CONVERSE ENVIRONMENTAL WEST

REPORT OF ACTIVITIES
QUARTER 2, 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
San Francisco, California 94105

June 5, 1992

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

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June 5, 1992
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Mr. Paul Hayes
SHELL OIL COMPANY
P.O. Box 5278
Concord, California 94524

Subject: Transmittal of the Quarter 2, 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 2, 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

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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 2, 1992 (Q2/92) for the former Shell Oil Company (Shell) station (site) located at 2724 Castro Valley Blvd, Castro Valley, California (Drawing 1). The Activity Summary for Q2/92 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.

Excavation I began in June 1989, and consisted of removing soil around the former storage tanks to a depth of 12 feet, the approximate depth of the water table. 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.

Excavation III began on August 22, 1991, when the three underground fuel tanks and the underground waste oil tank were excavated, removed and properly disposed of. The waste oil tank excavation was expanded to remove all accessible contaminated soil in the vicinity. 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 Q2/92 were authorized under an existing purchase order and blanket number from Shell for environmental services at the site. The work completed during Q2/92 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 dissolved oxygen (DO). The samples from MW-2 and MW-7 were also analyzed for total dissolved solids (TDS), cadmium, chromium, lead, nickle and zinc; and

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

- Installation and sampling of temporary groundwater sampling points across Castro Valley Boulevard on April 24, 1992.

- Resampling of monitoring well MW-2 and MW-7 on May 13, 1992.

SECTION 2

WORK COMPLETED THIS QUARTER

Work initiated and completed during Q2/92 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 April 6, 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. All samples were also analyzed for DO. The samples from MW-2 and MW-7 were also analyzed for TDS, cadmium, chromium, lead, nickle and zinc. Wells MW-2 and MW-7 were resampled on May 13, 1992.

Copies of analytical laboratory reports and chain-of-custody forms are provided in Appendix B. Copies of the field sampling forms compiled during purging and sampling are contained in Appendix C.

2.2 PHYSICAL MONITORING

During Q2/92, 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 Q2/92 monitoring activities.

2.3 OFFSITE GROUNDWATER SAMPLING

Four temporary groundwater sampling points (P1, P2, P3, P4) were drilled and installed on the south side of Castro Valley Boulevard on April 24, 1992. The well points were installed by drilling borings using a hydraulically operated hammer/driver which is hoisted over a drill string/sampler. The drill string/sampler consists of 1.5-inch diameter rod and a split spoon sampler which are hydraulically driven to the desired depths. Groundwater samples were collected by driving decontaminated temporary well screen down within the borings and below the water table. Groundwater purging and sampling was accomplished using a peristaltic pump following appropriate regulatory protocols. The samples were submitted, under chain-of-custody to NET Pacific. The samples were analyzed for TPH-g and BTEX.

Copies of the analytical laboratory reports and chain-of-custody forms are provided in Appendix B. Copies of the field sampling forms are contained in Appendix C.

SECTION 3

FINDINGS AND DISCUSSION

3.1 GROUNDWATER ELEVATION AND GRADIENT

Depth to groundwater at the time of the Q2/92 monitoring ranged from 5.53 to 7.12 ft. below grade surface (bgs), which indicated a rise in groundwater elevation of approximately 1.5 feet since last quarter. The inferred groundwater flow direction was toward the south at a gradient of approximately 0.015 ft/ft to 0.037 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 site is presented in Table 8. The supplementary analytical data for TDS, DO, and the suite of five metals for MW-2 and MW-7 is included in Table 9. Laboratory analytical results for groundwater samples collected from monitoring wells MW-1, MW-3, and MW-5 showed no detectable concentrations of hydrocarbons. Samples collected from wells MW-2 and MW-7 on April 6, 1992 contained concentrations of TPH-g, TPH-d, and/or 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. The concentrations of DO found onsite ranged from 11 mg/L to 14 mg/L. The TDS concentrations ranged from 1,200 mg/L in MW-2 to 590 mg/L in MW-7. Concentrations of chromium, lead and zinc were found in both MW-2 and MW-7. MW-7 also contained 0.06 mg/L of nickle. No cadmium was detected.

The sample from well MW-7 collected on May 13, 1992 did not contain concentrations of TPH-g or TPH-d but contained concentrations of BTEX. The sample collected from MW-2 on that date contained concentrations of TPH-g, TPH-d and BTEX.

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 10. Laboratory analytical results of groundwater samples collected from monitoring wells OMW-6 and OMW-8 showed no detectable concentrations of hydrocarbons. Both water samples contained 13 mg/L of DO.

Offsite Groundwater Sampling - South Side of Castro Valley Boulevard

A summary of groundwater chemistry data for the groundwater sampling points on the south side of Castro Valley Boulevard is presented in Table 11. Groundwater samples collected from sample point P3 showed no detectable concentrations of petroleum hydrocarbons. Sample point P1 indicated the presence of toluene and xylenes at concentrations of 0.0008 and 0.0009 mg/L, respectively. Samples from sample points P2 and P4 contained TPH-g at concentrations of 13 and 5.8 mg/L, respectively and concentrations of TPH-d at concentrations of 3.7 and 3.9 mg/L, respectively.

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 detected.

No petroleum hydrocarbons were detected in offsite monitoring wells OMW-6 and OMW-8 and the on-site wells MW-1, MW-3 and MW-5.

Concentrations of BTEX detected last quarter (Q1/92) in samples from wells MW-3 and OMW-8 were not detected this quarter. Until Q1/92, groundwater samples from monitoring wells MW-3 and OMW-8 had historically exhibited no detectable concentrations of petroleum hydrocarbons. Since these wells are inferred to be up- and cross-gradient of the suspected contamination source area, it was thought unlikely that the Q1/92 analytical results were representative of actual

groundwater conditions in the vicinity of those wells. The results of the Q2/91 sampling, which showed no detectable petroleum hydrocarbons, further suggests that the positive results detected in Q1/92 were not representative of actual water quality at those locations. It appears likely that the Q1/92 results are the result of laboratory methodology rather than water quality. Discussions with the analytical laboratory have found that the Q1/92 water samples from wells MW-3 and OMW-8 were both run immediately after samples that contained levels of hydrocarbons sufficiently high as to require dilution. It is possible that residual hydrocarbons from the previous samples may have contaminated the Q1/92 MW-3 and OMW-8 samples.

The metal concentrations found in the supplementary analysis were all below the maximum contaminant levels for drinking water as established by the California Environmental Protection Agency. The 1,200 mg/L concentration of TDS found in MW-2 exceeds the drinking water standards (between 500 mg/L and 1,000 mg/L) as established by the California Regional Water Quality Control Board drinking water standards.

SECTION 4

NEXT QUARTER ACTIVITIES

The following activity is 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.

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,

PETER A. FULLER
Project Manager

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

PRIMARY CONTACTS

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

Quarter 2, 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. Richard Finn, 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 2, 1992

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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 State Water Resources Control Board, 1985, California Administrative Code, Title 23 Waters, Chapter 3 Water Resources Control Board, Subchapter 16 Underground Tank Regulations, effective August 13, 1985.

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_____, 1991, Exploratory borings at former Shell Oil Company retail gas station, 2724 Castro Valley Boulevard, Castro Valley, California, dated October 31, 1991.

Helley, E.J., La Joie, K.R., Spangle, W.E., and Blair, M.L., 1979, Flatland deposits of the San Francisco Bay Region, California - their geology and engineering properties, and their importance to comprehensive planning, U.S. Geological Survey Professional Paper 943, 88 p.

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 2, 1992

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

PERCENT COMPLETE

Activity	Quarter 2, 1992 Onsite	Quarter 2, 1992 Offsite	Total to Date Onsite	Total to Date Offsite
Soil Characterization	0	0	90	90
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. 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

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 (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	<2.5	<2.5	<2.5	<2.5	NA
A-2	8	08/22/91	<1.0	NA	NA	NA	<2.5	<2.5	<2.5	<2.5	NA
B-1	8	08/22/91	<1.0	NA	NA	NA	<2.5	<2.5	<2.5	<2.5	NA
B-2	8	08/22/91	<1.0	NA	NA	NA	<2.5	<2.5	<2.5	<2.5	NA
C-1	8	08/22/91	<1.0	NA	NA	NA	<2.5	<2.5	<2.5	<2.5	NA
C-2	8	08/22/91	<1.0	NA	NA	NA	<2.5	<2.5	<2.5	<2.5	NA
SW-1	8	08/22/91	<1.0	NA	NA	NA	<2.5	<2.5	<2.5	<2.5	NA
SW-2	8	08/22/91	<1.0	NA	NA	NA	<2.5	<2.5	<2.5	<2.5	NA
WO-1	7	08/22/91	7.8	<1.0	1,100	1,400	<2.5	<2.5	13	30	11
WO-2	4	08/22/91	<1.0	<1.0	<1.0	<1.0	<2.5	<2.5	<2.5	<2.5	NA
WO-3	7	08/22/91	<1.0	<1.0	<1.0	<1.0	<2.5	<2.5	<2.5	<2.5	NA
WO-4	6	08/22/91	<1.0	1.6	<1.0	<1.0	<2.5	<2.5	<2.5	<2.5	NA
WO-5	5.5	08/22/91	<1.0	<1.0	<1.0	<1.0	<2.5	<2.5	<2.5	<2.5	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
	04/06/92	**6.75**	**93.03**	**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
	04/06/92	**6.91**	**93.92**	**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
	04/06/92	**7.12**	**94.36**	**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
	04/06/92	**5.53**	**94.37**	**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
	04/06/92	**5.80**	**95.68**	**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
	04/06/92	**5.87**	**93.67**	**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
	04/06/92	**6.82**	**93.36**	**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 Quarter 2, 1992

TABLE 8. RESULTS OF GROUNDWATER CHEMICAL ANALYSES - 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-1	**04/06/92**	**0.05**	**<0.05**	**NA**	**0.042**	**<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-2	**04/06/92**	**3.8**	**1.0**	**NA**	**0.930**	**0.050**	**0.110**	**0.190**
MW-2	**05/13/92**	**2.4**	**0.57**	**NA**	**0.610**	**0.0088**	**0.090**	**<0.0005**
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-3	**04/06/92**	**<0.05**	**<0.05**	**NA**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**

TABLE 8 (cont'd). RESULTS OF GROUNDWATER CHEMICAL ANALYSES - 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-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
MW-5	**04/06/92**	**<0.05**	**<0.05**	**NA**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**
MW-7	07/16/91	1.3	0.27	1.1	0.440	0.140	0.0069	0.160
MW-7	10/08/91	0.52	<0.05	<0.5	0.230	0.036	0.026	0.054
MW-7	02/04/92	0.64	0.14**	NA	0.130	0.051	0.026	0.079
MW-7	**04/06/92**	**0.08**	**<0.05**	**NA**	**0.032**	**0.0017**	**0.0023**	**0.0044**
MW-7	**05/13/92**	**<0.05**	**<0.05**	**NA**	**0.0031**	**0.0017**	**0.0009**	**0.0038**

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 2, 1992

TABLE 9. RESULTS OF SUPPLEMENTARY GROUNDWATER CHEMICAL - ANALYSES (mg/L)

Former Shell Oil Company Site and Castro Valley Florist
2724 and 2728 Castro Valley Boulevard
Castro Valley, California

Well Number	Date Sample	DO	TDS	Cadmium	Chromium	Lead	Nickel	Zinc
MW-1	04/06/92	11	NA	NA	NA	NA	NA	NA
MW-2	04/06/92	11	1,200	<0.02	0.02	0.006	<0.05	0.19
MW-3	04/06/92	12	NA	NA	NA	NA	NA	NA
MW-5	04/06/92	14	NA	NA	NA	NA	NA	NA
MW-7	04/06/92	11	590	<0.02	0.05	0.004	0.06	0.13
OMW-6	04/06/92	13	NA	NA	NA	NA	NA	NA
OMW-8	04/06/92	13	NA	NA	NA	NA	NA	NA

NOTES:

mg/L Milligram per liter
NA Not analyzed for this parameter
DO Dissolved oxygen
TDS Total dissolved solids

TABLE 10. RESULTS OF GROUNDWATER CHEMICAL ANALYSES - 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-6	**04/06/92**	**<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
OMW-8	02/04/92	<0.05	<0.05	NA	0.0009	0.0019	0.0006	0.0036
OMW-8	**04/06/92**	**<0.05**	**<0.05**	**NA**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**

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 2, 1992

TABLE 11. RESULTS OF GROUNDWATER CHEMICAL ANALYSES - SOUTH SIDE OF CASTRO VALLEY BOULEVARD (mg/L)

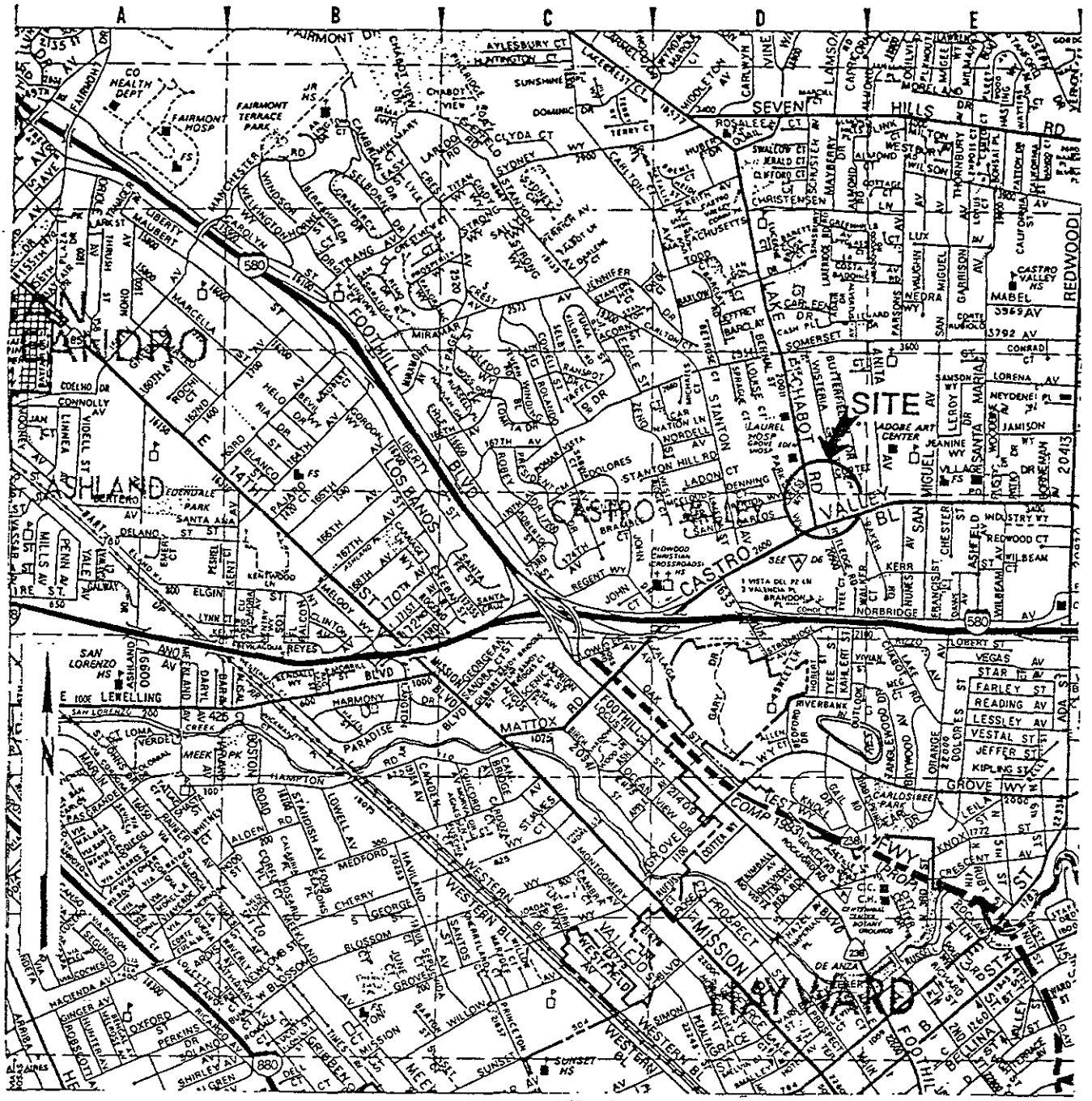
Castro Valley Florist
2728 Castro Valley Boulevard
Castro Valley, California

Sample Number	Date Sampled	TPH-g	TPH-d	TPH-mo	Benzene	Toluene	Ethyl-Benzene	Xylenes
P1	**04/24/92**	**<0.05**	**<0.05**	**NA**	**<0.0005**	**0.0008**	**<0.0005**	**0.0009**
P2	**04/24/92**	**13**	**3.7**	**NA**	**<0.0005**	**0.01**	**0.42**	**0.73**
P3	**04/24/92**	**<0.05**	**NA**	**NA**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**
P4	**04/24/92**	**5.8**	**3.9**	**NA**	**<0.0005**	**<0.0005**	**0.11**	**0.11**

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 2, 1992

DRAWINGS

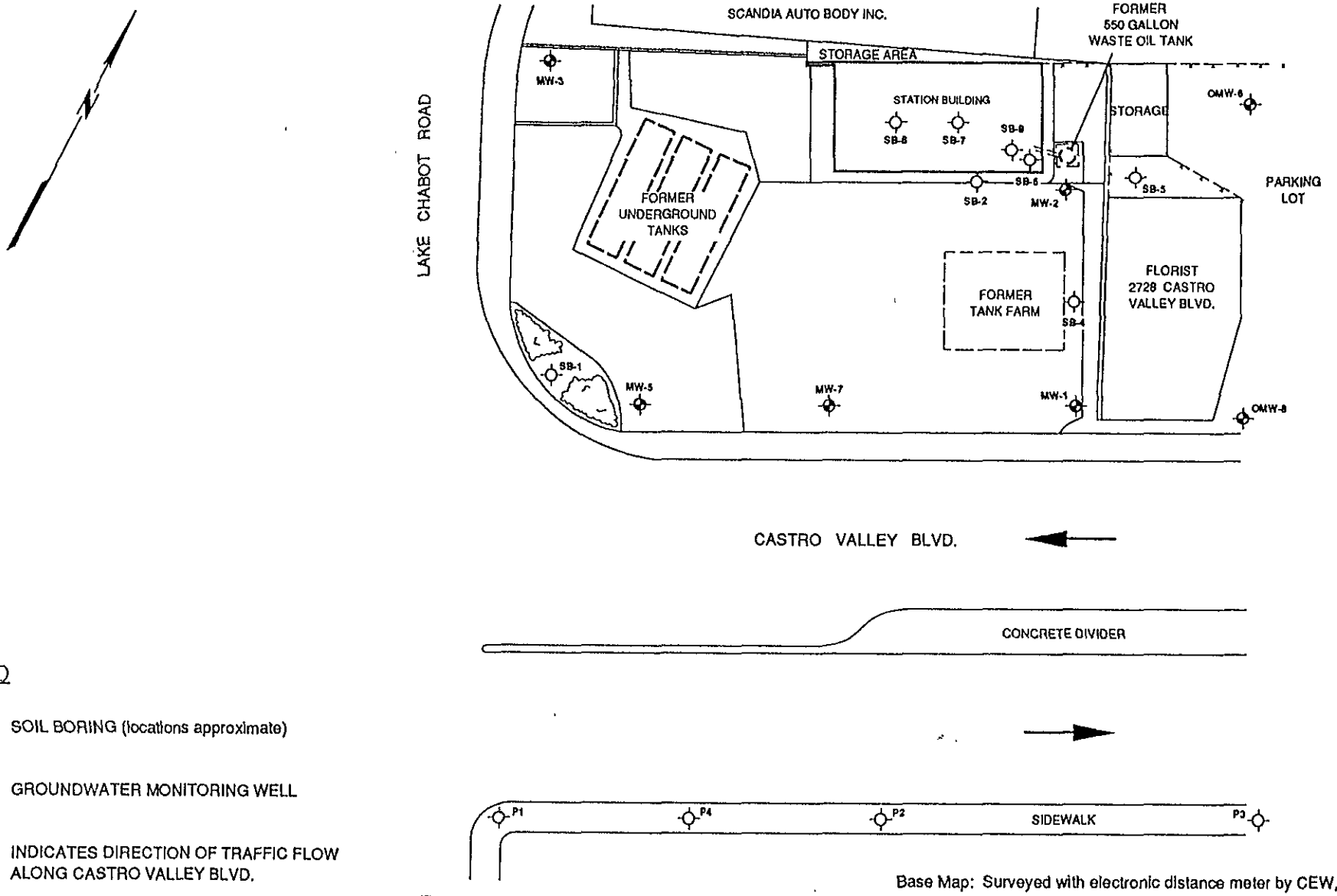


SITE LOCATION MAP

SHELL OIL COMPANY
2724 Castro Valley Boulevard
Castro Valley, California

Converse Environmental West

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



LEGEND

SB-1 — SOIL BORING (locations approximate)

MW-1 — GROUNDWATER MONITORING WELL

INDICATES DIRECTION OF TRAFFIC FLOW ALONG CASTRO VALLEY BLVD.

0 40 80

SCALE IN FEET

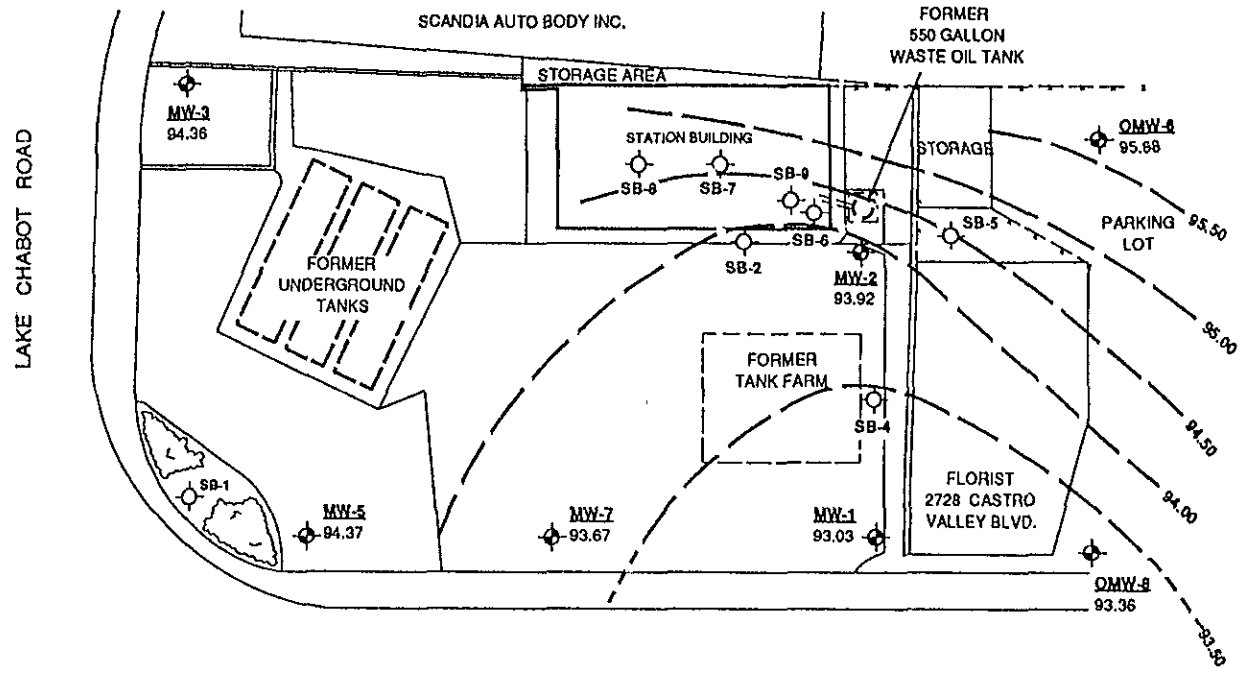
Base Map: Surveyed with electronic distance meter by CEW, 1990.

PLOT PLAN - (4/6/92)

SHELL OIL COMPANY
2724 Castro Valley Boulevard
Castro Valley, California

Converse Environmental West

Scale	AS SHOWN
Project No.	88-44-380-20
Prepared by	TM
Date	5/6/91
Checked by	DS
Drawing No.	2
WIC Number	204-1381-0407



LEGEND

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

SB-1 SOIL BORING (locations approximate)

MW-1 GROUNDWATER MONITORING WELL SHOWING GROUNDWATER ELEVATION

NOTE: GROUNDWATER ELEVATIONS GIVEN WITH RESPECT TO A POINT HAVING AN ARBITRARY DATUM OF 100.00 FEET

0 40 80

SCALE IN FEET

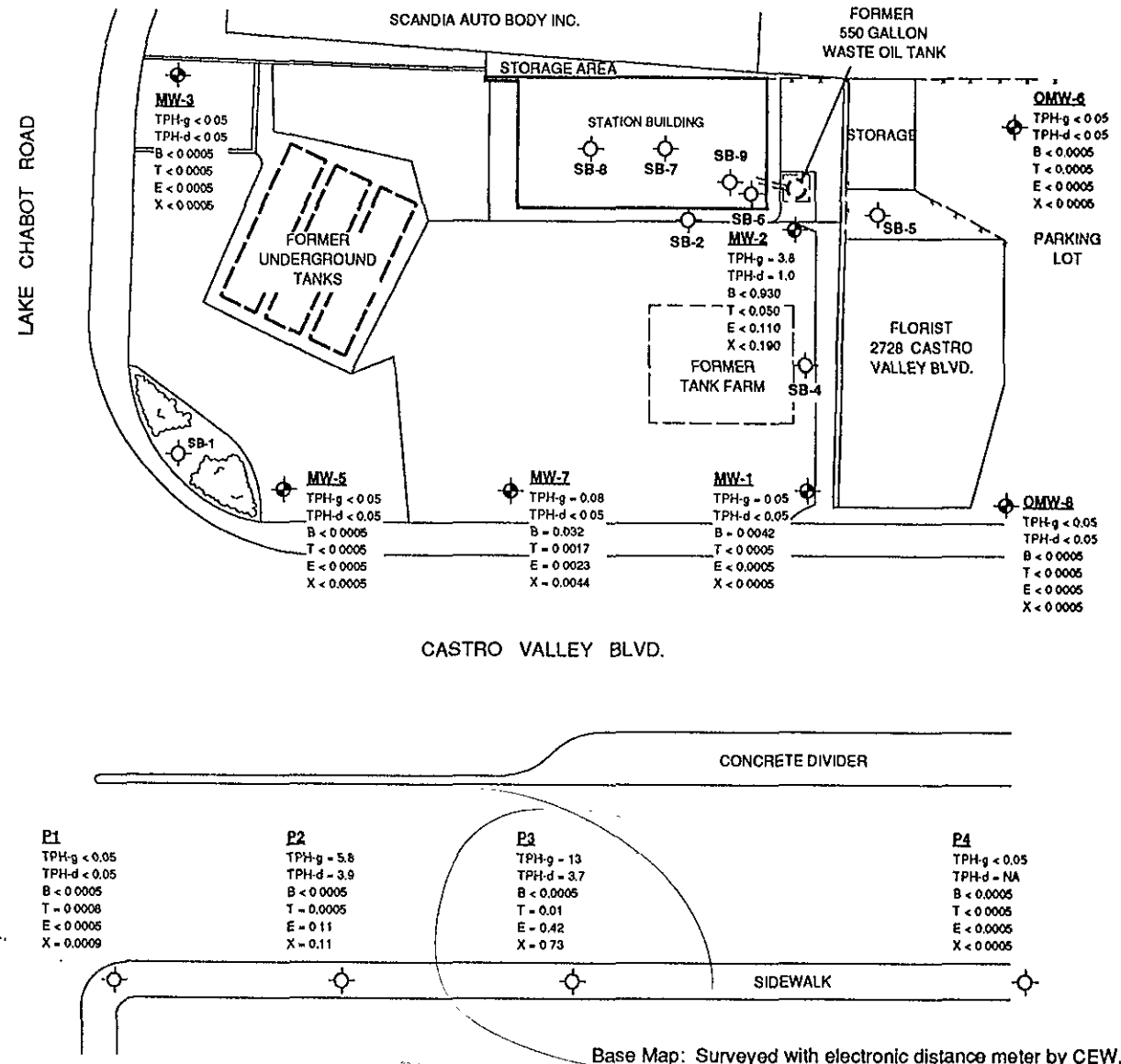
Base Map: Surveyed with electronic distance meter by CEW, 1990.

GROUNDWATER CONTOUR MAP Q2/92

SHELL OIL COMPANY
2724 Castro Valley Boulevard
Castro Valley, California

Converse Environmental West

Scale	AS SHOWN
Prepared by	TM
Checked by	DS
WIC Number	204-1381-0407
Project No.	88-44-380-20
Date	5/6/91
Drawing No.	3



LEGEND

- SB-1 — SOIL BORING (locations approximate)
- 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)
- B = BENZENE (in milligrams per liter)
- T = TOLUENE (in milligrams per liter)
- E = ETHYLBENZENE (in milligrams per liter)
- X = XYLENES (in milligrams per liter)
- NA= NOT ANALYZED

0 40 80

SCALE IN FEET

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

PLAN: TPH-g, TPH-d AND BTEX Q2/92

SHELL OIL COMPANY
2724 Castro Valley Boulevard
Castro Valley, California

Converse Environmental West

Scale	AS SHOWN
Prepared by	TM
Checked by	DS
WIC Number	204-1381-0407
Project No.	88-44-380-20
Date	5/6/91
Drawing No.	4

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.
04/06/92	**Converse sampled groundwater from MW-1, MW-2, MW-3, MW-5, OMW-6, MW-7 and OMW-8.**

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

APR 2 8 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

REVISED 04-24-92

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)

Ref: Shell, 2724 Castro Valley Blvd.

			Descriptor, Lab No. and Results		
			OMW8	OMW6	
			02/04/1992	02/04/1992	
Parameter	Method	Reporting Limit	112797**	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

** Note: The positive results for the METHOD 8020 analysis on this sample may have been due to carryover from a previous sample.

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.

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.

***Note: The positive results for the METHOD 8020 analysis on this sample may have been due to carryover from a previous sample.

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 Date: 02/13/1992
Client Name: Converse Consultants
NET Log No: 92.0555 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, 17th Edition, APHA, 1989.

NATIONAL
ENVIRONMENTAL
TESTING, INC.

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435 Tesconi Circle
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Tel: (707) 526-7200
Fax: (707) 526-9623

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

Date: 04/20/1992
NET Client Acct. No: 1802
NET Pacific Job No: 92.1876
Received: 04/08/1992

Client Reference Information

SHELL 2724 Castro Valley

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

Enclosure(s)

Ref: SHELL 2724 Castro Valley

SAMPLE DESCRIPTION: MW-5
Date Taken: 04/06/1992
Time Taken:
LAB Job No: (-118726)

Parameter	Method	Reporting Limit	Results	Units
Dissolved Oxygen	360.1	0.5	14	mg/L
TPH (Gas/BTXE,Liquid)				
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			04-14-92	
DILUTION FACTOR*			1	
as Gasoline	5030	0.05	ND	mg/L
METHOD 8020 (GC,Liquid)			--	
DATE ANALYZED			04-14-92	
DILUTION FACTOR*			1	
Benzene	8020	0.5	ND	ug/L
Ethylbenzene	8020	0.5	ND	ug/L
Toluene	8020	0.5	ND	ug/L
Xylenes (Total)	8020	0.5	ND	ug/L
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		72	% Rec.
METHOD 3510 (GC,FID)				
DILUTION FACTOR*			1	
DATE EXTRACTED			04-13-92	
DATE ANALYZED			04-13-92	
as Diesel	3510	0.05	ND	mg/L

Ref: SHELL 2724 Castro Valley

SAMPLE DESCRIPTION: MW-3
Date Taken: 04/06/1992
Time Taken:
LAB Job No: (-118727)

Parameter	Method	Reporting Limit	Results	Units
Dissolved Oxygen	360.1	0.5	12	mg/L
TPH (Gas/BTXE,Liquid)				
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			04-14-92	
DILUTION FACTOR*			1	
as Gasoline	5030	0.05	ND	mg/L
METHOD 8020 (GC,Liquid)			--	
DATE ANALYZED			04-14-92	
DILUTION FACTOR*			1	
Benzene	8020	0.5	ND	ug/L
Ethylbenzene	8020	0.5	ND	ug/L
Toluene	8020	0.5	ND	ug/L
Xylenes (Total)	8020	0.5	ND	ug/L
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		101	% Rec.
METHOD 3510 (GC,FID)				
DILUTION FACTOR*			1	
DATE EXTRACTED			04-13-92	
DATE ANALYZED			04-13-92	
as Diesel	3510	0.05	ND	mg/L

Ref: SHELL 2724 Castro Valley

SAMPLE DESCRIPTION: OMW-8
Date Taken: 04/06/1992
Time Taken:
LAB Job No: (-118728)

Parameter	Method	Reporting Limit	Results	Units
Dissolved Oxygen	360.1	0.5	13	mg/L
TPH (Gas/BTXE,Liquid)				
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			04-14-92	
DILUTION FACTOR*			1	
as Gasoline	5030	0.05	ND	mg/L
METHOD 8020 (GC,Liquid)			--	
DATE ANALYZED			04-14-92	
DILUTION FACTOR*			1	
Benzene	8020	0.5	ND	ug/L
Ethylbenzene	8020	0.5	ND	ug/L
Toluene	8020	0.5	ND	ug/L
Xylenes (Total)	8020	0.5	ND	ug/L
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		99	% Rec.
METHOD 3510 (GC,FID)				
DILUTION FACTOR*			1	
DATE EXTRACTED			04-13-92	
DATE ANALYZED			04-13-92	
as Diesel	3510	0.05	ND	mg/L

Ref: SHELL 2724 Castro Valley

SAMPLE DESCRIPTION: OMW-6
Date Taken: 04/06/1992
Time Taken:
LAB Job No: (-118729)

Parameter	Method	Reporting Limit	Results	Units
Dissolved Oxygen	360.1	0.5	13	mg/L
TPH (Gas/BTXE,Liquid)				
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			04-14-92	
DILUTION FACTOR*			1	
as Gasoline	5030	0.05	ND	mg/L
METHOD 8020 (GC,Liquid)			--	
DATE ANALYZED			04-14-92	
DILUTION FACTOR*			1	
Benzene	8020	0.5	ND	ug/L
Ethylbenzene	8020	0.5	ND	ug/L
Toluene	8020	0.5	ND	ug/L
Xylenes (Total)	8020	0.5	ND	ug/L
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		106	% Rec.
METHOD 3510 (GC,FID)				
DILUTION FACTOR*			1	
DATE EXTRACTED			04-13-92	
DATE ANALYZED			04-13-92	
as Diesel	3510	0.05	ND	mg/L

Ref: SHELL 2724 Castro Valley

SAMPLE DESCRIPTION: MW-1
Date Taken: 04/06/1992
Time Taken:
LAB Job No: (-118730**)

Parameter	Method	Reporting Limit	Results	Units
Dissolved Oxygen	360.1	0.5	11	mg/L
TPH (Gas/BTXE,Liquid)				
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			04-14-92	
DILUTION FACTOR*			1	
as Gasoline	5030	0.05	0.05	mg/L
METHOD 8020 (GC,Liquid)			--	
DATE ANALYZED			04-14-92	
DILUTION FACTOR*			1	
Benzene	8020	0.5	42	ug/L
Ethylbenzene	8020	0.5	ND	ug/L
Toluene	8020	0.5	ND	ug/L
Xylenes (Total)	8020	0.5	ND	ug/L
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		87	% Rec.
METHOD 3510 (GC,FID)				
DILUTION FACTOR*			1	
DATE EXTRACTED			04-13-92	
DATE ANALYZED			04-13-92	
as Diesel	3510	0.05	ND	mg/L

** Note: The positive result for the PETROLEUM HYDROCARBONS as Gasoline analysis is an hydrocarbon which consists of a singular peak.

Ref: SHELL 2724 Castro Valley

SAMPLE DESCRIPTION: 040692
Date Taken: 04/06/1992
Time Taken:
LAB Job No: (-118731**)

Parameter	Method	Reporting Limit	Results	Units
Dissolved Oxygen	360.1	0.5	12	mg/L
TPH (Gas/BTXE,Liquid)				
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			04-14-92	
DILUTION FACTOR*			1	
as Gasoline	5030	0.05	0.05	mg/L
METHOD 8020 (GC,Liquid)			--	
DATE ANALYZED			04-14-92	
DILUTION FACTOR*			1	
Benzene	8020	0.5	42	ug/L
Ethylbenzene	8020	0.5	ND	ug/L
Toluene	8020	0.5	ND	ug/L
Xylenes (Total)	8020	0.5	ND	ug/L
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		105	% Rec.
METHOD 3510 (GC,FID)				
DILUTION FACTOR*			1	
DATE EXTRACTED			04-13-92	
DATE ANALYZED			04-13-92	
as Diesel	3510	0.05	ND	mg/L

** Note: The positive result for the PETROLEUM HYDROCARBONS as Gasoline analysis is an hydrocarbon which consists of a singular peak.

Ref: SHELL 2724 Castro Valley

SAMPLE DESCRIPTION: MW-2
Date Taken: 04/06/1992
Time Taken:
LAB Job No: (-118732)

Parameter	Method	Reporting Limit	Results	Units
Tot. Dissolved Solids (TFR)	160.1	10	1,200	mg/L
Dissolved Oxygen	360.1	0.5	11	mg/L
Cadmium (ICP)	EPA 6010	0.02	ND	mg/L
Chromium (ICP)	EPA 6010	0.02	0.02	mg/L
Lead (GFAA)	EPA 7421	0.002	0.006	mg/L
Nickel (ICP)	EPA 6010	0.05	ND	mg/L
Zinc (ICP)	EPA 6010	0.02	0.19	mg/L
TPH (Gas/BTXE,Liquid)				
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			04-15-92	
DILUTION FACTOR*			10	
as Gasoline	5030	0.05	3.8	mg/L
METHOD 8020 (GC,Liquid)			--	
DATE ANALYZED			04-15-92	
DILUTION FACTOR*			10	
Benzene	8020	0.5	930	ug/L
Ethylbenzene	8020	0.5	110	ug/L
Toluene	8020	0.5	50	ug/L
Xylenes (Total)	8020	0.5	190	ug/L
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		121	% Rec.
METHOD 3510 (GC,FID)				
DILUTION FACTOR*			1	
DATE EXTRACTED			04-13-92	
DATE ANALYZED			04-13-92	
as Diesel	3510	0.05	1.0	mg/L

Ref: SHELL 2724 Castro Valley

SAMPLE DESCRIPTION: MW-7
Date Taken: 04/06/1992
Time Taken:
LAB Job No: (-118733)

Parameter	Method	Reporting Limit	Results	Units
Tot. Dissolved Solids (TFR)	160.1	10	590	mg/L
Dissolved Oxygen	360.1	0.5	11	mg/L
Cadmium (ICP)	EPA 6010	0.02	ND	mg/L
Chromium (ICP)	EPA 6010	0.02	0.05	mg/L
Lead (GFAA)	EPA 7421	0.002	0.009	mg/L
Nickel (ICP)	EPA 6010	0.05	0.06	mg/L
Zinc (ICP)	EPA 6010	0.02	0.13	mg/L
TPH (Gas/BTXE,Liquid)				
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			04-14-92	
DILUTION FACTOR*			1	
as Gasoline	5030	0.05	0.08	mg/L
METHOD 8020 (GC,Liquid)			--	
DATE ANALYZED			04-14-92	
DILUTION FACTOR*			1	
Benzene	8020	0.5	32	ug/L
Ethylbenzene	8020	0.5	2.3	ug/L
Toluene	8020	0.5	1.7	ug/L
Xylenes (Total)	8020	0.5	4.4	ug/L
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		100	% Rec.
METHOD 3510 (GC,FID)				
DILUTION FACTOR*			1	
DATE EXTRACTED			04-13-92	
DATE ANALYZED			04-13-92	
as Diesel	3510	0.05	ND	mg/L

Ref: SHELL 2724 Castro Valley

SAMPLE DESCRIPTION: Field Blank
Date Taken: 04/06/1992
Time Taken:
LAB Job No: (-118734)

Parameter	Method	Reporting Limit	Results	Units
TPH (Gas/BTXE,Liquid)				
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			04-14-92	
DILUTION FACTOR*			1	
as Gasoline	5030	0.05	ND	mg/L
METHOD 8020 (GC,Liquid)			--	
DATE ANALYZED			04-14-92	
DILUTION FACTOR*			1	
Benzene	8020	0.5	ND	ug/L
Ethylbenzene	8020	0.5	ND	ug/L
Toluene	8020	0.5	ND	ug/L
Xylenes (Total)	8020	0.5	ND	ug/L
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		99	% Rec.
METHOD 3510 (GC,FID)				
DILUTION FACTOR*			1	
DATE EXTRACTED			04-13-92	
DATE ANALYZED			04-13-92	
as Diesel	3510	0.05	ND	mg/L

Ref: SHELL 2724 Castro Valley

SAMPLE DESCRIPTION: Trip Blank
Date Taken: 04/06/1992
Time Taken:
LAB Job No: (-118735)

Parameter	Method	Reporting Limit	Results	Units
TPH (Gas/BTXE,Liquid)				
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			04-14-92	
DILUTION FACTOR*			1	
as Gasoline	5030	0.05	ND	mg/L
METHOD 8020 (GC,Liquid)			--	
DATE ANALYZED			04-14-92	
DILUTION FACTOR*			1	
Benzene	8020	0.5	ND	ug/L
Ethylbenzene	8020	0.5	ND	ug/L
Toluene	8020	0.5	ND	ug/L
Xylenes (Total)	8020	0.5	ND	ug/L
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		104	% Rec.
METHOD 3510 (GC,FID)				
DILUTION FACTOR*			1	
DATE EXTRACTED			04-13-92	
DATE ANALYZED			04-13-92	
as Diesel	3510	0.05	ND	mg/L

Ref: SHELL 2724 Castro Valley

QUALITY CONTROL DATA

Parameter	Reporting Limits	Units	Cal Verf Stand % Recovery	Blank Data	Spike % Recovery	Duplicate Spike % Recovery	RPD
Diesel	0.05	mg/L	99	ND	93	117	23
Gasoline	0.05	mg/L	95	ND	96	95	1.0
Benzene	0.5	ug/L	99	ND	96	95	1.3
Toluene	0.5	ug/L	103	ND	99	97	2.3
COMMENT: Blank Results were ND on other analytes tested.							
Gasoline	0.05	mg/L	90	ND	93	99	6.3
Benzene	0.5	ug/L	98	ND	102	108	5.7
Toluene	0.5	ug/L	93	ND	102	106	4.2
COMMENT: Blank Results were ND on other analytes tested.							
TDS(TFR)	10	mg/L	100	ND	N/A	N/A	1.7
Diss.Oxygen	0.5	mg/L	99	ND	N/A	N/A	2.1
Cadmium	0.02	mg/L	104	ND	92	90	1.5
Chromium	0.02	mg/L	106	ND	89	93	3.6
Lead	0.002	mg/L	101	ND	90	90	< 1
Nickel	0.05	mg/L	104	ND	91	95	3.9
Zinc	0.02	mg/L	104	ND	92	88	4.0

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KEY TO ABBREVIATIONS and METHOD REFERENCES

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

Method References

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

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

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

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

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No.: 5033

Date:
Page 1 of 3

Site Address: 2724 CASTRO VALLEY

WIC #: 204-1381-0407

Shell Engineer: R. HAYES | Phone No. | Fax #:

Consultant Name & Address: CEW / 55 HAWTHORNE ST, SUITE 500, S.F.

Consultant Contact: P. FULLER | Phone No. (415) 543-4200 | Fax #:

Comments:

Sampled By: [signature] R. Richards

Printed Name: R. Richards

LAB: NET

Sample ID	Date	Soil	Water	Air	No. of cont.
MW-5	4-6-92		X		3
" "			X		2
MW-2			X		3
" "			X		3
" "			X		1
MW-3			X		3
" "			X		2
FIELD BLANK			X		1

Analysis Required

TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	TOTAL Dissolved Solids	ICAP - METALS	Dissolved O_2
X		X					
	X						X
X		X					
(X)	X				X		X
						X	
X		X					
	X						X
X		X					

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.

Container Size	Preservation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
40 ML	HCl	N	ground water	
1 LIT.	—	N	" "	run 00 for qualitative test Cd, Cr, Pb, N, Zn.
40 ML	HCl	N	" "	
1 LITR	—	N	" "	
1 500ML	SULF. ACID	N	" "	
40 ML	HCl	N	" "	
1 LIT.	—	N	" "	
40 ML	HCl	1	" "	

Relinquished By (signature): [signature] | Printed name: R. Richards | Date: 4/7/92 | Time: 1400 | Received (signature): [signature] | Printed name: M. TAVANI | Date: 4/7/92 | Time: 0945

Relinquished By (signature): [signature] | Printed name: M. TAVANI | Date: | Time: | Received (signature): | Printed name: | Date: | Time:

Relinquished By (signature): [signature] | Printed name: | Date: | Time: | Received (signature): [signature] | Printed name: Kelly Temple | Date: 4/8/92 | Time: 0800

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

Last Revision Date: 10/15/91

CUSTODY SEALED 4/7/92
@ 1400 [signature]

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No.: 5033

Date:
Page 2 of 3

Site Address: 2724 CASTRO VALLEY BLVD

WIC #: 204-138-0407

Shell Engineer: P. HAYES
Phone No.:
Fax #:

Consultant Name & Address: CEW / 55 HAWTHORNE ST, SUITE 500 S.F.

Consultant Contact: P. FULLER
Phone No.: (415) 543-4200
Fax #:

Comments:

Sampled By: R. Richards
Printed Name: R. Richards

LAB: NET

CHECK ONE (1) BOX ONLY — GTADT

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	TOTAL Dissolved Solids	ICAP-METALS	Dissolved O2	Container Size	Preservation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
OMW-8	4-6-92		X		4	X		X						40 ML	Hcl	N	Shoowd WATER	
"			X		3		X						X	1 LITER	—	N	" "	
OMW-6			X		3	X		X						40 ML	Hcl	N	" "	
" "			X		2		X						X	1 LITER	—	N	" "	
MW-1			X		3	X		X						40 ML	Hcl	N	" "	
" "			X		2		X						X	1 LITER	—	N	" "	
040692			X		3	X		X						40 ML	Hcl	N	" "	
040692			X		2		X						X	1 LITER	—	N	" "	

Relinquished By (signature): R. Richards
Printed name: R. Richards
Date:
Time:

Relinquished By (signature): Mike Tavani
Printed name: M. TAVANI
Date: 4/7/92
Time: 1900

Received (signature): Mike Tavani
Printed name: M. TAVANI
Date:
Time:

Relinquished By (signature): (Via UPS)
Printed name:
Date:
Time:

Received (signature):
Printed name: Kelly Temple
Date: 4/8/92
Time: 0800

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

Last Revision Date: 10/15/91

CUSTODY SEALED 4/7/92
@ 1900 MLT seal intact

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No.: 5037

Date:
Page 3 of 3

Site Address: 27724 Castro Valley
WIC#: 204-1381-0404
Shell Engineer: R. Hayes | Phone No.: | Fax #:
Consultant Name & Address: CEW/55 Hawthorne St., Suite 500, S.F.
Consultant Contact: P. Fuller | Phone No. (415) 543-4200 | Fax #:
Comments:
Sampled By: [signature]
Printed Name: R. Richards

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	Total Dissolved Solids	ICAP - Metals	Dissolved O₂	Container Size	Preparation Used	Composite Y/N	Material Description	Sample Condition/Comments
Field Blank	4-6-92		X		1		X							1 Lit.	—	N	ground water	
MW-7	↓		X		3	X		X						40 mL	Hcl	N	" "	
" "			X		3		X				X		X	1 Lit.	—	N	" "	
" "			X		1							X		1 500 mL	Sulf. Acid	N	" "	
Trip Blank			X		1	X		X									" "	
" "	↓		X		1		X										" "	

Relinquished By (signature)	Printed name	Date / Time	Received (signature)	Printed name	Date / Time
[signature]	R. Richards	Date: Time:	[signature]	M. Tavani	Date: 4/7/92 Time: 2041
[signature]	M. Tavani	Date: 4/7/92 Time: 1900	Received (signature):	Printed name:	Date: Time:
(vans)	Printed name:	Date: Time:	[signature]	Kelly Temple	Date: 4/8/92 Time: 0800

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

Last Revision Date: 10/15/91

CUSTODY SEALED 4/7/92
1900 [initials] seal intact

NATIONAL ENVIRONMENTAL TESTING, INC.

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

MAY 0 '92

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

Date: 05/06/1992
NET Client Acct. No: 1802
NET Pacific Job No: 92.2327
Received: 04/25/1992

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

Enclosure(s)

Ref: SHELL 2724 Castro Valley Blvd.

SAMPLE DESCRIPTION: P4
Date Taken: 04/24/1992
Time Taken: 12:20
LAB Job No: (-121130**)

Parameter	Method	Reporting Limit	Results	Units
TPH (Gas/BTXE,Liquid)				
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			05-04-92	
DILUTION FACTOR*			10	
as Gasoline	5030	0.05	5.8	mg/L
METHOD 8020 (GC,Liquid)			--	
DATE ANALYZED			05-04-92	
DILUTION FACTOR*			10	
Benzene	8020	0.5	ND	ug/L
Ethylbenzene	8020	0.5	110	ug/L
Toluene	8020	0.5	ND	ug/L
Xylenes (Total)	8020	0.5	110	ug/L
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		96	% Rec.
METHOD 3510 (GC,FID)				
DILUTION FACTOR*			1	
DATE EXTRACTED			04-28-92	
DATE ANALYZED			05-01-92	
as Diesel	3510	0.05	3.9	mg/L

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

Ref: SHELL 2724 Castro Valley Blvd.

SAMPLE DESCRIPTION: P2
Date Taken: 04/24/1992
Time Taken: 15:30
LAB Job No: (-121131**)

Parameter	Method	Reporting Limit	Results	Units
TPH (Gas/BTXE,Liquid)				
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			05-04-92	
DILUTION FACTOR*			10	
as Gasoline	5030	0.05	13	mg/L
METHOD 8020 (GC,Liquid)			--	
DATE ANALYZED			05-03-92	
DILUTION FACTOR*			10	
Benzene	8020	0.5	ND	ug/L
Ethylbenzene	8020	0.5	420	ug/L
Toluene	8020	0.5	10	ug/L
Xylenes (Total)	8020	0.5	730	ug/L
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		101	% Rec.
METHOD 3510 (GC,FID)				
DILUTION FACTOR*			1	
DATE EXTRACTED			04-28-92	
DATE ANALYZED			05-01-92	
as Diesel	3510	0.05	3.7	mg/L

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

Ref: SHELL 2724 Castro Valley Blvd.

SAMPLE DESCRIPTION: P1
Date Taken: 04/24/1992
Time Taken: 16:00
LAB Job No: (-121132)

Parameter	Method	Reporting Limit	Results	Units
TPH (Gas/BTXE,Liquid)				
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			05-03-92	
DILUTION FACTOR*			1	
as Gasoline	5030	0.05	ND	mg/L
METHOD 8020 (GC,Liquid)			--	
DATE ANALYZED			05-03-92	
DILUTION FACTOR*			1	
Benzene	8020	0.5	ND	ug/L
Ethylbenzene	8020	0.5	ND	ug/L
Toluene	8020	0.5	0.8	ug/L
Xylenes (Total)	8020	0.5	0.9	ug/L
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		84	% Rec.
METHOD 3510 (GC,FID)				
DILUTION FACTOR*			1	
DATE EXTRACTED			04-28-92	
DATE ANALYZED			05-01-92	
as Diesel	3510	0.05	ND	mg/L

Ref: SHELL 2724 Castro Valley Blvd.

SAMPLE DESCRIPTION: P3
Date Taken: 04/24/1992
Time Taken: 16:30
LAB Job No: (-121133)

Parameter	Method	Reporting Limit	Results	Units
TPH (Gas/BTXE,Liquid)				
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			05-03-92	
DILUTION FACTOR*			1	
as Gasoline	5030	0.05	ND	mg/L
METHOD 8020 (GC,Liquid)			--	
DATE ANALYZED			05-03-92	
DILUTION FACTOR*			1	
Benzene	8020	0.5	ND	ug/L
Ethylbenzene	8020	0.5	ND	ug/L
Toluene	8020	0.5	ND	ug/L
Xylenes (Total)	8020	0.5	ND	ug/L
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		83	% Rec.

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	90	ND	90	90	< 1
Gasoline	0.05	mg/L	96	ND	95	97	2.1
Benzene	0.5	ug/L	88	ND	92	93	< 1
Toluene	0.5	ug/L	89	ND	95	95	< 1

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, 17th Edition, APHA, 1989.

5972

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No.: 5972

Date: 4/24/92
Page 1 of 1

Site Address: 2724 Castro Valley Blvd

WIC #: 204-1381-0407

Shell Engineer: Paul Hayes (310) approved by PH. Phone No. 685-3852 Fax #:

Consultant Name & Address: Converse Environmental

Consultant Contact: Pete Fuller / Dave Soiga Phone No. 5934200 Fax #:

Comments:

Sampled By: Charles Brown

Printed Name: Charles Brown

LAB: N.E.T.

CHECK ONE (1) BOX ONLY		STAT	TURN AROUND TIME
Quarterly Monitoring	[ ]	5461	24 hours [ ]
Site Investigation	[ ]	5441	48 hours [ ]
Soil for disposal	[ ]	5442	15 days [ ] (Normal)
Water for disposal	[ ]	5443	Other 5 W DAY
Air Sample - Sys O&M	[ ]	5452	NOTE: Notify Lab as soon as possible of 24/48 hrs. TAT.
Water Sample - Sys O&M	[ ]	5453	
Other	[ ]		

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
P4 1220	4/24/92		X		4	X		X			VOA			diesel due 5/6	
P4 1220			X		3		X				LIT			OK Pet	PF to NP 4/27
P2 1530			X		3	X		X			VOA				
P2 1530			X		2		X				LIT				
P1 1600			X		3	X		X			VOA				
P1 1600			X		1½		X				LIT				
P3 1630	4/24/92		X		2	X		X			VOA				

CUSTODY SEALED (2) 1600 4/24/92

Relinquished By (signature): Charles Brown
Printed name:
Date:
Time:

Relinquished By (signature): M. Tavani
Printed name: M. TAVANI
Date: 4/24/92
Time: 1900

Relinquished By (signature):
Printed name:
Date:
Time:

Received (signature): M. Tavani
Printed name: M. TAVANI
Date: 4/24/92
Time: 5:10PM

Received (signature): A. Lopez
Printed name: Anny Lopez
Date: 4/25/92
Time: 0800

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

NATIONAL ENVIRONMENTAL TESTING, INC.

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

MAY 2 2 1992

Dave Siegel
Converse Consultants
55 Hawthorne St, Ste 500
San Francisco, CA 94105

Date: 05/20/1992
NET Client Acct No: 1802
NET Pacific Job No: 92.2698
Received: 05/14/1992

Client Reference Information

SHELL 2724 Castro Valley Blvd, Castro Valley

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: 05/20/1992
Client Name: Converse Consultants
NET Job No: 92.2698 Page: 2

Ref: SHELL 2724 Castro Valley Blvd, Castro Valley

Descriptor, Lab No. and Results

Parameter	Method	Reporting Limit	MW-7 05/13/1992 122907	MW-2 05/13/1992 122908 **	Units
TPH (Gas/BTXE,Liquid)					
METHOD 5030 (GC,FID)			--	--	
DATE ANALYZED			05-18-92	05-18-92	
DILUTION FACTOR*			1	1	
as Gasoline	5030	0.05	ND	2.4	mg/L
METHOD 8020 (GC,Liquid)			--	--	
DATE ANALYZED			05-18-92	05-18-92	
DILUTION FACTOR*			1	1	
Benzene	8020	0.5	3.1	610	ug/L
Ethylbenzene	8020	0.5	0.9	90	ug/L
Toluene	8020	0.5	1.7	8.8	ug/L
Xylenes (Total)	8020	0.5	3.8	ND	ug/L
SURROGATE RESULTS			--	--	
Bromofluorobenzene	5030		81	107	% Rec.
METHOD 3510 (GC,FID)					
DILUTION FACTOR*			1	1	
DATE EXTRACTED			05-17-92	05-17-92	
DATE ANALYZED			05-18-92	05-18-92	
as Diesel	3510	0.05	ND	0.57	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 Job No: 92.2698

Date: 05/20/1992
Page: 3

Ref: SHELL 2724 Castro Valley Blvd, Castro Valley

QUALITY CONTROL DATA

Parameter	Reporting Limits	Units	Cal Verf Stand % Recovery	Blank Data	Spike % Recovery	Duplicate Spike % Recovery	RPD
Diesel	0.05	mg/L	109	ND	113	115	1.7
Gasoline	0.05	mg/L	103	ND	100	98	2.0
Benzene	0.5	ug/L	100	ND	100	99	2.0
Toluene	0.5	ug/L	100	ND	108	105	1.0

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, 17th Edition, APHA, 1989.

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No.: 6347

Date: 5/13/92
Page 1 of 1

Site Address: 2724 Castro Valley Blvd Castro Valley

WIC#: 204-1381-0407

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

Consultant Name & Address: Converse
55 Hawthorne Suite 500 S.F. 94105

Consultant Contact: Dave Seigel — Phone No.: 415 543 4200 — Fax #:

Comments:

Sampled By: Charles Brown
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 [X] 15 days [ ] (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
MW-7	5/13/92		X		4	X		X			V			results wed ok per	
MW-7	"		"		3		X				L			Dave Segal to NP 5/13/92	
MW-2	"		"		3	X		X			V				
MW-2	5/13/92		X		2		X				L				

CUSTODY SEALED 5-13 @ 7:00 J.Bu — Seals intact

Relinquished By (signature):	Printed name:	Date: / Time:	Received (signature):	Printed name:	Date: / Time:
Charles Brown			Jason Bu	J. Bu	Date: 5-13 Time: 6:00
Jason Bu	J. BURN	Date: 5-13 Time: 7:00			
			K. Temple	K. Temple	Date: 5/14/92 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: 98-44.3390-7.01
Date: 4-6-92
Inspector: KR

Well Number	Time	Total Depth	Depth to Water	Comments
MW-1	1034		6.75'	
MW-2	1039		6.91'	WATER IN BOX
MW-3	1043		7.12'	
MW 5	1041		5.53'	
MW-7	1032		5.87'	
OMW-6	0900		5.80'	
OMW8	0855		6.82'	

CONVERSE ENVIRONMENTAL WEST
Water Sampling Form

Job # 88-44-320-20 Site 2724 CRESTVIEW Sampling Team RR

Date 7-6-92 Well #/Source OVM-5 Lab Sample I.D.# _____

Field conditions SUNNY, COOL

Describe Equipment D-Con Before Sampling This Well DISPOSABLE BAILER - KIMWIPES

Describe All Meter/Equipment Calibration CALIBRATED TO FIELD STANDARDS

Total Depth of Well 19.74 Time 0955 OVM Reading High _____ Average _____

Depth to Water Before Pumping 6.82 Product Present YES/NO (Circle) Thickness _____

Height of Water Column (ft) 12.92 (2" .16, 3" .37, (4" .65), 6" .47) = Volume 8.40 × Purge Multiple 3 = Volume to Purge 25.2 (Gal)

Depth Purging From NEAR BOTTOM

Time Purging Begins 0910 Notes on Initial Discharge CLEAR

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

Time	Volume Purged	pH	Conductivity	T	Notes
0910	PP	7.04	900	18.5	SEE ABOVE
0916	10	7.34	925	19.5	CLEAR
0920	15	7.39	900	18.8	"
—	20	—	—	—	—
—	25	—	—	—	—

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

Time Sample Collection Begins _____ Time Sample Collection Ends 1025 Total Volume Purged _____

Depth to Water for 80% Recharge 9.40 Depth to Water After Total Purge (2)

DTW = 19.3 at 0921
DTW = 16.0 at 0925
DTW = 12.54 at 1020

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: _____

1054

CONVERSE ENVIRONMENTAL WEST
Water Sampling Form

Job # 88-44-380-20 Site 2724 CASTRO VALLEY Sampling Team BR

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

Field conditions SUNNY, WARM

Describe Equipment D-Con Before Sampling This Well REFER TO OMW-5

Describe All Meter/Equipment Calibration REFER TO OMW-8

Total Depth of Well 21.8 Time 0900 OVM Reading High _____ Average _____

Depth to Water Before Pumping 5.80 Product Present YES/NO (Circle) Thickness _____

Height of Water Column (ft) 16.0 (2" .16 · 3" .37 · 4" .65 · 6" 1.47) = Volume 10.4 · Purge Multiple 3 = Volume to Purge 31.2 (Gal)

Depth Purging From NEAR BOTTOM

Time Purging Begins 0950 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
0950	DP	7.01	1800	18.0	SLIGHT SHEEN
0954	10	7.16	2000	19.0	CLEAR
0958	15	7.23	2200	19.0	"
1005	20	7.24	2250	19.1	"
1009	25	7.23	2600	19.5	

Time	Volume Purged	pH	Conductivity	T	Notes
1000	32	7.26	2300	19.5	CLEAR

16
26
31
36
41
48

Time Sample Collection Begins _____ Time Sample Collection Ends 1115 Total Volume Purged 32

Depth to Water for 80% Recharge 9.0 Depth to Water After Total Purge 20.45 @ 1002

DTW = 16.32 at 1120 DTW = _____ at _____

DTW = _____ at _____ 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 # 88-41-380-70 Site 2724 CASTRO VALLEY Sampling Team RR

Date 4-6-92 Well #/Source MW-1 Lab Sample I.D.# 040692

Field conditions SUNNY, WARM

Describe Equipment D-Con Before Sampling This Well REFER TO OWW-8

Describe All Meter/Equipment Calibration REFER TO OWW-8

Total Depth of Well 15.35 Time 1034 OVM Reading High _____ Average _____

Depth to Water Before Pumping 6.75 Product Present YES/NO (Circle) Thickness _____

Height of Water Column (ft) 8.6 (2" .16, 3" .37, 4" .65, 6" 1.47) = Volume 5.59 × Purge Multiple 3 = Volume to Purge 16.77 (Gal)

Depth Purging From NEAR BOTTOM

Time Purging Begins 1207 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
1207	PP	7.25	890	20.0	SEE ABOVE						
1210	5	7.53	950	18.0	CLEAR						
1213	10	7.62	950	17.5	"						
1215	15	7.64	900	17.5	"						
1217	17	7.70	900	18.0							

11/16/21

Time Sample Collection Begins _____ Time Sample Collection Ends 1230 Total Volume Purged 17

Depth to Water for 80% Recharge 8.47 Depth to Water After Total Purge 10.25 @ 1218

DTW = 9.25 at 1219
DTW = 8.47 at 1220
DTW = _____ at _____

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 # 86-44-380-20 Site 2724 ... Sampling Team TP

Date 4-6-92 Well #/Source MW-5 Lab Sample I.D.# ______

Field conditions SUNNY, WARM

Describe Equipment D-Con Before Sampling This Well REFER TO OW-MW-8

Describe All Meter/Equipment Calibration REFER TO OW-MW-8

Total Depth of Well 22.8 Time 1041 OVM Reading High ______ Average ______

Depth to Water Before Pumping 5.53 Product Present YES/NO (Circle) Thickness ______

Height of Water Column (ft) 17.35 2" .16 3" .37 (4" .65) 6" 1.47 = Volume 11.28 × Purge Multiple 3 = Volume to Purge 33.84 (Gal)

Depth Purging From NEAR BOTTOM

Time Purging Begins 1055 Notes on Initial Discharge CLEAR

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

Time	Volume Purged	pH	Conductivity	T	Notes	Time	Volume Purged	pH	Conductivity	T	Notes
1055	PP	7.06	1300	19.5	[illegible]						
1101	10	7.20	1300	18.5	CLEAR						
1103	15	7.20	1350	19.0	"						
1104	20	7.23	1450	19.0	"						
1105	23		"WELL DRY"								

Time Sample Collection Begins ______ Time Sample Collection Ends 1410 Total Volume Purged 23 gals

Depth to Water for 80% Recharge 8.92 Depth to Water After Total Purge ______

DTW = 21.75 at 1106 DTW = ______ at ______

DTW = 20.55 at 1112 DTW = ______ at ______

DTW = 9.86 at 1403 DTW = ______ at ______

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

Sample Temp ______ Sample D.O. ______ ppm

Comments:

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

CONVERSE ENVIRONMENTAL WEST
Water Sampling Form

Job # 88-44580-20 Site 2725 Castro Valley Sampling Team TP

Date 4-6-92 Well #/Source MW-7 Lab Sample I.D.# _____

Field conditions SUNNY, WARM

Describe Equipment D-Con Before Sampling This Well REFER TO DMW-8

Describe All Meter/Equipment Calibration REFER TO DMW-1

Total Depth of Well 14.9 Time 1039 OVM Reading High _____ Average _____

Depth to Water Before Pumping 6.91 Product Present YES/NO (Circle) Thickness _____

Height of Water Column (ft) 7.99 (2" .16, 3" .37, 4" .65, 6" 1.47) = Volume 5.19 × Purge Multiple 3 = Volume to Purge 15.57 (Gal)

Depth Purging From NEAR BOTTOM

Time Purging Begins 1145 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
1145	PP	6.87	1600	19.5	SET TO MOVE
1149	5	7.00	1525	18.0	CLEAR
1151	8	7.07	1425	18.0	1
1153	11	* WELL DRY *			

Time	Volume Purged	pH	Conductivity	T	Notes

Time Sample Collection Begins _____ Time Sample Collection Ends 1430 Total Volume Purged 11

Depth to Water for 80% Recharge 8.51 Depth to Water After Total Purge _____

DTW = 13.75 at 1154
DTW = 12.73 at 1159
DTW = 6.93 at 1422

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: _____

6.39

CONVERSE ENVIRONMENTAL WEST
Water Sampling Form

Job # 88-44-380-20 Site 2724 CASTO & ALLEN Sampling Team ZR

Date 4-6-92 Well #/Source MW-3 Lab Sample I.D.# _____

Field conditions SUNNY, WARM

Describe Equipment D-Con Before Sampling This Well REFER TO MW-8

Describe All Meter/Equipment Calibration REFER TO MW-8

Total Depth of Well 24.34 Time 1043 OVM Reading High _____ Average _____

Depth to Water Before Pumping 7.12 Product Present YES/NO (Circle) Thickness _____

Height of Water Column (ft) 17.22 (2" .16 · 3" .37 · 4" .65 · 6" 1.47) = Volume 11.19 × Purge Multiple 3 = Volume to Purge 33.57 (Gal)

Depth Purging From NEAR BOTTOM

Time Purging Begins 1309 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
1309	PP	7.20	1125	21.0	SEE ABOVE						
1315	10	7.38	1150	19.5	CLOUDY						
1320	20	7.45	1190	20.0	11						
1324	25	7.45	1200	20.0	11						
1329	26	7.55	1150	20.5	11						
			WELL DRY								

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

Depth to Water for 80% Recharge 10.56 Depth to Water After Total Purge _____

DTW = 18.80 at 1330 DTW = _____ at _____

DTW = 9.74 at 1500 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:

FIELD BLANK @ 1500

13.78

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

21
31
41
46

CONVERSE ENVIRONMENTAL WEST
Water Sampling Form

Job # 88-44-380-20 Site 2724 CASTRO VALLEY Sampling Team RR

Date 4-6-92 Well #/Source MW-7 Lab Sample I.D.#

Field conditions SUNNY, CLEAR

Describe Equipment D-Con Before Sampling This Well REFER TO OMW-8

Describe All Meter/Equipment Calibration REFER TO OMW-8

Total Depth of Well 19.96 Time 1032 OVM Reading High ____ Average ____

Depth to Water Before Pumping 5.87 Product Present YES/NO (Circle) Thickness ____

Height of Water Column (ft) 14.09 (2" .16 3" .37 4" .65 6" 1.47) = Volume 2.25 * Purge Multiple 3 = Volume to Purge 6.75 (Gal)

Depth Purging From HAND BAILED

Time Purging Begins 1344 Notes on Initial Discharge CLOUDY

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

Time	Volume Purged	pH	Conductivity	T°C	Notes
1344	2	7.12	600	19.0	CLOUDY
1347	2	7.53	600	18.5	MURKY
1351	4	7.59	625	17.5	"
1357	7	7.57	600	18.0	"

Time	Volume Purged	pH	Conductivity	T	Notes

Time Sample Collection Begins ____ Time Sample Collection Ends (1526) Total Volume Purged 7

Depth to Water for 80% Recharge 8.69 Depth to Water After Total Purge 14.65 @ 1359

DTW = 10.41 at 1513 DTW = ____ at ____

DTW = ____ at ____ DTW = ____ at ____

DTW = ____ at ____ DTW = ____ at ____

48
50
52
55

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

Sample Temp ____ Sample D.O. ____ ppm

Comments: ____

CONVERSE ENVIRONMENTAL WEST
DAILY REPORT

Project: 2024 Castro Valley Project No.: 88-44-380-20 Project Manager: D.S/A.F.

Date: 5-13-97 Day: WED

CONVERSE PERSONNEL

Name	Mobe Start	Mobe End	Arrive Site	Leave Site	Demobe Start	Demobe End	
C. Braden		1215	1300	1580	1630	1700	4.7

SUBCONTRACTORS

Name	Mobe Start	Mobe End	Arrive Site	Leave Site	Demobe Start	Demobe End	Ticket Number

WORK ACCOMPLISHED

Wells/Borings Bored/Sampled:
Wells Installed:
Wells/Borings Surface Completed:
Wells/Borings Abandoned:
Wells Developed:
Wells Initially Sampled:
Wells Periodically Sampled: MW2-MW7
Wells/Borings/Structures Surveyed:

Work Accomplished - Not Listed Above - Expanded Description:
START W/ MW-2 WENT DRY" + 2 WELL VOLUMES
MOVE TO MW-7 HAND BAIL & TEST. WENT BACK TO MW2
& GOT 3 RD VOL.
BACK TO MW-7 SAMPLED
BACK TO MW2 SAMPLED

Deviations From Standard Operating Procedures:
2 DRUMS FROM PIEZO DRILLING STILL ON SITE
WELL WATER FROM 2 & 7 PLACED IN DRUM 6215

CONVERSE ENVIRONMENTAL WEST
Water Sampling Form

Job # 88-44-380-2 Site 2224 Castro Valley Sampling Team DS

Date 5/13/92 Well #/Source MW2 Lab Sample I.D.# _____

Field conditions CLEAR-Hot

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

Describe All Meter/Equipment Calibration BUFFER SOLUTION

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

Depth to Water Before Pumping 7.28 Product Present YES (NO) (Circle) Thickness _____

Height of Water Column (ft) 7.6 2" .16 3" .37 (4") .65 6" 1.47 = Volume 4.94 * Purge Multiple 3 = Volume to Purge 14.8 (Gal)

Depth Purging From BOTTOM

Time Purging Begins _____ Notes on Initial Discharge _____

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

Time	Volume Purged	pH	Conductivity	T °C	Notes
327	P.P	6.84	1800	12.6	
—	4	6.75	1200	16.2	
337	8	6.76	1680	17.1	
340	12	well DRY			
355	~~8~~ 11	7.03	1680	14.7	

Time	Volume Purged	pH	Conductivity	T	Notes
1400	150	—	"well DRY"		
1410	15.0	7.01	1650	15.6	
—	—	—	—	—	
—	—	—	—	—	
—	—	—	—	—	

Time Sample Collection Begins _____ Time Sample Collection Ends 1520 Total Volume Purged _____

Depth to Water for 80% Recharge 8.8 Depth to Water After Total Purge _____

DTW = 11.3 at 1435
DTW = 9.6 at 1515
DTW = _____ at _____

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 # 88-44-380-20 Site 2724 Castro Valley Sampling Team 88

Date 5/13/92 Well #/Source MW7 Lab Sample I.D.# _____

Field conditions CLEAR WINDY

Describe Equipment D-Con Before Sampling This Well DISPOSABLE BAILER

Describe All Meter/Equipment Calibration BUFFER SOLUTIONS

Total Depth of Well 20. Time _____ OVM Reading High _____ Average _____

Depth to Water Before Pumping 7.08 Product Present YES/NO (Circle) Thickness _____

Height of Water Column (ft) 13.0 (2" .16 / 3" .37 / 4" .65 / 6" 1.47) = Volume 2.08 * Purge Multiple 3 = Volume to Purge 6.2 (Gal)

Depth Purging From Bottom

Time Purging Begins _____ Notes on Initial Discharge HARD BAILING

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
350	P.P.	7.18	900	14.7							
354	2	7.15	880	14.9							
404	4	7.15	880	16.1							
408	6	7.22	880	15.9							

Time Sample Collection Begins _____ Time Sample Collection Ends (1455) Total Volume Purged _____

Depth to Water for 80% Recharge 9.7 Depth to Water After Total Purge _____

DTW = 148 at 1420 DTW = _____ at _____

DTW = 142 at 1433 DTW = _____ at _____

DTW = 133 at 1447 DTW = _____ at _____

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

Sample Temp _____ Sample D.O. _____ ppm

Comments: 48 HR T.A.T. / DAVE SEIGEL