PACIFIC
ENVIRONMENTAL
GROUP, INC.

October 20, 1992
Project 305-94.01

Mr. Paul Hayes
Shell Oil Company
P.O. Box 5278
Concord, California 94520

Re: Former Shell Service Station
2724 Castro Valley Boulevard at Lake Chabot Road
Castro Valley, California
WIC No 204-1381-0407

Dear Mr. Hayes:

This letter presents the results of the third quarter 1992 monitoring program for Shell Oil Company (Shell) prepared by Pacific Environmental Group, Inc. (PACIFIC) for the above referenced site (Figures 1 and 2).

**FINDINGS**

Groundwater monitoring wells were gauged and sampled by Emcon Associates (Emcon) at the direction of PACIFIC on August 26, 1992. Groundwater elevation contours for the sampling date are shown on Figure 2. Table 1 presents groundwater elevation data.

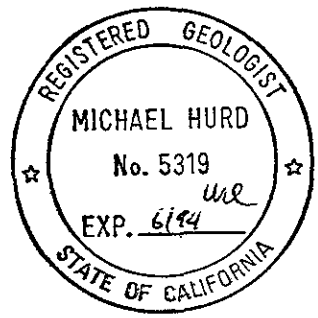
Groundwater analytical data are presented in Tables 2 and 3. Total petroleum hydrocarbons calculated as gasoline (TPH-g), benzene, and total petroleum hydrocarbons calculated as diesel (TPH-d) concentrations for the August 1992 sampling event are shown on Figure 3. Emcon's groundwater sampling report is presented in Attachment A.

2025 Gateway Place, Suite 440, San Jose, California 95110 (408) 441-7500 FAX (408) 441-7539
620 Contra Costa Blvd., Suite 209, Pleasant Hill, California 94523 (510) 825-0855 FAX (510) 825-0882

If you have any questions regarding the contents of this letter, please call.

Sincerely,

**Pacific Environmental Group, Inc.**




Michael Hurd
Project Geologist
RG 5319

Attachments:
Table 1 - Groundwater Elevation Data
Table 2 - Groundwater Analytical Data - Total Petroleum Hydrocarbons (TPH-g and BTEX Compounds)
Table 3 - Groundwater Analytical Data - Total Petroleum Hydrocarbons (TPH-d and Oil and Grease)
Figure 1- Site Location Map
Figure 2- Groundwater Elevation Contour Map
Figure 3- TPH-g/Benzene/TPH-d Concentration Map
Attachment A - Groundwater Sampling Report

cc: Mr. Lawrence Seto, Alameda County Department of Environmental Health
Dr. Mohsen Mehran, Owner Consultant
Mr. Michael K. Johnson, Larson, Burnham and Turner
Mr. Matthew Righetti, Righetti Law Firm
Mr. Richard A. Schoenberger, Esq., Walkup, Shelby, Bastian, Melodia, Kelly, Echeverria and Link
Mr. David Swope, Shell Oil Company

Table 1
**Groundwater Elevation Data**

Former Shell Service Station
2724 Castro Valley Boulevard at Lake Chabot Road
Castro Valley, California

| Well Number | Gauging Date | Well Elevation (feet, MSL) | Depth to Water (TOB) | Groundwater Elevation (feet, MSL) |
|---|---|---|---|---|
| MW-1 | 02/08/90 | 99.78 | 8.39 | 91.39 |
| | 04/20/90 | | 9.21 | 90.57 |
| | 07/30/90 | | 9.21 | 90.57 |
| | 10/25/90 | | 9.44 | 90.34 |
| | 01/15/91 | | 9.11 | 90.67 |
| | 04/19/91 | | 5.58 | 94.20 |
| | 07/16/91 | | 7.58 | 92.20 |
| | 10/08/91 | | 8.25 | 91.53 |
| | 02/04/92 | | 8.52 | 91.26 |
| | 04/06/92 | | 6.75 | 93.03 |
| | 08/26/92 | | 9.89 | 89.89 |
| MW-2 | 02/08/90 | 100.83 | 7.33 | 93.50 |
| | 04/20/90 | | 8.63 | 92.20 |
| | 07/30/90 | | 8.78 | 92.05 |
| | 10/25/90 | | 9.50 | 91.33 |
| | 01/15/91 | | 8.52 | 92.31 |
| | 04/19/91 | | 6.90 | 93.93 |
| | 07/16/91 | | 9.01 | 91.82 |
| | 10/08/91 | | 8.82 | 92.01 |
| | 02/04/92 | | 7.46 | 93.37 |
| | 04/06/92 | | 6.91 | 93.92 |
| | 08/26/92 | | 9.28 | 91.55 |
| MW-3 | 02/08/90 | 101.48 | 8.91 | 92.57 |
| | 04/20/90 | | 10.20 | 91.28 |
| | 07/30/90 | | 10.61 | 90.87 |
| | 10/25/90 | | 10.00 | 91.48 |
| | 01/15/91 | | 9.74 | 91.74 |
| | 04/19/91 | | 7.92 | 93.56 |
| | 07/16/91 | | 9.40 | 92.08 |
| | 10/08/91 | | 9.62 | 91.86 |
| | 02/04/92 | | 8.74 | 92.74 |
| | 04/06/92 | | 7.12 | 94.36 |
| | 08/26/92 | | 9.58 | 91.90 |
| MW-5 | 02/08/90 | 99.90 | 8.80 | 91.10 |
| | 04/20/90 | | 9.35 | 90.55 |
| | 07/30/90 | | 9.49 | 90.41 |
| | 10/25/90 | | 10.12 | 89.78 |
| | 01/15/91 | | 9.26 | 90.64 |
| | 04/19/91 | | 6.52 | 93.38 |
| | 07/16/91 | | 9.12 | 90.78 |
| | 10/08/91 | | 9.22 | 90.68 |
| | 02/04/92 | | 8.13 | 91.77 |
| | 04/06/92 | | 5.53 | 94.37 |
| | 08/26/92 | | 9.25 | 90.65 |

Table 1 (continued)
**Groundwater Elevation Data**

Former Shell Service Station
2724 Castro Valley Boulevard at Lake Chabot Road
Castro Valley, California

| Well Number | Gauging Date | Well Elevation (feet, MSL) | Depth to Water (TOB) | Groundwater Elevation (feet, MSL) |
|---|---|---|---|---|
| OMW-6 | 07/16/91 | 101.48 | 8.60 | 92.88 |
| | 10/08/91 | | 8.82 | 92.66 |
| | 02/04/92 | | 7.47 | 94.01 |
| | 04/06/92 | | 5.80 | 95.68 |
| | 08/26/92 | | 9.18 | 92.30 |
| MW-7 | 07/16/91 | 99.54 | 8.70 | 90.84 |
| | 10/08/91 | | 8.74 | 90.80 |
| | 02/04/92 | | 7.78 | 91.76 |
| | 04/06/92 | | 5.87 | 93.67 |
| | 08/26/92 | | 8.93 | 90.61 |
| OMW-8 | 07/16/91 | 100.18 | 8.40 | 91.78 |
| | 10/08/91 | | 8.74 | 91.44 |
| | 02/04/92 | | 8.22 | 91.96 |
| | 04/06/92 | | 6.82 | 93.36 |
| | 08/26/92 | | 9.15 | 91.03 |

MSL = Mean sea level
TOB = Top of vault box
All elevations are tied into a temporary benchmark elevation of 100.00 feet.

Table 2
**Summary of Groundwater Analytical Data**
Total Petroleum Hydrocarbons
(TPH-g and BTEX Compounds)

Former Shell Service Station
2724 Castro Valley Boulevard at Lake Chabot Road
Castro Valley, California

| Well Number | Date Sampled | TPH-g (ppb) | Benzene (ppb) | Toluene (ppb) | Ethylbenzene (ppb) | Xylenes (ppb) |
|---|---|---|---|---|---|---|
| MW-1 | 02/09/90 | <1,000 | 0.58 | 0.63 | <0.5 | <0.5 |
| | 04/20/90 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 07/31/90 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 10/25/90 | 100 | <0.5 | <0.5 | <0.5 | <0.6 |
| | 01/15/91 | 60 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 01/15/91 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 04/19/91 | <50 | 7.7 | <0.5 | <0.5 | <0.5 |
| | 04/19/91 | <50 | 7.4 | <0.5 | <0.5 | <0.5 |
| | 07/16/91 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 10/08/91 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 02/04/92 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 04/06/92 | 50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 08/26/92 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| MW-2 | 02/09/90 | 8,600 | 360 | 410 | 6.5 | 670 |
| | 04/20/90 | 9,100 | 500 | 330 | 110 | 900 |
| | 07/31/90 | 5,300 | 550 | 38 | <0.5 | 280 |
| | 10/25/90 | 4,800 | 490 | 22 | 21 | 156 |
| | 01/15/91 | 5,700 | 320 | 29 | 120 | 530 |
| | 04/19/91 | 3,900 | 100 | 77 | 100 | 93 |
| | 07/16/91 | 1,800 | 100 | 5.8 | 41 | 31 |
| | 07/16/91 | 2,700 | 130 | 7.6 | 62 | 45 |
| | 10/08/91 | 1,000 | 17 | <0.5 | 25 | 25 |
| | 02/04/92 | 1,700 | 190 | 5.8 | 18 | 110 |
| | 04/06/92 | 3,800 | 930 | 50 | 110 | 190 |
| | 05/03/92 | 2,400 | 610 | 8.8 | 90 | <0.5 |
| | 08/26/92 | 520 | 36 | 2.0 | 12 | 7.9 |
| | 08/26/92(D) | 450 | 33 | 1.7 | 11 | 3.4 |
| MW-3 | 02/09/90 | <1,000 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 04/20/90 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 07/31/90 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 10/25/90 | <50 | <0.5 | <0.5 | <0.6 | <0.6 |
| | 01/15/91 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 04/19/91 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 07/16/91 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 10/08/91 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 02/04/92 | <50 | 4 | 2 | 7 | 3.2 |
| | 04/06/92 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 08/26/82 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |

Table 2 (continued)
**Summary of Groundwater Analytical Data**
Total Petroleum Hydrocarbons
(TPH-g and BTEX Compounds)

Former Shell Service Station
2724 Castro Valley Boulevard at Lake Chabot Road
Castro Valley, California

| Well Number | Date Sampled | TPH-g (ppb) | Benzene (ppb) | Toluene (ppb) | Ethylbenzene (ppb) | Xylenes (ppb) |
|---|---|---|---|---|---|---|
| MW-5 | 02/09/90 | <1,000 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 04/20/90 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 07/31/90 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 10/25/90 | <50 | <0.5 | <0.7 | <0.6 | <0.6 |
| | 01/15/91 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 04/19/91 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 07/16/91 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 10/08/91 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 02/04/92 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 04/06/92 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 08/26/92 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| OMW-6 | 07/16/91 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 10/08/91 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 02/04/92 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 04/06/92 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 08/26/92 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| MW-7 | 07/16/91 | 1,300 | 440 | 140 | 6.9 | 160 |
| | 10/08/91 | 520 | 230 | 36 | 26 | 54 |
| | 02/04/92 | 640 | 130 | 51 | 26 | 79 |
| | 04/06/92 | 80 | 32 | 1.7 | 2.3 | 4.4 |
| | 05/13/92 | <50 | 3.1 | 1.7 | 0.9 | 3.8 |
| | 08/26/92 | 63 | 1.0 | <0.5 | 2.6 | <0.5 |
| OMW-8 | 07/16/91 | <50 | <0.5 | 0.8 | <0.5 | <0.5 |
| | 10/08/91 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 02/04/92 | <50 | 0.9 | 1.9 | 0.6 | 3.6 |
| | 04/06/92 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 08/26/92 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |

ppb = Parts per billion
(D) = Duplicate sample

Table 3 (continued)
**Groundwater Analytical Data**

Former Shell Service Station
2724 Castro Valley Boulevard at Lake Chabot Road
Castro Valley, California

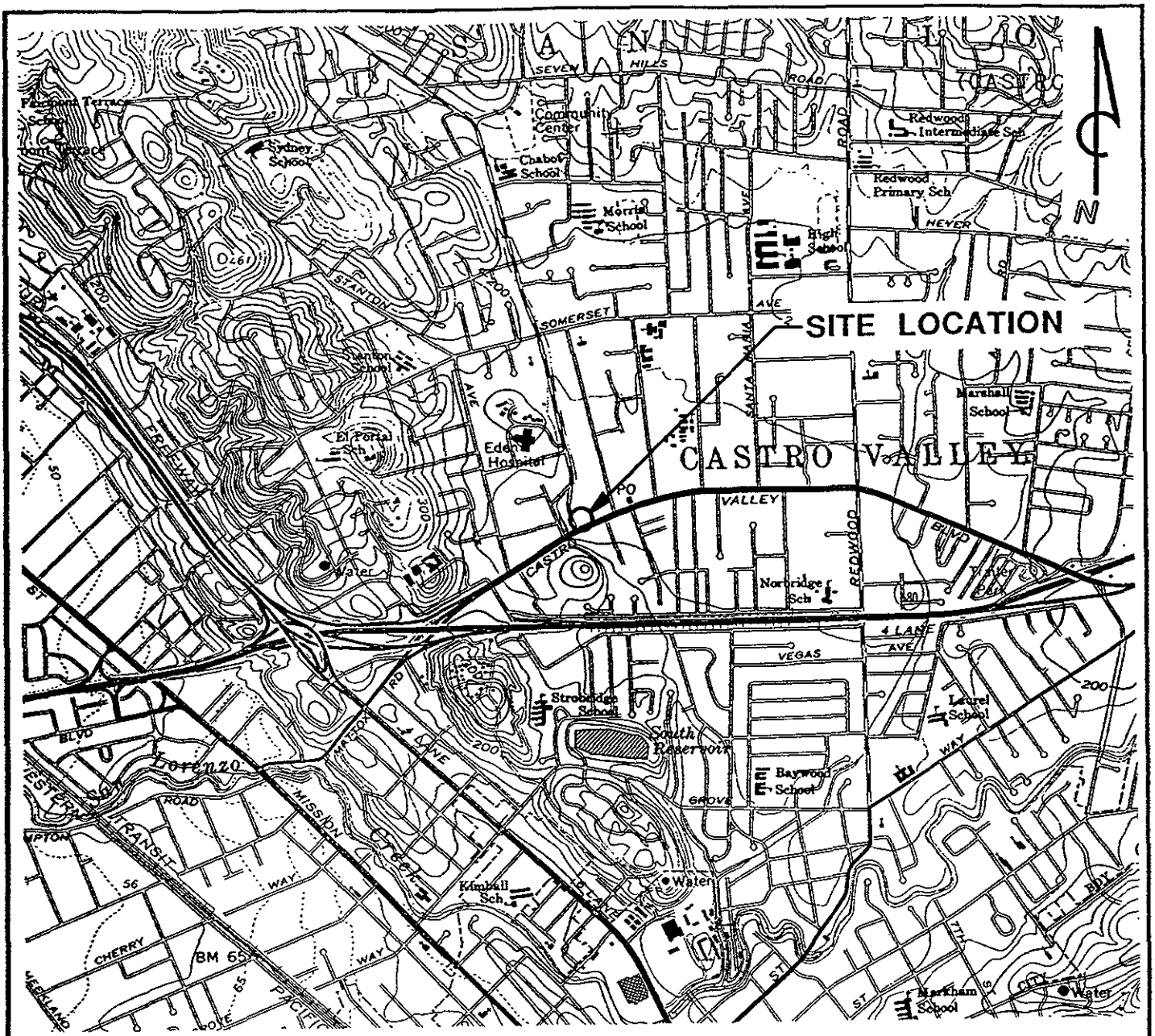
| Well Number | Sample Date | TPH-d (ppb) | Motor Oil (ppb) |
|---|---|---|---|
| MW-5 | 02/09/90 | NA | NA |
| | 04/20/90 | NA | NA |
| | 07/31/90 | NA | NA |
| | 10/25/90 | <50 | NA |
| | 01/15/91 | <50 | NA |
| | 04/19/91 | <50 | NA |
| | 07/16/91 | <50 | <50 |
| | 10/08/91 | <50 | <50 |
| | 02/04/92 | <50 | NA |
| | 04/06/92 | <50 | NA |
| | 08/26/92 | <50 | NA |
| OMW-6 | 07/16/91 | <50 | <50 |
| | 10/08/91 | <50 | <50 |
| | 02/04/92 | <50 | NA |
| | 04/06/92 | <50 | NA |
| | 08/26/92 | <50 | NA |
| MW-7 | 07/16/92 | 270 | 1,100 |
| | 10/08/92 | <50 | <50 |
| | 02/04/92 | 140** | NA |
| | 04/06/92 | <50 | NA |
| | 05/13/92 | <50 | NA |
| | 08/26/92 | <50 | NA |
| OMW-8 | 07/16/91 | <50 | <50 |
| | 10/08/91 | <50 | <50 |
| | 02/04/92 | <50 | NA |
| | 04/06/92 | <50 | NA |
| | 08/26/92 | <50 | NA |

ppb = Parts per billion
NA = Not Analyzed
NS = Not Sampled
* = Did not match motor oil chromatographic pattern. Wax-like pattern present. See individual analytical reports for detection limits.
** = The positive result for TPH-d analysis on this sample appears to be lighter hydrocarbon than diesel.
(D) = Duplicate sample

Table 3
**Groundwater Analytical Data**
Total Petroleum Hydrocarbons
(TPH-d and Motor Oil)

Former Shell Service Station
2724 Castro Valley Boulevard at Lake Chabot Road
Castro Valley, California

| Well Number | Sample Date | TPH-d (ppb) | Motor Oil (ppb) |
|---|---|---|---|
| MW-1 | 02/09/90 | NA | NA |
| | 04/20/90 | NA | NA |
| | 07/31/90 | NA | NA |
| | 10/25/90 | <50 | NA |
| | 01/15/91 | <50 | NA |
| | 01/15/91 | <50 | NA |
| | 04/19/91 | <50 | NA |
| | 04/19/91 | <50 | NA |
| | 07/16/91 | <50 | <50 |
| | 10/08/91 | <50 | <50 |
| | 02/04/92 | <50 | NA |
| | 04/06/92 | <50 | NA |
| | 08/26/92 | 51 | NA |
| MW-2 | 02/09/90 | 4,100 | NA |
| | 04/20/90 | 1,800 | NA |
| | 07/31/90 | 60 | NA |
| | 10/25/90 | 300 | NA |
| | 01/15/91 | 680 | NA |
| | 04/19/91 | 306 | NA |
| | 07/16/91 | 430 | <50 |
| | 07/16/91 | 540 | <50 |
| | 10/08/91 | 110 | <50 |
| | 02/04/92 | 870 | NA |
| | 04/06/92 | 1,000 | NA |
| | 05/13/92 | 570 | NA |
| | 08/26/92 | 63 | NA |
| | 08/26/92(D) | 63 | NA |
| MW-3 | 02/09/90 | NA | NA |
| | 04/20/90 | NA | NA |
| | 07/31/90 | NA | NA |
| | 10/25/90 | <50 | NA |
| | 01/15/91 | <50 | NA |
| | 04/19/91 | <50 | NA |
| | 07/16/91 | <50 | 1,400 |
| | 10/08/91 | <50 | <50 |
| | 02/04/92 | <50 | NA |
| | 04/06/92 | <50 | NA |
| | 08/24/92 | <50 | NA |





QUADRANGLE LOCATION

**REFERENCES:**
USGS 7.5 MIN. TOPOGRAPHIC MAP
TITLED: HAYWARD, CALIFORNIA
DATED: 1959 REVISED: 1980

SCALE

2000 0 2000 FEET

PACIFIC ENVIRONMENTAL GROUP, INC.

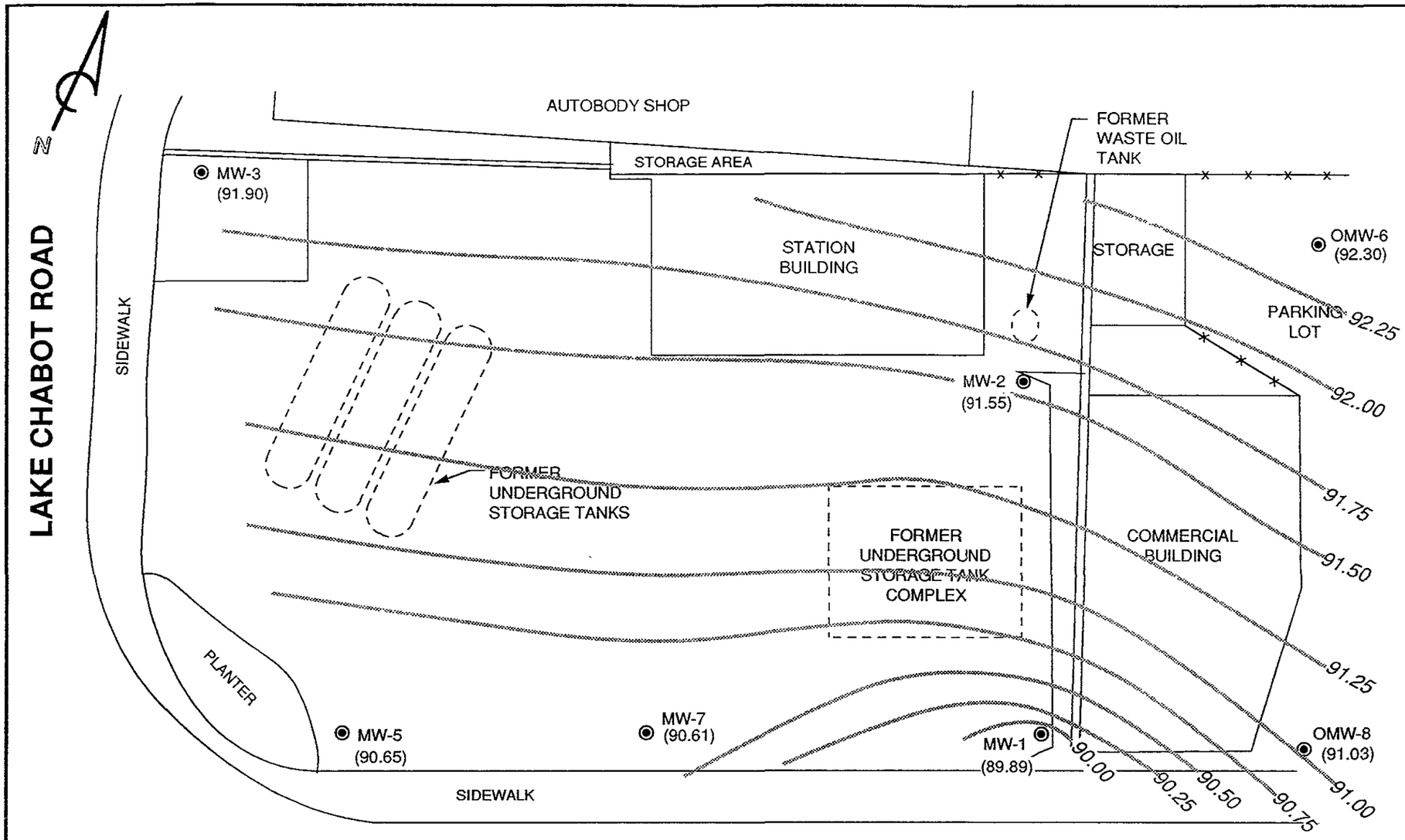
**FORMER SHELL SERVICE STATION**
2724 Castro Valley Boulevard at Lake Chabot Road
Castro Valley, California

SITE LOCATION MAP

FIGURE: 1

PROJECT: 305-94.01

REORDER NO. A54081




**LEGEND**

MW-1 ◉ GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION

(91.55) GROUNDWATER ELEVATION IN FEET, 8-26-92

91.00 GROUNDWATER ELEVATION CONTOUR IN FEET, 8-26-92

APPROXIMATE DIRECTION OF GROUNDWATER FLOW

APPROXIMATE GRADIENT = 0.026

PACIFIC ENVIRONMENTAL GROUP, INC.

SCALE
0 20 40 FEET

**FORMER SHELL SERVICE STATION**
2724 Castro Valley Boulevard at Lake Chabot Road,
Castro Valley, California

**GROUNDWATER ELEVATION CONTOUR MAP**

FIGURE:
**2**
PROJECT:
305-94.01

N

LAKE CHABOT ROAD

SIDEWALK

AUTOBODY SHOP

STORAGE AREA

MW-3
ND/ND/ND

STATION BUILDING

FORMER WASTE OIL TANK

STORAGE

OMW-6
ND/ND/ND

PARKING LOT

MW-2
502/36/63

FORMER UNDERGROUND STORAGE TANKS

FORMER UNDERGROUND STORAGE TANK COMPLEX

COMMERCIAL BUILDING

PLANTER

MW-5
ND/ND/ND

MW-7
63/1.0/ND

MW-1
ND/ND/51

OMW-8
ND/ND/ND

SIDEWALK

CASTRO VALLEY BOULEVARD

**LEGEND**

MW-1 ◉ GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION

502/36/63 TPH-g/BENZENE/TPH-d CONCENTRATION IN GROUNDWATER, IN PARTS PER BILLION 8-26-92

ND NOT DETECTED

APPROXIMATE DIRECTION OF GROUNDWATER FLOW

PACIFIC ENVIRONMENTAL GROUP, INC.

SCALE
0 20 40 FEET

**FORMER SHELL SERVICE STATION**
2724 Castro Valley Boulevard at Lake Chabot Road,
*Castro Valley, California*

TPH-g /BENZENE/TPH-d CONCENTRATION MAP

FIGURE:
3
PROJECT:
305-94.01

# ATTACHMENT A

# GROUNDWATER SAMPLING REPORT

EMCON ASSOCIATES
Consultants in Wastes Management and Environmental Control



September 29, 1992
Project: G67-68.01
WIC#: 204-1381-0407

Ms. Rhonda Barrick
Pacific Environmental Group, Inc.
1601 Civic Center Drive, Suite 202
Santa Clara, California 95050

Re: Third quarter 1992 ground-water monitoring report, Shell Oil Company, 2724 Castro Valley Boulevard, Castro Valley, California

Dear Ms. Barrick:

This letter presents the results of the third quarter 1992 ground-water monitoring event for the Shell Oil Company (Shell) site located at 2724 Castro Valley Boulevard, Castro Valley, California (figure 1). Third quarter monitoring was conducted on August 26, 1992. The site is monitored quarterly.

## GROUND-WATER LEVEL SURVEY

A water-level survey preceded the purging and sampling of the monitoring wells. The wells included in the survey are identified in figure 2 (supplied by Converse Environmental West). During the survey, wells MW-1, MW-2, MW-3, MW-5, OMW-6, MW-7, and OMW-8 were measured for depth to water, floating product thickness, and total depth. Depth to water and floating product thickness were measured to the nearest 0.01 foot with an oil/water interface probe. No floating product was observed in any wells. Total depth was measured to the nearest 0.1 foot. Results of the third quarter water-level survey, and available data from four previous surveys, are summarized in table 1.

## SAMPLING AND ANALYSIS

Ground-water samples were collected from wells MW-1, MW-2, MW-3, MW-5, OMW-6, MW-7, and OMW-8 on August 26, 1992. Prior to sample collection, the wells were purged with polyvinyl chloride bailers. During the purging operation, ground water was monitored for pH, electrical conductivity, and temperature as a function of volume of water removed. Purging continued until these parameters were stable and a minimum of three casing volumes of ground water were removed. Wells MW-2, MW-5, OMW-6, and OMW-8 were evacuated to dryness before the removal of three casing volumes. The wells were allowed to recharge for up to 24 hours. Samples were collected after the wells had recharged to a sufficient level. Field measurements from third quarter monitoring, and



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available measurements from four previous monitoring events, are summarized in table 1. Purge water from the monitoring wells was contained in 55-gallon drums. The drums were identified with Shell-approved labels and secured for on-site storage.

Ground-water samples were collected with a Teflon® bailer, labeled, placed on ice, and transported to Anametrix Inc. for analysis. Shell chain-of-custody documents accompanied all samples to the laboratory.

All equipment that was placed down a well or that came in contact with ground water was steam cleaned with deionized water prior to use at each well.

Quality control samples for third quarter monitoring included a trip blank (TB), a field blank (FB), and a duplicate well sample (MW-2D) collected from well MW-2. All water samples collected during third quarter monitoring were analyzed for total petroleum hydrocarbons as gasoline (TPH-g); benzene, toluene, ethylbenzene, and total xylenes (BTEX); and total petroleum hydrocarbons as diesel (TPH-d).

## ANALYTICAL RESULTS

Analytical results for the third quarter 1992 monitoring event, and available results from four previous monitoring events, are summarized in table 2. The original certified analytical report and final chain-of-custody document are attached.

If you have any questions, please call.

Very truly yours,

EMCON Associates

David Larsen
Environmental Sampling Coordinator

Orrin Childs
Environmental Sampling Supervisor

DL/OC:dl

Attachments: Table 1 - Monitoring well field measurement data
Table 2 - Summary of analytical results
Figure 1 - Site location
Figure 2 - Site Map
Certified analytical report
Chain-of-custody document

Table 1
Monitoring Well Field Measurement Data
Third Quarter 1992

Shell Station: 2724 Castro Valley Boulevard
Castro Valley, California
WIC #: 204-1381-0407

Date: 09/28/92
Project Number: G67-68.01

| Well Designation | Water Level Field Date | TOC Elevation (ft-PSD) | Depth to Water (feet) | Groundwater Elevation (ft-PSD) | Total Well Depth (feet) | Floating Product Thickness (feet) | Water Sample Field Date | pH (std. units) | Electrical Conductivity (micromhos/cm) | Temperature (degrees F) | Turbidity (NTU) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-1 | 01/15/91 | 99.78 | 9.11 | 90.67 | NR | ND | 01/15/91 | NR | NR | NR | NR |
| MW-1 | 04/19/91 | 99.78 | 5.58 | 94.20 | NR | ND | 04/19/91 | NR | NR | NR | NR |
| MW-1 | 07/16/91 | 99.78 | 7.58 | 92.20 | NR | ND | 07/16/91 | NR | NR | NR | NR |
| MW-1 | 10/08/91 | 99.78 | 8.25 | 91.53 | 15.3 | ND | 10/08/91 | 7.18 | 1350 | 21.3^ | NR |
| MW-1 | 08/26/92 | 99.78 | 9.23 | 90.55 | 14.3 | ND | 08/26/92 | 7.31 | 1410 | 75.2 | 365 |
| MW-2 | 01/15/91 | 100.83 | 8.52 | 92.31 | NR | ND | 01/15/91 | NR | NR | NR | NR |
| MW-2 | 04/19/91 | 100.83 | 6.90 | 93.93 | NR | ND | 04/19/91 | NR | NR | NR | NR |
| MW-2 | 07/16/91 | 100.83 | 9.01 | 91.82 | NR | ND | 07/16/91 | NR | NR | NR | NR |
| MW-2 | 10/08/91 | 100.83 | 8.82 | 92.01 | 14.9 | ND | 10/08/91 | 7.10 | 1310 | 21.0^ | NR |
| MW-2 | 08/26/92 | 100.83 | 8.74 | 92.09 | 14.8 | ND | 08/26/92 | 7.70 | 1828 | 74.3 | 129 |
| MW-3 | 01/15/91 | 101.48 | 9.74 | 91.74 | NR | ND | 01/15/91 | NR | NR | NR | NR |
| MW-3 | 04/19/91 | 101.48 | 7.92 | 93.56 | NR | ND | 04/19/91 | NR | NR | NR | NR |
| MW-3 | 07/16/91 | 101.48 | 9.40 | 92.08 | NR | ND | 07/16/91 | NR | NR | NR | NR |
| MW-3 | 10/08/91 | 101.48 | 9.62 | 91.86 | 24.4 | ND | 10/08/91 | 7.26 | 1900 | 23.6^ | NR |
| MW-3 | 08/26/92 | 101.48 | 9.31 | 92.17 | 25.2 | ND | 08/26/92 | 7.72 | 3270 | 80.5 | >1000 |
| MW-5 | 01/15/91 | 99.90 | 9.26 | 90.64 | NR | ND | 01/15/91 | NR | NR | NR | NR |
| MW-5 | 04/19/91 | 99.90 | 6.52 | 93.38 | NR | ND | 04/19/91 | NR | NR | NR | NR |
| MW-5 | 07/16/91 | 99.90 | 9.12 | 90.78 | NR | ND | 07/16/91 | NR | NR | NR | NR |
| MW-5 | 10/08/91 | 99.90 | 9.22 | 90.68 | 22.8 | ND | 10/08/91 | 7.42 | 1890 | 21.3^ | NR |
| MW-5 | 08/26/92 | 99.90 | 8.96 | 90.94 | 22.4 | ND | 08/26/92 | 7.40 | 1829 | 76.3 | 109 |

TOC = top of casing
ft-PSD = elevation in feet, relative to project site datum
std. units = standard pH units
micromhos/cm = micromhos per centimeter
degrees F = degrees Fahrenheit
NTU = nephelometric turbidity units
NR = Not reported; data not available
ND = None detected
^ = Temperature measured in degrees centigrade

Table 1
Monitoring Well Field Measurement Data
Third Quarter 1992

Shell Station: 2724 Castro Valley Boulevard
Castro Valley, California
WIC #: 204-1381-0407

Date: 09/28/92
Project Number: G67-68.01

| Well Designation | Water Level Field Date | TOC Elevation (ft-PSD) | Depth to Water (feet) | Groundwater Elevation (ft-PSD) | Total Well Depth (feet) | Floating Product Thickness (feet) | Water Sample Field Date | pH (std. units) | Electrical Conductivity (micromhos/cm) | Temperature (degrees F) | Turbidity (NTU) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OMW-6 | 07/16/91 | 101.48 | 8.60 | 92.88 | NR | ND | 07/16/91 | NR | NR | NR | NR |
| OMW-6 | 10/08/91 | 101.48 | 8.82 | 92.66 | 21.8 | ND | 10/08/91 | 7.39 | 2750 | 19.7^ | NR |
| OMW-6 | 08/26/92 | 101.48 | 8.63 | 92.85 | 22.1 | ND | 08/26/92 | 7.20 | 2700 | 78.0 | 563 |
| MW-7 | 07/16/91 | 99.54 | 8.70 | 90.84 | NR | ND | 07/16/91 | NR | NR | NR | NR |
| MW-7 | 10/08/91 | 99.54 | 8.74 | 90.80 | 20.0 | ND | 10/08/91 | 7.00 | 1690 | 19.6^ | NR |
| MW-7 | 08/26/92 | 99.54 | 8.61 | 90.93 | 20.3 | ND | 08/26/92 | 7.28 | 1418 | 69.1 | 151 |
| OMW-8 | 07/16/91 | 100.18 | 8.40 | 91.78 | NR | ND | 07/16/91 | NR | NR | NR | NR |
| OMW-8 | 10/08/91 | 100.18 | 8.74 | 91.44 | 19.7 | ND | 10/08/91 | 7.47 | 1150 | 20.1^ | NR |
| OMW-8 | 08/26/92 | 100.18 | 8.78 | 91.40 | 19.8 | ND | 08/26/92 | 6.26 | 1160 | 75.0 | 157 |

TOC = top of casing
ft-PSD = elevation in feet, relative to project site datum
std. units = standard pH units
micromhos/cm = micromhos per centimeter
degrees F = degrees Fahrenheit
NTU = nephelometric turbidity units
NR = Not reported; data not available
ND = None detected
^ = Temperature measured in degrees centigrade

Table 2
Summary of Analytical Results
Third Quarter 1992
milligrams per liter (mg/l) or parts per million (ppm)

Shell Station: 2724 Castro Valley Boulevard
Castro Valley, California
WIC #: 204-1381-0407

Date: 09/28/92
Project Number: G67-68.01

| Sample Designation | Water Sample Field Date | TPH-g (mg/l) | Benzene (mg/l) | Toluene (mg/l) | Ethyl-benzene (mg/l) | Total Xylenes (mg/l) | TPH-d (mg/l) | TPH-mo (mg/l) |
|---|---|---|---|---|---|---|---|---|
| MW-1 | 01/15/91 | <0.05 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.05 | NA |
| MW-1 | 04/19/91 | <0.05 | 0.0077 | <0.0005 | <0.0005 | <0.0005 | <0.05 | NA |
| MW-1 | 07/16/91 | <0.05 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.05 | <0.5 |
| MW-1 | 10/08/91 | <0.05 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.05 | <0.5 |
| MW-1 | 08/26/92 | <0.05 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | 0.051 | NA |
| MW-2 | 01/15/91 | 5.7 | 0.320 | 0.029 | 0.120 | 0.530 | 0.68 | NA |
| MW-2 | 04/19/91 | 3.9 | 0.10 | 0.077 | 0.100 | 0.093 | 0.36 | NA |
| MW-2 | 07/16/91 | 1.8 | 0.100 | 0.0058 | 0.041 | 0.031 | 0.43 | <0.5 |
| MW-2 | 10/08/91 | 1.0 | 0.017 | <0.0005 | 0.025 | 0.025 | 0.11 | <0.5 |
| MW-2 | 08/26/92 | 0.52 | 0.036 | 0.0020 | 0.012 | 0.0079 | 0.063* | NA |
| MW-2D | 08/26/92 | 0.45 | 0.033 | 0.0017 | 0.011 | 0.0034 | 0.063* | NA |
| MW-3 | 01/15/91 | <0.05 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.05 | NA |
| MW-3 | 04/19/91 | <0.05 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.05 | NA |
| MW-3 | 07/16/91 | <0.05 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.05 | 1.4 |
| MW-3 | 10/08/91 | <0.05 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.05 | <0.5 |
| MW-3 | 08/26/92 | <0.05 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.05 | NA |
| MW-5 | 01/15/91 | <0.05 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.05 | NA |
| MW-5 | 04/19/91 | <0.05 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.05 | NA |
| MW-5 | 07/16/91 | <0.05 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.05 | <0.5 |
| MW-5 | 10/08/91 | <0.05 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.05 | <0.5 |
| MW-5 | 08/26/92 | <0.05 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.05 | NA |

TPH-g = total petroleum hydrocarbons as gasoline
TPH-d = total petroleum hydrocarbons as diesel
TPH-mo = total petroleum hydrocarbons as motor oil
NA = Not analyzed
* = Concentration reported as diesel is primarily due to the presence of a lighter petroleum product, possibly gasoline or kerosene

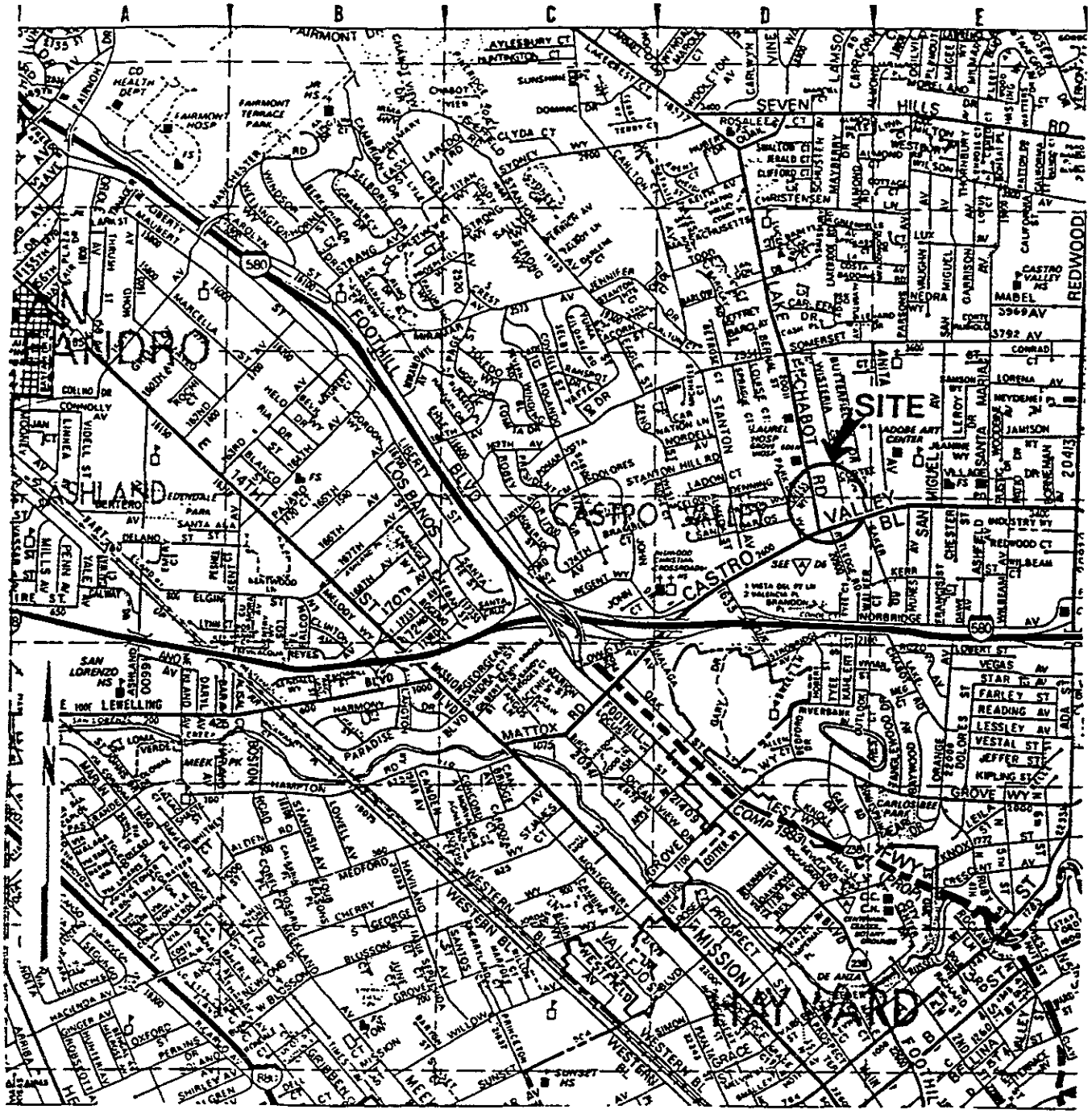
Table 2
Summary of Analytical Results
Third Quarter 1992
milligrams per liter (mg/l) or parts per million (ppm)

Shell Station: 2724 Castro Valley Boulevard
Castro Valley, California
WIC #: 204-1381-0407

Date: 09/28/92
Project Number: G67-68.01

| Sample Designation | Water Sample Field Date | TPH-g (mg/l) | Benzene (mg/l) | Toluene (mg/l) | Ethyl-benzene (mg/l) | Total Xylenes (mg/l) | TPH-d (mg/l) | TPH-mo (mg/l) |
|---|---|---|---|---|---|---|---|---|
| OMW-6 | 07/16/91 | NR | NR | NR | NR | NR | NR | NR |
| OMW-6 | 10/08/91 | NR | NR | NR | NR | NR | NR | NR |
| OMW-6 | 08/26/92 | <0.05 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.05 | NA |
| MW-7 | 07/16/91 | NR | NR | NR | NR | NR | NR | NR |
| MW-7 | 10/08/91 | NR | NR | NR | NR | NR | NR | NR |
| MW-7 | 08/26/92 | 0.063 | 0.0010 | <0.0005 | 0.0026 | <0.0005 | <0.05 | NA |
| OMW-8 | 07/16/91 | NR | NR | NR | NR | NR | NR | NR |
| OMW-8 | 10/08/91 | NR | NR | NR | NR | NR | NR | NR |
| OMW-8 | 08/26/92 | <0.05 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.05 | NA |
| FB | 08/26/92 | <0.05 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.05 | NA |
| TB | 08/26/92 | <0.05 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.05 | NA |

TPH-g = total petroleum hydrocarbons as gasoline
TPH-d = total petroleum hydrocarbons as diesel
TPH-mo = total petroleum hydrocarbons as motor oil
NR = Not reported; data not available
NA = Not analyzed

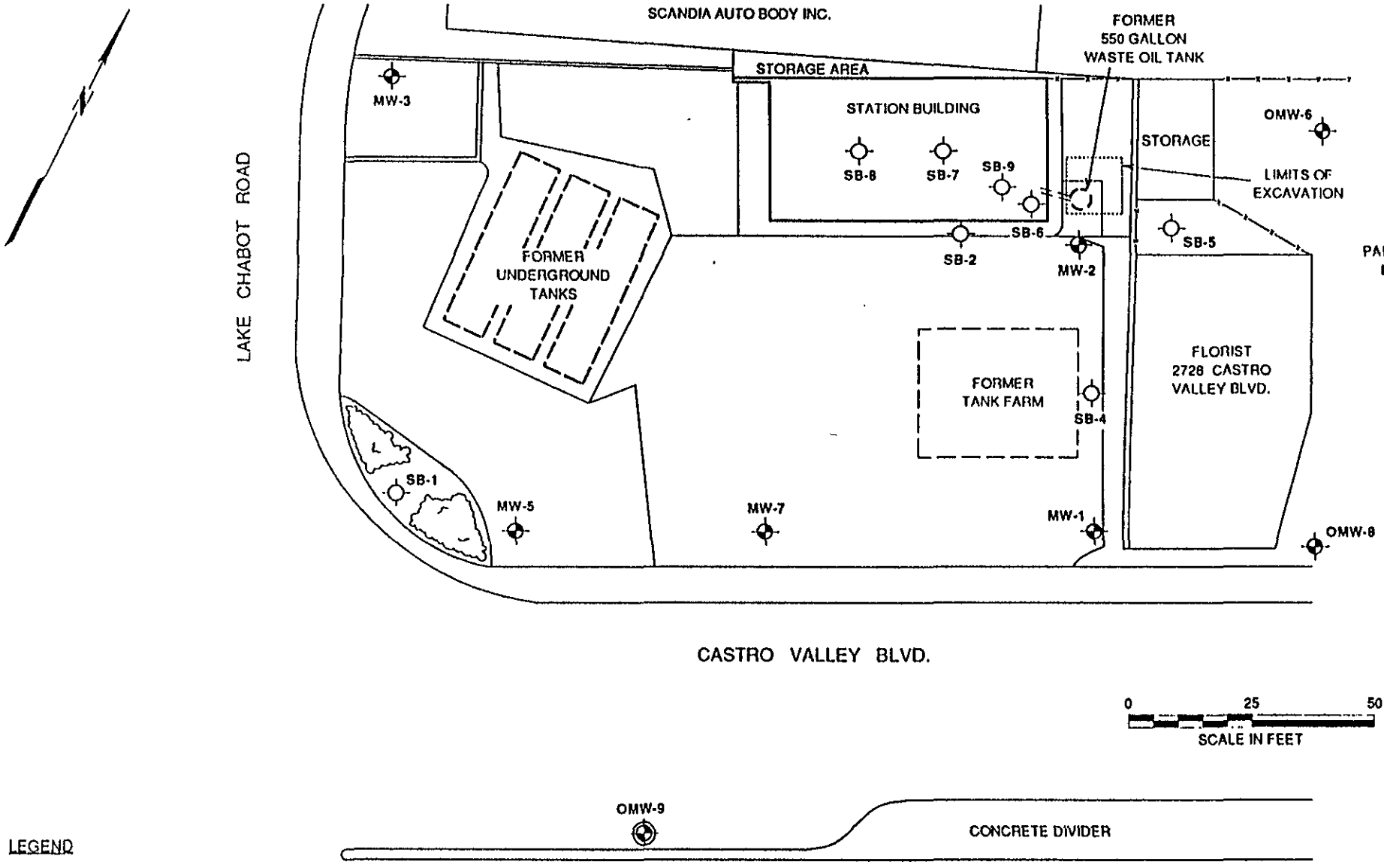



# SITE LOCATION MAP

SHELL OIL COMPANY
2724 Castro Valley Boulevard
Castro Valley, California

| | |
|---|---|
| Scale: AS SHOWN | Project No.: 89-44-380-20 |
| Prepared by: LQL | Date: 6/8/90 |
| Checked by: MCC | Drawing No.: |
| Approved by: CRC | 1 |

Converse Environmental West




LEGEND

SB-1 — SOIL BORING (locations approximate)

MW-1 — GROUNDWATER MONITORING WELL

OMW-9 — PROPOSED OFFSITE GROUNDWATER MONITORING WELL

Base Map: Surveyed with electronic distance meter by CEW, 1990.

# PLOT PLAN

SHELL OIL COMPANY
2724 Castro Valley Boulevard
Castro Valley, California

**Converse Environmental West**

| | |
|---|---|
| Scale | AS SHOWN |
| Project No. | 88-44-380-20 |
| Prepared by | LQL |
| Date | 10/24/91 |
| Checked by | DS |
| Drawing No. | 2 |
| WIC Number | 204-1381-0407 |

**ANAMETRIX INC**
Environmental & Analytical Chemistry
1961 Concourse Drive, Suite E, San Jose, CA 95131
(408) 432-8192 • Fax (408) 432-8198

# REPORT

MR. DAVID LARSEN
EMCON ASSOCIATES
1938 JUNCTION AVE.
SAN JOSE, CA 95131

Workorder # : 9208328
Date Received : 08/27/92
Project ID : 204-1381-0407
Purchase Order: MOH-B813

The following samples were received at Anametrix, Inc. for analysis :

| ANAMETRIX ID | CLIENT SAMPLE ID |
|---|---|
| 9208328- 1 | OMW-6 |
| 9208328- 2 | OMW-8 |
| 9208328- 3 | MW-1 |
| 9208328- 4 | MW-3 |
| 9208328- 5 | MW-5 |
| 9208328- 6 | MW-2 |
| 9208328- 7 | MW-7 |
| 9208328- 8 | MW-2D |
| 9208328- 9 | TB |
| 9208328-10 | FB |

This report consists of 8 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Sarah Schoen, Ph.D.
Laboratory Director

9-15-92
Date

EMCON ASSOCIATES

SEP 17 1992

RECEIVED

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. DAVID LARSEN
EMCON ASSOCIATES
1938 JUNCTION AVE.
SAN JOSE, CA 95131

Workorder # : 9208328
Date Received : 08/27/92
Project ID : 204-1381-0407
Purchase Order: MOH-B813
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

| ANAMETRIX SAMPLE ID | CLIENT SAMPLE ID | MATRIX | DATE SAMPLED | METHOD |
|---|---|---|---|---|
| 9208328- 1 | OMW-6 | WATER | 08/26/92 | TPHd |
| 9208328- 2 | OMW-8 | WATER | 08/26/92 | TPHd |
| 9208328- 3 | MW-1 | WATER | 08/26/92 | TPHd |
| 9208328- 4 | MW-3 | WATER | 08/26/92 | TPHd |
| 9208328- 5 | MW-5 | WATER | 08/26/92 | TPHd |
| 9208328- 6 | MW-2 | WATER | 08/26/92 | TPHd |
| 9208328- 7 | MW-7 | WATER | 08/26/92 | TPHd |
| 9208328- 8 | MW-2D | WATER | 08/26/92 | TPHd |
| 9208328- 9 | TB | WATER | 08/26/92 | TPHd |
| 9208328-10 | FB | WATER | 08/26/92 | TPHd |
| 9208328- 1 | OMW-6 | WATER | 08/26/92 | TPHg/BTEX |
| 9208328- 2 | OMW-8 | WATER | 08/26/92 | TPHg/BTEX |
| 9208328- 3 | MW-1 | WATER | 08/26/92 | TPHg/BTEX |
| 9208328- 4 | MW-3 | WATER | 08/26/92 | TPHg/BTEX |
| 9208328- 5 | MW-5 | WATER | 08/26/92 | TPHg/BTEX |
| 9208328- 6 | MW-2 | WATER | 08/26/92 | TPHg/BTEX |
| 9208328- 7 | MW-7 | WATER | 08/26/92 | TPHg/BTEX |
| 9208328- 8 | MW-2D | WATER | 08/26/92 | TPHg/BTEX |
| 9208328- 9 | TB | WATER | 08/26/92 | TPHg/BTEX |
| 9208328-10 | FB | WATER | 08/26/92 | TPHg/BTEX |

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. DAVID LARSEN
EMCON ASSOCIATES
1938 JUNCTION AVE.
SAN JOSE, CA 95131

Workorder # : 9208328
Date Received : 08/27/92
Project ID : 204-1381-0407
Purchase Order: MOH-B813
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- The concentrations reported as diesel for samples MW-2 and MW-2D are primarily due to the presence of a lighter petroleum product, possibly gasoline or kerosene.

Cheryl Balmer 9/15/92
Department Supervisor Date

Reggie Davison 9/15/92
Chemist Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS
(GASOLINE WITH BTEX)
ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9208328
Matrix : WATER
Date Sampled : 08/26/92

Project Number : 204-1381-0407
Date Released : 09/14/92

| COMPOUNDS | Reporting Limit (mg/L) | Sample I.D.# OMW-6 -01 | Sample I.D.# OMW-8 -02 | Sample I.D.# MW-1 -03 | Sample I.D.# MW-3 -04 | Sample I.D.# MW-5 -05 |
|---|---|---|---|---|---|---|
| Benzene | 0.0005 | ND | ND | ND | ND | ND |
| Toluene | 0.0005 | ND | ND | ND | ND | ND |
| Ethylbenzene | 0.0005 | ND | ND | ND | ND | ND |
| Total Xylenes | 0.0005 | ND | ND | ND | ND | ND |
| TPH as Gasoline | 0.050 | ND | ND | ND | ND | ND |
| % Surrogate Recovery | | 84% | 65% | 82% | 80% | 89% |
| Instrument I.D. | | HP12 | HP12 | HP12 | HP12 | HP12 |
| Date Analyzed | | 08/31/92 | 08/31/92 | 08/31/92 | 08/31/92 | 08/31/92 |
| RLMF | | 1 | 1 | 1 | 1 | 1 |

ND - Not detected at or above the practical quantitation limit for the method.
TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.
BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.
RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Reggie Davison 9/15/92
Analyst / Date

Cheryl Balmer 9/15/92
Supervisor / Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS
(GASOLINE WITH BTEX)
ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9208328
Matrix : WATER
Date Sampled : 08/26/92

Project Number : 204-1381-0407
Date Released : 09/14/92

| | Reporting Limit | Sample I.D.# MW-2 | Sample I.D.# MW-7 | Sample I.D.# MW-2D | Sample I.D.# TB | Sample I.D.# FB |
|---|---|---|---|---|---|---|
| COMPOUNDS | (mg/L) | -06 | -07 | -08 | -09 | -10 |
| Benzene | 0.0005 | 0.036 | 0.0010 | 0.033 | ND | ND |
| Toluene | 0.0005 | 0.0020 | ND | 0.0017 | ND | ND |
| Ethylbenzene | 0.0005 | 0.012 | 0.0026 | 0.011 | ND | ND |
| Total Xylenes | 0.0005 | 0.0079 | ND | 0.0034 | ND | ND |
| TPH as Gasoline | 0.050 | 0.52 | 0.063 | 0.45 | ND | ND |
| % Surrogate Recovery | | 90% | 96% | 87% | 83% | 79% |
| Instrument I.D. | | HP12 | HP12 | HP12 | HP12 | HP12 |
| Date Analyzed | | 09/01/92 | 08/31/92 | 09/01/92 | 08/31/92 | 08/31/92 |
| RLMF | | 2 | 1 | 2 | 1 | 1 |

ND - Not detected at or above the practical quantitation limit for the method.
TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.
BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.
RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Reggie Davison 9/15/92
Analyst Date

Cheryl Bal... 9/15/92
Supervisor Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS
(GASOLINE WITH BTEX)
ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9208328
Matrix : WATER
Date Sampled : N/A

Project Number : 204-1381-0407
Date Released : 09/14/92

| COMPOUNDS | Reporting Limit (mg/L) | Sample I.D.# BG3101E3 BLANK |
|---|---|---|
| Benzene | 0.0005 | ND |
| Toluene | 0.0005 | ND |
| Ethylbenzene | 0.0005 | ND |
| Total Xylenes | 0.0005 | ND |
| TPH as Gasoline | 0.050 | ND |
| % Surrogate Recovery | | 104% |
| Instrument I.D. | | HP12 |
| Date Analyzed | | 08/31/92 |
| RLMF | | 1 |

ND - Not detected at or above the practical quantitation limit for the method.
TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.
BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.
RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Reggie Davisson 9/15/92
Analyst Date

Cheryl Bateman 9/15/92
Supervisor Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL
ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9208328
Matrix : WATER
Date Sampled : 08/26/92
Date Extracted: 08/27/92

Project Number : 204-1381-0407
Date Released : 09/14/92
Instrument I.D.: HP23

| Anametrix I.D. | Client I.D. | Date Analyzed | Reporting Limit (mg/L) | Amount Found (mg/L) |
|---|---|---|---|---|
| 9208328-01 | OMW-6 | 09/11/92 | 0.050 | ND |
| 9208328-02 | OMW-8 | 09/11/92 | 0.050 | ND |
| 9208328-03 | MW-1 | 09/11/92 | 0.050 | 0.051 |
| 9208328-04 | MW-3 | 09/11/92 | 0.050 | ND |
| 9208328-05 | MW-5 | 09/11/92 | 0.050 | ND |
| 9208328-06 | MW-2 | 09/12/92 | 0.050 | 0.063 |
| 9208328-07 | MW-7 | 09/12/92 | 0.050 | ND |
| 9208328-08 | MW-2D | 09/12/92 | 0.050 | 0.063 |
| 9208328-09 | TB | 09/12/92 | 0.050 | ND |
| 9208328-10 | FB | 09/12/92 | 0.050 | ND |
| DWBL082792 | METHOD BLANK | 09/11/92 | 0.050 | ND |

Note : Reporting limit is obtained by multiplying the dilution factor times 0.050 mg/L.
ND - Not detected at or above the practical quantitation limit for the method.
TPHd - Total Petroleum Hydrocarbons as diesel is determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Reggie Davison 9/15/92
Analyst Date

Cheryl Palmer 9/15/92
Supervisor Date

TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT
EPA METHOD 5030 WITH GC/FID
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE
Matrix : WATER
Date Sampled : N/A
Date Analyzed : 08/31/92

Anametrix I.D. : LCSW0831
Analyst : RD
Supervisor : CS
Date Released : 09/14/92
Instrument I.D.: HP12

| COMPOUND | SPIKE AMT. (mg/L) | REC LCS (mg/L) | %REC LCS | % REC LIMITS |
|---|---|---|---|---|
| GASOLINE | 0.25 | 0.14 | 56% | 48-145 |
| SURROGATE | | 82% | | 53-147 |

*Limits established by Anametrix, Inc.

TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT
EPA METHOD 3510 WITH GC/FID
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE
Matrix : WATER
Date Sampled : N/A
Date Extracted: 08/27/92
Date Analyzed : 09/12/92

Anametrix I.D. : LCSW0827
Analyst : RD
Supervisor : CB
Date Released : 09/14/92
Instrument I.D.: HP23

| COMPOUND | SPIKE AMT (mg/L) | LCS REC (mg/L) | % REC LCS | LCSD REC (mg/L) | % REC LCSD | RPD | % REC LIMITS |
|---|---|---|---|---|---|---|---|
| DIESEL | 1.25 | 0.91 | 73% | 0.88 | 71% | -3% | 63-130 |

*Quality control established by Anametrix, Inc.

18:10 ms 9208328 (18) (10/2)

# SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

## CHAIN OF CUSTODY RECORD
Serial No.: _____

Date: 8-26-92
Page 1 of 2

Site Address: 2724 Castro Valley Blvd.
Castro Valley, CA

WIC#: 204-1381-0407

Shell Engineer: Dan Kirk ?
Phone No. / Fax #: (510) 675-6168

Consultant Name & Address: 1938 Junction Avenue
EMCON Associates San Jose, CA 95131

Consultant Contact: David Larsen
Phone No. / Fax #: (408) 453-2269

Comments: 3-VOAs (HCl) for gas, BTEX
2-Liter Glass (SB) for diesel

Sampled By: Kevin Reichelderfer / Bart Stafford
Printed Name: KEVIN REICHELDERFER / Bart Stafford

**Analysis Required**

**LAB:** Anametrix

| CHECK ONE (1) BOX ONLY | CT/DT |
|---|---|
| Quarterly Monitoring | [X] 5461 |
| Site Investigation | [ ] 5441 |
| Soil for disposal | [ ] 5442 |
| Water for disposal | [ ] 5443 |
| Air Sample- Sys O&M | [ ] 5452 |
| Water Sample - Sys O&M | [ ] 5453 |
| Other | [ ] |

**TURN AROUND TIME**
- 24 hours [ ]
- 48 hours [ ]
- 15 days [X] (Normal)
- Other [ ] _____

NOTE: Notify Lab as soon as possible of 24/48 hrs. TAT.

| Sample ID | Date | 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 | Container Size | Preparation Used | Composite Y/N | MATERIAL DESCRIPTION | SAMPLE CONDITION/ COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (1) OMW-6 | 8-26-92 | | X | | 5 | X | X | X | | | 40 ml | HCl | No | | |
| (2) OMW-8 | | | | | | | | | | | | | | | |
| (3) MW-1 | | | | | | | | | | | | | | | |
| (4) MW-3 | | | | | | | | | | | | | | | |
| (5) MW-5 | | | | | | | | | | | | | | | |
| (6) MW-2 | | | | | | | | | | | | | | Bubble(1) | |
| (7) MW-7 | | | | | | | | | | | | | | | |
| (8) MW-2D | ↓ | | ↓ | | ↓ | ↓ | ↓ | ↓ | | | ↓ | ↓ | ↓ | | |

| | | | | |
|---|---|---|---|---|
| Relinquished By (signature): Kevin Reichelderfer | Printed name: KEVIN REICHELDERFER | Date: 8-26-92 Time: 17:35 | Received (signature): Maria Barajas | Printed name: Maria Barajas Date: 8/26/92 Time: 17:35 |
| Relinquished By (signature): | Printed name: | Date: Time: | Received (signature): | Printed name: Date: Time: |
| 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

Last Revision Date: 10/15/91

18:10 MB 4208328 (18) (10/2)

# SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

## CHAIN OF CUSTODY RECORD
Serial No.: _____

Date: 8-26-92
Page 2 of 2

Site Address: 2724 Castro Valley Blvd
Castro Valley, CA

WIC#: 204-1381-0407

Shell Engineer: Dan Kirk? Phone No. Fax #: (510) 675-6168

Consultant Name & Address: 1938 Junction Avenue
EMCON Associates San Jose, CA 95131

Consultant Contact: David Larsen Phone No. Fax #: (408) 453-2269

Comments: 3-VOAs (HCl) for gas, BTEX
2-Liter Glass (SK) for diesel
(only one for TB, FB)

Sampled By: Kevin Reichelderfer / Bart Stafford

Printed Name: KEVIN REICHELDERFER / Bart Stafford

**Analysis Required**

**LAB:** Anametrix

| CHECK ONE (1) BOX ONLY | CT/DT |
|---|---|
| Quarterly Monitoring | ☒ 5461 |
| Site Investigation | ☐ 5441 |
| Soil for disposal | ☐ 5442 |
| Water for disposal | ☐ 5443 |
| Air Sample- Sys O&M | ☐ 5452 |
| Water Sample - Sys O&M | ☐ 5453 |
| Other | ☐ |

**TURN AROUND TIME**
24 hours ☐
48 hours ☐
15 days ☒ (Normal)
Other ☐ _____
NOTE: Notify Lab as soon as possible of 24/48 hrs. TAT.

| Sample ID | Date | 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 | Container Size | Preparation Used | Composite Y/N | MATERIAL DESCRIPTION | SAMPLE CONDITION/ COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (9) TB | 8-26-92 | | X | | 4 | X | X | X | | | 40 ml | HCl | NO | | |
| (10) FB | ↓ | | ↓ | | ↓ | ↓ | ↓ | ↓ | | | ↓ | ↓ | ↓ | | |

| | Printed name: | Date: | Received (signature): | Printed name: | Date: |
|---|---|---|---|---|---|
| Relinquished By (signature): Kevin Reichelderfer | KEVIN REICHELDERFER | 8-26-92 Time: 17:35 | Maria Barajas | Maria Barajas | 8/26/92 Time: 17:35 |
| Relinquished By (signature): | Printed name: | Date: Time: | Received (signature): | Printed name: | Date: Time: |
| 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

Last Revision Date: 10/15/91