## **Ultramar**

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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

February 18, 1997

Mr. Scott Seery Department of Environmental Health Alameda County Health Care Agency 1131 Harbor Parkway, Room 250 Alameda, CA 94502-6577

SUBJECT:

BEACON STATION NO. 720, 1088 MARINA BLVD., SAN

LEANDRO, CALIFORNIA

Dear Mr. Seery:

Enclosed is a copy of the *Fourth Quarter 1996 Groundwater Monitoring Report* for the above-referenced Ultramar facility. Also included is a copy of the Quarterly Status Report.

The gas line was installed in the beginning of February 18, 1997. It is anticipated that start-up will occur before the end of February.

Please call if you have any questions.

Sincerely,

(20) ANE - 5545

**ULTRAMAR INC.** 

Terrence A. Fox

Senior Project Manager

Marketing Environmental Department

**Enclosure** 

CC:

Mr. Owen Kittredge, Delta Environmental Consultants



BEACON
#I 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: February 18, 1997

QUARTER ENDING: December 31, 1996

**SERVICE STATION NO.: 720** 

ADDRESS: 1088 Marina Blvd., San Leandro, CA

**COUNTY:** Alameda

**ULTRAMAR CONTACT:** Terrence A. Fox

TEL. NO: 209-583-5545

## **BACKGROUND:**

In January 1987, three underground gasoline storage tanks and one waste oil tank were excavated and removed from two tank cavities. Samples collected from beneath the former tanks indicated that hydrocarbons were present in the soil. In March 1987, five monitoring wells (MW-1 through MW-5) were installed by Conoco. Hydrocarbons were detected in soil and ground-water samples collected from the wells with the highest concentrations being detected in the area of MW-4. In July 1987, four soil borings were drilled in the vicinity of MW-4 to further characterize the soil contamination in that area. TPH concentrations above 100 ppm were detected in each boring. The site has been on a monitoring program since June 1987.

In July 1990, the site was purchased by Ultramar Inc. from Conoco. The monitoring program has continued.

In August 1991, perform shallow ground water study as screening tool to locate wells.

In October 1991, installed three additional wells to further define the extent of the dissolved hydrocarbon plume.

In October 1993, performed a ground-water pump test, a vapor extraction test, and a air sparging test.

In May 1994, submitted Problem Assessment Report/Remedial Action Plan.

In December 1994, installed one additional monitoring well, six air sparging points, and one vapor extraction well.



Beacon Station 720 Quarterly Status Report Page 2

## **SUMMARY OF THIS QUARTER'S ACTIVITIES:**

Performed quarterly monitoring on December 5, 1996.

**RESULT OF QUARTERLY MONITORING:** 

Monitoring data indicates that the benzene concentration remained not detected in MW-6 and MW-7. The benzene concentration decreased in MW-1 from 65 ppb to 25 ppb, in MW-2 from 1,600 ppb to 650 ppb, in MW-3 from 1.4 ppb to not detected, in MW-4 from 13,000 ppb to 3,700 ppb, in MW-5 from 5,600 ppb to 5,100 ppb, and in MW-8 from 1,300 ppb to 1,100 ppb. Benzene concentrations increased in MW-9 from 860 ppb to 2,100 ppb.

## PROPOSED ACTIVITY OR WORK FOR NEXT QUARTER:

**ACTIVITY** 

**ESTIMATED COMPLETION DATE** 

Continue quarterly monitoring program.

Install gas line for the remediation system.

February 7, 1997

Start up remediation system.

March 1, 1997

## El Dorado Environmental, Inc.

2221 Goldorado Trail, El Dorado, California 95623

(916) 626-3898 Fax (916) 626-3899

February 8, 1997

Mr. Terrence Fox Senior Project Manager Ultramar Inc. 525 West Third Street Hanford, California 93230

Subject:

Fourth Quarter 1996 Ground Water Monitoring Report

Beacon Station #720

1088 Marina Boulevard, San Leandro, California

Dear Mr. Fox:

El Dorado Environmental, Inc. (EDE) has prepared this report to document the results of quarterly ground water monitoring conducted on December 5, 1996 at the subject site (Figure 1). The monitoring, conducted by Doulos Environmental (Doulos), included measurements of depth to ground water, subjective analysis for the presence or absence of free product, ground water purging and collection of ground water samples. Doulos reports that all field activities were conducted in accordance with the Ultramar Field Procedures described in Attachment A.

## **GROUND WATER ELEVATIONS**

Prior to purging, Doulos collected depth to ground water measurements. Copies of Doulos' field data sheets are contained in Attachment B. Ground water elevation data collected since March 1992 are summarized in Table 1. Historical ground water elevation data are presented in Attachment C. On the basis of the current measurements, ground water flows generally toward the southwest (Figure 2). The gradient of ground water flow is less than 0.01 foot per foot. Ground water elevations increased an average of 0.47 feet compared to the last monitoring event.

## **GROUND WATER SAMPLING AND ANALYSES**

Ground water samples were collected from nine monitoring wells. All samples were analyzed for concentrations of:

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

Analytical results collected since March 1992 are summarized in Table 2. Historical analytical data are presented in Attachment D. Figure 3 illustrates the inferred distribution of benzene in ground water based on the current data. The laboratory report and chain-of-custody form for the current sampling event are contained in Attachment E. Benzene was not present at detectable concentrations in ground water samples collected from monitoring wells MW-3, MW-6, and MW-7. Concentrations of benzene decreased in the samples collected from monitoring wells MW-1, MW-2, MW-4, MW-5, and MW-8 and increased in the sample collected from monitoring well MW-9 compared to prior sampling.

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

Mr. Rafat Shahid Division of Hazardous Materials Alameda County Health Care Services 80 Swan Way, Room 200 Oakland, California 94621 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 will be at such parties' sole risk.

If you have any questions or comments, please contact us at (916) 626-3898.

Regards,

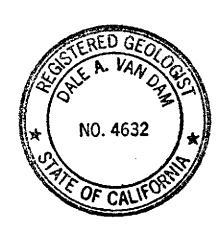
EL DORADO ENVIRONMENTAL, INC.

Dale a. m Da

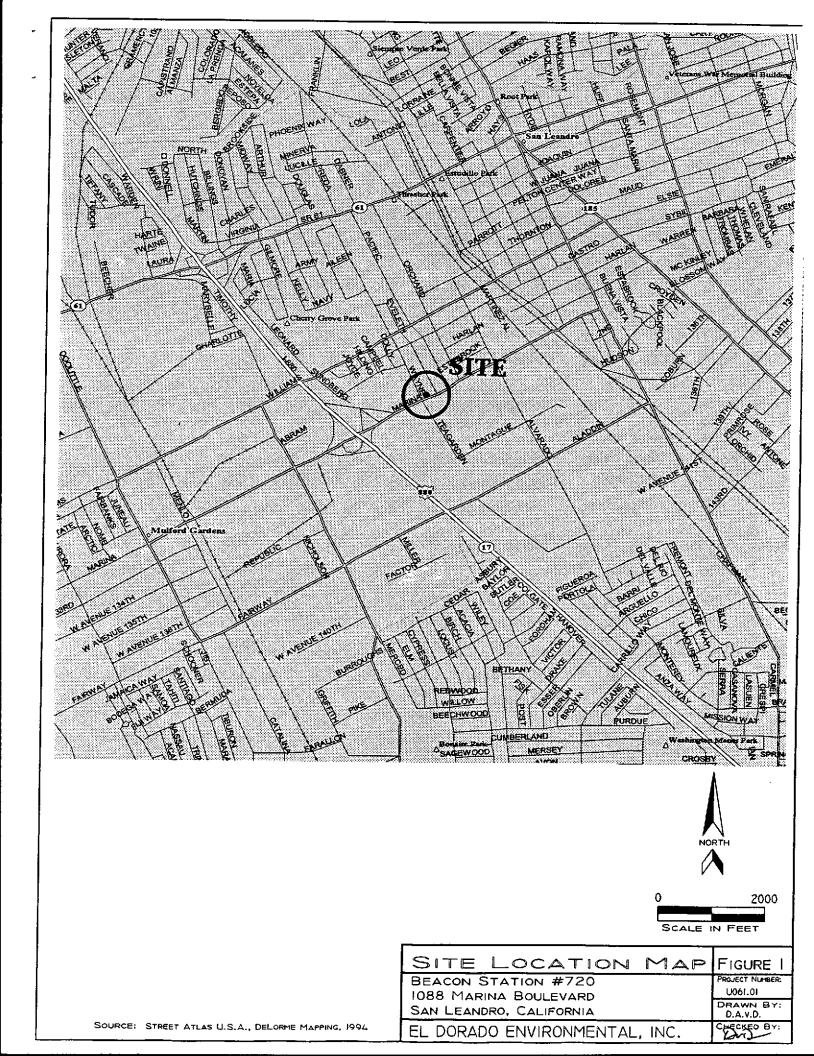
Dale A. van Dam, R.G. Hydrogeologist

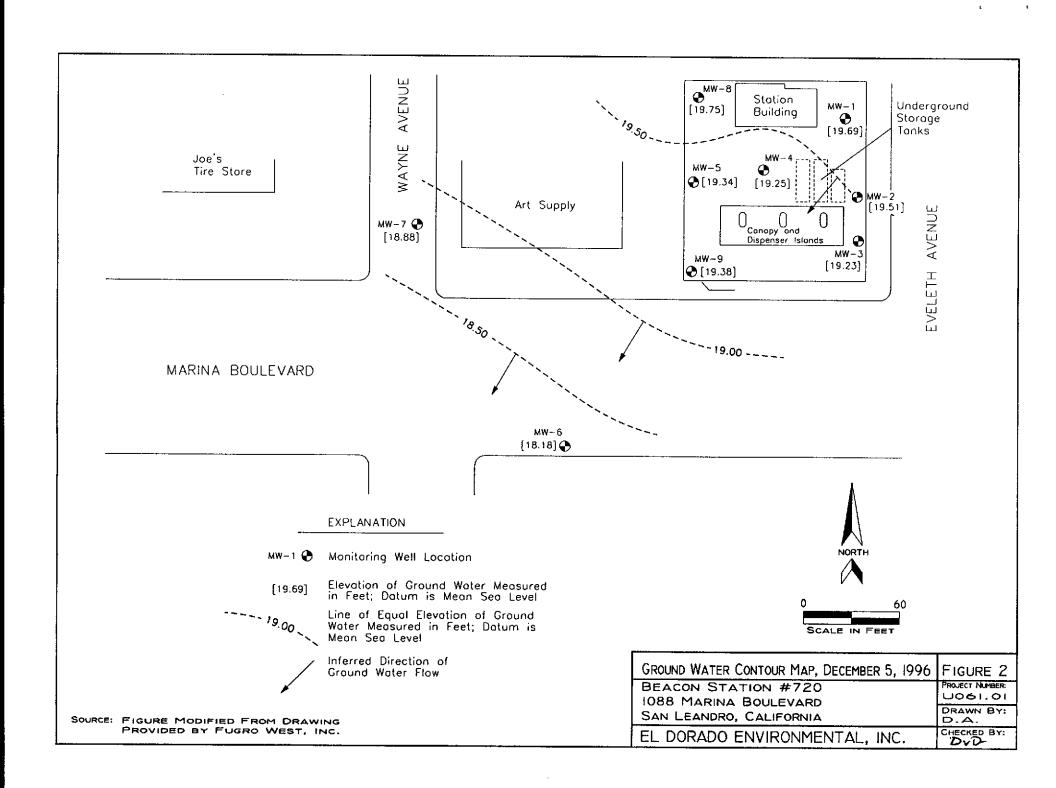
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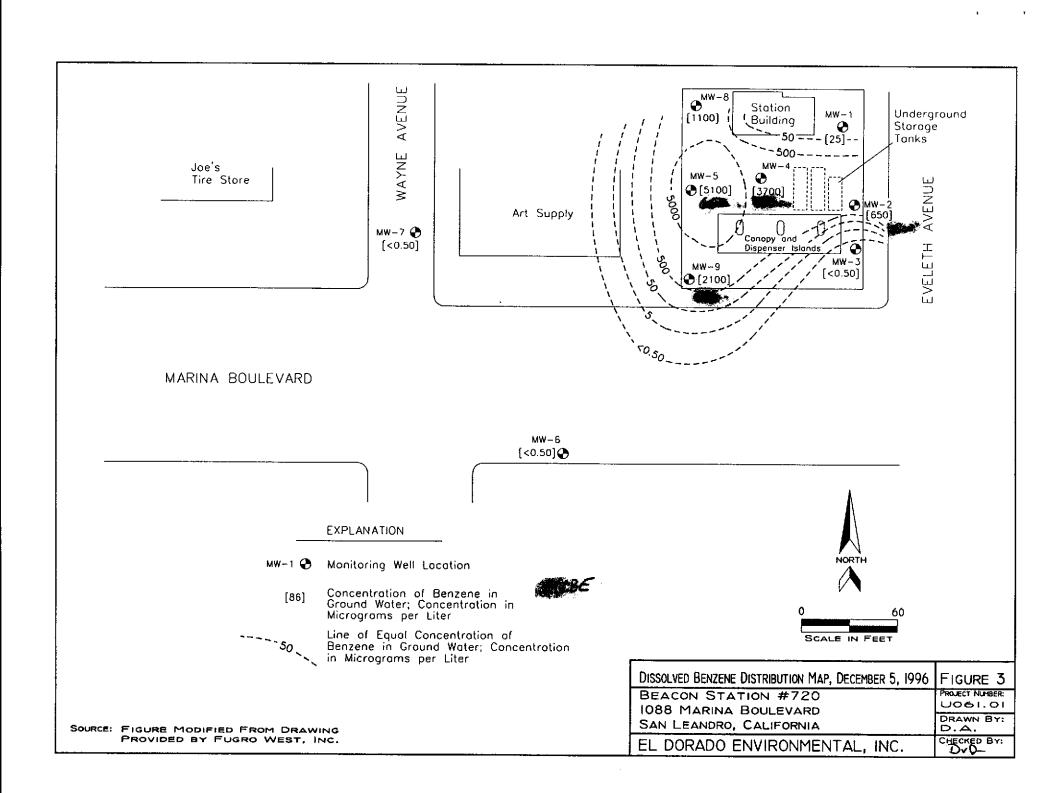
Attachments



| FIGURES:     | FIGURE 1 SITE LOCATION MAP                                   |
|--------------|--|
|              | FIGURE 2 GROUND WATER CONTOUR MAP DECEMBER 5, 1996           |
|              | FIGURE 3 DISSOLVED BENZENE DISTRIBUTION MAP DECEMBER 5, 1996 |
| TANK EG      |  |
| TABLES:      | TABLE 1 GROUND WATER ELEVATION DATA                          |
|              | TABLE 2 GROUND WATER ANALYTICAL RESULTS                      |
|              |  |
| ATTACHMENTS: | A  |
|              | B DOULOS ENVIRONMENTAL FIELD DATA SHEETS                     |
|              | C HISTORICAL GROUND WATER ELEVATION DATA                     |
|              | D HISTORICAL GROUND WATER ANALYTICAL DATA                    |
|              | E LABORATORY REPORT AND CHAIN-OF-CUSTODY FORM                |







## TABLE 1 **GROUND WATER ELEVATION DATA BEACON STATION #720** 1088 MARINA BOULEVARD, SAN LEANDRO, CALIFORNIA

#### (Measurements in feet)

| Monitoring<br>Well | Date   | Reference<br>Elevation<br>(top of casing) <sup>1</sup> | Depth to<br>Ground Water <sup>1</sup>   | Ground Water<br>Elevation <sup>2</sup>  | Well<br>Depth   | Comments |
|--------------------|--|--|---|---|---|----------|
| MW-1               | 03/30/92<br>07/01/92<br>09/30/92<br>11/19/92<br>02/03/93<br>05/25/93<br>09/22/93<br>12/21/93<br>03/18/94<br>06/15/94<br>09/14/94<br>12/19/95<br>03/07/95<br>06/08/95<br>09/22/95<br>12/27/95<br>03/26/96<br>09/10/96<br>12/05/96                         | 33.10  | 13.58<br>14.80<br>16.12<br>16.34<br>12.61<br>13.12<br>14.18<br>14.36<br>13.64<br>14.30<br>15.18<br>13.79<br>13.86<br>12.74<br>12.95<br>13.94<br>13.57<br>12.13<br>13.10<br>14.08<br>13.41 | 19.52<br>18.30<br>16.98<br>16.76<br>20.49<br>19.98<br>18.92<br>18.74<br>19.46<br>18.80<br>17.92<br>19.31<br>19.24<br>20.36<br>20.15<br>19.16<br>19.53<br>20.97<br>20.00<br>19.02<br>19.69 | 27.76<br>27.72<br>27.70<br>27.73<br>27.70<br>27.67<br>27.69<br>27.66<br>27.70<br><br>29.51<br>29.54<br>29.54<br>29.92<br>29.90<br>17.02<br>17.03<br>17.05 |          |
| MW-2               | 03/30/92<br>07/01/92<br>09/30/92<br>11/19/92<br>02/03/93<br>05/25/93<br>09/22/93<br>12/21/93<br>03/18/94<br>06/15/94<br>09/14/94<br>12/19/94<br>12/21/95<br>03/07/95<br>06/08/95<br>09/22/95<br>12/27/95<br>03/26/96<br>06/13/96<br>09/10/96<br>12/05/96 | 32.80  | 13.32<br>14.42<br>15.78<br>15.99<br>12.31<br>12.97<br>14.32<br>14.52<br>13.45<br>14.07<br>14.96<br>13.64<br>13.71<br>12.54<br>12.81<br>13.66<br>13.42<br>12.05<br>12.79<br>13.73<br>13.29 | 19.48 18.38 17.02 16.81 20.49 19.83 18.48 18.28 19.35 18.73 17.84 19.16 19.09 20.26 19.99 19.14 19.38 20.75 20.01 19.07 19.51   | 24.56<br>25.37<br>25.31<br>25.34<br>25.31<br>25.49<br>25.50<br>25.50<br>25.52<br><br>25.87<br>25.86<br>25.80<br>25.83<br>26.39<br>26.43<br>26.45          |          |

NOTES:

Measurement and reference elevation taken from notch/mark on top north side of well casing.
 Elevation referenced to mean sea level.
 Measurement from top of casing to bottom of well.
 Not measured.

Well Depth =

Well paved over.

## TABLE 1 GROUND WATER ELEVATION DATA **BEACON STATION #720** 1088 MARINA BOULEVARD, SAN LEANDRO, CALIFORNIA

(Measurements in feet)

| Monitoring<br>Well | Date                 | Reference<br>Elevation<br>(top of casing) <sup>t</sup> | Depth to<br>Ground Water <sup>1</sup> | Ground Water<br>Elevation <sup>1</sup> | Well<br>Depth  | Comments |
|--------------------|----------------------|--|---------------------------------------|--|----------------|----------|
| MW-3               | 03/30/92             | 32.30  | 12.96                                 | 19,34                                  |                |          |
|                    | 07/01/92             |  | 14.00                                 | 18.30                                  | <u> </u>       |          |
| ļ                  | 09/30/92             |  | 15.36                                 | 16.94                                  | –              | }        |
|                    | 11/19/92             |  | 15.57                                 | 16.73                                  | 24.45          | <u> </u> |
| 1                  | 02/03/93             |  | 11.96                                 | 20.34                                  | 24.54          |          |
|                    | 05/25/93             |  | 14.12                                 | 18.18                                  | 24.50          |          |
| ļ                  | 09/22/93             |  | 13.88                                 | 18.42                                  | 24.50          |          |
|                    | 12/21/93             |  | 14.12                                 | 18.18                                  | 24.50          |          |
|                    | 03/18/94             |  | 13.04                                 | 19.26                                  | 24.57          |          |
|                    | 06/15/94             |  | 13.65                                 | 18.65                                  | 24.78          |          |
|                    | 09/14/94             |  | 14.54                                 | 17.76                                  | 24.59          |          |
|                    | 12/19/94<br>12/21/95 |  | 13.28                                 | 19.02                                  | 24.71          |          |
|                    | 03/07/95             | '  | 13.30<br>12.26                        | 19.00                                  | 26.02          |          |
|                    | 06/08/95             |  | 12.26                                 | 20.04                                  | 26.03          |          |
|                    | 09/22/95             |  | 13.25                                 | 19.88<br>19.05                         | 26.02<br>26.00 |          |
|                    | 12/27/95             |  | 13.04                                 | 19.26                                  | 26.00          |          |
|                    | 03/26/96             |  | 11.62                                 | 20.68                                  | 26.00          |          |
|                    | 06/13/96             |  | 12.61                                 | 19.69                                  | 28.45          |          |
|                    | 09/10/96             |  | 13.49                                 | 18.81                                  | 28.42          |          |
|                    | 12/05/96             |  | 13.07                                 | 19.23                                  | 28.42          |          |
| MW-4               | 03/30/92             | 32,90  | 13.60                                 | 19.30                                  |                |          |
|                    | 07/01/92             |  | 15.72                                 | 17.18                                  |                |          |
|                    | 09/30/92             |  | 16.04                                 | 16.86                                  |                |          |
|                    | 11/19/92             |  | 16.21                                 | 16.69                                  | 26.92          |          |
|                    | 02/03/93             |  | 12.70                                 | 20.20                                  | 27.00          |          |
|                    | 05/25/93             |  | 12.97                                 | 19.93                                  | 26.88          |          |
|                    | 09/22/93             |  | 14.51                                 | 18.39                                  | 26.90          |          |
|                    | 12/21/93             |  | 14.75                                 | 18.15                                  | 26.90          |          |
|                    | 03/18/94             |  | 13.68                                 | 19.22                                  | 27.24          |          |
|                    | 06/15/94             |  | 14.37                                 | 18.53                                  | 28.54          |          |
|                    | 09/14/94             |  | l5.23                                 | 17.67                                  | 27.25          |          |
|                    | 12/19/94             |  | l3. <del>9</del> 3                    | 18.97                                  | 28.61          |          |
|                    | 12/21/95             |  | 13.99                                 | 18.91                                  |                |          |
|                    | 03/07/95             |  | 12.86                                 | 20.04                                  | 28.64          |          |
|                    | 06/08/95             | ļ  | 13.10                                 | 19.80                                  | 28.68          |          |
|                    | 09/22/95             |  | 13.98                                 | 18.92                                  | 28.71          |          |
|                    | 12/27/95             |  | 13.74                                 | 19.16                                  | 28.71          |          |
|                    | 03/26/96             | İ  | 12.30                                 | 20.60                                  | 28.70          |          |
|                    | 06/13/96             |  | 13.18                                 | 19.72                                  | 27.86          | ·        |
|                    | 09/10/96             |  | 14.22                                 | 18.68                                  | 27.40          |          |
|                    | 12/05/96             | <u></u>  | 13.65                                 | 19.25                                  | 27.40          |          |

NOTES:

Measurement and reference elevation taken from notch/mark on top north side of well casing.

1 = Measurement and reference elevation taken from r
2 = Elevation referenced to mean sea level.
Well Depth = Measurement from top of casing to bottom of well.

Not measured.

Well paved over

## TABLE 1 GROUND WATER ELEVATION DATA **BEACON STATION #720**

## 1088 MARINA BOULEVARD, SAN LEANDRO, CALIFORNIA

(Measurements in feet)

| Monitoring<br>Well | Date   | Reference<br>Elevation<br>(top of casing) <sup>1</sup> | Depth to<br>Ground Water <sup>t</sup>   | Ground Water<br>Elevation <sup>2</sup>  | Well<br>Depth  | Comments |
|--------------------|--|--|---|---|--|----------|
| MW-5               | 03/30/92<br>07/01/92<br>09/30/92<br>11/19/92<br>02/03/93<br>05/25/93<br>09/22/93<br>12/21/93<br>03/18/94<br>06/15/94<br>09/14/94<br>12/19/94<br>12/21/95<br>03/07/95<br>06/08/95<br>09/22/95<br>12/27/95<br>03/26/96<br>06/13/96<br>09/10/96<br>12/05/96 | 32.70  | 13.48<br>14.58<br>15.82<br>16.00<br>12.40<br>13.01<br>14.37<br>14.58<br>13.53<br>14.18<br>15.07<br>13.74<br>13.84<br>12.73<br>12.99<br>13.83<br>13.59<br>12.20<br>12.98<br>13.96<br>13.36 | 19.22<br>18.12<br>16.88<br>16.70<br>20.30<br>19.69<br>18.33<br>18.12<br>19.17<br>18.52<br>17.63<br>18.96<br>18.86<br>19.97<br>19.71<br>18.87<br>19.11<br>20.50<br>19.72<br>18.74<br>19.34 | 27.56<br>27.61<br>27.61<br>27.64<br>27.01<br>28.70<br>28.74<br>28.70<br>28.76<br>—<br>28.88<br>28.87<br>28.85<br>28.85<br>28.85<br>28.85<br>28.85<br>28.84<br>28.84<br>28.84<br>28.87<br>28.87 |          |
| MW-6               | 03/30/92<br>07/01/92<br>09/30/92<br>11/19/92<br>02/03/93<br>05/25/93<br>10/11/93<br>12/21/93<br>03/18/94<br>06/15/94<br>09/14/94<br>12/19/94<br>12/21/95<br>03/07/95<br>06/08/95<br>09/22/95<br>12/27/95<br>03/26/96<br>06/13/96<br>09/10/96<br>12/05/96 | 30.40  | 12.62<br>12.70<br>13.40<br>13.59<br>12.43<br><br>12.82<br>13.06<br>12.16<br>12.59<br>12.86<br>12.48<br>11.61<br>12.37<br>11.14<br>12.44<br>12.21<br>12.26<br>12.55<br>12.31<br>12.22      | 17.78 17.70 17.00 16.81 17.97 17.58 17.34 18.24 17.81 17.54 17.92 18.79 18.03 19.26 17.96 18.19 18.14 17.85 18.09 18.18   | 15.10<br>15.01<br>15.01<br>15.10<br>15.10<br>15.16<br>15.17<br>14.97<br>15.19<br><br>14.98<br>15.00<br>15.00<br>14.98<br>14.97<br>14.98<br>15.01<br>15.01                                      | •        |

NOTES:

Measurement and reference elevation taken from notch/mark on top north side of well casing.
 Elevation referenced to mean sea level.
 Measurement from top of casing to bottom of well.

2 = Well Depth =

Not measured. Well paved over.

## TABLE 1 GROUND WATER ELEVATION DATA **BEACON STATION #720** 1088 MARINA BOULEVARD, SAN LEANDRO, CALIFORNIA

(Measurements in feet)

| Monitoring<br>Well | Date     | Reference<br>Elevation<br>(top of casing) <sup>1</sup> | Depth to<br>Ground Water <sup>i</sup> | Ground Water<br>Elevation <sup>2</sup> | Well<br>Depth | Comments |
|--------------------|----------|--|---------------------------------------|--|---------------|----------|
| MW-7               | 03/30/92 | 31.20  | 12.34                                 | 18.86                                  |               |          |
|                    | 07/01/92 |  | 15.54                                 | 15.66                                  |               |          |
|                    | 09/30/92 |  | 14.64                                 | 16.56                                  |               |          |
|                    | 11/19/92 |  | 14.80                                 | 16.40                                  | 25.10         |          |
|                    | 02/03/93 |  | 11.36                                 | 19.84                                  | 25.02         |          |
|                    | 05/25/93 |  |                                       | 17.04                                  | 25.02         | <u>.</u> |
|                    | 09/22/93 |  | 13.18                                 | 18.02                                  | 25.01         | ·        |
|                    | 12/21/93 |  | 13.42                                 | 17.78                                  | 25.02         |          |
|                    | 03/18/94 |  | 12.36                                 | 18.84                                  | 25.13         |          |
|                    | 06/15/94 |  | 13.01                                 | 18.19                                  | 25.21         |          |
|                    | 09/14/94 |  | 13.88                                 | 17.32                                  |               |          |
|                    | 12/19/94 |  |                                       |  | 25.13         | İ        |
|                    | 12/19/94 |  | 12.61                                 | 18.59                                  | 25.23         | ·        |
|                    | 1        |  | 12.38                                 | 18.82                                  | 35.22         |          |
|                    | 03/07/95 |  | 11.56                                 | 19.64                                  | 25.22         |          |
|                    | 06/08/95 |  | 11.82                                 | 19.38                                  | 25.20         |          |
|                    | 09/22/95 |  | 12.67                                 | 18.53                                  | 25.23         |          |
|                    | 12/27/95 |  | 12.34                                 | 18.86                                  | 25.23         |          |
|                    | 03/26/96 |  | 11.03                                 | 20.17                                  | 25.21         |          |
|                    | 06/13/96 |  | 11.76                                 | 19.44                                  | 25.20         |          |
|                    | 09/10/96 |  | 12.71                                 | 18.49                                  | 24.56         |          |
|                    | 12/05/96 |  | 12,32                                 | 18.88                                  | 24.56         |          |
| MW-8               | 03/30/92 | 33.80  | 14.66                                 | 19.14                                  |               |          |
| 17111-0            | 07/01/92 | 33.80  |                                       |  |               |          |
|                    |          |  | 15.74                                 | 18.06                                  |               |          |
|                    | 09/30/92 |  | 17.00                                 | 16.80                                  |               |          |
|                    | 11/19/92 |  | 17.01                                 | 16.79                                  | 29.75         |          |
|                    | 02/03/93 | j  | 13.83                                 | 19.97                                  | 29.88         |          |
|                    | 05/25/93 | İ  | 13.01                                 | 20.79                                  | 29.86         |          |
|                    | 09/22/93 |  | 15.81                                 | 17.99                                  | 24.52         |          |
|                    | 12/21/93 |  | 16.05                                 | 17.75                                  | 29.86         |          |
|                    | 03/18/94 |  | 14.62                                 | 19.18                                  | 29.87         |          |
|                    | 06/15/94 |  | 15.29                                 | 18.51                                  | 30.07         |          |
|                    | 09/14/94 |  | 16.22                                 | 17.58                                  | 29.87         |          |
|                    | 12/19/94 |  | 14.81                                 | 18.99                                  | 30.05         |          |
|                    | 12/21/95 |  | 14.89                                 | 18.91                                  | _             |          |
|                    | 03/07/95 |  | 13.75                                 | 20.05                                  | 29.94         |          |
|                    | 06/08/95 |  | 13.98                                 | 19.82                                  | 29.93         |          |
|                    | 09/22/95 |  | 14.92                                 | 18.88                                  | 29.95         |          |
|                    | 12/27/95 | ļ  | 14.61                                 | 19.19                                  | 29.92         |          |
|                    | 03/26/96 | 1  | 13.09                                 | 20.71                                  | 29.73         |          |
|                    | 06/13/96 |  | 13.81                                 | 19.99                                  | 27.92         |          |
|                    | 09/10/96 |  | 14.80                                 | 19.00                                  | 27.95         |          |
|                    | 12/05/96 |  | 14.05                                 | 19.75                                  | 27.96         |          |
| MW-9               | 13/31/05 | 12.50  | 12.76                                 | 10.50                                  |               |          |
| IVI VV -Y          | 12/21/95 | 32.56  | 13.76                                 | 18.80                                  |               |          |
|                    | 03/07/95 |  | 12.79                                 | 19.77                                  | 24.71         |          |
|                    | 06/08/95 |  | 12.96                                 | 19.60                                  | 24.70         |          |
| :                  | 09/22/95 |  | 13.73                                 | 18.83                                  | 24.72         |          |
|                    | 12/27/95 |  | 13.53                                 | 19.03                                  | 24.71         |          |
|                    | 03/26/96 |  | 12.27                                 | 20.29                                  | 24.70         |          |
|                    | 06/13/96 |  | 12.84                                 | 19.72                                  | 24.53         |          |
|                    | 09/10/96 | ļ  | 13.49                                 | 19.07                                  | 24.58         |          |
|                    | 12/05/96 | Ĭ  | 13.18                                 | 19.38                                  | 24.60         |          |

NOTES:

Measurement and reference elevation taken from notch/mark on top north side of well casing. Elevation referenced to mean sea level. Measurement from top of casing to bottom of well.

Not measured. Well paved over.

### TABLE 2 GROUND WATER ANALYTICAL RESULTS **BEACON STATION #720** 1088 MARINA BOULEVARD, SAN LEANDRO, CALIFORNIA

## (All results in micrograms per Liter)

| Monitoring<br>Well | Date<br>Collected | Total<br>Petroleum<br>Hydrocarbons | Aromatic Volatile Organics |         |                   |                  |
|--------------------|-------------------|------------------------------------|----------------------------|---------|-------------------|------------------|
|                    |                   | Gasoline                           | Benzene                    | Toluene | Ethyl-<br>benzene | Total<br>Xylenes |
| MW-I               | 03/30/92          | 27,000                             | 630                        | 550     | 540               | 1,900            |
|                    | 07/01/92          | 55,000                             | 840                        | 1,000   | 830               | 3,600            |
|                    | 09/30/92          | 6,400                              | 150                        | 95      | 120               | 470              |
|                    | 11/19/92          | 1,300                              | 90                         | 11      | 50                | 87               |
|                    | 02/03/93          | 53,000                             | 750                        | 560     | 950               | 5.700            |
|                    | 05/25/93          | 9,400                              | 200                        | 86      | 470               | 1,500            |
|                    | 09/22/93          | 4 Í,000                            | 1,000                      | 510     | 850               | 1,100            |
|                    | 12/21/93          | 41,000                             | 1,000                      | 490     | 2,700             | 13,000           |
|                    | 03/18/94          | 9,500                              | 320                        | 160     | 830               | 2,900            |
|                    | 06/15/94          | 8,000                              | 310                        | 80      | 990               | 2,300            |
|                    | 09/14/94          | 3,600                              | 130                        | 31      | 390               | 630              |
|                    | 12/19/94          | 17,000                             | 350                        | 150     | 1,500             | 5,200            |
|                    | 03/07/95          | 12,000                             | 180                        | 62      | 1,200             | 3,200            |
|                    | 06/08/95          | 6,300                              | 76                         | 8.0     | 560               | 860              |
|                    | 09/22/95          | 12,000                             | 140                        | 55      | 1,500             | 2,500            |
|                    | 12/27/95          | 3,900                              | 60                         | 13      | 480               | 870              |
|                    | 03/26/96          | 6,400                              | 42                         | 4.9     | 560               | 600              |
|                    | 06/13/96          | 9,600                              | 86                         | 39      | 1,100             | 1,700            |
|                    | 09/10/96          | 16,000                             | 65                         | 35      | 1,500             | 2,700            |
|                    | 12/05/96          | 6,400                              | 25                         | l ii    | 570               | 930              |
| 3.000.0            | 00.100.100        |                                    |                            |         |                   |                  |
| MW-2               | 03/30/92          | 52,000                             | 2,300                      | 1,700   | 940               | 3,300            |
|                    | 07/01/92          | 130,000                            | 3,500                      | 2,900   | 1,900             | 7,900            |
|                    | 09/30/92          | 24,000                             | 890                        | 350     | 500               | 1,700            |
|                    | 11/19/92          | 32,000                             | 1,900                      | 1,700   | 870               | 3,400            |
|                    | 02/03/93          | 64,000                             | 1,900                      | 2,200   | 860               | 4,100            |
|                    | 05/25/93          | 34,000                             | 3,300                      | 1,500   | 1,300             | 5,900            |
|                    | 09/22/93          | 8,000                              | 640                        | 150     | 270               | 2,000            |
|                    | 12/21/93          | 18,000                             | 1,500                      | 410     | 1,300             | 5,000            |
|                    | 03/18/94          | 14,000                             | 1,600                      | 790     | 1,100             | 3,700            |
|                    | 06/15/94          | 13,000                             | 1,600                      | 580     | 1,200             | 4,100            |
|                    | 09/14/94          | 20,000                             | 1,600                      | 560     | 1,800             | 6,400            |
|                    | 12/19/94          | 19,000                             | 1,700                      | 750     | 1,600             | 5,800            |
|                    | 03/07/95          | 17,000                             | 1,900                      | 980     | 1,300             | 5,100            |
| ſ                  | 06/08/95          | 19,000                             | 2,100                      | 740     | 1,500             | 4,900            |
|                    | 09/22/95          | 12,000                             | 840                        | 170     | 1,100             | 3,400            |
|                    | 12/27/95          | 16,000                             | 1,100                      | 540     | 1,400             | 5,100            |
| j                  | 03/26/96          | 11,000                             | 930                        | 520     | 970               | 3,000            |
| i                  | 06/13/96          | 11,000                             | 1,800                      | 1,400   | 1,500             | 4,500            |
|                    | 09/10/96          | 19,000                             | 1,600                      | 600     | 1,600             | 5,000            |
|                    | 12/05/96          | 12,000                             | 650                        | 180     | 000,1             | 2,800            |

NOTES:

Below indicated detection limit,

Reported as "nondetect" by previous consultant.
Not sampled.

NO NS

# TABLE 2 GROUND WATER ANALYTICAL RESULTS BEACON STATION #720 1088 MARINA BOULEVARD, SAN LEANDRO, CALIFORNIA

(All results in micrograms per Liter)

| Monitoring<br>Well | Date<br>Collected | Total<br>Petroleum<br>Hydrocarbons     | Aromatic Volatile Organics |         |                   |                  |
|--------------------|-------------------|--|----------------------------|---------|-------------------|------------------|
|                    |                   | Gasoline                               | Benzene                    | Toluene | Ethyl-<br>benzene | Total<br>Xylenes |
| MW-3               | 03/30/92          | 21,000                                 | 560                        | 50      | 630               | 980              |
|                    | 07/01/92          | 13,000                                 | 150                        | 20      | 22                | 300              |
|                    | 09/30/92          | 4,500                                  | 53                         | 2.6     | 84                | 96               |
|                    | 11/19/92          | 4,700                                  | 73                         | 6.2     | 140               | 120              |
|                    | 02/03/93          | 23,000                                 | 220                        | 40      | 430               | 740              |
|                    | 05/25/93          | 9,900                                  | 120                        | 26      | 370               | 520              |
|                    | 09/22/93          | 10,000                                 | 370                        | 71      | 320               | 640              |
|                    | 12/21/93          | 7,800                                  | 130                        | 8.5     | 430               | 380              |
|                    | 03/18/94          | 3,100                                  | 22                         | 1.3     | 78                | 41               |
|                    | 06/15/94          | 1,700                                  | 8.6                        | 1.4     | 22                | 15               |
|                    | 09/14/94          | 1,400                                  | 3.8                        | <1.3    | 13                | 18               |
|                    | 12/19/94          | 3,800                                  | 70                         | 1.7     | 140               | 110              |
|                    | 03/07/95          | 2,200                                  | 9.4                        | <1.3    | 30                | 21               |
|                    | 06/08/95          | 1,700                                  | 5.8                        | <1.3    | 2.3               | 14               |
|                    | 09/22/95          | 1,200                                  | <1.3                       | <1.3    | 1.3               | <1.3             |
|                    | 12/27/95          | 1,300                                  | 2.4                        | <1.3    | 3.3               | 3.6              |
|                    | 03/26/96          | 1,200                                  | 4,3                        | <1.3    | 4.2               | 2.0              |
|                    | 06/13/96          | 1,300                                  | 5.1                        | <0.50   | 21                | 6.5              |
|                    | 09/10/96          | 810                                    | 1.4                        | 4.8     | 1.6               | 2,1              |
|                    | 12/05/96          | 590                                    | <0.50                      | 3.2     | 0.79              | 0.52             |
|                    |                   | ······································ |                            |         |                   | 0.52             |
| MW-4               | 03/30/92          | 76,000                                 | 8,000                      | 4,400   | 730               | 2,500            |
|                    | 07/01/92          | 95,000                                 | 6,900                      | 2,200   | 70                | 880              |
|                    | 09/30/92          | 58,000                                 | 7,100                      | 1,500   | 650               | 2,700            |
|                    | 11/19/92          | 33,000                                 | 5,500                      | 840     | 400               | 1,400            |
|                    | 02/03/93          | 130,000                                | 8,200                      | 6,700   | 940               | 4,400            |
| ļ                  | 05/25/93          | 63,000                                 | 16,000                     | 6,600   | 1,700             | 8,100            |
| İ                  | 09/22/93          | 23,000                                 | 6,900                      | 940     | 150               | 3,000            |
|                    | 12/21/93          | 28,000                                 | 6,900                      | 1,900   | 1,100             | 5,500            |
|                    | 03/18/94          | 58,000                                 | 17,000                     | 6,300   | 2,500             | 10,000           |
|                    | 06/15/94          | 59,000                                 | 20,000                     | 4,900   | 2,500             | 9,100            |
|                    | 09/14/94          | 73,000                                 | 22,000                     | 6,800   | 2,700             | 10,000           |
|                    | 12/19/94          | 67,000                                 | 20,000                     | 8,300   | 2,300             | 9,100            |
|                    | 03/07/95          | 57,000                                 | 19,000                     | 7,900   | 2,200             | 8,700            |
|                    | 06/08/95          | 61,000                                 | 17,000                     | 6,300   | 2,700             | 9,000            |
|                    | 09/22/95          | 37,000                                 | 12,000                     | 2,200   | 1,400             | 3,500            |
|                    | 12/27/95          | 39,000                                 | 12,000                     | 6,000   | 1,800             | 5,800            |
| ļ                  | 03/26/96          | 31,000                                 | 9,600                      | 3,700   | 2,300             | 6,200            |
|                    | 06/13/96          | 240                                    | 64                         | 0.93    | 1.8               | 2.7              |
| }                  | 09/10/96          | 91,000                                 | 13,000                     | 20,000  | 3,200             | 16,000           |
| į                  | 12/05/96          | 16,000                                 | 3,700                      | 3,100   | 580               | 2,800            |

NOTES:

Below indicated detection limit,

D = Reported as "nondetect" by previous consultant.

ND NS

Not sampled

## TABLE 2 GROUND WATER ANALYTICAL RESULTS **BEACON STATION #720** 1088 MARINA BOULEVARD, SAN LEANDRO, CALIFORNIA

## (All results in micrograms per Liter)

| Monitoring<br>Well | Date<br>Collected | Total<br>Petroleum<br>Hydrocarbons | Aromatic Volatile Organics |         |                   |                  |
|--------------------|-------------------|------------------------------------|----------------------------|---------|-------------------|------------------|
|                    |                   | Gasoline                           | Велгеле                    | Toluene | Ethyl-<br>benzene | Total<br>Xylenes |
| MW-5               | 03/30/92          | 29,000                             | 2,600                      | 980     | 390               | 1,100            |
|                    | 07/01/92          | 52,000                             | 2,400                      | 1,000   | 5,200             | 2,000            |
|                    | 09/30/92          | 32,000                             | 008.1                      | 780     | 370               | 1,700            |
|                    | 11/19/92          | 7,800                              | 1,000                      | 280     | 120               | 370              |
|                    | 02/03/93          | 74,000                             | 3,500                      | 3,000   | 780               | 3,200            |
|                    | 05/25/93          | 57,000                             | 7,900                      | 4,700   | 1,900             | 7,800            |
|                    | 09/22/93          | 52,000                             | 7,600                      | 2,400   | 1,200             | 8,800            |
|                    | 12/21/93          | 23,000                             | 3,600                      | 1,200   | 970               | 3,600            |
|                    | 03/18/94          | 47,000                             | 8,200                      | 5,000   | 1,400             | 6,100            |
|                    | 06/15/94          | 28,000                             | 7,900                      | 4,000   | 1,200             | 5,200            |
|                    | 09/14/94          | 32,000                             | 8,000                      | 5,100   | 1,400             | 5,600            |
|                    | 12/19/94          | 29,000                             | 7,000                      | 3,400   | 1,200             | 5,200            |
|                    | 03/07/95          | 36,000                             | 9,800                      | 5,800   | 1,800             | 7,800            |
|                    | 06/08/95          | 33,000                             | 7,700                      | 3,800   | 1,500             | 6,200            |
|                    | 09/22/95          | 39,000                             | 9,500                      | 3,800   | 1,900             | 7,000            |
|                    | 12/27/95          | 42,000                             | 9,700                      | 5,000   | 2,200             | 8,800            |
|                    | 03/26/96          | 37,000                             | 9,800                      | 4,900   | 2,300             | 8,800            |
|                    | 06/13/96          | 18,000                             | 5,500                      | 2,200   | 1,500             | 5,300            |
|                    | 09/10/96          | 22,000                             | 5,600                      | 1,400   | 1,100             | 3,500            |
|                    | 12/05/96          | 24,000                             | 5,100                      | 2,500   | 1,400             | 4,700            |
| MW-6               | 03/30/92          | 73                                 | 2.1                        | 1.1     | ND                | 0.6              |
|                    | 07/01/92          | ND                                 | ND                         | ND      | ND                | ND               |
|                    | 09/30/92          | ND                                 | 0.73                       | ND      | ND                | 0.58             |
|                    | 11/19/92          | 96                                 | 1.5                        | <0.5    | <0.5              | 0.9              |
|                    | 02/03/93          | 73                                 | 0.6                        | <0.5    | <0.5              | <0.5             |
|                    | 05/25/93          | NS                                 | NS                         | NS      | NS                | NS               |
| Ì                  | 10/11/93          | <50                                | < 0.5                      | <0.5    | < 0.5             | <0.5             |
|                    | 12/21/93          | <50                                | <0.5                       | <0.5    | <0.5              | <0.5             |
|                    | 03/18/94          | <50                                | <0.5                       | <0.5    | <0.5              | <0.5             |
|                    | 06/15/94          | <50                                | <0.5                       | <0.5    | <0.5              | <0.5             |
|                    | 09/14/94          | <50                                | <0.5                       | <0.5    | <0.5              | <0.5             |
| į                  | 12/19/94          | <50                                | <0.5                       | <0.5    | <0.5              | <0.5             |
| ì                  | 03/07/95          | <50                                | <0.5                       | <0.5    | <0.5              | <0.5             |
|                    | 06/08/95          | <50                                | <0.5                       | <0.5    | <0.5              | <0.5             |
|                    | 09/22/95          | <50                                | < 0.50                     | <0.50   | <0.50             | <0.50            |
| ļ                  | 12/27/95          | <50                                | <0.50                      | < 0.50  | < 0.50            | <0.50            |
| ł                  | 03/26/96          | <50                                | < 0.50                     | <0.50   | <0.50             | <0.50            |
| 1                  | 06/13/96          | <50                                | <0.50                      | <0.50   | <0.50             | <0.50            |
|                    | 09/10/96          | <50                                | <0.50                      | <0.50   | <0.50             | <0.50            |
|                    | 12/05/96          | <50                                | < 0.50                     | <0.50   | <0.50             | <0.50            |

NOTES:

Below indicated detection limit. Reported as "nondetect" by previous consultant. Not sampled.

ND NS

## TABLE 2 GROUND WATER ANALYTICAL RESULTS **BEACON STATION #720**

## 1088 MARINA BOULEVARD, SAN LEANDRO, CALIFORNIA

(All results in micrograms per Liter)

| Monitoring<br>Well | Date<br>Collected    | Total<br>Petroleum<br>Hydrocarbons | Aromatic Volatile Organics |              |                   |                  |
|--------------------|----------------------|------------------------------------|----------------------------|--------------|-------------------|------------------|
|                    |                      | Gasoline                           | Benzene                    | Toluene      | Ethyl-<br>benzene | Total<br>Xylenes |
| MW-7               | 03/30/92             | ND                                 | ND                         | ND           | ND                | ND               |
|                    | 07/01/92             | ND                                 | ND                         | ND           | ND                | ND               |
|                    | 09/30/92             | ND                                 | ND                         | ND           | ND                | ND               |
|                    | 11/19/92             | <50                                | <0.5                       | <0.5         | <0.5              | <0.5             |
|                    | 02/03/93             | <50                                | <0.5                       | <0.5         | <0.5              | <0.5             |
|                    | 05/25/93             | NS                                 | NS                         | NS           | NS                | NS               |
|                    | 09/22/93             | <50                                | 0.51                       | 0.82         | <0.5              | 0.81             |
|                    | 12/21/93<br>03/18/94 | <50                                | <0.5                       | <0.5         | <0.5              | <0.5             |
|                    | 06/15/94             | <50<br><50                         | <0.5<br><0.5               | <0.5<br><0.5 | <0.5<br><0.5      | <0.5             |
|                    | 09/14/94             | <50                                | <0.5                       | <0.5         | <0.5              | <0.5<br><0.5     |
|                    | 12/19/94             | <50<br><50                         | <0.5                       | <0.5         | <0.5              | <0.5             |
|                    | 03/07/95             | <50                                | <0.5                       | <0.5         | <0.5              | <0.5             |
|                    | 06/08/95             | <50                                | <0.5                       | <0.5         | <0.5              | <0.5             |
|                    | 09/22/95             | <50                                | < 0.50                     | < 0.50       | <0.50             | <0.50            |
|                    | 12/27/95             | <50                                | < 0.50                     | < 0.50       | <0.50             | <0.50            |
|                    | 03/26/96             | <50                                | <0.50                      | <0.50        | <0.50             | <0.50            |
|                    | 06/13/96             | <50                                | <0.50                      | <0.50        | <0.50             | <0.50            |
|                    | 09/10/96             | <50                                | <0.50                      | <0.50        | <0.50             | <0.50            |
|                    | 12/05/96             | <50                                | <0.50                      | <0.50        | <0.50             | <0.50            |
| MW-8               | 03/30/92             | 3,000                              | 1.700                      | 990          | 070               | 1,000            |
| 171 77 -0          | 07/01/92             | 72,000                             | 1,700<br>1,800             | 880          | 970               | 1,900            |
|                    | 09/30/92             | 12,000                             | 680                        | 550<br>140   | 520<br>140        | 2,200            |
|                    | 11/19/92             | 9,600                              | 530                        | 310          | 130               | 560<br>560       |
|                    | 02/03/93             | 44,000                             | 1,500                      | 1,300        | 490               | 2,300            |
|                    | 05/25/93             | 7,400                              | 580                        | 160          | 170               | 480              |
|                    | 09/22/93             | 2,400                              | 490                        | 45           | 37                | 140              |
|                    | 12/21/93             | 1,400                              | 240                        | 7.5          | <2.5              | 82               |
|                    | 03/18/94             | 8,600                              | 1,600                      | 680          | 470               | 1,900            |
|                    | 06/15/94             | 4,800                              | 980                        | 380          | 260               | 1,200            |
|                    | 09/14/94             | 6,600                              | 1,200                      | 280          | 330               | 1,100            |
|                    | 12/19/94             | 8,400                              | 1,800                      | 390          | 500               | 2,000            |
|                    | 03/07/95             | 7,400                              | 1,400                      | 370          | 440               | 2,000            |
|                    | 06/08/95             | 6,000                              | 790                        | 220          | 290               | 1,400            |
|                    | 09/22/95             | 4,100                              | 750                        | 93           | 230               | 860              |
|                    | 12/27/95<br>03/26/96 | 5,400<br>1,700                     | 860                        | 140          | 350               | 1,400            |
|                    | 03/26/96 06/13/96    | 1,700<br>2,400                     | 180<br>500                 | 27<br>67     | 100<br>220        | 370              |
|                    | 09/10/96             | 7,000                              | 1,300                      | 100          | 410               | 850              |
|                    | 12/05/96             | 6,300                              | 1,100                      | 78           | 410               | 1,600<br>1,600   |
|                    | .2,03,30             | 9,200                              | 1,100                      | ,,,          | 710               | 1,000            |
| MW-9               | 12/20/94             | 16,000                             | 2,500                      | 1,400        | 690               | 2,800            |
|                    | 03/07/95             | 5,200                              | 1,600                      | 250          | 320               | 520              |
|                    | 06/08/95             | 4,900                              | 1,000                      | 98           | 300               | 200              |
|                    | 09/22/95             | 4,000                              | 1,100                      | 82           | 190               | 200              |
|                    | 12/27/95             | 2,800                              | 960                        | 100          | 200               | 250              |
|                    | 03/26/96             | 1,600                              | 380                        | 44           | 96                | 110              |
|                    | 06/13/96             | 1,800                              | 540                        | 71           | 140               | 180              |
|                    | 09/10/96             | 2,400                              | 860                        | 70           | 190               | 210              |
|                    | 12/05/96             | 5,500                              | 2,100                      | 420          | 380               | 720              |

NOTES:

Below indicated detection limit. Reported as "nondetect" by previous consultant. Not sampled.

ND NS

## ATTACHMENT A ULTRAMAR FIELD PROCEDURES

#### ATTACHMENT A - ULTRAMAR FIELD PROCEDURES

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

#### 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 of the purge water are monitored. The well is considered to be sufficiently purged when: The four casing volumes have been removed; the temperature, pH, and conductivity values 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 or pumped 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 depth to water 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 depth to water reading within two hours, the well is considered to contain formational 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 well 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 the purging process, a final free product thickness measurement will be taken and a ground water sample will not be collected.

Ground water samples are stored in 40-milliliter vials so that air passage through the sample is minimized (to prevent volatilization of the sample). The vial is tilted and filled slowly until an upward convex meniscus forms over the mouth of the vial. The Teflon<sup>TM</sup> 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. The Chain-of-Custody form is completed to ensure sample integrity. Ground water samples are transported to a state-certified laboratory and analyzed within the U.S. Environmental Protection Agency-specified hold times for the specified analytes.

## ATTACHMENT B DOULOS ENVIRONMENTAL FIELD DATA SHEETS

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

Project Address:

Beacon #720, 1088 Marina Blvd.

Date: <u>/2-5-96</u>

San Leandro, CA Project No.: 94-720-01

Recorded by:

Hal Hansen

| Well No | Time | Well Elev.<br>TOC | Depth to<br>Gr. Water | Measured<br>Total Depth | Gr. Water<br>Elevation | Depth to<br>Product | Product<br>Thickness | Comments  |
|---------|------|-------------------|-----------------------|-------------------------|------------------------|---------------------|----------------------|---|
| MW-L    | 358  | ,                 | 13.41                 | 17.05                   |                        |                     |                      |   |
| MW-2    | 35 U |                   | 13.29                 | 26,45                   |                        |                     |                      | noon me san   |
| MW-3    | 351  |                   | 13.07                 | 28.42                   |                        |                     |                      | moore makey   |
| MW-4    | 409  |                   | /3.65                 | 17.40                   |                        |                     |                      | noode meden<br>noode meden<br>slightede meden<br>Petroler ode meden |
| MW-5    | 405  |                   | 13,36                 | 28.8)                   |                        |                     |                      | Al I have ada mother  |
| MW-6    | 344  | I                 | /1.21                 | 1500                    |                        |                     |                      | Peholemador no 8 1000   |
| MW-7    | 340  | · ·               | 12,32                 | 24.56                   |                        |                     |                      | noodo mo a he.  |
| MW-8    | 347  |                   | 14,05                 | 27,96                   |                        |                     |                      | moder no otre.  |
| MW-9    | 402  |                   | 13.18                 | 24.66                   |                        |                     |                      | Achalemodo noche,   |
|         |      |                   |                       |                         |                        |                     |                      | Kendem odo noohen   |
|         |      |                   |                       |                         |                        |                     |                      |   |
|         |      |                   |                       |                         |                        |                     |                      |   |
|         |      |                   |                       |                         |                        |                     |                      |   |
|         |      |                   |                       |                         |                        |                     |                      |   |
|         |      |                   |                       |                         |                        |                     |                      |   |

Signature:

|  | Client: <u>Ultramar</u>                      |   |   |                               | Sampling                | Date: <u>/</u> | 1-5-96   |                               |
|--|--|---|---|-------------------------------|-------------------------|----------------|--|-------------------------------|
|  | Site:  | Beacon #  | 720   |                               | Proje                   | ct No.:        | 94-720-0   | 01                            |
|  | -  | 1088 Mar  | <u>ina Boulev</u>   | <u>ard</u> W                  | ell Desig               | nation:        | MW-  |                               |
|  |  | San Lean  |   |                               | ·                       |                |  | <del></del>                   |
| Is the Is to Is well to Well to 12" BI | ere star p of cas ll cap s t of wel cover ty | iding wate<br>sing cut 1<br>sealed and<br>l casing :<br>pe: 8" U<br>12" DWP | ntrol devir in well evel? locked? riser (in V1 2" Clellhead as: | inches): 2" UV                | NO<br>NO<br>NO<br>12" E | YES AI         | time:bove TOC If no, se If no, se8" Bl herFair   | Below TOO e remarks e remarks |
|  | ng Equip<br>Sampled                          |   | 2" dispo<br>2" PVC l<br>4" PVC l<br>sposable ba                 | pailer<br>pailer              | -                       | Ded<br>Cen     | omersible<br>licated batrifugal  | ailer                         |
|  |  |   | 2" 🗶  |                               |                         |                |  |                               |
| Initia<br>Time:_<br>Depth<br>Depth     | 1 Measu<br>35%<br>of well<br>to wate         | : <u>17.05</u><br>:: <u>/³.41</u>   | Time: Rec   | harge Mea                     | ር<br><u>ያ 83</u>        |                |  | _                             |
| Start                                  |  | 514   | Sam   | pling tim                     | e: <u>621</u>           |                |  |                               |
|  | Time   | Temp.   | E.C.  | рН                            | Turbi                   | dity           | Volume   |                               |
|  | 6/5  | 704   | 1362  | 734                           |                         |                | /  | _                             |
|  | 6/6  | 682   | 1304  | 718                           |                         |                | 2  | _]                            |
|  | 6/6  | 67.5  | 1282  | 719                           |                         |                | 3  |                               |
|  | 617  | 669   | 1235  | 715                           |                         |                | 4  |                               |
| Sa                                     | ample ap                                     | pearance:   | _clen   |                               | Lock:                   | Isla           | Aria.  |                               |
| 4" Lo                                  | ocking C                                     | ap:<br>ap:  |   | at apply)  ( #3753:  Oolphin: |                         | 7/32 A<br>9    | of replacion of replacion of replacement of the contract of th | ÷                             |
| Remar                                  | ks:  |   |   |                               |                         |                |  |                               |
| ignatu                                 | re:  | Ala   | 891_  |                               |                         |                |  |                               |

|  |                                       |                                     | 25.06                        |   |  |  |
|--|---------------------------------------|-------------------------------------|------------------------------|---|--|--|
| Client: <u>Ultramar</u>  |                                       | <u></u>                             | Sampling Date:               | 12-5-96   |  |  |
| Site: <u>Beacon #</u>  | 720                                   | <del></del>                         | Project No.:                 | 94-720-01   |  |  |
| 1088 Mar   | ina Boulev                            | ard W                               | ell Designation:             | :mw-2   |  |  |
| San Lean   | dro, CA                               |                                     |                              |   |  |  |
| Is setup of traffic co Is there standing wate Is top of casing cut 1 Is well cap sealed and Height of well casing Well cover type: 8" U 12" BK 12" DWP General condition of we | r in well : evel? locked? riser (in : | inches):                            | NO YES A<br>NO YES<br>NO YES | . 04 pr   |  |  |
| Purging Equipment:   | 2" dispo<br>2" PVC b<br>4" PVC b      | osable bas<br>pailer<br>pailer      | ilerSu<br>De<br>/Ce          | bmersible pump<br>dicated bailer<br>ntrifugal pump  |  |  |
| Purge Vol. Multiplier:  Initial Measurement Time: 354  Depth of well: 1645 Depth to water: /3.19   | 0.16 Rec Time: (                      | 0.65<br>harge Mea<br>SOX<br>water:/ | Calcula<br>Acti              |   |  |  |
| Start purge: 602   | T                                     | pling tim                           | e: <u>609</u>                | <del></del>   |  |  |
| Time Temp.   | <u> </u>                              | pН                                  | Turbidity                    | Volume  |  |  |
| 603 71.4   | 1504                                  | 714                                 |                              | 1   |  |  |
| 604 692  | 1508                                  | 707                                 |                              | 2   |  |  |
| 604 68.3   | 1467                                  | 710                                 |                              | مو  |  |  |
| 605 68,4   | 1450                                  | 701                                 |                              | 4   |  |  |
| Sample appearance:   | clan                                  |                                     | Lock: doly                   | hi  |  |  |
| Equipment replaced: (Che 2" Locking Cap:4" Locking Cap:6" Locking Cap:   | Lock                                  | at apply)<br>c #3753:<br>Oolphin:   | 7/32                         | n of replaced item Allenhead: 9/16 Bolt: ead (DWP): |  |  |
| Remarks:  Signature:   | 21                                    |                                     |                              |   |  |  |

|                                     | Client:_                                     | Ultramar  |  | <u> </u>                           | Sampling D                            | Date:_/                               | 1-5-96  |                                     |
|-------------------------------------|--|---|--|------------------------------------|---------------------------------------|---------------------------------------|---|-------------------------------------|
|                                     | Site:_                                       | Beacon #  | 720  | ·····                              | Projec                                | t No.:                                | 94-720-0  | 1                                   |
|                                     | _  | 1088 Mar  | <u>ina Boulev</u>  | ard_ W                             | ell Desigr                            | ation:                                |   |                                     |
|                                     | <del>-</del>                                 | San Lean  | dro, CA  | <del>_</del>                       |                                       |                                       |   |                                     |
| Is the<br>Is to<br>Is we:<br>Height | ere stan<br>p of cas<br>ll cap s<br>t of wel | ding water<br>ing cut le<br>ealed and<br>l casing r | ntrol device in well level? locked? siser (in : V 1 locked ass | box?                               | no<br>no                              | YES ALVES I                           | time:bove TOC If no, se If no, se8" Bl herFair  | Below TOO<br>e remarks<br>e remarks |
| -                                   | ng Equip                                     |   | 2" dispo<br>2" PVC l<br>4" PVC l                               |                                    |                                       | Ded<br>Cen                            | omersible<br>licated batrifugal                 | ailer                               |
|                                     |  |   | 2"   |                                    |                                       | · · · · · · · · · · · · · · · · · · · |   |                                     |
| Initia Time: Depth Depth            | of well:                                     | 18,42   | Time: <u>58</u> Depth to                                       | harge Mea<br>57<br>water: <u>/</u> | 1.47 surement Ca 381                  | alculat<br>Actu                       |   |                                     |
|                                     | Time   |   | E.C.   |                                    | Turbic                                |                                       | Volume  |                                     |
|                                     | 552  | 73. W   |  |                                    |                                       |                                       |   | _                                   |
|                                     | 553  | 784   | 1303   | 724                                |                                       |                                       | 2   | $\dashv$                            |
|                                     | 553  | 682   | 1252   | 718                                |                                       |                                       | 3   |                                     |
|                                     | 5 54   | 575   | 1248   | 711                                |                                       |                                       | 4   |                                     |
|                                     |  |   |  |                                    |                                       |                                       |   |                                     |
| Sa                                  | ample ap                                     | pearance:   | <u>clan</u>  |                                    | Lock:                                 | <u>_dol</u>                           | sher_   | <del></del>                         |
| 2" Lo<br>4" Lo                      | ocking C<br>ocking C                         | aced: (Ch<br>ap:<br>ap:<br>ap:                      | eck all th<br>Lock-I<br>Lock-I                                 | at apply)<br>c #3753:<br>Dolphin:  |                                       | 7/32 2                                | of repla<br>Allenhead<br>9/16 Bolt<br>ead (DWP) | ÷                                   |
| Remai                               | rks:   |   |  |                                    | · · · · · · · · · · · · · · · · · · · |                                       |   |                                     |
| Signatu                             | ıre:   | Hall.   | la   |                                    |                                       |                                       |   |                                     |

| Client: <u>Ultramar</u>            |   |  |                               | Sampling 1                         | Date: /2                                  | 1-5-96                       |  |  |
|------------------------------------|---|--|-------------------------------|------------------------------------|---|------------------------------|--|--|
|                                    | Site:                                   | Beacon #   | 720                           | <u> </u>                           | Proje                                     | ct No.:                      | 94-720-0                                     | 01   |
|                                    |   | 1088 Mar   | ina Boulev                    | <u>vard</u> W                      | Well Design                               | nation:                      | MW- 4  |  |
|                                    |   | San Lean   |                               |                                    |   |                              |  | <del></del>  |
| Is th Is to Is we Heigh Well 12" B | ere sta<br>p of ca<br>ll cap<br>t of we | traffic conding wate sing cut 1 sealed and 11 casing ype: 8" U 12" DWP_ition of we | r in well<br>evel?<br>locked? | inches): 2" UV                     | NO<br>NO<br>12" E<br>36" CNI<br>Excellent | YES ALL YES NCO Oth Godd Sub | omersible<br>licated b                       | Below TOO e remarks e remarks  K  Poor  pump ailer |
| 5                                  | Sampled                                 | with: Dis  |                               |                                    |   | 1                            | trifugal                                     | pump   |
| <del></del>                        |   | Diameter:  | $\overline{}$                 |                                    |   |                              |  |  |
| Initia<br>Time:<br>Depth<br>Depth  | und Measu<br>und<br>of well<br>to wate  | 11tiplier:<br>1rement<br>: 17.40<br>er: /365                                       | Time:                         | charge Mea<br>6}2<br>water:/       | 1.47 asurement C. 3 59                    |                              |  | 4  |
|                                    | Time                                    | Temp.  | E.C.                          | Нq                                 | Turbio                                    | dity                         | Volume                                       |  |
|                                    | 627                                     | 674  | 1774                          | 736                                |   |                              | )  |  |
|                                    | QT8                                     | 662  | 1382                          | 7/4                                |   |                              | 2,   |  |
|                                    | <u>ब</u> ्रः४                           | 66.0   | 1364                          | 702                                |   | n n                          | 3  | 7  |
|                                    | 614                                     | 65.9   | 1384                          | 695                                |   | >                            | 4  |  |
|                                    |   |  |                               |                                    |   |                              |  |  |
| S                                  | ample a                                 | ppearance:   | clean                         |                                    | Lock:                                     | dola                         | hen  |  |
| 4" Lo                              | ocking (<br>ocking (                    | laced: (Ch<br>Cap:<br>Cap:<br>Cap:   | _ Loc)                        | nat apply)<br>k #3753:<br>Dolphin: |   | 7/32 A<br>9                  | of repla<br>llenhead<br>/16 Bolt<br>ad (DWP) | :  |
| Signatu                            | ıre: _                                  | Hal;   | 15/a-                         |                                    |   |                              |  |  |

|                          | Client:                    | Ultramar                 | •   |                               | Sampling           | Date: //            | -5-96  |              |
|--------------------------|----------------------------|--------------------------|---|-------------------------------|--------------------|---------------------|--|--------------|
|                          | Site:                      | Beacon #                 | <sup>£</sup> 720  |                               | Proje              | ect No.:            | 94-720-0   | 1            |
|                          | -                          | 1088 Mar                 | ina Boulev  | ard V                         | Vell Desig         | nation:             | mw-5   | <del>_</del> |
|                          | <del>_</del>               |                          | dro, CA   |                               |                    |                     |  |              |
| Is the                   | ere star<br>p of cas       | nding wate<br>sing cut l | ntrol devirin well avel? locked? riser (in average 12" Clean asserments | box?                          | NO<br>NO           |                     | time:_<br>bove TOC<br>If no, see<br>If no, see<br>8" BK<br>ner<br>Fair | Below TO     |
| Purgin                   | ng Equip                   | oment:                   | 2" dispo<br>2" PVC k<br>4" PVC k<br>sposable ba                         | osable ba<br>Dailer<br>Dailer | iler               | Sub<br>Ded<br>X Cer | omersible<br>licated ba<br>strifugal                                   | pump         |
|                          | Well                       | Diameter:                | 2"  | 4"                            | 6"                 | _ 8"_               |  |              |
| Time:_<br>Depth<br>Depth | ups<br>of well<br>to water | rement                   | Time: 52 Depth to   | harge Mea                     | 1.47 asurement 382 | Calculat<br>Actu    |  |              |
|                          | Time                       | Temp.                    | E.C.  | Hq                            | Turbi              | dity                | Volume   | 7            |
|                          | 514                        | 734                      | 1082  | 754                           |                    |                     | 1  |              |
|                          | 525                        | 684                      | 1053  | 721                           |                    |                     | 2  | 7            |
|                          | 325                        | 680                      | 982   | 734                           |                    |                     | 7  |              |
|                          | 526                        | 67.5                     | 976   | 706                           |                    |                     | 4  | 7            |
|                          |                            |                          |   |                               |                    |                     |  | ]            |
| Sa                       | ample ap                   | pearance:                | _clear  |                               | Lock:              | dola                | Ai.  |              |
| 4" Lo                    | ocking Cocking Cocking C   | ap:                      | neck all th<br>Lock<br>Lock-D   | #3753.                        |                    | 7/32 A<br>9         | of replaction of replaction of replace (1984)   1984                   |              |
| Signatu                  | re:                        | Selfle                   |   |                               |                    |                     |  |              |

|   | Client:   | Ultrama  | r   |   | Sampling Date:_  | /2-5-96   |  |
|---|---|--|---|---|--|---|--|
|   | Site:   | Beacon   | <i>#</i> 720  |   | Project No.: 94-720-01   |   |  |
|   | <u>.</u>  | 1088 Ma  | rina Bouley   | vard_ W                                     | ell Designation  |   |  |
|   |   |  | ndro, CA  |   |  |   |  |
| Is to<br>Is we<br>Heigh<br>Well<br>12" B<br>Gener | ere star p of cas ll cap s t of wel cover ty K al condi | iding watering cut is sealed and il casing type: 8" to 12" DWP_tion of watering the case of the case o | l locked? riser (in  V 12" C rellhead as  2" disp 2" PVC 4" PVC | inches): 2" UV NI sembly: osable bas bailer | NO YES NO YES NO YES NO YES NO YES L  12" EMCO  36" CNI  Excellent Good  L  Celler Cood  Celler Cood  Celler Cood  Celler Cood  Celler Cood  Celler Cood  Celler Cood  Celler Cood  Celler Cood  Celler Celler Cood  Celler | bmersible pump<br>dicated bailer<br>ntrifugal pump  |  |
|   |   |  |   |   | Teflon baile   |   |  |
| Initia Time: Depth Depth                          | al Measu<br>444<br>of well<br>to water                  | : 500  | Rec<br>Time: 3<br>Depth to                                      | charde Mea                                  | Calcula<br>LUS Act   | .61 gal/ft.<br>ted purge: المورة<br>ual purge: ١١٤٠ |  |
|   | Time  | Temp.  | E.C.  | Нф  | Turbidity  | Volume  |  |
|   | 428   | 70,6   | 7084  | 751   |  |   |  |
|   | 43.0  | 682  | 1052  | 7/4   |  | 2   |  |
|   | 438   | 68.7   | 1012  | 7/0   |  | 3   |  |
|   | 440   | 69.0   | 972   | 274   |  | 4   |  |
| Sa  | ample ap  | pearance:  | clem  |   | Lock: dola   | 11:   |  |
| 4" Lo   | ocking C  | aced: (Cl<br>ap:<br>ap:  |   | at apply)<br>x #3753:<br>Dolphin:           | 7/32   | of replaced item Allenhead: 9/16 Bolt: ead (DWP):   |  |
| Remar   |   |  |   |   |  |   |  |
| Signatu   | re:   | 2/4/2/   | a   |   |  | -   |  |

|  |   |   | ورجست جساسته   | ·                                   |                 |                    |  | 1011 0111111                        |
|--|---|---|--|-------------------------------------|-----------------|--------------------|--|-------------------------------------|
|  | Client:   | <u> Ultrama</u>   | <u>r                                    </u>                       |                                     | Sampling        | Date:_/            | 12-5-96  |                                     |
|  | Site:   | Beacon  | <u>#720</u>  |                                     | Proj            | ect No.:           | 94-720-0   | ) <u>1</u>                          |
|  |   | 1088 Max  | rina Bouley  | vard                                |                 |                    |  | ·                                   |
|  |   |   | ndro, CA   |                                     |                 |                    |  |                                     |
| Is to<br>Is we<br>Heigh<br>Well<br>12" B | pere stand<br>op of case<br>all capes<br>at of well<br>cover ty | nding wate<br>sing cut ]<br>sealed and<br>ll casing<br>ype: 8" U<br>12" DWP | ontrol devier in well level? l locked? riser (in V 12" Cellhead as | inches):                            | NO<br>NO<br>12" | YES A YES YES EMCO | time:bove TOC If no, se If no, se 8" Bi herFair  | Below Too<br>e remarks<br>e remarks |
|  | ng Equip<br>Sampled   |   | 2" disp<br>2" PVC 1<br>4" PVC 1                                    | bailer<br>bailer                    |                 | Dec                | bmersible<br>dicated batrifugal  | ailer                               |
|  | Well  | Diameter:   | 2"   | 4"                                  | 6"              |                    | • • • • • • • • • • • • • • • • • • •  |                                     |
| Initia<br>Time:<br>Depth<br>Depth        | al Measu<br>{40<br>of well<br>to wate                           | : 14,56   | Rec<br>Time:<br>Depth to   | charge Me:                          | asurement       | Calculat<br>Actu   | 61 gal/<br>ed purge:<br>al purge:  |                                     |
|  | Time  | Temp.   | E.C.   | pH pH                               |                 |                    | 77.2   | <b>-</b>                            |
|  | 1115  |   | <u> </u>   | <del>  -</del>                      | Turb            | idity<br>———       | Volume   | -                                   |
|  | 416   | 70 5  | 1739   | 737                                 |                 |                    | <i>   </i>   | _                                   |
|  | 417   | 68.14   | 1 732  | 775                                 |                 |                    | 2  | _                                   |
|  | 418   | 67.)  | 1652   | 730                                 |                 | <del></del>        | 9  | _                                   |
|  | 7,8   | 61-5  | 1601   | 728                                 |                 |                    | 4  | _                                   |
| S  | ample ap  | pearance:   | _clrus   |                                     | Lock:           | dela               | uha.   | <u></u>                             |
| 4" Lo                                    | ocking Cocking C  | ap:<br>ap:  | neck all th<br>Lock-I<br>Lock-I                                    | at apply)<br>k #3753:_<br>Dolphin:_ |                 | 7/32 A             | of replace of replace of the second s |                                     |
| Remai                                    |   | 911   | 1 h 1  |                                     |                 |                    |  |                                     |
| Signatu                                  | ıre:  | 70/a/1  | Man  |                                     | - <del> </del>  |                    |  |                                     |

|  | Client:   | Ultramar  |  |                            | Sampling Date: 12-5-96                           |  |                                       |                                  |
|--|---|---|--|----------------------------|--|--|---------------------------------------|----------------------------------|
|  | Site:   | Beacon #  | 720  |                            | Project No.: 94-720-0                            |  | 1                                     |                                  |
|  | -   | 1088 Mar  | ina Boulev   | ard W                      | ell Design                                       | ation:                                     | mw-8                                  |                                  |
|  |   | San Lean  | dro, CA  | · ·                        | •  |  |                                       |                                  |
| Is the Is too Is we. Height Well of 12" BI General | ere star p of cas ll cap s t of wel cover ty K al condi | raffic conding water sing cut less ealed and lessing representation of we ment: | r in well level? locked? riser (in : V112" Chellhead ass | inches): 2" UV             | NO<br>NO<br>DI<br>12" EN<br>36" CNI<br>Excellent | YES AL<br>YES I<br>YES I<br>4COOth<br>Good | Fair                                  | Below TOO e remarks e remarks  K |
| 1 41 9 11  | d ndarb   |   | 2" QISPO<br>2" PVC h<br>4" PVC h                         | pailer                     | rrer   | Ded  | mersible<br>icated ba                 | ailer                            |
| c  | belame:   |   |  |                            |  | `  | trifugal                              | pump                             |
|  |   |   |  |                            | Teflon   |  | :                                     | <del></del>                      |
| <u>Initia</u> Time: Depth                          | Vol. Mu<br>l Measu<br>347                               | ltiplier:<br>rement<br><br>: 27,96  | 0.16<br>Rec  | 0.65                       | 6"<br>1.47<br><u>surement</u><br>Ca<br>4,83      | 2.   |                                       |                                  |
| Start  | purge:_   | 5/2   | Sam  | pling tim                  | e: <i>5 /9</i>                                   |  | <del> </del>                          | · <del>······</del> ·            |
|  | Time  | Temp.   | E.C.   | На                         | Turbid   | lity                                       | Volume                                | 7                                |
|  | 5/3   | 70 L  | 175]   | 75}                        |  |  | ]                                     | 1                                |
|  | 5/2   | 68-3  | 1782   | 735                        |  |  | 2                                     | 1                                |
|  | 5/4   | 671   | 161)   | 737                        |  |  | 3                                     | 1                                |
|  | 5/5   | 66.9  | 1584   | 724                        |  |  | 4                                     |                                  |
|  |   |   |  |                            |  |  |                                       |                                  |
| Sa   | ample ar  | pearance:   | _clear   |                            | Lock:  | dolo                                       | hin                                   | <del></del>                      |
| 2" Lo<br>4" Lo                                     | ent replocking Cocking Cocking C                        | ap:   | eck all th<br>Lock-<br>Lock-                             | at apply)  #3753: Dolphin: |  | 7/32 A<br>9                                | of replace llenhead /16 Bolt ad (DWP) | •                                |
| Remar  |   | d1.1  | 'Mana  |                            |  |  |                                       |                                  |
| Signatu  | re:   | 70/1  | Mana   | ^                          |  |  |                                       |                                  |

|                                    | Client:_                                     | Ultramar   |                               | · · · · · · · · · · · · · · · · · · ·           | Sampling D       | Date: <u>/</u> 1     | -5-96  |                                 |
|------------------------------------|--|--|-------------------------------|---|------------------|----------------------|--|---------------------------------|
|                                    | Site:_                                       | Beacon #   | 720                           |   | Projec           | ct No.:_             | 94-720-01  | <u>L</u>                        |
|                                    | -  | 1088 Mar   | <u>ina Boulev</u>             | vard W  | ell Design       | nation:_             | mw-9   |                                 |
|                                    |  | San Lean   | dro, CA                       |   |                  |                      |  |                                 |
| Is the<br>Is to<br>Is we<br>Height | ere stan<br>p of cas<br>ll cap s<br>t of wel | raffic conding water ing cut lealed and leasing received by the condition of well and the condition of well and the condition of well and the condition of well and the condition of the conditio | r in well<br>evel?<br>locked? | inches):  | NO BO            | YES Ab<br>YES I      | ime:<br>ove TOC I<br>f no, see<br>f no, see<br>8" BK<br>er<br>Fair | Below TOO<br>remarks<br>remarks |
| Purgin                             | ng Equip                                     | ment:  | 2" disp<br>2" PVC<br>4" PVC   | osable bai<br>bailer<br>bailer                  | ller _<br>_<br>_ | Subr<br>Ded:<br>Cent | mersible<br>icated ba<br>crifugal                                  | pump<br>iler                    |
|                                    |  | Diameter:  |                               | ,   |                  |                      |  | _                               |
| <u>Initia</u><br>Time:_<br>Depth   | l Measur                                     | <u> 14.60                                     </u>   | <u>R</u> ec                   | 0.65<br><u>charge Mea<br/>{46</u><br>p water:_/ | surement         |                      |  | ,                               |
| Start                              | purge: 5                                     | 34   | Sar                           | mpling tim                                      | e: <u>547</u>    |                      |  |                                 |
|                                    | Time   | Temp.  | E.C.                          | рН  | Turbio           | dity                 | Volume   |                                 |
|                                    | 130  | 704  | 1436                          | 732   |                  |                      |  |                                 |
|                                    | 538  | 682  | 1404                          | 7/3   |                  |                      | 2,   |                                 |
|                                    | 340  | 6 7.3  | 13:37                         | 706   |                  |                      | 3  | _                               |
|                                    | 541  | 66.8   | 1308                          | 6917  |                  |                      | 4  |                                 |
| Sa                                 | ample ap                                     | pearance:  | clean                         |   | Lock:            | nan                  | <i>(</i>   |                                 |
| 2" Lo<br>4" Lo                     | ocking C                                     | aced: (Ch<br>ap:<br>ap:  | _ Loc                         | nat apply)<br>k #3753:<br>Dolphin:              |                  | 7/32 A               | of replacellenhead:<br>/16 Bolt:                                   |                                 |
| Reman                              | ks:  |  |                               |   |                  |                      |  |                                 |
| Signatu                            | ıre:   | Kel 9  | 4                             |   |                  |                      |  |                                 |

# ATTACHMENT C HISTORICAL GROUND WATER ELEVATION DATA

TABLE 1
GROUNDWATER ELEVATIONS
Page 1 of 5

| Date Sampled                      | Depth to<br>Groundwater<br>(Feet) | Groundwater<br>Elevation<br>(Feet) |
|-----------------------------------|-----------------------------------|------------------------------------|
| Groundwater Monitoring Well MW-1: | Elevation o                       | f Top of Casing = 29.89 feet       |
| June 23, 1987                     | 14.79                             | 15.10                              |
| July 06, 1987                     | 14.93                             | 14.96                              |
| August 06, 1987                   | 14.22                             | 15.67                              |
| November 04, 1987                 | 15.74                             | 14.15                              |
| February 02, 1988                 | 13.99                             | 15.90                              |
| May 02, 1988                      | 14.99                             | 14.90                              |
| November 21, 1988                 | 13.03                             | 16.86                              |
| February 14, 1989                 | 15.86                             | 14.03                              |
| May 02, 1989                      | 14.77                             | 15.12                              |
| August 10, 1989                   | 16.35                             | 13.54                              |
| November 08, 1989                 | 16.46                             | 13.43                              |
| February 20, 1990                 | 15.58                             | 14.31                              |
| May 18, 1990                      | 16.40                             | 13.49                              |
| September 15, 1990                | 16.83                             | 13.06                              |
| November 26, 1990                 | 17.16                             | 12.73                              |
| February 07, 1991                 | 16.43                             | 13.46                              |
| May 14, 1991                      | 14.93                             | 14.96                              |
| August 16, 1991                   | 16.35                             | 13.54                              |
| Groundwater Monitoring Well MW-1: | New Elevation of                  | Top of Casing = 33.10 feet         |
| December 24, 1991                 | 17.20                             | 15.90                              |
| March 30, 1992                    | 13.58                             | 19.52                              |
| Groundwater Monitoring Well MW-2: | Elevation of                      | Top of Casing = 29.57 feet         |
| June 23, 1987                     | 14.51                             | 15.06                              |

TABLE 1
GROUNDWATER ELEVATIONS

Page 2 of 5

| Date Sampled                      | Depth to<br>Groundwater<br>(Feet) | Groundwater<br>Elevation<br>(Feet) |
|-----------------------------------|-----------------------------------|------------------------------------|
| July 06, 1987                     | 14.63                             | 14.94                              |
| August 06, 1987                   | 14.95                             | 14.62                              |
| November 04, 1987                 | 15.45                             | 14.12                              |
| February 02, 1988                 | 13.74                             | 15.83                              |
| May 02, 1988                      | 14.63                             | 14.94                              |
| November 21, 1988                 | 12.99                             | 16.58                              |
| February 14, 1989                 | 15.66                             | 13.91                              |
| May 02, 1989                      | 14.56                             | 15.01                              |
| August 10, 1989                   | 16.22                             | 13.35                              |
| November 08, 1989                 | 16.19                             | 13.38                              |
| February 20, 1990                 | 15.34                             | 14.23                              |
| May 18, 1990                      | 16.20                             | 13.37                              |
| September 15, 1990                | 16.42                             | 13.05                              |
| November 26, 1990                 | 16.83                             | 12.74                              |
| February 07, 1991                 | 16.13                             | 13.44                              |
| May 14, 1991                      | 14.62                             | 14.95                              |
| August 16, 1991                   | 16.00                             | 13.57                              |
| Groundwater Monitoring Well MW-2: | New Elevation of                  | Top of Casing = 32.80 feet         |
| December 24, 1991                 | 16.90                             | 15.90                              |
| March 30, 1992                    | 13.32                             | 19,48                              |
| Groundwater Monitoring Well MW-3: | Elevation of                      | Top of Casing = 29.13 feet         |
| June 23, 1987                     | 14.13                             | 15.00                              |
| July 06, 1987                     | 14.24                             | 14.89                              |
| August 06, 1987                   | 14.52                             | 14.61                              |
| November 04, 19887                | 15.09                             | 14,04                              |
| February 02, 1988                 | 13.37                             | 15.76                              |

TABLE 1
GROUNDWATER ELEVATIONS
Page 3 of 5

|                                   | Depth to<br>Groundwater<br>(Feet) | Groundwater<br>Elevation<br>(Feet) |
|-----------------------------------|-----------------------------------|------------------------------------|
| Date Sampled                      | 14.22                             | 14.91                              |
| May 02, 1988                      |                                   | 16,12                              |
| November 21, 1988                 | 13.01                             | 13.91                              |
| February 14, 1989                 | 15.22                             |                                    |
| May 02, 1989                      | 14.16                             | 14.97                              |
| August 10, 1989                   | 15.61                             | 13.52                              |
| November 08, 1989                 | 15.75                             | 13.38                              |
| February 20, 1990                 | 14.95                             | 14.18                              |
| May 18, 1990                      | 15.79                             | 13.34                              |
| September 15, 1990                | 16.07                             | 13.06                              |
| November 26, 1990                 | 16.36                             | 12.77                              |
| February 07, 1991                 | 15.74                             | 13.39                              |
| May 14, 1991                      | 14.19                             | 14.94                              |
| August 16, 1991                   | 15.55                             | 13.58                              |
| Groundwater Monitoring Well MW-3: | New Elevation o                   | f Top of Casing = 32.30 feet       |
| December 24, 1991                 | 16.40                             | 15.90                              |
| March 30, 1992                    | 12.96                             | 19.34                              |
| Groundwater Monitoring Well MW-4: | Elevation o                       | f Top of Casing = 29.72 feet       |
| June 23, 1987                     | 14.77                             | 14.95                              |
| July 06, 1987                     | 14.91                             | 14.81                              |
| August 06, 1987                   | 15.19                             | 14.53                              |
| November 04, 1987                 | 15.72                             | 14.00                              |
| February 02, 1088                 | 14.03                             | 15.69                              |
| May 02, 1988                      | 14.89                             | 14.83                              |
| November 21, 1988                 | 12.88                             | 16.84                              |
| February 14, 1989                 | 15.83                             | 13.89                              |
| May 02, 1989                      | 14.75                             | 14.97                              |

TABLE 1
GROUNDWATER ELEVATIONS
Page 4 of 5

|                                   | Depth to<br>Groundwater | Groundwater<br>Elevation   |
|-----------------------------------|-------------------------|----------------------------|
| Date Sampled                      | (Feet)                  | (Feet)                     |
| August 10, 1989                   | 16.30                   | 13.42                      |
| November 08, 1989                 | 16.29                   | 13.43                      |
| February 20, 1990                 | 15.62                   | 14.10                      |
| May 18, 1990                      | 16.34                   | 13.38                      |
| September 15, 1990                | 16.79                   | 12.93                      |
| November 26, 1990                 | 17.08                   | 12.64                      |
| February 07, 1991                 | 16.37                   | 13.35                      |
| May 14, 1991                      | 14.87                   | 14.85                      |
| August 16, 1991                   | 16.25                   | 13.47                      |
| Groundwater Monitoring Well MW-4: | New Elevation of        | Top of Casing = 32.90 feet |
| December 24, 1991                 | 17.10                   | 15.80                      |
| March 30, 1992                    | 13.60                   | 19.30                      |
| Groundwater Monitoring Well MW-5: | Elevation of            | Top of Casing = 29.55 feet |
| June 23, 1987                     | 14.63                   | 14.92                      |
| July 06, 1987                     | 14.79                   | 14.76                      |
| August 06, 1987                   | 15.07                   | 14.48                      |
| November 04, 1987                 | 15.61                   | 13.94                      |
| February 02, 1988                 | 13.84                   | 15.71                      |
| May 02, 1988                      | 14.77                   | 14.78                      |
| November 21, 1988                 | 12.84                   | 16.71                      |
| February 14, 1989                 | 15.72                   | 13.83                      |
| May 02, 1989                      | 14.68                   | 14.87                      |
| August 10, 1989                   | 16.03                   | 13.52                      |
| November 08, 1989                 | 16.33                   | 13.22                      |
| February 20, 1990                 | 15.44                   | 14.11                      |

#### TABLE 1

#### GROUNDWATER ELEVATIONS Page 5 of 5

| Date Sampled                      | Depth to<br>Groundwater<br>(Feet) | Groundwater<br>Elevation<br>(Feet) |
|-----------------------------------|-----------------------------------|------------------------------------|
| May 18, 1990                      | 16.22                             | 13.33                              |
| September 15, 1990                | 16.65                             | 12.90                              |
| November 26, 1990                 | 16.95                             | 12.60                              |
| February 07, 1991                 | 16.20                             | 13.35                              |
| May 14, 1991                      | 14.72                             | 14.38                              |
| August 16, 1991                   | 16.10                             | 13.45                              |
| Groundwater Monitoring Well MW-5: | New Elevation of                  | Top of Casing = 32.70 feet         |
| December 24, 1991                 | 16.92                             | 15.78                              |
| March 30, 1992                    | 13.48                             | 19.22                              |
| Groundwater Monitoring Well MW-6: | Elevation o                       | f Top of Casing = 30.40 feet       |
| December 24, 1991                 | 14.12                             | 16.28                              |
| March 30, 1992                    | 12.62                             | 17.78                              |
| Groundwater Monitoring Well MW-7: | Elevation o                       | f Top of Casing = 31.20 feet       |
| December 24, 1991                 | 15.70                             | 15.50                              |
| March 30, 1992                    | 12.34                             | 18.86                              |
| Groundwater Monitoring Well MW-8: | Elevation o                       | f Top of Casing = 33.80 feet       |
| December 24, 1991                 | 18.00                             | 15.80                              |
| March 30, 1992                    | 14.66                             | 19.14                              |

Notes:

- All elevations surveyed to an arbitrary datum
- Elevations and depths are given in feet 2)
- 3)
- 4)
- Groundwater Technology, Inc., made measurements until February 1989

  Du Pont Environmental Services collected samples from February 1989 through February 1991

  Environmental Geotechnical Consultants, Inc., made measurements beginning in May 1991 5)

# ATTACHMENT D HISTORICAL GROUND WATER ANALYTICAL DATA

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
Page 1 of 5

| Well<br>No. | Date<br>Sampled | Benzene<br>(µg/L) | Toluene<br>(µg/L) | Ethyl-<br>benzene<br>(µg/L) | Xylenes<br>(μg/L) | TPH-G<br>(µg/L) | Comments           |
|-------------|-----------------|-------------------|-------------------|-----------------------------|-------------------|-----------------|--------------------|
| MW-1        | Apr. 16, 1987   | 2,313             | 3,770             | 664.1                       | 3,331             | 17,276          |                    |
|             | June 23, 1987   | 1,887             | 2,141             | 466.7                       | 1,652             | 26,027          |                    |
|             | July 06, 1987   | 778.2             | 943.7             | 133.2                       | 422.1             | 3,938           |                    |
|             | Aug. 06, 1987   | 1,270             | 1,576             | 288.7                       | 873.7             | 6,079           |                    |
|             | Nov. 04, 1987   | 1,700             | 4,000             | 720                         | 2,200             | 15,000          |                    |
|             | Feb. 02, 1988   | 1,500             | 1,700             | 230                         | 740               | 14,000          |                    |
|             | May 02, 1988    | 3,500             | 700               | 4,900                       | 2,700             | 33,000          |                    |
|             | Nov. 21, 1988   | 2,200             | 560               | 2,800                       | 2,200             | 15,000          |                    |
| <u>.</u>    | Feb. 14, 1989   | 1,700             | 1,700             | 340                         | 1,500             | 12,000          | Odor               |
| <u>-</u> -  | May 02, 1989    | 1,500             | 2,400             | 510                         | 2,400             | 18,000          | Odor, Slight Sheen |
|             | Aug. 10, 1989   | 1,400             | 1,500             | 360                         | 1,600             | 10,000          | Odor               |
|             | Nov. 08, 1989   | 920               | 470               | 190                         | 360               | 7,200           | Odor               |
|             | Feb. 20, 1990   | 810               | 540               | 270                         | 800               | 3,300           |                    |
|             | May 18, 1990    | 1,900             | 500               | 560                         | 1,600             | 5,600           |                    |
|             | Sep. 15, 1990   | 320               | 110               | 150                         | 520               | 5,200           | Odor               |
|             | Nov. 26, 1990   | 370               | 59                | 150                         | 370               | 3,000           | Odor               |
|             | Feb. 07, 1991   | 750               | 570               | 480                         | 1,800             | 14,000          |                    |
|             | May 14, 1991    | 1,000             | 1,400             | 600                         | 2,500             | 41,000          |                    |
| <del></del> | Aug. 16, 1991   | 310               | 210               | 150                         | 480               | 4,000           | Odor               |
|             | Dec. 24, 1991   | 530               | 95                | 310                         | 680               | 11,000          | Moderate Odor      |
|             | Mar. 30, 1992   | 630               | 550               | 540                         | 1,900             | 27,000          | Odor               |
| MW-2        | Apr. 16, 1987   | 3,131             | 4,239             | 1,067                       | 4,608             | 17,920          |                    |
|             | June 23, 1987   | 2,188             | 2,622             | 1,047                       | 4,699             | 49,354          |                    |
|             | July 06, 1987   | 1,575             | 1,729             | 457                         | 1,702             | 8,676           |                    |
|             | Aug. 06, 1987   | 2,623             | 3,722             | 702                         | 2,882             | 14,376          |                    |
|             | Nov. 04, 1987   | 2,200             | 4,100             | 900                         | 3,500             | 19,000          |                    |

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
Page 2 of 5

| Well<br>No. | Date<br>Sampled | Benzene<br>(µg/L) | Toluene<br>(µg/L) | Ethyl-<br>benzene<br>(µg/L) | Xylenes<br>(µg/L) | TPH-G<br>(µg/L) | Comments                      |
|-------------|-----------------|-------------------|-------------------|-----------------------------|-------------------|-----------------|-------------------------------|
| MW-2        | Feb. 02, 1988   | 6,200             | 6,500             | 1,000                       | 4,000             | 54,000          |                               |
|             | May 02, 1988    | 6,800             | 1,300             | 7,100                       | 5,400             | 53,000          |                               |
|             | Nov. 21, 1988   |                   | +                 |                             |                   |                 | Free product                  |
| ·····       | Feb. 14, 1989   | 6,900             | 4,300             | 1,100                       | 5,200             | 48,000          | Film of free product          |
|             | May 02, 1989    | 6,100             | 8,800             | 2,100                       | 16,000            | 111,000         | Odor, sheen                   |
|             | Aug. 10, 1989   | 4,200             | 2,900             | 1,000                       | 5,800             | 39,000          | Odor, sheen                   |
|             | Nov. 08, 1989   | 3,700             | 1,500             | 740                         | 2,200             | 45,000          | Odor, heavy sheen             |
|             | Feb. 20, 1990   | 5,000             | 8,200             | 1,600                       | 11,000            | 60,000          |                               |
|             | May 18, 1990    | 6,200             | 1,900             | 1,300                       | 610               | 19,000          |                               |
|             | Sep. 15, 1990   | 1,400             | 820               | 660                         | 3,000             | 27,000          | Odor, sheen                   |
|             | Nov. 26, 1990   | 1,100             | 880               | 700                         | 3,800             | 28,000          | Odor, sheen                   |
|             | Feb. 07, 1991   | 2,100             | 1,900             | 1,300                       | 6,200             | 63,000          | Odor, sheen                   |
|             | May 14, 1991    | 2,200             | 2,700             | 1,100                       | 5,900             | 100,000         | Moderate odor<br>Slight sheen |
|             | Aug. 16, 1991   | 1800              | 950               | 990                         | 3900              | 32,000          | Slight odor, sheen            |
|             | Dec. 24, 1991   | 1,100             | 550               | 750                         | 2,700             | 30,000          | Odor, sheen                   |
|             | Mar. 30, 1992   | 2,300             | 1,700             | 940                         | 3,300             | 52,000          | Odor, sheen                   |
| MW-3        | Apr. 16, 1987   | 1,371             | 2,438             | 472.3                       | 2,617             | 9,967           |                               |
|             | June 23, 1987   | 646.2             | 822.9             | 320.9                       | 1,280             | 16,824          |                               |
|             | July 06, 1987   | 340.3             | 384.2             | 116.5                       | 420.2             | 3,395           |                               |
|             | Aug. 06, 1987   | 441.9             | 436.3             | 118.2                       | 417.3             | 3,107           |                               |
| ,           | Nov. 04, 1987   | 320               | 280               | 74                          | 250               | 2,600           | ,                             |
|             | Feb. 02, 1988   | 2,200             | 2,300             | 500                         | 2,300             | 44,000          |                               |
|             | May 02, 1988    | 1,600             | . 450             | 840                         | 1,700             | 14,000          |                               |
|             | Nov. 21, 1988   | 1,200             | 220               | 560                         | 810               | 8,100           |                               |
|             | Feb. 14, 1989   | 1,500             | 220               | 220                         | 500               | 5,500           | Odor                          |

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
Page 3 of 5

| Well<br>No.     | Date<br>Sampled | Benzene<br>(µg/L) | Toluene<br>(µg/L) | Ethyl-<br>benzene<br>(µg/L) | Xylenes<br>(µg/L) | TPH-G<br>(µg/L) | Comments           |
|-----------------|-----------------|-------------------|-------------------|-----------------------------|-------------------|-----------------|--------------------|
|                 | Aug. 10, 1989   | 750               | 10                | 190                         | 210               | 2,700           | Odor               |
|                 | Nov. 08, 1989   | 370               | 90                | ND                          | 58                | 2,400           | Odor               |
|                 | Feb. 20, 1990   | 1,200             | 810               | 77                          | 460               | 3,700           |                    |
| <del></del> ,   | May 18, 1990    | 980               | DИ                | 330                         | 250               | 2,300           |                    |
|                 | Sep. 15, 1990   | 240               | 36                | 150                         | 230               | 4,700           | Odor               |
|                 | Nov. 26, 1990   | 170               | 8.4               | 86                          | 120               | 1,400           | Odor               |
|                 | Feb. 07, 1991   | 220               | 20                | 120                         | 230               | 2,900           |                    |
|                 | May 14, 1991    | 370               | 39                | 220                         | 820               | 15,000          |                    |
| , . <del></del> | Aug. 16, 1991   | 480               | 50                | 360                         | 680               | 7,200           | Slight Odor        |
|                 | Dec. 24, 1991   | 150               | 20                | 100                         | 140               | 4,900           | Slight Odor        |
|                 | Mar. 30, 1992   | 560               | 50                | 630                         | 980               | 21,000          | Odor               |
| MW-4            | Apr. 16, 1987   | 5,896             | 3,797             | 893.9                       | 4,106             | 19,309          |                    |
| <del></del>     | June 23, 1987   | 4,030             | 1,842             | 850.0                       | 3,254             | 31,429          |                    |
|                 | July 06, 1987   | 2,710             | 1,247             | 308.2                       | 1,312             | 8,117           |                    |
|                 | Aug. 06, 1987   | 3,992             | 1,589             | 447.9                       | 1,611             | 10,464          |                    |
|                 | Nov. 04, 1987   | 9,500             | 17,000            | 2,800                       | 11,000            | 55,000          |                    |
|                 | Feb. 02, 1988   | 11,000            | 7,400             | 1,400                       | 6,200             | 47,000          |                    |
|                 | May 02, 1988    | 9,200             | 1,300             | 6,100                       | 6,400             | 58,000          |                    |
|                 | Nov. 21, 1988   | 5,700             | 1,600             | 3,100                       | 7,600             | 48,000          |                    |
| -               | Feb. 14, 1989   | 8,700             | 2,500             | 900                         | 3,800             | 29,000          | Odor & sheen       |
| -               | May 02, 1989    | 4,800             | 5,600             | 1,800                       | 8,800             | 69,000          | Odor, slight sheen |
|                 | Aug. 10, 1989   | 15,000            | 6,600             | 1,800                       | 12,000            | 67,000          | Odor, slight sheen |
|                 | Nov. 08, 1989   | 11,000            | 3,200             | 1,100                       | 4,400             | 71,000          | Odor, slight sheen |
|                 | Feb. 20, 1990   | 8,100             | 4,500             | 930                         | 3,500             | 19,000          |                    |
|                 | May 18, 1990    | 45,000            | 12,000            | 5,000                       | 27,000            | 100,000         |                    |
|                 | Sep. 15, 1990   | 4,200             | 1,200             | 740                         | 3,000             | 38,000          |                    |

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
Page 4 of 5

| Well<br>No. | Date<br>Sampled | Benzeпe<br>(µg/L) | Toluene<br>(µg/L) | Ethyl-<br>benzene<br>(µg/L) | Xylenes<br>(μg/L) | TPH-G<br>(µg/L) | Comments           |
|-------------|-----------------|-------------------|-------------------|-----------------------------|-------------------|-----------------|--------------------|
| MW-4        | Nov. 26, 1990   | 2,800             | 650               | 810                         | 2,600             | 19,000          | Odor               |
|             | Feb. 07, 1991   | 4,600             | 1,100             | 1,600                       | 4,600             | 41,000          | Odor, sheen        |
|             | May 14, 1991    | 7,300             | 830               | 3,900                       | 3,600             | 100,000         | Slight odor, sheen |
|             | Aug. 16, 1991   | 8,000             | 2,500             | 1,100                       | 4,000             | 45,000          | Strong odor, sheen |
| <u> </u>    | Dec. 24, 1991   | 6,000             | 1,200             | 1,100                       | 3,700             | 79,000          | Odor, sheen        |
|             | Mar. 30, 1992   | 8,000             | 4,400             | 730                         | 2,500             | 76,000          | Odor, sheen        |
| MW-5        | Apr. 16 1987    | 2,267             | 921.2             | 3,277                       | 4,536             | 17,733          |                    |
|             | June 23, 1987   | 2,239             | 516.8             | 953.9                       | 1,587             | 19,555          |                    |
|             | July 06, 1987   | 1,335             | 313.7             | 799.2                       | 923.9             | 5,631           |                    |
|             | Aug. 06, 1987   | 1,890             | 881.2             | 576.8                       | 93.4              | 6,450           |                    |
|             | Nov. 04, 1987   | 1,300             | 500               | 270                         | 640               | 4,600           |                    |
|             | Feb. 02, 1988   | 3,100             | 1,500             | 550                         | 1,400             | 24,000          |                    |
|             | May 02, 1988    | 4,400             | 490               | 1,200                       | 1,500             | 17,000          |                    |
|             | Nov. 21, 1988   | 5,600             | 590               | 870                         | 2,200             | 19,000          |                    |
|             | Feb. 14, 1989   | 4,300             | 810               | 410                         | 1,300             | 13,000          | Odor               |
|             | May 02, 1989    | 2,900             | 1,500             | 690                         | 3,200             | 24,000          | Odor, slight sheen |
|             | Aug. 10, 1989   | 6,700             | 2,300             | 860                         | 4,700             | 36,000          | Odor, slight sheen |
|             | Nov. 08, 1989   | 5,300             | 860               | 460                         | 600               | 30,000          | Odor               |
|             | Feb. 20, 1990   | 1,700             | 220               | 120                         | 370               | 3,400           |                    |
|             | May 18, 1990    | 18,000            | 2,000             | 1,500                       | 5,600             | 24,000          |                    |
|             | Sep. 15, 1990   | 2,600             | 2,200             | 1,000                       | 4,900             | 42,000          | Odor, sheen        |
|             | Nov. 26, 1990   | 1,900             | 280               | 260                         | 800               | 8,500           | Odor, sheen        |

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
Page 5 of 5

| Well<br>No. | Date<br>Sampled | Benzene<br>(µg/L) | Toluene<br>(µg/L) | Ethyl-<br>benzene<br>(µg/L) | Xylenes<br>(μg/L) | TPH-G<br>(µg/L) | Comments                |
|-------------|-----------------|-------------------|-------------------|-----------------------------|-------------------|-----------------|-------------------------|
|             | Feb. 07, 1991   | 1,500             | 1,200             | 610                         | 2,700             | 24,000          | Odor                    |
|             | May 14, 1991    | 3,800             | 4,400             | 1,400                       | 6,400             | 120,000         | Odor, sheen             |
|             | Aug. 16, 1991   | 4,200             | 1,900             | 760                         | 2,900             | 29,000          | Moderate odor,<br>sheen |
|             | Dec. 24, 1991   | 3,900             | 1,500             | 880                         | 3,200             | 63,000          | Odor, sheen             |
|             | Mar. 30, 1992   | 2,600             | 980               | 390                         | 1,100             | 29,000          | Odor, sheen             |
| MW-6        | Dec. 24, 1991   | ND                | ND                | NO                          | ND                | 79              |                         |
|             | Mar. 30, 1992   | 2.1               | 1.1               | DИ                          | 0.6               | 73              |                         |
| MW-7        | Dec. 24, 1991   | ND                | ND                | DN                          | ND                | ND              |                         |
|             | Mar. 30, 1992   | ND                | סא                | ND                          | ND                | ND              |                         |
| 8-WM        | Dec. 24, 1991   | 1,700             | 2,400             | 1,200                       | 6,100             | 81,000          | Odor, sheen             |
|             | Mar. 30, 1992   | 1,700             | . 880             | 970                         | 1,900             | 3,000           | Odor, sheen             |

#### Notes:

- 1) TPH-G = Total Petroleum Hydrocarbons as-gasoline
- 2) Odor refers to petroleum hydrocarbon odor
- 3) All results are presented in parts per billion
- 4) Groundwater Technology, Inc., collected samples prior to February 1989
- 5) Du Pont Environmental Services collected samples from February 1989 through February 1991
- 6) Environmental Geotechnical Consultants, Inc. collected samples beginning in May 1991
- 7) ND = Non Detect
- 8) See analytical results for detection limits (Appendix B)

#### ATTACHMENT E

### LABORATORY REPORT AND CHAIN-OF-CUSTODY FORM



December 18, 1996 Sample Log 16104

Dale van Dam El Dorado Environmental 2221 Goldorado Trail El Dorado, CA 95623

Subject: Analytical Results for 9 Water Samples

Identified as: Beacon 720 (Proj. # 94-720-01)

Received: 12/10/96

Dear Mr. van Dam:

Analysis of the sample(s) referenced above has been completed. This report is written to confirm results communicated on December 18, 1996 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:

Senior Chemist



### MTBE (Methyl-t-butyl ether) By EPA Method 8020/602

From : Beacon 720 (Proj. # 94-720-01)

Sampled: 12/05/96 Received: 12/10/96

Matrix : Water

| MTBE         | (MRL) ug/L | Measured<br>Value ug/L |
|--------------|------------|------------------------|
| MW-1         | (25)       | <25                    |
| MA-2-        | (50)       | *****                  |
| MW-3         | (5.0)      | <5.0                   |
| <b>*****</b> | (250)      |                        |
| M4-5         | (130)      |                        |
| MW-6         | (5.0)      | <5.0                   |
| MW-7         | (5.0)      | <5.0                   |
| MW-8         | (50)       | <50                    |
| 10           | (50)       |                        |
|              |            |                        |

Approved By:

Joel Kift Senior Chemist



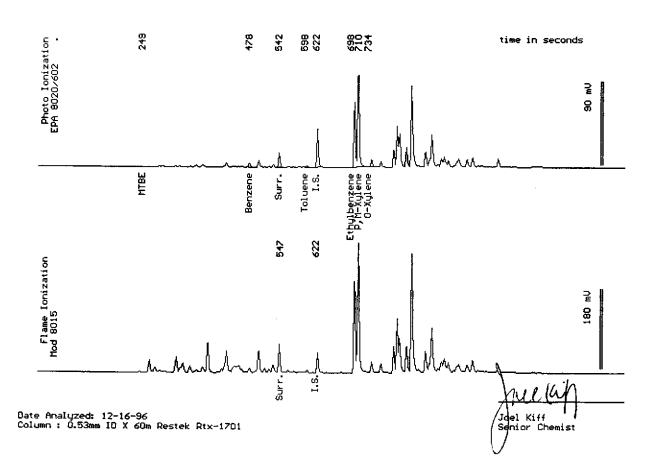
Sample: MW-1

From : Beacon 720 (Proj. # 94-720-01)

Sampled: 12/05/96

Dilution: 1:5 QC Batch: 6180A

| Parameter  | (MRL) ug/L                                | Measured<br>Value ug/L         |
|--|---|--------------------------------|
| Benzene<br>Toluene<br>Ethylbenzene<br>Total Xylenes<br>TPH as Gasoline | (2.5)<br>(2.5)<br>(2.5)<br>(2.5)<br>(250) | 25<br>11<br>570<br>930<br>6400 |
| Surrogate Recovery   | 7   | 113 %                          |





Sample Log 16104 16104-02

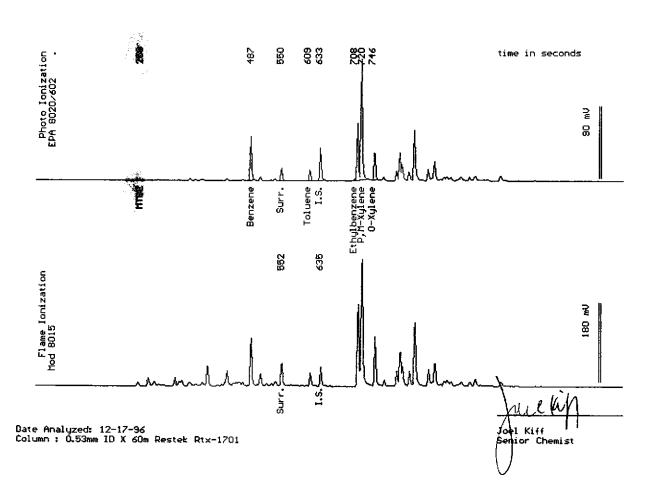
Sample: MW-2

From : Beacon 720 (Proj. # 94-720-01)

Sampled: 12/05/96

Dilution: 1:10 QC Batch: 6180B

| Parameter  | (MRL) ug/L                                | Measured<br>Value ug/L              |
|--|---|-------------------------------------|
| Benzene<br>Toluene<br>Ethylbenzene<br>Total Xylenes<br>TPH as Gasoline | (5.0)<br>(5.0)<br>(5.0)<br>(5.0)<br>(500) | 650<br>180<br>1000<br>2800<br>12000 |
| Surrogate Recovery   | 7   | 111 %                               |





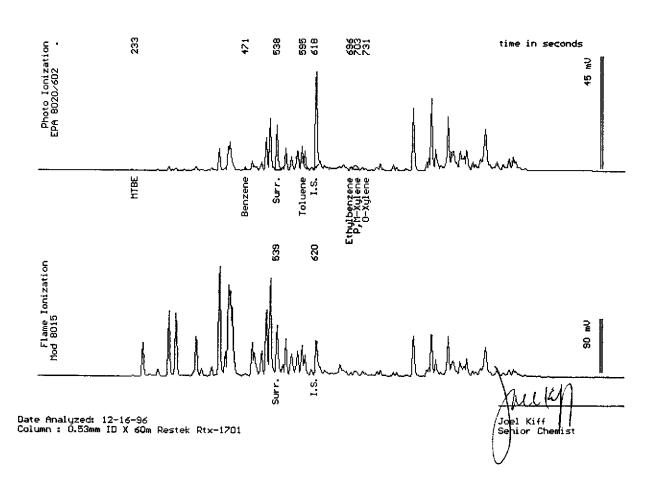
Sample Log 16104 16104-03

Sample: MW-3

From : Beacon 720 (Proj. # 94-720-01) Sampled : 12/05/96

Dilution: 1:1 QC Batch : 6180A

| Parameter  | (MRL) ug/L                               | Measured<br>Value ug/L           |
|--|--|----------------------------------|
| Benzene<br>Toluene<br>Ethylbenzene<br>Total Xylenes<br>TPH as Gasoline | (.50)<br>(.50)<br>(.50)<br>(.50)<br>(50) | <.50<br>3.2<br>.79<br>.52<br>590 |
| Surrogate Recovery   | ,  | 127 %                            |





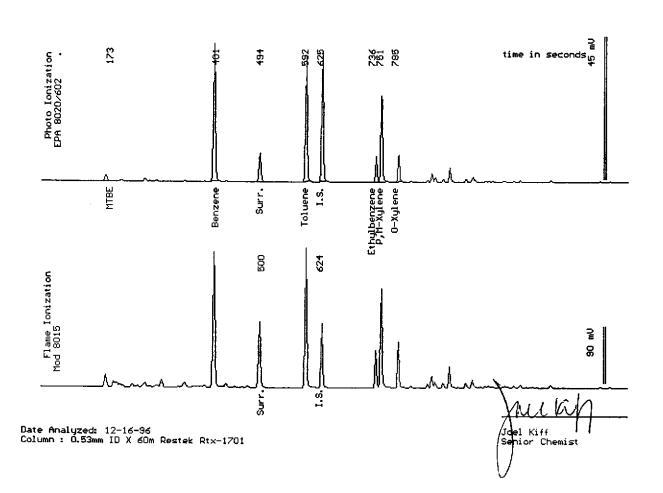
Sample: MW-4

From : Beacon 720 (Proj. # 94-720-01)

Sampled: 12/05/96

Dilution: 1:50 QC Batch: 4156I

| Parameter  | (MRL) ug/L                             | Measured<br>Value ug/L               |
|--|--|--------------------------------------|
| Benzene<br>Toluene<br>Ethylbenzene<br>Total Xylenes<br>TPH as Gasoline | (25)<br>(25)<br>(25)<br>(25)<br>(2500) | 3700<br>3100<br>580<br>2800<br>16000 |
| Surrogate Recovery   | ,                                      | 100 %                                |





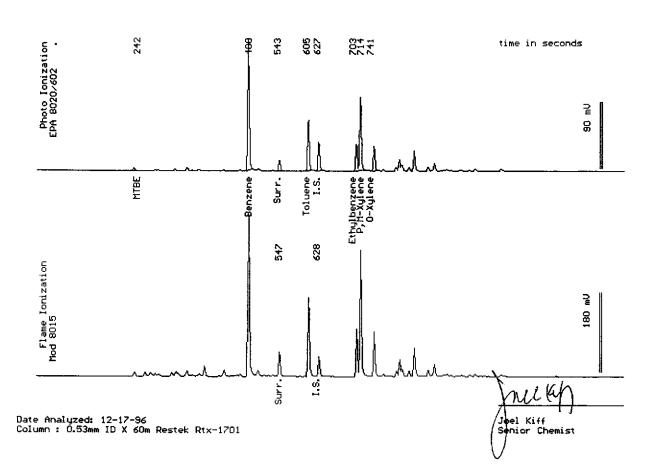
Sample: MW-5

From : Beacon 720 (Proj. # 94-720-01)

Sampled: 12/05/96

Dilution: 1:25 QC Batch: 6180B

| Parameter  | (MRL) ug/L                             | Measured<br>Value ug/L                |
|--|--|---------------------------------------|
| Benzene<br>Toluene<br>Ethylbenzene<br>Total Xylenes<br>TPH as Gasoline | (13)<br>(13)<br>(13)<br>(13)<br>(1300) | 5100<br>2500<br>1400<br>4700<br>24000 |
| Surrogate Recovery   | 7                                      | 106 %                                 |





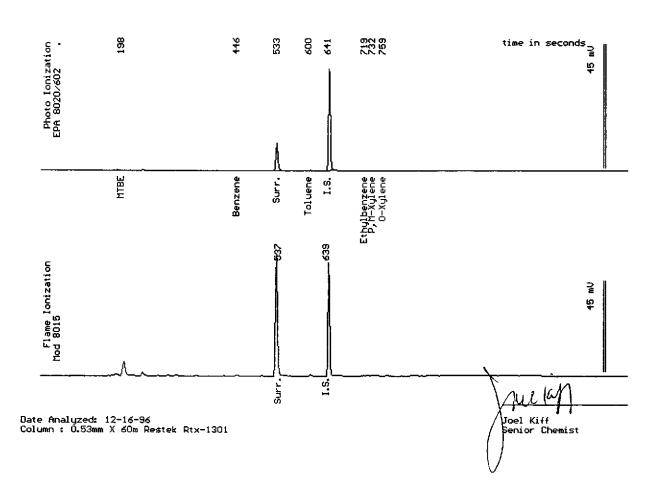
Sample: MW-6

From : Beacon 720 (Proj. # 94-720-01)

Sampled: 12/05/96

Dilution: 1:1 QC Batch: 2154D

| Parameter                        | (MRL) ug/L     | Measured<br>Value ug/L |  |  |  |  |  |  |  |
|----------------------------------|----------------|------------------------|--|--|--|--|--|--|--|
| Panana                           | ( 50)          | 4.50                   |  |  |  |  |  |  |  |
| Benzene<br>Toluene               | (.50)<br>(.50) | <.50<br><.50           |  |  |  |  |  |  |  |
| Ethylbenzene                     | (.50)          | <.50                   |  |  |  |  |  |  |  |
| Total Xylenes<br>TPH as Gasoline | (.50)<br>(50)  | <.50<br><50            |  |  |  |  |  |  |  |
| Surrogate Recovery               | 7              | 94 %                   |  |  |  |  |  |  |  |





Sample Log 16104 16104-07

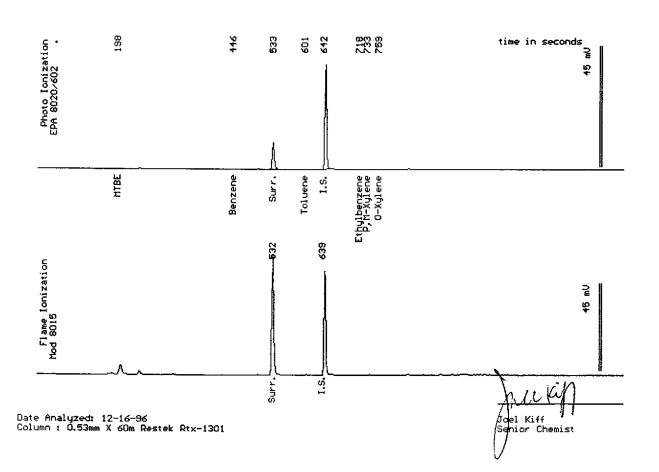
Sample: MW-7

From : Beacon 720 (Proj. # 94-720-01)

Sampled : 12/05/96

Dilution: 1:1 QC Batch: 2154D

| Parameter  | (MRL) ug/L                               | Measured<br>Value ug/L              |  |  |  |  |  |  |  |
|--|--|-------------------------------------|--|--|--|--|--|--|--|
| Benzene<br>Toluene<br>Ethylbenzene<br>Total Xylenes<br>TPH as Gasoline | (.50)<br>(.50)<br>(.50)<br>(.50)<br>(50) | <.50<br><.50<br><.50<br><.50<br><50 |  |  |  |  |  |  |  |
| Surrogate Recovery   | 7  | 93 %                                |  |  |  |  |  |  |  |





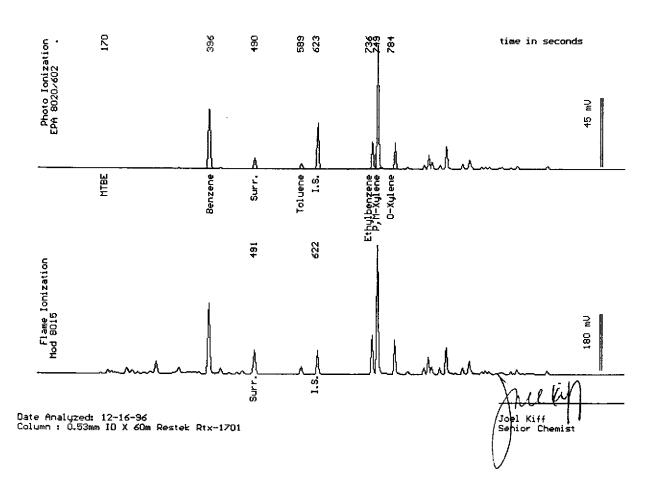
Sample: MW-8

From : Beacon 720 (Proj. # 94-720-01)

Sampled: 12/05/96

Dilution: 1:10 QC Batch: 4156I

| Parameter  | (MRL) ug/L                                | Measured<br>Value ug/L            |  |  |  |  |  |  |  |
|--|---|-----------------------------------|--|--|--|--|--|--|--|
| Benzene<br>Toluene<br>Ethylbenzene<br>Total Xylenes<br>TPH as Gasoline | (5.0)<br>(5.0)<br>(5.0)<br>(5.0)<br>(500) | 1100<br>78<br>410<br>1600<br>6300 |  |  |  |  |  |  |  |
| Surrogate Recovery   | 7   | 102 %                             |  |  |  |  |  |  |  |





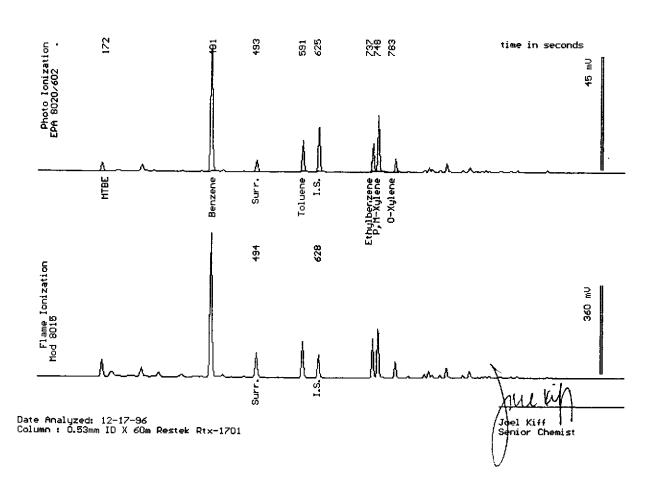
Sample: MW-9

From : Beacon 720 (Proj. # 94-720-01)

Sampled: 12/05/96

Dilution: 1:10 QC Batch: 4156J

| Parameter  | (MRL) ug/L                                | Measured<br>Value ug/t            |  |  |  |  |  |  |  |  |
|--|---|-----------------------------------|--|--|--|--|--|--|--|--|
| Benzene<br>Toluene<br>Ethylbenzene<br>Total Xylenes<br>TPH as Gasoline | (5.0)<br>(5.0)<br>(5.0)<br>(5.0)<br>(500) | 2100<br>420<br>380<br>720<br>5500 |  |  |  |  |  |  |  |  |
| Surrogate Recovery   | ,   | 107 %                             |  |  |  |  |  |  |  |  |





## **Ultramar Inc.**CHAIN OF CUSTODY REPORT

| Beacon Station No.                       | Sampler (Print |             |                            | Date                                   | Form No.     |          |              |                |
|--|----------------|-------------|----------------------------|--|--------------|----------|--------------|----------------|
| 720                                      | Halk           | tansan      |                            | ANALYS                                 | SES          | 12-5-96  | / of 2       |                |
| Project No.                              | Sampler (Sign  | ature)      |                            | 1                                      |              | Rote.    | 1 1          |                |
| 94-720-01                                | 20/41          | 91.         |                            |  | ers          | Stand    | -            |                |
| Project Location                         | Affiliation    | <u> </u>    |                            | el) el)                                | Containers   | 1 /      |              |                |
| Sen Leandra                              | Dan            | Sam-        | X<br>(gasolin<br>(diesel)  | of Cor                                 |              |          |              |                |
| Sample No./Identification                | Date           | Time        | Lab No.                    | BTEX<br>TPH (gasoline)<br>TPH (diesel) | No.          | REMA     | RKS          |                |
| MW-/                                     | 12-5-96        | 621         |                            | XX                                     | 1 2          |          |              |                |
| M M-T                                    |                | 609         |                            |  |              |          | ··· <u>.</u> | <b></b>        |
| MW-3                                     |                | 558         |                            |  |              |          |              |                |
| MW-4                                     |                | 633         |                            |  |              | D 6 777- | RECEIVED     | ,              |
| MW5                                      |                | 530         |                            |  |              | DALET    | TEMP         | <u>ල</u><br>0' |
| MW-6                                     |                | 508         |                            |  |              | :        | NITIAL_      |                |
| MW-7                                     |                | 423         |                            |  |              | WEST.    | LAB          |                |
| MW.8                                     | 1              | 519         |                            |  |              |          |              |                |
| Relinquished by: (Signature/Affiliation) | Date           | 1 1 1 1 .   | ved by: (Signatur          | 4                                      | <del> </del> |          | 1 1 1        | Time           |
| Ital Hansen Daylos                       | En 12/10/96    | 1100        | Wood Ma /1                 | lest,                                  |              |          | 12/11/11     | 110            |
| Relinquished by: (Signature/Affiliation) | Date           | Time Receiv | ved by: (Signatur          | e/Affiliation)                         |              |          | Date         | Time           |
|  |                |             |                            |  |              |          |              |                |
| Relinquished by: (Signature/Affiliation) | 1 . / /        | Time Receiv | ved by Signatur            | e/Affiliation)                         |              | ,        | Date /20/96/ | Time           |
| Sto Woodfl West Report To: Dale van Dan  | 15-710         | Bill to     | 525 West Th<br>Hanford, CA | nird Street                            | Fox          |          |              |                |



### **Ultramar Inc.**CHAIN OF CUSTODY REPORT

BEACON

| Beacon Station No.                          | Sampler (Print Name)              |                          |              |                        | ANALYSES               |              |             |      |      |          | Da       |      | Form No     | ).          |
|---|-----------------------------------|--------------------------|--------------|------------------------|------------------------|--------------|-------------|------|------|----------|----------|------|-------------|-------------|
| 710   | Hal Hansen                        |                          |              |                        |                        |              | AN.         | ALYS | SES  |          | 1/4-5    | 5-96 | 2 of 2      |             |
| Project No.                                 | Hal Hansen<br>Sampler (Signature) |                          |              |                        |                        |              |             |      |      |          | ŀ        | 8ta  | nda         | 1           |
| 94-720-01                                   | Well                              |                          |              |                        |                        | <u>.</u>     |             |      |      | į,       | <u>n</u> | TA   | rdad.<br>T  |             |
| Project Location                            | Affiliation                       |                          | <u>.—-</u> - |                        | ┤                      | <u> </u>     | न्त         |      |      | التحقيقي |          | ,    | ,           |             |
| 94-720-01<br>Project Location<br>San Seanho | Dow                               | Affiliation  Doulos Env. |              |                        |                        |              | (dies       |      |      |          | 5        |      |             |             |
| Sample No./Identification                   | Date                              | 1                        | me           | Lab No.                | BTEX<br>TPH (gasoline) |              | 티           |      |      | Q IV     |          |      | RKS         |             |
| MW-9  | 12-5-96                           | 54                       | 7            |                        | H                      |              |             |      |      | -        | Ų        |      |             |             |
|   |                                   |                          |              |                        |                        |              |             |      |      |          |          |      | ·           |             |
|   |                                   |                          |              |                        |                        |              |             |      |      |          |          |      |             | <del></del> |
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|   |                                   |                          |              | ×                      | $\parallel \parallel$  |              | $\perp$     |      |      |          | -        |      |             |             |
|   |                                   | ļ                        |              |                        |                        |              |             |      |      |          |          |      | *           |             |
|   |                                   |                          |              |                        |                        |              |             |      |      |          |          |      |             |             |
| Relinquished by: (Signature/Affiliation)    | Date                              | Time                     | Receiv       | ed by: (Signatur       | e/Af                   | filia        | atio        | 1)   |      |          | '        |      | Date        | Time        |
| Hell James Deulos En                        | 12/10/96                          | 1100                     | Sto !        | Nood/M                 | We.                    | sT           | •           | ,    |      |          |          |      | 12/19/96    | 1100        |
| Relinquished by: (Signature/Affiliation)    | Date                              | Time                     | Receiv       | ed by: (Signatur       | e/Af                   | filia        | ation       | W    |      |          |          | •    | Date        | Time        |
|   |                                   |                          |              |                        | <del></del>            | 4            | <u>//</u>   |      |      |          |          |      |             |             |
| Relinquished by: (Signature/Affiliation)    | Date                              | Time                     | Receive      | ed by: (Signatur       | e/ <i>M</i>            | W.           | ation       | 1)   |      |          |          |      | Date        | Time        |
| Da Weodfu Vol                               | 196                               | 125                      | م            |                        |                        | 14           | $\triangle$ |      |      |          |          |      | X0/96       | 1250        |
| Report To: Dale wan Dan                     | •                                 |                          | Bill to:     | ULTRAMAR<br>525 West T | grade<br>sird          | 2 / [<br>Ctv | 7 /<br>00t  |      |      |          |          |      |             |             |
| Lale bandan                                 |                                   |                          | İ            | Hanford CA             | 932                    | วลก          | ١           |      |      |          |          |      |             | ĺ           |
|   |                                   |                          |              | Attention:             |                        | ΧŻ           | 2           | S    | 1    | م        | <u>/</u> |      | <del></del> |             |
| WHITE: Return to Client with Report         | YELLOW: Lab                       | oratory (                | l<br>Copy    | PINK: Origin           | ator                   | Сс           | γα          |      | ···· |          |          |      | 32-80       | 003 1/90    |