conduits within Foothill Boulevard and High Street. Storm drain and sanitary sewer locations are shown on Figure 1. Three sewer mains were identified downgradient of the site within High Street. The sewer main diameters were 18-inch, 8-inch, and 16-inch, buried approximately 11.1 ft bgs, 6.5 ft bgs, and 5.9 ft bgs, respectively. The sewer and storm drain conduits downgradient of the site are graded to flow towards the west. *DTW 6-10'*

Depth to groundwater has ranged from 6.0 to 10.5 ft bgs, thus the top few feet of the groundwater table may have infiltrated the sewer trenches and flowed preferentially within porous backfill material during periods of shallow groundwater. However, groundwater in the vicinity is flowing west to southwest, and therefore any preferential flow in utility conduits is not necessarily further contributing to dissolved contaminant transport. It does not appear there is additional risk associated with preferential flow within pathways identified downgradient of the site. *what can be done to test and? (MTBE could be moving along utility)*

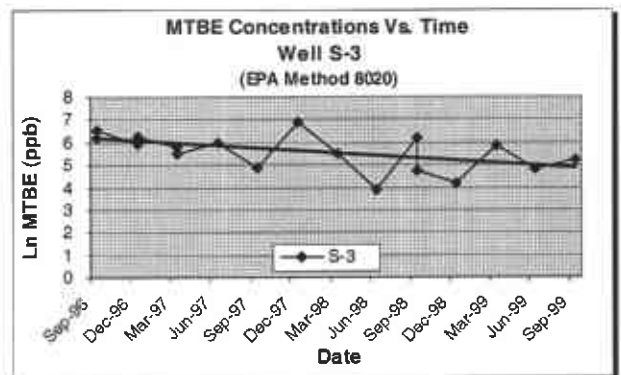
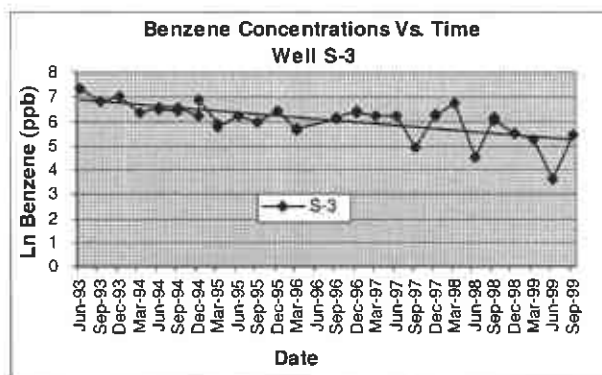
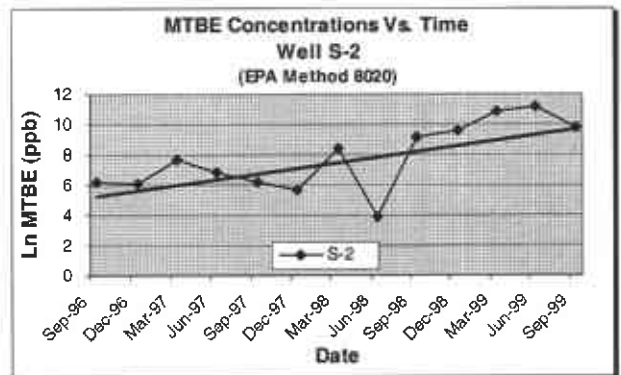
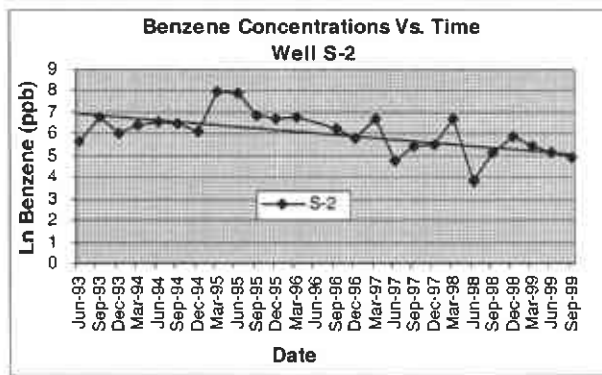
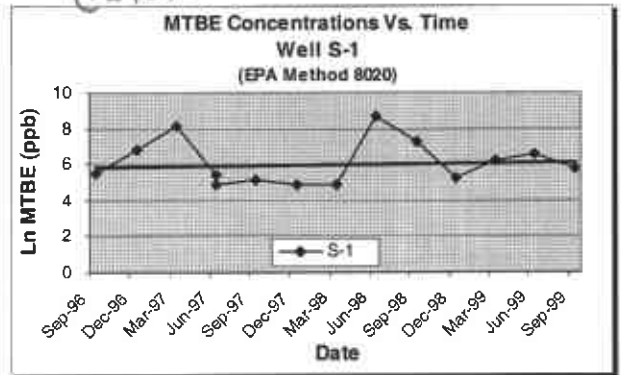
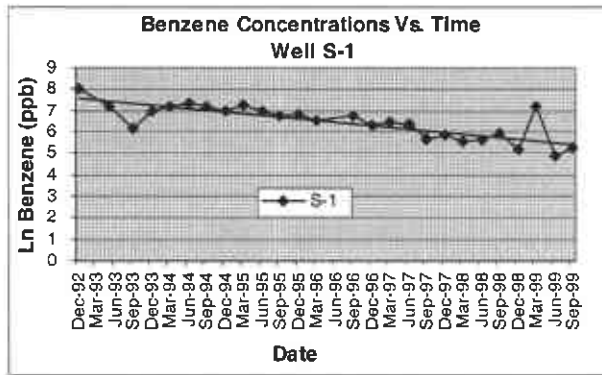
## *Prepare plots of chemical concentrations versus time and chemical concentrations versus distance from the source:*

Following are plots of concentrations of benzene and MTBE versus time for site wells S-1, S-2, and S-3. Per ASTM Standard E 1443-98, the natural log of concentration values was used so that concentration trends could be differentiated from random concentration fluctuations. Benzene concentrations appear to stable to decreasing. MTBE concentrations appear to be stable in wells S-1 and S-3, but trend upwards in well S-2.

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*Inc = 2.3 log C  
 10 = 2.3 log C  
 4 = log C  
 C = 10,000 ppb MTBE*

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The existing monitoring well network of wells S-1, S-2, and S-3 does not present a center line of monitoring points through the contaminant plume, therefore, concentration versus distance plots are not presented.

*Define the vertical and lateral extent of contamination. This will require that a deep groundwater sample be taken.*

Defining the lateral extent of dissolved contaminants originating from the Shell-branded site is not practical in the downgradient direction due to the presence of a contaminant plume originating from the Chevron station located at 4265 Foothill Boulevard. Combined groundwater monitoring data from both sites (Figure 1) demonstrate that at some point south of the two sites, the dissolved plumes likely commingle (Chevron wells C-7, C-8, and C-9).



The vertical extent of petroleum hydrocarbons in soil was delineated in soil borings for wells S-1, S-2, and S-3 by results below detection limits in the bottom of boring samples. In order to define the vertical extent of hydrocarbons and oxygenates in groundwater, Cambria proposes obtaining discrete groundwater and soil samples from the bottom of proposed monitoring well MW-4. Based on groundwater depths, MW-4 will likely be completed to 25-ft bgs. Prior to constructing the well, Cambria will collect a bottom of the boring soil sample and discrete grab water sample and analyze for TPHg, BTEX and MTBE.

*How about a boring with at least 25 ft + soil grab every 5-10'?*

*Provide a work plan for active remediation of the source area if groundwater concentrations remain at current high level.*

Should groundwater concentrations remain at the current levels, Equiva may implement active source removal through weekly vacuum truck extraction from source area well BW-A and monitoring well S-2. Cambria will coordinate collection of groundwater samples from both wells to evaluate the effectiveness of the weekly purging events. The analytical data, purge volumes, and mass removal estimates would be presented in forthcoming quarterly monitoring reports.

*OK how frequent?*

**SUMMARY OF PROPOSED ACTIVITIES**

Following is a summary of proposed activities:

- Install proposed monitoring well S-4 (Figure 1),
- Collect discrete soil and groundwater samples for vertical definition from the bottom of soil boring S-4, and
- Conduct sensitive receptor survey to identify any potential vertical conduits and nearby surface bodies of water.

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**CLOSING**

We appreciate the opportunity to work with you on this project. Please call Darryk Ataide at (510) 420-3339 if you have any questions or comments.

Sincerely,

**Cambria Environmental Technology, Inc**



Darryk Ataide, REA I  
Project Manager



Ailsa S. Le May, R.G.  
Senior Geologist

- Attachments:
- A - Summary of Soil Analytical Results from Monitoring Well Borings
  - B - Soil and Groundwater Analytical Data and Geologic Cross Sections from 1995 Investigation
  - C - Dispenser Sampling Locations and Analytical Results
  - D - Simplicity Monthly Compliance Report and Service Station Monitoring System Certification
  - E - Basement Survey Map

cc: Karen Petryna, Equiva Services LLC, P.O. Box 7869 Burbank, California 91501-7869

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**EXPLANATION**

- S-1 ◆ Monitoring well location
- BW-A □ Tank backfill well location
- S-4 ⊕ Proposed monitoring well location
- ◆ Dispenser sample location
- ⊗ Fire Hydrant
- Drain Inlet
- Manhole
- ⊕ Power pole
- Overhead Power lines
- Storm Drain and flow direction
- Sanitary Sewer line and flow direction
- Ground water flow direction
- XX.XX Ground water elevation contour, in feet above mean sea level (msl), approximately located; dashed where inferred

| Well | ELEV | Benzene  | MTBE |
|------|------|--|------|
|      |      | Benzene and MTBE concentrations are in parts per billion and are analyzed by EPA Method 8020 |      |

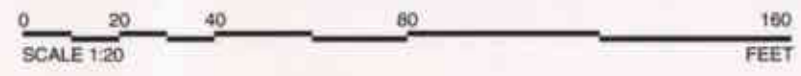
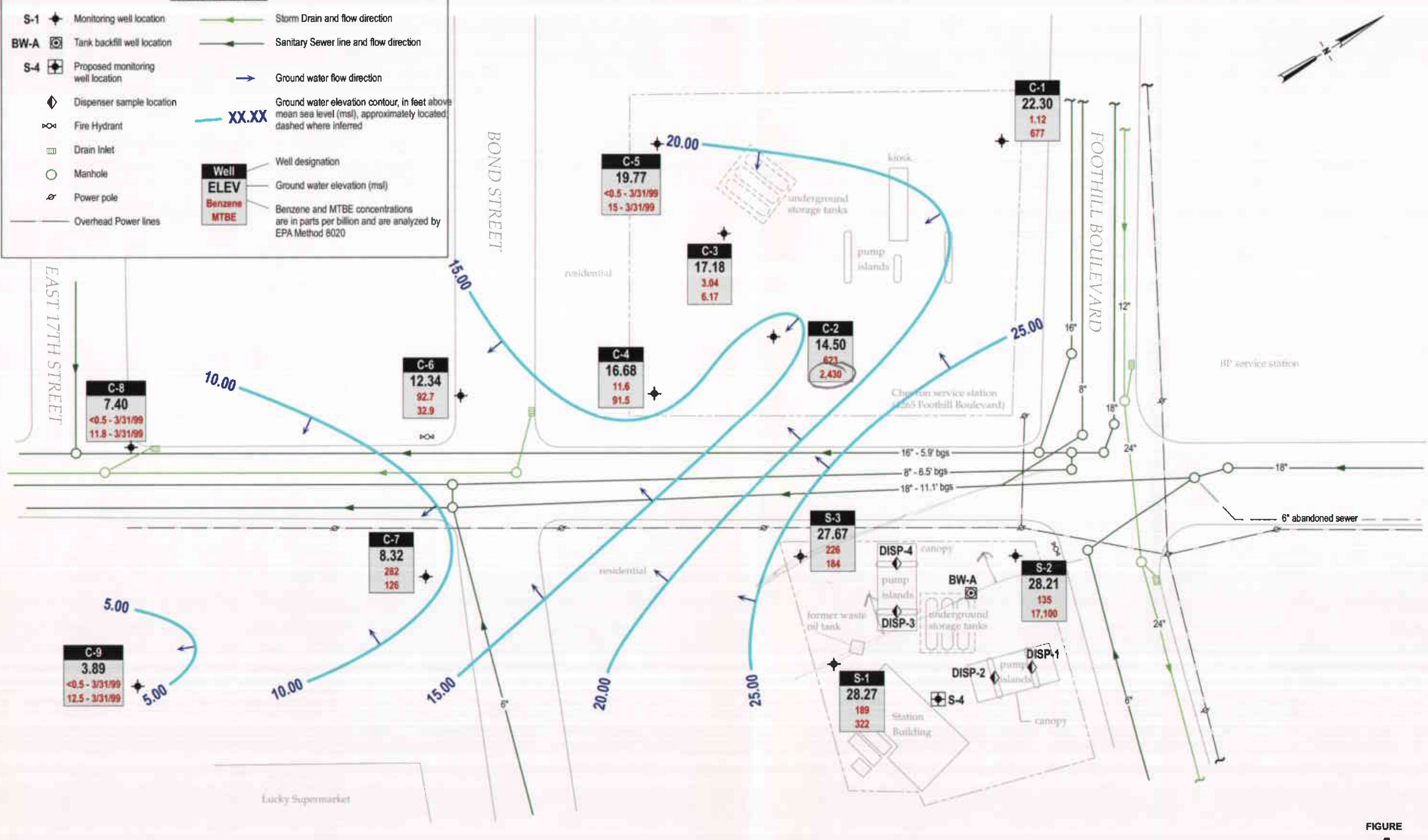


FIGURE 1



G:\OAK4411\FIGURES\COMBINED.AJ



**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**4411 Foothill Boulevard**  
**Oakland, CA**  
**Wic #204-5508-3400**

| Well ID | Date | TPPH<br>(ug/L) | TEPH<br>(ug/L) | B<br>(ug/L) | T<br>(ug/L) | E<br>(ug/L) | X<br>(ug/L) | MTBE<br>8020<br>(ug/L) | MTBE<br>8260<br>(ug/L) | TOB<br>(MSL) | Depth to<br>Water<br>(ft.) | GW<br>Elevation<br>(MSL) | DO<br>Reading<br>(ppm) |
|---------|------|----------------|----------------|-------------|-------------|-------------|-------------|------------------------|------------------------|--------------|----------------------------|--------------------------|------------------------|
|---------|------|----------------|----------------|-------------|-------------|-------------|-------------|------------------------|------------------------|--------------|----------------------------|--------------------------|------------------------|

|          |            |        |        |       |       |       |        |       |       |       |       |       |         |
|----------|------------|--------|--------|-------|-------|-------|--------|-------|-------|-------|-------|-------|---------|
| S-1      | 12/18/92   | 41,000 | NA     | 3,100 | 1,100 | 1,200 | 8,700  | NA    | NA    | 38.31 | 9.06  | NA    | NA      |
| S-1      | 5/26/93    | 39,000 | 6,000  | 1,300 | 4,700 | 1,500 | 7,800  | NA    | NA    | 38.31 | NA    | NA    | NA      |
| S-1      | 5/28/93    | NA     | NA     |       | NA    | NA    | NA     | NA    | NA    | 38.31 | 12.13 | 26.18 | NA      |
| S-1      | 6/3/93     | NA     | NA     |       | NA    | NA    | NA     | NA    | NA    | 38.31 | 8.89  | 29.42 | NA      |
| S-1      | 6/8/93     | NA     | NA     |       | NA    | NA    | NA     | NA    | NA    | 38.31 | 8.80  | 29.51 | NA      |
| S-1      | 9/21/93    | 34,000 | 5,900  | 480   | 5,000 | 3,800 | 18,000 | NA    | NA    | 38.31 | 10.40 | 27.91 | NA      |
| S-1      | 12/14/93   | 25,000 | 13,000 | 1,100 | 5,000 | 2,200 | 11,000 | NA    | NA    | 38.31 | 9.66  | 28.65 | NA      |
| S-1      | 3/17/94    | 57,000 | 1,600  | 1,300 | 5,400 | 2,100 | 11,000 | NA    | NA    | 38.31 | 8.20  | 30.11 | NA      |
| S-1      | 6/16/94    | 57,000 | 3,000  | 1,600 | 6,000 | 2,000 | 13,000 | NA    | NA    | 38.31 | 9.41  | 28.90 | NA      |
| S-1      | 9/22/94    | 39,000 | ND     | 1,300 | 2,100 | 1,500 | 7,100  | NA    | NA    | 38.31 | 11.13 | 27.18 | NA      |
| S-1 a    | 12/15/94   | 30,000 | 3,100  | 1,100 | 4,700 | 1,600 | 10,000 | NA    | NA    | 38.31 | 7.15  | 31.16 | NA      |
| S-1 a, b | 3/30/95    | 30,000 | 3,100  | 1,400 | 4,000 | 1,500 | 11,000 | NA    | NA    | 38.31 | 6.09  | 32.22 | NA      |
| S-1      | 06/2019/95 | 28,000 | 2,100  | 1,100 | 2,300 | 1,100 | 8,300  | NA    | NA    | 38.31 | 7.30  | 31.01 | NA      |
| S-1      | 9/20/95    | 40,000 | 2,600  | 840   | 3,600 | 1,300 | 8,600  | NA    | NA    | 38.31 | 10.02 | 28.29 | NA      |
| S-1 a    | 12/6/95    | 38,000 | 6,400  | 920   | 3,200 | 1,500 | 9,400  | NA    | NA    | 38.31 | 11.64 | 26.67 | NA      |
| S-1      | 3/21/96    | 48,000 | NA     | 700   | 4,200 | 1,100 | 8,600  | NA    | NA    | 38.31 | 6.87  | 31.44 | NA      |
| S-1      | 9/6/96     | 41,000 | 4,100  | 830   | 2,600 | 2,100 | 12,000 | <250  | NA    | 38.31 | 10.50 | 27.81 | NA      |
| S-1      | 12/19/96   | 40,000 | 2,500  | 540   | 3,100 | 1,900 | 9,800  | 920   | NA    | 38.31 | 8.24  | 30.07 | NA      |
| S-1      | 3/17/97    | 42,000 | 4,700  | 610   | 2,700 | 1,700 | 11,000 | 3,500 | NA    | 38.31 | 7.26  | 31.05 | NA      |
| S-1      | 6/11/97    | 28,000 | 4,000  | 540   | 960   | 1,300 | 5,300  | 220   | NA    | 38.31 | 10.69 | 27.62 | NA      |
| S-1 (D)  | 6/11/97    | 30,000 | 3,900  | 580   | 1,000 | 1,400 | 5,400  | <125  | NA    | 38.31 | 10.69 | 27.62 | NA      |
| S-1      | 9/17/97    | 27,000 | 4,400  | 310   | 1,200 | 1,900 | 9,000  | 170   | NA    | 38.31 | 10.26 | 28.05 | NA      |
| S-1 (D)  | 9/17/97    | 27,000 | 4,400  | 270   | 1,200 | 1,900 | 9,000  | 170   | NA    | 38.31 | 10.26 | 28.05 | NA      |
| S-1      | 12/11/97   | 21,000 | 3,400  | 350   | 820   | 1,500 | 6,500  | <125  | NA    | 38.31 | 6.96  | 31.35 | NA      |
| S-1      | 3/16/98    | 25,000 | 2,500  | 250   | 820   | 670   | 5,000  | <125  | NA    | 38.31 | 6.00  | 32.31 | NA      |
| S-1 (D)  | 3/16/98    | 26,000 | NA     | 250   | 840   | 720   | 5,100  | <125  | NA    | 38.31 | 6.00  | 32.31 | 5.3/3.7 |
| S-1      | 6/23/98    | <1,000 | 230    | 280   | 14    | 23    | 15     | 6,100 | 7,800 | 38.31 | 6.31  | 32.00 | 3.8/2.4 |
| S-1      | 9/1/98     | 26,000 | 2,300  | 370   | 620   | 1,300 | 33     | 1,400 | 120   | 38.31 | 9.17  | 29.14 | 1.4/2.6 |

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**4411 Foothill Boulevard**  
**Oakland, CA**  
**Wic #204-5508-3400**

| Well ID | Date | TPPH<br>(ug/L) | TEPH<br>(ug/L) | B<br>(ug/L) | T<br>(ug/L) | E<br>(ug/L) | X<br>(ug/L) | MTBE<br>8020<br>(ug/L) | MTBE<br>8260<br>(ug/L) | TOB<br>(MSL) | Depth to<br>Water<br>(ft.) | GW<br>Elevation<br>(MSL) | DO<br>Reading<br>(ppm) |
|---------|------|----------------|----------------|-------------|-------------|-------------|-------------|------------------------|------------------------|--------------|----------------------------|--------------------------|------------------------|
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|     |          |        |       |       |     |       |       |      |      |       |       |       |         |
|-----|----------|--------|-------|-------|-----|-------|-------|------|------|-------|-------|-------|---------|
| S-1 | 12/30/98 | 29,900 | 1,970 | 174   | 732 | 1,680 | 5,740 | 182  | NA   | 38.31 | 8.99  | 29.32 | 1.6/2.0 |
| S-1 | 3/30/99  | 14,200 | 1,150 | 1,360 | 260 | 1,070 | 3,580 | <500 | 90.0 | 38.31 | 6.10  | 32.21 | 1.2/1.8 |
| S-1 | 3/31/99  | NA     | NA    |       | NA  | NA    | NA    | NA   | NA   | 38.31 | 7.84  | 30.47 | NA      |
| S-1 | 6/14/99  | 20,200 | 4,280 | 135   | 407 | 825   | 5,000 | 705  | NA   | 38.31 | 7.94  | 30.37 | 1.4/2.1 |
| S-1 | 9/30/99  | 18,300 | 3,120 | 189   | 531 | 1,250 | 4,740 | 322  | NA   | 38.31 | 10.04 | 28.27 | 4.3/2.0 |

|         |            |        |    |       |      |     |     |       |       |       |       |       |         |
|---------|------------|--------|----|-------|------|-----|-----|-------|-------|-------|-------|-------|---------|
| S-2     | 5/28/93    | NA     | NA |       | NA   | NA  | NA  | NA    | NA    | 38.79 | 9.51  | 29.28 | NA      |
| S-2     | 6/3/93     | NA     | NA |       | NA   | NA  | NA  | NA    | NA    | 38.79 | 9.51  | 29.28 | NA      |
| S-2     | 6/8/93     | NA     | NA |       | NA   | NA  | NA  | NA    | NA    | 38.79 | 9.57  | 29.22 | NA      |
| S-2     | 6/29/93    | 1,300  | NA | 290   | 35   | 38  | 130 | NA    | NA    | 38.79 | NA    | NA    | NA      |
| S-2     | 9/21/93    | 3,300  | NA | 870   | 24   | 190 | 120 | NA    | NA    | 38.79 | 10.54 | 28.25 | NA      |
| S-2     | 12/14/93   | 1,300  | NA | 400   | 16   | 36  | 27  | NA    | NA    | 38.79 | 9.76  | 29.03 | NA      |
| S-2     | 3/17/94    | 4,500  | NA | 610   | 27   | 92  | 110 | NA    | NA    | 38.79 | 9.92  | 28.87 | NA      |
| S-2 (D) | 3/17/94    | 4,000  | NA | 610   | 26   | 93  | 120 | NA    | NA    | 38.79 | 9.92  | 28.87 | NA      |
| S-2     | 6/16/94    | 2,800  | NA | 690   | 45   | 97  | 140 | NA    | NA    | 38.79 | 10.11 | 28.68 | NA      |
| S-2     | 9/22/94    | 4,000  | NA | 630   | 94   | 64  | 230 | NA    | NA    | 38.79 | 10.51 | 28.28 | NA      |
| S-2     | 12/15/94   | 1,600  | NA | 450   | 300  | 67  | 130 | NA    | NA    | 38.79 | 9.12  | 29.67 | NA      |
| S-2 b   | 3/30/95    | 8,200  | NA | 2,800 | 190  | 240 | 700 | NA    | NA    | 38.79 | 7.86  | 30.93 | NA      |
| S-2     | 06/20/1995 | 9,600  | NA | 2,600 | 160  | 170 | 500 | NA    | NA    | 38.79 | 9.51  | 29.28 | NA      |
| S-2     | 9/20/95    | 4,200  | NA | 920   | 45   | 98  | 140 | NA    | NA    | 38.79 | 10.06 | 28.73 | NA      |
| S-2     | 12/6/95    | <5,000 | NA | 790   | 67   | 64  | 130 | NA    | NA    | 38.79 | 10.52 | 28.27 | NA      |
| S-2     | 3/21/96    | 3,700  | NA | 850   | 45   | 96  | 170 | NA    | NA    | 38.79 | 8.60  | 30.19 | NA      |
| S-2     | 9/6/96     | 2,400  | NA | 500   | 33   | 39  | 84  | 490   | NA    | 38.79 | 10.50 | 28.29 | NA      |
| S-2     | 12/19/96   | 1,200  | NA | 330   | 15   | 24  | 31  | 430   | NA    | 38.79 | 9.40  | 29.39 | NA      |
| S-2     | 3/17/97    | 4,100  | NA | 780   | 42   | 110 | 120 | 2,200 | NA    | 38.79 | 9.82  | 28.97 | NA      |
| S-2     | 6/11/97    | 760    | NA | 120   | <5.0 | 7.0 | 7.6 | 900   | NA    | 38.79 | 10.18 | 28.61 | NA      |
| S-2     | 9/17/97    | 1,500  | NA | 230   | 8.6  | 40  | 27  | 480   | NA    | 38.79 | 9.90  | 28.89 | NA      |
| S-2     | 12/11/97   | 1,300  | NA | 240   | 15   | 33  | 57  | 280   | NA    | 38.79 | 8.27  | 30.52 | NA      |
| S-2     | 3/16/98    | 1,100  | NA | 830   | 48   | <10 | <10 | 4,700 | 4,800 | 38.79 | 7.97  | 30.82 | 7.0/4.3 |

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|---------|------|----------------|----------------|-------------|-------------|-------------|-------------|------------------------|------------------------|--------------|----------------------------|--------------------------|------------------------|
|---------|------|----------------|----------------|-------------|-------------|-------------|-------------|------------------------|------------------------|--------------|----------------------------|--------------------------|------------------------|

|         |          |        |      |     |       |       |      |        |         |       |       |       |         |
|---------|----------|--------|------|-----|-------|-------|------|--------|---------|-------|-------|-------|---------|
| S-2     | 6/23/98  | 720    | NA   | 46  | 6.8   | 50    | 68   | 50     | 8.8     | 38.79 | 8.20  | 30.59 | 4.2/3.8 |
| S-2 (D) | 6/23/98  | 810    | NA   | 49  | 7.1   | 50    | 70   | 49     | 8.8     | 38.79 | 8.20  | 30.59 | 4.2/3.8 |
| S-2     | 9/1/98   | <2,000 | NA   | 170 | <20   | <20   | <20  | 9,300  | 12,000  | 38.79 | 9.85  | 28.94 | 1.9/1.6 |
| S-2     | 12/30/98 | <5,000 | NA   | 369 | <50   | <50   | <50  | 14,300 | NA      | 38.79 | 9.84  | 28.95 | 2.0/1.8 |
| S-2     | 3/30/99  | <2,000 | NA   | 234 | <20.0 | 27.4  | 36.9 | 49,200 | 53,000  | 38.79 | 8.41  | 30.38 | 2.1/1.8 |
| S-2     | 3/31/99  | NA     | NA   |     | NA    | NA    | NA   | NA     | NA      | 38.79 | 8.67  | 30.12 | NA      |
| S-2     | 6/14/99  | <1,000 | NA   | 175 | <10.0 | <10.0 | 11.1 | 67,500 | NA      | 38.79 | 9.80  | 28.99 | NA      |
| S-2     | 9/30/99  | 678    | 177a | 135 | 8.22  | 14.9  | 25.8 | 17,100 | 17,000c | 38.79 | 10.58 | 28.21 | 5.1/4.8 |

|         |            |        |    |       |       |       |        |    |    |       |       |       |    |
|---------|------------|--------|----|-------|-------|-------|--------|----|----|-------|-------|-------|----|
| S-3     | 5/28/93    | NA     | NA |       | NA    | NA    | NA     | NA | NA | 37.33 | 8.45  | 28.88 | NA |
| S-3     | 6/3/93     | NA     | NA |       | NA    | NA    | NA     | NA | NA | 37.33 | 8.36  | 28.97 | NA |
| S-3     | 1/19/00    | NA     | NA |       | NA    | NA    | NA     | NA | NA | 37.33 | 8.41  | 28.92 | NA |
| S-3     | 6/29/93    | 29,000 | NA | 1,500 | 1,800 | 950   | 6,200  | NA | NA | 37.33 | NA    | NA    | NA |
| S-3     | 9/21/93    | 15,000 | NA | 900   | 2,200 | 2,600 | 11,000 | NA | NA | 37.33 | 10.08 | 27.25 | NA |
| S-3     | 12/94/1993 | 20,000 | NA | 1,100 | 2,400 | 1,800 | 8,500  | NA | NA | 37.33 | 8.80  | 28.53 | NA |
| S-3     | 3/17/94    | 14,000 | NA | 580   | 190   | 750   | 1,700  | NA | NA | 37.33 | 8.34  | 28.99 | NA |
| S-3     | 6/16/94    | 20,000 | NA | 700   | 690   | 1,400 | 4,100  | NA | NA | 37.33 | 9.12  | 28.21 | NA |
| S-3 (D) | 6/16/94    | 19,000 | NA | 680   | 560   | 1,300 | 3,700  | NA | NA | 37.33 | NA    | NA    | NA |
| S-3     | 9/22/94    | 24,000 | NA | 630   | 1,100 | 1,400 | 5,700  | NA | NA | 37.33 | 10.27 | 27.06 | NA |
| S-3 (D) | 9/22/94    | 25,000 | NA | 720   | 1,100 | 1,500 | 6,100  | NA | NA | 37.33 | NA    | NA    | NA |
| S-3     | 12/15/94   | 18,000 | NA | 520   | 800   | 1,100 | 4,200  | NA | NA | 37.33 | 7.81  | 29.52 | NA |
| S-3 (D) | 12/15/94   | 23,000 | NA | 1,000 | 1,900 | 2,000 | 8,600  | NA | NA | 37.33 | NA    | NA    | NA |
| S-3 b   | 3/30/95    | 8,800  | NA | 360   | 730   | 700   | 3,700  | NA | NA | 37.33 | 7.06  | 30.27 | NA |
| S-3 (D) | 3/30/95    | 7,600  | NA | 330   | 570   | 600   | 2,600  | NA | NA | 37.33 | NA    | NA    | NA |
| S-3     | 06/20/1995 | 9,600  | NA | 510   | 170   | 960   | 1,700  | NA | NA | 37.33 | 8.15  | 29.18 | NA |
| S-3 (D) | 06/20/1995 | 9,800  | NA | 500   | 170   | 950   | 1,700  | NA | NA | 37.33 | NA    | NA    | NA |
| S-3     | 9/20/95    | 21,000 | NA | 400   | 560   | 1,300 | 4,600  | NA | NA | 37.33 | 9.32  | 28.01 | NA |
| S-3     | 12/6/95    | 24,000 | NA | 630   | 1,400 | 1,400 | 6,000  | NA | NA | 37.33 | 10.53 | 26.80 | NA |
| S-3 (D) | 12/6/95    | 22,000 | NA | 630   | 1,200 | 1,400 | 5,500  | NA | NA | 37.33 | NA    | NA    | NA |

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**4411 Foothill Boulevard**  
**Oakland, CA**  
**Wic #204-5508-3400**

| Well ID | Date     | TPPH<br>(ug/L) | TEPH<br>(ug/L) | B<br>(ug/L) | T<br>(ug/L) | E<br>(ug/L) | X<br>(ug/L) | MTBE<br>8020<br>(ug/L) | MTBE<br>8260<br>(ug/L) | TOB<br>(MSL) | Depth to<br>Water<br>(ft.) | GW<br>Elevation<br>(MSL) | DO<br>Reading<br>(ppm) |
|---------|----------|----------------|----------------|-------------|-------------|-------------|-------------|------------------------|------------------------|--------------|----------------------------|--------------------------|------------------------|
| S-3     | 3/21/96  | 9,100          | NA             | 290         | 110         | 490         | 1,600       | NA                     | NA                     | 37.33        | 7.32                       | 30.01                    | NA                     |
| S-3 (D) | 3/21/96  | 11,000         | NA             | 310         | 250         | 540         | 2,100       | NA                     | NA                     | 37.33        | NA                         | NA                       | NA                     |
| S-3     | 9/6/96   | 15,000         | NA             | 440         | 300         | 1,100       | 3,000       | 500                    | NA                     | 37.33        | 10.10                      | 27.23                    | NA                     |
| S-3 (D) | 9/6/96   | 11,000         | NA             | 490         | 170         | 820         | 1,500       | 700                    | NA                     | 37.33        | NA                         | NA                       | NA                     |
| S-3     | 12/19/96 | 12,000         | NA             | 600         | 380         | 850         | 2,500       | 380                    | NA                     | 37.33        | 8.36                       | 28.97                    | NA                     |
| S-3 (D) | 12/19/96 | 12,000         | NA             | 590         | 380         | 830         | 2,500       | 540                    | NA                     | 37.33        | 8.36                       | 28.97                    | NA                     |
| S-3     | 3/17/97  | 12,000         | NA             | 520         | 140         | 740         | 1,400       | 320                    | NA                     | 37.33        | 8.57                       | 28.76                    | NA                     |
| S-3 (D) | 3/17/97  | 9,600          | NA             | 500         | 100         | 680         | 1,100       | <250                   | NA                     | 37.33        | 8.57                       | 28.76                    | NA                     |
| S-3     | 6/11/97  | 9,600          | NA             | 510         | 94          | 740         | 1,100       | 410                    | NA                     | 37.33        | 9.26                       | 28.07                    | NA                     |
| S-3     | 9/17/97  | 21,000         | NA             | 140         | 560         | 1,800       | 7,200       | 130                    | NA                     | 37.33        | 9.62                       | 27.71                    | NA                     |
| S-3     | 12/11/97 | 24,000         | NA             | 530         | 970         | 1,600       | 6,900       | 950                    | NA                     | 37.33        | 7.34                       | 29.99                    | NA                     |
| S-3 (D) | 12/11/97 | 29,000         | NA             | 520         | 1,000       | 1,600       | 7,300       | 970                    | NA                     | 37.33        | 7.34                       | 29.99                    | NA                     |
| S-3     | 3/16/98  | 29,000         | NA             | 840         | 810         | 1,700       | 6,000       | <250                   | NA                     | 37.33        | 5.75                       | 31.58                    | 3.0/3.4                |
| S-3     | 6/23/98  | 3,800          | NA             | 90          | 220         | 240         | 1,400       | <50                    | NA                     | 37.33        | 5.98                       | 31.35                    | 4.2/2.0                |
| S-3     | 9/1/98   | 9,600          | NA             | 480         | 120         | 870         | 1,800       | 490                    | <50                    | 37.33        | 8.98                       | 28.35                    | 1.9/2.8                |
| S-3 (D) | 9/1/98   | 9,200          | NA             | 420         | 110         | 800         | 1,700       | 110                    | <50                    | 37.33        | 8.98                       | 28.35                    | 1.9/2.8                |
| S-3     | 12/30/98 | 7,660          | NA             | 240         | 103         | 410         | 834         | 64.9                   | NA                     | 37.33        | 9.11                       | 28.22                    | 1.8/1.6                |
| S-3     | 3/30/99  | 2,070          | NA             | 195         | 10.0        | <5.00       | 48.6        | 354                    | 64.6                   | 37.33        | 6.95                       | 30.38                    | 1.3/1.5                |
| S-3     | 3/31/99  | NA             | NA             |             | NA          | NA          | NA          | NA                     | NA                     | 37.33        | 7.48                       | 29.85                    | NA                     |
| S-3     | 6/14/99  | 1,250          | NA             | 37.4        | 17.4        | 110         | 109         | 118                    | NA                     | 37.33        | 8.85                       | 28.48                    | NA                     |
| S-3     | 9/30/99  | 8,270          | 2,020a         | 226         | 113         | 686         | 1,440       | 184                    | NA                     | 37.33        | 9.66                       | 27.67                    | 3.5/2.8                |
| BW-A    | 9/30/99  | NA             | NA             | NA          | NA          | NA          | NA          | NA                     | NA                     | NA           | 10.55                      | NA                       | 2.3                    |

**Abbreviations:**

TPPH = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015

TEPH = Total petroleum hydrocarbons as diesel by modified EPA Method 8015

BTEX = benzene, toluene, ethylbenzene, xylenes by EPA Method 8020

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**4411 Foothill Boulevard**  
**Oakland, CA**  
**Wic #204-5508-3400**

| Well ID | Date | TPPH<br>(ug/L) | TEPH<br>(ug/L) | B<br>(ug/L) | T<br>(ug/L) | E<br>(ug/L) | X<br>(ug/L) | MTBE<br>8020<br>(ug/L) | MTBE<br>8260<br>(ug/L) | TOB<br>(MSL) | Depth to<br>Water<br>(ft.) | GW<br>Elevation<br>(MSL) | DO<br>Reading<br>(ppm) |
|---------|------|----------------|----------------|-------------|-------------|-------------|-------------|------------------------|------------------------|--------------|----------------------------|--------------------------|------------------------|
|---------|------|----------------|----------------|-------------|-------------|-------------|-------------|------------------------|------------------------|--------------|----------------------------|--------------------------|------------------------|

MTBE = methyl-tertiary-butyl ether

TOB = Top of Box Elevation

GW = Groundwater

DO = Dissolved Oxygen

ug/L = parts per billion

msl = Mean sea level

ft = Feet

<n = Below detection limit

D = Duplicate sample

n/n = Pre-purge / Post-purge

NA = Not applicable

Notes:

a = Chromatogram pattern indicates an unidentified hydrocarbon.

b = National Environmental Testing, Inc. (NET), analyzed within hold time but further dilutions were required and analyzed out of hold time.

NET suggests that these should be considered minimum concentrations.

c = Sample analyzed outside the EPA recommended holding times.

**Attachment A**

Summary of Soil Analytical Results from Monitoring Well Borings

Table 1

SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS

Shell Service Station - WIC#204-6852-1008  
4411 Foothill Boulevard, Oakland, California

NO MTBE

| Well Number | Sample Depth (feet) | Sampling Date | TPHmo (ppm) | TPHd (ppm) | TPHg (ppm) | B (ppm) | T (ppm) | E (ppm) | X (ppm) |
|-------------|---------------------|---------------|-------------|------------|------------|---------|---------|---------|---------|
| S-1         | 6.0                 | 11/24/92      | <1.0        | <1.0       | <1.0       | <0.005  | <0.005  | <0.005  | <0.005  |
|             | 11.0                | 11/24/92      | 390         | 180        | 110        | 0.45    | <0.005  | 2.2     | 8       |
|             | 16.0                | 11/24/92      | <1.0        | <1.0       | 2.8        | <0.050  | 0.51    | 0.097   | 0.50    |
|             | 21.0                | 11/24/92      | <1.0        | <1.0       | <1.0       | <0.005  | <0.005  | <0.005  | <0.005  |
|             | 26.0                | 11/24/92      | <1.0        | <1.0       | <1.0       | <0.005  | <0.005  | <0.005  | <0.005  |
| S-2         | 6                   | 5/21/93       | NT          | <10        | <0.5       | <0.005  | <0.005  | <0.005  | <0.005  |
|             | 10.5                | 5/21/93       | NT          | <10        | 95         | <0.005  | <0.005  | 0.52    | 0.56    |
|             | 15                  | 5/21/93       | NT          | <10        | <0.5       | <0.005  | <0.005  | <0.005  | 0.013   |
| S-3         | 6.5                 | 5/21/93       | NT          | <10        | <0.5       | <0.005  | <0.005  | <0.005  | <0.005  |
|             | 11                  | 5/21/93       | NT          | 36         | 1,300      | <0.005  | <0.005  | 35      | 200     |
|             | 15                  | 5/21/93       | NT          | <10        | <0.5       | <0.005  | 0.019   | 0.020   | 0.11    |

Notes:

- TPHd : Total petroleum hydrocarbons as diesel by EPA Method 8015 (modified)
- TPHg : Total petroleum hydrocarbons as gasoline by EPA Method 8015 (modified)
- BTEX : Benzene, toluene, ethylbenzene and total xylenes by EPA Method 8020 (modified)
- NT : Not tested

**Attachment B**

Soil and Groundwater Analytical Data and Geologic Cross Sections from 1995  
Investigation



Table 1  
Soil Analytical Data  
Total Petroleum Hydrocarbons  
(TPPH, BTEX Compounds, and TEPH)

Shell Service Station  
4411 Foothill Boulevard at High Street  
Oakland, California

| Sample ID | Sample Depth (feet) | Date Sampled | TPPH (C6-C12)                              |               |               | Ethyl-benzene |       | Xylenes (ppm) | TEPH (C9-C24) (ppm) |
|-----------|---------------------|--------------|--|---------------|---------------|---------------|-------|---------------|---------------------|
|           |                     |              | (ppm)                                      | Benzene (ppm) | Toluene (ppm) | (ppm)         | (ppm) |               |                     |
| GP-3      | 8                   | 06/28/95     | ND   | 0.006         | ND            | ND            | ND    | 2.0           |                     |
|           | 12                  |              | 8.4  | 0.13          | 0.029         | 0.14          | 0.36  | 3.7           |                     |
| GP-4      | 8                   | 06/28/95     | 7.2  | 0.098         | 0.009         | 0.054         | 0.13  | 2.9           |                     |
|           | 12                  |              | 280  | ND            | 3.1           | 3.9           | 25    | 46            |                     |
| GP-5      | 8                   | 06/28/95     | ND   | ND            | ND            | ND            | ND    | ND            |                     |
|           | 12                  |              | ND   | ND            | ND            | ND            | ND    | 1.2           |                     |
| GP-6      | 8                   | 06/27/95     | 87   | ND            | 1.3           | 2.2           | 6.6   | 7.3           |                     |
|           | 12                  |              | 39   | ND            | ND            | 0.14          | 0.29  | 5.4           |                     |
| GP-7      | 9.5                 | 06/27/95     | ND   | ND            | ND            | 0.15          | 0.017 | 180           |                     |
|           | 12                  |              | 840  | ND            | 6.0           | 20            | 98    | 43            |                     |
| GP-8      | 8                   | 06/28/95     | ND   | ND            | ND            | ND            | ND    | ND            |                     |
|           | 12                  |              | 86   | ND            | ND            | 1.0           | 2.0   | 15            |                     |
| GP-9      | 8                   | 06/28/95     | 190  | ND            | ND            | 3.6           | 13    | 380           |                     |
|           | 12                  |              | 760  | ND            | 0.71          | 17            | 76    | 41            |                     |
| TPPH      |                     |              | = Total purgeable petroleum hydrocarbons   |               |               |               |       |               |                     |
| TEPH      |                     |              | = Total extractable petroleum hydrocarbons |               |               |               |       |               |                     |
| ppm       |                     |              | = Parts per million                        |               |               |               |       |               |                     |
| ND        |                     |              | = Not detected                             |               |               |               |       |               |                     |

Table 2  
**Groundwater Analytical Data**  
**Total Petroleum Hydrocarbons**  
**(TPPH, BTEX Compounds, TEPH, and Motor Oil)**

Shell Service Station  
 4411 Foothill Boulevard at High Street  
 Oakland, California

| Sample ID | Date Sampled                               | TPPH (C6-C12) (ppb) | Benzene (ppb) | Toluene (ppb) | Ethyl-benzene (ppb) | Xylenes (ppb) | TEPH (C9-C24) (ppb) | Motor Oil (ppb) |
|-----------|--|---------------------|---------------|---------------|---------------------|---------------|---------------------|-----------------|
| GP-2      | 06/27/95                                   | 1,100               | 34            | ND            | 7.2                 | 4.1           | 800                 | ND              |
| GP-10     | 06/28/95                                   | 820                 | 6.3           | ND            | 41                  | 71            | 860                 | 820             |
| TPPH      | = Total purgeable petroleum hydrocarbons   |                     |               |               |                     |               |                     |                 |
| TEPH      | = Total extractable petroleum hydrocarbons |                     |               |               |                     |               |                     |                 |
| ppb       | = Parts per billion                        |                     |               |               |                     |               |                     |                 |
| ND        | = Not detected                             |                     |               |               |                     |               |                     |                 |



EAST 17th STREET

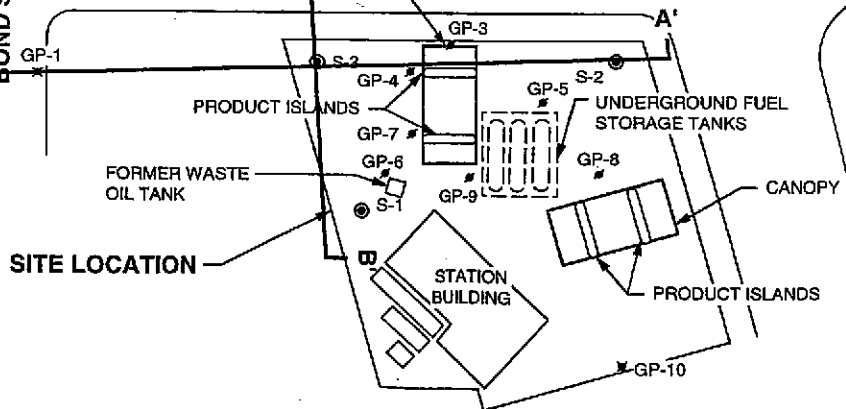
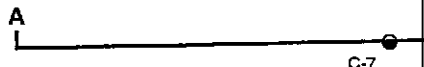
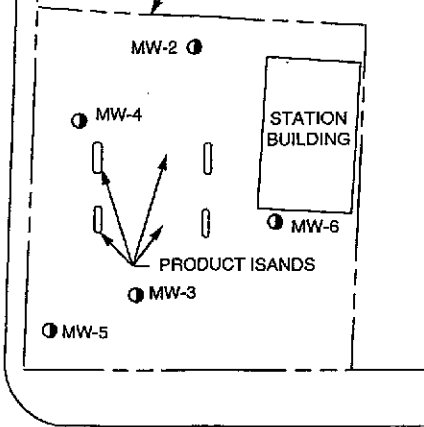
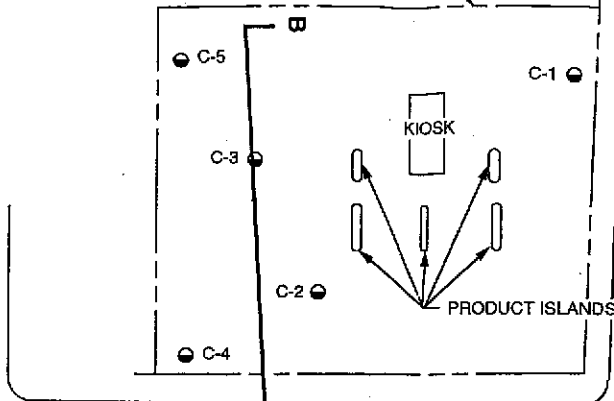
CHEVRON SERVICE STATION

FOOTHILL BOULEVARD

HIGH STREET

BOND STREET

BP SERVICE STATION

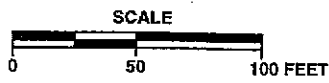


**LEGEND**

- S-3 ● GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION, (SHELL)
- C-1 ● GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION, (CHEVRON)
- MW-5 ● GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION, (BP)
- A A' LINE OF GEOLOGIC CROSS-SECTION (SEE FIGURES 3 and 4)
- GP-7 ■ GEOPROBE SOIL BORING LOCATION AND DESIGNATION
- GP-1 ✕ GEOPROBE GRAB GROUNDWATER LOCATION AND DESIGNATION



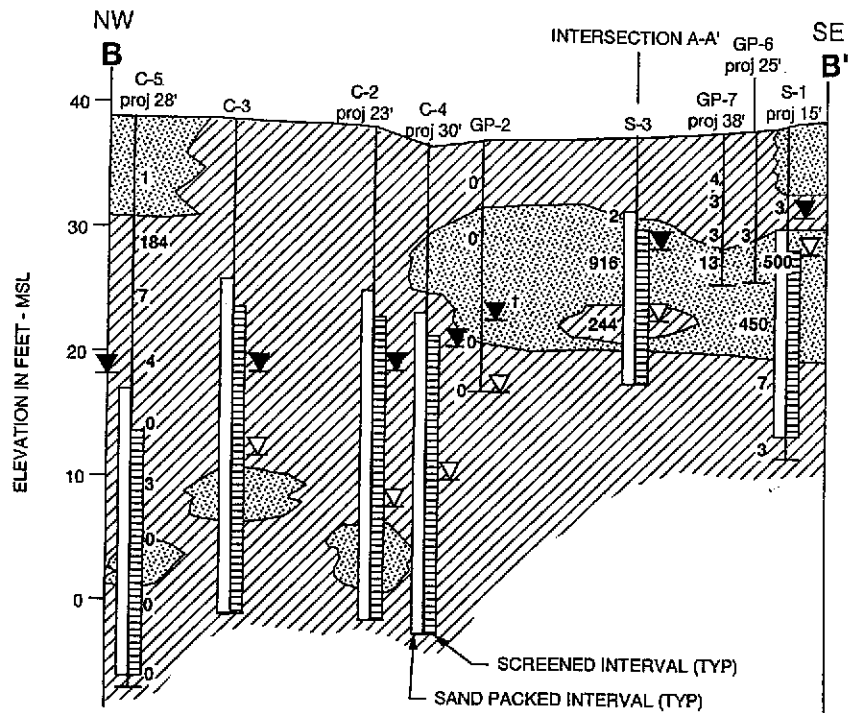
PACIFIC ENVIRONMENTAL GROUP, INC.



**SHELL SERVICE STATION**  
4411 Foothill Boulevard at High Street  
Oakland, California

**GEOPROBE LOCATION MAP**

FIGURE:  
**2**  
PROJECT:  
305-131.1B



PACIFIC ENVIRONMENTAL GROUP, INC.

**SCALE**  
 HORIZONTAL : 1" = 50'  
 VERTICAL : 1" = 10'

**SHELL SERVICE STATION**  
 4411 Foothill Boulevard at High Street  
 Oakland, California

**GEOLOGIC CROSS-SECTION B-B'**

FIGURE:  
 4  
 PROJECT:  
 305-131.1B



**Attachment C**

**Dispenser Sampling Locations and Analytical Results**

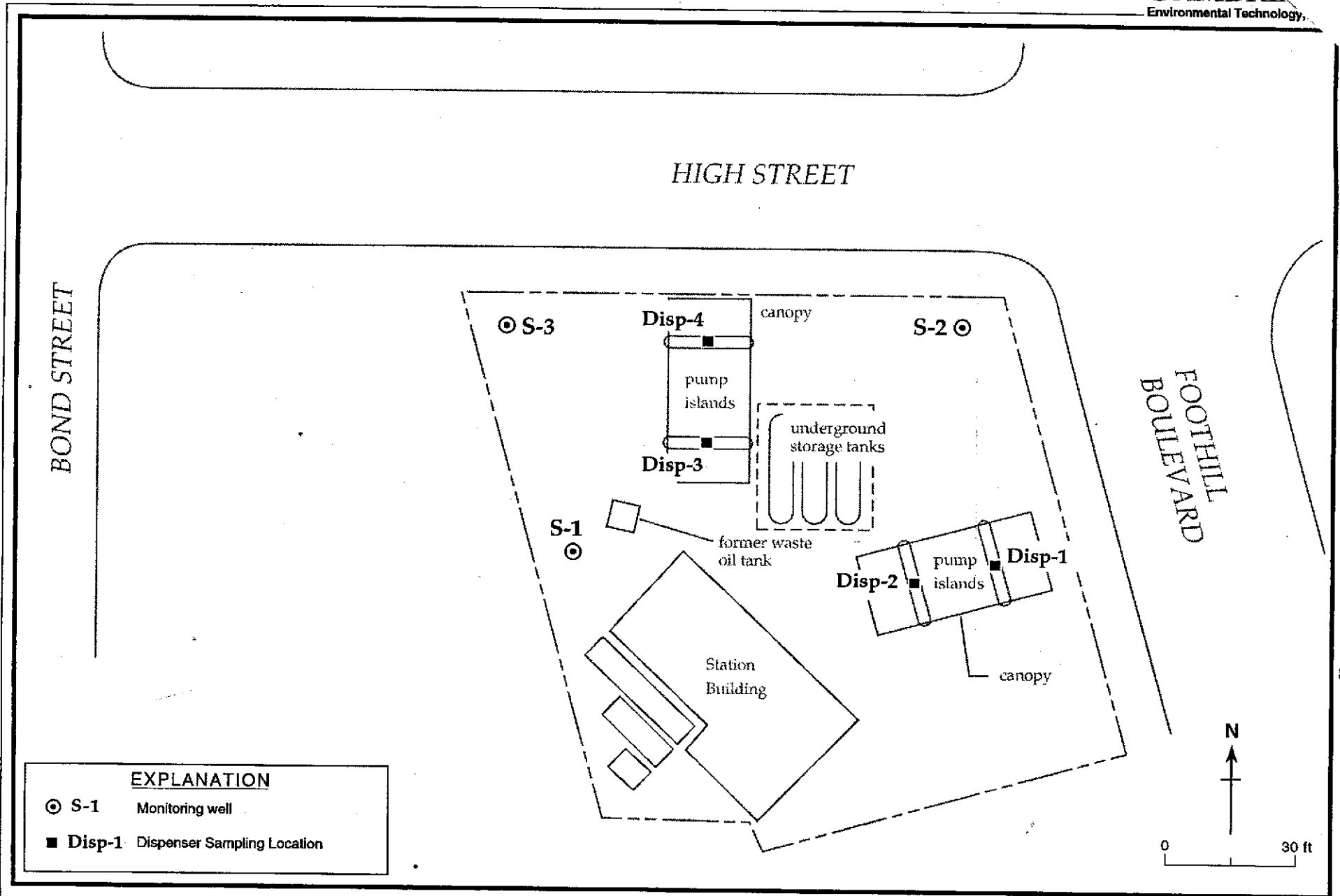


Figure 1. Dispenser Sampling Locations - August 26, 1998 - Shell-branded Service Station - WIC #204-5508-3400, 4411 Foothill Boulevard, Oakland, California

# CAMBRIA

Table 2. Dispenser Sample Analytical Data - Shell-branded Service Station - WIC #204-0461-0501, 4411 Foothill Blvd., Oakland, California

| Date    | Sample ID | Depth<br>(feet) | TPHg  | (Concentrations reported in milligrams per kilogram) |         |         |              |         |
|---------|-----------|-----------------|-------|--|---------|---------|--------------|---------|
|         |           |                 |       | MTBE   | Benzene | Toluene | Ethylbenzene | Xylenes |
| 8/26/98 | D-1(2.0)  | 2.0             | 1,100 | 13(2.5)  | 9.2     | 4.1     | 15           | 61      |
| 8/26/98 | D-2(2.0)  | 2.0             | 1,500 | <6.2   | 3.6     | 4.3     | 7.1          | 21      |
| 8/26/98 | D-3(2.0)  | 2.0             | 160   | 1.4  | 1.3     | 0.61    | 2.9          | 2.0     |
| 8/26/98 | D-4(2.0)  | 2.0             | 180   | 0.83   | 0.29    | 0.17    | 0.10         | 0.43    |

**Abbreviations and Notes:**

TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015.

MTBE = Methyl tert-butyl ether by EPA Method 8020. Result in parentheses represents MTBE by EPA 8260.

Benzene, ethylbenzene, toluene, and total xylenes by EPA Method 8020.

<n= Below detection limit of n milligrams per kilograms



**Attachment D**

Simplicity Monthly Compliance Report and Service Station Monitoring System  
Certification

# SIMPLICITY MONTHLY COMPLIANCE REPORT

for  
Equiva - No. Cal. 1  
10/5/99

Site No. 101501

Alternate Site No. 135686

Site: Shell  
4411 Foothill Blvd.  
Oakland, CA  
94601

Customer: Equiva - No. Cal. 1  
P.O. Box 8080  
Martinez, CA  
94553

## In-Tank Results

| <u>Tank</u> | <u>Product</u> | <u>Date</u> | <u>Test Type</u> | <u>Results</u> |
|-------------|----------------|-------------|------------------|----------------|
| 1           | REGULAR        | 10/01/1999  | 0.2 GPH Monthly  | Passed         |
| 2           | PLUS           | 10/04/1999  | 0.2 GPH Monthly  | Passed         |
| 3           | PREMIUM        | 10/04/1999  | 0.2 GPH Monthly  | Passed         |

## Line Leak Detection Results

| <u>Line</u> | <u>Product</u> | <u>Date</u> | <u>Test Type</u> | <u>Results</u> |
|-------------|----------------|-------------|------------------|----------------|
| 1           | REGULAR        | 09/21/1999  | 0.1 GPH Annual   | Passed         |
| 2           | PLUS           | 09/19/1999  | 0.1 GPH Annual   | Passed         |
| 3           | PREMIUM        | 02/01/1999  | 0.1 GPH Annual   | Passed         |

This report documents tank and line tests performed at the above location for the indicated date and period. This report and the tests performed are part of the Equiva - No. Cal. 1 compliance program. This report and the tests performed are intended to satisfy local state and federal EPA UST release detection and recordkeeping requirements for automatic tank gauge (ATG) and automatic line leak detector (LLD) systems.

VEEDER-ROOT COMPANY  
125 Powder Forest Drive  
Simsbury, CT 06070-2003  
(860) 651-2700

# SIMPLICITY MONTHLY COMPLIANCE REPORT

for  
Equiva - No. Cal. 1  
10/5/99

Site No. 101501

Alternate Site No. 135686

Site: Shell  
4411 Foothill Blvd.  
Oakland, CA  
94601

Customer: Equiva - No. Cal. 1  
P.O. Box 8080  
Martinez, CA  
94553

## Sensor Status

| <u>Sensor Category</u> | <u>Sensor Label</u> | <u>Date</u> | <u>Status</u> |
|------------------------|---------------------|-------------|---------------|
| STP Sump               | REGULAR SUMP        | 10/04/1999  | Normal        |
| STP Sump               | PLUS SUMP           | 10/04/1999  | Normal        |
| STP Sump               | PREMIUM SUMP        | 10/04/1999  | Normal        |
| Other                  | NONE                | 10/04/1999  | Normal        |
| Other                  | NONE                | 10/04/1999  | Normal        |
| Other                  | NONE                | 10/04/1999  | Normal        |
| Other                  | NONE                | 10/04/1999  | Normal        |
| Other                  | NONE                | 10/04/1999  | Normal        |

This report documents tank and line tests performed at the above location for the indicated date and period. This report and the tests performed are part of the Equiva - No. Cal. 1 compliance program. This report and the tests performed are intended to satisfy local state and federal EPA UST release detection and recordkeeping requirements for automatic tank gauge (ATG) and automatic line leak detector (LLD) systems.

**VEEDER-ROOT COMPANY**  
125 Powder Forest Drive  
Simsbury, CT 06070-2003  
(860) 651-2700

# SERVICE STATION MONITORING SYSTEM CERTIFICATION

STATION ADDRESS: 4411 FOOTHILL BLVDCITY: OAKLAND, CAWIC#: 5508-3400

|                      |  |   |   |
|----------------------|--|---|---|
| Tank Material:       | <input checked="" type="checkbox"/> Fiberglass | <input type="checkbox"/> Steel                  | <input type="checkbox"/> Fibersteel                     |
| Tank Type:           | <input type="checkbox"/> Single Wall           | <input checked="" type="checkbox"/> Double Wall |   |
| Line Material:       | <input checked="" type="checkbox"/> Fiberglass | <input type="checkbox"/> Steel                  | <input type="checkbox"/> Flex Line                      |
| Line Type:           | <input type="checkbox"/> Single Wall           | <input checked="" type="checkbox"/> Double Wall | <input type="checkbox"/> Trench Containment             |
| Waste Oil Tank Type: | <input type="checkbox"/> Single Wall           | <input type="checkbox"/> Double Wall            | <input type="checkbox"/> Above Ground                   |
| Waste Oil Line Type: | <input type="checkbox"/> Single Wall           | <input type="checkbox"/> Double Wall            | <input type="checkbox"/> Direct Fill (No Product Lines) |

## TANK MONITORING SYSTEM

| QTY | TYPE   | POSITIVE SHUT DOWN | FAIL SAFE | OPERATIONAL | MANUFACTURER MODEL NUMBER |
|-----|--|--------------------|-----------|-------------|---------------------------|
| 3   | Interstitial Monitor<br><input checked="" type="checkbox"/> Wet <input type="checkbox"/> Dry Annular | Yes                | Yes       | Yes         |                           |
| 3   | Electronic Tank Level Monitor  |                    |           | Yes         |                           |
|     | Vadose Monitor   |                    |           |             |                           |
| 3   | Fill / Vapor Recovery Riser  | Yes                | Yes       | Yes         |                           |

Comments:

## WASTE OIL MONITORING SYSTEM

| QTY | TYPE  | OPERATIONAL | MANUFACTURER MODEL NUMBER |
|-----|---|-------------|---------------------------|
|     | Interstitial Monitor<br><input type="checkbox"/> Wet <input type="checkbox"/> Dry Annular   |             |                           |
|     | Waste Oil Line Monitor<br><input type="checkbox"/> Wet <input type="checkbox"/> Dry Annular |             |                           |
|     | Fill / Vapor Recovery Riser   |             |                           |

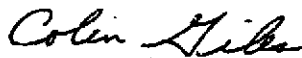
Comments: NO TANK IN GROUND.THERE IS AN ABOVE GROUND TANK W/O A SENSOR

## LINE MONITORING SYSTEM

| QTY | TYPE   | POSITIVE SHUT DOWN | FAIL SAFE | OPERATIONAL | MANUFACTURER MODEL NUMBER |
|-----|--|--------------------|-----------|-------------|---------------------------|
|     | Mechanical Leak Detector                                       |                    |           |             |                           |
| 3   | Electronic Line Pressure Monitor                               | Yes                | Yes       | Yes         |                           |
|     | Electronic Line Pressure Monitor with Mechanical Leak Detector |                    |           |             |                           |
|     | Electronic Sump Monitor  |                    |           |             |                           |
|     | Electronic Line Trench Monitor                                 |                    |           |             |                           |

I certify that the above information is accurate and functioning according to manufacturers specifications.

SIGNATURE: \_\_\_\_\_



COMPANY: \_\_\_\_\_

Tanknology-NDE

PRINT NAME: \_\_\_\_\_

COLIN PATRICK GILES

DATE: \_\_\_\_\_

03/03/99

# SERVICE STATION MONITORING SYSTEM CERTIFICATION

STATION ADDRESS: 4411 FOOTHILL BLVD

CITY: OAKLAND, CA

WIC#: 5508-3400

|                      |  |   |   |
|----------------------|--|---|---|
| Tank Material:       | <input checked="" type="checkbox"/> Fiberglass | <input type="checkbox"/> Steel                  | <input type="checkbox"/> Fibersteel                     |
| Tank Type:           | <input type="checkbox"/> Single Wall           | <input checked="" type="checkbox"/> Double Wall |   |
| Line Material:       | <input checked="" type="checkbox"/> Fiberglass | <input type="checkbox"/> Steel                  | <input type="checkbox"/> Flex Line                      |
| Line Type:           | <input type="checkbox"/> Single Wall           | <input checked="" type="checkbox"/> Double Wall | <input type="checkbox"/> Trench Containment             |
| Waste Oil Tank Type: | <input type="checkbox"/> Single Wall           | <input type="checkbox"/> Double Wall            | <input type="checkbox"/> Above Ground                   |
| Waste Oil Line Type: | <input type="checkbox"/> Single Wall           | <input type="checkbox"/> Double Wall            | <input type="checkbox"/> Direct Fill (No Product Lines) |

### TANK MONITORING SYSTEM

| QTY | TYPE   | POSITIVE SHUT DOWN | FAIL SAFE | OPERATIONAL | MANUFACTURER MODEL NUMBER |
|-----|--|--------------------|-----------|-------------|---------------------------|
| 3   | Interstitial Monitor<br><input checked="" type="checkbox"/> Wet <input type="checkbox"/> Dry Annular | Yes                | Yes       | Yes         |                           |
| 3   | Electronic Tank Level Monitor  |                    |           | Yes         |                           |
|     | Vadose Monitor   |                    |           |             |                           |
| 3   | Fill / Vapor Recovery Riser  | Yes                | Yes       | Yes         |                           |

Comments:

### WASTE OIL MONITORING SYSTEM

| QTY | TYPE  | OPERATIONAL | MANUFACTURER MODEL NUMBER |
|-----|---|-------------|---------------------------|
|     | Interstitial Monitor<br><input type="checkbox"/> Wet <input type="checkbox"/> Dry Annular   |             |                           |
|     | Waste Oil Line Monitor<br><input type="checkbox"/> Wet <input type="checkbox"/> Dry Annular |             |                           |
|     | Fill / Vapor Recovery Riser   |             |                           |

Comments: **NO TANK IN GROUND.THERE IS AN ABOVE GROUND TANK W/O A SENSOR**

### LINE MONITORING SYSTEM

| QTY | TYPE   | POSITIVE SHUT DOWN | FAIL SAFE | OPERATIONAL | MANUFACTURER MODEL NUMBER |
|-----|--|--------------------|-----------|-------------|---------------------------|
|     | Mechanical Leak Detector                                       |                    |           |             |                           |
| 3   | Electronic Line Pressure Monitor                               | Yes                | Yes       | Yes         |                           |
|     | Electronic Line Pressure Monitor with Mechanical Leak Detector |                    |           |             |                           |
|     | Electronic Sump Monitor  |                    |           |             |                           |
|     | Electronic Line Trench Monitor                                 |                    |           |             |                           |

I certify that the above information is accurate and functioning according to manufacturers specifications.

SIGNATURE: *Colin Giles*

COMPANY: Tanknology-NDE

PRINT NAME: COLIN PATRICK GILES

DATE: 03/03/99

# SERVICE STATION CHECKLIST

WIC#: 5508-3400

12-07-1999 11:13AM FROM

| TANK FILL AREA                             |           |                        |                   |                  |                         |                         |                        |                          |                         |                                  |                        |                                     |
|--|-----------|------------------------|-------------------|------------------|-------------------------|-------------------------|------------------------|--------------------------|-------------------------|----------------------------------|------------------------|-------------------------------------|
| Qty  | Product   | Spill Containment Size | Drain Operational | Remote Fill (RF) | Spill Containment On RF | Caps & Gaskets In Place | Lids In Good Condition | Product I.D. Tag Present | Overfill Device Present | Strike Plate Basket Cage or None | Tank Diameter (Inches) | Drop Tube Distance From Tank Bottom |
| 1  | Regular   | 15                     | Yes               | No               | Yes                     | Yes                     | Yes                    | Yes                      | Yes                     |                                  |                        |                                     |
| 1  | Plus      | 15                     | Yes               | No               | Yes                     | Yes                     | Yes                    | Yes                      | Yes                     |                                  |                        |                                     |
| 1  | Premium   | 15                     | Yes               | No               | Yes                     | Yes                     | Yes                    | Yes                      | Yes                     |                                  |                        |                                     |
|  | Diesel    |                        |                   |                  |                         |                         |                        |                          | No                      |                                  |                        |                                     |
|  | Other:    |                        |                   |                  |                         |                         |                        |                          |                         |                                  |                        |                                     |
|  | Waste Oil |                        |                   |                  |                         |                         |                        |                          |                         |                                  |                        | N/A                                 |
| Are All Pump Turbines In A Contained Sump? |           |                        |                   |                  |                         |                         |                        |                          |                         |                                  |                        |                                     |

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

| VAPOR RECOVERY AREA |         |                       |                                       |                         |                        |                                 |                             |   |
|---------------------|---------|-----------------------|---------------------------------------|-------------------------|------------------------|---------------------------------|-----------------------------|---|
| Qty                 | Product | Remote Vapor Recovery | Spill Containment Drain (Operational) | Gaps & Gaskets In Place | Lids In Good Condition | Vapor Recovery I.D. Tag Present | Dry Break In Good Condition | Pressure Relief Valves Installed On Vent Stacks |
| 1                   | Regular | No                    | Yes                                   | Yes                     | Yes                    | Yes                             | Yes                         | Yes   |
| 1                   | Plus    | No                    | Yes                                   | Yes                     | Yes                    | Yes                             | Yes                         | Yes   |
| 1                   | Premium | No                    | Yes                                   | Yes                     | Yes                    | Yes                             | Yes                         | Yes   |
|                     | Other:  |                       |                                       |                         |                        |                                 |                             |   |

Comments: \_\_\_\_\_

# SERVICE STATION CHECKLIST

WIC#: 5508-3400

## DISPENSER AREA

| Product | Dispenser Manufacturer | Number of Nozzles | Impact Valves Operational | Dispenser Containment Box | Containment Sensor: Mechanical, Electronic or None<br><small>If electronic, write model type.</small> | Containment Sensor Operational | Do Any of the Nozzles exceed a 10 gpm flow rate? | B.S.: Balance System<br>H.S.: Heavy System<br>V.A.: Vacuum Assisted |
|---------|------------------------|-------------------|---------------------------|---------------------------|---|--------------------------------|--|---|
| Regular | WAYNES                 | 8                 | Yes                       | Yes                       | E Model: 406 liquid   | Yes                            | No   | V.A.  |
| Plus    | WAYNES                 | 8                 | Yes                       | Yes                       | E Model: 406 liquid   | Yes                            | No   | V.A.  |
| Premium | WAYNES                 | 8                 | Yes                       |                           | E Model: 406 liquid   | Yes                            | No   | V.A.  |
| Diesel  |                        |                   |                           |                           | Model:  |                                |  |   |
| Other   |                        |                   |                           |                           | Model:  |                                |  |   |

Comments: \_\_\_\_\_

## GENERAL INFORMATION

| Qty | Emergency Shutoff (ESO) Present | ESO Operational |
|-----|---------------------------------|-----------------|
|     | Exterior                        |                 |
| 1   | Interior                        | Yes             |

General Information: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

12-07-1999 11:15AM FROM

**Attachment E**

**Basement Survey Map**





EAST 17th STREET

NB

APARTMENT (BASEMENT APARTMENTS)

C-6

BOND STREET

PARKING LOT

C-7

GROCERY STORE

HOUSE 1/2 BASEMENT

C-5

C-3

C-2

C-4

HOUSE 1/2 B

CHEVRON SERVICE STATION APARTMENTS NB

KIOSK

C-1

PRODUCT ISLANDS

FOOTHILL BOULEVARD

MW-6

BP SERVICE STATION

MW-2

MW-4

STATION BUILDING

MW-6

PRODUCT ISLANDS

MW-3

MW-5

MW-9

HIGH STREET

CANOPY

S-3

S-2

HOUSE 1/2 BASEMENT

APT. NB

PRODUCT ISLANDS

UNDERGROUND FUEL STORAGE TANKS

FORMER WASTE OIL TANK

S-1

CANOPY

STATION BUILDING

PRODUCT ISLANDS

SITE LOCATION

COMMERCIAL NB

LEGEND

- S-3 ● GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION, (SHELL)
- C-1 ● GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION, (CHEVRON)
- MW-5 ● GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION, (BP)
- C-2 ● GROUNDWATER EXTRACTION WELL LOCATION AND DESIGNATION
- NB NO BASEMENT OBSERVED



PACIFIC ENVIRONMENTAL GROUP, INC.

SCALE



SHELL SERVICE STATION  
4411 Foothill Boulevard at High Street  
Oakland, California

BASEMENT SURVEY MAP

FIGURE:  
3  
PROJECT:  
305-131.2B