**Weiss Associates** Environmental and Geologic Services

5500 Shellmound Street, Emeryville, CA 94608-2411 Fax: 510-547-5043 Phone: **510-450-6000**

November 6, 1995

Scott Seery
Alameda County Department
of Environmental Health
Hazardous Materials Division
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: **Third Quarter 1995**
Shell Service Station
WIC #204-6852-1404
1784 150th Avenue
San Leandro, California
WA Job #81-0422-205

Dear Mr. Seery:

This status report satisfies the quarterly reporting requirements prescribed by California Administrative Code Title 23 Waters, Division 3, Chapter 16, Article 5, Section 2652.d.

## Third Quarter 1995 Activities

- Blaine Tech Services, Inc. (BTS) of San Jose, California measured ground water depths and collected ground water samples from the site wells (Figures 1 and 2). The BTS report describing these activities and the analytic report for the ground water samples are included as Attachment A.

- Weiss Associates (WA) calculated ground water elevations and compiled the analytic data (Tables 1 and 2), prepared a ground water elevation contour map and plotted benzene and total petroleum hydrocarbons as gasoline (TPH-G) concentrations in ground water (Figure 2).

## Discussion of Quarterly Monitoring Results

Ground water elevations in September 1995 dropped 1.5 to 2.5 ft in all site wells since the second quarter 1995. Although ground water contours indicate a southerly flow direction this quarter, the gradient is flat, less than 0.001 ft/ft. Historically, the ground water flow direction has been predominantly to the northwest. Furthermore, the distribution of dissolved hydrocarbons suggests that ground water flows northwestward, which is consistent with the topographic gradient.

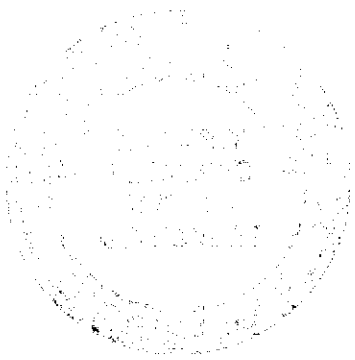
## Anticipated Fourth Quarter 1995 Activities

- WA will submit a report presenting the results of the fourth quarter 1995 ground water monitoring results. The report will include tabulated chemical analytic results, ground water elevations, a ground water elevation contour map with plotted benzene and TPH-G concentrations in ground water.

- **WA will submit a corrective action plan (CAP) as you requested in your October 20, 1995 letter to Shell.**

We trust that this submittal meets your needs. Please call Tom Howard at (510) 450-6118 if you have any questions or comments.

Sincerely,
Weiss Associates



Thomas M. Howard
Project Geologist

James W. Carmody, C.H.G.
Senior Project Hydrogeologist

Attachments: Figures
Tables
A - BTS Ground Water Monitoring Report

cc: R. Jeff Granberry, Shell Oil Products Company, P.O. Box 4023, Concord, California 94524
Kevin Graves, Regional Water Quality Control Board - San Francisco Bay Region,
2101 Webster Street, Suite 500, Oakland, California 94612

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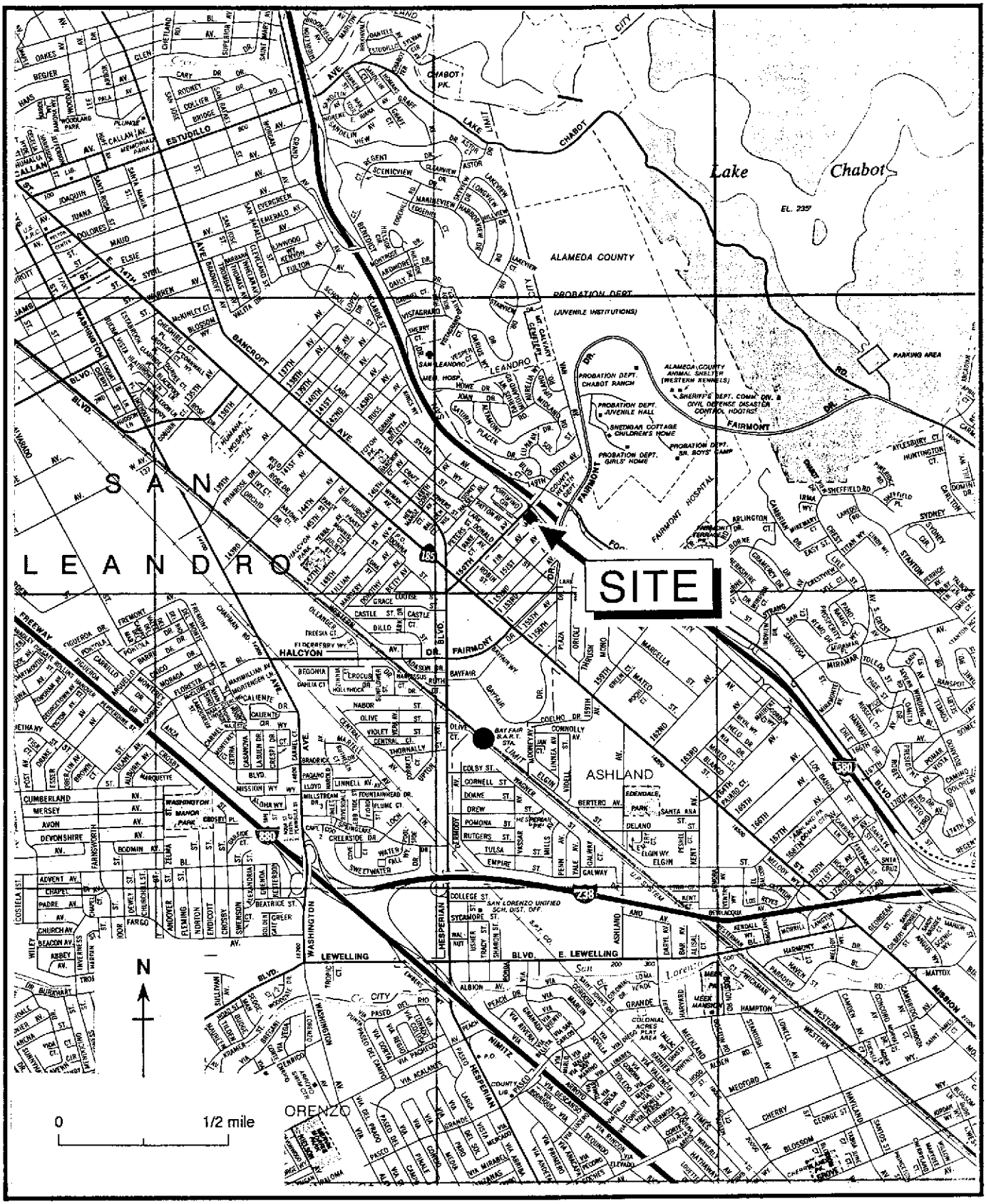


Figure 1. Site Location Map - Shell Service Station WIC #204-6852-1404, 1784 150th Avenue, San Leandro, California

3/16/90

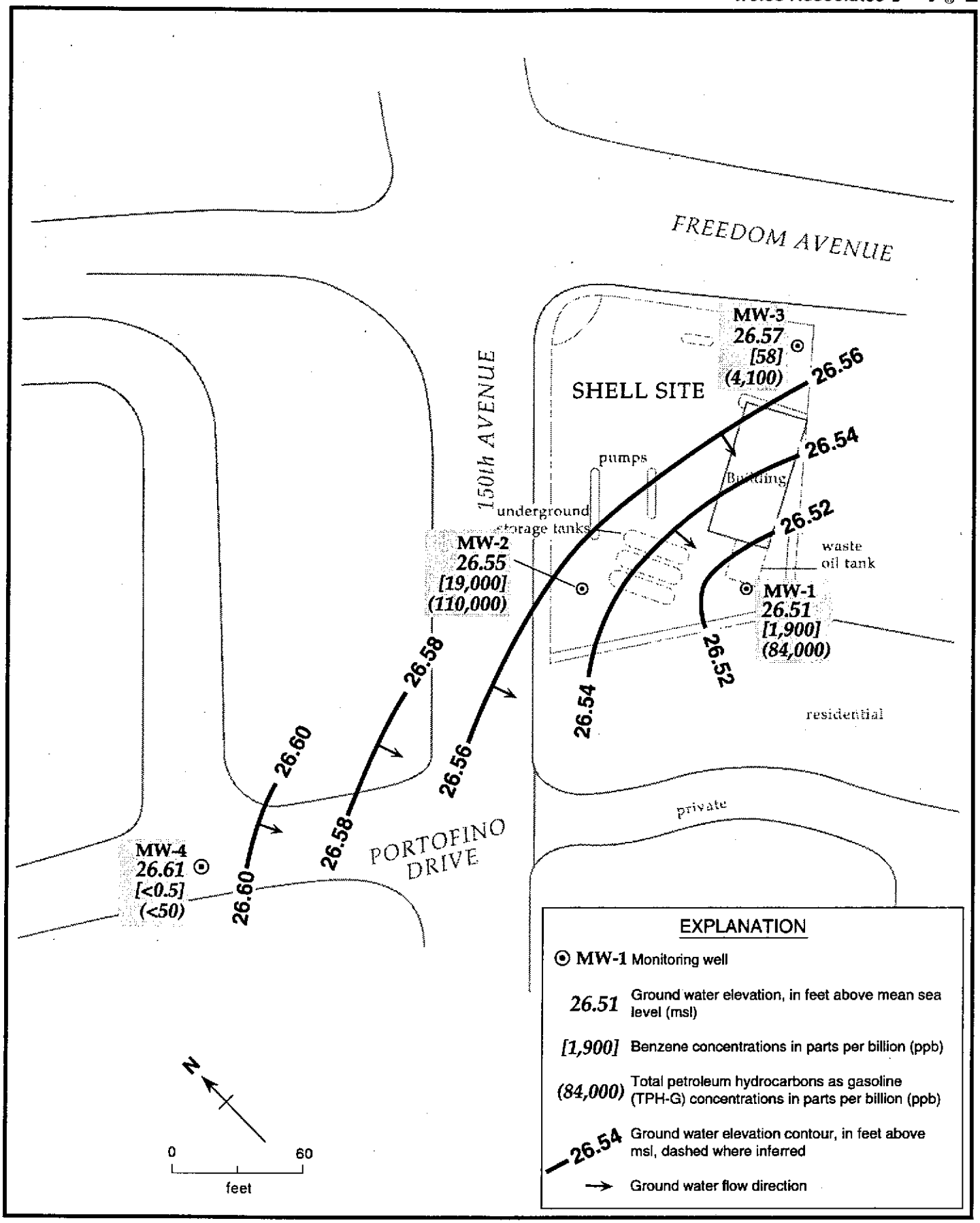


Figure 2 . Monitoring Well Locations, Ground Water Elevation Contours, Benzene and TPH-G Concentrations in Ground Water - September 13, 1995 - Shell Service Station WIC #204-6852-1404, 1784 150th Avenue, San Leandro, California

Table 1. Ground Water Elevations - Shell Service Station WIC #204-6852-1404, 1784 150th Avenue, San Leandro, California

| Well ID | Date | Top-of-Casing Elevation (ft above msl) | Depth to Water (ft) | Ground Water Elevation (ft above msl) |
|---|---|---|---|---|
| MW-1 | 03/08/90 | 49.13 | 25.29 | 23.84 |
| | 06/12/90 | | 25.85 | 23.28 |
| | 09/13/90 | | 27.49 | 21.64 |
| | 12/18/90 | | 27.41 | 21.72 |
| | 03/07/91 | | 25.79 | 23.34 |
| | 06/07/91 | | 25.64 | 23.49 |
| | 09/17/91 | | 27.54 | 21.59 |
| | 12/09/91 | | 27.81 | 21.32 |
| | 02/13/92 | | 25.57 | 23.56 |
| | 02/24/92 | | 22.83 | 26.30 |
| | 02/27/92 | | 23.09 | 26.04 |
| | 03/01/92 | | 23.26 | 25.87 |
| | 06/03/92 | | 24.64 | 24.49 |
| | 09/01/92 | | 26.74 | 22.39 |
| | 10/06/92 | | 27.18 | 21.95 |
| | 11/11/92 | | 27.99 | 21.14 |
| | 12/04/92 | | 27.14 | 21.99 |
| | 01/22/93 | | 20.09 | 29.04 |
| | 02/10/93 | | 24.26 | 24.87 |
| | 03/03/93 | | 20.50 | 28.63 |
| | 05/11/93 | | 21.70 | 27.43 |
| | 06/17/93 | | 22.42 | 26.71 |
| | 09/10/93 | | 24.11 | 25.02 |
| | 12/13/93 | | 23.73 | 25.40 |
| | 03/03/94 | | 22.08 | 27.05 |
| | 06/06/94 | | 23.10 | 26.03 |
| | 09/12/94 | | 25.19 | 23.94 |
| | 12/19/94 | | 23.06 | 26.07 |
| | 02/28/95 | | 20.90 | 28.23 |
| | 03/24/95 | | 18.28 | 30.85 |
| | 06/26/95 | | 20.40 | 28.73 |
| | **09/13/95** | | **22.62** | **26.51** |
| MW-2 | 02/13/92 | 45.83 | 22.22 | 23.61 |
| | 02/24/92 | | 19.61 | 26.22 |
| | 02/27/92 | | 19.92 | 25.91 |
| | 03/01/92 | | 21.11 | 24.72 |
| | 06/03/92 | | 21.58 | 24.25 |
| | 09/01/92 | | 23.46 | 22.37 |
| | 10/06/92 | | 23.99 | 21.84 |
| | 11/11/92 | | 24.25 | 21.58 |
| | 12/04/92 | | 23.89 | 21.94 |
| | 01/22/93 | | 17.03 | 28.80 |

Table 1. Ground Water Elevations - Shell Service Station WIC #204-6852-1404, 1784 150th Avenue, San Leandro, California (continued)

| Well ID | Date | Top-of-Casing Elevation (ft above msl) | Depth to Water (ft) | Ground Water Elevation (ft above msl) |
|---|---|---|---|---|
| | 02/10/93 | | 18.08 | 27.75 |
| | 03/03/93 | | 17.28 | 28.55 |
| | 05/11/93 | | 18.41 | 27.42 |
| | 06/17/93 | | 19.06 | 26.77 |
| | 09/10/93 | | 20.88 | 24.95 |
| | 12/13/93 | | 20.42 | 25.41 |
| | 03/03/94 | | 18.48 | 27.35 |
| | 06/06/94 | | 20.26 | 25.57 |
| | 09/12/94 | | 21.80 | 24.03 |
| | 12/19/94 | | 19.66 | 26.17 |
| | 02/28/95 | | 17.51 | 28.32 |
| | 03/24/95 | | 14.88 | 30.95 |
| | 06/26/95 | | 17.58 | 28.25 |
| | **09/13/95** | | **19.28** | **26.55** |
| MW-3 | 02/13/92 | 51.97 | 27.97 | 24.00 |
| | 02/24/92 | | 25.60 | 26.37 |
| | 02/27/92 | | 25.88 | 26.09 |
| | 03/01/92 | | 26.00 | 25.97 |
| | 06/03/92 | | 27.70 | 24.27 |
| | 09/01/92 | | 29.46 | 22.51 |
| | 10/06/92 | | 30.01 | 21.96 |
| | 11/11/92 | | 30.26 | 21.71 |
| | 12/04/92 | | 29.93 | 22.04 |
| | 01/22/93 | | 22.76 | 29.21 |
| | 02/10/93 | | 21.40 | 30.57 |
| | 03/03/93 | | 23.08 | 28.89 |
| | 05/11/93 | | 24.51 | 27.46 |
| | 06/17/93 | | 25.21 | 26.76 |
| | 09/10/93 | | 26.95 | 25.02 |
| | 12/13/93 | | 26.52 | 25.45 |
| | 03/03/94 | | 24.50 | 27.47 |
| | 06/06/94 | | 26.33 | 25.64 |
| | 09/12/94 | | 27.98 | 23.99 |
| | 12/19/94 | | 25.63 | 26.34 |
| | 02/28/95 | | 23.45 | 28.52 |
| | 03/24/95 | | 21.07 | 30.90 |
| | 06/26/95 | | 23.64 | 28.33 |
| | **09/13/95** | | **25.40** | **26.57** |
| MW-4 | 03/24/95 | 40.51 | 9.16 | 31.35 |
| | 06/26/95 | | 12.06 | 28.45 |
| | **09/13/95** | | **13.90** | **26.61** |



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Table 2. Analytic Results for Ground Water - Shell Service Station WIC #204-6852-1404, 1784 150th Avenue, San Leandro, California

| Well ID | Date Sampled | Depth to Water (ft) | TPH-G | TPH-D | POG | B | E | T | X | 1,2-DCA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | ← parts per billion (µg/l) → | | | | | | | |
| MW-1 | 03/08/90 | 25.29 | 510 | 120[a] | <10,000 | 1.5 | <0.5 | 0.8 | 5.4 | 12 |
| | 06/12/90 | 25.85 | 390 | 100[a] | <10,000 | 86 | 0.7 | 1.3 | 6.2 | <0.4 |
| | 09/13/90 | 27.49 | 100 | 130[a] | <10,000 | 56 | 2.4 | 0.75 | 2.8 | <0.4[b] |
| | 12/18/90 | 27.41 | 480 | <50[a] | <10,000 | 54 | 3.3 | 1.7 | 3.7 | 5.3 |
| | 03/07/91 | 25.79 | 80 | <50[a] | --- | 266 | 1.2 | <0.5 | <1.5 | 6.7 |
| | 06/07/91 | 25.64 | 510 | <50[a] | --- | 130 | 6.1 | 3.8 | 11 | 7.9 |
| | 09/17/91 | 27.54 | 330 | 120[ac] | --- | 67 | 3 | <0.5 | 2.2 | 6 |
| | 12/09/91 | 27.81 | 140[d] | 80 | --- | <0.5 | 1.7 | <0.5 | 4.7 | 5.4 |
| | 03/01/92 | 23.36 | <50 | <50 | --- | <0.5 | <0.5 | <0.5 | <0.5 | 3 |
| | 06/03/92 | 24.64 | 1,500 | --- | --- | 520 | 72 | 180 | 230 | 3 |
| | 09/01/92 | 26.74 | 130 | --- | --- | 16 | 1.8 | 1.4 | 3.4 | 1.3[e] |
| | 12/04/92 | 27.14 | 150 | --- | --- | 360 | 1.8 | 0.7 | 2.1 | 3.3 |
| | 03/03/93 | 20.50 | <50 | --- | --- | 1.5 | <0.5 | <0.5 | <0.5 | 0.76 |
| | 06/17/93 | 22.42 | 1,600 | --- | --- | 340 | 120 | 120 | 440 | 3 |
| | 09/10/93 | 24.11 | 2,600 | --- | --- | 670 | 310 | 340 | 730 | 2.3 |
| | 12/13/93 | 23.73 | 11,000 | --- | --- | 470 | 380 | 320 | 2,300 | 6.3 |
| | 03/03/94 | 22.08 | 16,000 | --- | --- | 700 | 480 | 690 | 3,200 | --- |
| | 06/06/94 | 23.10 | 7,500 | --- | --- | 420 | 200 | 280 | 1,000 | 3.1 |
| | 09/12/94 | 25.19 | 1,200 | --- | --- | 110 | 3.3 | 21 | 420 | 2.6 |
| | 12/19/94 | 23.06 | 4,600 | --- | --- | 470 | 230 | 330 | 1,300 | 3.7 |
| | 02/28/95 | 20.90 | 500 | --- | --- | 59 | 6.8 | 32 | 68 | 5.0 |
| | 06/26/95 | 20.40 | 5,500 | --- | --- | 740 | 300 | 420 | 1,800 | 8.6 |
| | **09/13/95** | **22.62** | **84,000** | **---** | **---** | **1,900** | **3,000** | **2,600** | **14,000** | **12** |
| MW-2 | 02/24/92 | 19.61 | 17,000 | 2,700[c] | --- | 6,200 | 550 | 1,600 | 1,900 | 200 |
| | 03/01/92 | 21.11 | 86,000 | 1,000[c] | --- | 30,000 | 2,300 | 34,000 | 16,000 | 82 |
| | 06/03/92 | 21.58 | 87,000 | --- | --- | 28,000 | 2,000 | 18,000 | 10,000 | <50 |
| | 09/01/92 | 23.46 | 110,000 | --- | --- | 21,000 | 1,900 | 13,000 | 7,800 | 83[h] |
| | 12/04/92 | 23.89 | 42,000 | --- | --- | 15,000 | 960 | 2,400 | 2,900 | 100 |
| | 03/03/93 | 17.28 | 160,000 | --- | --- | 36,000 | 32,000 | 3,800 | 21,000 | 7.7 |

Table 2. Analytic Results for Ground Water - Shell Service Station WIC #204-6852-1404, 1784 150th Avenue, San Leandro, California (continued)

| Well ID | Date Sampled | Depth to Water (ft) | TPH-G | TPH-D | POG | B | E | T | X | 1,2-DCA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | ← parts per billion (µg/l) → | | | | | | | |
| | 03/03/93[h] | 17.28 | 150,000 | --- | --- | 31,000 | 20,000 | 3,100 | 14,000 | 16 |
| | 06/17/93 | 19.06 | 65,000 | --- | --- | 34,000 | 3,200 | 15,000 | 11,000 | 37 |
| | 06/17/93[h] | 19.06 | 62,000 | --- | --- | 28,000 | 2,700 | 14,000 | 10,000 | 36 |
| | 09/10/93[f] | 20.88 | 72,000 | --- | --- | 24,000 | 2,300 | 16,000 | 11,000 | 28.0 |
| | 09/10/93[dupf] | 20.88 | 71,000 | --- | --- | 23,000 | 2,300 | 15,000 | 10,000 | 27.0 |
| | 12/13/93 | 20.42 | 19,000 | --- | --- | 5,400 | 680 | 4,900 | 3,100 | <0.5 |
| | 12/13/93[dup] | | 17,000 | --- | --- | 6,200 | 720 | 5,500 | 3,500 | 3.4 |
| | 03/03/94 | 18.48 | 110,000 | --- | --- | 21,000 | 2000 | 24,000 | 13,000 | --- |
| | 03/03/94[dup] | 18.48 | 93,000 | --- | --- | 19,000 | 1,800 | 22,000 | 12,000 | --- |
| | 06/06/94 | 20.26 | 10,000 | --- | --- | 1,900 | 2,500 | 3,300 | 13,000 | 5.8 |
| | 06/06/94[dup] | 20.26 | 99,000 | --- | --- | 9,900 | 2,400 | 12,000 | 12,000 | 5.7 |
| | 09/12/94 | 21.80 | 160,000 | --- | --- | 22,000 | 3,400 | 33,000 | 23,000 | <0.4 |
| | 09/12/94[dup] | 21.80 | 150,000 | --- | --- | 23,000 | 3,500 | 34,000 | 23,000 | <0.4 |
| | 12/19/94 | 19.66 | 80,000 | --- | --- | 17,000 | 2,300 | 16,000 | 14,000 | <0.4 |
| | 12/19/94[dup] | 19.66 | 100,000 | --- | --- | 28,000 | 3,400 | 26,000 | 20,000 | <0.4 |
| | 02/28/95 | 17.51 | 100,000 | --- | --- | 24,000 | 2,300 | 18,000 | 17,000 | <0.4 |
| | 02/28/95[dup] | 17.51 | 100,000 | --- | --- | 31,000 | 3,200 | 21,000 | 18,000 | <0.4 |
| | 06/26/95 | 17.58 | 45,000 | --- | --- | 14,000 | 1,500 | 12,000 | 7,500 | 3.4 |
| | 06/26/95[dup] | 17.58 | 68,000 | --- | --- | 13,000 | 1,800 | 11,000 | 7,700 | --- |
| | **09/13/95** | **19.28** | **110,000** | **---** | **---** | **19,000** | **2,800** | **19,000** | **15,000** | **7.2** |
| | **09/13/95[dup]** | **19.28** | **120,000** | **---** | **---** | **20,000** | **2,900** | **20,000** | **15,000** | **<0.4** |
| MW-3 | 02/24/92 | 25.60 | 4,500 | 1,300[c] | --- | 97 | 78 | <5 | 18 | 9.1 |
| | 03/01/92 | 26.00 | 2,200 | 440 | --- | 69 | <0.5 | <0.5 | <0.5 | 13 |
| | 06/03/92 | 27.70 | 4,100 | --- | --- | 13 | 44 | 72 | 65 | 16 |
| | 09/01/92 | 29.46 | 1,900 | --- | --- | 20 | 5.5 | 6.8 | <5 | 19 |
| | 09/01/92[dup] | 29.46 | 1,900 | --- | --- | 21 | 3.4 | 6.6 | <5 | 21 |
| | 12/04/92 | 29.93 | 2,400 | --- | --- | 8.2 | <5 | <5 | <5 | 16 |
| | 12/04/92[dup] | 29.93 | 2,100 | --- | --- | 11 | 5.7 | <0.5 | <0.5 | 18 |
| | 03/03/93 | 23.08 | 5,100 | --- | --- | 63 | 75 | 61 | 150 | 3.3 |

Table 2. Analytic Results for Ground Water - Shell Service Station WIC #204-6852-1404, 1784 150th Avenue, San Leandro, California (continued)

| Well ID | Date Sampled | Depth to Water (ft) | TPH-G | TPH-D | POG | B | E | T | X | 1,2-DCA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | ← parts per billion (µg/l) → | | | | | | | |
| | 06/17/93 | 25.21 | 4,000 | --- | --- | 94 | 82 | 140 | 150 | 23 |
| | 09/10/93 | 26.95 | 3,200 | --- | --- | 140 | 12.5 | 12.5 | 12.5 | 20.0 |
| | 12/13/93 | 26.52 | 6,200 | --- | --- | <12.5 | <12.5 | <12.5 | <12.5 | 13 |
| | 03/03/94 | 24.50 | 4,500 | --- | --- | 73 | <5 | <5 | <5 | --- |
| | 06/06/94 | 26.33 | 3,200 | --- | --- | <0.5 | 3.1 | <0.5 | <0.5 | 16 |
| | 09/12/94 | 27.98 | 3,900 | --- | --- | <0.5 | 9.6 | <0.5 | 4.1 | 7.8 |
| | 12/19/94 | 25.63 | 2,400 | --- | --- | 21 | 4.2 | 22 | 2.6 | 25 |
| | 02/28/95 | 23.45 | 4,000 | --- | --- | 58 | 7.1 | <0.5 | 3.5 | 18 |
| | 06/26/95 | 23.64 | 3,900 | --- | --- | 8.1 | 12 | <0.5 | 2.4 | 15 |
| | **09/13/95** | **25.40** | **4,100** | **---** | **---** | **58** | **5.5** | **5.5** | **<0.5** | **6.7** |
| MW-4 | 03/24/95 | 9.16 | <50 | --- | --- | <0.5 | <0.5 | <0.5 | <0.5 | <0.4 |
| | 06/26/95 | 12.06 | <50 | --- | --- | <0.5 | <0.5 | <0.5 | <0.5 | <0.4 |
| | **09/13/95** | **13.90** | **<50** | **---** | **---** | **<0.5** | **<0.5** | **<0.5** | **<0.5** | **<0.4** |
| Trip Blank | 03/08/90 | | <50 | --- | --- | <0.5 | <0.5 | <0.5 | <0.5 | --- |
| | 06/12/90 | | <50 | --- | --- | <0.5 | <0.5 | <0.5 | <0.5 | --- |
| | 12/18/90 | | <50 | --- | --- | <0.5 | <0.5 | <0.5 | <0.5 | --- |
| | 03/07/91 | | <50 | --- | --- | <0.5 | <0.5 | <0.5 | <0.5 | --- |
| | 06/07/91 | | <50 | --- | --- | <0.5 | <0.5 | <0.5 | <0.5 | --- |
| | 09/17/91 | | <50 | --- | --- | <0.5 | <0.5 | <0.5 | <0.5 | --- |
| | 12/09/91 | | <50 | --- | --- | <0.5 | <0.5 | <0.5 | <0.5 | --- |
| | 02/24/92 | | <50 | --- | --- | <0.5 | 0.6 | 2.5 | 2.2 | --- |
| | 03/01/92 | | <50 | --- | --- | <0.5 | <0.5 | <0.5 | <0.5 | --- |
| | 06/03/92 | | <50 | --- | --- | <0.5 | <0.5 | <0.5 | <0.5 | --- |
| | 09/01/92 | | <50 | --- | --- | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 12/04/92 | | <50 | --- | --- | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 03/03/93 | | <50 | --- | --- | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 06/17/93 | | <50 | --- | --- | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 09/10/93 | | <50 | --- | --- | <0.5 | <0.5 | <0.5 | <0.5 | --- |

Table 2. Analytic Results for Ground Water - Shell Service Station WIC #204-6852-1404, 1784 150th Avenue, San Leandro, California (continued)

| Well ID | Date Sampled | Depth to Water (ft) | TPH-G | TPH-D | POG | B | E | T | X | 1,2-DCA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | ← parts per billion (µg/l) → | | | | | | | |
| | 12/13/93 | | <50 | --- | --- | <0.5 | <0.5 | <0.5 | <0.5 | <0.5[k] |
| | 03/03/94 | | <50 | --- | --- | <0.5 | <0.5 | <0.5 | <0.5 | --- |
| | 06/06/94 | | <50 | --- | --- | <0.5 | <0.5 | <0.5 | <0.5 | --- |
| | 09/12/94 | | <50 | --- | --- | <0.5 | <0.5 | <0.5 | <0.5 | --- |
| | 12/19/94 | | <50 | --- | --- | <0.5 | <0.5 | <0.5 | <0.5 | --- |
| | 02/28/95 | | <50 | --- | --- | <0.5 | <0.5 | <0.5 | <0.5 | --- |
| | 03/24/95 | | <50 | --- | --- | <0.5 | <0.5 | <0.5 | <0.5 | --- |
| | 06/26/95 | | <50 | --- | --- | 4.1 | <0.5 | 3.0 | 1.5 | --- |
| | **09/13/95** | | **<50** | **---** | **---** | **<0.5** | **<0.5** | **<0.5** | **<0.5** | **---** |
| Bailer Blank | 03/08/90 | | <50 | --- | --- | <0.5 | <0.5 | <0.5 | <0.5 | --- |
| | 09/01/92 | | <50 | --- | | <0.5 | <0.5 | 0.7 | <0.5 | <0.5 |
| | 12/04/92 | | 60 | --- | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5[j] |
| DTSC MCLs | | | NE | NE | NE | 1 | 680 | 100[l] | 1,750 | 5.0 |

Table 2. Analytic Results for Ground Water - Shell Service Station WIC #204-6852-1404, 1784 150th Avenue, San Leandro, California (continued)

Abbreviations:

TPH-G = Total Petroleum Hydrocarbons as Gasoline by Modified EPA Method 8015
TPH-D = Total Petroleum Hydrocarbons as Diesel by Modified EPA Method 8015
POG = Petroleum oil and grease by American Public Health Association Standard Method 503E or 5520F
B = Benzene by EPA Method 8020
E = Ethylbenzene by EPA Method 8020
T = Toluene by EPA Method 8020
X = Xylenes by EPA Method 8020
1,2-DCA = 1,2-Dichloroethane by EPA Method 601
--- = Not analyzed
<n = Not detected above method detection limit of n ppb
DTSC MCLs = California Department of Toxic Substances Control maximum contaminant levels for drinking water
NE = Not established

Notes:

a = No total petroleum hydrocarbons as motor oil detected above modified EPA Method 8015 detection limit of 500 ppb
b = Tetrachloroethene (PCE) detected at 24 ppb by EPA Method 601; DTSC MCL for PCE = 5 ppb
c = Result is due to hydrocarbon compounds lighter than diesel
d = Result due to a non-gasoline hydrocarbon
e = In the matrix spike/matrix spike duplicate of sample MW-1, the RPD for Freon 113 and 1,3-dichlorobenzene was greater than 25%
f = The MW-2 and Dup samples each contained 1.6 ppb of methylene chloride which is within normal laboratory background levels.
h = Sample MW-2 was diluted 1:100 for EPA Method 8010 due to the interfering hydrocarbon peaks
j = The trip and field blank samples contained 14 and 10 mg/L 1,3-dichlorobenzene, respectively
k = 1.4 mg/L Chloroethene detected in equipment blank, trip blank not analyzed
l = DTSC recommended action level for drinking water; MCL not established



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# ATTACHMENT A

BTS GROUND WATER MONITORING REPORT

BLAINE
TECH SERVICES INC.

985 TIMOTHY DRIVE
SAN JOSE, CA 95133
(408) 995-5535
FAX (408) 293-8773

October 4, 1995

Shell Oil Company
P.O. Box 4023
Concord, CA 94524

Attn: R. Jeff Granberry

Shell WIC #204-6852-1404
1784 150th Avenue
San Leandro, California

3rd Quarter 1995

Quarterly Groundwater Monitoring Report 950913-T-2

Blaine Tech Services, Inc. performs environmental sampling and documentation as an independent third party. Copies of our Sampling Report along with the laboratory's Certified Analytical Report are forwarded to the consultant overseeing work at this site. Submission of the assembled documents to interested regulatory agencies will be made by the designated consultant.

Groundwater monitoring at this site was performed in accordance with Standard Operating Procedures provided to the interested regulatory agencies. If you have any questions about the work performed at this site please call me at (408) 995-5535 ext. 201.

Yours truly,

Francis Thie

attachments: Table of Well Gauging Data
Chain of Custody
Field Data Sheets
Certified Analytical Report

cc: Weiss Associates
5500 Shellmound Street
Emeryville, CA 95608-2411
Attn: Grady Glasser

(Any professional evaluations or recommendations will be made by the consultant under separate cover.)

# TABLE OF WELL GAUGING DATA

| WELL I.D. | DATA COLLECTION DATE | MEASUREMENT REFERENCED TO | QUALITATIVE OBSERVATIONS (sheen) | DEPTH TO FIRST IMMISCIBLES LIQUID (FPZ) (feet) | THICKNESS OF IMMISCIBLES LIQUID ZONE (feet) | VOLUME OF IMMISCIBLES REMOVED (ml) | DEPTH TO WATER (feet) | DEPTH TO WELL BOTTOM (feet) |
|---|---|---|---|---|---|---|---|---|
| MW-1 | 9/13/95 | TOC | SHEEN/ODOR | -- | -- | -- | 22.62 | 44.70 |
| MW-2 * | 9/13/95 | TOC | ODOR | NONE | -- | -- | 19.28 | 44.07 |
| MW-3 | 9/13/95 | TOC | -- | NONE | -- | -- | 25.40 | 41.64 |
| MW-4 | 9/13/95 | TOC | -- | NONE | -- | -- | 13.90 | 25.04 |

* Sample DUP was a duplicate sample taken from well MW-2.

# SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

# CHAIN OF CUSTODY RECORD
Serial No: 950913-T2

Date: 9-13-95
Page 1 of 1

Site Address: 1784 150th Avenue, San Leandro

WIC#: 204-6852-1404

Shell Engineer: Dan Kirk
Phone No.: (510) 675-6188
Fax #: 675-6160

Consultant Name & Address: Blaine Tech Services, Inc.
985 Timothy Dr., San Jose, CA 95133

Consultant Contact: Jim Keller
Phone No.: (408) 995-5535
Fax #: 293-8773

Comments:

Sampled by: M Toll

Printed Name: Mike Toll

LAB: NET

| Sample ID | Date | Sludge | Soil | Water | Air | No. of conts. | TPH (EPA 8015 Mod. Gas) | TPH (EPA 8015 Mod. Diesel) | BTEX (EPA 8020/602) | Volatile Organics (EPA 8240) | Test for Disposal | Combination TPH 8015 & BTEX 8020 | VOC (8010) | | Asbestos | Container Size | Preparation Used | Composite Y/N | MATERIAL DESCRIPTION | SAMPLE CONDITION/ COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW1 | 9/13 | | | X | | 6 | | | | | | X | X | | | | | | | |
| MW2 | 9/13 | | | X | | 6 | | | | | | X | X | | | | | | | |
| MW3 | 9/13 | | | X | | 6 | | | | | | X | X | | | | | | | |
| MW4 | 9/13 | | | X | | 6 | | | | | | X | X | | | | | | | |
| DUP | 9/13 | | | X | | 6 | | | | | | X | X | | | | | | | |
| CB | 9/13 | | | X | | 3 | | | | | | X | X | per Fran T to 8-9/20/95 | | | | | | |
| TB | 9/13 | | | X | | 2 | | | | | | X | | | | | | | | |

CHECK ONE (1) BOX ONLY — CT/DT

- Quarterly Monitoring XXX — 6441
- Site Investigation — 6441
- Soil Closure/Disposal — 6442
- Water Closure/Disposal — 6443
- Soil/Air Rem. or Sys. O & M — 6452
- Water Rem. or Sys. O & M — 6453
- Other

TURN AROUND TIME

- 24 hours
- 48 hours
- 15 days XXX (Normal)
- Other ____

NOTE: Notify Lab as soon as Possible of 24/48 hr. TAT.

CUSTODY SEALED
Date 9/14/95 Time 1722 Initials RS
SEAL INTACT?
Yes ✓ No ____ Initials SM

| Relinquished By (Signature) | Printed Name | Date | Time | Received (Signature) | Printed Name | Date | Time |
|---|---|---|---|---|---|---|---|
| M Toll | Mike Toll | 9-14-95 | 1027 | Phyllis Smart | Phyllis Smart | 9-14-95 | 1027 |
| Phyllis Smart | Phyllis Smart | 9-14-95 | 1720 | PAM GLEENE | PAM GLEENE | 9-15-95 | 10:30 |
| Relinquished By (Signature): | Printed Name: | Date: | Time: | Received (Signature): | Printed Name: | Date: | Time: |

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

VIA: NCS

NATIONAL ENVIRONMENTAL TESTING, INC.

Santa Rosa Division
3636 North Laughlin Road
Suite 110
Santa Rosa, CA 95403-8226
Tel: (707) 526-7200
Fax: (707) 541-2333

Jim Keller
Blaine Tech Services
985 Timothy Dr.
San Jose, CA 95133

Date: 10/13/1995
NET Client Acct. No: 1821
NET Job No: 95.03669
Received: 09/15/1995
Amended: 11/09/95

Client Reference Information

Shell 1784 150th Avenue, San Leandro, CA/950913-T2

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel free to call me at (707) 541-2305.

Submitted by:

Ginger Brunlee
Project Coordinator

Enclosure(s)

NATIONAL ENVIRONMENTAL TESTING, INC.

Santa Rosa Division
3636 North Laughlin Road
Suite 110
Santa Rosa, CA 95403-8226
Tel: (707) 526-7200
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Jim Keller
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Date: 10/13/1995
NET Client Acct. No: 1821
NET Job No: 95.03669
Received: 09/15/1995

Client Reference Information

Shell 1784 150th Avenue, San Leandro, CA/950913-T2

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel free to call me at (707) 541-2305.

Submitted by:

Ginger Brinlee
Project Coordinator

Enclosure(s)

Ref: Shell 1784 150th Avenue, San Leandro, CA/950913-T2

SAMPLE DESCRIPTION: MW1
Date Taken: 09/13/1995
Time Taken:
NET Sample No: 251159

| Parameter | Results | Flags | Reporting Limit | Units | Method | Date Extracted | Date Analyzed | Run Batch No. |
|---|---|---|---|---|---|---|---|---|
| METHOD 5030/8015-M (Shell) | | | | | | | | |
| DILUTION FACTOR* | 100 | | | | | | 09/27/1995 | 3206 |
| Purgeable TPH | 84,000 | | 5,000 | ug/L | 5030/M8015 | | 09/27/1995 | 3206 |
| Carbon Range: C6 to C12 | -- | | | | | | 09/27/1995 | 3206 |
| METHOD 8020 (GC, Liquid) | -- | | | | | | 09/27/1995 | 3206 |
| Benzene | 1900 | | 50 | ug/L | 8020 | | 09/27/1995 | 3206 |
| Toluene | 2600 | | 50 | ug/L | 8020 | | 09/27/1995 | 3206 |
| Ethylbenzene | 3000 | | 50 | ug/L | 8020 | | 09/27/1995 | 3206 |
| Xylenes (Total) | 14,000 | FH | 250 | ug/L | 8020 | | 10/02/1995 | 3226 |
| SURROGATE RESULTS | -- | | | | | | 09/27/1995 | 3206 |
| Bromofluorobenzene (SURR) | 94 | | | % Rec. | 8020 | | 09/27/1995 | 3206 |

FH : Compound quantitated at a 500X dilution factor.

Ref: Shell 1784 150th Avenue, San Leandro, CA/950913-T2

SAMPLE DESCRIPTION: MW1
Date Taken: 09/13/1995
Time Taken:
NET Sample No: 251159

| Parameter | Results | Flags | Reporting Limit | Units | Method | Date Extracted | Date Analyzed | Run Batch No. |
|---|---|---|---|---|---|---|---|---|
| METHOD 8010 (GC,Liquid) | | | | | | | | |
| DILUTION FACTOR* | 1 | | | | | | 09/27/1995 | 892 |
| Bromodichloromethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Bromoform | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Bromomethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Carbon tetrachloride | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Chlorobenzene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Chloroethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 2-Chloroethylvinyl ether | ND | | 1.0 | ug/L | 8010 | | 09/27/1995 | 892 |
| Chloroform | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Chloromethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Dibromochloromethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,2-Dichlorobenzene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,3-Dichlorobenzene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,4-Dichlorobenzene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Dichlorodifluoromethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,1-Dichloroethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,2-Dichloroethane | 12 | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,1-Dichloroethene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| cis-1,2-Dichloroethene | ND | | 0.5 | ug/L | 8010 | | 09/27/1995 | 892 |
| trans-1,2-Dichloroethene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,2-Dichloropropane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| cis-1,3-Dichloropropene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| trans-1,3-Dichloropropene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Methylene chloride | ND | | 10 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Tetrachloroethene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,1,1-Trichloroethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,1,2-Trichloroethane | ND | | 1 | ug/L | 8010 | | 09/27/1995 | 892 |
| Trichloroethene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Trichlorofluoromethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Vinyl chloride | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| SURROGATE RESULTS | -- | | | | | | 09/27/1995 | 892 |
| 1,4-Difluorobenzene (SURR) | 196 | MI | | % Rec. | | | 09/27/1995 | 892 |
| 1,4-Dichlorobutane (SURR) | 85 | | | % Rec. | | | 09/27/1995 | 892 |
| Bromochloromethane (SURR) | N/A | | | % Rec. | | | 09/27/1995 | 892 |

MI : Matrix Interference Suspected.

Ref: Shell 1784 150th Avenue, San Leandro, CA/950913-T2

SAMPLE DESCRIPTION: MW2
Date Taken: 09/13/1995
Time Taken:
NET Sample No: 251160

| Parameter | Results | Flags | Reporting Limit | Units | Method | Date Extracted | Date Analyzed | Run Batch No. |
|---|---|---|---|---|---|---|---|---|
| METHOD 5030/8015-M (Shell) | | | | | | | | |
| DILUTION FACTOR* | 1,000 | | | | | | 10/05/1995 | 3233 |
| Purgeable TPH | 110,000 | | 50,000 | ug/L | 5030/M8015 | | 10/05/1995 | 3233 |
| Carbon Range: C6 to C12 | -- | | | | | | 10/05/1995 | 3233 |
| METHOD 8020 (GC, Liquid) | -- | | | | | | 10/05/1995 | 3233 |
| Benzene | 19,000 | | 500 | ug/L | 8020 | | 10/05/1995 | 3233 |
| Toluene | 19,000 | | 500 | ug/L | 8020 | | 10/05/1995 | 3233 |
| Ethylbenzene | 2,800 | | 500 | ug/L | 8020 | | 10/05/1995 | 3233 |
| Xylenes (Total) | 15,000 | | 500 | ug/L | 8020 | | 10/05/1995 | 3233 |
| SURROGATE RESULTS | -- | | | | | | 10/05/1995 | 3233 |
| Bromofluorobenzene (SURR) | 88 | | | % Rec. | 8020 | | 10/05/1995 | 3233 |

Ref: Shell 1784 150th Avenue, San Leandro, CA/950913-T2

SAMPLE DESCRIPTION: MW2
Date Taken: 09/13/1995
Time Taken:
NET Sample No: 251160

| Parameter | Results | Flags | Reporting Limit | Units | Method | Date Extracted | Date Analyzed | Run Batch No. |
|---|---|---|---|---|---|---|---|---|
| METHOD 8010 (GC,Liquid) | | | | | | | | |
| DILUTION FACTOR* | 1 | | | | | | 09/27/1995 | 892 |
| Bromodichloromethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Bromoform | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Bromomethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Carbon tetrachloride | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Chlorobenzene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Chloroethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 2-Chloroethylvinyl ether | ND | | 1.0 | ug/L | 8010 | | 09/27/1995 | 892 |
| Chloroform | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Chloromethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Dibromochloromethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,2-Dichlorobenzene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,3-Dichlorobenzene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,4-Dichlorobenzene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Dichlorodifluoromethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,1-Dichloroethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,2-Dichloroethane | 7.2 | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,1-Dichloroethene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| cis-1,2-Dichloroethene | ND | | 0.5 | ug/L | 8010 | | 09/27/1995 | 892 |
| trans-1,2-Dichloroethene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,2-Dichloropropane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| cis-1,3-Dichloropropene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| trans-1,3-Dichloropropene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Methylene chloride | ND | | 10 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Tetrachloroethene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,1,1-Trichloroethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,1,2-Trichloroethane | ND | | 1 | ug/L | 8010 | | 09/27/1995 | 892 |
| Trichloroethene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Trichlorofluoromethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Vinyl chloride | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| SURROGATE RESULTS | -- | | | | | | 09/27/1995 | 892 |
| 1,4-Difluorobenzene (SURR) | 172 | MI | | % Rec. | | | 09/27/1995 | 892 |
| 1,4-Dichlorobutane (SURR) | 75 | | | % Rec. | | | 09/27/1995 | 892 |
| Bromochloromethane (SURR) | N/A | | | % Rec. | | | 09/27/1995 | 892 |

MI : Matrix Interference Suspected.

Ref: Shell 1784 150th Avenue, San Leandro, CA/950913-T2

SAMPLE DESCRIPTION: MW3
Date Taken: 09/13/1995
Time Taken:
NET Sample No: 251161

| Parameter | Results | Flags | Reporting Limit | Units | Method | Date Extracted | Date Analyzed | Run Batch No. |
|---|---|---|---|---|---|---|---|---|
| METHOD 5030/8015-M (Shell) | | | | | | | | |
| DILUTION FACTOR* | 10 | | | | | | 10/03/1995 | 3221 |
| Purgeable TPH | 4,100 | | 500 | ug/L | 5030/M8015 | | 10/03/1995 | 3221 |
| Carbon Range: C6 to C12 | -- | | | | | | 10/03/1995 | 3221 |
| METHOD 8020 (GC, Liquid) | -- | | | | | | 10/03/1995 | 3221 |
| Benzene | 58 | | 5 | ug/L | 8020 | | 10/03/1995 | 3221 |
| Toluene | 5.5 | | 5 | ug/L | 8020 | | 10/03/1995 | 3221 |
| Ethylbenzene | 5.5 | | 5 | ug/L | 8020 | | 10/03/1995 | 3221 |
| Xylenes (Total) | ND | | 5 | ug/L | 8020 | | 10/03/1995 | 3221 |
| SURROGATE RESULTS | -- | | | | | | 10/03/1995 | 3221 |
| Bromofluorobenzene (SURR) | 92 | | | % Rec. | 8020 | | 10/03/1995 | 3221 |

Ref: Shell 1784 150th Avenue, San Leandro, CA/950913-T2

SAMPLE DESCRIPTION: MW3
Date Taken: 09/13/1995
Time Taken:
NET Sample No: 251161

| Parameter | Results | Flags | Reporting Limit | Units | Method | Date Extracted | Date Analyzed | Run Batch No. |
|---|---|---|---|---|---|---|---|---|
| METHOD 8010 (GC,Liquid) | | | | | | | | |
| DILUTION FACTOR* | 1 | | | | | | 09/27/1995 | 892 |
| Bromodichloromethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Bromoform | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Bromomethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Carbon tetrachloride | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Chlorobenzene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Chloroethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 2-Chloroethylvinyl ether | ND | | 1.0 | ug/L | 8010 | | 09/27/1995 | 892 |
| Chloroform | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Chloromethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Dibromochloromethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,2-Dichlorobenzene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,3-Dichlorobenzene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,4-Dichlorobenzene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Dichlorodifluoromethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,1-Dichloroethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,2-Dichloroethane | 6.7 | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,1-Dichloroethene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| cis-1,2-Dichloroethene | ND | | 0.5 | ug/L | 8010 | | 09/27/1995 | 892 |
| trans-1,2-Dichloroethene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,2-Dichloropropane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| cis-1,3-Dichloropropene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| trans-1,3-Dichloropropene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Methylene chloride | ND | | 10 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Tetrachloroethene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,1,1-Trichloroethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,1,2-Trichloroethane | ND | | 1 | ug/L | 8010 | | 09/27/1995 | 892 |
| Trichloroethene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Trichlorofluoromethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Vinyl chloride | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| SURROGATE RESULTS | -- | | | | | | 09/27/1995 | 892 |
| 1,4-Difluorobenzene (SURR) | 98 | | | % Rec. | | | 09/27/1995 | 892 |
| 1,4-Dichlorobutane (SURR) | 113 | | | % Rec. | | | 09/27/1995 | 892 |
| Bromochloromethane (SURR) | N/A | | | % Rec. | | | 09/27/1995 | 892 |

Ref: Shell 1784 150th Avenue, San Leandro, CA/950913-T2

SAMPLE DESCRIPTION: MW4
Date Taken: 09/13/1995
Time Taken:
NET Sample No: 251162

| Parameter | Results | Flags | Reporting Limit | Units | Method | Date Extracted | Date Analyzed | Run Batch No. |
|---|---|---|---|---|---|---|---|---|
| METHOD 5030/8015-M (Shell) | | | | | | | | |
| DILUTION FACTOR* | 1 | | | | | | 09/27/1995 | 3205 |
| Purgeable TPH | ND | | 50 | ug/L | 5030/M8015 | | 09/27/1995 | 3205 |
| Carbon Range: C6 to C12 | -- | | | | | | 09/27/1995 | 3205 |
| METHOD 8020 (GC, Liquid) | -- | | | | | | 09/27/1995 | 3205 |
| Benzene | ND | | 0.5 | ug/L | 8020 | | 09/27/1995 | 3205 |
| Toluene | ND | | 0.5 | ug/L | 8020 | | 09/27/1995 | 3205 |
| Ethylbenzene | ND | | 0.5 | ug/L | 8020 | | 09/27/1995 | 3205 |
| Xylenes (Total) | ND | | 0.5 | ug/L | 8020 | | 09/27/1995 | 3205 |
| SURROGATE RESULTS | -- | | | | | | 09/27/1995 | 3205 |
| Bromofluorobenzene (SURR) | 91 | | | % Rec. | 8020 | | 09/27/1995 | 3205 |

Ref: Shell 1784 150th Avenue, San Leandro, CA/950913-T2

SAMPLE DESCRIPTION: MW4
Date Taken: 09/13/1995
Time Taken:
NET Sample No: 251162

| Parameter | Results | Flags | Reporting Limit | Units | Method | Date Extracted | Date Analyzed | Run Batch No. |
|---|---|---|---|---|---|---|---|---|
| METHOD 8010 (GC,Liquid) | | | | | | | | |
| DILUTION FACTOR* | 1 | | | | | | 09/27/1995 | 892 |
| Bromodichloromethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Bromoform | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Bromomethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Carbon tetrachloride | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Chlorobenzene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Chloroethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 2-Chloroethylvinyl ether | ND | | 1.0 | ug/L | 8010 | | 09/27/1995 | 892 |
| Chloroform | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Chloromethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Dibromochloromethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,2-Dichlorobenzene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,3-Dichlorobenzene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,4-Dichlorobenzene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Dichlorodifluoromethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,1-Dichloroethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,2-Dichloroethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,1-Dichloroethene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| cis-1,2-Dichloroethene | ND | | 0.5 | ug/L | 8010 | | 09/27/1995 | 892 |
| trans-1,2-Dichloroethene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,2-Dichloropropane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| cis-1,3-Dichloropropene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| trans-1,3-Dichloropropene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Methylene chloride | ND | | 10 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Tetrachloroethene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,1,1-Trichloroethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,1,2-Trichloroethane | ND | | 1 | ug/L | 8010 | | 09/27/1995 | 892 |
| Trichloroethene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Trichlorofluoromethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Vinyl chloride | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| SURROGATE RESULTS | -- | | | | | | 09/27/1995 | 892 |
| 1,4-Difluorobenzene (SURR) | 99 | | | % Rec. | | | 09/27/1995 | 892 |
| 1,4-Dichlorobutane (SURR) | 112 | | | % Rec. | | | 09/27/1995 | 892 |
| Bromochloromethane (SURR) | N/A | | | % Rec. | | | 09/27/1995 | 892 |

Ref: Shell 1784 150th Avenue, San Leandro, CA/950913-T2

SAMPLE DESCRIPTION: DUP
Date Taken: 09/13/1995
Time Taken:
NET Sample No: 251163/Amended

| Parameter | Results | Flags | Reporting Limit | Units | Method | Date Extracted | Date Analyzed | Run Batch No. |
|---|---|---|---|---|---|---|---|---|
| METHOD 5030/8015-M (Shell) | | | | | | | | |
| DILUTION FACTOR* | 100 | | | | | | 10/03/1995 | 3221 |
| Purgeable TPH | 120,000 | | 5,000 | ug/L | 5030/M8015 | | 10/03/1995 | 3221 |
| Carbon Range: C6 to C12 | -- | | | | | | 10/03/1995 | 3221 |
| METHOD 8020 (GC, Liquid) | -- | | | | | | 10/03/1995 | 3221 |
| Benzene | 20000 | FI | 500 | ug/L | 8020 | | 10/05/1995 | 3233 |
| Toluene | 20000 | FI | 500 | ug/L | 8020 | | 10/05/1995 | 3233 |
| Ethylbenzene | 2,900 | | 50 | ug/L | 8020 | | 10/03/1995 | 3221 |
| Xylenes (Total) | 15,000 | | 50 | ug/L | 8020 | | 10/03/1995 | 3221 |
| SURROGATE RESULTS | -- | | | | | | 10/03/1995 | 3221 |
| Bromofluorobenzene (SURR) | 99 | | | % Rec. | 8020 | | 10/03/1995 | 3221 |

FI : Compound quantitated at a 1000X dilution factor.

Ref: Shell 1784 150th Avenue, San Leandro, CA/950913-T2

SAMPLE DESCRIPTION: DUP
Date Taken: 09/13/1995
Time Taken:
NET Sample No: 251163

| Parameter | Results | Flags | Reporting Limit | Units | Method | Date Extracted | Date Analyzed | Run Batch No. |
|---|---|---|---|---|---|---|---|---|
| METHOD 8010 (GC,Liquid) | | | | | | | | |
| DILUTION FACTOR* | 1 | | | | | | 09/27/1995 | 892 |
| Bromodichloromethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Bromoform | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Bromomethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Carbon tetrachloride | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Chlorobenzene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Chloroethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 2-Chloroethylvinyl ether | ND | | 1.0 | ug/L | 8010 | | 09/27/1995 | 892 |
| Chloroform | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Chloromethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Dibromochloromethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,2-Dichlorobenzene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,3-Dichlorobenzene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,4-Dichlorobenzene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Dichlorodifluoromethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,1-Dichloroethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,2-Dichloroethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,1-Dichloroethene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| cis-1,2-Dichloroethene | ND | | 0.5 | ug/L | 8010 | | 09/27/1995 | 892 |
| trans-1,2-Dichloroethene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,2-Dichloropropane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| cis-1,3-Dichloropropene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| trans-1,3-Dichloropropene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Methylene chloride | ND | | 10 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Tetrachloroethene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,1,1-Trichloroethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| 1,1,2-Trichloroethane | ND | | 1 | ug/L | 8010 | | 09/27/1995 | 892 |
| Trichloroethene | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Trichlorofluoromethane | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| Vinyl chloride | ND | | 0.4 | ug/L | 8010 | | 09/27/1995 | 892 |
| SURROGATE RESULTS | -- | | | | | | 09/27/1995 | 892 |
| 1,4-Difluorobenzene (SURR) | 85 | | | % Rec. | | | 09/27/1995 | 892 |
| 1,4-Dichlorobutane (SURR) | 79 | | | % Rec. | | | 09/27/1995 | 892 |
| Bromochloromethane (SURR) | N/A | | | % Rec. | | | 09/27/1995 | 892 |

Ref: Shell 1784 150th Avenue, San Leandro, CA/950913-T2

SAMPLE DESCRIPTION: EB
Date Taken: 09/13/1995
Time Taken:
NET Sample No: 251164

| Parameter | Results | Flags | Reporting Limit | Units | Method | Date Extracted | Date Analyzed | Run Batch No. |
|---|---|---|---|---|---|---|---|---|
| METHOD 5030/8015-M (Shell) | | | | | | | | |
| DILUTION FACTOR* | 1 | | | | | | 09/27/1995 | 3205 |
| Purgeable TPH | ND | | 50 | ug/L | 5030/M8015 | | 09/27/1995 | 3205 |
| Carbon Range: C6 to C12 | -- | | | | | | 09/27/1995 | 3205 |
| METHOD 8020 (GC, Liquid) | -- | | | | | | 09/27/1995 | 3205 |
| Benzene | ND | | 0.5 | ug/L | 8020 | | 09/27/1995 | 3205 |
| Toluene | ND | | 0.5 | ug/L | 8020 | | 09/27/1995 | 3205 |
| Ethylbenzene | ND | | 0.5 | ug/L | 8020 | | 09/27/1995 | 3205 |
| Xylenes (Total) | ND | | 0.5 | ug/L | 8020 | | 09/27/1995 | 3205 |
| SURROGATE RESULTS | -- | | | | | | 09/27/1995 | 3205 |
| Bromofluorobenzene (SURR) | 81 | | | % Rec. | 8020 | | 09/27/1995 | 3205 |

Ref: Shell 1784 150th Avenue, San Leandro, CA/950913-T2

SAMPLE DESCRIPTION: TB
Date Taken: 09/13/1995
Time Taken:
NET Sample No: 251165

| Parameter | Results | Flags | Reporting Limit | Units | Method | Date Extracted | Date Analyzed | Run Batch No. |
|---|---|---|---|---|---|---|---|---|
| METHOD 5030/8015-M (Shell) | | | | | | | | |
| DILUTION FACTOR* | 1 | | | | | | 09/27/1995 | 3205 |
| Purgeable TPH | ND | | 50 | ug/L | 5030/M8015 | | 09/27/1995 | 3205 |
| Carbon Range: C6 to C12 | -- | | | | | | 09/27/1995 | 3205 |
| METHOD 8020 (GC, Liquid) | -- | | | | | | 09/27/1995 | 3205 |
| Benzene | ND | | 0.5 | ug/L | 8020 | | 09/27/1995 | 3205 |
| Toluene | ND | | 0.5 | ug/L | 8020 | | 09/27/1995 | 3205 |
| Ethylbenzene | ND | | 0.5 | ug/L | 8020 | | 09/27/1995 | 3205 |
| Xylenes (Total) | ND | | 0.5 | ug/L | 8020 | | 09/27/1995 | 3205 |
| SURROGATE RESULTS | -- | | | | | | 09/27/1995 | 3205 |
| Bromofluorobenzene (SURR) | 80 | | | % Rec. | 8020 | | 09/27/1995 | 3205 |

Ref: Shell 1784 150th Avenue, San Leandro, CA/950913-T2

# CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

| Parameter | CCV Standard % Recovery | CCV Standard Amount Found | CCV Standard Amount Expected | Units | Date Analyzed | Analyst Initials | Run Batch Number |
|---|---|---|---|---|---|---|---|
| METHOD 5030/8015-M (Shell) | | | | | | | |
| Purgeable TPH | 100.0 | 0.50 | 0.50 | mg/L | 09/27/1995 | aal | 3205 |
| Benzene | 100.4 | 5.02 | 5.00 | ug/L | 09/27/1995 | aal | 3205 |
| Toluene | 107.6 | 5.38 | 5.00 | ug/L | 09/27/1995 | aal | 3205 |
| Ethylbenzene | 104.0 | 5.20 | 5.00 | ug/L | 09/27/1995 | aal | 3205 |
| Xylenes (Total) | 108.0 | 16.2 | 15.0 | ug/L | 09/27/1995 | aal | 3205 |
| Bromofluorobenzene (SURR) | 92.0 | 92 | 100 | % Rec. | 09/27/1995 | aal | 3205 |
| METHOD 5030/8015-M (Shell) | | | | | | | |
| Purgeable TPH | 106.0 | 0.53 | 0.50 | mg/L | 09/27/1995 | | 3206 |
| Benzene | 99.0 | 4.95 | 5.00 | ug/L | 09/27/1995 | | 3206 |
| Toluene | 95.8 | 4.79 | 5.00 | ug/L | 09/27/1995 | | 3206 |
| Ethylbenzene | 98.8 | 4.94 | 5.00 | ug/L | 09/27/1995 | | 3206 |
| Xylenes (Total) | 98.0 | 14.7 | 15.0 | ug/L | 09/27/1995 | | 3206 |
| Bromofluorobenzene (SURR) | 82.0 | 82 | 100 | % Rec. | o9/27/1995 | aal | 3205 |
| METHOD 5030/8015-M (Shell) | | | | | | | |
| Purgeable TPH | 96.0 | 0.48 | 0.50 | mg/L | 10/03/1995 | aal | 3221 |
| Benzene | 95.8 | 4.79 | 5.00 | ug/L | 10/03/1995 | aal | 3221 |
| Toluene | 97.8 | 4.89 | 5.00 | ug/L | 10/03/1995 | aal | 3221 |
| Ethylbenzene | 101.2 | 5.06 | 5.00 | ug/L | 10/03/1995 | aal | 3221 |
| Xylenes (Total) | 102.7 | 15.4 | 15.0 | ug/L | 10/03/1995 | aal | 3221 |
| Bromofluorobenzene (SURR) | 100.0 | 100 | 100 | % Rec. | 10/03/1995 | aal | 3221 |
| METHOD 5030/8015-M (Shell) | | | | | | | |
| Purgeable TPH | 98.0 | 0.49 | 0.50 | mg/L | 10/02/1995 | dld | 3226 |
| Benzene | 111.0 | 5.55 | 5.00 | ug/L | 10/02/1995 | dld | 3226 |
| Toluene | 113.6 | 5.68 | 5.00 | ug/L | 10/02/1995 | dld | 3226 |
| Ethylbenzene | 111.6 | 5.58 | 5.00 | ug/L | 10/02/1995 | dld | 3226 |
| Xylenes (Total) | 114.7 | 17.2 | 15.0 | ug/L | 10/02/1995 | dld | 3226 |
| Bromofluorobenzene (SURR) | 97.0 | 97 | 100 | % Rec. | 10/02/1995 | dld | 3226 |
| METHOD 5030/8015-M (Shell) | | | | | | | |
| Purgeable TPH | 86.0 | 0.43 | 0.50 | mg/L | 10/05/1995 | aal | 3233 |
| Benzene | 94.8 | 4.74 | 5.00 | ug/L | 10/05/1995 | aal | 3233 |
| Toluene | 89.0 | 4.45 | 5.00 | ug/L | 10/05/1995 | aal | 3233 |
| Ethylbenzene | 90.0 | 4.50 | 5.00 | ug/L | 10/05/1995 | aal | 3233 |
| Xylenes (Total) | 88.0 | 13.2 | 15.0 | ug/L | 10/05/1995 | aal | 3233 |
| Bromofluorobenzene (SURR) | 87.0 | 87 | 100 | % Rec. | 10/05/1995 | aal | 3233 |

Ref: Shell 1784 150th Avenue, San Leandro, CA/950913-T2

# CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

| Parameter | CCV Standard % Recovery | CCV Standard Amount Found | CCV Standard Amount Expected | Units | Date Analyzed | Analyst Initials | Run Batch Number |
|---|---|---|---|---|---|---|---|
| METHOD 8010 (GC,Liquid) | | | | | | | |
| Bromodichloromethane | 116.5 | 23.29 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| Bromoform | 119.0 | 23.80 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| Bromomethane | 131.5 | 26.29 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| Carbon tetrachloride | 125.5 | 25.09 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| Chlorobenzene | 117.8 | 23.55 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| Chloroethane | 80.0 | 16.00 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| 2-Chloroethylvinyl ether | 109.0 | 21.80 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| Chloroform | 113.9 | 22.78 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| Chloromethane | 70.7 | 14.13 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| Dibromochloromethane | 111.9 | 22.37 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| 1,2-Dichlorobenzene | 107.9 | 21.57 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| 1,3-Dichlorobenzene | 112.9 | 22.57 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| 1,4-Dichlorobenzene | 108.4 | 21.67 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| Dichlorodifluoromethane | 87.7 | 17.54 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| 1,1-Dichloroethane | 102.7 | 20.53 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| 1,2-Dichloroethane | 111.7 | 22.34 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| 1,1-Dichloroethene | 97.6 | 19.51 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| cis-1,2-Dichloroethene | 114.2 | 22.84 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| trans-1,2-Dichloroethene | 62.9 | 12.57 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| 1,2-Dichloropropane | 112.2 | 22.43 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| cis-1,3-Dichloropropene | 117.9 | 23.57 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| trans-1,3-Dichloropropene | 116.7 | 23.34 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| Methylene chloride | 51.0 | 10.19 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| 1,1,2,2-Tetrachloroethane | 101.5 | 20.30 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| Tetrachloroethene | 113.3 | 22.66 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| 1,1,1-Trichloroethane | 113.7 | 22.74 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| 1,1,2-Trichloroethane | 108.0 | 21.59 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| Trichloroethene | 112.8 | 22.56 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| Trichlorofluoromethane | 100.0 | 19.99 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| Vinyl chloride | 84.8 | 16.95 | 20.0 | ug/L | 09/27/1995 | tdn | 892 |
| 1,4-Difluorobenzene (SURR) | 111.0 | 111 | 100 | % Rec. | 09/27/1995 | tdn | 892 |
| 1,4-Dichlorobutane (SURR) | 107.0 | 107 | 100 | % Rec. | 09/27/1995 | tdn | 892 |
| Bromochloromethane (SURR) | | N/A | 100 | % Rec. | 09/27/1995 | tdn | 892 |

Ref: Shell 1784 150th Avenue, San Leandro, CA/950913-T2

# METHOD BLANK REPORT

| Parameter | Method Blank Amount Found | Reporting Limit | Units | Date Analyzed | Analyst Initials | Run Batch Number |
|---|---|---|---|---|---|---|
| METHOD 5030/8015-M (Shell) | | | | | | |
| Purgeable TPH | ND | 0.05 | mg/L | 09/27/1995 | aal | 3205 |
| Benzene | ND | 0.5 | ug/L | 09/27/1995 | aal | 3205 |
| Toluene | ND | 0.5 | ug/L | 09/27/1995 | aal | 3205 |
| Ethylbenzene | ND | 0.5 | ug/L | 09/27/1995 | aal | 3205 |
| Xylenes (Total) | ND | 0.5 | ug/L | 09/27/1995 | aal | 3205 |
| Bromofluorobenzene (SURR) | 89 | | % Rec. | 09/27/1995 | aal | 3205 |
| METHOD 5030/8015-M (Shell) | | | | | | |
| Purgeable TPH | ND | 0.05 | mg/L | 09/27/1995 | | 3206 |
| Benzene | ND | 0.5 | ug/L | 09/27/1995 | | 3206 |
| Toluene | ND | 0.5 | ug/L | 09/27/1995 | | 3206 |
| Ethylbenzene | ND | 0.5 | ug/L | 09/27/1995 | | 3206 |
| Xylenes (Total) | ND | 0.5 | ug/L | 09/27/1995 | | 3206 |
| Bromofluorobenzene (SURR) | 88 | | % Rec. | 09/27/1995 | | 3206 |
| METHOD 5030/8015-M (Shell) | | | | | | |
| Purgeable TPH | ND | 0.05 | mg/L | 10/03/1995 | aal | 3221 |
| Benzene | ND | 0.5 | ug/L | 10/03/1995 | aal | 3221 |
| Toluene | ND | 0.5 | ug/L | 10/03/1995 | aal | 3221 |
| Ethylbenzene | ND | 0.5 | ug/L | 10/03/1995 | aal | 3221 |
| Xylenes (Total) | ND | 0.5 | ug/L | 10/03/1995 | aal | 3221 |
| Bromofluorobenzene (SURR) | 97 | | % Rec. | 10/03/1995 | aal | 3221 |
| METHOD 5030/8015-M (Shell) | | | | | | |
| Purgeable TPH | ND | 0.05 | mg/L | 10/02/1995 | dld | 3226 |
| Benzene | ND | 0.5 | ug/L | 10/02/1995 | dld | 3226 |
| Toluene | ND | 0.5 | ug/L | 10/02/1995 | dld | 3226 |
| Ethylbenzene | ND | 0.5 | ug/L | 10/02/1995 | dld | 3226 |
| Xylenes (Total) | ND | 0.5 | ug/L | 10/02/1995 | dld | 3226 |
| Bromofluorobenzene (SURR) | 85 | | % Rec. | 10/02/1995 | dld | 3226 |
| METHOD 5030/8015-M (Shell) | | | | | | |
| Purgeable TPH | ND | 0.05 | mg/L | 10/05/1995 | aal | 3233 |
| Benzene | ND | 0.5 | ug/L | 10/05/1995 | aal | 3233 |
| Toluene | ND | 0.5 | ug/L | 10/05/1995 | aal | 3233 |
| Ethylbenzene | ND | 0.5 | ug/L | 10/05/1995 | aal | 3233 |
| Xylenes (Total) | ND | 0.5 | ug/L | 10/05/1995 | aal | 3233 |
| Bromofluorobenzene (SURR) | 86 | | % Rec. | 10/05/1995 | aal | 3233 |

Ref: Shell 1784 150th Avenue, San Leandro, CA/950913-T2

# METHOD BLANK REPORT

| Parameter | Method Blank Amount Found | Reporting Limit | Units | Date Analyzed | Analyst Initials | Run Batch Number |
|---|---|---|---|---|---|---|
| METHOD 8010 (GC,Liquid) | | | | | | |
| Bromodichloromethane | ND | 0.4 | ug/L | 09/27/1995 | tdn | 892 |
| Bromoform | ND | 0.4 | ug/L | 09/27/1995 | tdn | 892 |
| Bromomethane | ND | 0.4 | ug/L | 09/27/1995 | tdn | 892 |
| Carbon tetrachloride | ND | 0.4 | ug/L | 09/27/1995 | tdn | 892 |
| Chlorobenzene | ND | 0.4 | ug/L | 09/27/1995 | tdn | 892 |
| Chloroethane | ND | 0.4 | ug/L | 09/27/1995 | tdn | 892 |
| 2-Chloroethylvinyl ether | ND | 1.0 | ug/L | 09/27/1995 | tdn | 892 |
| Chloroform | ND | 0.4 | ug/L | 09/27/1995 | tdn | 892 |
| Chloromethane | ND | 0.4 | ug/L | 09/27/1995 | tdn | 892 |
| Dibromochloromethane | ND | 0.4 | ug/L | 09/27/1995 | tdn | 892 |
| 1,2-Dichlorobenzene | ND | 0.4 | ug/L | 09/27/1995 | tdn | 892 |
| 1,3-Dichlorobenzene | ND | 0.4 | ug/L | 09/27/1995 | tdn | 892 |
| 1,4-Dichlorobenzene | ND | 0.4 | ug/L | 09/27/1995 | tdn | 892 |
| Dichlorodifluoromethane | ND | 0.4 | ug/L | 09/27/1995 | tdn | 892 |
| 1,1-Dichloroethane | ND | 0.4 | ug/L | 09/27/1995 | tdn | 892 |
| 1,2-Dichloroethane | ND | 0.4 | ug/L | 09/27/1995 | tdn | 892 |
| 1,1-Dichloroethene | ND | 0.4 | ug/L | 09/27/1995 | tdn | 892 |
| cis-1,2-Dichloroethene | ND | 0.4 | ug/L | 09/27/1995 | tdn | 892 |
| trans-1,2-Dichloroethene | ND | 0.4 | ug/L | 09/27/1995 | tdn | 892 |
| 1,2-Dichloropropane | ND | 0.4 | ug/L | 09/27/1995 | tdn | 892 |
| cis-1,3-Dichloropropene | ND | 0.4 | ug/L | 09/27/1995 | tdn | 892 |
| trans-1,3-Dichloropropene | ND | 0.4 | ug/L | 09/27/1995 | tdn | 892 |
| Methylene chloride | ND | 10 | ug/L | 09/27/1995 | tdn | 892 |
| 1,1,2,2-Tetrachloroethane | ND | 0.4 | ug/L | 09/27/1995 | tdn | 892 |
| Tetrachloroethene | ND | 0.4 | ug/L | 09/27/1995 | tdn | 892 |
| 1,1,1-Trichloroethane | ND | 0.4 | ug/L | 09/27/1995 | tdn | 892 |
| 1,1,2-Trichloroethane | ND | 0.4 | ug/L | 09/27/1995 | tdn | 892 |
| Trichloroethene | ND | 0.4 | ug/L | 09/27/1995 | tdn | 892 |
| Trichlorofluoromethane | ND | 0.4 | ug/L | 09/27/1995 | tdn | 892 |
| Vinyl chloride | ND | 0.4 | ug/L | 09/27/1995 | tdn | 892 |
| 1,4-Difluorobenzene (SURR) | 107 | | % Rec. | 09/27/1995 | tdn | 892 |
| 1,4-Dichlorobutane (SURR) | 109 | | % Rec. | 09/27/1995 | tdn | 892 |
| Bromochloromethane (SURR) | N/A | | % Rec. | 09/27/1995 | tdn | 892 |

Ref: Shell 1784 150th Avenue, San Leandro, CA/950913-T2

# MATRIX SPIKE / MATRIX SPIKE DUPLICATE

| Parameter | Matrix Spike % Rec. | Matrix Spike Dup % Rec. | RPD | Spike Amount | Sample Conc. | Matrix Spike Conc. | Matrix Spike Dup. Conc. | Units | Date Analyzed | Run Batch | Sample Spiked |
|---|---|---|---|---|---|---|---|---|---|---|---|
| METHOD 5030/8015-M (Shell) | | | | | | | | | | | 251152 |
| Purgeable TPH | 108.0 | 110.0 | 1.8 | 0.50 | ND | 0.54 | 0.55 | mg/L | 09/27/1995 | 3205 | 251152 |
| Benzene | 98.8 | 99.5 | 0.7 | 7.78 | ND | 7.69 | 7.74 | ug/L | 09/27/1995 | 3205 | 251152 |
| Toluene | 102.1 | 103.1 | 1.0 | 28.6 | ND | 29.2 | 29.5 | ug/L | 09/27/1995 | 3205 | 251152 |
| METHOD 5030/8015-M (Shell) | | | | | | | | | | | 251250 |
| Purgeable TPH | 96.0 | 98.0 | 2.1 | 0.50 | ND | 0.48 | 0.49 | mg/L | 09/27/1995 | 3206 | 251250 |
| Benzene | 95.9 | 97.3 | 1.4 | 7.30 | ND | 7.00 | 7.10 | ug/L | 09/27/1995 | 3206 | 251250 |
| Toluene | 94.7 | 97.3 | 2.7 | 26.2 | ND | 24.8 | 25.5 | ug/L | 09/27/1995 | 3206 | 251250 |
| METHOD 5030/8015-M (Shell) | | | | | | | | | | | 251766 |
| Purgeable TPH | 96.0 | 96.0 | 0.0 | 0.5 | ND | 0.48 | 0.48 | mg/L | 10/03/1995 | 3221 | 251766 |
| Benzene | 109.9 | 99.6 | 9.7 | 4.53 | ND | 4.98 | 4.51 | ug/L | 10/03/1995 | 3221 | 251766 |
| Toluene | 109.7 | 105.5 | 3.9 | 23.7 | ND | 26.0 | 25.0 | ug/L | 10/03/1995 | 3221 | 251766 |
| METHOD 5030/8015-M (Shell) | | | | | | | | | | | 252046 |
| Purgeable TPH | 82.0 | 92.0 | 11.5 | 0.50 | ND | 0.41 | 0.46 | mg/L | 10/02/1995 | 3226 | 252046 |
| Benzene | 86.9 | 93.4 | 7.2 | 7.89 | ND | 6.86 | 7.37 | ug/L | 10/02/1995 | 3226 | 252046 |
| Toluene | 90.1 | 98.6 | 9.0 | 28.2 | ND | 25.4 | 27.8 | ug/L | 10/02/1995 | 3226 | 252046 |
| METHOD 5030/8015-M (Shell) | | | | | | | | | | | 252076 |
| Purgeable TPH | 76.0 | 72.0 | 5.4 | 0.5 | 0.69 | 1.07 | 1.05 | mg/L | 10/05/1995 | 3233 | 252076 |
| Benzene | 105.0 | 113.4 | 7.7 | 7.14 | 10 | 17.5 | 18.1 | ug/L | 10/05/1995 | 3233 | 252076 |
| Toluene | 95.6 | 96.9 | 1.4 | 22.6 | 4.5 | 26.1 | 26.4 | ug/L | 10/05/1995 | 3233 | 252076 |

Ref: Shell 1784 150th Avenue, San Leandro, CA/950913-T2

# MATRIX SPIKE / MATRIX SPIKE DUPLICATE

| Parameter | Matrix Spike % Rec. | Matrix Spike Dup % Rec. | RPD | Spike Amount | Sample Conc. | Matrix Spike Conc. | Matrix Spike Dup. Conc. | Units | Date Analyzed | Run Batch | Sample Spiked |
|---|---|---|---|---|---|---|---|---|---|---|---|
| METHOD 8010 (GC,Liquid) | | | | | | | | | | | 251172 |
| Chlorobenzene | 109.9 | 105.9 | 3.7 | 20.0 | ND | 21.97 | 21.18 | ug/L | 09/27/1995 | 892 | 251172 |
| 1,1-Dichloroethene | 84.8 | 84.3 | 0.6 | 20.0 | 5.5 | 22.47 | 22.37 | ug/L | 09/27/1995 | 892 | 251172 |
| Trichloroethene | | | 0.40 | 20.0 | 150 | NI2 | NI2 | ug/L | 09/27/1995 | 892 | 251172 |

NET®

## KEY TO ABBREVIATIONS and METHOD REFERENCES

| | | |
|---|---|---|
| < | : | Less than; When appearing in results column indicates analyte not detected at the value following. This datum supercedes the listed Reporting Limit. |
| * | : | Reporting Limits are a function of the dilution factor for any given sample. To obtain the actual reporting limits for this sample, multiply the stated Reporting Limits by the dilution factor (but do not multiply reported values). |
| ICVS | : | Initial Calibration Verification Standard (External Standard). |
| mean | : | Average; sum of measurements divided by number of measurements. |
| mg/Kg (ppm) | : | Concentration in units of milligrams of analyte per kilogram of sample, wet-weight basis (parts per million). |
| mg/L | : | Concentration in units of milligrams of analyte per liter of sample. |
| mL/L/hr | : | Milliliters per liter per hour. |
| MPN/100 mL | : | Most probable number of bacteria per one hundred milliliters of sample. |
| N/A | : | Not applicable. |
| NA | : | Not analyzed. |
| ND | : | Not detected; the analyte concentration is less than applicable listed reporting limit. |
| NTU | : | Nephelometric turbidity units. |
| RPD | : | Relative percent difference, 100 [Value 1 - Value 2]/mean value. |
| SNA | : | Standard not available. |
| ug/Kg (ppb) | : | Concentration in units of micrograms of analyte per kilogram of sample, wet-weight basis (parts per billion). |
| ug/L | : | Concentration in units of micrograms of analyte per liter of sample. |
| umhos/cm | : | Micromhos per centimeter. |

Method References

Methods 100 through 493: see "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, rev. 1983.

Methods 601 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, rev. 1988.

Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986.

SM: see "Standard Methods for the Examination of Water & Wastewater, 17th Edition, APHA, 1989.

COOLER RECEIPT FORM

Project: 950913-T2 Log No: 9/15/95 8498

Cooler received on: 9/15/95 and checked on 9/15/95 by

(signature)

Were custody papers present?.....~~YES~~ NO

Were custody papers properly filled out?.....~~YES~~ NO

Were the custody papers signed?.....~~YES~~ NO

Was sufficient ice used?.....YES NO TEMP.: 0°C

Did all bottles arrive in good condition (unbroken)?.....~~YES~~ NO

Did bottle labels match COC?.....~~YES~~ (NO)

Were proper bottles used for analysis indicated?.....~~YES~~ NO

Correct preservatives used?.....YES NO

VOA vials checked for headspace bubbles?.....~~YES~~ NO

Note which voas (if any) had bubbles:*

Three vials only rec. for EB. for GAS, BTEX

| Sample descriptor: | Number of vials: |
|---|---|
| MW-2 | 3 |
| DUP | 1 |
| TB | 2 |

*All VOAs with headspace bubbles have been set aside so they will not be used for analysis.....YES NO

List here all other jobs received in the same cooler:

| Client Job # | NET log # |
|---|---|
| | |

(coolerrec)