CONVERSE ENVIRONMENTAL WEST

REPORT OF ACTIVITIES
QUARTER 1, 1992

SHELL OIL COMPANY SITE
2724 CASTRO VALLEY BOULEVARD
CASTRO VALLEY, CALIFORNIA

Prepared for:
SHELL OIL COMPANY
1390 Willow Pass Road, Suite 900
Concord, California 94520

Prepared by:
CONVERSE ENVIRONMENTAL WEST
55 Hawthorne Street, Suite 500
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April 13, 1992

Project No. 88-44-380-20
WIC No. 204-1381-0407

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April 13, 1992
88-44-380-20-1562
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Mr. Paul Hayes
SHELL OIL COMPANY
P.O. Box 5278
Concord, California 94524

Subject: Transmittal of the Quarter 1, 1992 Report of Activities
Former Shell Oil Site
2724 Castro Valley Boulevard
Castro Valley, California

Dear Mr. Hayes:

Enclosed with this letter is a copy of the quarterly report (Quarter 1, 1992) prepared by Converse Environmental West for the former Shell Oil Company Site located at 2724 Castro Valley Boulevard in Castro Valley, California.

Copies of the enclosed report have been forwarded to Mr. Thomas Callahan of the San Francisco Bay Regional Water Quality Control Board, and Mr. Lawrence Seto of the Alameda County Health Care Services Agency.

Please call the undersigned if you have any questions or require additional information.

Very truly yours,

Converse Environmental West

David Siegel
Project Geologist

Peter A. Fuller
Project Manager

cc: Mr. Lawrence Seto - Alameda County Health Care Services Agency (w/ encl.)
Dr. Mohsen Mehran - Owner Consultant (w/ encl.)
Mr. Michael K. Johnson - Larson, Burnham and Turner (w/ encl.)
Mr. Mathew Righetti - Righetti Law Firm (w/ encl.)
Mr. Richard A. Schoenberger, Esq. - Walkup, Shelby, Bastian, Melodia, Kelly, Echeverria and Link
Mr. David Swope - Shell Oil Company

REPORT OF ACTIVITIES
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SECTION 1

INTRODUCTION

1.1 BACKGROUND AND OBJECTIVES

This report presents the results of investigative activities conducted by Converse Environmental West (Converse) during Quarter 1, 1992 (Q1/92) for the former Shell Oil Company (Shell) station (site) located at 2724 Castro Valley Blvd, Castro Valley, California (Drawing 1). The Activity Summary for Q1/92 is presented as Table 1. This report is prepared to fulfill the quarterly reporting requirements as specified in the Work Plan prepared by Converse dated January 16, 1990 for achievement of environmental closure of the site. The Work Plan is on file with the regulatory agencies of jurisdiction.

This former retail gasoline station is located on the northeast corner of Castro Valley Blvd and Lake Chabot Road in Castro Valley, California. The site is approximately 160 feet long by 100 feet wide (Drawing 2). Commercial businesses exist on all corners of the intersection and extend down both roads on all sides. Single family houses or residences are located on nearby side streets. The site was an active service station prior to 1989, but is now closed.

Topographically, the site is located on the western edge of a gentle valley (Castro Valley) on Recent alluvial fill. The terrain rises northward into the San Leandro Hills and the site is approximately 50 feet above the valley floor. An isolated hillside knob with 60 to 100 feet of relief exists 600 feet south of the site. An intermittent stream is shown 300 feet west on the 7 1/2 minute Hayward, California USGS topographic map. This stream enters San Lorenzo Creek approximately one mile south of the site.

During the past four years Shell and its environmental consultants Blaine Technical Services, Woodward-Clyde Consultants, Crosby and Overton, and Converse have investigated the extent of soil contamination associated with underground storage tanks and product lines at the site. Environmental investigation was initiated in November, 1986, when Shell replaced the waste oil tank and discovered minor soil contamination in the tank backfill.

In March, 1989, Shell removed the underground gasoline storage tanks and discovered subjacent soil contamination. The contaminated soil was removed in three successive stages of excavation.

During June 1989, soil around the former storage tanks was excavated to a depth of 12 feet, the approximate depth of the water table (Excavation I). In July 1989, Excavation I was extended from the existing building on the north, to the sidewalk of Castro Valley Boulevard on the south. The soils from the excavation were removed from the site, by Crosby and Overton, a licensed hazardous waste transporter, and disposed of at a Class I landfill at Buttonwillow, California. Verification samples collected from the excavation sidewalls indicated the absence of petroleum hydrocarbons in the exposed soils, except at the northeast corner, where further excavation was impractical due to the presence of buildings and underground utilities. Mr. Larry Seto of the Alameda County Health Care Services Agency (ACHCSA) was notified of the sample results in letters dated July 11, 1989 and July 27, 1989, and the excavation was subsequently backfilled with clean imported soil.

In late August, 1989, exploratory test pits were excavated under the drive pad area, to determine the extent of suspected contamination in shallow soil near the former pump islands. Local areas of contaminated soil were discovered between the pump islands. In early October 1989, the test pits were expanded into Excavation II, and contaminated soil was removed. Soil samples were taken from the sidewalls and bottom of the excavation, and the excavation was expanded slightly where residual soil contamination was present.

Final verification samples collected from Excavation II in January 1990 showed that the exposed soils did not contain detectable levels of petroleum hydrocarbons. Three samples taken in the deepest portion of the excavation showed some contamination. These samples were all taken in the capillary or saturated zone.

On January 18 through 22, 1990 monitoring wells MW-1, MW-2, MW-3 and MW-5 were installed at the site. (There is no well MW-4 at the site.)

A letter was sent to ACHCSA dated May 31, 1990 describing these sampling results, and requesting permission to backfill the excavation and fully restore the site. Excavation II was backfilled on July 10, 1990.

On May 9, 1990 hand-auger boring SB-2 was drilled at an angle under the building foundation, 20 feet to the west of MW-2 (Drawing 2). Two soil samples were taken at depths of 4.5 and 6.5 feet below the building, and analyzed for waste oil parameters.

On July 8 and 9, 1991, Converse bored and sampled SB-4, and MW-7, at the site and SB-5, OMW-6 and OMW-8 on Castro Valley Florist property located adjacent to the site to the east. Offsite monitoring wells OMW-6 and OMW-8 were installed and onsite well MW-7 was installed. The soil samples were analyzed for petroleum hydrocarbons.

On August 22, 1991, the three underground fuel tanks and the underground waste oil tank were removed and properly disposed of. Converse collected samples from the bottoms and sidewalls of both excavations. The excavations were subsequently filled.

On September 18, 1991 Converse bored and sampled SB-6, SB-7, SB-8 and SB-9 inside the station building. Borings SB-7 and SB-8 were drilled near the hydraulic lifts. Borings SB-6 and SB-9 were drilled near a sump which connected to the former waste oil tank. Soil samples were analyzed for oil and grease. Selected samples from borings SB-6 and SB-9 were also analyzed for waste oil parameters.

A chronological summary of environmental activities conducted at the site is presented in Appendix A. Activities at the site are summarized in Table 1. Soil boring information is presented in Table 2. Past available soil sample analytical data for the site is compiled in Table 3. Soil analytical data for the borings at the Castro Valley Florist is summarized in Table 4. Well installation information is summarized in Table 5.

1.2 SCOPE OF ACTIVITIES

The investigative activities conducted during Q1/92 were authorized under an existing purchase order and blanket number from Shell for environmental services at the site. The work completed during Q1/92 consisted of the following activities:

- Sampling and physical monitoring of wells MW-1, MW-2, MW-3, MW-5, OMW-6, MW-7 and OMW-8. The samples were analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX), and total petroleum hydrocarbons as gasoline (TPH-g), and diesel (TPH-d); and

- Evaluating the findings from the field activities and preparing this report.

SECTION 2

WORK COMPLETED THIS QUARTER

Work initiated and completed during Q1/92 followed the task descriptions of the Work Plan dated January 16, 1990, and the Converse protocols on file with the regulatory agencies of jurisdiction. Modifications and additions to the Work Plan are contained in a Site Restoration Plan and Schedule for Future Work, dated May 31, 1990.

2.1 GROUNDWATER SAMPLING AND ANALYSES

Groundwater samples were collected on February 4, 1992 from monitoring wells MW-1, MW-2, MW-3, MW-5, OMW-6, MW-7 and OMW-8. These samples were submitted, under chain of custody protocols, to NET Pacific, Inc., a California-certified analytical laboratory located in Santa Rosa, California. The samples were analyzed for TPH-g, TPH-d, and BTEX following the recommended analytical methods listed in Table 6. Copies of analytical laboratory reports and chain-of-custody forms are provided in Appendix B.

2.2 PHYSICAL MONITORING

During Q1/92, wells MW-1, MW-2, MW-3, MW-5, OMW-6, MW-7 and OMW-8 were physically measured once for depth-to-water, and the presence of floating product. A summary of these results is presented in Table 7. Floating product was not present in wells at the site during Q1/92 monitoring activities.

SECTION 3

FINDINGS AND DISCUSSION

3.1 GROUNDWATER ELEVATION AND GRADIENT

Depth to groundwater at the time of the Q1/92 monitoring ranged from 7.46 to 8.74 ft. bgs. The inferred groundwater flow direction was toward the south at the time of measurements during Q1/92 under a gradient of approximately 0.015 ft/ft to 0.035 ft/ft (Drawing 3).

3.2 RESULTS OF CHEMICAL ANALYSES OF GROUNDWATER SAMPLES

Former Shell - 2724 Castro Valley Boulevard

A summary of groundwater chemistry data for the former Shell - 2724 Castro Valley Boulevard Shell site is presented in Table 8. Groundwater samples collected from monitoring wells MW-1 and MW-5 showed no detectable concentrations of hydrocarbons. Well MW-2 and MW-7 contained concentrations of TPH-g, TPH-d, and BTEX. Well MW-3 contained concentrations of BTEX. Groundwater chemical concentrations for TPH-g and TPH-d are shown on Drawing 4 and groundwater chemical concentrations for BTEX are shown on Drawing 5.

Castro Valley Florist - 2728 Castro Valley Boulevard

A summary of groundwater chemistry data for the Castro Valley Florist - 2728 Castro Valley Boulevard, Castro Valley Florist site is presented in Table 9. The groundwater sample collected from monitoring well OMW-6 showed no detectable concentrations of hydrocarbons. No TPH-g and TPH-d concentrations were detected in the groundwater sample collected from OMW-8, however BTEX was detected.

3.3 DISCUSSION

The groundwater flow direction and gradient calculated from data collected this quarter are generally consistent with those previously reported. Petroleum hydrocarbon concentrations in groundwater are generally consistent with those previously encountered.

No petroleum hydrocarbons were detected in offsite upgradient monitoring well OMW-6 and two onsite downgradient wells MW-1 and MW-5. Concentrations of BTEX were for the first time detected in groundwater samples collected from MW-3 and OMW-8.

SECTION 4

NEXT QUARTER ACTIVITIES

The following activities are planned for the site:

- Continue monitoring groundwater conditions. Groundwater samples should be analyzed for TPH-g, BTEX, and TPH-d following the analytical methods listed in Table 6.

- Install one offsite groundwater monitoring well in the public right-of-way on Castro Valley Boulevard south of the former Shell station.

CERTIFICATION

This report of activities for the Shell Oil Company facility at 2724 Castro Valley Boulevard, Castro Valley, California has been prepared by the staff of **Converse Environmental West** under the professional supervision of the Engineer and/or Geologist whose seal(s) and signature(s) appear hereon.

The findings, recommendations, specifications or professional opinions are presented, within the limits prescribed by the Client, after being prepared in accordance with generally accepted professional engineering and geologic practice. We make no other warranty, either expressed or implied.

Respectfully submitted,

DAVID SIEGEL
Project Geologist

GERARD L. SLATTERY, RG 5038
Senior Geologist
Environmental Operations Manager

PRIMARY CONTACTS

Shell Oil Company Facility
2724 Castro Valley Boulevard
Castro Valley, California

Quarter 1, 1992

Regional Water Quality Control Board Representative:	Mr. Thomas Callahan San Francisco Bay Regional Water Quality Control Board 2101 Webster Street, Suite 500 Oakland, California 94612
LIA Representative:	Mr. Lawrence Seto Alameda County Health Care Services Agency Department of Public Health 80 Swan Way, Room 200 Oakland, California 94621
Shell Engineer:	Mr. Paul Hayes Shell Oil Company P.O. Box 5278 Concord, California 94520
Shell Legal Staff:	Mr. Dave Swope 900 Louisiana 1 Shell Plaza #4809 Houston, Texas 77001
Shell Legal Representative:	Mr. Michael K. Johnson, Esq. Larson, Burnham and Turner 1901 Harrison Street, 11th Floor Oakland, California 94604
Converse Project Manager:	Mr. Peter A. Fuller Converse Environmental West 55 Hawthorne Street, Suite 500 San Francisco, California 94105
Registered Geologist in Charge:	Mr. Gerard Slattery Converse Environmental West 55 Hawthorne Street, Suite 500 San Francisco, California 94105

PRIMARY CONTACTS (continued)

Shell Oil Company Facility
2724 Castro Valley Boulevard
Castro Valley, California

Quarter 1, 1992

Owner Legal Representative:	Mr. Matthew Righetti, Esq. Righetti Law Firm Signature Center 4900 Hopyard Road, Suite 220 Pleasanton, California 94588-3346
Owner Consultant	Dr. Mohsen Mehran 18218 Mc Dermott East Suite G Irvine, California 92714
Other	Mr. Richard A. Schoenberger, Esq. Walkup, Shelby, Bastian, Melodia, Kelly, Echeverria and Link 650 California Street, 30th Floor San Francisco, California 94108

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California Regional Water Quality Control Board, San Francisco Bay Region, 1986, Water quality control plan, San Francisco Bay Basin Region (2), December.

California Regional Water Quality Control Board, 1988, Regional Board staff recommendations for initial evaluation and investigation of underground tanks, June 2, 1988.

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Hickenbottom, K. and Muir, K., 1988. Geohydrology and groundwater - quality overview, of the East Bay Plain area, Alameda County, California 205(j) Report, Alameda County Flood Control and Water Conservation District, 83p. plus appendix.

TABLES

TABLE 1. ACTIVITY SUMMARY - QUARTER 1, 1992

Former Shell Oil Company Site
2724 Castro Valley Boulevard
Castro Valley, California

Activity	PERCENT COMPLETE			
	Quarter 1, 1992		Total to Date	
	Onsite	Offsite	Onsite	Offsite
Soil Characterization	0	0	90	60
Groundwater Characterization (Dissolved Product)	0	0	70	70
Groundwater Characterization (Floating Product)	NA	NA	NA	NA
Soil Remediation	0	NA	90*	NA
Groundwater Remediation (Dissolved Product)	0	0	0	0
Groundwater Remediation (Floating Product)	NA	NA	NA	NA

NOTES:

* Presumes that excavation to 11 feet below ground surface will be accepted as the full vertical extent of the unsaturated zone

NA Not Applicable

TABLE 2. SOIL BORING INFORMATION

Former Shell Oil Company Site
2724 Castro Valley Boulevard
Castro Valley, California

Boring No.	Date Drilled	Total Depth (ft bgs)	Completion	Unsaturated Soil Samples (ft bgs)	Saturated Soil Samples (ft bgs)
MW-1	01/18/90	16	4" diameter well	5, 10	NC
MW-2	01/19/90	15	4" diameter well	5, 9, 15, 20, 25	NC
MW-3	01/19/90	25	4" diameter well	5, 10, 15	NC
MW-5	01/22/90	23	4" diameter well	5, 9, 15, 20, 25	NC
OMW-6	07/08/91	23	4" diameter well	5, 10	NC
MW-7	07/08/91	20	2" diameter well	11, 14	NC
OMW-8	07/08/91	22	4" diameter well	5, 10 ,14.5	NC
SB-1	01/18/90	15	Abandoned 01/18/90	5, 9	NC
SB-2	05/09/90	6.5	Abandoned 05/09/90	4.5, 6.5	NC
SB-4	07/08/91	15.5	Abandoned 07/09/91	6, 11, 15	NC
SB-5	07/09/91	20	Abandoned 07/09/91	5, 10, 15, 20	NC
SB-6	09/18/91	10	Abandoned 09/18/91	5, 10	NC
SB-7	09/18/91	10	Abandoned 09/18/91	5, 10	NC
SB-8	09/18/91	10	Abandoned 09/18/91	5, 10	NC
SB-9	09/18/91	10	Abandoned 09/18/91	5, 10	NC

NOTES:

ft bgs Feet below ground surface
NC None collected
The number SB-3 was not used for a boring at the site. The number MW-4 was not used for a well at the site.

TABLE 3 (cont'd). RESULTS OF SOIL CHEMICAL ANALYSES - FORMER SHELL SITE (mg/kg)

Former Shell Oil Company Site
2724 Castro Valley Boulevard
Castro Valley, California

Boring No.	Sample Depth (ft bgs)	Date Sampled	TPH-g	TPH-d	TPH-mo	Oil and Grease	Benzene	Toluene	Ethyl-Benzene	Xylenes	Total Lead
SB-1	5	01/18/90	<1.0	<1.0	<10	NR	<0.0025	0.0067	<0.0025	0.0046	4.7
SB-1	9	01/18/90	<1.0	<1.0	<10	NR	<0.0025	0.0077	<0.0025	0.0034	6.5
SB-1	10	01/18/90	<1.0	<1.0	<10	NR	<0.0025	0.018	<0.0025	0.0068	NR
SB-2-2A[6]	4.5	05/09/90	1.0	14	73	NR	<0.0025	<0.0025	0.0039	0.016	9.1
SB-2-3A[7]	6.5	05/09/90	<1	18	26	NR	<0.0025	<0.0025	<0.0025	<0.0025	7.0
SB-4	6	07/08/91	<1	<1	<10	NR	<0.0025	<0.0025	<0.0025	<0.0025	NR
SB-4	11	07/08/91	<1	<1	<10	NR	<0.0025	<0.0025	<0.0025	<0.0025	NR
SB-4	15	07/08/91	<1	<1	<10	NR	<0.0025	<0.0025	<0.0025	<0.0025	NR
SB-6	5	09/18/91	770	280	160	740	<0.0025	3.6	5.4	2.2	NR
SB-6	10	09/18/91	1.7	5.0	13	<50	0.110	0.032	0.0028	0.033	NR
SB-7	5	09/18/91	NR	NR	NR	880	NR	NR	NR	NR	NR
SB-7	10	09/18/91	NR	NR	NR	160	NR	NR	NR	NR	NR
SB-8	5	09/18/91	NR	NR	NR	<50	NR	NR	NR	NR	NR
SB-8	10	09/18/91	NR	NR	NR	<50	NR	NR	NR	NR	NR
SB-9	5	09/18/91	1,800	380	470	1,800	<0.0025	<0.0025	<0.0025	30	NR
SB-9	10	09/18/91	240	190	190	460	<0.0025	<0.0025	<0.0025	3.7	NR

TABLE 3. RESULTS OF SOIL CHEMICAL ANALYSES - FORMER SHELL SITE (mg/kg)

Former Shell Oil Company Site
2724 Castro Valley Boulevard
Castro Valley, California

Boring No.	Sample Depth (ft bgs)	Date Sampled	TPH-g	TPH-d	TPH-mo	Benzene	Toluene	Ethyl-Benzene	Xylenes	Total Lead
MW-1	5	01/18/90	<1.0	5.8	73	<0.0025	<0.0025	<0.0025	<0.0025	4.4
MW-1	10	01/18/90	<1.0	4.4	39	<0.0025	<0.0025	<0.0025	<0.0025	4.3
MW-2[1]	5	01/19/90	<1.0	14	90	<0.0025	<0.0025	<0.0025	<0.0025	4.6
MW-2[2]	9	01/19/90	<1.0	<1.0	23	<0.0025	<0.0025	<0.0025	<0.0025	5.3
MW-2[3]	15	01/19/90	<1.0	3.1	<10	0.0032	0.0029	<0.0025	0.054	6.3
MW-2[4]	20	01/19/90	<1.0	3.2	<10	0.0084	0.021	<0.0025	0.016	7.9
MW-2[5]	25	01/19/90	<1.0	8.2	19	0.023	0.034	0.0036	0.023	8.0
MW-3	5	01/19/90	<1.0	<1.0	<1.0	<0.0025	0.0059	<0.0025	<0.0025	6.2
MW-3	10	01/19/90	<1.0	<1.0	<1.0	<0.0025	0.011	<0.0025	<0.0025	5.8
MW-3	15	01/19/90	<1.0	2.4	<1.0	<0.0025	0.023	<0.0025	0.0074	6.5
MW-5	5	01/22/90	<1.0	<1.0	<10	<0.0025	0.0065	<0.0025	0.0026	5.5
MW-5	9	01/22/90	<1.0	<1.0	<10	<0.0025	0.0031	<0.0025	<0.0025	6.4
MW-5	15	01/22/90	<1.0	<1.0	<10	<0.0025	0.0044	<0.0025	0.0027	8.0
MW-5	20	01/22/90	<1.0	1.6	<10	0.003	0.011	<0.0025	0.0061	35
MW-5	25	01/22/90	<1.0	<1.0	<10	<0.0025	0.006	<0.0025	0.0049	3.9
MW-7	11	07/08/91	260	50	<10	1.3	5.6	5.3	13	NR

TABLE 3 (cont'd). RESULTS OF SOIL CHEMICAL ANALYSES - FORMER SHELL SITE (mg/kg)

Former Shell Oil Company Site
2724 Castro Valley Boulevard
Castro Valley, California

Sample Number	Sample Depth (ft bgs)	Date Sampled	TPH-g	TPH-d	TPH-mo	Oil and Grease	Benzene	Toluene	Ethyl-Benzene	Xylenes	Total Lead
A-1	8	08/22/91	<1.0	NA	NA	NA	<0.0025	<0.0025	<0.0025	<0.0025	NA
A-2	8	08/22/91	<1.0	NA	NA	NA	<0.0025	<0.0025	<0.0025	<0.0025	NA
B-1	8	08/22/91	<1.0	NA	NA	NA	<0.0025	<0.0025	<0.0025	<0.0025	NA
B-2	8	08/22/91	<1.0	NA	NA	NA	<0.0025	<0.0025	<0.0025	<0.0025	NA
C-1	8	08/22/91	<1.0	NA	NA	NA	<0.0025	<0.0025	<0.0025	<0.0025	NA
C-2	8	08/22/91	<1.0	NA	NA	NA	<0.0025	<0.0025	<0.0025	<0.0025	NA
SW-1	8	08/22/91	<1.0	NA	NA	NA	<0.0025	<0.0025	<0.0025	<0.0025	NA
SW-2	8	08/22/91	<1.0	NA	NA	NA	<0.0025	<0.0025	<0.0025	<0.0025	NA
WO-1	7	08/22/91	7.8	<1.0	1,100	1,400	<0.0025	<0.0025	0.013	0.03	11
WO-2	4	08/22/91	<1.0	<1.0	<1.0	<1.0	<0.0025	<0.0025	<0.0025	<0.0025	NA
WO-3	7	08/22/91	<1.0	<1.0	<1.0	<1.0	<0.0025	<0.0025	<0.0025	<0.0025	NA
WO-4	6	08/22/91	<1.0	1.6	<1.0	<1.0	<0.0025	<0.0025	<0.0025	<0.0025	NA
WO-5	5.5	08/22/91	<1.0	<1.0	<1.0	<1.0	<0.0025	<0.0025	<0.0025	<0.0025	NA

NOTES:

1 Sample contained 370 ppm total oil grease, 350 ppm non-polar oil and grease, 18 ppm chromium, and 67 ppm zinc
2 Sample contained 45 ppm chromium and 56 ppm zinc
3 Sample contained 40 ppm chromium, 60 ppm zinc, 240 ppb total xylenes, and 380 ppb bis (2-ethylhexyl) phthalate
4 Sample contained 53 ppm chromium, 99 ppm zinc, and 550 ppb bis (2-ethylhexyl) phthalate
5 Sample contained 48 ppm chromium and 110 ppm zinc
6 Sample contained 33 ppm chromium and 46 ppm zinc
7 Sample contained 32 ppm chromium and 46 ppm zinc
NA Not analyzed
NR Not requested
ft bgs Feet below ground surface
mg/Kg Milligrams per kilograms

TABLE 4. RESULTS OF SOIL CHEMICAL ANALYSES - CASTRO VALLEY FLORIST (mg/kg)

Castro Valley Florist
2728 Castro Valley Boulevard
Castro Valley, California

Boring No.	Sample Depth (ft bgs)	Date Sampled	TPH-g	TPH-d	TPH-mo	Benzene	Toluene	Ethyl-Benzene	Xylenes	Total Lead
OMW-6	5	07/08/91	<1.0	<1.0	15	<0.0025	<0.0025	<0.0025	<0.0025	NR
OMW-6	10	07/08/91	<1.0	<1.0	<10	<0.0025	<0.0025	<0.0025	<0.0025	NR
OMW-8	5	07/08/91	<1	<1	<10	<0.0025	<0.0025	<0.0025	<0.0025	NR
	10	07/08/91	<1	<1	<10	<0.0025	<0.0025	<0.0025	<0.0025	NR
	14.5	07/08/91	<1	1.8	<10	<0.0025	<0.0025	<0.0025	<0.0025	NR
SB-5	5	07/09/91	<1	<1	<10		<0.0025	<0.0025	<0.0025	NR
SB-5	10	07/09/91	<1	<1	<10	<0.0025	<0.0025	<0.0025	<0.0025	NR
SB-5	15	07/09/91	<1	<1	<10	<0.0025	<0.0025	<0.0025	<0.0025	NR

NOTES:

1	Sample contained 370 ppm total oil grease, 350 ppm non-polar oil and grease, 18 ppm chromium, and 67 ppm zinc
2	Sample contained 45 ppm chromium and 56 ppm zinc
3	Sample contained 40 ppm chromium, 60 ppm zinc, 240 ppb total xylenes, and 380 ppb bis (2-ethylhexyl) phthalate
4	Sample contained 53 ppm chromium, 99 ppm zinc, and 550 ppb bis (2-ethylhexyl) phthalate
5	Sample contained 48 ppm chromium and 110 ppm zinc
6	Sample contained 33 ppm chromium and 46 ppm zinc
7	Sample contained 32 ppm chromium and 46 ppm zinc
NA	Not analyzed
NR	Not requested
ft bgs	Feet below ground surface
mg/Kg	Milligrams per kilograms

TABLE 5. WELL INSTALLATION INFORMATION

Former Shell Oil Company Site
2724 Castro Valley Boulevard
Castro Valley, California

Well Number	Date Installed	Well Diameter (inches)	Total Depth of Well (ft bgs)	Screened Interval (ft bgs)	Bentonite Seal Interval (ft bgs)	Grout Seal Interval (ft bgs)
MW-1	01/18/90	4	16	6 to 16	4 to 6	0 to 4
MW-2	01/19/90	4	15	5 to 15	3 to 4	0 to 3
MW-3	01/19/90	4	25	5 to 25	3 to 4	0 to 3
MW-5	01/22/90	4	23	9 to 23	6 to 8	0 to 6
OMW-6	07/09/91	4	22	5 to 22	4 to 5	0 to 4
MW-7	07/08/91	2	20	5 to 20	4 to 5	0 to 4
OMW-8	07/09/91	4	21	5 to 21	4 to 5	0 to 4

NOTE:

ft bgs Feet below ground surface

TABLE 6. RECOMMENDED MINIMUM VERIFICATION ANALYSES FOR UNDERGROUND TANK LEAKS

FROM: Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites (Revised August 10, 1990)

HYDROCARBON LEAK	SOIL ANALYSIS		WATER ANALYSIS	
Unknown Fuel	TPH-g	GCFID (5030)	TPH-g	GCFID (5030)
	TPH-d	GCFID (3550)	TPH-d	GCFID (3510)
	BTEX	8020 or 8240	BTEX	602, 624 or 8260
	TPH & BTEX 8260		BTEX	602, 624 or 8260
Leaded Gas	TPH-g	GCFID (5030)	TPH-g	GCFID (5030)
	BTEX	8020 or 8240	BTEX	602, 625 or 8260
	TPH & BTEX 8260		BTEX	602, 624 or 8260
	TOTAL LEAD AA		TOTAL LEAD AA	
		OPTIONAL		
	TEL	DHS-LUFT	TEL	DHS-LUFT
	EDB	DHS-AB1803	EDB	DHS-AB1803
Unleaded Gas	TPH-g	GCFID (5030)	TPH-g	GCFID (5030)
	BTEX	8020 or 8240	BTEX	602, 624 or 8260
	TPH & BTEX 8260			
Diesel	TPH-d	GCFID (3550)	TPH-d	GCFID (3510)
	BTEX	8020 or 8240	BTEX	602, 624 or 8260
	TPH & BTEX 8260			
Jet Fuel	TPH-d	GCFID (3550)	TPH-d	GCFID (3510)
	BTEX	8020 or 8240	BTEX	602, 624 or 8260
	TPH & BTEX 8260			
Kerosene	TPH-d	GCFID (3550)	TPH-d	GCFID (3510)
	BTEX	8020 or 8240	BTEX	602, 624 or 8260
Fuel/Heating Oil	TPH-d	GCFID (3550)	TPH-d	GCFID (3510)
	BTEX	8020 or 8240	BTEX	602, 624 or 8260
Chlorinated Solvents	CL HC	8010 or 8240	CL HC	601 or 624
	BTEX	8020 or 8240	BTEX	602 or 624
	CL HC & BTEX 8260		CL HC & BTEX 8260	
Non Chlorinated Solvents	TPH-d	GCFID (3550)	TPH-d	GCFID (3510)
	BTEX	8020 or 8240	BTEX	602 or 624
	TPH & BTEX 8260		TPH & BTEX 8260	
Waste and Used Oil and Unknown	TPH-g	GCFID (5030)	TPH-g	5520 C&F
	TPH-d	GCFID (3550)	TPH-d	GCFID (3510)
	TPH & BTEX 8260			
	O & G	5520 D&F	O & G	5520 C&F
	BTEX	8020 or 8240 BTEX	602, 624 or 8260	
	CL HC	8010 or 8240 CL HC	601 or 624	
	ICAP or AA TO DETECT METALS: Cd, Cr, Pb, Zn, Ni			
	METHOD 8270 FOR SOIL OR WATER TO DETECT:			
	PCB*		PCB*	
	PCP*		PCP*	
	PNA		PNA	
	CREOSOTE		CREOSOTE	

* If found analyze for dibenzofurans (PCBs) or dioxins (PCP).

TABLE 7. GROUNDWATER MONITORING INFORMATION

Former Shell Oil Company Site
2724 Castro Valley Boulevard
Castro Valley, California

Well Number	Date Monitored	Depth to Water (ft bgs)	Water Table Elevation (ft)	Floating Product Thickness (inches)	Petroleum Odor in Water
MW-1	02/08/90	8.39	91.39	None	None
El. 99.78'	04/20/90	9.21	90.57	None	None
	07/30/90	9.21	90.57	None	None
	10/25/90	9.44	90.34	None	None
	01/15/91	9.11	90.67	None	None
	04/19/91	5.58	94.20	None	None
	07/16/91	7.58	92.20	None	None
	10/08/91	8.25	91.53	None	None
	02/04/92	**8.52**	**91.26**	**None**	**None**
MW-2	02/08/90	7.33	93.50	None	None
El. 100.83'	04/20/90	8.63	92.20	None	Slight
	07/30/90	8.78	92.05	None	Slight
	10/25/90	9.50	91.33	None	Strong
	01/15/91	8.52	92.31	None	Slight
	04/19/91	6.90	93.93	None	Slight
	07/16/91	9.01	91.82	None	Strong
	10/08/91	8.82	92.01	None	None
	02/04/92	**7.46**	**93.37**	**None**	**None**
MW-3	02/08/90	8.91	92.57	None	None
El. 101.48'	04/20/90	10.20	91.28	None	None
	07/30/90	10.61	90.87	None	None
	10/25/90	10.00	91.48	None	None
	01/15/91	9.74	91.74	None	None
	04/19/91	7.92	93.56	None	None
	07/16/91	9.40	92.08	None	None
	10/08/91	9.62	91.86	None	None
	02/04/92	**8.74**	**92.74**	**None**	**None**
MW-5	02/08/90	8.80	91.10	None	None
El. 99.90'	04/20/90	9.35	90.55	None	None
	07/30/90	9.49	90.41	None	None
	10/25/90	10.12	89.78	None	None
	01/15/91	9.26	90.64	None	None
	04/19/91	6.52	93.38	None	None
	07/16/91	9.12	90.78	None	None
	10/08/91	9.22	90.68	None	None
	02/04/92	**8.13**	**91.77**	**None**	**None**

TABLE 7 (cont'd). GROUNDWATER MONITORING INFORMATION

Former Shell Oil Company Site
2724 Castro Valley Boulevard
Castro Valley, California

Well Number	Date Monitored	Depth to Water (ft bgs)	Water Table Elevation (ft)	Floating Product Thickness (inches)	Petroleum Odor in Water
OMW-6	07/16/91	8.60	92.88	None	None
El. 101.48	10/08/91	8.82	92.66	None	None
	02/04/92	**7.47**	**94.01**	**None**	**None**
MW-7	07/16/91	8.70	90.84	None	None
El. 99.54	10/08/91	8.74	90.80	None	None
	02/04/92	**7.78**	**91.76**	**None**	**None**
OMW-8	07/16/91	8.40	91.78	None	None
El. 100.18	10/08/91	8.74	91.44	None	None
	02/04/92	**8.22**	**91.96**	**None**	**None**

NOTES:

ft bgs Feet below ground surface
All elevations are tied into a temporary benchmark elevation of 100.00 feet
Boldface items indicate the results of measurements conducted during this quarter

TABLE 8. RESULTS OF GROUNDWATER CHEMICAL ANALYSIS - FORMER SHELL SITE (mg/L)

Former Shell Oil Company Site
2724 Castro Valley Boulevard
Castro Valley, California

Well Number	Date Sampled	TPH-g	TPH-d	TPH-mo	Benzene	Toluene	Ethyl-Benzene	Xylenes
MW-1	02/09/90	<1.0	NA	NA	0.00058	0.00063	<0.0005	<0.0005
MW-1	04/20/90	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005
MW-1	07/31/90	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005
MW-1	10/25/90	0.10	<0.05	NA	<0.0005	<0.0005	<0.0006	<0.0006
MW-1	01/15/91	0.06	<0.05	NA	<0.0005	<0.0005	<0.0005	<0.0005
MW-1	01/15/91	<0.05	<0.05	NA	<0.0005	<0.0005	<0.0005	<0.0005
MW-1	04/19/91	<0.05	<0.05	NA	0.0077	<0.0005	<0.0005	<0.0005
MW-1	04/19/91	<0.05	<0.05	NA	0.0074	<0.0005	<0.0005	<0.0005
MW-1	07/16/91	<0.05	<0.05	<0.5	<0.0005	<0.0005	<0.0005	<0.0005
MW-1	10/08/91	<0.05	<0.05	<0.5	<0.0005	<0.0005	<0.0005	<0.0005
MW-1	**02/04/92**	**<0.05**	**<0.05**	**NA**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**
MW-2	02/09/90	8.6	4.1	NA	0.360	0.410	0.0065	0.670
MW-2	04/20/90	9.1	1.8	NA	0.500	0.330	0.110	0.900
MW-2	07/31/90	5.3	0.6	N	0.550	0.038	<0.0005	0.280
MW-2	10/25/90	4.8	0.30	NA	0.490	0.022	0.021	0.156
MW-2	01/15/91	5.7	0.68	NA	0.320	0.029	0.120	0.530
MW-2	04/19/91	3.9	0.36	NA	0.10	0.077	0.100	0.093
MW-2	07/16/91	1.8	0.43	<0.5	0.100	0.0058	0.041	0.031
MW-2*	07/16/91	2.7	0.54	<0.5	0.130	0.0076	0.062	0.045
MW-2	10/08/91	1.0	0.11	<0.5	0.017	<0.0005	0.025	0.025
MW-2	**02/04/92**	**1.7**	**0.87**	**NA**	**0.190**	**0.0058**	**0.018**	**0.110**
MW-3	02/09/90	<1.0	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005
MW-3	04/20/90	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005
MW-3	07/31/90	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005
MW-3	10/25/90	<0.05	<0.05	NA	<0.0005	<0.0005	<0.0006	<0.0006
MW-3	01/15/91	<0.05	<0.05	NA	<0.0005	<0.0005	<0.0005	<0.0005
MW-3	04/19/91	<0.05	<0.05	NA	<0.0005	<0.0005	<0.0005	<0.0005
MW-3	07/16/91	<0.05	<0.05	1.4	<0.0005	<0.0005	<0.0005	<0.0005
MW-3	10/08/91	<0.05	<0.05	<0.5	<0.0005	<0.0005	<0.0005	<0.0005
MW-3	**02/04/92**	**<0.05**	**<0.05**	**NA**	**0.004**	**0.002**	**0.0007**	**0.0032**
MW-5	02/09/90	<1.0	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005
MW-5	04/20/90	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005
MW-5	07/31/90	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005
MW-5	10/25/90	<0.05	<0.05	NA	<0.0005	0.0007	<0.0006	<0.0006
MW-5	01/15/91	<0.05	<0.05	NA	<0.0005	<0.0005	<0.0005	<0.0005
MW-5	04/19/91	<0.05	<0.05	NA	<0.0005	<0.0005	<0.0005	<0.0005
MW-5	07/16/91	<0.05	<0.05	<0.5	<0.0005	<0.0005	<0.0005	<0.0005
MW-5	10/08/91	<0.05	<0.05	<0.5	<0.0005	<0.0005	<0.0005	<0.0005
MW-5	**02/04/92**	**<0.05**	**<0.05**	**NA**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**

TABLE 8 (cont'd). RESULTS OF GROUNDWATER CHEMICAL ANALYSIS - FORMER SHELL SITE (mg/L)

Former Shell Oil Company Site
2724 Castro Valley Boulevard
Castro Valley, California

Well Number	Date Sampled	TPH-g	TPH-d	TPH-mo	Benzene	Toluene	Ethyl-Benzene	Xylenes
MW-7	07/16/91	1.3	0.27	1.1	0.440	0.140	0.0069	0.160
[redacted]	10/08/91	0.52	<0.05	<0.5	0.230	0.036	0.026	0.054
	02/04/92	**0.64**	**0.14****	**NA**	**0.130**	**0.051**	**0.026**	**0.079**

NOTES:

*	Duplicate sample
**	The positive result for the TPH-d analysis on this sample appears to be lighter hydrocarbon than diesel
mg/L	Milligram per liter
TPH-g	Total petroleum hydrocarbons as gasoline (GCFID)
TPH-d	Total petroleum hydrocarbons as diesel (GCFID)
TPH-mo	Total petroleum hydrocarbons as motor oil (GCFID)
NA	Not analyzed for this parameter
MW-4	Was not completed as groundwater monitoring well
Bold	Items indicate the results of chemical analyses conducted during Quarter 1, 1992

TABLE 9. RESULTS OF GROUNDWATER CHEMICAL ANALYSIS - CASTRO VALLEY FLORIST (mg/L)

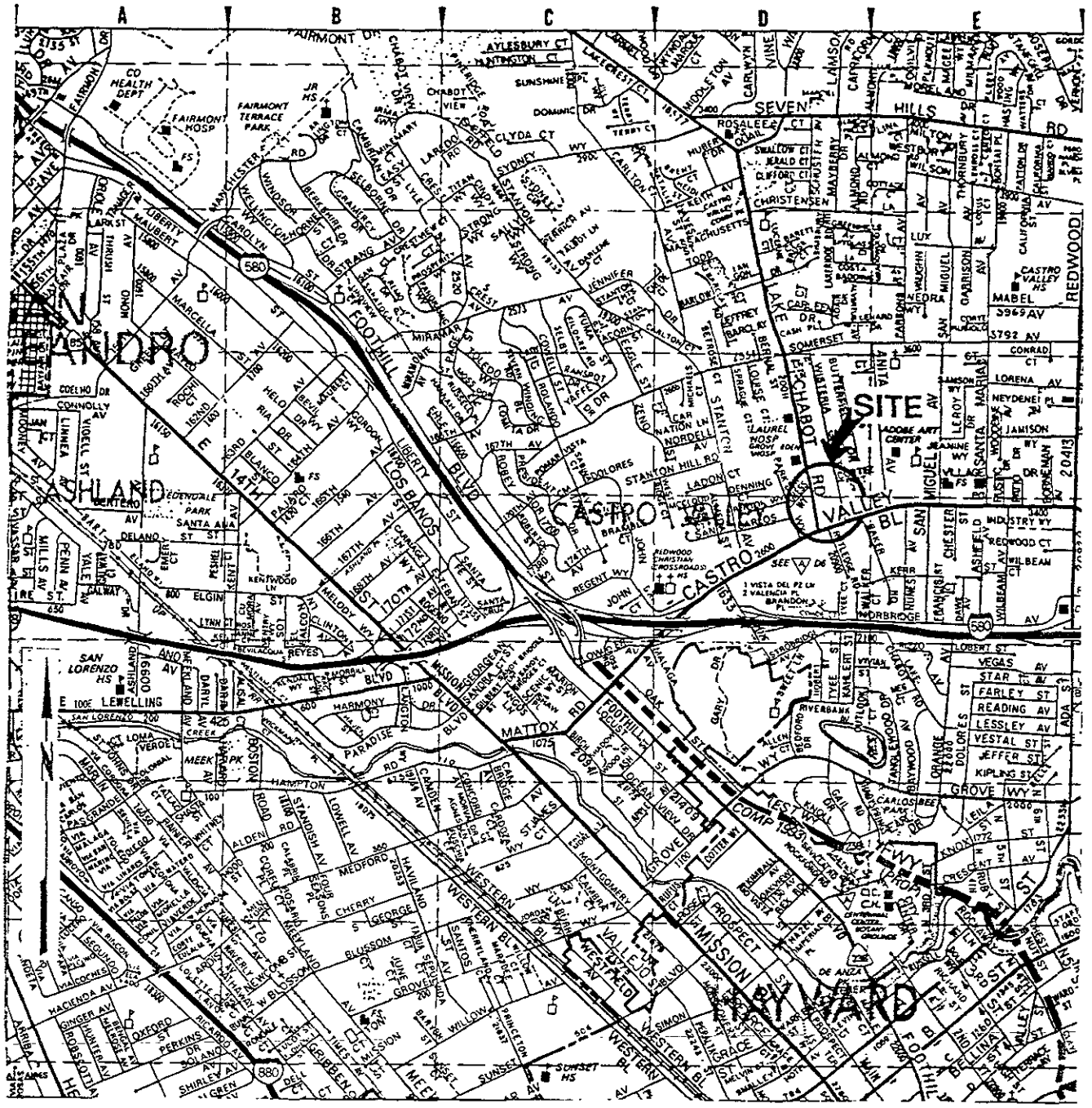
Castro Valley Florist
2728 Castro Valley Boulevard
Castro Valley, California

Well Number	Date Sampled	TPH-g	TPH-d	TPH-mo	Benzene	Toluene	Ethyl-Benzene	Xylenes
OMW-6	07/16/91	<0.05	<0.05	<0.5	<0.0005	<0.0005	<0.0005	<0.0005
OMW-6	10/08/91	<0.05	<0.05	<0.5	<0.0005	<0.0005	<0.0005	<0.0005
OMW-6	**02/04/92**	**<0.05**	**<0.05**	**NA**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**
OMW-8	07/16/91	<0.05	<0.05	<0.5	<0.0005	0.0008	<0.0005	<0.0005
OMW-8	10/08/91	<0.05	<0.05	<0.5	<0.0005	<0.0005	<0.0005	<0.0005
[redacted]	**02/04/92**	**<0.05**	**<0.05**	**NA**	**0.0009**	**0.0019**	**0.0006**	**0.0036**

NOTES:

*	Duplicate sample
TPH-g	Total petroleum hydrocarbons as gasoline (GCFID)
TPH-d	Total petroleum hydrocarbons as diesel (GCFID)
TPH-mo	Total petroleum hydrocarbons as motor oil (GCFID)
NA	Not analyzed for this parameter
Bold	Items indicate the results of chemical analyses conducted during Quarter 4, 1991

DRAWINGS



SOURCE: Thomas Brothers Maps, 1989.

0 220 440

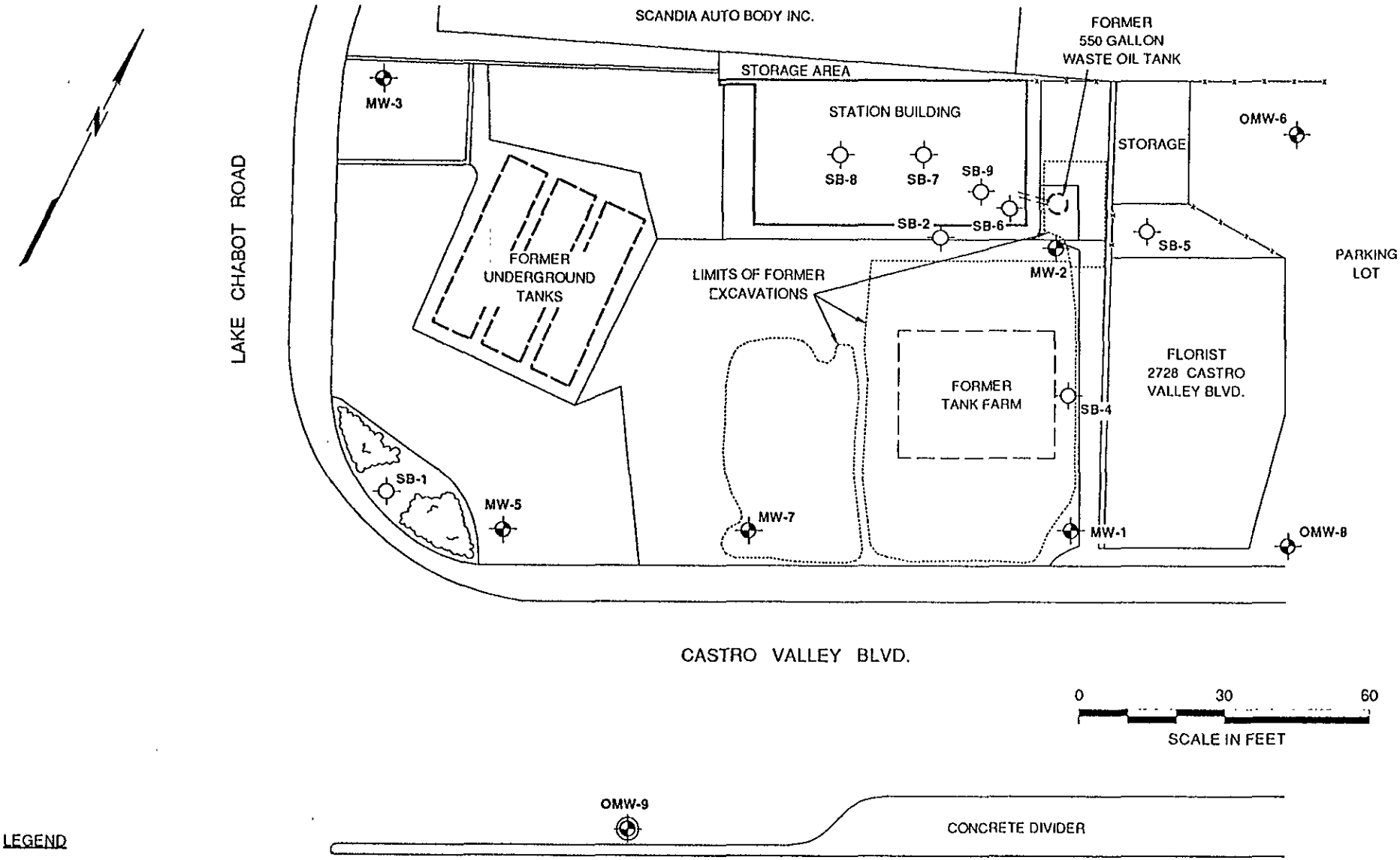
SCALE IN FEET

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

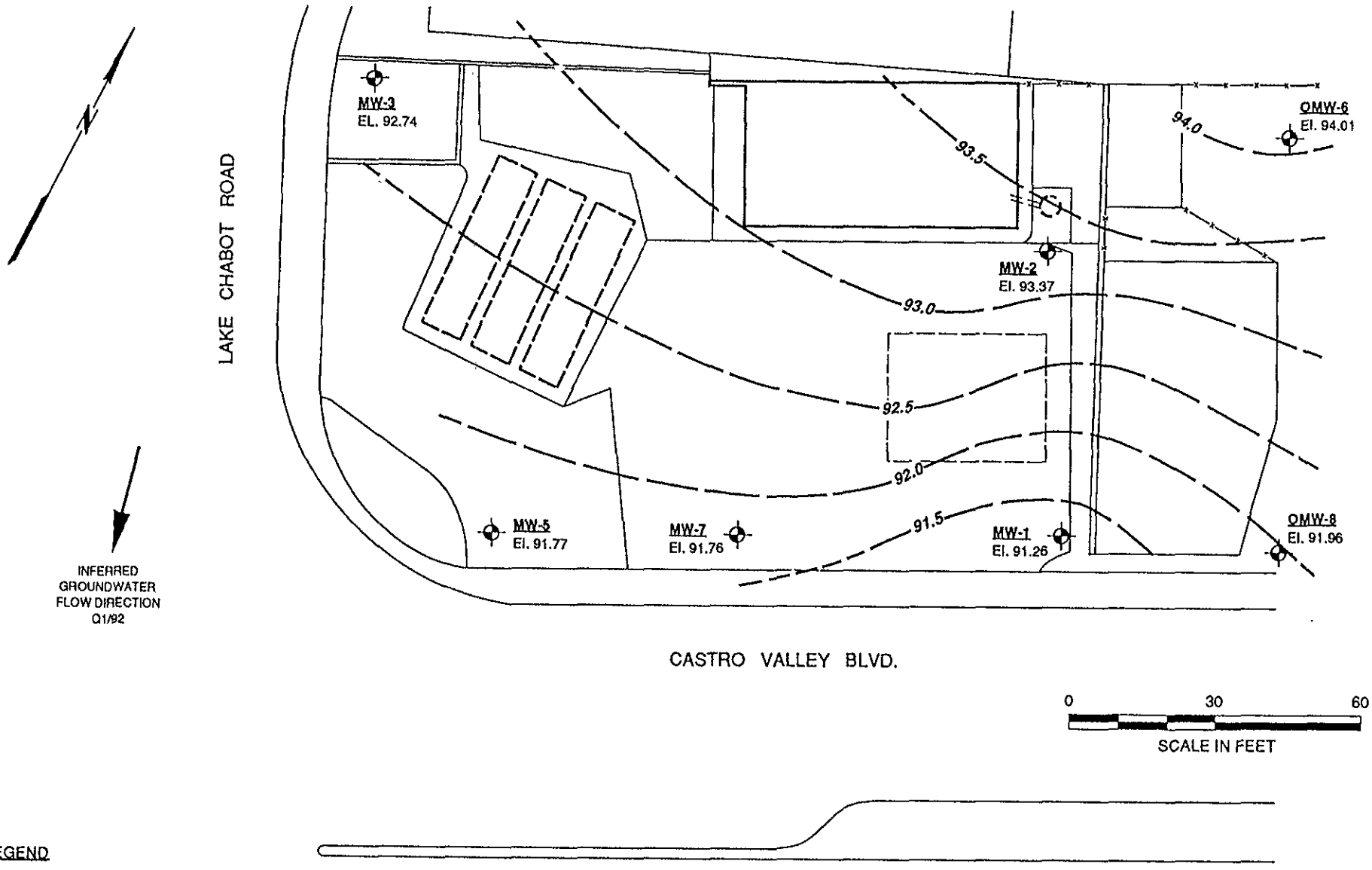
Base Map: Surveyed with electronic distance meter by CEW, 1990.

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	3/16/92
Checked by	DS
Drawing No.	2
WIC Number	204-1381-0407



LEGEND

GROUNDWATER CONTOUR (long dash where approximate, short dash where inferred)

MW-1 GROUNDWATER MONITORING WELL SHOWING GROUNDWATER ELEVATION

NOTE: Groundwater elevations are in feet with respect to a point having an arbitrary datum of 100.00 feet

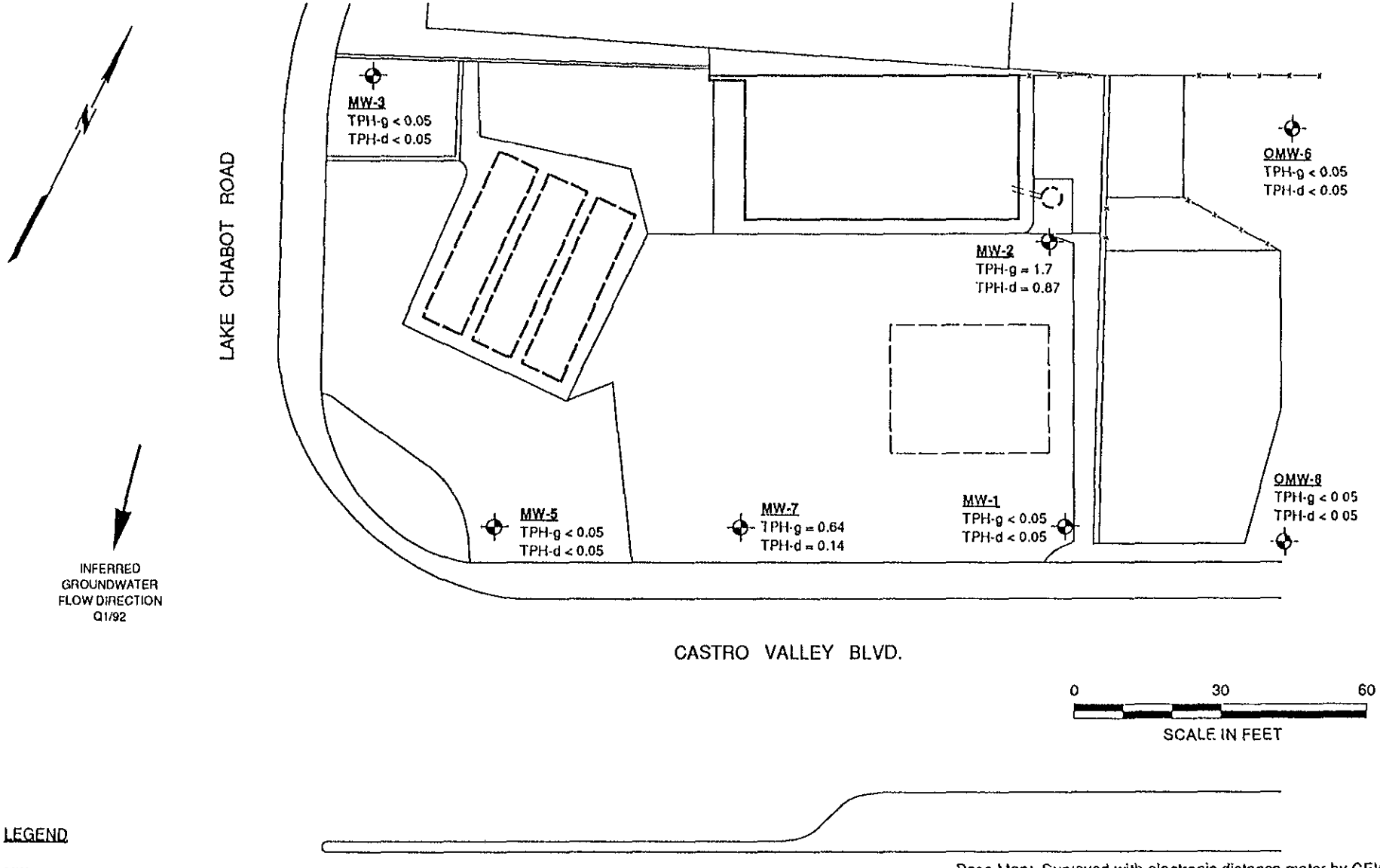
Base Map: Surveyed with electronic distance meter by CEW, 1990.

GROUNDWATER CONTOUR MAP Q1/92

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	3/16/92
Checked by	DS
Drawing No.	3
WIC Number	204-1381-0407



LEGEND

MW-1 GROUNDWATER MONITORING WELL

TPH-g = TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (In milligrams per liter)

TPH-d = TOTAL PETROLEUM HYDROCARBONS AS DIESEL (In milligrams per liter)

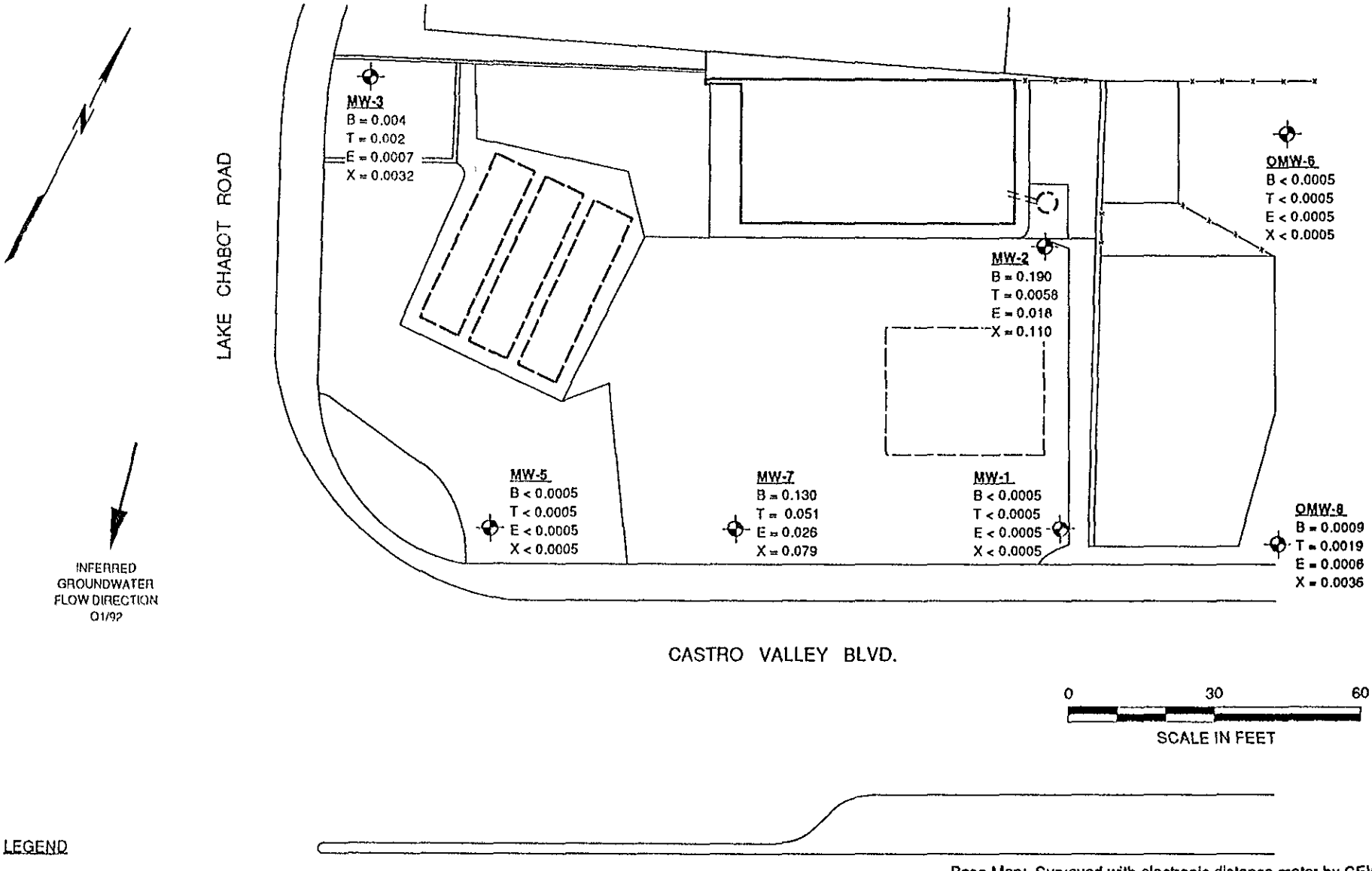
Base Map: Surveyed with electronic distance meter by CEW, 1990.

PLAN: GROUNDWATER TPH-g AND TPH-d Q1/92

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: 3/16/92
Checked by: DS	Drawing No.: 4
WIC Number: 204-1381-0407	



LEGEND

MW-1 ⊕ GROUNDWATER MONITORING WELL

B = BENZENE (in milligrams per liter)

T = TOLUENE (in milligrams per liter)

E = ETHYLBENZENE (in milligrams per liter)

X = XYLENES (in milligrams per liter)

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

PLAN: GROUNDWATER BTEX Q1/92

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	3/16/92
Checked by	DS
Drawing No.	5
WIC Number	204-1381-0407

APPENDIX A

Chronological Summary

CHRONOLOGICAL SUMMARY

For Shell Property at
2724 Castro Valley Blvd., Castro Valley, California

The following chronological summary is based on information provided to Converse Environmental West (Converse) by Shell Oil Company (Shell). Converse was not provided with certain information related to the construction, operational, and environmental history of the facility. According to Shell, the following information is not available in Shell files: volume of contaminated soil removed at the time of tank removal, geometry of the excavation created during tank removal, if any, and date and volume of any possible releases at the facility.

Date	Description of Activity
11/21/86	Blaine Tech Services removed one 550 gallon waste oil tank and conducted field sampling.
04/22/88	Woodward-Clyde drilled and sampled three soil borings around the existing underground storage tank (UST) complex.
03/06/89	Crosby & Overton, Inc conducted field sampling during removal of 4 underground storage tanks. Contaminated soil was discovered and additional excavation and sampling was performed.
03/31/89	Field sampling in the vicinity of the new tank hole was performed.
05/05/89	Converse Environmental West (Converse) was retained by Shell Oil Co to supervise environmental activities at the site.
06/12/89	Soil samples SW-1 through SW-7 were collected.
07/05/89	Soil samples SW-8 through SW-11 were collected.
07/06/89	One water sample in the excavation pit was collected.
07/11/89	Converse sent an "Interim Sampling Report and Recommendations" to the Alameda County Health Care Services Agency (ACHCSA).
07/27/89	Converse sent an "Addendum to July 11, 1989 Interim Sampling Report and Recommendations" to the ACHCSA.
08/30/89	Soil samples SS-1 through SS-7 were collected.
10/02/89 to 10/11/89	Soil samples 1 through 4 and S-1 through S-7 were collected.
10/26/89	Samples 20 through 23, and stockpile samples were collected.

CHRONOLOGICAL SUMMARY (continued)

Date	Description of Activity
10/31/89	Converse sent a report titled "Soil Sampling Report" to the ACHCSA.
11/30/89	Converse sent a Draft Work Plan to the ACHCSA.
01/11/90	Converse sent a Progress Report for Q4/89 to the ACHCSA.
01/18/90 to	Bored and sampled MW-1 through MW-5 and installed MW-1, MW-2, MW-3 and MW-5.
01/23/90	MW-4 grouted. Surface completed: MW-2 and MW-3.
02/08/90	Developed MW-5. Surveyed wells MW-1, MW-2, MW-3, MW-5 and soil borings site survey.
02/09/90	Developed, sampled MW-1, MW-2, MW-3 and MW-5.
02/22/90	Sampled MW-2 for pesticides and oil and grease.
03/12/90	Converse requested permission from ACHA to backfill the existing excavation onsite.
03/16/90	Converse obtained site assessment information on uses of nearby properties, and reported fuel leaks from nearby underground tanks.
04/02/90	Converse conducted E.D.M. survey of adjacent streets, extending 200 to 300 feet from the site.
04/20/90	Converse conducted Q2/90 water sampling in MW-1, MW-2, MW-3 and MW-5. Requested analyses of TPH-g, TPH-d, BTEX, 601/602, oil and grease.
04/23/90	Converse arranged to have one segment of chain-link fence moved, to protect MW-3.
04/26/90	Converse, Shell, ACHCSA and Rhighetti meet at site to discuss backfilling of the existing excavation.
05/02/90	Shell received permission from ACHCSA to backfill the existing excavation.
05/09/90	Converse bored and sampled SB-2 near station building.
05/31/90	Converse issues site restoration plan and schedule for future work.
06/27/90	Converse personnel visit the site to assess current conditions.
06/29/90	Converse issues Q2/90 report.
07/30/90	Converse samples and analyzes groundwater from MW-1, MW-2, MW-3 and MW-5.
09/28/90	Converse issues Quarter 3, 1990 report.

CHRONOLOGICAL SUMMARY (continued)

Date	Description of Activity
10/25/90	Converse samples and analyzes groundwater from MW-1, MW-2, MW-3, and MW-5.
12/31/90	Converse issues Quarter 4, 1990 report.
01/15/91	Converse samples and analyzes groundwater from MW-1, MW-2, MW-3, and MW-5.
03/19/91	ACHCSA approves Site Restoration Plan.
03/28/91	Converse issues Quarter 1, 1991 report.
04/19/91	Converse samples and analyzes groundwater from MW-1, MW-2, MW-3 and MW-5.
06/28/91	Converse issues Quarter 2, 1991 report.
07/08-09/91	Converse bored and sampled SB-4, SB-5, OMW-6, MW-7 and OMW-8 and installed wells OMW-6, MW-7 and OMW-8.
07/11-12/91	Converse surveyed and developed OMW-6, MW-7 and OMW-8.
07/16/91	Converse sampled groundwater from MW-1, MW-2, MW-3, MW-5, OMW-6, MW-7 and OMW-8.
08/22/91	Fuel tanks and waste oil tank removed. Converse collects soil samples from bottoms and sidewalls of excavations.
09/18/91	Converse bored and sampled SB-6, SB-7, SB-8, and SB-9.
09/31/91	Converse issues Quarter 3, 1991 report.
10/08/91	Converse sampled groundwater from MW-1, MW-2, MW-3, MW-5, OMW-6, MW-7, and OMW-8.
10/17/91	Converse issues Underground Storage Tank Removal Report.
10/31/91	Converse issues Report on Exploratory Soil Borings.
12/31/31	Converse issues Quarter 4, 1991 report.
02/04/92	**Converse sampled groundwater from MW-1, MW-2, MW-3, MW-5, OMW-6, MW-7, and OMW-8.**
03/31/92	**Converse issues Quarter 1, 1992 report.**

NOTE:

Bold indicates work completed this quarter

APPENDIX B

Analytical Laboratory Reports and Chain-of-Custody Forms

NATIONAL
ENVIRONMENTAL
TESTING, INC.

NET Pacific, Inc.
435 Tesconi Circle
Santa Rosa, CA 95401
Tel: (707) 526-7200
Fax: (707) 526-9623

FEB 18 1992

Pete Fuller
Converse Consultants
55 Hawthorne St, Ste 500
San Francisco, CA 94105

Date: 02/13/1992
NET Client Acct No: 1802
NET Pacific Log No: 92.0555
Received: 02/05/1992

Client Reference Information

Shell, 2724 Castro Valley Blvd.

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:

Jules Skamarack
Laboratory Manager

JS:rct
Enclosure(s)

NET Pacific, Inc.

Client No: 1802 Date: 02/13/1992
Client Name: Converse Consultants
NET Log No: 92.0555 Page: 2

Ref: Shell, 2724 Castro Valley Blvd.

Descriptor, Lab No. and Results

Parameter	Method	Reporting Limit	OMW8 02/04/1992 112797	OMW6 02/04/1992 112798	Units
TPH (Gas/BTXE,Liquid)					
METHOD 5030 (GC,FID)			--	--	
DATE ANALYZED			02-06-92	02-06-92	
DILUTION FACTOR*			1	1	
as Gasoline	5030	0.05	ND	ND	mg/L
SURROGATE RESULTS			--	--	
Bromofluorobenzene	5030		100	87	% Rec
METHOD 8020 (GC,Liquid)			--	--	
DATE ANALYZED			02-06-92	02-06-92	
DILUTION FACTOR*			1	1	
Benzene	8020	0.5	0.9	ND	ug/L
Ethylbenzene	8020	0.5	0.6	ND	ug/L
Toluene	8020	0.5	1.9	ND	ug/L
Xylenes (Total)	8020	0.5	3.6	ND	ug/L
METHOD 3510 (GC,FID)					
DILUTION FACTOR*			1	1	
DATE EXTRACTED			02-06-92	02-06-92	
DATE ANALYZED			02-09-92	02-09-92	
as Diesel	3510	0.05	ND	ND	mg/L

NET Pacific, Inc.

Client No: 1802 Date: 02/13/1992
Client Name: Converse Consultants
NET Log No: 92.0555 Page: 3

Ref: Shell, 2724 Castro Valley Blvd.

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results MW-1 02/04/1992 112799	MW-2 02/04/1992 112800**	Units
TPH (Gas/BTXE,Liquid)					
METHOD 5030 (GC,FID)			--	--	
DATE ANALYZED			02-06-92	02-06-92	
DILUTION FACTOR*			1	1	
as Gasoline	5030	0.05	ND	1.7	mg/L
SURROGATE RESULTS			--	--	
Bromofluorobenzene	5030		101	150	% Rec
METHOD 8020 (GC,Liquid)			--	--	
DATE ANALYZED			02-06-92	02-06-92	
DILUTION FACTOR*			1	1	
Benzene	8020	0.5	ND	190	ug/L
Ethylbenzene	8020	0.5	ND	18	ug/L
Toluene	8020	0.5	ND	5.8	ug/L
Xylenes (Total)	8020	0.5	ND	110	ug/L
METHOD 3510 (GC,FID)					
DILUTION FACTOR*			1	1	
DATE EXTRACTED			02-06-92	02-06-92	
DATE ANALYZED			02-09-92	02-09-92	
as Diesel	3510	0.05	ND	0.87	mg/L

** Note: The positive result for the PETROLEUM HYDROCARBONS as Diesel analysis on this sample appears to be a lighter hydrocarbon than diesel.

NET Pacific, Inc.

Client No: 1802 Date: 02/13/1992
Client Name: Converse Consultants
NET Log No: 92.0555 Page: 4

Ref: Shell, 2724 Castro Valley Blvd.

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results MW-7 02/04/1992 112801**	MW-3 02/04/1992 112802	Units
TPH (Gas/BTXE,Liquid)					
METHOD 5030 (GC,FID)			--	--	
DATE ANALYZED			02-06-92	02-06-92	
DILUTION FACTOR*			1	1	
as Gasoline	5030	0.05	0.64	ND	mg/L
SURROGATE RESULTS			--	--	
Bromofluorobenzene	5030		105	110	% Rec
METHOD 8020 (GC,Liquid)			--	--	
DATE ANALYZED			02-06-92	02-06-92	
DILUTION FACTOR*			1	1	
Benzene	8020	0.5	130	4.0	ug/L
Ethylbenzene	8020	0.5	26	0.7	ug/L
Toluene	8020	0.5	51	2.0	ug/L
Xylenes (Total)	8020	0.5	79	3.2	ug/L
METHOD 3510 (GC,FID)					
DILUTION FACTOR*			1	1	
DATE EXTRACTED			02-06-92	02-06-92	
DATE ANALYZED			02-09-92	02-09-92	
as Diesel	3510	0.05	0.14	ND	mg/L

** Note: The positive result for the PETROLEUM HYDROCARBONS as Diesel analysis on this sample appears to be a lighter hydrocarbon than diesel.

NET Pacific, Inc.

Client No: 1802 Date: 02/13/1992
Client Name: Converse Consultants
NET Log No: 92.0555 Page: 5

Ref: Shell, 2724 Castro Valley Blvd.

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results MW-5 02/04/1992 112803	Field Blank 02/04/1992 112804	Units
TPH (Gas/BTXE,Liquid)					
METHOD 5030 (GC,FID)			--	--	
DATE ANALYZED			02-06-92	02-06-92	
DILUTION FACTOR*			1	1	
as Gasoline	5030	0.05	ND	ND	mg/L
SURROGATE RESULTS			--	--	
Bromofluorobenzene	5030		99	93	
METHOD 8020 (GC,Liquid)			--	--	
DATE ANALYZED			02-06-92	02-06-92	
DILUTION FACTOR*			1	1	
Benzene	8020	0.5	ND	ND	ug/L
Ethylbenzene	8020	0.5	ND	ND	ug/L
Toluene	8020	0.5	ND	0.6	ug/L
Xylenes (Total)	8020	0.5	ND	ND	ug/L
METHOD 3510 (GC,FID)					
DILUTION FACTOR*			1	1	
DATE EXTRACTED			02-06-92	02-06-92	
DATE ANALYZED			02-09-92	02-09-92	
as Diesel	3510	0.05	ND	ND	mg/L

NET Pacific, Inc.

Client No: 1802 Date: 02/13/1992
Client Name: Converse Consultants
NET Log No: 92.0555 Page: 6

Ref: Shell, 2724 Castro Valley Blvd.

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results 02-04-92 02/04/1992 112805**	 Trip Blank 02/04/1992 112806	Units
TPH (Gas/BTXE,Liquid)					
METHOD 5030 (GC,FID)			--	--	
DATE ANALYZED			02-06-92	02-06-92	
DILUTION FACTOR*			1	1	
as Gasoline	5030	0.05	1.7	ND	mg/L
SURROGATE RESULTS			--	--	
Bromofluorobenzene	5030		107	91	
METHOD 8020 (GC,Liquid)			--	--	
DATE ANALYZED			02-06-92	02-06-92	
DILUTION FACTOR*			1	1	
Benzene	8020	0.5	160	ND	ug/L
Ethylbenzene	8020	0.5	19	ND	ug/L
Toluene	8020	0.5	6.3	ND	ug/L
Xylenes (Total)	8020	0.5	93	ND	ug/L
METHOD 3510 (GC,FID)					
DILUTION FACTOR*			1	1	
DATE EXTRACTED			02-06-92	02-06-92	
DATE ANALYZED			02-09-92	02-09-92	
as Diesel	3510	0.05	0.87	ND	mg/L

** Note: The positive result for the PETROLEUM HYDROCARBONS as Diesel analysis on this sample appears to be a lighter hydrocarbon than diesel.

NET Pacific, Inc.

Client No: 1802
Client Name: Converse Consultants
NET Log No: 92.0555

Date: 02/13/1992
Page: 7

Ref: Shell, 2724 Castro Valley Blvd.

QUALITY CONTROL DATA

Parameter	Reporting Limits	Units	Cal Verf Stand % Recovery	Blank Data	Spike % Recovery	Duplicate Spike % Recovery	RPD
Diesel	0.05	mg/L	93	ND	96	93	2.6
Motor Oil	0.5	mg/L	89	ND	N/A	N/A	N/A
Gasoline	0.05	mg/L	101	ND	118	112	5.2
Benzene	0.5	ug/L	101	ND	109	108	1.4
Toluene	0.5	ug/L	98	ND	111	109	1.6

COMMENT: Blank Results were ND on other analytes tested.

NET Pacific, Inc

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, 16th Edition, APHA, 1985.

3739

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No.: _____

Date: 2-4-92
Page 1 of 3

Site Address: 2724 Castro Valley Blvd

WIC #: 204-8381-0407

Shell Engineer: Paul Hayes (510) Phone No. 685-3852 Fax #:

Consultant Name & Address: Converse Environ. 55 Hawthorne Suite 300 S.F.

Consultant Contact: Pete Fuller (415) Phone No. 543-4200 Fax #:

Comments:

Sampled By: Charles Brown

Printed Name: CHARLES BROWN

LAB: NET

CHECK ONE (1) BOX ONLY	CTADT
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	Preservation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
OMW8	2-4-92		X		4	X		X							
OMW8					3		X								
OMW6					3	X		X						CUSTODY SEALED 2/4/92	
OMW6					2		X								
MW1					3	X		X						1900	
MW1					2		X								
MW2					3	X		X							
MW2	2-4-92		X		2		X								

Relinquished By (signature): Charles Brown
Printed name: CHARLES BROWN
Date: 2/4/92 Time: 1640

Relinquished By (signature): M. Tavani
Printed name: M. TAVANI
Date: 2/4/92 Time: 1900

Relinquished By (signature): VIA FAX!
Printed name:
Date: Time:

Received (signature): M. Tavani
Printed name: M. TAVANI
Date: 2/4/92 Time: 1900

Received (signature):
Printed name:
Date: Time:

Received (signature): Kelly Temple
Printed name: Kelly Temple
Date: 2/5/92 Time: 0800

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

Last Revision Date: 10/15/91

3739

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD

Serial No.:

Date: 2-4-92
Page 2 of 3

Site Address: 2724 Castro Valley Blvd

WIC#: 204-1381-0407

Shell Engineer: Paul Hayes — Phone No. 510 685 3852 — Fax #:

Consultant Name & Address: Converse, 55 Hawthorne Suite 500 S.F.

Consultant Contact: Pete Fuller — Phone No. 415 543-4200 — Fax #:

Comments:

Sampled By: Charles Brown (signature)

Printed Name: CHARLES BROWN

LAB: NET

CHECK ONE (1) BOX ONLY — CT/DT

- [X] 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
- [X] 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
MW-7	2-4-92		X		3	X		X											
MW-7					2		X												
MW-3					3	X		X											
MW-3					2		X												
MW-5					3	X		X											
MW-5					2		X												
Field Blank					1	X		X											
Field Blank	2-4-92		X		1		X												

CUSTODY SEALED 2/4/92 1900 [initials] seal intact

Relinquished By (signature)	Printed name	Date/Time	Received (signature)	Printed name	Date/Time
Charles Brown	CHARLES BROWN	Date: 2/4/92 Time: 1640	M. Tavani	M. TAVANI	Date: 2/4/92 Time: 1640
M. Tavani	M. TAVANI	Date: 2/4/92 Time: 1900	Received (signature):	Printed name:	Date: Time:
(VIA NCS)	Printed name:	Date: Time:	K. Temple	Kelly Temple	Date: 2/5/92 Time: 0900

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

Last Revision Date: 10/15/91

3739

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD

Serial No.:

Date: 2-4-92
Page 3 of 3

Site Address: 2724 Castro Valley Blvd

WIC#: 204-1381-0407

Shell Engineer: Paul Hayes — Phone No. 510 685-8852 — Fax #:

Consultant Name & Address: Converse, 55 Hawthorne Suite 500 SF

Consultant Contact: Pete Fuller — Phone No. 415-543-4200 — Fax #:

Comments:

Sampled By: Charles Brown (signature)

Printed Name: CHARLES BROWN

LAB: NET

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.

Analysis Required

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
02-04-92	2-4-92		X		3	X		X							
02-04-92	"		"		2		X								
TRIP BLANK	"		"		1	X		X							
TRIP BLANK	2-4-92		X		1		X								

CUSTODY SEALED 2/4/92 @ 1900 MT seal intact

Relinquished By (signature)	Printed name	Date / Time	Received (signature)	Printed name	Date / Time
Charles Brown (signature)	CHARLES BROWN	Date: 2/4/92 Time: 1600	Mike Tavani (signature)	M. TAVANI	Date: 2/4/92 Time: 440
Mike Tavani (signature)	M. TAVANI	Date: 2/4/92 Time: 1900			Date: Time:
(via NCS)		Date: Time:	K Temple (signature)	Kelly Temple	Date: 2/5/92 Time: 0800

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

Last Revision Date: 10/15/91

APPENDIX C

Field Data Forms

CONVERSE ENVIRONMENTAL WEST

Well Sampling Summary

Project Name: 2724 Castro Valley Blvd
Project Number: 88-44-380-20
Date: 2-4-92
Inspector: C. Brown

Well Number	Time	Total Depth	Depth to Water	Comments
MW5	0620		8.13	
MW3	0625		8.24	
MW7	0635		7.18	
MW1	0640		8.52	
MW2	0643		7.46	
O MW6	0650		7.47	
O MW8	0655		8.22	

CONVERSE ENVIRO ENTAL WEST
Water Sampling Form

Job # 88-44-380-2L Site 2724 Castro Valley Sampling Team SB

Date 2/4/92 Well #/Source MW-1 Lab Sample I.D.# _____

Field conditions CLEAR COOL

Describe Equipment D-Con Before Sampling This Well DEDICATED SUCTION + DISPOSABLE BAILER

Describe All Meter/Equipment Calibration BUFFER SOLUTION

Total Depth of Well 16.35 Time _____ OVM Reading High _____ Average _____

Depth to Water Before Pumping ~~8.13~~ 8.52 3/30/92 Product Present YES/NO (Circle) Thickness _____

Height of Water Column (ft) 7.22 (2" .16 · 3" .37 · 4" .65 · 6" 1.47) = Volume 4.7 · Purge Multiple 3 = Volume to Purge 14.1 (Gal)

Depth Purging From BOTTOM

Time Purging Begins _____ Notes on Initial Discharge CLEAR

Pre-Purge Sample (Check) Sheen _ Petro Odor ___ Clear ✓ Other (Describe under comments)

Time	Volume Purged	pH	Conductivity	T°C	Notes
0940	PP	7.90	980	16.7	
0946	5	7.65	1050	16.9	
0949	10	7.69	900	17.2	TR ORGANIC
0950	11	PUMP AIR	H2O	12.5	
0957	15	—	—	—	—

Time	Volume Purged	pH	Conductivity	T	Notes
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—

Time Sample Collection Begins _____ Time Sample Collection Ends 1050 Total Volume Purged ~~15~~ 11

Depth to Water for 80% Recharge 9.6 Depth to Water After Total Purge _____

DTW = 12.2 at 0950
DTW = 10.6 at 0955
DTW = PUMP at _____

DTW = 11.13 at 0958
DTW = 8.17 at 1040
DTW = _____ at _____

Dissolved oxygen measured? YES/NO (circle) Barometric Pressure _____ Ambient D.O. ppm _____
Sample Temp _____ Sample D.O. _____ ppm
Comments: _____

CONVERSE ENVIRONMENTAL WEST
Water Sampling Form

Job # 88-44-3820 Site 2724 CASTROVALLEY Sampling Team BS

Date 2/4/92 Well #/Source MW2 Lab Sample I.D.# _____

Field conditions CLEAR

Describe Equipment D-Con Before Sampling This Well DEDICATED SUCTION + DISPOSABLE BAILER

Describe All Meter/Equipment Calibration BUFFER SOLUTIONS

Total Depth of Well 14.9 Time _____ OVM Reading High _____ Average _____

Depth to Water Before Pumping 7.5 Product Present YES/NO (Circle) Thickness _____

Height of Water Column (ft) 7.4 2" .16 3" .37 (4" .65) 6" 1.47 = Volume 4.8 * Purge Multiple 3 = Volume to Purge 14.4 (Gal)

Depth Purging From Bottom

Time Purging Begins _____ Notes on Initial Discharge CLEAR

Pre-Purge Sample (Check) Sheen _ Petro Odor ___ Clear ✓ · Other (Describe under comments)

Time	Volume Purged	pH	Conductivity	T C	Notes	Time	Volume Purged	pH	Conductivity	T	Notes
1010	P.P.	7.12	460	16.9	@ 15½ GAL						
1020	4	7.65	490	16.7							
1025	8	7.60	590	16.7							
1030	13	WELL DRY									
1039	13	7.61	580	17.1							
	LET RECHARGE										

Time Sample Collection Begins _____ Time Sample Collection Ends (1325) Total Volume Purged 13

Depth to Water for 80% Recharge 9.0 Depth to Water After Total Purge _____

DTW = 13.1	at 1031	DTW = 8.3	at 1320
DTW = 11.2	at 1055	DTW = _____	at _____
DTW = 9.4	at 1147	DTW = _____	at _____

Dissolved oxygen measured? YES/NO (circle) Barometric Pressure _____ Ambient D.O. ppm _____

Sample Temp _____ Sample D.O. _____ ppm

Comments: NO FOOT VALVE.

DUP SAMPLE 02-04-92

CONVERSE ENVIRC :ENTAL WEST
Water Sampling Form

Job # 88-44-380-20 Site 2724 Castro Valley Blvd Sampling Team [illegible]

Date 2-4-92 Well #/Source 3 Lab Sample I.D.# ______

Field conditions CLEAR WARM

Describe Equipment D-Con Before Sampling This Well DEDICATED SUCTION + DISPOSABLE

Describe All Meter/Equipment Calibration BUFFER SOLUTION

Total Depth of Well 24.34 Time ______ OVM Reading High ______ Average ______

Depth to Water Before Pumping 8.74 Product Present YES/NO (Circle) Thickness ______

Height of Water Column (ft) 15.60 × 2" .16 · 3" .37 · 4" .65 · 6" 1.47 = Volume 10.14 · Purge Multiple 3 = Volume to Purge 30.4 (Gal)

Depth Purging From ______

Time Purging Begins ______ Notes on Initial Discharge ______

Pre-Purge Sample (Check) Sheen __ Petro Odor __ Clear ✓ · Other (Describe under comments)

Time	Volume Purged	pH	Conductivity	T C	Notes	Time	Volume Purged	pH	Conductivity	T	Notes
1350	P.P.	7.49	1150	18.9							
1356	10	7.43	1200	19.3							
1405	20	7.37	1810	19.9							
1412	25	7.39	2400	20.2							
	26 - DRY										

Time Sample Collection Begins ______ Time Sample Collection Ends 1455 Total Volume Purged 26

Depth to Water for 80% Recharge 11.9 Depth to Water After Total Purge ______

DTW = 21.0 at 1415 DTW = ______ at ______
DTW = 16.0 at 1452 DTW = ______ at ______
DTW = ______ at ______ DTW = ______ at ______

Dissolved oxygen measured? YES/NO (circle) Barometric Pressure ______ Ambient D.O. ppm ______
Sample Temp ______ Sample D.O. ______ ppm
Comments: ______

CONVERSE ENVIRC IENTAL WEST
Water Sampling Form

Job # 88-44-380-20 Site 2724 Castro Valley Sampling Team [illegible]

Date 2/4/92 Well #/Source MW5 Lab Sample I.D.# ____

Field conditions CLEAR - WARM

Describe Equipment D-Con Before Sampling This Well DEDICATED Suction + DISPOSABLE BAILER

Describe All Meter/Equipment Calibration BUFFER SOLUTIONS

Total Depth of Well 22.8 Time ____ OVM Reading High ____ Average ____

Depth to Water Before Pumping 8.13 Product Present YES/NO (Circle) Thickness ____

Height of Water Column (ft) 14.7 2" .16 3" .37 4" .55 6" 1.47 = Volume 9.6 · Purge Multiple 3 = Volume to Purge 28.2 (Gal)

Depth Purging From ____

Time Purging Begins ____ Notes on Initial Discharge CLEAR

Pre-Purge Sample (Check) Sheen __ Petro Odor __ Clear ✓ · Other (Describe under comments)

Time	Volume Purged	pH	Conductivity	T C	Notes	Time	Volume Purged	pH	Conductivity	T	Notes
1425	PD	7.49	1500	19.3	-0 [illegible] GAL						
1431	10	7.38	1490	19.6							
1445	20		WELL	"DRY"							
	30										

Time Sample Collection Begins ____ Time Sample Collection Ends 1520 Total Volume Purged 20

Depth to Water for 80% Recharge 11.0 Depth to Water After Total Purge ____

DTW = 22.0 at 1440 DTW = ____ at ____
DTW = 19.3 at 1510 DTW = ____ at ____
DTW = ____ at ____ DTW = ____ at ____

Dissolved oxygen measured? YES/NO (circle) Barometric Pressure ____ Ambient D.O. ppm ____
Sample Temp ____ Sample D.O. ____ ppm
Comments: NEED STAB PIPE, SHORT [illegible]
WELL RECOVERED 2.7 FT IN 1/2 HOURS

Converse Environmental West FORM\WATER SAMPLING_2.FRM (Rev. 5/12/90)

CONVERSE ENVIRONMENTAL WEST
Water Sampling Form

Job # 88-44-380.20 Site 2724 Castro Valley Sampling Team 83

Date 2-4-92 Well #/Source OMW 6 Lab Sample I.D.# _____

Field conditions CLEAR COOL

Describe Equipment D-Con Before Sampling This Well DEDICATED SUCTION + DISPOSABLE BAILERS

Describe All Meter/Equipment Calibration BUFFER

Total Depth of Well 21.8 Time _____ OVM Reading High _____ Average _____

Depth to Water Before Pumping 7.47 Product Present YES/NO (Circle) Thickness _____

Height of Water Column (ft) 14.3 2" .16 3" .37 (4") .65 6" 1.47 = Volume 9.3 × Purge Multiple 3 = Volume to Purge 27.9 (Gal)

Depth Purging From BOTTOM

Time Purging Begins _____ Notes on Initial Discharge _____

Pre-Purge Sample (Check) Sheen _ Petro Odor ___ Clear ✓ Other (Describe under comments)

Time	Volume Purged	pH	Conductivity	T °C	Notes	Time	Volume Purged	pH	Conductivity	T	Notes
0755	P.P.	7.32	2200	18.1	@ 20GAL						
0803	10	7.28	2350	18.5							
0806	15	7.20	2280	17.8							
0809	20	7.27	2360	18.6							
0813	27	7.30	2400	18.7							
			NEARLY DRY								

Time Sample Collection Begins _____ Time Sample Collection Ends 0900 Total Volume Purged 27

Depth to Water for 80% Recharge 10.3 Depth to Water After Total Purge _____

DTW = 20.4 at 0813 DTW = _____ at _____
DTW = 18.1 at 0900 DTW = _____ at _____
DTW = _____ at _____ DTW = _____ at _____

Dissolved oxygen measured? YES/NO (circle) Barometric Pressure _____ Ambient D.O. ppm _____
Sample Temp _____ Sample D.O. _____ ppm
Comments: _____

CONVERSE ENVIRO :ENTAL WEST
Water Sampling Form

Job # 85-44-380-20 Site 2724 CASTRO VALLEY Sampling Team SB

Date 2-4-92 Well #/Source 7 Lab Sample I.D.# _____

Field conditions CLEAR ~~[illegible]~~

Describe Equipment D-Con Before Sampling This Well DISPOSABLE BAILER

Describe All Meter/Equipment Calibration BUFFER SOLUTION

Total Depth of Well 19.96 Time _____ OVM Reading High _____ Average _____

Depth to Water Before Pumping 7.18 Product Present YES (NO) (Circle) Thickness _____

Height of Water Column (ft) 12.78 (2" 3" 4" 6" / .16 .37 .55 1.47) * Volume 1.9 * Purge Multiple 3 = Volume to Purge 5.8 (Gal)

Depth Purging From FULL DEPTH

Time Purging Begins _____ Notes on Initial Discharge _____

Pre-Purge Sample (Check) Sheen _ Petro Odor ___ Clear ✓ Other (Describe under comments)

Time	Volume Purged	pH	Conductivity	T C	Notes	Time	Volume Purged	pH	Conductivity	T	Notes
1115	P.P.	7.58	910	17.0							
1120	2	7.45	970	17.4							
1129	4	7.30	1250	18.0							
1132	6	7.28	1340	18.4							

Time Sample Collection Begins _____ Time Sample Collection Ends (1255) Total Volume Purged 6

Depth to Water for 80% Recharge 10.2 Depth to Water After Total Purge _____

DTW = 14.9 at 11 40
DTW = 13.9 at 12 00
DTW = 12.1 at 12 55 SAMPLE

DTW = _____ at _____
DTW = _____ at _____
DTW = _____ at _____

Dissolved oxygen measured? YES/NO (circle) Barometric Pressure _____ Ambient D.O. ppm _____
Sample Temp _____ Sample D.O. _____ ppm
Comments: _____

CONVERSE ENVIRONMENTAL WEST
Water Sampling Form

Job # 88-44-38020 Site 2724 CASTRO VALL Sampling Team SG

Date 2/4/92 Well #/Source OMW 8 Lab Sample I.D.# _____

Field conditions COLD EARLY AM

Describe Equipment D-Con Before Sampling This Well DEDICATED SUCTION DISPOSABLE BAILER

Describe All Meter/Equipment Calibration BUFFER SOLUTION

Total Depth of Well 19.74 Time _____ OVM Reading High _____ Average _____

Depth to Water Before Pumping 8.22 Product Present YES (NO) (Circle) Thickness _____

Height of Water Column (ft) 11.52 2" .16 3" .37 (4") .65 6" 1.47 = Volume 2.5 * Purge Multiple 3 = Volume to Purge 22.5 (Gal)

Depth Purging From BOTTOM

Time Purging Begins _____ Notes on Initial Discharge CLEAR

Pre-Purge Sample (Check) Sheen _ Petro Odor ___ Clear ✓ Other (Describe under comments)

Time	Volume Purged	pH	Conductivity	T°C	Notes	Time	Volume Purged	pH	Conductivity	T	Notes
0710	P.P.	7.30	820	17.2							
0720	10	7.35	770	18.8							
0725	15	7.40	850	18.8							
0729	20	"DRY"	WATER @ 19.4 FT								
		LET RECHARGE FOR PARAMETER									
0740	20	7.63810	18.0	18.3 FT							

Time Sample Collection Begins _____ Time Sample Collection Ends 0830 Total Volume Purged 20

Depth to Water for 80% Recharge 10.5 Depth to Water After Total Purge _____

DTW = 19.4 at 0729 DTW = _____ at _____
DTW = 18.3 at 0740 DTW = _____ at _____
DTW = 13.9 at 0820 DTW = _____ at _____

Dissolved oxygen measured? YES/NO (circle) Barometric Pressure _____ Ambient D.O. ppm _____
Sample Temp _____ Sample D.O. _____ ppm

Comments:
WELL DRY 1 HR 80% OR ENOUGH WATER TO SAMPLE
SAMPLE @ WATER LEVEL 13.9. STONE OPENS IN 10 MINUTES