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By dehloptoxic at 9:03 am, Nov 01, 2006





Atlantic Richfield Company (a BP affiliated company)

P.O. Box 1257 San Ramon, California 94583 Phone: (925) 275-3801 Fax: (925) 275-3815

18 October 2006

Re: Third Quarter 2006 Status Report Former BP Service Station # 11270 3255 Mecartney Road Alameda, California ACEH Case #RO0000511

"I declare, that to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached document are true and correct."

Submitted by:

Paul Supple

Environmental Business Manager

Broadbent & Associates, Inc. 1324 Mangrove Ave., Suite 212 Chico, CA 95926 Voice (530) 566-1400 Fax (530) 566-1401



18 October 2006

Project No. 06-08-661

ROBERT H.

MILLER

No. 4893

**TEXAS** 

Atlantic Richfield Company P.O. Box 1257 San Ramon, California 94583 Submitted via ENFOS

Attn.: Mr. Paul Supple

Re: Third Quarter 2006 Status Report, Former BP Service Station #11270

3255 Mecartney Road, Alameda, Alameda County, California

ACEH Case #RO0000511

Dear Mr. Supple:

Provided herein is the *Third Quarter 2006 Status Report* for Former BP Service Station #11270 (herein referred to as Station #11270), located at 3255 Mecartney Road, Alameda, Alameda County, California.

Case closure was requested from Alameda County Environmental Health (ACEH) on 27 October 2004. BP is currently awaiting a response from ACEH. A copy of the Case Closure Summary report, as prepared and submitted by URS, is included as an attachment.

Should you have questions regarding this submission, please do not hesitate to contact us at (530) 566-1400.

Sincerely,

BROADBENT & ASSOCIATES, INC.

Thomas A. Venus, P.E.

Senior Engineer

Robert H. Miller, P.G., C.HG.

Principal Hydrogeologist

Enclosures

cc: Mr. Stephen Plunkett, ACEH (Submitted via ACEH ftp site)

Ms. Shelby Lathrop, ConocoPhillips (Submitted via WebXtender)

Electronic copy uploaded to GeoTracker

ARIZONA CALIFORNIA NEVADA

#### STATION #11270 QUARTERLY GROUND-WATER STATUS REPORT

Facility: #11270 Address: 3255 Mecartney Road, Alameda, California

Environmental Business Manager: Mr. Paul Supple

Consulting Company/Contact Person: Broadbent & Associates, Inc.(BAI)/Rob Miller & Tom Venus.

(530)566-1400

Consultant Project No.: 06-08-661

Primary Agency/Regulatory ID No.: Alameda County Environmental Health (ACEH)

ACEH Case #RO0000511

# WORK PERFORMED THIS QUARTER (Third Quarter 2006):

1. Prepared and submitted Second Quarter 2006 Status Report.

2. No environmental work was conducted at the site during the Third Quarter 2006.

#### WORK PROPOSED FOR NEXT QUARTER (Fourth Quarter 2006):

1. Prepared and submitted this Third Quarter 2006 Status Report.

2. No environmental work is proposed for the site during the Fourth Quarter 2006.

3. Prepare and submit the Fourth Quarter 2006 Status Report.

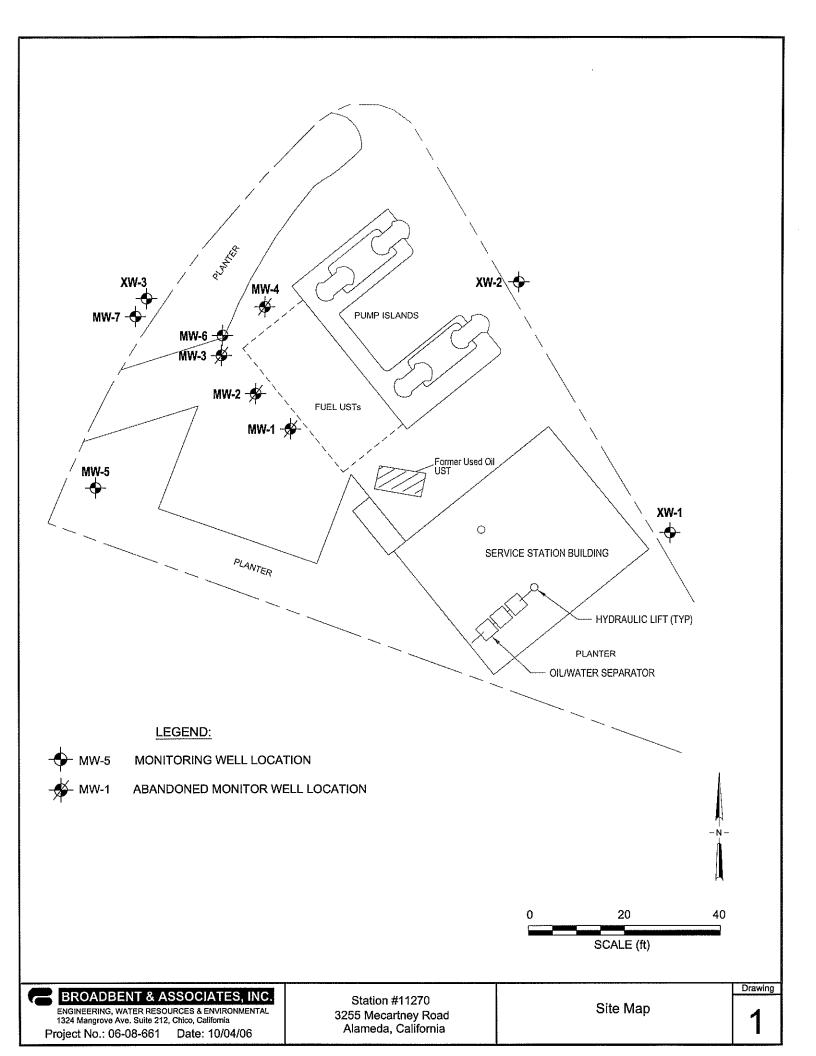
#### DISCUSSION:

Case closure was requested on 27 October 2004 from ACEH. BP is currently awaiting a response from the ACEH. A copy of the Case Closure Summary report, prepared by URS, is included as an attachment to this status report. A Site Map is provided as Drawing 1.

#### ATTACHMENTS:

Drawing 1. Site Map, Station #11270, 3255 Mecartney Road, Alameda, California

Appendix A. Case Closure Summary, Case #RO0000511, Former BP Service Station #11270, 3255 Mecartney Road, Alameda, California (URS, 27 October 2004)



# APPENDIX A

Case Closure Summary, Case #RO0000511, Former BP Service Station #11270 3255 Mecartney Road, Alameda, California (URS, 27 October 2004)

October 27, 2004

Mr. Robert Schultz Alameda County Health Care Services 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502

Subject:

Case Closure Summary, Case #RO0000511

Former BP Service Station #11270

3255 MeCartney Road, Alameda, California

Dear Mr. Schultz:

On behalf of the Atlantic Richfield Company (RM-an affiliated company of BP), URS Corporation (URS) has prepared this Case Closure Summary for the above referenced facility (the Site). This Case Closure Summary was prepared to assist Alameda County Health Care Services's (ACHCS) ongoing efforts to determine if the Site is qualified for case closure. A letter from ACHCS to BP representative Mr. Scott Hooten, dated October 31, 2001, indicated ACHCS's intent to make a determination if No Further Action is required or issue a closure letter for the Site (Attachment A). This Case Closure Summary includes a discussion of the Site background, Site hydrogeology, low risk groundwater case criteria evaluation, and recommendations.

#### SITE HISTORY AND PREVIOUS INVESTIGATIVE AND REMEDIAL ACTIVITIES

The Site is an operational service station located within a developed shopping center at the northern corner of the intersection of Island Drive and Mecartney Road in Alameda, California. The Site is located in a mixed commercial residential neighborhood. The Site location is shown on Figure 1. BP acquired the Site from Mobil in 1989 and TOSCO subsequently acquired the Site from BP in 1994. Site features include three gasoline underground storage tanks (USTs), two pump islands, a station building, and a service bay with two hoists. The onsite USTs include one 12,000 gallon, one 10,000 gallon, and one 6,000 gallon fiberglass tanks installed in 1981. The Site plan is shown on Figure 2.

In May 1990, two soil samples (P1 and P2) were collected from beneath the product dispensers during a routine dispenser modification. The respective samples were collected from material excavated to a depth of approximately 4.5 feet below ground surface (bgs). After additional excavation in the area of sample P1, one additional soil sample P1(8) was collected at a depth of approximately 8 feet bgs. Two sidewall samples (SW1 and SW2) were collected from the sidewalls of the product line trench in the vicinity of sample point P1 at a depth of approximately 4.5 feet bgs. All soil samples collected were analyzed for Total Petroleum Hydrocarbons as gasoline (TPH-g), benzene, toluene, ethylbenzene, xylenes (BTEX), and total lead. The respective sample locations are shown in Attachment B and the analytical results are presented in

URS Corporation 1333 Broadway, Suite 800 Oakland, CA 94612-1924 Tel: 510.893.3600 Fax: 510.874.3268

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Attachment C. Based on the hydrocarbon concentrations detected in sample SW1, additional soils were excavated 8 feet laterally and to a depth of approximately 8 feet bgs in the area of sample SW1. During overexcavation, water was encountered at approximately 8 feet bgs. Three soil samples (SW3, SW4 and SW5) were subsequently collected at depths of 8, 4.5 and 4.5 feet bgs and analyzed for TPH-g, BTEX and total Lead (Attachments B and C). Based on the hydrocarbon concentrations detected in samples SW4 and SW5, additional soils were excavated 7 feet laterally and to a depth of about 8 feet bgs in the vicinity of samples SW4 and SW5. Four soil samples (SW6 through SW9) were collected from material excavated by a backhoe to a depth of approximately 4.5 feet bgs and analyzed for TPH-g, BTEX and Total lead (Attachments B and C). Soil was not excavated south of sample SW3 because of its proximity to the UST complex. A total of approximately 195 cubic yards of soils were excavated, aerated onsite and appropriately disposed offsite.

In August 1992, a preliminary site assessment was conducted at the Site involving the sampling of two pre-existing Mobil groundwater monitoring wells MW-2 and MW-4. The analytical results of the respective samples are included in Attachment D. Samples could not be collected from two additional pre-existing wells MW-1 through MW-3 due to insufficient recharge. The well locations (MW-1 through MW-4) are shown in Attachment B. Product sheens were observed on the purge water from all the monitoring wells. However, it was indicated that age, outdated construction of the wells, and silting of wells MW-1 and MW-3 likely decreased their hydraulic connection to the Site groundwater. Records of boring logs and well construction details for wells MW-1 through MW-4 could not be located.

In October 1994, as part of a supplemental site assessment, two exploratory soil borings (TB-1 and TB-2) were advanced to 10 feet bgs (Attachment B). The analytical results of soil samples collected from the respective borings are included in Attachment C.

In June 1993, a 4-inch groundwater monitoring well MW-5 was installed offsite, near the western corner of the Site. In January 1995, one 4-inch monitoring well MW-6 was installed onsite and one 2-inch monitoring well MW-7 was installed offsite. Borings MW-5 and MW-6 was drilled to 15 feet bgs and MW-7 was drilled to 16.5 feet bgs. Groundwater was encountered in the wells at depths ranging between 5 and 7.5 feet bgs. The respective well locations are shown in Attachment B and the analytical results of soil samples collected from MW-5 through MW-7 are included in Attachment C. Wells MW-1 through MW-4 were subsequently destroyed in January 1995. The boring logs and well construction details for wells MW-5 through MW-7, and the DWR well destruction logs for wells MW-1 through MW-4 are included in Attachment E.

In November 1996, a Tier 2 risk-based corrective action (RBCA) evaluation was conducted to determine the potential exposure risk to residual benzene concentrations in onsite soils. The results of the evaluation indicated that the levels of benzene in soil eight feet bgs should not pose a risk to onsite workers. Risks to potential hypothetical future residents reportedly exceeded the lower, more protective end of the USEPA acceptable risk range. The evaluation also concluded

Mr. Robert Schultz October 27, 2004 Page 3 of 7

that ongoing natural attenuation was likely to reduce residual benzene concentrations to below the acceptable risk range prior to the unlikely scenario of the Site being converted to residential use.

In December 1996, the oil/water separator located on the floor of the vehicle service bay at the west side of the service station building was cleaned and removed. Two soil samples (OWS-1, 0.5' and OWS-1, 2') were subsequently collected from beneath the former oil/water separator location. The respective sampling locations are shown in Attachment B and the analytical results are included in Attachment C.

In August 1997, samples of pea gravel base material (S-1, through S-4) were collected from the bottom of each dispenser and analyzed for TPH-g, BTEX and methyl tertiary butyl ether (MTBE). The respective sampling locations are shown in Attachment B and the analytical results are included in Attachment C.

In July 1998, one 1,000 gallon single walled fiberglass used-oil UST was removed from the Site (Attachment B). The removed UST was noted to be intact with no visible holes or cracks. One native soil sample (S-6-T1E) was collected from the eastern sidewall of the UST cavity at a depth of approximately 7 feet bgs. The analytical results of the respective soil sample are included in Attachment C.

In August 2000, onsite dispensers and product lines were removed and replaced. A total of four pea gravel samples (PD-1-2', PD-2-1.5', PD-3-1.5', and PD-4-1.5') were collected from beneath each of the four product dispensers, and four pea gravel samples (PL-3-1.5', PL-4-1.5', PL-6-1.5', and PL-7-1.5') were collected from beneath the product lines (Attachment B). Three pea gravel samples were also collected at each of the ends of the fuel USTs (F-1-4', F-2-4', and F-5-3'). The analytical results of the respective soil sample are included in Attachment C.

A groundwater monitoring program was initiated since October 1992 starting with wells MW-1 through MW-4 and was continued till September 2001, incorporating wells MW-5 through MW-7, and offsite wells XW-1 through XW-3 that are not associated with the Site. The analytical results of the groundwater monitoring program are included in Attachment D. The potentiometric groundwater elevation contour map and a figure depicting the concentrations of petroleum hydrocarbons in groundwater during the most recent monitoring session conducted in September 2001 are also included in Attachment D. The monitoring program was discontinued in September 2001, awaiting ACHCS's determination if the Site is qualified for case closure.

#### SITE GEOLOGY AND HYDROGEOLOGY

The Site is situated approximately 4,500 feet south of San Leandro Bay, and approximately 3,500 to 5,400 feet northeast of the present shoreline of San Francisco Bay. Sediments encountered at the Site generally consisted of silty to gravelly sand and sandy gravel to the explored depth of 16.5 feet bgs. Lean clay was encountered in MW-5 from 13 to 15 feet bgs,

Mr. Robert Schultz October 27, 2004 Page 4 of 7

and gravelly clay (possibly fill) from 3.5 to 5 feet bgs in MW-7. Groundwater was encountered during drilling at 5 to 7.5 feet bgs. Copies of the boring logs and well construction diagrams are included as Attachment E.

In November 1992, a sensitive receptor survey and existing well search were conducted, the results of which are included in Attachment F. No public water supply wells were identified within approximately 2,500 feet of the Site. No private water supply wells were identified within 1,000 feet of the Site. Additionally, no subways, basements, and schools were identified within 1,000 feet of the Site. The survey identified a surface water body located about 500 feet from the Site, but did not name it. As observed during a site visit by URS, this surface water body is a channel excavated as part of a residential development; it is uncertain if it is connected to the San Francisco Bay, located greater than ½ mile from the Site.

According to the Regional Water Quality Control Board (RWQCB) San Francisco Bay Region "East Bay Plain Groundwater Basin Beneficial Use Evaluation Report", Figures 16 and 17, June 1999, there are one shallow (less than 100 feet bgs) and four deep (greater than 100 feet bgs) irrigation wells located within 0.5 miles of the Site (Attachment F). During the groundwater monitoring program, the depth to water at onsite and offsite wells have ranged between 5.24 feet bgs and 9.15 feet bgs. Historically the groundwater flow direction at the Site has ranged from west through northeast. During the last monitoring session in September 2001, the groundwater flow direction at the Site was westerly at a hydraulic gradient of 0.01 foot per foot (Attachment D).

#### LOW RISK GROUNDWATER CASE CRITERIA REVIEW

The six criteria for closure as a low-risk groundwater case as listed in the San Francisco Regional Water Quality Control Board (SFRWQCB) *Interim Guidance Document* 1996 (December 8, 1995) include:

The leak has been stopped and ongoing sources, including free product, have been removed or remediated:

Between July 1998 and August 2000, part of the primary source(s) comprising of one used-oil UST, one oil/water separator, two dispenser islands, and product piping were removed from the Site and appropriately disposed offsite. Additionally, approximately 195 cubic yards of hydrocarbon impacted soils were excavated, aerated onsite and appropriately disposed offsite.

# The Site has been adequately characterized:

The results of soil and groundwater analysis indicate that the extent of petroleum hydrocarbons has been adequately characterized at the Site. The results of soil and groundwater sampling performed to date at the site are presented and summarized in Attachments B, C and D. Historical analytical results of soil samples collected at the Site between 1990 and 2000 indicate that the potentially remaining petroleum hydrocarbons are limited to the former source areas, i.e., the UST complex and dispenser locations. The vertical limit of hydrocarbons in the soil

Mr. Robert Schultz October 27, 2004 Page 5 of 7

appear to have historically extended to the capillary fringe zone, as the depth to water at the Site has ranged between 5.24 feet bgs and 9.15 feet bgs. Petroleum hydrocarbons historically detected at concentrations of concern were at the following locations and depths (Attachments B and C): at approximately 8 feet bgs in excavation soil sample SW3 in May 1990 (860 mg/kg TPH-g and 5 mg/kg benzene); at approximately 8 feet bgs in excavation soil sample P1(8) in May 1990 (1.0 mg/kg benzene); and at approximately 5 feet bgs in boring soil sample MW-6-5' in January 1995 (480 mg/kg TPH-diesel). The respective TPH-g and benzene concentrations exceed applicable non-drinking water commercial ESLs of 400 mg/kg for TPH-g and 0.38 mg/kg for benzene but the TPH-d concentrations do not exceed the applicable non-drinking water commercial ESL of 500 mg/kg for TPH-d. It is to be noted that residual petroleum hydrocarbons historically detected in onsite soils have most likely attenuated due to ongoing biodegradation.

The extent of the residual dissolved-phase hydrocarbon plume has been generally defined. Well MW-5 defines the southern to southwestern extent, wells MW-6, MW-7 and XW-3 define the western extent, well XW-1 defines the eastern to southeastern extent, and well XW-2 defines the north to northeastern extent (Figure 2). However, it is to be noted that no monitoring wells are located directly north of the onsite UST complex and dispensers and historically, the groundwater flow direction at the Site has ranged between west through north to northeast. Hydrocarbons concentrations have consistently remained at low to non-detect concentrations in wells MW-5, MW-6, MW-7, XW-1, XW-2, and XW-3, which generally define the extent of the residual dissolved hydrocarbon plume. (Attachment D).

#### The dissolved hydrocarbon plume is not migrating:

The analytical results of the groundwater monitoring program indicate that the remaining dissolved hydrocarbon concentrations at wells MW-5, MW-6, MW-7, XW-1, XW-2, and XW-3 have consistently remained at relatively low to non-detect concentrations (Attachment D). The respective wells define the northern, southern, eastern and western boundaries of the residual dissolved hydrocarbon plume. Accordingly, this is indicative that the residual dissolved hydrocarbon plume is not migrating.

# No water wells, deeper drinking water aquifers, surface water or other sensitive receptors are likely to be impacted:

Considering that the dissolved phase hydrocarbon concentrations in wells defining the extent of the residual hydrocarbon plume have consistently remained at low to non-detect concentrations, indicative of a non-migratory plume, no water wells, deeper drinking water aquifers, surface water or other sensitive receptors are likely to be impacted. Additionally, no public water supply wells were identified within approximately 2,500 feet of the Site, no private water supply wells were identified within 1,000 feet of the Site, and no subways, basements, and schools were identified within 1,000 feet of the Site. Onsite detected concentrations of TPH-g and BTEX detected in groundwater are below RWQCB's Environmental Screening Levels (ESLs) for

Mr. Robert Schultz October 27, 2004 Page 6 of 7

drinking water sources (ESL Table F1-a), and MTBE is below non-drinking water ESLs (ESL Table B).

#### The Site presents no significant risk to human health:

The results of a Tier 2 RBCA evaluation was conducted in November 1996 indicated that the historical residual levels of benzene in onsite soils at approximately eight feet bgs should not pose a risk to ensite workers. Risks to potential hypothetical future residents reportedly exceeded the low end of the USEPA acceptable risk range, albeit, risks at the lower, more protective end of the acceptable risk range. The evaluation also concluded that engoing natural attenuation was likely to reduce residual benzene concentrations to below the acceptable risk range prior to the unlikely scenario of the Site being converted to residential use. Additionally, the entire Site is paved over limiting potential exposure pathways and it is also likely the historically detected hydrocarbon concentrations have been further reduced over time by natural attenuation.

#### The site presents no significant risk to the environment:

Considering the relatively low hydrocarbon concentrations likely to be remaining in onsite soils at depths exceeding 8 feet bgs and the lack of migration of the remaining dissolved hydrocarbon plume confined within the Site, the Site is unlikely to present significant risk to the environment. In addition, the absence of ecological receptors and suitable habitat renders the potential ecological exposure pathways onsite and in the vicinity incomplete. The site is located in a highly commercialized and urbanized area and the site and its surroundings consist primarily of paved surfaces, although a surface water channel exists about 700 feet north of the Site, possibly connected to the San Francisco Bay.

#### RECOMMENDATION FOR CASE CLOSURE

The data reviewed indicate the Site is a low-risk groundwater case as defined by the RWQCB. Natural attenuation at the Site is likely to further reduce residual hydrocarbon concentrations in soil and groundwater at the Site. Based on these findings, case closure is requested for this Site.

#### LIMITATIONS

This report is based on data, Site conditions and other information that is generally applicable as of the date of the report, and the conclusions and recommendations herein are therefore applicable only to that time frame. Background information including but not limited to previous field measurements, analytical results, Site plans and other data have been furnished to URS by RM, their previous consultants, and/or third parties, which URS has used in preparing this report. URS has relied on this information as furnished, and is neither responsible for nor has confirmed the accuracy of this information.

Analytical data provided by RM approved laboratory has been reviewed and verified by the laboratory. URS has not performed an independent review of the data and is neither responsible for nor has confirmed the accuracy of this data. Field measurements have been supplied by a

Mr. Robert Schultz October 27, 2004 Page 7 of 7

groundwater sampling subcontractor. URS has not performed an independent review of the field sampling data and is neither responsible for nor has confirmed the accuracy of this data.

If you have any questions or concerns, please contact me at (510) 874-1720.

Sincerely,

URS CORPORATION

Leonard P. Niles, R.G. #5774, C.H.G. #357

Project Manager

cc: Mr. Kyle Christie, BP, Environmental Resource

(electronic file uploaded to ENFOS)

Ms. Liz Sewell, ConocoPhilips, 76 Broadway, Sacramento, CA 95818

Mr. Chris Jimmerson, Delta Environmental Consultants, 3164 Gold Camp Drive, Suite

NO.HG357

200, Rancho Cordova, CA 95670-6021

#### **ATTACHMENTS**

References

Figure 1 – Site Location Map

Figure 2 – Site Plan

Attachment A - ACHCS's October 31, 2001 correspondence

Attachment B - Historical Sample Location Figures

Attachment C - Historical Soil Analytical Data

Attachment D - Historical Water Analytical Data and Third Quarter 2001 Figures

Attachment E - Boring Logs/Well Completion Diagrams

Attachment F - Sensitive Receptor Survey and Well Search Results

Attachment G - Case Closure Summary Form

#### REFERENCES

Kaprealian Engineering, Inc. 1990. Soil Sampling Report. July 16.

EMCON. 1994. Baseline Assessment Report. Site Number 11270. December 27.

Hydro-Environmental Technologies, Inc. 1993. Preliminary Site Assessment Report. January 7.

Hydro-Environmental Technologies, Inc. 1995. Subsurface Investigation Report. March 22.

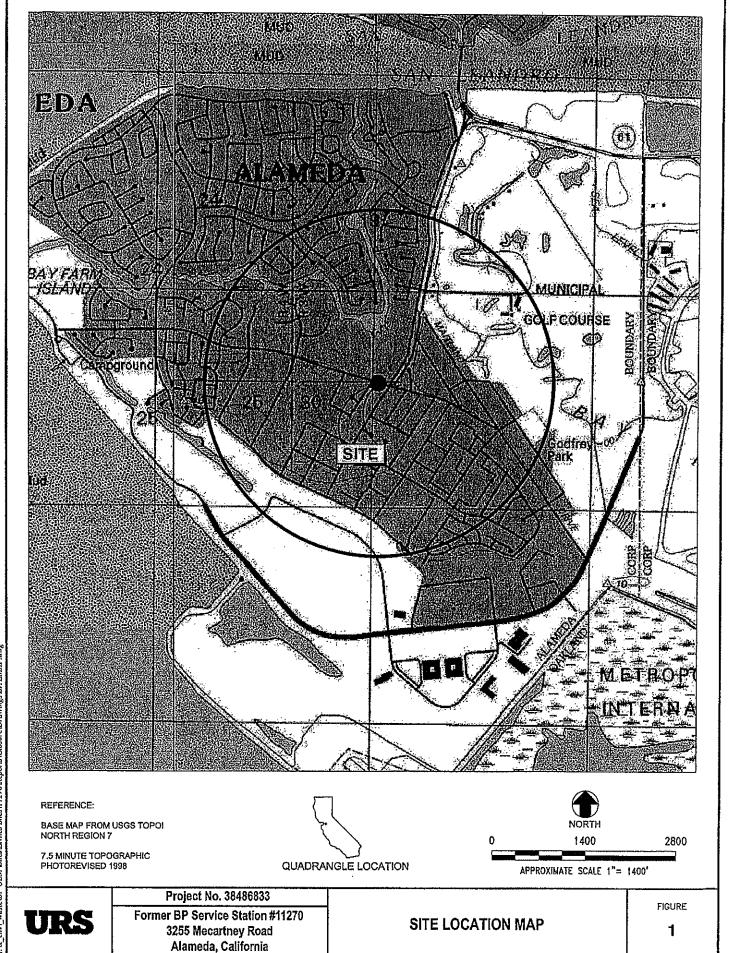
Foster Wheeler Environmental Corporation. 1996. Tier 2 RBCA Evaluation for the Former BP Oil Site No. 11270, Island & Mecartney, Alameda, California. November 1.

Pacific Environmental Group, Inc. 1997. Oil/Water Separator Closure Documentation. Tosco Service Station 11270. January 20.

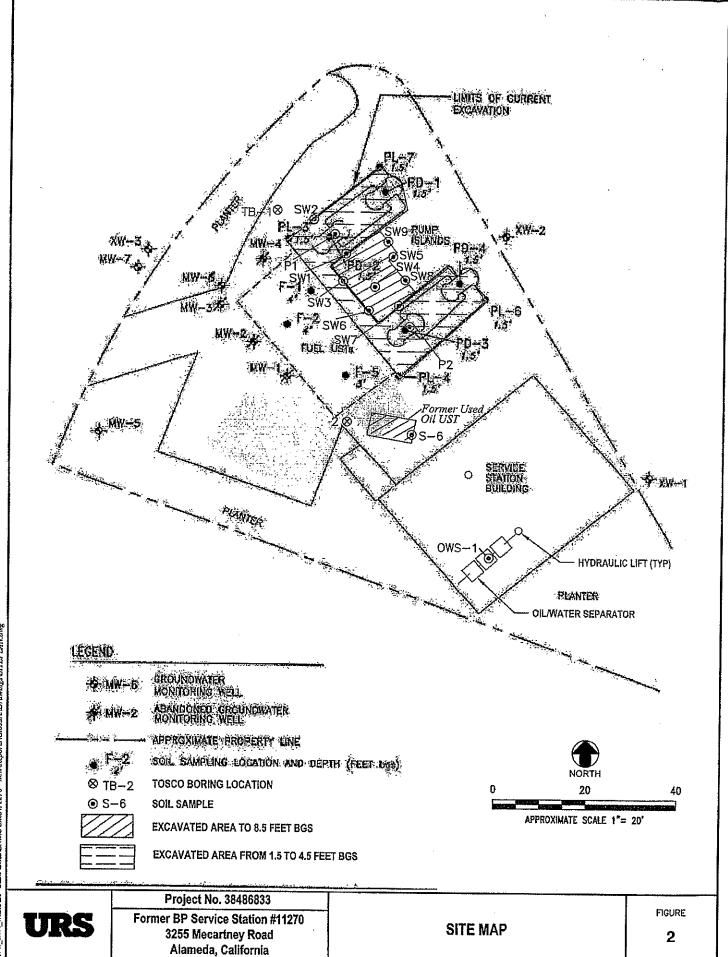
Alisto Engineering Goup. 1997. Soil Sampling at Fuel Dispenser Islands. BP Oil Company Service Station No. 11270. September 19.

Environmental Resolutions, Inc. 1998. Underground Storage Tank Removal at Tosco BP Service Station 11270. October 23.

Secor International, Inc. 2000. Removal and Replacement of Product Lines and Dispensers. Tosco (Former BP) Service Station #11270. September 5.



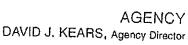
Sep 14, 2004 - 11:00am X: tr\_env\_wasseBP GEM/SitesUNites Sites\11270\Reports\Closure\Drawings\SITEMAP.dvg



Oct 21, 1004 - 4:50pm K'it\_emv[\_westelBP GEM\SitexUNifes Sitex11 1270 - new\Reports1GosurelDrawings1SITEPLANAwg

# ATTACHMENT A

# ALAMEDA COUNTY HEALTH CARE SERVICES





NOV

→ BP OIL COMPANY ←

MIDWEST ENVIRONMENTAL SERVICES

ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION

31 Harbor Bay Parkway, Suite 250 ameda, CA 94502-6577

10) 567-6700 X (510) 337-9335

October 31, 2001 StID # 1771/ R00000511

BP Oil Company Mr. Scott Hooten Bld. 13, Suite N 295 SW 41<sup>st</sup> St. Renton, WA 98055

SUBJECT: INTENT TO MAKE A DETERMINATION THAT NO FURTHER ACTION IS REQUIRED OR ISSUE A CLOSURE LETTER FOR 3255 McCartney Rd., Alameda, CA 94501

Dear Mr. Hooten:

This letter is to inform you that Alameda County Environmental Protection (LOP) intends to make a determination that no further action is required at the above site or to issue a closure letter. Please notify this agency of any input and recommendations you may have on these proposed actions within 20 days of the date of this letter.

In accordance with section 25297.15 of Ch. 6.7 of the Health & Safety Code, you must provide certification to the local agency that all of the current record fee title owners have been informed of the proposed action. You may use the enclosed Example letter #3 as a guide. Please provide this certification to this office within 20 days of the date of this letter.

If you have any questions about this, please contact me at (510) 567-6765.

Sincerely,

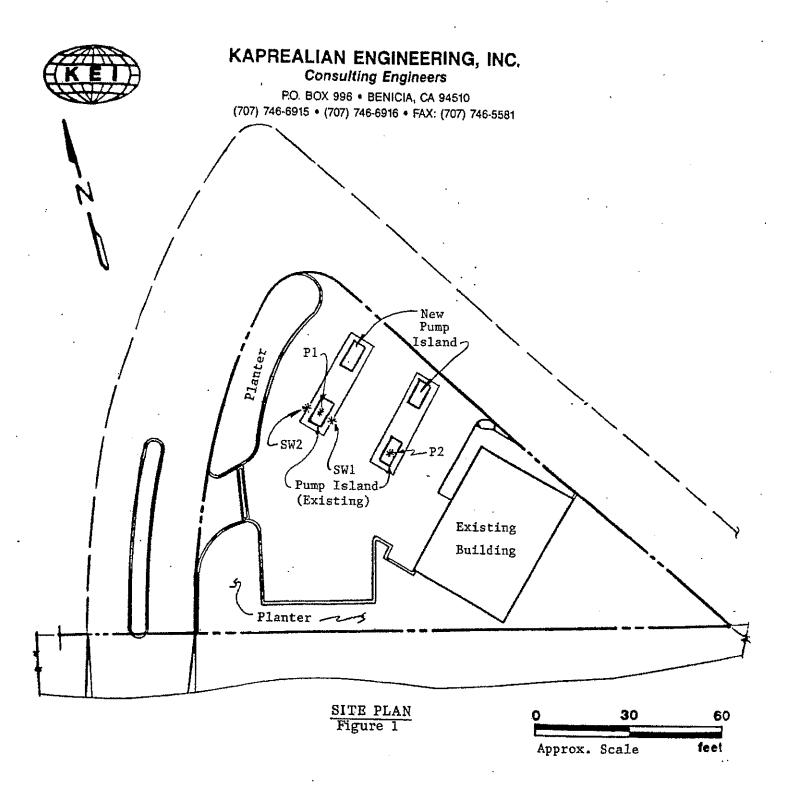
Barney M. Chan

Hazardous Materials Specialist

Enclosure (sample letter #3)

c: B.Chan, files

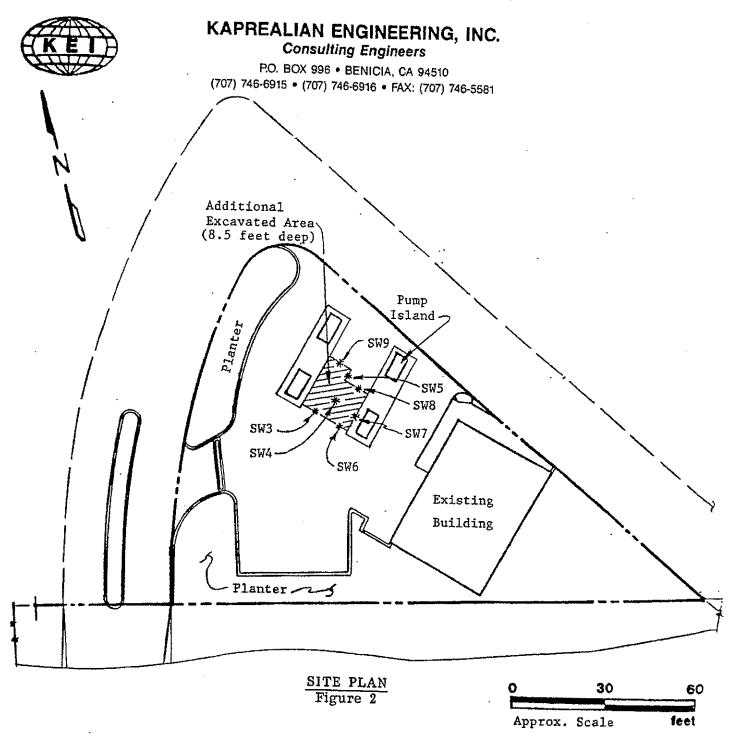
# ATTACHMENT B



#### LEGEND

\* Soil Sample Point Location

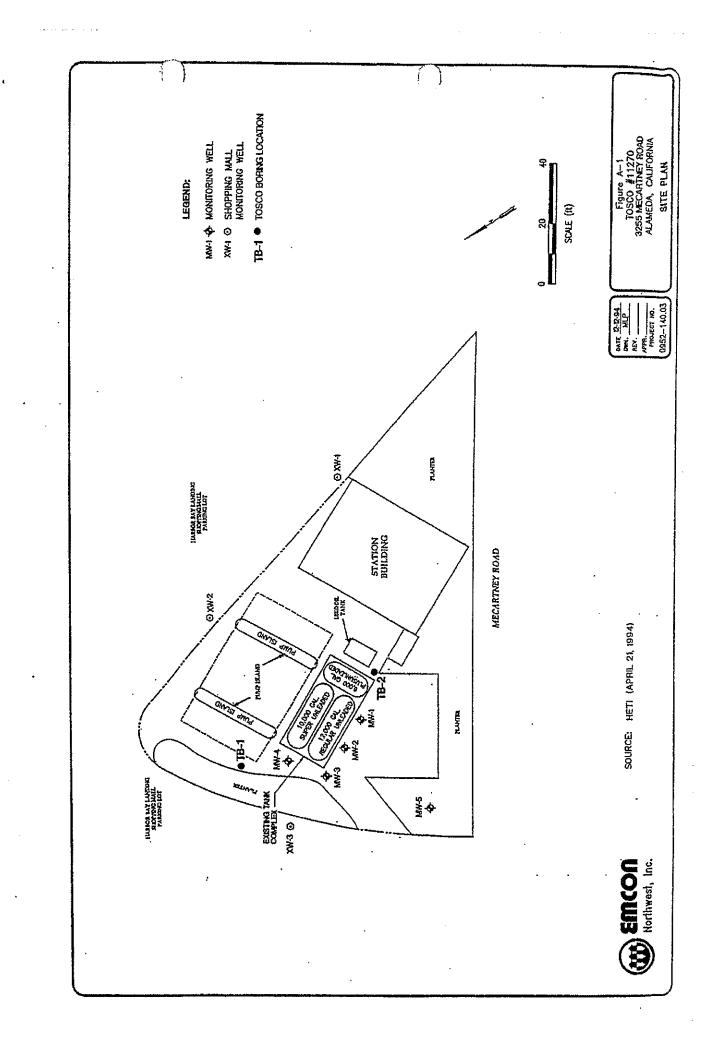
BP Service Station 3255 McCartney Road Alameda, California

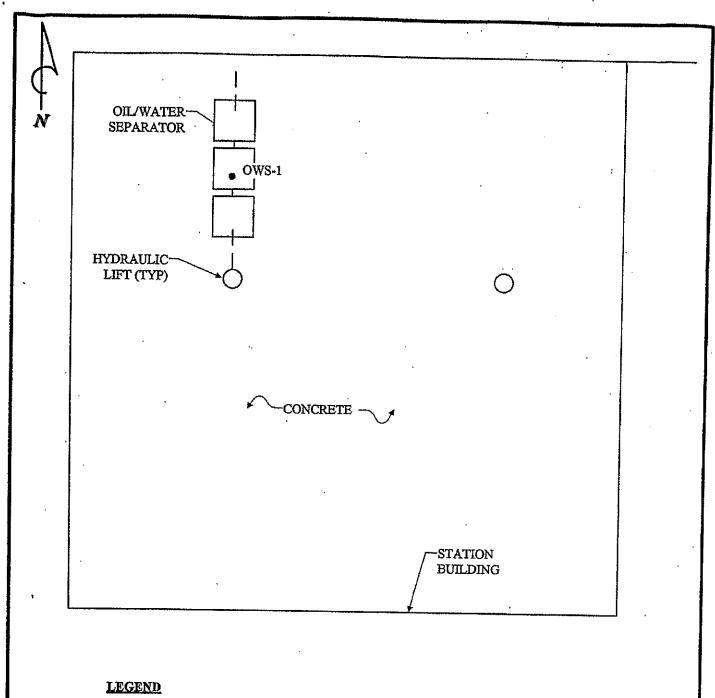


# LEGEND

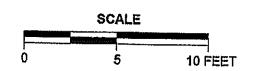
\* Soil Sample Point Location

BP Service Station 3255 McCartney Road Alameda, California





OWS-1 SOIL SAMPLE LOCATION AND DESIGNATION





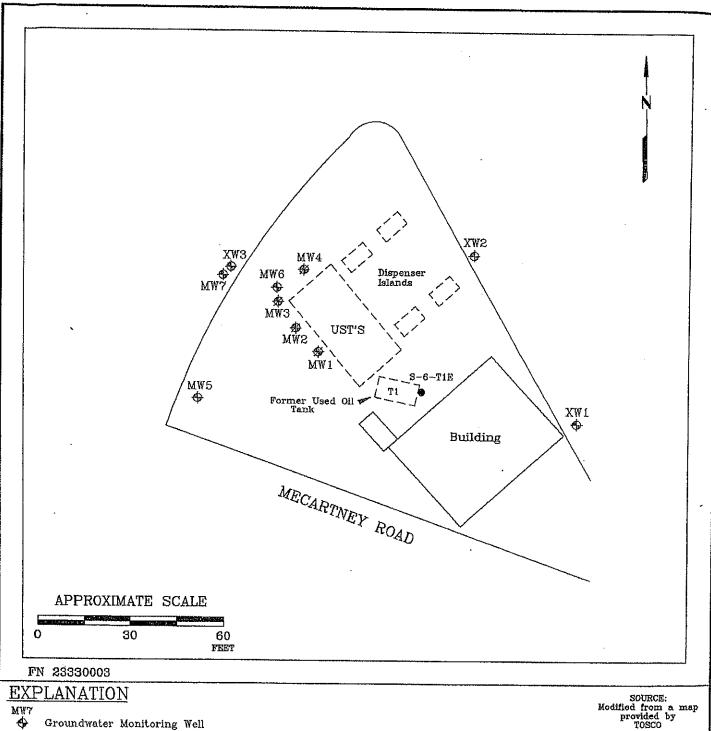
PACIFIC **ENVIRONMENTAL** GROUP, INC.

**TOSCO SERVICE STATION 11270** 3255 McCartney Road Oakland, California

SITE MAP

FIGURE: PROJECT:

304-012.1A



MW7 0

Groundwater Monitoring Well

хwэ

Groundwater Monitoring Well

MW4

Destroyed Groundwater Monitoring Well

Soil Sample Location

- Tank Number Depth Soil Sample



# GENERALIZED SITE PLAN

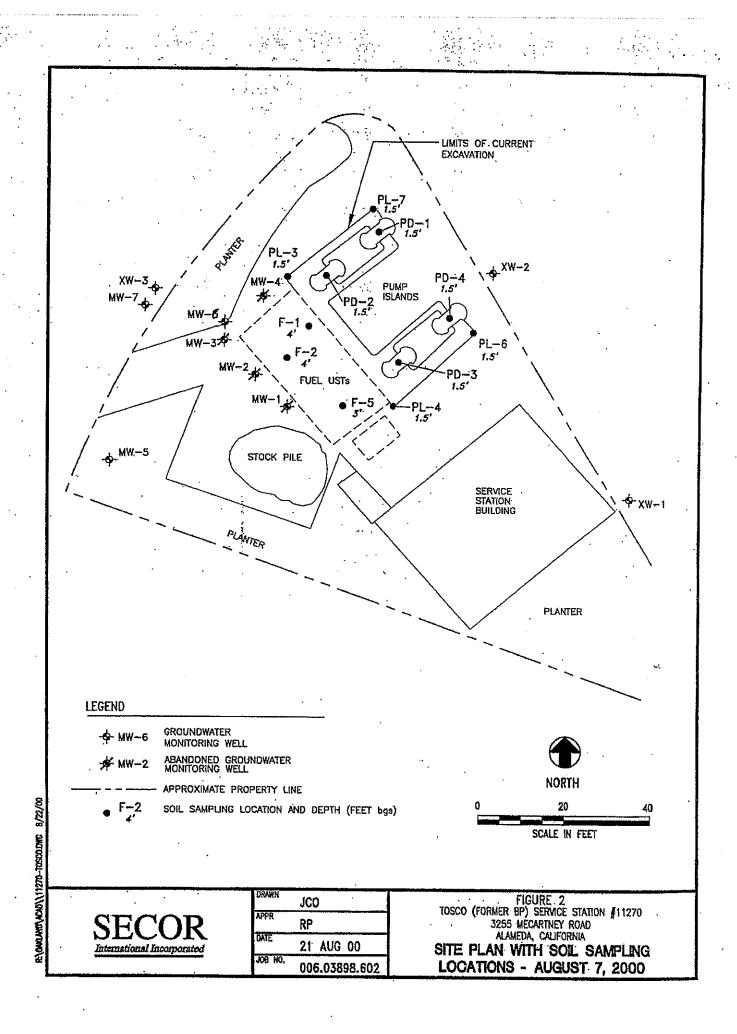
TOSCO BP SERVICE STATION 11270 3255 MeCartney Road Alameda, California

PROJECT NO.

2333

PLATE

2



# ATTACHMENT C

KEI-J90-0514.R1 July 16, 1990

# TABLE 1 SUMMARY OF LABORATORY ANALYSES SOIL

(Samples collected on May 22 & 30, and June 4, 1990)

Sample	Depth (feet)	TPH as <u>Gasoline</u>	Benzene	<u>Toluene</u>	Xylenes	Ethyl- <u>benzene</u>	Total <u>Lead</u>
SW1	4.5	2,000	18	<b>5</b> 6	270	39	6.5
SW2	4.5	8.0	0.31	0.084	1.2	0.26	1.7
SW3	8.0	860	5 .	2.8	13	7.5	5.7
SW4	4.5	1.0	0.0090	0.017	0.030	0.0099	0.71
SW5	4.5	15	0.035	0.26	0.49	0.14	2.1
SW6	4.5	1.5	0.0079	0.0052	0.069	0.023	2.9
SW7*	4.5	ND	0.034	0.0073	0.076	0.042	36
SW8	4.5	ND	0.010	0.0098	0.035	0.016	5.8
SW9	4.5	ND	0.024	ND	0.026	0.020	11
P1.	4.5	6,900	70	260	700	120	0.91
P1(8)	8.0	7.0	1.0	0.025	0.47	0.19	1.7
P2	4.5	ND	0.0058	0.0050	0.023	0.010	1.6
Detecti	on						
Limits	i.	1.0	0.0050	0.0050	0.0050	0.0050	0.25

<sup>\*</sup> Organic lead was non-detectable.

ND = Non-detectable.

Results are in parts per million (ppm), unless otherwise indicated.

Table A-1

# Site Number 11270 3255 McCartney Road, Alameda, California

# Soil Sample Results of Analyses (ppm)

			California DHS LUFT Method TPH-G		DHS LUFT rocarbon Scan	BTEX EPA Method 5030/8020				
Sample Number	Depth (feet)	Date Collected	ТРН-G	TPH-D	ТРН-О	Benzene	Toluene	Ethylbenzene	Total Xylenes	
TB1-S,2.5-3 TB1-S,5.5-6 TB2-S,2.5-3 TB2-S,6.5-7	2.5-3 5.5-6 2.5-3 6.5-7	10/26/94 10/26/94 10/26/94 10/26/94	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	

# **Groundwater Sample Results of Analyses (ppb)**

	Depth to		California DHS LUFT Method TPH-G	California I Method Hydr							
Sample Number (feet)		Date Sampled	TPH-G	TPH-D	трн-о	Benzene	Toluene	Ethylbenzene	Totai Xylenes		
TB1-W-11.5 TB2-W-11.5	11.5 11.5	10/26/94 10/26/94	1,500 310	nd nd	nđ nđ	nd nd	nd 1	nd nd	nd 1		
NOTE: TPH-G = Total petroleum hydrocarbons as gasoline.  TPH-D = Total petroleum hydrocarbons as diesel.  TPH-O = Total petroleum hydrocarbons as diesel.  TB = Tosco bering.  TD = Tosco dispenser soil sample.  TD = Tosco HydroPunch.  THP = Tosco HydroPunch.  SGP = Soil gas probe.  Raised method reporting limits (see laboratory report in Attachment D).											

#### TABLE 1

#### SOIL SAMPLE ANALYTICAL RESULTS

BP Service Station No. 11270 3255 Mecartney Road Alameda, California

Sample No.	Date	TPHd (µg/kg)	TPHg (µg/kg)	B (µg/kg)	T (µg/kg)	Ε (μg/kg)	Χ (μg/kg)
MW-5-5'	6/17/93	11,000 (1)	ND<1000 (2)	ND<5.0 (3)	ND<5.0 (3)	ND<5.0 (3)	ND<5.0 (3)
MW-6-5'	1/19/95	480,000	89,000	ND<50	210	630	4,800
MW-7-5'	1/18/95	110,000	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0

#### Notes:

Sample No.: Soil boring designation and sample collection depth.

Date: Sample collection date.

Total petroleum hydrocarbons as diesel by EPA Method 8015 (modified). (1) TPHd: (2) TPHg: Total petroleum hydrocarbons as gasoline by EPA Method 8015 (modified).

(3) BTEX: Benzene, toluene, ethylbenzene and total xylenes by EPA Method 8020 (modified).

μg/kg: Micrograms per kilogram.

TPHd: Total petroleum hydrocarbons as diesel by California Leaking Underground Fuel Tank (CA LUFT) Manual protocols. Total petroleum hydrocarbons as gasoline by California Leaking Underground Fuel Tank (CA LUFT) Manual protocols. TPHg:

Benzene, toluene, ethylbenzene and total xylenes by California Leaking Underground Fuel Tank (CA LUFT) Manual protocols BTEX: ND:

Not detected in concentrations exceeding the indicated laboratory method detection limit.

Table 1
Soil Analytical Data
Oil/Water Separator
Total Petroleum Hydrocarbons
(TPH as Gasoline, BTEX Compounds, TPH as Diesel, TRPH, and HVOCs)

Tosco Service Station 11270 3255 McCartney Road Alameda, California

2/96 ND					(ppm)	(ppm)	(ppb)
000 110	ND	ND	ND	ND	ND	49	ŅD
2/96 ND	ND	ND	ND	ND .	ND	13	ND
	petroleum hydrocart	2/96 ND ND  petroleum hydrocarbons e organic compounds	petroleum hydrocarbons				

#### TABLE 1 - SUMMARY OF RESULTS OF DISPENSER SAMPLING BP OIL COMPANY SERVICE STATION NO. 11270 3255 MECARTNEY ROAD, ALAMEDA, CALIFORNIA

#### ALISTO PROJECT NO. 10-206

SAMPLE ID	DATE OF SAMPLING	TPH-G (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	MTBE (mg/kg)	LAB
S-1	08/15/97	ND<0.1	ND<0.001	0.085	ND<0.002	0.0047	ND<0.1	SPL <sub>.</sub>
S-2	08/15/97	ND<0.1	ND<0.001	0.047	ND<0.002	ND<0.002	ND<0.1	SPL
S-3	08/15/97	ND<0.1	ND<0.001	0.058	ND<0.002	ND<0.002	ND<0.1	SPL
S-4	08/15/97	ND<0.1	ND<0.001	0.049	ND<0.002	ND<0.002	ND<0.1	SPL

#### ABBREVIATIONS:

TPH-G

Total petroleum hydrocarbons as gasoline

В Т Benzene

E

Toluene Ethylbenzene

Х

Total xylenes

MTBE

mg/kg

NĎ

Methyl tert butyl ether
Milligrams per kilogram
Not detected above reported detection limit
Southern Peroleum Laboratories

SPL

F302\10-206\206-5-S.WQ2

TABLE 1
SOIL SAMPLE ANALYSIS RESULTS
Tosco BP Service Station 11270
3255 Mecartney Road
Alameda, California
(Page 1 of 1)

Sample #	Depth (ft bgs)	Date	ТЕРНА	ТРРНд	В	Т	E	х	TRPH	Total Lead	SVOC's	HVOC's
S-6-TIE	6.0	7/9/98	ND*	ND	ND	ИD	ND	ND	ND	ND**	ND	ND

Notes:
--------

Depths are in feet below gr	round surface (	ft bgs)
Soil results (S) in parts per	million (ppm)	·
TEPHd	=	Total extractable petroleum hydrocarbons as diesel analyzed using modified EPA method 8015.
ТРРНg	***	Total purgeable petroleum hydrocarbons as gasoline analyzed using modified EPA method 8015.
BTEX	ant.	Benzene, Toluene, Ethylbenzene, and total Xylenes analyzed using EPA method 8020.
TRPH -	=	Total recoverable petroleum hydrocarbons analyzed using EPA method 5520 E&F.
Total Lead	=	Total threshold limit concentration of lead analyzed using EPA method 6010.
SVOC's		Semi-volatile organic compounds analyzed using EPA method 8270.
HVOC's	=	Halogenated volatile organic compounds analyzed using EPA method 8010
- ND	==	Not detected
*	<del></del>	TEPHd analyses completed after 14 - day hold time.
***	=	Additional Analyses: Cadmium ND; Chomium 22 ppm; Nickel 8.9 ppm; Zinc 16 ppm analyzed using EPA method 6010.
	_	Additional Analyses: Cadition 1907, Cholinon 22 ppm; Packet 6.9 ppm; Zinc 16 ppm analyzed using EPA method 6010.

# Soli Analytical Data **Product Lines and Dispeners**

#### Tosco (Former BP) Service Station # 11270 3255 McCartney Road Alameda, California

	Sample .		TPH as			Ethly-		MTBE	
Sample	Depth	Date	Gasoline	Benzene	Toluene	benzene	Xylenes	8020/8260	Total Lead
Name	(feet bgs)	Sampled	· (mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
PD-1-2'		00/07/00					TO STATE OF THE PERSON	•	*Angrykelyager
–	2	08/07/00	ND<1	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05/NA	ND<10
PD-2-1.5	1.5	08/07/00	 ND<1	્રાફ્ટેજ્ડું હું કે અ ND<0.005	ND<0.005	ND<0.005			tan Angalat
	-mg2 1 11	00,0,700					ND<0.005 A.⊈te 1996 .	ND<0.05/NA	ND<10
PD-3-1.5'	1.5	08/07/00	ND<1	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05/NA	4411000000 C
	vattar et e						arioni ri e neeksii	14D<0.05/14A	ND<10
PD-4-1.5'	1.5	08/07/00	ND<1	ND<0.005	ND<0.005	ND<0.005		0.0582/ND<0.05	
1.000 分析。	1. 1814WW	and wife a	The Leading of the				estate securit	312445K XIBO	3.655,411,547
PL-3-1.5'	1.5	08/07/00	ND<1	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05/NA	ND<10
10000 10	A 1872 N	Table AR. or	# 1 R # - 1 . # 18	THE SAME OF	2000年15、1960年	রীয় নারপার্ক নো <u>র্ভারতী</u> ।	THEY THELD	··· ANTONELLUS	019.6389 des
PL-6-1.5'	1,5	08/07/00	ND<1	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05/NA	ND<10
	· Artis (Application)	、物 部份的	2000年 水鄉		是一种代码。	心的特別	<b>"我就你!"我就</b> 能	**************************************	AREA MERCEN
PL-7-1.5'	1.5	08/07/00	ND<1	ND<0.005	ND<0.005	ND<0.005	· ND<0.005	ND<0.05/NA	ND<10
ិស្សាស្តីដ ពិសាសា	The Market	A. 113 S	(4) [1] [1]					· 一个的线道和2	ALC: ASSESSE:
F-1-4'	4	08/07/00	ND<1	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05/NA	ND<10
	Sugar Market Control	•						一、清彩成品种色	
F-2-4	<b>4</b> 1 :::25×363	08/07/00	ND<1		- ND<0.005	ND<0.005	ND<0.005	ND<0.05/NA	ND<10
F-5-3'	3	08/07/00	ND<1	ND<0.005	ND<0.005		NAME OF THE		
· ····································	H Designation	30131100				ND<0.005	·ND<0.005	ND<0.05/NA .	ND<10

TPH = Total petroleum hydrocarbons

Sample depth in feet below ground surface

MTBE = Methyl tertiary butyl ether

ND = Not detected above specified laboratory reporting limits

NA = Not analyzed

mg/kg = milligrams per kilogram

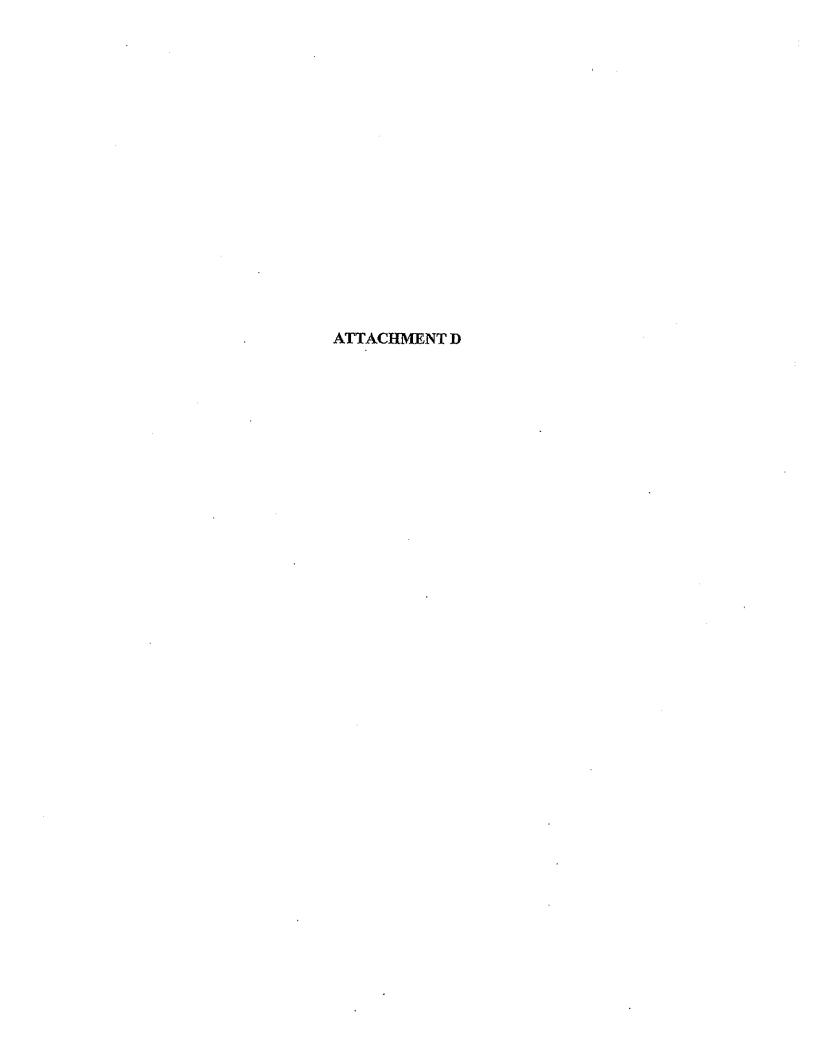


TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug//l)	TPH-D (ug//i)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	TDS (ug/l)	DO (ppm)	LAB
MW-1 (	c) 10/29/92	7.49	7.28		0.21										
MW-1 (	c) 06/21/93	7.49	5.40		2.09		Brands.		***						
MW-1	04/05/94	7.49	5.64		1.85	1700	***	20	1.1	3.9	7.6				PACE
MW-1	07/28/94	7.49	6.22		1,27				***						LACE
MW-1	10/26/94	7.49	6.40		1.09				<b>-</b>					_	
MW-1 (	d) 02/05/95	_		***	_							<del></del>	_	_	_
MW-2	10/29/92	7.07	6.84		0.23	2500	3900	140	ND<10	65	22				
MW-2	06/21/93	7.07	5.49	~~~	1.58	720	770	12	1.5	11	12		_	******	*****
MW-2	04/05/94	7.07	5.40		1.67	420	1300	ND<0.5	ND<0.5	ND<0.5	4	4500 /-	·	4.5	
MW-2	07/28/94	7.07	5.97		1.10	**************************************	1500	ND <0.5	140~0.0	NU~0.5		4500 (e	)	1.8	PACE
MW-2	10/26/94	7.07	6.10		0.97								-		
MW-2 (		<del>_</del>					_				***	*****			
– `	-,											****			
MW-3 (		7.08	7.14		-0.06						****				
MW-3 (		7.08	5.84		1.24										
E-WM	04/05/94	7.08	5.83		1.25	990	4300	3.2	ND<0.5	ND<0.5	1.3	790 (e	٠		PACE
KW-3	07/28/94	7.08	6.32	_	0.76	'	-					(0	, <u> </u>		F.AUE
MW-3	10/26/94	7.08	6.42		0.66								_		
MW-3 (	d) 02/05/95	<del></del>		_						***		-	_		
MW-4	10/29/92	7.13	6.90		0.23	2600		250	2.5	74	6.6				
MW-4	06/21/93	7.13	5.54		1.59	1400	1100	24	2.9	2.6	7.9				_
MW-4	04/05/94	7.13	5.46		1.67	930	940	33	0.8	2.6 ND<0.5	7.9 2.8	9700 (-			
MW-4	07/28/94	7.13	6.02	****	1.11	2400	1400	19	0.0 1.8	ND<0.5 0.5	∠.8 8	8700 (e	) <del></del>	2.7	PACE
QC-1 (	f) 07/28/94	****		Philippe		2300		19	1.7	0.5 .			******	6.7	PACE
MW-4	10/26/94	7.13	6.13		1.00		_	10	1.7	0,5 .	7.4				PACE
MW-4 (d			<del></del>	***						******				_	
	-,														_

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (I (Feet)		TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	TDS (ug/i)	DO (ppm)	LAB
MW-5	06/21/93	8.36	7,44		0.92	ND<50	100	ND<0.5	ND<0.5	ND<0.5	ND<0.5				
MW-5	04/05/94	8.36	7:42		0.94	ND<50	100	ND<0.5	ND<0.5	ND<0.5	ND<0.5			2.5	PACE
QC-1 (		***	_			ND<50		ND<0.5	ND<0.5	ND<0.5	ND<0.5				PACE
MW-5	07/28/94	8.36	7.88		0.48	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	*****		7.4	PACE
MW-5	10/26/94	8.36	7.92		0.44	ND<50	160	ND<0.5	ND<0.5	ND<0.5	ND<0.5			5.5	PACE
QC-1 (						ND<50		. ND<0.5	0.5	ND<0.5	ND<0.5				PACE
MW-5	02/05/95	8,36	7.83	*****	0.53	ND<50	ND<500	ND<0.25	ND<0.25	ND<0.25	ND<0.50				ATI
QC-1 (						ND<50		ND<0.25	ND<0.25	ND<0.25	ND<0.50				ATŧ
MW-5	05/05/95	8.36	9.00		-0.64	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<1.0			3.1	ATI
MW-5	07/19/95	8.36	9.03		-0.67	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<1.0		14700	4.6	ATI
MW-5	10/12/95	8.36	9.15		-0.79	ND<50	***	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	8490	4.3	ATI
MW-5	01/08/96	8.36	9.04		-0.68	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	10000	4.9	
MW-5	09/11/97	8.36	8.90		-0.54	ND<50		ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10		4.5	ATI SPL
MW-5	01/27/98	8.36	8.27 ·		0.09					1			_	<del></del>	. –
MW-5	04/19/98	8.36	8.60		-0.24		***						<del>_</del>		
MW-5	09/27/00	8.36	8.68		~0.32						ė	_			_
MW-5	03/21/01	8.36	8.13		0.23	*****					***		_		
MW-5 (F	c) 09/18/01	8.36										-	<del></del>		
MW-6	02/05/95	6.88	6.39		0.49	1000	1000	7.6	19	9.1	96	(	n)	5	A771
MW-6	05/05/95	6.88	6,85		0.03	2300	***	49	9	130	46		g) 	3.3	ATI
QC-1 (1			-			2400		49	9,2	140	48				ATI
MW-6	07/19/95	6.88	7.13		-0.25	1500		84	3.3	28	24		3) 818	3.7	ATI ATI
QC-1 (f		<del></del>				1500		89	3.8	30	26		g) 818 g)	J.1	
MW-6	10/12/95	6.88	7.35	***************************************	-0.47	1800	_	38	13	38	86	2500	9) .— 868	4.1	ATI ATI
QC-1 (f			<del></del>			1100		33	7	18	44	2200			ATI
MW-6	01/08/96	6.88	7.04		-0.16	1300		31	4.7	60	53	170	474	4.2	ATI
QC-1 (f						1000		27	4	49	44	150			
MW-6	09/11/97	6.88	7.29		-0.41	ND<250		8.5	ND<5.0	11	6	1400	_	3.5	ATI SPL
QC-1 (f						210		8.7	ND<5.0	14	8	1400	_		
MW-6	01/27/98	6.88	6.20		0.68	47000		350	150	360	690	38000	******	4.6	SPL
QC-1 (f				-		51000		290	120	300	580	35000		4.6	SPL
MW-6	04/19/98	6.88	6.64		0.24	36000	_	40	510	140	10500	660			SPL
QC-1 (f						24000		20	360	81	7100	480		4	SPL
MW-6	09/27/00	6.88	6.99		-0.11	1400		6,9	19	110	53		·		SPL
MW-6	03/21/01	6.88	6.36		0.52	330		2.2	1.42	50.4	10.2	•	•	~	PACE
MW-6	09/18/01	6.88	7.11		-0.23	290	***	0.957	ND<5.0	11.2	6.83	56.3 50.7		_	PACE PACE

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/li)	TPH-D (ug/li)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	TDS (ug/l)	DO (ppm)	LAB
MW-7	02/05/95	6.62	7.62	desirate.	-1.00	280	ND<500	ND<0.25	ND<0.25	ND<0.25	ND<0.50		/X	- 4	
MW-7	05/05/95	6.62	7.64	-	-1.02	290	***	ND<0.50	ND<0.50	ND<0.20	ND<1.0		(g) —	5.1	ATI
MW-7	07/19/95	6.62	7.70		-1.08	150		ND<0.50	ND<0.50	ND<0.50	ND<1.0	***	/m) 40400	3.6	ATI
MW-7	10/12/95	6.62	7.88		-1.26	110		ND<0.50	ND<0.50	ND<0.50	ND<1.0	390	(g) 12100 14000	4.6	ITA
MW-7	01/08/96	6.62	7.66		-1.04	90		ND<0.50	ND<0.50	ND<0.50	ND<1.0	300	12060	4.7	ATI
MW-7	09/11/97	6.62	7.78		-1.16	ND<50		ND<2.5	ND<5.0	ND<5.0	ND<5.0	63		4.9	ATI
MW-7	01/27/98	6.62	7.30		-0.68	1400		7.7	ND<1.0	ND<1.0	ND<1.0	920		3.8	SPL
MW-7	04/19/98	6.62	7.52		-0.90	3500		15	7.7	11	19.3	3600		4.4	SPL
MW-7	09/27/00	6.62	7.71		-1.09	ND<50		ND<0.5	ND<0.5	ND<0.5	ND<0.5		(a)	4.7	SPL
MW-7	(j) 03/21/01	6.62	7.62	<del></del>	-1.00				, 125 10.0	110 40.0			(i)	******	PACE
MW-7	03/29/01	6.62	7.57	***	-0.95	80		ND<0.5	ND<0.5	ND<0.5	ND<1.5	88.2			
MW-7	09/18/01	6.62	7.74		-1.12	ND<250		ND<2.5	ND<2.5	ND<2.5	ND<7.5	36.6			PACE PACE
XW-1	06/21/93	<del></del>													
XW-1	04/05/94		5.36	***		 ND<50	70	ND<0.5	***				-		
XW-1	07/28/94		5.92		-		70	כ.ט~טאו	ND<0.5	ND<0.5	ND<0.5			3	PACE
XW-1	10/26/94		6.05					-							PACE
XW-1	02/05/95	7.49	5.82	***		ND<50	ND<500	ND<0.25	ND 40 05						
XW-1	05/05/95	7.49	5.57		1.92	110~00	ND~500	ND~0.25	ND<0.25	ND<0,25	ND<0.50			4.9	ATI
XW-1	07/19/95	7.49	6.12	-		ND<50		ND<0.50	ND-0 50	NO 40 60	100 of 0		<del></del>	~~~	_
XW-1	10/12/95	7.49	6.82	-		ND<50		ND<0.50 ND<0.50	ND<0.50 ND<0.50	ND<0.50	ND<1.0		1680	4.3	ATI
XW-1	01/08/96	7.49	6.11	******		ND<50		ND<0.50		ND<0.50	ND<1.0	ND<5.0	1150	3.8	ATI
XW-1	09/11/97	7.49	6.57	all the same		ND<50		ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	1300	4.7	ATI
XW-1	01/27/98	7.49	5.27		2,22			MD-0'9	ND<1.0	ND<1.0	ND<1.0	ND<10		3.3	SPL
XW-1	04/19/98	7.49	5.24	<del></del>	2.25		***		***	***			_		
XW-1	09/27/00	7.49	6.13		1.36										
XW-1	03/21/01	7.49	5.97	_	1.52									_	
XW-1	09/18/01	7.49	6.59		0.90								<del></del>	_	
					0.00	_		***	_		_				

ID MEIT	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (I (Feet)		TPH-D (ug/li)	B (ug/l)	T (ug/l)	E (ug/l)	X - (ug/l)	MTBE (ug/l)	TDS (ug/l)	DO (ppm)	LAB
XW-2	06/21/93	7.48	5.89	_	1.59							<del></del>			
XW-2	04/05/94	7.48	5.77		1.71	ND<50	160	ND<0.5	ND<0.5	ND<0.5	ND<0.5			3	PACE
XW-2	07/28/94	7.48	6.25		1.23		•			٠ ــــ			_		PACE
XW-2	10/26/94	7.48	6.39	-	1.09									_	
XW-2	02/05/95	7.48	5.62	nne	1.86	ND<50	ND<500	ND<0.25	0.38	ND<0.25	ND<0.50			5.2	ÆΠ
XW-2	05/05/95	7.48	5.66		1.82								deten		
XW-2	07/19/95	7.48	6.8	_	0.68	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<1.0		4750	3.9	ATI
XW-2	10/12/95	7.48	7.21		0.27	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	3630	4.3	ATI
XW-2	01/08/96	7.48	6.79		0.69	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	3440		
XW-2	09/11/97	7.48	6.86		0.62	ND<50		ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10		4.2	ATI
XW-2	01/27/98	7.48	5.88	~~~	1.60							MD<10		3.6	SPL
XW-2	04/19/98	7.48	5.42		2.06		-					_			
XW-2	09/27/00	7.48	6.86		0.62							_			_
XW-2	03/21/01	7.48	6.60		0.88			_							_
XW-2	09/18/01	7.48	7.15		0.33										
			,0		0.00		-		<del></del>						
XW-3	06/21/93	6.84	5.85		0.99										
XW-3	04/05/94	6.84	5.85	···	0.99	ND<50	150	ND<0.5	0.7	11D -0 F					
XW-3	07/28/94	6.84	6.28		0.56	140700			-	ND<0.5	ND<0.5		-	3.1	PACE
XW-3	10/26/94	6.84	6.4		0.44		~	_		<del></del>	_		_	_	PACE
XW-3	02/05/95	6.84	7.23		-0.39	280	ND<500	ND -0 50				_		_	
XW-3	05/05/95	6.84	7.43		-0.59		ND/200	ND<0.50	ND<0.50	0.63	ND<1.0		(g) —	4.9	ITA
XW-3	07/19/95	6.84	7.6		-0.76	400	<del></del>	ND 40 CD							_
XW-3	10/12/95	6.84	7.74		-0.90	130	-	ND<0.50	ND<0.50	ND<0.50	ND<1.0		10400	4.3	ATI
XW-3	01/08/96	6.84	7.58		-0.74	320		ND<0.50	ND<0.50	ND<0.50	ND<1.0		(e) 8430	4.7	ATI
XW-3	01/27/98	6.84	7.01	_	-0.74 -0.17			ND<2.5	ND<2.5	ND<2.5	ND<5.0	1100	10000	4.4	ATI
XW-3	04/19/98	6.84	7.28		-0.17 -0.44	1200 4500		2.8	ND<1.0	ND<1.0	ND<1.0	990		4.3	SPL
XW-3	09/27/00	6.84	7.59		-0.44 -0.75	4500 ND<50		ND<2.5	ND<5.0	ND<5.0	ND<5.0	4800		4.3	SPL
XW-3	03/21/01	6.84	7.35	<del></del>	-0.75 -0.51			ND<0.5	ND<0.5	ND<0.5	ND<0.5	35/38	(i) —		PACE
XW-3	09/18/01	6.84	7.70			ND<250		ND<2.5	ND<2.5	ND<2.5	ND<7.5	61,7			PACE
7	50/10/01	0.04	7.70		-0.86	ND<250		ND<2.5	ND<2.5	ND<2.5	ND<7.5	23.4			PACE
QC-2 (h	) 04/05/94					tio .no									
QC-2 (h						ND<50		ND<0.5	ND<0.5	ND<0.5	ND<0.5		_		PACE
QC-2 (h				*	*****	ND<50		ND<0.5	ND<0.5	ND<0.5	ND<0.5				PACE
QC-2 (h						ND<50		ND<0.5	ND<0.5	ND<0.5	ND<0.5		_	···	PACE
QC-2 (h					<del></del>	ND<50		ND<0.25	ND<0.25	ND<0.25	ND<0,50				ATI
QC-2 (h	•					ND<50	_	ND<0.50	ND<0.50	ND<0.50	ND<1.0			***	ATI
QC-2 (h)		_			_	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<1.0		***		ATI
QC-2 (h)		_	<del>-</del>		***	ND<50	***************************************	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0			ATI
40-E (II)	0 1100130	_		***		ND<50		ND<0,50	ND<0,50	ND<0.50	ND<1.0	ND<5.0			ATI

#### TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

#### ADDITIONAL ANALYSES

Well ID	DATE OF SAMPLING/ MONITORING	TBA (ug/l)	DIPE . (ug/l)	ETBE (ug/l)	TAME (ug/l)	LAB
MW-6	09/27/00	ND<10	ND<1.0	ND<1.0	6.2	PACE
MW-7	09/27/00	20	ND<1.0	ND<1.0	9.4	PACE
хw-з	09/27/00	ND<10	ND<1.0	'ND<1.0	6.2	PACE

#### ABBREVIATIONS:

TPH-G	Total petroleum hydrocarbons as gasoline
TPH-D	Total petroleum hydrocarbons as diesel
В	Benzene
T	Toluene
E	Ethylbenzene
X	Total xylenes
MTBE	Methyl tert butyl ether
TDS	Total dissolved solids
DO	Dissolved oxygen
ug/l	Micrograms per liter
mg/l	Milligrams per liter
ppm	Parts per million
	Not analyzed/measured/applicable
ND	Not detected above reported detection limit
	•

PACE Pace, Inc.
ATI Analytical Technologies, Inc.
SPL Southern Petroleum Laboratories

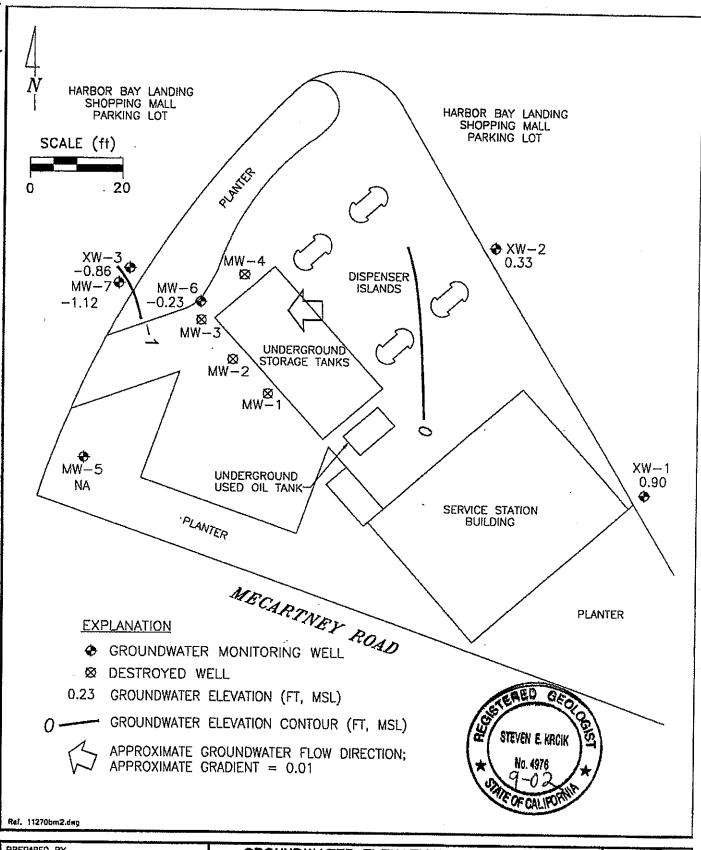
DIPE Di-Isopropyl Ether ETBE Ethyl t-Butyl Ether TAME t-Amyl Methyl Ether

#### NOTES:

Blaine Tech Services, Inc. began routine monitoring of this facility on September 27, 2000.

All previous data provided by Alisto Engineering.

- (a) Casing elevations surveyed to nearest 0.01 foot relative to an arbitrary datum.
- (b) Groundwater elevations in feet above an arbritary datum.
- (c) Not sampled due to inadequate recharge.
- (d) Wells destroyed by HETI on January 18 and 19, 1995.
- (e) A copy of the documentation for this data is included in Appendix C of Alisto report 10-206-04-001.
- (f) Blind duplicate.
- (g) MTBE peak present. See documentation for this data included in Appendix C of Alisto report 10-206-04-001.
- (h) Travel blank.
- (I) MTBE by 8020/8260.
- (j) Samples lost, resampled 3/29/01.
- (k) Unable to locate well.



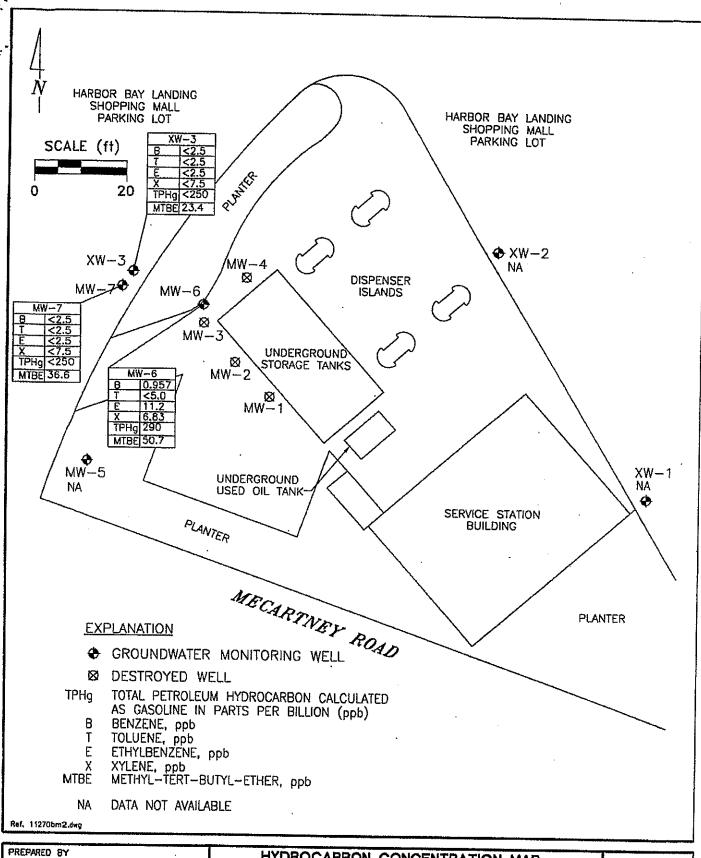


GROUNDWATER ELEVATION CONTOUR MAP, SEPTEMBER 18, 2001

> BP Oil Service Station No. 11270 3255 Mecartney Road Alameda, California

FIGURE:

PROJECT: DACO4





HYDROCARBON CONCENTRATION MAP, SEPTEMBER 18, 2001

BP Oil Service Station No. 11270 3255 Mecartney Road Alameda, California FIGURE:

PROJECT: DAC04

### ATTACHMENT E

erro a	LOCATION				-							
	Mecartne	ey Roa	d, A	Jame	da, CA	BEGUN 6/17/9	3	BORING DIAMETER 10 Inches	ANGLE/BEARING 90 Degrees	BORING NO MW-5		
DRILL Bay	inc contraction land Dril	CTOR				6/17/9	red 13	PERST ENCOUNTERED 7.5 Feet	WATER DEPTH	BOTTOM OF BORING 15 Feet		
	ator m Higuar	o				LOGGED Tony I	<sub>BY</sub> Ramirez	static water depth 7.0 Feet	-VDATE	WELL NO. MW-5		
DRILL	MAKE & MOI			<del></del>		SAMPLIN	G METHOD		•	BOTTOM OF WELL		
WELL	MATERIAL			T SIZH	FILTER PACK	WELL SE	<b>N</b> L	ied split spoon		15 Feet PLANNED USE		
	CH 40 PV	<u>C</u>		010"	#2/16	Neat c	ement ove	r hydrated bento	nite pellets	Monitoring		
mows/	PID FIELD HEADSPACE (ppm)	DEPTH	SAMPLE	VATER LEVEL	WELL CONSTR.	GRAPHIC LOG	MATERI	AL CLASSIFICA	TION & PHYSICAL	DESCRIPTION		
	,	1					PEAT(F	't); dark brow	n; covered with t	anbark; moist.		
	·	2	<u>.</u>				to sub-i	ounded sand;	with Gravel (SP) 35% fine to coars l; trace fines; dan	; tan; fine angular se, sub-angular np.		
		3	H				·					
12	14.0	4 — 5 —	7	•		Poorly graded SAND with Gravel (SP); medium br fine angular to sub-rounded sand; 25% fine, sub-an to sub-rounded gravel; trace fines; damp.						
		6			ininiminini Malitiniilinii		Silty SA	Silty SAND (SM); grey- brown; fine to coarse sub-angular o sub-rounded sand; 20% silt; moist.				
-		8		Ţ			to sub-r	ounded sand;	20% silt; moist.			
	•	9					Same as	ame as above, but wet.				
			Ħ									
:	·	11					Poorly g	graded GRAVI	EL with Sand (GP ular to sub-round	); grey-brown;		
		13 <u>·</u>				0 0 0 0 0 0 0 0 0 0 0 0			gular to sub-roun			
		14					Lean CI sub-rou	AY with Sand nded sand; 40	l; grey-brown; fin % clay; wet.	e sub-angular to		
		15						`.				
	HYD			W. #**	TATES A		WE	SOIL BORING LOG AND WELL CONSTRUCTION DIAGRAM  PLATE B-2				
					ENTA: HES,			•	W-5	SHEET 1 OF 1		
			11		e a livid,	1110	<u> </u>	BP Service Station No. 11270 3255 Mecartney Road JOB NO.				
	E: June 18, 1		·		·				eda, CA	9-042.1		
<b>PPI</b>	ROVED BY:	Owen C	2. Rat	chye, l	P.E.					7-U#4.I		

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A SITR/	LOCATION		•		BEGUN				`		
325	5 Mecartn	ey Road	, Alam	eda, CA	1/19/		BORING DIAMETER 10 Inches	ANGLE/BEARING 90 Degrees	BORING NO MW-6		
PC:	inc contra Exploratio	on, Inc.			1/19/	95	FIRST ENCOUNTERED 5.0 Feet	WATER DEPTH	BOTTOM OF BORING 15.0 Feet		
CM		DEL	1	Bartolovi	********	es Maroni	5.76 Feet (1/28/		WELL NO. MW-6		
	MATERIAL CSCH 40		0.010		SAMPLIN Califo	g method rnia modil	fied split spoon		BOTTOM OF WELL 15.0 Feet		
	rpack 12 SAND		Neat Neat	EAL cement ove					PLANNED USE Monitoring		
BLOWS/ ROOT	PID FIELD HEADSPACE (ppm)	DEPTH	WATER		GRAPHIC LOG	MATERI	AL CLASSIFICA	TION & PHYSICA			
٠	•					Asphalt	, Baserock				
; ;		3				mottling	(SW); Brown v g, well graded, d, moist.	vith yellow mot , fine grained, su	tling and iron oxide abrounded to		
5	2.6	5 — — — — — — — — — — — — — — — — — — —	₩ ₩ In			As abov	e; Dark gray, v	vet.			
29		10				Silty SA graded, wet.	ND (SM); Dari fine-grained, s	k gray with blac subrounded to re	k mottling,well ounded, some silt,		
	•	13				As abov	e; Greenish-gr	ay-blue, wet.			
		16									
		20									
F		R 🍝 I	IM	entai Hes, 1				G LOG AND CTION DIAGRA V-6	PLATE B-3 SHEET 1 OF 1		
OATI	: February OVED BY:	10, 1995					BP Service Station No. 11270 3255 Mecariney Road Alameda, CA  9-042.2				

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3255	ocation Mecartn		i, Alam	eda, CA	BEGUN 1/18/95		BORING DIAMETER 10 Inches	ANGLE/BEARING 90 Degrees	BORING NO MW-7		
	ng contrac Exploratio				1/19/95		FIRST ENCOUNTERED ( 5.0 Feet	WATER DEPTH	BOTTOM OF BORING 16.5 Feet		
RILL	MAKE & MOI	)EL	opera Frank	ror Bartolovi	LOGGED IF		STATIC WATER DEPTH	/DATE	WELL NO. MW-7		
ELL	MATERIAL SCH 40		SLOT SI 0,010		SAMPLING	METHOD	ied split spoon	·	BOTTOM OF WELL		
LTER	PACK		WELL S	EAL.					15.0 Feet PLANNED USE		
	12 SAND PID		Neat	cement over	er nyarat	ed bento	nite pellets		Monitoring		
FOOT	FIELD HEADSPACE (ppm)	DRPTH	WATER LEVEL	WELL CONSTR.	GRAPHIC LOG	MATERI	AL CLASSIFICA	TION & PHYSICAI	L DESCRIPTION		
		1				Asphali	, Baserock				
		2 <del></del>				SAND ( rounded	SP); Gray brov 1, medium der	vn, poorly-grade nse, dry.	d, fine grained,		
5	2.6	.5	¥			Gravely Clay (CH); Dark reddish brown, high plasticity, some coarse to fine grained angular to subangular gravel medium stiff, moist.					
		7 \$	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			Silty SAND (SM); Dark brown with black organic mottl- ng, well-graded, fine grained, occasional coarse to fine grained, angular to subangular gravel, some silt, moist to wet.					
2		10				As above; Dark gray, some gravel, wet.					
<b>16</b>	•	11				well gra	ilty SAND (SM); Dark gray with yellow green mottlingell graded, fine-grained, subrounded to rounded, son lit, occasional subangular cobble, wet.				
io	•	16		<b></b>		SAND ( subrour	SW); Yellowis ided, wet.	h orange, well-g	raded fine-graine		
		17				Heaving	3 sands 14.5-16	.5 feet bgs.			
F		RĚ	NMI	enţai Sies,			L CONSTRUC	G LOG AND CTION DIAGRA V-7	PLATE B-4 SHEET 1 OF		
	E: February		chike C.E.C		2110.	BP Service Station No. 11270 3255 Mecartney Road Alameda, CA  SHERT 1 OF 1  JOB NO.  9-042.2					

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

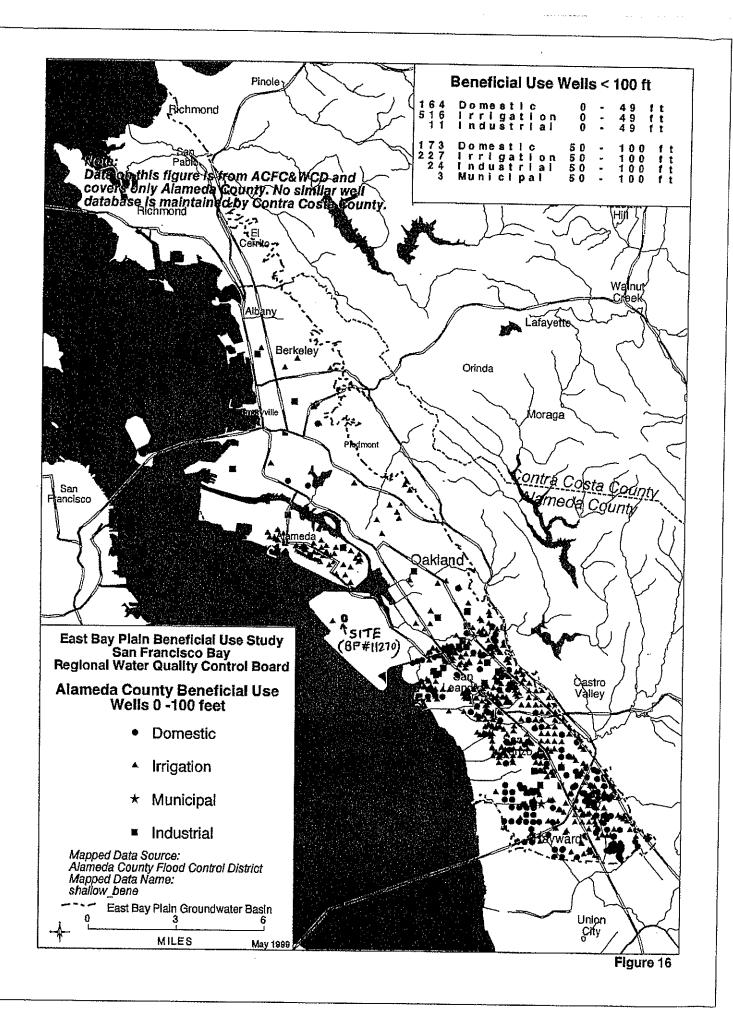
STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

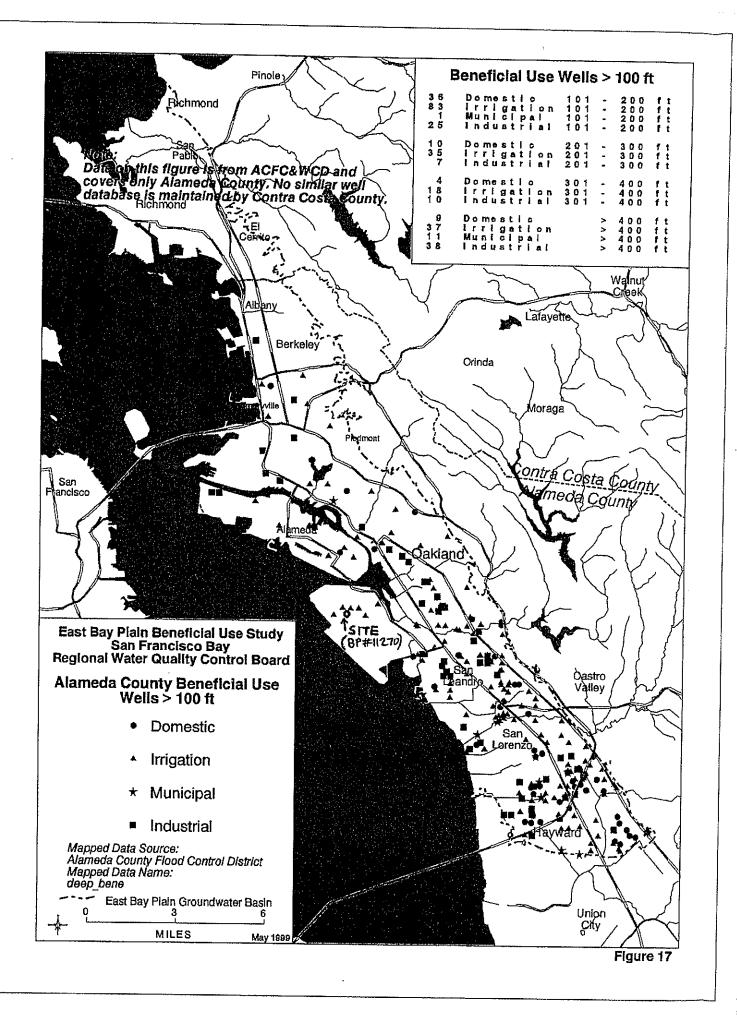
STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

### ATTACHMENT F

### SENSITIVE RECEPTORS SURVEY Site Survey and Literature Research

Store No:		11270	
Location:		3255 McCartney Rd.	
City/Stat	:e	Alameda, CA	•
I.	Pro	ovide answers to the following questions:	
	a.	Is a public water supply well within 2500 ft? If yes, Distance (ft)	(Y.D)
	b.	Is a private water supply well within 1000 Tt? If yes, Distance (ft)	(y,(n)
	c.	Is a subway within 1000 ft? If yes, Distance (ft)	(D,Y)
	đ.	Is a basement within 1000 ft? If yes, Distance (ft)	(yA)
	e.	Is a School within 1000 ft? If yes, Distance (ft)	(y,n)
	f.	Is a surface body of water within 1000 ft? If yes, Distance (ft) 500	(Yn)
II.	Des	scribe type of local water supply:	
	*Su *Su *Di	upplier's Name <u>East Bay Municipal</u> District 8° upplier's Source <u>American/Mokulumre</u> River-Folson istance to Site 90 mi	71-0615 7
III.	Aqu	uifer Classification, if available:	
	***************************************	Class I: Special Ground Waters Irreplaceable Drinking Water Sour Ecologically Vital	rces
		Class II: Current and Potential Drinking Wa	ater
		Class III: Not Potential Source of Drinking	Water
IV.	Des	scribe observation wells, if any:	•
		Number Free Product(yn)	
v.	Sig	gnature of Preparer Henry Awdmans Date 11-	4-92





#### ATTACHMENT G

#### SITE CLOSURE SUMMARY

Date: \_\_\_\_\_October 15, 2004

#### I. AGENCY INFORMATION

Agency Name:	S.F.B.R.W.Q.C.B.	Address:	1515 Clay Street, Suite 1400	
City/State/Zip:	Oakland, CA 94612	Phone:	(510) 622-2374	
Responsible Staff Person:	Roger Brewer	Title:	Associate Engineering Geologist	

#### II. SITE INFORMATION

Site Facility Na	ame: Former BP	Service Station #11270			_
Site Facility Ac	idress: 3255 Meca	rtney Road, Alameda, CA			
RB LUSTIS C	ase No. 1771	Local or LOP Case	No.: RO0000511	Priority:	
URF Filing Da	te:	SWEEPS No.:			
Responsible Pa	arties (include address	es and phone numbers)	,		
Atlantic Richfi	eld Company, c/o Ky	le Christie, Environmenta	l Business Manager,	Remediation Man	agement
Remediation M	lanagement				
4 Centerpiece I	Drive, Room 172, La	Palma, CA 90623-1066			
Phone No. 714	-670-5303				
Tank No.	Size in Gallons	Contents	Closed In-P	lace/Removed?	Date
1	1,000	Used Oil	Removed	-	07/98
	·				·
					·

### III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Site characterization complete?	X Yes No	Date Approved By Over	rsight Agency:
Monitoring wells installed?	X Yes No	Number: 7	Proper screened interval? X Yes No
Highest GW Depth Below Ground	Surface: 5.24 ft	Lowest Depth: 9.15 ft	Flow Direction: west through north to northeast
Most Sensitive Current Use: Comp	mercial		
	11010141		
		e: drinking and irrigation v	water
Most Sensitive Potential Use and P	Probability of Use	e: drinking and irrigation v	
Most Sensitive Potential Use and P Are drinking water wells affected?	Probability of Use		V
Most Sensitive Potential Use and P Are drinking water wells affected?  Is surface water affected?  Off-Site Beneficial Use Impacts (A	Probability of Use Yes NoX Yes NoX	Aquifer Name: Shallov Nearest/Affected SW N	V

Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank	l each (1,000-gallon)	Disposed offsite	07/98
Piping	Unknown	Disposed offsite	05/90 and 08/00
Free Product			
Soil	195 cubic yards	Excavated/aerated onsite/disposed offsite	05/90 - 06/90
Groundwater			
Barrels			

### MAXIMUM DOCUMENTED POLLUTANT CONCENTRATIONS—BEFORE AND AFTER CLEANUP

POLLUTANT	Soil	(ppm)	Water	(ppb)	POLLUTANT	Soil	(ppm)	Water	(ppb)
	Before	After	Before	After		Before	After	Before	After
TPH (Gas)	6,900	860	51,000	290	Xylene	700	13	10,500	6.83
TPH (Dlesel)	480	480	4,300	1,000¹	Ethylbenzene	120	7.5	360	11.2
Benzene	70	5	350	0.957	Oil & Grease	NA	NA	NA	NA
Toluene	260	2.8	510	<5.0	Heavy Metals	36 <sup>2</sup> (lead)	5.7 (lead)	NA	NA
MTBE	ND<0.1	ND<0.1	38,000	50.7	Other				

Comments (Depth of Remediation, etc.): Please refer to Case Closure Report for details; maximum excavation depths were 8.5 feet bgs in the dispenser location area.

- 1 Analyzed in 02/05/95 in MW-6 and hasn't been analyzed in MW-6 since then
- 2 Organic lead was non-detectable

#### IV. CLOSURE

Does completed corrective action protect potential b	eneficial uses per the Regional Board I	Basin Plan? XYes No
Does corrective action protect public health for curr	XYes No	
Site Management Requirements: Future construction deal with potential residual hydrocarbon in onsite so	on activities at the Site may warrant appoils.	ropriate measures and precautions to
Monitoring Wells Decommissioned: Yes X No	Number Decommissioned: 4	Number Retained: 3
Monitoring Wells Decommissioned: Yes X No  List Enforcement Actions Taken: NONE	Number Decommissioned: 4	Number Retained: 3

### V. TECHNICAL REPORTS, CORRESPONDENCE ETC., THAT THIS CLOSURE RECOMMENDATION WAS BASED UPON

Title:	Date:
Please refer to Case Closure Report for details	09/10/04

#### VI. ADDITIONAL COMMENTS, DATA, ETC.

PLEASE INCLUDE/ATTACH THE FOLLOWING AS APPROPRIATE:

- 1) SITE MAP INDICATING TANK PIT LOCATION, MONITORING WELL LOCATION, GROUNDWATER GRADIENT, ETC.; AND,
- 2) SITE COMMENTS WORTHY OF NOTICE (E.G., AREA OF RESIDUAL POLLUTION LEFT IN PLACE, DEED NOTICES ETC.)

Please refer to Case Closure Report for details		
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This document and the related CASE CLOSURE LETTER, shall be retained by the lead agency as part of the official site file.