

Reviewed 10/27/95

Ultramar

Ultramar, Inc.
P.O. Box 466
525 W. Third Street
Hanford, CA 93232-0466
(209) 582-0241

Telecopy: 209-585-5685 Credit
209-583-3330 Administrative
209-583-3302 Information Services
209-583-3358 Accounting

September 8, 1995

Mr. Scott O. Seery, CHMM
Senior Hazardous Materials Specialist
Alameda County Health Care Services
80 Swan Way, Room 200
Oakland, CA 94621

SUBJECT: FORMER BEACON STATION NO. 574, 22315 REDWOOD ROAD, CASTRO VALLEY, CALIFORNIA

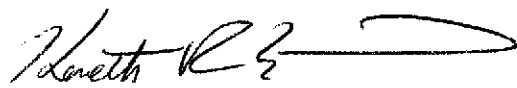
Dear Mr. Seery:

Enclosed is a copy of the Second Quarter 1995 Groundwater Monitoring Report for the above-referenced Ultramar facility prepared by Fugro West, Inc. Also included with the report is a copy of the Quarterly Status report describing the work performed this quarter and the work anticipated to be conducted in the next quarter.

Please do not hesitate to call if you have any questions about this project at (209) 583-5571.

Sincerely,

ULTRAMAR INC.



Kenneth R. Earnest
Environmental Specialist II
Marketing Environmental Department

Enclosure: Second Quarter 1995 Groundwater Monitoring Report
Quarterly Status Report

cc w/encl: Mr. Rich Hiatt, San Francisco Bay Region, RWQCB
Mr. Peter J. Pugnale, Shell Oil Company

RECEIVED
SEP 11 11 02 AM '95
ENVIRONMENTAL



A Member of the Ultramar Group of Companies

BEACON
#1 Quality and Service

Ultramar

Ultramar, Inc.
P.O. Box 466
525 W. Third Street
Hanford, CA 93232-0466
(209) 582-0241

Telecopy: 209-585-5685 Credit
209-583-3330 Administrative
209-583-3302 Information Services
209-583-3358 Accounting

ENVIRONMENTAL PROJECT QUARTERLY STATUS REPORT

DATE REPORT SUBMITTED: September 8, 1995
QUARTER ENDING: June 30, 1995

FORMER SERVICE STATION NO.: 574
ADDRESS: 22315 Redwood Road, Castro Valley, CA
COUNTY: Alameda
ULTRAMAR CONTACT: Kenneth R. Earnest

TEL. NO: 209-583-5571

BACKGROUND:

On May 5, 1987, five underground storage tanks (two gasoline, two diesel and one waste oil) were excavated and removed from the site. Soil samples were collected from beneath the tanks and analyzed for hydrocarbon constituents. Based on preliminary analytical data related to the collected soil samples, it was determined that elevated levels of gasoline and diesel were present in the soil beneath the former fuel tanks. Soil was overexcavated from beneath the former fuel tanks. Soil samples were collected after the over-excavation and confirmed that the addition excavation was successful.

During March 1991, three ground-water monitoring wells were installed on-site. Laboratory analysis of soil samples obtained from the borings for the installation of the monitoring wells indicated that the soil near the soil/water interface exhibited gasoline range hydrocarbons.

Quarterly monitoring was initiated during the fourth quarter 1991.

Installed five new groundwater monitoring wells in May of 1993. With the installation of these new wells the site is fully defined.

Conducted a soil gas survey/performance test, aquifer pump test and air sparging test during first quarter 1994.

Submitted PAR/RAP during the fourth quarter 1994.

SUMMARY OF THIS QUARTER'S ACTIVITIES:

Performed second quarter monitoring on June 14, 1995.



A Member of the Ultramar Group of Companies

BEACON
#1 Quality and Service

Page 2
Former Station #574
Castro Valley, CA

RESULT OF QUARTERLY MONITORING:

Results indicate that since the previous sampling event TPH-g concentrations in MW-6 have increased from 180 ppb to 220 ppb.

PROPOSED ACTIVITY OR WORK FOR NEXT QUARTER:

| <u>ACTIVITY</u> | <u>ESTIMATED COMPLETION DATE</u> |
|--------------------------|---|
| Third quarter monitoring | September 1995 |

*Reviewed by A. Grech
on 10/27/95*

FUGRO WEST, INC.



1050 Melody Lane, Suite 160
Roseville, California 95678
Tel: (916) 782-2110
FAX: (916) 786-7830

August 29, 1995

Mr. Kenneth Earnest
Environmental Specialist
Ultramar Inc.
525 West Third Street
Hanford, California 93232-0466

Subject: **Second Quarter 1995 Groundwater Monitoring Report
Beacon Station #574**
22315 Redwood Road, Castro Valley, California

Dear Mr. Earnest:

This report documents the results of quarterly groundwater monitoring conducted on June 14, 1995 at the subject site (Figure 1). The monitoring, conducted by Doulos Environmental, included measurements of depth to groundwater, subjective analysis for free product, groundwater purging and collection of groundwater samples. All field activities pertaining to events in this report were conducted according to the Ultramar Field Procedures included in the Attachments.

GROUNDWATER ELEVATIONS

Prior to purging, Doulos Environmental personnel collected depth to groundwater measurements. Groundwater level data from March 1992 to date are summarized in Table 1. Historic groundwater levels are presented as an Attachment. On the basis of the current measurements, groundwater flows to the southwest (Figure 2) at a gradient of <0.01 ft/ft. Groundwater levels have decreased an average of 0.46 feet compared to the last monitoring event.



GROUNDWATER SAMPLING AND ANALYSES

Groundwater samples were collected from three wells. All samples were analyzed for concentrations of:

- TPH, as gasoline, by modified EPA Method 8015.
- BTEX by EPA Method 602.

Analytical results from March 1992 to date are summarized in Table 2. Historic analytical data are presented as an Attachment. The laboratory report and chain-of-custody form for the current sampling event are attached. Benzene concentrations remain nondetectable in wells MW-5, MW-6, and MW-7.

A copy of this quarterly monitoring report should be forwarded to the following parties:

Mr. Scott Seery
Senior Hazardous Materials Specialist
Alameda County Health Agency
Division of Hazardous Materials
Department of Environmental Health
80 Swan Way, Room 350
Oakland, California 94621

Mr. Rich Hiatt
San Francisco Bay Regional Water Quality Control Board
2101 Webster Street, Suite 500
Oakland, California 94612


The interpretations and/or conclusions that may be contained within this report represent our professional opinions. These opinions are based on currently available information. Other than this, no warranty is implied or intended. This report has been prepared solely for the use of Ultramar Inc. Any reliance on this report by third parties shall be at such parties' sole risk. This report was prepared under the review and supervision of the professional geologist, registered with the State of California, whose signature appears below.

If you have any questions or comments, please contact us at (916) 782-2110.

Sincerely,

FUGRO WEST, INC.

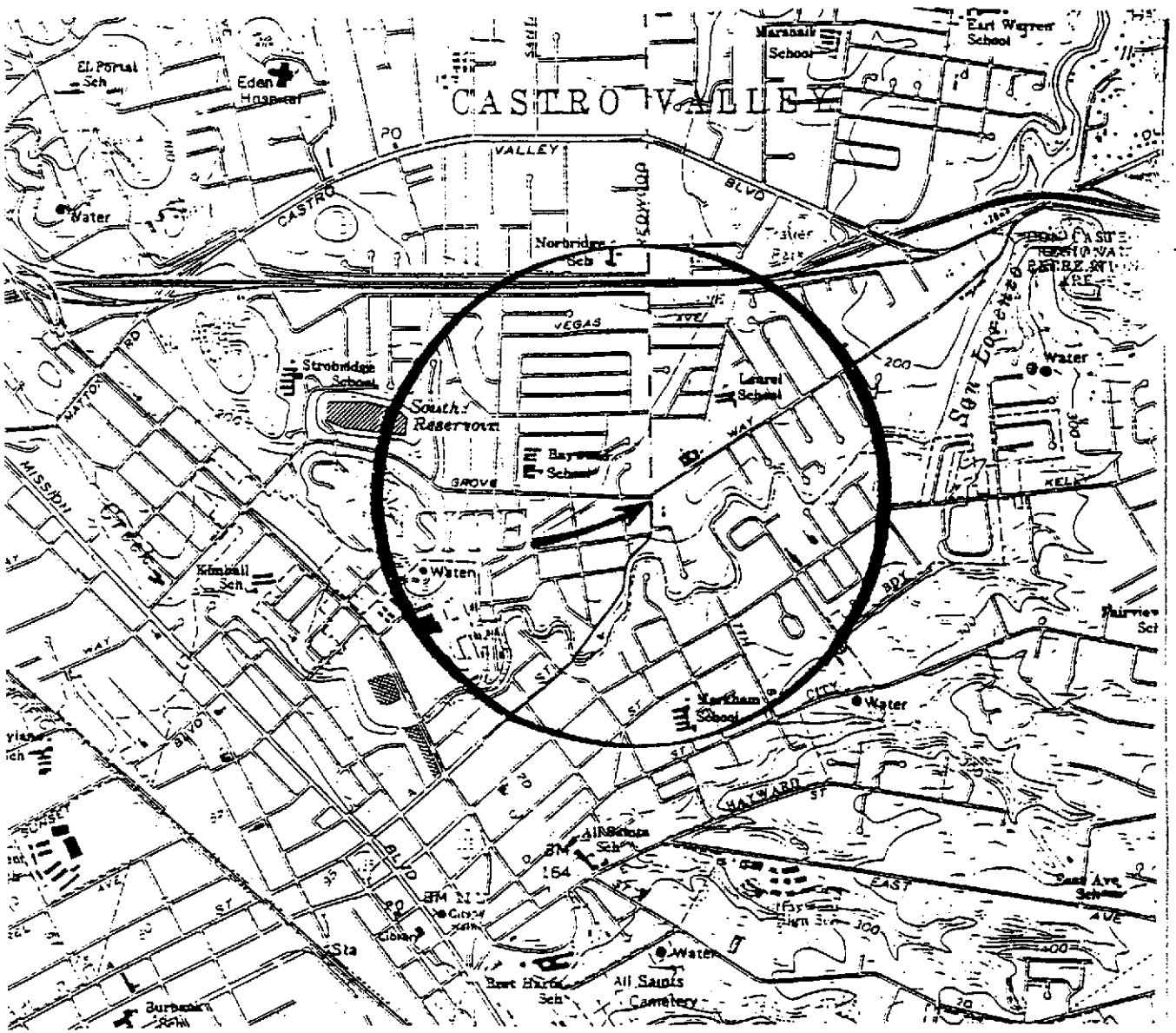
for Sheila R. Richgels
Report Coordinator


Owen M. Kittredge
Registered Geologist
CRG No. 5853 No. 5853
Exp. 11/30/95
STATE OF CALIFORNIA

8/29/95
Date

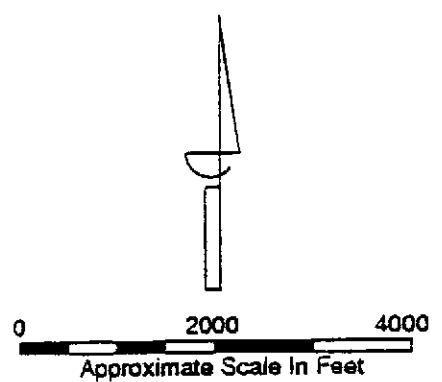
SRR/OMK/srr

Attachments



GENERAL NOTES:

BASE MAP FROM USGS
7.5 MINUTE TOPOGRAPHIC
HAYWARD, CA



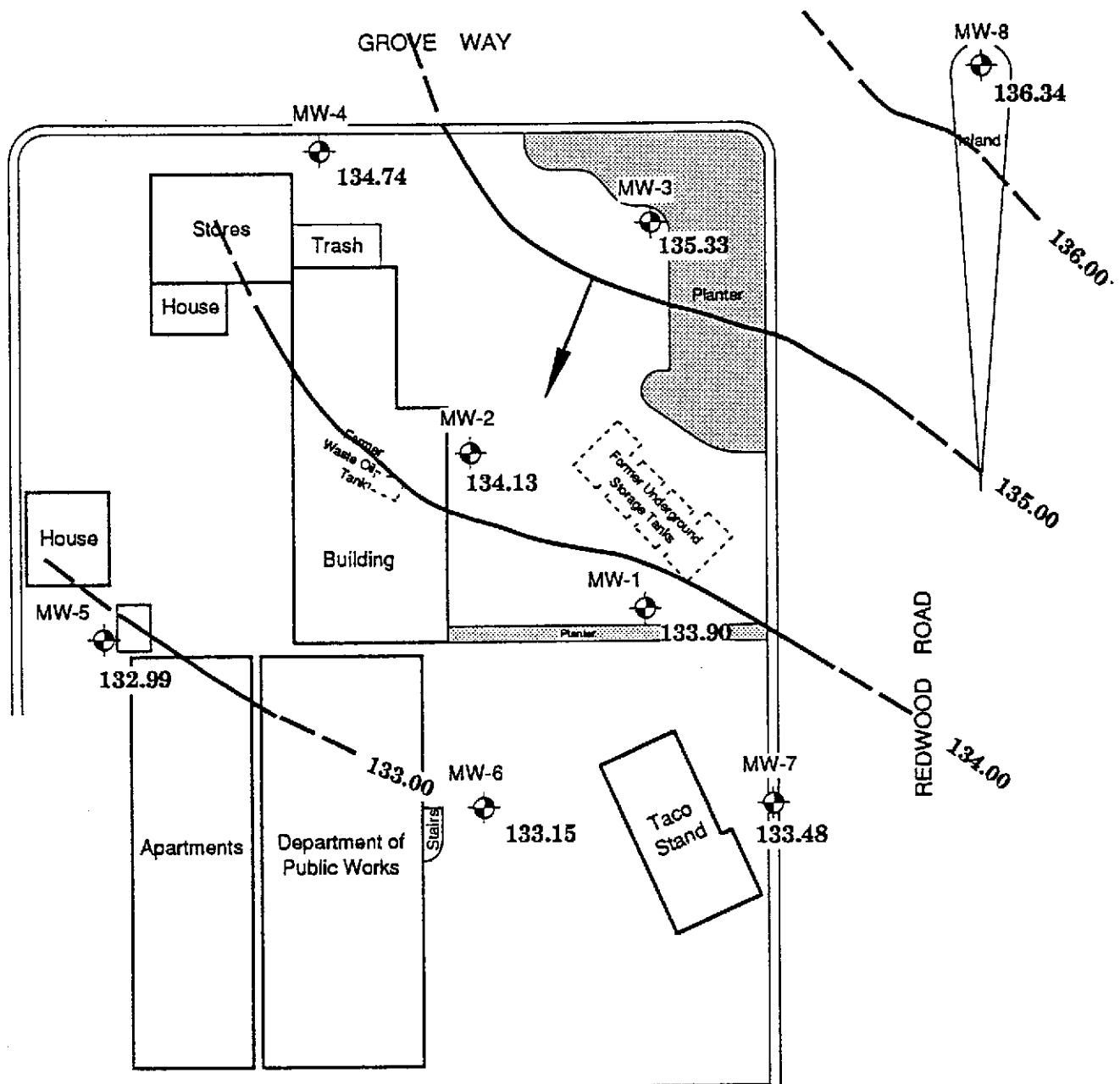
DRAWN BY:
J. Paradis
DATE:
May 23, 1994
REVISED BY:
DATE:

SITE LOCATION MAP





Beacon Station #574
22315 Redwood Road
Castro Valley, CA

FIGURE
1

PROJECT NUMBER:
9546-0021



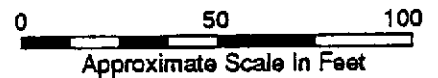
LEGEND

-  Monitoring Well
-  133.90 Ground Water Elevation in Feet
-  Potentiometric Surface Contour Line (Dashed Where Inferred)
-  Estimated Direction of Ground Water Flow

NOTES

- Site Sketch After Site Map
- By Acton • Mickelson • van Dam, Inc.
- All locations Are Approximate

Hydraulic Gradient = < 0.01 ft/ft
 Contour Interval = 1.0 ft



DRAWN BY:
D. Hada

DATE:
March 24, 1995

REVISED BY:
J. Scruggs

DATE:
July 28, 1995

POTENTIOMETRIC SURFACE MAP
 June 14, 1995

Former Beacon Station # 574
 22315 Redwood Road
 Castro Valley, CA

FIGURE
 2

PROJECT NUMBER:
 9546-0021

TABLE 1
WATER LEVEL DATA
BEACON STATION #574
22315 REDWOOD ROAD, CASTRO VALLEY, CALIFORNIA
(Measurements in feet)

| Monitoring Well | Date | Reference Elevation (top of casing) ¹ | Depth to Groundwater ¹ | Groundwater Elevation ² | Well Depth | Comments |
|-----------------|----------|--|-----------------------------------|------------------------------------|------------|----------|
| MW-1 | 03/27/92 | 156.55 | 22.43 | 134.12 | --- | |
| | 06/04/92 | | 23.40 | 133.15 | --- | |
| | 09/23/92 | | 24.07 | 132.48 | --- | |
| | 11/12/92 | | 24.16 | 132.39 | 29.33 | |
| | 02/02/93 | | 21.87 | 134.68 | 29.80 | |
| | 05/07/93 | | 22.58 | 133.97 | 29.84 | |
| | 05/18/93 | | 22.66 | 133.89 | --- | |
| | 08/11/93 | | 23.41 | 133.14 | 29.81 | |
| | 11/05/93 | | 24.09 | 132.46 | 29.81 | |
| | 03/01/94 | | 22.76 | 133.79 | 29.85 | |
| | 06/02/94 | | 23.24 | 133.31 | 29.85 | |
| | 09/09/94 | | 23.93 | 132.62 | 29.86 | |
| | 12/20/94 | | 22.94 | 133.61 | 29.85 | |
| | 03/08/95 | | 22.20 | 134.35 | 29.71 | |
| | 06/14/95 | | 22.65 | 133.90 | 29.70 | |
| MW-2 | 03/27/92 | 155.17 | 20.82 | 134.35 | --- | |
| | 06/04/92 | | 21.81 | 133.36 | --- | |
| | 09/23/92 | | 22.45 | 132.72 | --- | |
| | 11/12/92 | | 22.60 | 132.57 | 29.71 | |
| | 02/02/93 | | 20.28 | 134.89 | 29.73 | |
| | 05/07/93 | | 20.97 | 134.20 | 29.73 | |
| | 05/18/93 | | 21.06 | 134.11 | --- | |
| | 08/11/93 | | 21.85 | 133.32 | 29.70 | |
| | 11/05/93 | | 22.32 | 132.85 | 29.70 | |
| | 03/01/94 | | 21.19 | 133.98 | 29.68 | |
| | 06/02/94 | | 21.59 | 133.58 | 29.69 | |
| | 09/09/94 | | 22.33 | 132.84 | 29.66 | |
| | 12/20/94 | | 21.37 | 133.80 | 29.65 | |
| | 03/08/95 | | 20.60 | 134.57 | 29.52 | |
| | 06/14/95 | | 21.04 | 134.13 | 29.54 | |
| MW-3 | 03/27/92 | 157.13 | 21.46 | 135.67 | --- | |
| | 06/04/92 | | 22.34 | 134.79 | --- | |
| | 09/23/92 | | 22.84 | 134.29 | --- | |
| | 11/12/92 | | 23.04 | 134.09 | 29.55 | |
| | 02/02/93 | | 21.03 | 136.10 | 29.45 | |
| | 05/07/93 | | 21.59 | 135.54 | 29.53 | |
| | 05/18/93 | | 21.73 | 135.40 | --- | |
| | 08/11/93 | | 22.31 | 134.82 | 29.41 | |
| | 11/05/93 | | 22.85 | 134.28 | 29.41 | |
| | 03/01/94 | | 21.97 | 135.16 | 29.55 | |
| | 06/02/94 | | 22.29 | 134.84 | 29.56 | |
| | 09/09/94 | | 22.91 | 134.22 | 29.56 | |
| | 12/20/94 | | 22.11 | 135.02 | 29.54 | |
| | 03/08/95 | | 21.40 | 135.73 | 29.38 | |
| | 06/14/95 | | 21.80 | 135.33 | 29.36 | |

NOTES: 1 = Measurement and reference elevation taken from notch/mark on top north side of well casing.
2 = Elevation referenced to mean sea level.
Well Depth = Measurement from top of casing to bottom of well.
-- = Not measured.

TABLE 1
WATER LEVEL DATA
BEACON STATION #574
22315 REDWOOD ROAD, CASTRO VALLEY, CALIFORNIA
(Measurements in feet)

| Monitoring Well | Date | Reference Elevation (top of casing) ¹ | Depth to Groundwater ¹ | Groundwater Elevation ² | Well Depth | Comments |
|-----------------|----------|--|-----------------------------------|------------------------------------|------------|----------|
| MW-4 | 05/18/93 | 151.96 | 17.55 | 134.41 | --- | |
| | 08/11/93 | | 17.50 | 134.46 | 28.43 | |
| | 11/05/93 | | 15.84 | 136.12 | 28.43 | |
| | 03/01/94 | | 17.35 | 134.61 | 28.11 | |
| | 06/02/94 | | 17.68 | 134.28 | 28.12 | |
| | 09/09/94 | | 18.19 | 133.77 | 28.13 | |
| | 12/20/94 | | 17.52 | 134.44 | 28.10 | |
| | 03/08/95 | | 16.82 | 135.14 | 27.97 | |
| | 06/14/95 | | 17.22 | 134.74 | 27.97 | |
| MW-5 | 05/18/93 | 148.68 | 15.72 | 132.96 | --- | |
| | 08/11/93 | | 16.42 | 132.26 | 25.43 | |
| | 11/05/93 | | 16.92 | 131.76 | 25.43 | |
| | 03/01/94 | | 15.54 | 133.14 | 25.00 | |
| | 06/02/94 | | 16.19 | 132.49 | 25.00 | |
| | 09/09/94 | | 16.87 | 131.81 | 25.00 | |
| | 12/20/94 | | 15.84 | 132.84 | 25.01 | |
| | 03/08/95 | | 15.11 | 133.57 | 24.85 | |
| | 06/14/95 | | 15.69 | 132.99 | 24.86 | |
| MW-6 | 05/18/93 | 153.96 | 20.80 | 133.16 | --- | |
| | 08/11/93 | | 21.64 | 132.32 | 31.15 | |
| | 11/05/93 | | 22.11 | 131.85 | 31.15 | |
| | 03/01/94 | | 20.80 | 133.16 | 29.96 | |
| | 06/02/94 | | 21.37 | 132.59 | 29.98 | |
| | 09/09/94 | | 22.05 | 131.91 | 29.96 | |
| | 12/20/94 | | 21.06 | 132.90 | 29.89 | |
| | 03/08/95 | | 20.29 | 133.67 | 29.67 | |
| | 06/14/95 | | 20.81 | 133.15 | 29.65 | |
| MW-7 | 05/18/93 | 156.09 | 22.64 | 133.45 | --- | |
| | 08/11/93 | | 23.25 | 132.84 | 30.75 | |
| | 11/05/93 | | 23.93 | 132.16 | 30.75 | |
| | 03/01/94 | | 22.72 | 133.37 | 30.11 | |
| | 06/02/94 | | 23.22 | 132.87 | 30.12 | |
| | 09/09/94 | | 23.90 | 132.19 | 30.12 | |
| | 12/20/94 | | 22.98 | 133.11 | 30.10 | |
| | 03/08/95 | | 22.14 | 133.95 | 29.91 | |
| | 06/14/95 | | 22.61 | 133.48 | 29.91 | |
| MW-8 | 05/18/93 | 158.04 | 21.55 | 136.49 | --- | |
| | 08/11/93 | | 22.43 | 135.61 | 34.82 | |
| | 11/05/93 | | 23.00 | 135.04 | 34.82 | |
| | 03/01/94 | | 22.05 | 135.99 | 34.04 | |
| | 06/02/94 | | 22.29 | 135.75 | 34.04 | |
| | 09/09/94 | | 22.99 | 135.05 | 34.04 | |
| | 12/20/94 | | 22.14 | 135.90 | 33.98 | |
| | 03/08/95 | | 21.25 | 136.79 | 34.48 | |
| | 06/14/95 | | 21.70 | 136.34 | 34.49 | |

NOTES: 1 = Measurement and reference elevation taken from notch/mark on top north side of well casing.
2 = Elevation referenced to mean sea level.
Well Depth = Measurement from top of casing to bottom of well.
--- = Not measured.

TABLE 2
ANALYTICAL RESULTS: GROUNDWATER
BEACON STATION #574
22315 REDWOOD ROAD, CASTRO VALLEY, CALIFORNIA
(All results in parts-per-billion)

| Monitoring Well | Date Collected | Total Petroleum Hydrocarbons | | | Aromatic Volatile Organics | | | |
|-----------------|----------------|------------------------------|--------|-----------|----------------------------|---------|--------------|---------------|
| | | Gasoline | Diesel | Motor Oil | Benzene | Toluene | Ethylbenzene | Total Xylenes |
| MW-1 | 03/27/92 | 5,600 | <50 | <50 | 760 | 900 | 230 | 1,100 |
| | 06/04/92 | 2,600 | <800 | NA | 270 | 57 | 230 | 440 |
| | 09/23/92 | 3,400 | NA | NA | 480 | 430 | 110 | 550 |
| | 11/12/92 | 2,700 | NA | NA | 5.8 | <5.0 | 140 | 340 |
| | 02/02/93 | 8,500 | NA | NA | 760 | 770 | 250 | 1,200 |
| | 05/07/93 | 7,700 | NA | NA | 970 | 630 | 280 | 1,500 |
| | 08/11/93 | 11,000 | NA | NA | 1,400 | 1,000 | 260 | 1,600 |
| | 11/05/93 | 36,000 | NA | NA | 6,200 | 4,700 | 1,400 | 7,100 |
| | 03/01/94 | 3,800 | NA | NA | 580 | 490 | 110 | 620 |
| | 06/02/94 | 8,900 | NA | NA | 1,900 | 1,200 | 420 | 2,100 |
| | 09/09/94 | 4,300 | NA | NA | 740 | 290 | 200 | 630 |
| | 12/20/94 | 3,900 | NA | NA | 550 | 260 | 150 | 510 |
| | 03/08/95 | 8,100 | NA | NA | 1,100 | 540 | 250 | 1,100 |
| 06/14/95 | NS | NS | NS | NS | NS | NS | NS | |
| MW-2 | 03/27/92 | 18,000 | <50 | <50 | 2,400 | 2,300 | 870 | 3,300 |
| | 06/04/92 | 14,000 | <5,000 | NA | 1,900 | 1,700 | 580 | 2,300 |
| | 09/23/92 | 22,000 | NA | NA | 2,100 | 1,500 | 760 | 2,900 |
| | 11/12/92 | 29,000 | NA | NA | 2,400 | 860 | 540 | 3,500 |
| | 02/02/93 | 24,000 | NA | NA | 2,700 | 1,900 | 590 | 2,600 |
| | 05/07/93 | 19,000 | NA | NA | 1,800 | 1,300 | 460 | 2,600 |
| | 08/11/93 | 23,000 | NA | NA | 2,300 | 1,500 | 550 | 2,300 |
| | 11/05/93 | 30,000 | NA | NA | 3,100 | 2,900 | 860 | 3,700 |
| | 03/01/94 | 13,000 | NA | NA | 1,500 | 490 | 350 | 1,000 |
| | 06/02/94 | 12,000 | NA | NA | 2,000 | 790 | 460 | 1,300 |
| | 09/09/94 | 13,000 | NA | NA | 1,800 | 660 | 440 | 1,000 |
| | 12/20/94 | 16,000 | NA | NA | 2,300 | 1,000 | 650 | 1,900 |
| | 03/08/95 | 16,000 | NA | NA | 2,200 | 1,000 | 550 | 2,100 |
| 06/14/95 | NS | NS | NS | NS | NS | NS | NS | |
| MW-3 | 03/27/92 | 160 | <50 | <50 | 9.2 | 4.8 | 10 | 23 |
| | 06/04/92 | 120 | <50 | NA | 7.5 | 2.7 | 0.5 | 15 |
| | 09/23/92 | 220 | NA | NA | 8.3 | 4.3 | 6.2 | 19 |
| | 11/12/92 | 230 | NA | NA | 12 | 5.5 | 7.7 | 19 |
| | 02/02/93 | 86 | NA | NA | 2.4 | 0.71 | 2.7 | 6.2 |
| | 05/07/93 | 140 | NA | NA | 2.6 | 1.2 | 3.9 | 8.4 |
| | 08/11/93 | 490 | NA | NA | 15 | 8.1 | 14 | 37 |
| | 11/05/93 | 820 | NA | NA | 45 | 24 | 34 | 93 |
| | 03/01/94 | 410 | NA | NA | 7.4 | 2.7 | 5.6 | 10 |
| | 06/02/94 | 440 | NA | NA | 13 | 4.9 | 14 | 31 |
| | 09/09/94 | 620 | NA | NA | 12 | 4.8 | 9.7 | 20 |
| | 12/20/94 | 770 | NA | NA | 24 | 11 | 16 | 36 |
| | 03/08/95 | 300 | NA | NA | 6.1 | 0.97 | 4.8 | 7.5 |
| 06/14/95 | NS | NS | NS | NS | NS | NS | NS | |

NOTES: < = Below indicated detection limit.
NS = Not sampled.
NA = Not analyzed.
* = Product is not typical gasoline.

TABLE 2
ANALYTICAL RESULTS: GROUNDWATER
BEACON STATION #574
22315 REDWOOD ROAD, CASTRO VALLEY, CALIFORNIA
(All results in parts-per-billion)

| Monitoring Well | Date Collected | Total Petroleum Hydrocarbons | | | Aromatic Volatile Organics | | | |
|-----------------|----------------|------------------------------|--------|-----------|----------------------------|---------|--------------|---------------|
| | | Gasoline | Diesel | Motor Oil | Benzene | Toluene | Ethylbenzene | Total Xylenes |
| MW-4 | 05/18/93 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 08/11/93 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 11/05/93 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 03/01/94 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 06/02/94 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 09/09/94 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 12/20/94 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 03/08/95 | NS | NS | NS | NS | NS | NS | NS |
| 06/14/95 | NS | NS | NS | NS | NS | NS | NS | |
| MW-5 | 05/18/93 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 08/11/93 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 11/05/93 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 03/01/94 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 06/02/94 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 09/09/94 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 12/20/94 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 03/08/95 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| 06/14/95 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 | |
| MW-6 | 05/18/93 | 170 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 08/11/93 | 78 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 11/05/93 | 170 | NA | NA | <0.5 | <0.5 | <0.5 | 0.65 |
| | 03/01/94 | 210 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 06/02/94 | 190 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 09/09/94 | 140 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 12/20/94 | 210 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 03/08/95 | 180* | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| 06/14/95 | 220* | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 | |
| MW-7 | 05/18/93 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 08/11/93 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 11/05/93 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 03/01/94 | 60 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 06/02/94 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 09/09/94 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 12/20/94 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 03/08/95 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| 06/14/95 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 | |
| MW-8 | 05/18/93 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 08/11/93 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 11/05/93 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 03/01/94 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 06/02/94 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 09/09/94 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 12/20/94 | <50 | NA | NA | <0.5 | <0.5 | <0.5 | <0.5 |
| | 03/08/95 | NS | NS | NS | NS | NS | NS | NS |
| 06/14/95 | NS | NS | NS | NS | NS | NS | NS | |

NOTES: < = Below indicated detection limit.
NS = Not sampled.
NA = Not analyzed.
* = Product is not typical gasoline.

ULTRAMAR FIELD PROCEDURES

The following section describes procedures used by Ultramar field personnel in the performance of ground water sampling.

Ground Water Level and Total Depth Determination

A water level indicator is lowered down the well and a measurement of the depth to water from an established reference point on the casing is taken. The indicator probe is used to sound the bottom of the well and a measurement of the total depth of the well is taken. Both the water level and total depth measurements are taken to the nearest 0.01-foot.

Visual Analysis of Ground Water

Prior to purging and sampling ground water monitoring wells, a water sample is collected from each well for subjective analysis. The visual analysis involves gently lowering a clean, disposable, polyethylene bailer to approximately one-half the bailer length past the water table interface. The bailer is then retrieved, and the sample contained within the bailer is examined for floating product or the appearance of a petroleum product sheen. If measurable free product is noted in the bailer, a water/product interface probe is used to determine the thickness of the free product to the nearest 0.01-foot. The thickness of free product is determined by subtracting the depth to product from the depth to water.

Monitoring Well Purging and Sampling

Monitoring wells are purged by removing approximately four casing volumes of water from the well using a clean disposable bailer or electrical submersible purge pump. Purge volumes are calculated prior to purging. During purging the temperature, pH, and electric conductivity are monitored. The well is sufficiently purged when: the four casing volumes have been removed; the temperature, pH, and conductivity have stabilized to within 10% of the initial readings; and the ground water being removed is relatively free of suspended solids. After purging, ground water levels are allowed to stabilize to within 80% of the initial water level reading. A water sample is then collected from each well with a clean, disposable polyethylene bailer. If the well is bailed dry prior to removing the minimum volume of water, the ground water is allowed to recharge. If the well has recharged to within 80% of the initial reading within two hours, the well will continue to be purged until the minimum volume of water has been removed. If the well has not recharged to at least 80% of the initial reading within two hours, the well is considered to contain formation water and a ground water sample is collected. Ground water removed from the well is stored in 55-gallon drums at the site and labeled pending disposal.

In wells where free product is detected, the wells will be bailed to remove the free product. An estimate of the volume of product and water will be recorded. If the free product thickness is reduced to the point where a measurable thickness is no longer present in the well, a ground water sample will be collected. If free product persists throughout bailing, a final free product thickness measurement will be taken and a ground water sample will not be collected.

Samples are stored in 40-milliliter vials so that air passage through the sample is minimized (to prevent volatilizing the sample). The vial is tilted and filled slowly until an upward convex meniscus forms over the mouth of the vial. The Teflon side of the septum (in cap) is then placed against the meniscus, and the cap is screwed on tightly. The sample is then inverted and the bottle is tapped lightly to check for air bubbles. If an air bubble is present in the vial, the cap is removed and more sample is transferred from the bailer. The vial is then resealed and rechecked for air bubbles. The sample is then appropriately labeled and stored on ice from the time of collection through the time of delivery to the laboratory. A Chain-of-Custody form is completed to ensure sample integrity. Ground water samples are transported to a state-certified laboratory and analyzed within the EPA-specified holding times for the requested analyses.

TABLE 2
WATER LEVEL DATA
(measurements in feet)

| Monitoring Well | Date | Reference Elevation (top of casing) | Depth to Ground Water | Ground Water Elevation |
|-----------------|----------|-------------------------------------|-----------------------|------------------------|
| MW-1 | 04-01-91 | 156.55 | 22.37 | 134.18 |
| | 03-27-92 | | 22.43 | 134.12 |
| | 06-04-92 | | 23.40 | 133.15 |
| | 09-23-92 | | 24.07 | 132.48 |
| | 11-12-92 | | 24.16 | 132.39 |
| | 02-02-93 | | 21.87 | 134.68 |
| | 05-18-93 | | 22.66 | 133.89 |
| MW-2 | 04-01-91 | 155.17 | 20.82 | 134.25 |
| | 03-27-92 | | 20.82 | 134.35 |
| | 06-04-92 | | 21.81 | 133.36 |
| | 09-23-92 | | 22.45 | 132.72 |
| | 11-12-92 | | 22.60 | 132.57 |
| | 02-02-93 | | 20.28 | 134.89 |
| | 05-18-93 | | 21.06 | 134.11 |
| MW-3 | 04-01-91 | 157.13 | 21.55 | 135.58 |
| | 03-27-92 | | 21.46 | 135.67 |
| | 06-04-92 | | 22.34 | 134.79 |
| | 09-23-92 | | 22.84 | 134.29 |
| | 11-12-92 | | 23.03 | 134.09 |
| | 02-02-93 | | 21.03 | 136.10 |
| | 05-18-93 | | 21.73 | 135.40 |
| MW-4 | 05-18-93 | 151.96 | 17.55 | 134.41 |
| MW-5 | 05-18-93 | 148.68 | 15.72 | 132.96 |
| MW-6 | 05-18-93 | 153.96 | 20.80 | 133.16 |
| MW-7 | 05-18-93 | 156.09 | 22.64 | 133.45 |
| MW-8 | 05-18-93 | 158.04 | 21.55 | 136.49 |

TABLE 3
GROUND WATER ANALYTICAL RESULTS
(concentrations in parts per billion)

| Monitoring Well | Date Collected | Total Petroleum Hydrocarbons | | | Aromatic Volatile Organics | | | |
|-----------------|----------------|------------------------------|--------|-----------|----------------------------|---------|--------------|---------------|
| | | Gasoline | Diesel | Motor Oil | Benzene | Toluene | Ethylbenzene | Total Xylenes |
| MW-1 | 04-01-91 | 4,100 | <100 | - | 140 | 570 | 76 | 460 |
| | 03-27-92 | 5,600 | <50 | <50 | 760 | 900 | 230 | 1,100 |
| | 06-04-92 | 2,600 | <800 | - | 270 | 57 | 230 | 440 |
| | 09-23-92 | 3,400 | - | - | 480 | 430 | 110 | 550 |
| | 11-12-92 | 2,700 | - | - | 5.8 | <5.0 | 140 | 340 |
| | 02-02-93 | 8,500 | - | - | 760 | 770 | 250 | 1,200 |
| | 05-07-93 | 7,700 | - | - | 970 | 630 | 280 | 1,500 |
| MW-2 | 04-01-91 | 10,000 | <100 | - | 650 | 640 | 150 | 960 |
| | 03-27-92 | 18,000 | <50 | <50 | 2,400 | 2,300 | 870 | 3,300 |
| | 06-04-92 | 14,000 | <5,000 | - | 1,900 | 1,700 | 580 | 2,300 |
| | 09-23-92 | 22,000 | - | - | 2,100 | 1,500 | 760 | 2,900 |
| | 11-12-92 | 29,000 | - | - | 2,400 | 860 | 540 | 3,500 |
| | 02-02-93 | 24,000 | - | - | 2,700 | 1,900 | 590 | 2,600 |
| | 05-07-93 | 19,000 | - | - | 1,800 | 1,300 | 460 | 2,600 |
| MW-3 | 04-01-91 | 3,100 | <100 | - | 41 | 91 | 37 | 420 |
| | 03-27-92 | 160 | <50 | <50 | 9.2 | 4.8 | 10 | 23 |
| | 06-04-92 | 120 | <50 | - | 7.5 | 2.7 | 0.5 | 15 |
| | 09-23-92 | 220 | - | - | 8.3 | 4.3 | 6.2 | 19 |
| | 11-12-92 | 230 | - | - | 12 | 5.5 | 7.7 | 19 |
| | 02-02-93 | 86 | - | - | 2.4 | 0.71 | 2.7 | 6.2 |
| | 05-07-93 | 140 | - | - | 2.6 | 1.2 | 3.9 | 8.4 |
| MW-4 | 05-18-93 | <50 | - | - | <0.50 | <0.50 | <0.50 | <0.50 |
| MW-5 | 05-18-93 | <50 | - | - | <0.50 | <0.50 | <0.50 | <0.50 |
| MW-6 | 05-18-93 | 170 | - | - | <0.50 | <0.50 | <0.50 | <0.50 |
| MW-7 | 05-18-93 | <50 | - | - | <0.50 | <0.50 | <0.50 | <0.50 |
| MW-8 | 05-18-93 | <50 | - | - | <0.50 | <0.50 | <0.50 | <0.50 |

Note: Dash (-) indicates that the sample was not analyzed for this constituent.

WEST LABORATORY

June 27, 1995
Sample Log 12066

Sheila Richgels
Fugro West, Inc.
1050 Melody Lane, Suite 160
Roseville, CA 95678

Subject: Analytical Results for 3 Water Samples
Identified as: Beacon 574 (Proj. # 94-574-01)
Received: 06/16/95

Dear Ms. Richgels:

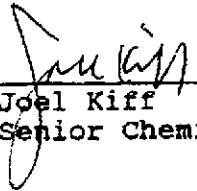
Analysis of the sample(s) referenced above has been completed. This report is written to confirm results communicated on June 27, 1995 and describes procedures used to analyze the samples.

Sample(s) were analyzed using the following method(s):

"BTEX" (EPA Method 602/Purge-and-Trap)
"TPH as Gasoline" (Modified EPA Method 8015/Purge-and-Trap)

Please refer to the following table(s) for summarized analytical results and contact us at 916-753-9500 if you have questions regarding procedures or results. The chain-of-custody document is enclosed.

Approved by:



Joel Kiff
Senior Chemist

Sample: MW-5

From : Beacon 574 (Proj. # 94-574-01)

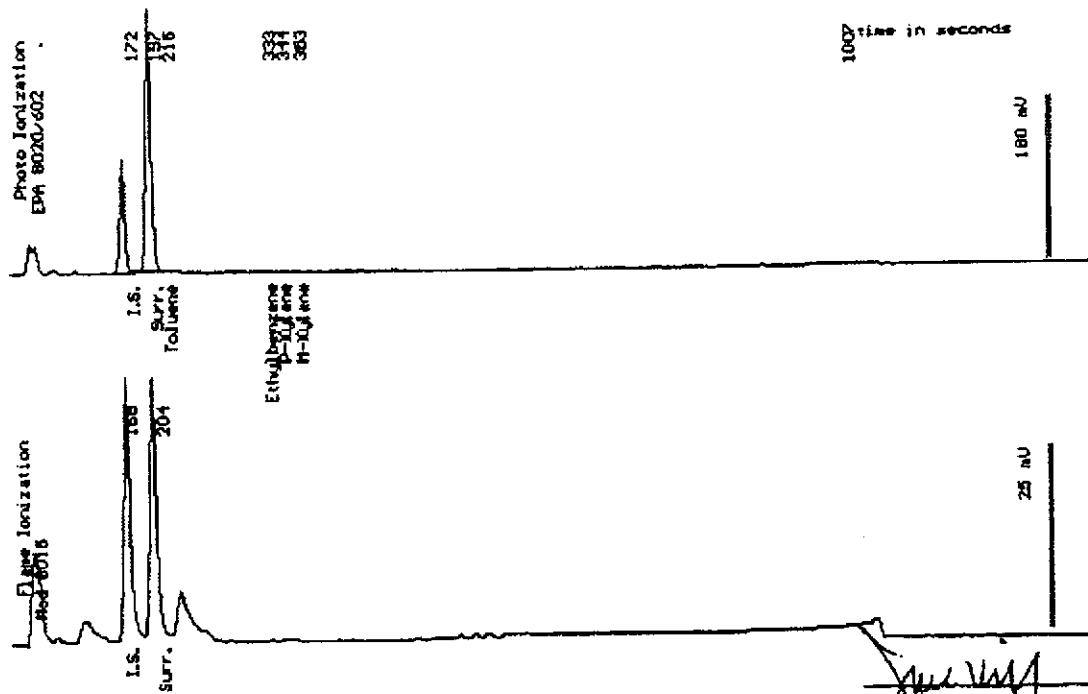
Sampled : 06/14/95

Dilution : 1:1

QC Batch : 2123B

Matrix : Water

| Parameter | (MRL) $\mu\text{g/L}$ | Measured Value $\mu\text{g/L}$ |
|--------------------|-----------------------|--------------------------------|
| Benzene | (.50) | <.50 |
| Toluene | (.50) | <.50 |
| Ethylbenzene | (.50) | <.50 |
| Total Xylenes | (.50) | <.50 |
| TPH as Gasoline | (50) | <50 |
| Surrogate Recovery | | 101 % |



Date Analyzed: 06-22-95
 Column : 0.53mm ID X 30m DBMEX (J&H Scientific)

[Signature]
 Nitra Sarkosh
 Senior Chemist

Sample: MW-6

From : Beacon 574 (Proj. # 94-574-01)

Sampled : 06/14/95

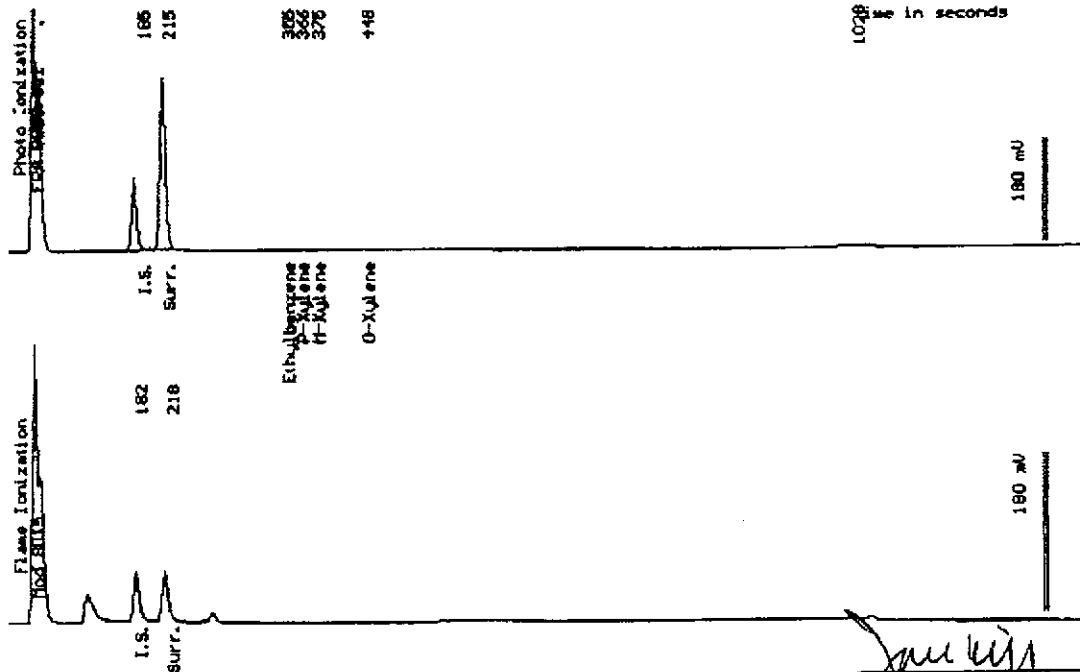
Dilution : 1:1

QC Batch : 2123G

Matrix : Water

| Parameter | (MRL) ug/L | Measured Value ug/L |
|--------------------|------------|---------------------|
| Benzene | (.50) | <.50 |
| Toluene | (.50) | <.50 |
| Ethylbenzene | (.50) | <.50 |
| Total Xylenes | (.50) | <.50 |
| TPH as Gasoline | (50) | 220 * |
| Surrogate Recovery | | 100 % |

* Product is not typical gasoline.



Date Analyzed: 06-26-95
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

[Signature]
Mitra Sarkosh
Senior Chemist

Sample: MW-7

From : Beacon 574 (Proj. # 94-574-01)

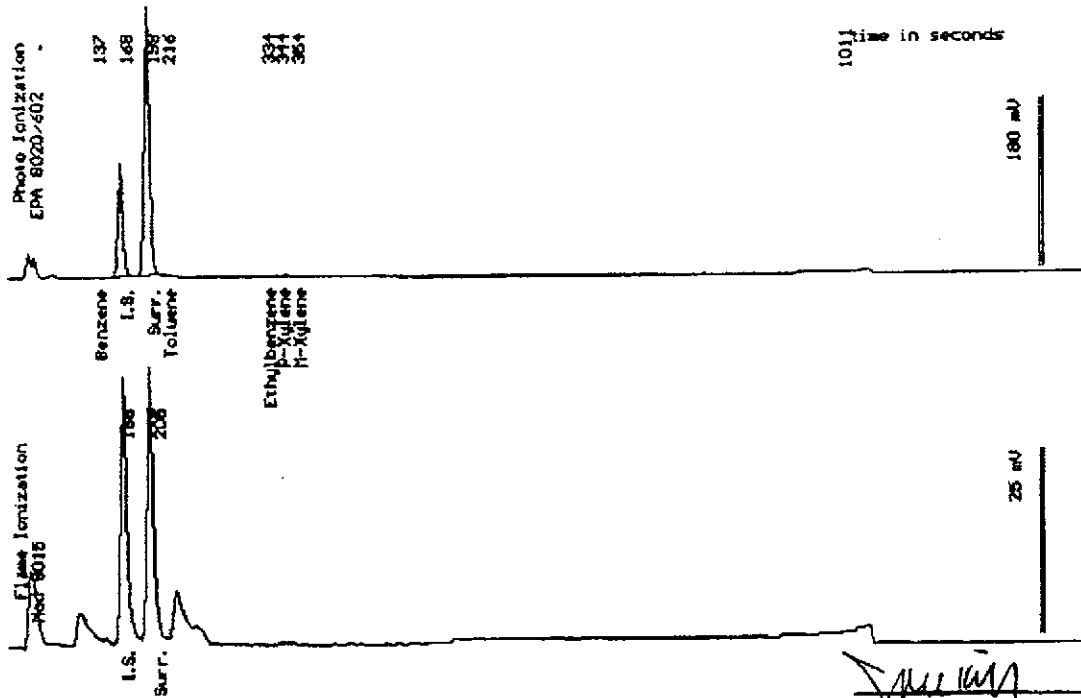
Sampled : 06/14/95

Dilution : 1:1

QC Batch : 2123B

Matrix : Water

| Parameter | (MRL) $\mu\text{g/L}$ | Measured Value $\mu\text{g/L}$ |
|--------------------|-----------------------|--------------------------------|
| Benzene | (.50) | <.50 |
| Toluene | (.50) | <.50 |
| Ethylbenzene | (.50) | <.50 |
| Total Xylenes | (.50) | <.50 |
| TPH as Gasoline | (50) | <50 |
| Surrogate Recovery | | 103 % |



Date Analyzed: 06-22-95
Column : 0.83mm ID X 30m DBMEX (J&H Scientific)

Mitro Sarkhosh
Mitro Sarkhosh
Senior Chemist

WEST LABORATORY

Sample Log 12066
12066-07

Sample: MW-7

From : Beacon 574 (Proj. # 94-574-01)

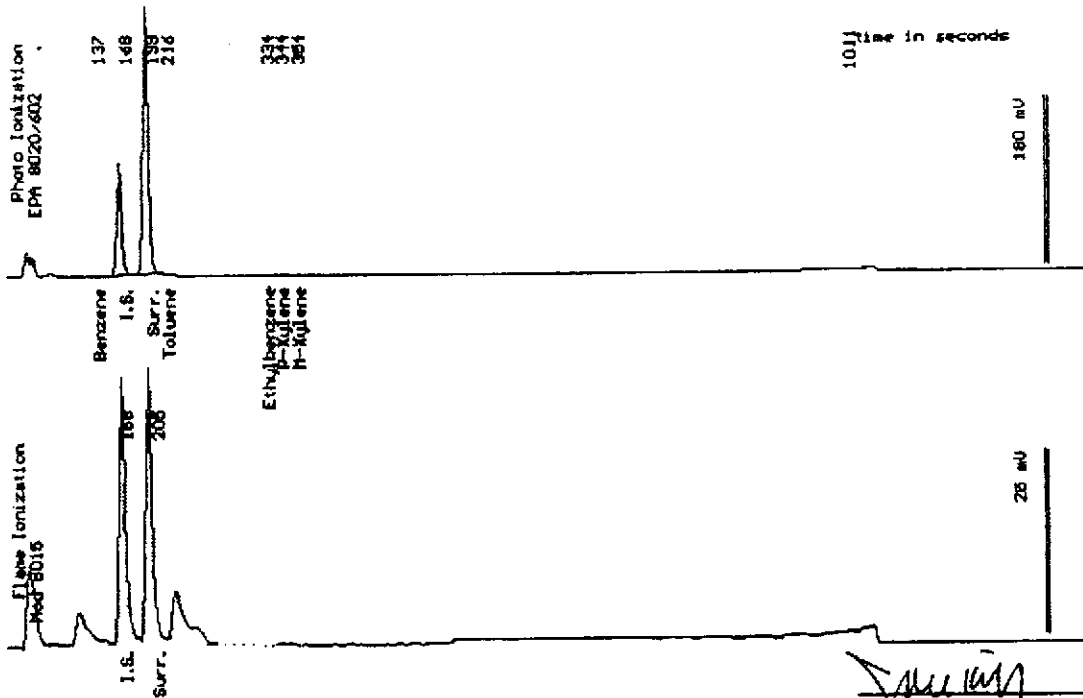
Sampled : 06/14/95

Dilution : 1:1

QC Batch : 2123B

Matrix : Water

| Parameter | (MRL) ug/L | Measured Value ug/L |
|--------------------|------------|---------------------|
| Benzene | (.50) | <.50 |
| Toluene | (.50) | <.50 |
| Ethylbenzene | (.50) | <.50 |
| Total Xylenes | (.50) | <.50 |
| TPH as Gasoline | (50) | <50 |
| Surrogate Recovery | | 103 % |



Date Analyzed: 06-22-98
Column : 0.53mm ID X 30m DBMEX (J&W Scientific)

[Signature]
Mina Sarkhosh
Senior Chemist



Reloc
17066

Ultramar Inc. CHAIN OF CUSTODY REPORT

BEACON

| | | | | | | | | | | |
|--|--|--|---------------|---|----------|------------------|--------------|---------------|------------------|--------------------|
| Beacon Station No. 574 | | Sampler (Print Name) Hal Hansen | | | ANALYSES | | | | Date 10-14-95 | Form No. 1 of 1 |
| Project No. 94-574-01 | | Sampler (Signature) <i>Hal Hansen</i> | | | BTEX | TPH (gasoline) | TPH (diesel) | | | No. of Containers |
| Project Location 22315 Redwood Rd. Castro Valley | | Affiliation Douglas Environmental | | | | | | | | |
| Sample No./Identification | | Date | Time | Lab No. | | | | | | REMARKS |
| MW-5 | | 10-14-95 | 7:10 | | X | X | | | | |
| MW-6 | | " | 7:25 | | ↓ | ↓ | | | | |
| MW-7 | | " | 7:50 | | ↓ | ↓ | | | | |
| Relinquished by: (Signature/Affiliation) <i>Hal Hansen Douglas Env.</i> | | Date 10/15/95 | Time 9:15 | Received by: (Signature/Affiliation) <i>[Signature]</i> | | Date 10/15/95 | | Time 9:15 | | |
| Relinquished by: (Signature/Affiliation) <i>[Signature]</i> | | Date 10/15/95 | Time 10:30 | Received by: (Signature/Affiliation) <i>[Signature]</i> | | Date 10/15/95 | | Time 10:30 | | |
| Relinquished by: (Signature/Affiliation) <i>[Signature]</i> | | Date 10/15/95 | Time 10:30 | Received by: (Signature/Affiliation) <i>[Signature]</i> | | Date 10/15/95 | | Time 10:30 | | |
| Report To: Sheila Richgels | | | | Bill to: ULTRAMAR INC. 525 West Third Street Hanford, CA 93230 Attention: <u>Kenneth Earnest</u> | | | | | | |

1030
WEST. LAB

5-6-7

**DOULOS ENVIRONMENTAL COMPANY
GROUNDWATER/LIQUID LEVEL DATA
(measurements in feet)**

Project Address: Beacon #574, 22315 Redwood Road

Date: 6-14-95

Castro Valley, CA

Project No.: 94-574-01

Recorded by: Hal Hansen

| Well No. | Time | Well Elev. TOC | Depth to Ground Water | Measured Total Depth | Ground Water Elevation | Depth to Product | Product Thickness | Comments |
|----------|------|-------------------|--------------------------|-------------------------|---------------------------|---------------------|----------------------|------------------|
| MW-1 | 631 | 1 | 22.65 | 29.70 | | | | |
| MW-2 | 627 | 4 | 21.04 | 29.54 | | | | |
| MW-3 | 623 | . | 21.80 | 29.36 | | | | |
| MW-4 | 620 | 2 | 17.22 | 27.97 | | | | |
| MW-5 | 604 | | 15.69 | 24.86 | | | | no odor no akeen |
| MW-6 | 609 | 3 | 20.81 | 29.65 | | | | no odor no akeen |
| MW-7 | 612 | | 22.61 | 29.91 | | | | no odor no akeen |
| MW-8 | 616 | : | 21.70 | 34.49 | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTES:

Client: Ultramar
 Site: Beacon #574
22315 Redwood Road
Castro Valley, CA

Sampling Date: 6-14-95
 Project No.: 94-574-01
 Well Designation: MW-5

Is setup of traffic control devices required? NO YES time: _____ hours
 Is there standing water in well box? NO YES Above TOC Below TOC
 Is top of casing cut level? NO YES If no, see remarks
 Is well cap sealed and locked? NO YES If no, see remarks
 Height of well casing riser (in inches): 3
 Well cover type: 8" UV 12" UV _____ 12" EMCO _____ 8" BK _____
 12" BK _____ 12" DPW _____ 12" CNI _____ 36" CNI _____ Other _____
 General condition of wellhead assembly: Excellent Good Fair Poor

Purging Equipment: _____ 2" disposable bailer _____ Submersible pump
 _____ 3" PVC bailer _____ Dedicated bailer
 _____ 4" PVC bailer Centrifugal pump
 Sampled with: Disposable bailer: Teflon bailer: _____

Well diameter: 2" 4" _____ 6" _____ 8" _____
 Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft

Initial Measurement

Recharge Measurement

Time: 604 Time: 709 Calculated purge: 6 gal
 Depth of well: 24.86 Depth to water: 17.50 Actual purge: 6.11
 Depth to water: 15.69

Start purge: 652 Sampling time: 710

| Time | Temperature | E. C. | pH | Turbidity | Volume |
|------|-------------|-------|------|-----------|--------|
| 653 | 64.2 | 791 | 72.6 | — | 1 |
| 654 | 64.3 | 782 | 73.0 | — | 2 |
| 655 | 64.4 | 727 | 73.1 | — | 3 |
| 656 | 64.5 | 704 | 73.8 | — | 4 |

Sample appearance: clear Lock: Dolphin

Equipment replaced: (Check all that apply)

Note condition of replaced items

2" locking cap: _____ Lock #3753: _____ 7/32 Allenhead: _____
 4" locking cap: _____ Lock-Dolphin: _____ 9/16 bolt: _____
 6" locking cap: _____ Pinned Allenhead (DPW): _____

Remarks: _____

Signature: Hal Hanson

Client: Ultramar
 Site: Beacon #574
22315 Redwood Road
Castro Valley, CA

Sampling Date: 6-14-95
 Project No.: 94-574-01
 Well Designation: MW-6

Is setup of traffic control devices required? NO YES time: _____ hours
 Is there standing water in well box? NO YES Above TOC Below TOC
 Is top of casing cut level? NO YES If no, see remarks
 Is well cap sealed and locked? NO YES If no, see remarks
 Height of well casing riser (in inches): 10
 Well cover type: 8" UV 12" UV _____ 12" EMCO _____ 8" BK _____
 12" BK _____ 12" DPW _____ 12" CNI _____ 36" CNI _____ Other _____
 General condition of wellhead assembly: Excellent Good Fair Poor

Purging Equipment: _____ 2" disposable bailer _____ Submersible pump
 _____ 3" PVC bailer _____ Dedicated bailer
 _____ 4" PVC bailer Centrifugal pump
 Sampled with: Disposable bailer: Teflon bailer: _____

Well diameter: 2" 4" _____ 6" _____ 8" _____
 Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement Recharge Measurement
 Time: 609 Time: 724 Calculated purge: 5.7 gal
 Depth of well: 29.65 Depth to water: 2200 Actual purge: 5.71
 Depth to water: 20.81

Start purge: 715 Sampling time: 725

| Time | Temperature | E. C. | pH | Turbidity | Volume |
|------|-------------|-------|-----|-----------|--------|
| 716 | 62.1 | 894 | 728 | — | 1 |
| 717 | 62.4 | 882 | 731 | — | 2 |
| 718 | 62.8 | 878 | 735 | — | 3 |
| 719 | 62.5 | 861 | 737 | — | 4 |

Sample appearance: clear Lock: dolphin

Equipment replaced: (Check all that apply) Note condition of replaced items
 2" locking cap: _____ Lock #3753: _____ 7/32 Allenhead: _____
 4" locking cap: _____ Lock-Dolphin: _____ 9/16 bolt: _____
 6" locking cap: _____ Pinned Allenhead (DPW): _____

Remarks: _____

Signature: Hal Hansen

Client: Ultramar
 Site: Beacon #574
22315 Redwood Road
Castro Valley, CA

Sampling Date: 6-14-95
 Project No.: 94-574-01
 Well Designation: MW-7

Is setup of traffic control devices required? NO YES time: _____ hours
 Is there standing water in well box? NO YES Above TOC Below TOC
 Is top of casing cut level? NO YES If no, see remarks
 Is well cap sealed and locked? NO YES If no, see remarks
 Height of well casing riser (in inches): 10
 Well cover type: 8" UV 12" UV _____ 12" EMCO _____ 8" BK _____
 12" BK _____ 12" DPW _____ 12" CNI _____ 36" CNI _____ Other _____
 General condition of wellhead assembly: Excellent Good Fair Poor

Purging Equipment: _____ 2" disposable bailer _____ Submersible pump
 _____ 3" PVC bailer _____ Dedicated bailer
 _____ 4" PVC bailer Centrifugal pump
 Sampled with: Disposable bailer: Teflon bailer: _____

Well diameter: 2" 4" _____ 6" _____ 8" _____
 Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement Recharge Measurement
 Time: 612 Time: 749 Calculated purge: 4.7 gal
 Depth of well: 29.91 Depth to water: 24.82 Actual purge: 4.7 l
 Depth to water: 22.61

Start purge: 729 Sampling time: 750

| Time | Temperature | E. C. | pH | Turbidity | Volume |
|------|-------------|-------|-----|-----------|--------|
| 730 | 62.4 | 920 | 724 | — | 1 |
| 731 | 63.8 | 914 | 726 | — | 2 |
| 732 | 63.7 | 898 | 729 | — | 3 |
| 733 | 63.9 | 882 | 727 | — | 4 |
| | | | | | |

Sample appearance: clear Lock: dolphin

Equipment replaced: (Check all that apply) Note condition of replaced items
 2" locking cap: _____ Lock #3753: _____ 7/32 Allenhead: _____
 4" locking cap: _____ Lock-Dolphin: _____ 9/16 bolt: _____
 6" locking cap: _____ Pinned Allenhead (DPW): _____

Remarks: _____

Signature: Hal Klemson