RIGHETTI
LAW
FIRM

November 22, 1991

91 NOV 25 AM 11:59

**LARRY SETO**
ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY
DEPARTMENT OF PUBLIC HEALTH
80 Swan Way, Room 200
Oakland, CA 94621

**Re: Righetti v. Shell Oil Company, et al.;**
**and related cross actions**

Dear Mr. Seto:

Pursuant to our recent telephone conversation, enclosed please find a copy of the October 31, 1991, Exploratory Borings report from Converse Environmental West. I kindly ask that you review this report in conjunction with the last quarterly report. It has been a very long time since we had a status meeting involving all concerned parties and I believe we should schedule such a meeting forthwith.

Please let me know your thoughts in this regard as we want to keep this matter moving forward toward conclusion so the property can again be put to productive use. Thank you for your continued professional courtesy and cooperation.

Very truly yours,

RIGHETTI LAW FIRM

**Matthew Righetti, Esq.**

MR;tgb
20-Seto;Righetti v Shell
cc Dr. Milton Righetti
(w/out enclosures)
David O. Larson/Michael Johnson
LARSON & BURNHAM
(w/out enclosures)
David M. Swope, Esq.
SHELL OIL COMPANY
(w/out enclosures)
Richard Schoenberger, Esq.
WALKUP, SHELBY, ET AL.
(w/out enclosures)

Signature Center · 4900 Hopyard Road · Suite 220
Pleasanton · CA 94588-3346 · fax: 415·460·0990 · phone: 415·460·0900

M. RIGGETTI

CONVERSE ENVIRONMENTAL WEST

55 Hawthorne Street, Suite 500
San Francisco, California 94105-3906

Telephone 415 543-4200
FAX 415 777-3157

October 31, 1991
88-44-380-20-1451

Mr. Jack Brastad
SHELL OIL COMPANY
P.O. Box 5278
Concord, California 94520

Subject: EXPLORATORY BORINGS
at former Shell Oil Company
Retail Gas Station
2724 Castro Valley Boulevard
Castro Valley, California

Dear Mr. Brastad:

Enclosed please find the results of drilling and sampling four soil borings at the above referenced Shell facility. The borings were completed at your request after soil contamination was detected adjacent to the station building during removal of the waste oil tank.

## *INTRODUCTION*

During tank removal operations at the former Shell Service Station located at 2724 Castro Valley Boulevard in Castro Valley (Drawing 1), contaminated soils were observed under the southeast corner of the station building. In order to attempt to assess the extent of contamination beneath the station building, Converse Environmental West (Converse) drilled an additional four borings, SB-6 through SB-9, at the locations shown on Drawing 2. Activities were conducted under the supervision of a Registered Geologist.

*DRILLING PROCEDURES*

The four soil borings, SB-6, SB-7, SB-8 and SB-9 were each drilled to approximately 10 feet below grade surface (bgs) on September 18, 1991. The borings were completed using a 1.5 inch inside diameter hollow stem auger. Boring logs (attached as Appendix A) were prepared by Converse personnel under the supervision of a Registered Geologist. Groundwater was not encountered in any of the borings.

Samples were collected at 5 and 10 feet bgs in each boring using either a modified California or a standard penetration sampler with brass sleeves to retain soil. Samples were immediately sealed, labeled and placed in refrigerated storage for transport under chain-of-custody control to NET Pacific, Inc., a California state-certified laboratory. All sampling equipment was cleaned with trisodium phosphate and triple rinsed before and after each sample was collected to minimize the potential for cross contamination.

Soil cuttings produced during drilling were placed on plastic sheeting, covered with additional plastic and temporarily stored on-site pending sample analysis and waste classification.

The borings were backfilled with bentonite grout and patched with concrete.

*LABORATORY ANALYSIS*

The soil samples collected from borings SB-6 and SB-9 were analyzed for oil and grease by Method 5520 CEF, Total Petroleum Hydrocarbons as gasoline (TPH-g) by 5030/GCFID, Total Petroleum Hydrocarbons as diesel (TPH-d) and motor oil by 3550/GCFID, and benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA Method 8020.

Soil samples collected from borings SB-7 and SB-8, adjacent to hydraulic lifts in the station building, were analyzed only for oil and grease.

## *FINDINGS*

### *Subsurface Lithology*

Boring logs of SB-6, SB-7, SB-8 and SB-9 (Appendix A) indicate that the soils beneath the station building to a depth of 10 feet bgs consist of silty clays and clays. This is consistent with observations from borings previously drilled at the site.

### *Laboratory Results*

Petroleum hydrocarbons were detected in each of the samples collected from SB-6 and SB-9 located near the southeastern corner of the station building. In general, the highest hydrocarbon concentrations were detected in the 5 feet bgs sample from SB-9. Hydrocarbons detected in this sample were oil and grease (1,800 mg/kg), TPH-g (1,800 mg/kg), TPH-d (330 mg/kg), TPH-mo (470 mg/kg), and total xylenes (30 mg/kg).

The highest hydrocarbon concentrations in samples from SB-6 were also found in the 5 feet bgs sample. Hydrocarbons detected in this sample were oil and grease (740 mg/kg), TPH-g (770 mg/kg), TPH-d (280 mg/kg), TPH-mo (160 mg/kg), toluene (3.6 mg/kg), ethylbenzene (5.4 mg/kg) and total xylenes (22 mg/kg). Benzene (0.11 mg/kg) was also detected in the 10 ft bgs sample from SB-6. No oil and grease was detected in this sample.

Analysis of soil samples from borings adjacent to the hydraulic hoists (SB-7 and SB-8) detected oil and grease in samples from SB-7. No oil and grease was detected in samples from SB-8. The 5 and 10 feet bgs samples from SB-7 contained 880 mg/kg and 160 mg/kg oil and grease, respectively.

Analytical results are summarized in Table 1; copies of the laboratory reports and chain-of-custody documents are attached as Appendix B.

*SUMMARY*

Soil samples collected from borings SB-6, SB-7 and SB-9, beneath the station building indicated the presence of concentrations of oil and grease, BTEX and petroleum hydrocarbons. The lateral extent to the north and south of impacted soils are currently unknown. Options for remediation and further assessment of the site will be addressed under separate cover.

If you have any questions concerning the procedures or findings described herein, please do not hesitate to call.

Respectfully submitted,

**Converse Environmental West**

David Siegel
Project Geologist

Enclosures:

| | |
|---|---|
| Drawing 1: | Site Location Map |
| Drawing 2: | Plot Plan |
| Table 1: | Summary of Analytical Results |
| Appendix A: | Boring Logs |
| Appendix B: | Laboratory Results and Chain-of-Custody Forms |

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. Matthew Righetti - Righetti Law Firm (w/encl.)
Mr. Richard A. Schoenberger, Esq. - Walkup, Shelby, Bastion, Melodia, Kelly, Echeverria and Link (w/encl.)

# CERTIFICATION

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

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

Respectfully submitted,


DAVID SIEGEL
Project Geologist

GERARD L. SLATTERY, RG 5038
Senior Geologist
Manager, Technical Services

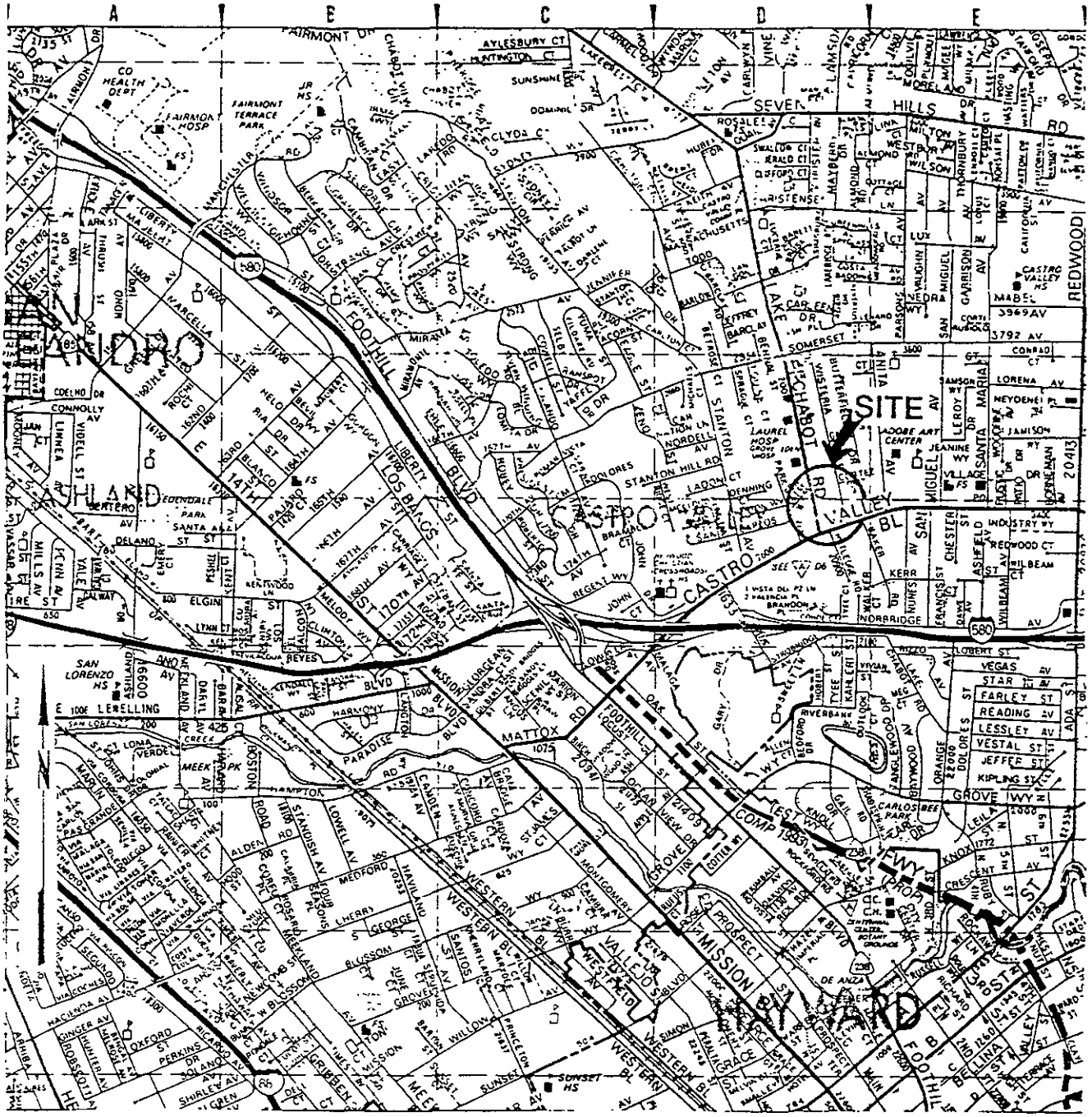
## Table 1: Soil Analytical Results

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

| Boring No. | Sample Depth (feet bgs) | Oil & Grease (mg/kg) | TPH-g (mg/kg) | TPH-d (mg/kg) | TPH-mo (mg/kg) | Benzene (µg/kg) | Toluene (µg/kg) | Ethyl-benzene (µg/kg) | Xylenes (µg/kg) |
|---|---|---|---|---|---|---|---|---|---|
| SB-6 | 5′ | 740 | 770 | 280 | 160 | ND | 3,600 | 5,400 | 22,000 |
| | 10′ | ND | 1.7 | 5.0 | 13 | 110 | 32 | 2.8 | 33 |
| SB-7 | 5′ | 880 | --- | --- | --- | --- | --- | --- | --- |
| | 10′ | 160 | --- | --- | --- | --- | --- | --- | --- |
| SB-8 | 5′ | ND | --- | --- | --- | --- | --- | --- | --- |
| | 10′ | ND | --- | --- | --- | --- | --- | --- | --- |
| SB-9 | 5′ | 1,800 | 1,800 | 380 | 470 | ND | ND | ND | 30,000 |
| | 10′ | 460 | 240 | 190 | 190 | ND | ND | ND | 3,700 |

| | |
|---|---|
| ND | Not detected above stated detection limits |
| --- | Parameter not analyzed for |
| TPH-g | Total petroleum hydrocarbon as gasoline |
| TPH-d | Total petroleum hydrocarbon as diesel |
| TPH-mo | Total petroleum hydrocarbon as motor oil |
| mg/kg | milligrams per kilogram |
| µg/kg | micrograms per kilogram |

| Detection Limits | |
|---|---|
| Oil & Grease | 50 mg/kg |
| TPH-g | 1 mg/kg |
| TPH-d | 1 mg/kg |
| TPH-mo | 10 mg/kg |
| BTEX | 2.5 µg/kg |



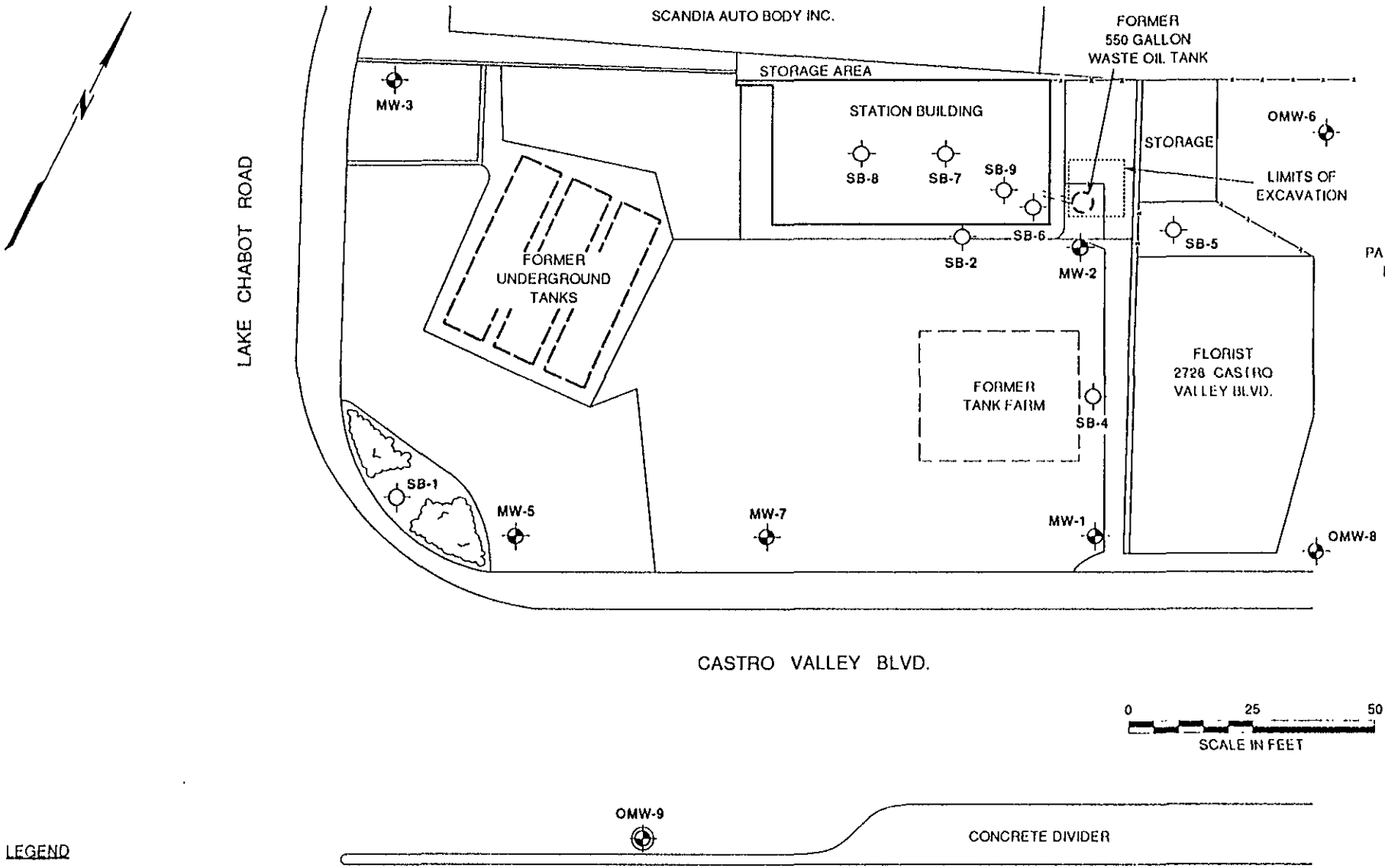

SOURCE: Thomas Brothers Maps, 1989.

# 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 | |




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

LEGEND

SB-1 SOIL BORING (locations approximate)

MW-1 GROUNDWATER MONITORING WELL

OMW-9 PROPOSED OFFSITE GROUNDWATER MONITORING WELL

# PLOT PLAN

SHELL OIL COMPANY
2724 Castro Valley Boulevard
Castro Valley, California

**Converse Environmental West**

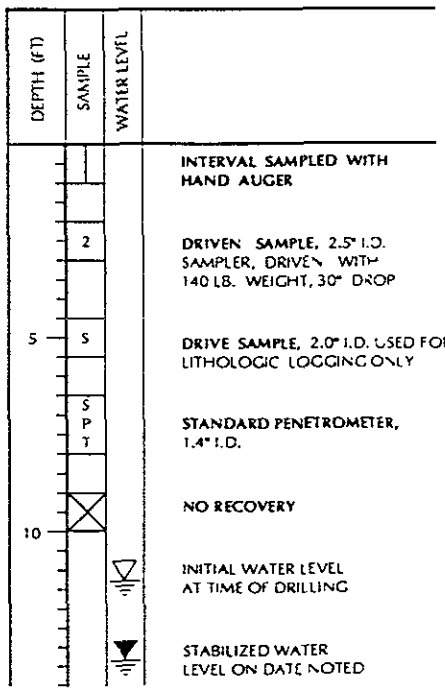
| | |
|---|---|
| Scale: AS SHOWN | Project No.: 88-44-380-20 |
| Prepared by: LQL | Date: 10/24/91 |
| Checked by: DS | Drawing No: 2 |
| WIC Number: 204-1301-0407 | |

# APPENDIX A

## Boring Logs

| MAJOR DIVISIONS | | | SYMBOLS | TYPICAL NAMES |
|---|---|---|---|---|
| COARSE GRAINED SOILS MORE THAN HALF IS LARGER THAN NO. 200 SIEVE | GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE | CLEAN GRAVELS WITH LITTLE OR NO FINES | GW | WELL GRADED GRAVELS, GRAVEL-SAND MIXTURES |
| | | | GP | POORLY GRADED GRAVELS, GRAVEL-SAND MIXTURES |
| | | GRAVELS WITH OVER 12 % FINES | GM | SILTY GRAVELS, POORLY GRADED GRAVEL-SAND-SILT MIXTURES |
| | | | GC | CLAYEY GRAVELS, POORLY GRADED GRAVEL-SAND-CLAY MIXTURES |
| | SANDS MORE THAN HALF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE | CLEAN SANDS WITH LITTLE OR NO FINES | SW | WELL GRADED SANDS, GRAVELLY SANDS |
| | | | SP | POORLY GRADED SANDS, GRAVELLY SANDS |
| | | SANDS WITH OVER 12 % FINES | SM | SILTY SANDS, POORLY GRADED SAND-SILT MIXTURES |
| | | | SC | CLAYEY SANDS, POORLY GRADED SAND-CLAY MIXTURES |
| FINE GRAINED SOILS MORE THAN HALF IS SMALLER THAN NO. 200 SIEVE | SILTS AND CLAYS LIQUID LIMIT LESS THAN 50 | | ML | INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS, OR CLAYEY SILTS WITH SLIGHT PLASTICITY |
| | | | CL | INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAY |
| | | | OL | ORGANIC CLAYS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY |
| | SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50 | | MH | INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE, SANDY OR SILTY SOILS, ELASTIC SILTS |
| | | | CH | INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS |
| | | | OH | ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS |
| HIGHLY ORGANIC SOILS | | | Pt | PEAT AND OTHER HIGHLY ORGANIC SOILS |

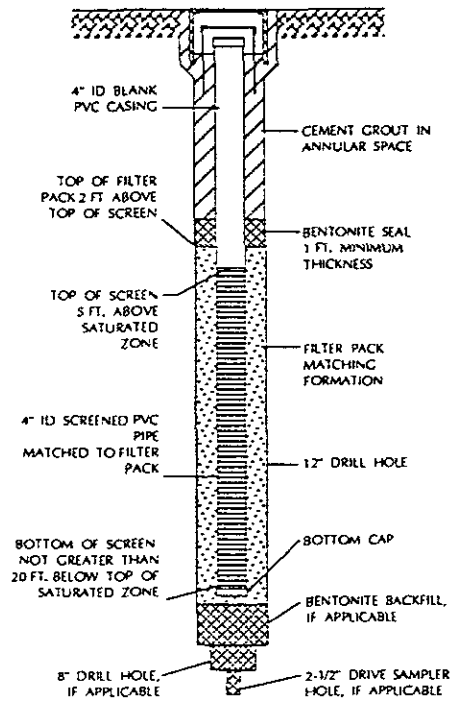
SAMPLE TYPE




NOTE:

SOIL CONDITIONS INDICATED BY BORING LOGS APPLY ONLY AT THE LOCATION OF THE PARTICULAR BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THE BORING LOCATION WITH THE PASSAGE OF TIME. DATA PRESENTED IN THE LOGS REPRESENT A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED. SOIL CONDITIONS INDICATED BETWEEN SAMPLE INTERVALS ARE INFERRED.

WELL CONSTRUCTION




# UNIFIED SOIL CLASSIFICATION, BORING LOG, AND WELL CONSTRUCTION SYMBOLS

SHELL OIL COMPANY
2724 Castro Valley Boulevard
Castro Valley, California

Project No.
88-44-380-20

Drawing No.
A-1

Converse Environmental West

# LOG OF BORING NO. SB-6

| | | |
|---|---|---|
| Start: *9/18/91* | Geologist: *J. Finnegan* | Diller/Helper: *N/A* |
| Completion: *9/18/91* | Assistant Geol.: | Drilling Method: *Power Core* |
| Water Measure: *N/A* | Drilling Co.: *Power Core* | Auger/Bit Dia.: *1.5"* |

| DEPTH (FT) | SAMPLE | WATER LEVEL | SYMBOL | DESCRIPTION | | MOISTURE | SOIL CONSISTENCY OR ROCK HARDNESS | COLOR | BLOWS / 6" | PERCENT RECOVERY |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 5" Concrete | | | | | | |
| | | | | Silty Clay, some Silt, little fine to coarse Sand, little Gravel | CL | slightly moist | stiff | dark brown to black | | |
| 5 | 1 | | | Clay, trace to little Silt | CH | slightly moist | stiff | dark brown to black | | |
| | | | | Clay, little Silt | CL | | | brown to light brown | | |
| 10 | 2 | | | Silty Clay, some Silt | | slightly moist | stiff | gray and lt. brown | | |
| | | | | Total Depth of Boring: 10 ft. | | | | | | |
| | | | | Backfilled with Concrete and Bentonite | | | | | | |
| 15 | | | | | | | | | | |
| 20 | | | | | | | | | | |

REGISTERED GEOLOGIST
GERARD L. SLATTERY
No. 5038
STATE OF CALIFORNIA

SHELL OIL COMPANY
2724 Castro Valley Boulevard
Castro Valley, California

Project No.
88-44-380-20

Converse Environmental West

Drawing No.
A-2

# LOG OF BORING NO. SB-7

| | | |
|---|---|---|
| Start: *9/18/91* | Geologist: *J. Finnegan* | Diller/Helper: *N/A* |
| Completion: *9/18/91* | Assistant Geol.: | Drilling Method: *Power Core* |
| Water Measure: *N/A* | Drilling Co.: *Power Core* | Auger/Bit Dia.: *1.5"* |

| DEPTH (FT) | SAMPLE | WATER LEVEL | SYMBOL | DESCRIPTION | | MOISTURE | SOIL CONSISTENCY OR ROCK HARDNESS | COLOR | BLOWS / 6" | PERCENT RECOVERY |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 5" Concrete | | | | | | |
| | | | | Silty Clay, some Silt, little Sand, little to some Gravel | CL | slightly moist | stiff | dark brown to black | | |
| 5 | 1 | | | Clay, trace to little Silt | CH | slightly moist | stiff | dark gray green brown | | |
| | 2 | | | Clay, little Silt, trace Gravel, roots | CH | slightly moist | stiff | gray and grn brown | | |
| 10 | | | | Total Depth of Boring: 10 ft. | | | | | | |
| | | | | Backfilled with Concrete and Bentonite | | | | | | |
| 15 | | | | | | | | | | |
| 20 | | | | | | | | | | |

REGISTERED GEOLOGIST
GERARD L. SLATTERY
No. 5038
STATE OF CALIFORNIA

SHELL OIL COMPANY
2724 Castro Valley Boulevard
Castro Valley, California

Project No.
88-44-380-20

Converse Environmental West

Drawing No.
A-3

# LOG OF BORING NO. SB-8

| | | |
|---|---|---|
| Start: *9/18/91* | Geologist: *J. Finnegan* | Diller/Helper: *N/A* |
| Completion: *9/18/91* | Assistant Geol.: | Drilling Method: *Power Core* |
| Water Measure: *N/A* | Drilling Co.: *Power Core* | Auger/Bit Dia.: *1.5"* |

| DEPTH (FT) | SAMPLE | WATER LEVEL | SYMBOL | DESCRIPTION | | MOISTURE | SOIL CONSISTENCY OR ROCK HARDNESS | COLOR | BLOWS / 6" | PERCENT RECOVERY |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 5" Concrete | | | | | | |
| | | | | Silty Clay, some Silt, some fine to coarse Sand and Gravel | CL | moist to slightly moist | stiff | dark brown | | |
| 5 | 1 | | | Clay, trace Silt | CH | slightly moist | stiff | dark gray green brown | | |
| | 2 | | | Silty Clay | CL | slightly moist | stiff | dark gray green brown | | |
| 10 | | | | Total Depth of Boring: 10 ft. | | | | | | |
| | | | | Backfilled with Concrete and Bentonite | | | | | | |
| 15 | | | | | | | | | | |
| 20 | | | | | | | | | | |

REGISTERED GEOLOGIST
GERARD L. SLATTERY
No. 5038
STATE OF CALIFORNIA

SHELL OIL COMPANY
2724 Castro Valley Boulevard
Castro Valley, California

Project No.
88-44-380-20

Converse Environmental West

Drawing No.
A-4

# LOG OF BORING NO. SB-9

| | | |
|---|---|---|
| Start: *9/18/91* | Geologist: *J. Finnegan* | Diller/Helper: *N/A* |
| Completion: *9/18/91* | Assistant Geol.: | Drilling Method: *Power Core* |
| Water Measure: *N/A* | Drilling Co.: *Power Core* | Auger/Bit Dia.: *1.5"* |

| DEPTH (FT) | SAMPLE | WATER LEVEL | SYMBOL | DESCRIPTION | | MOISTURE | SOIL CONSISTENCY OR ROCK HARDNESS | COLOR | BLOWS / 6" | PERCENT RECOVERY |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 5" Concrete | | | | | | |
| | | | | Silty Clay, some Silt, some fine to coarse Sand and Gravel | CL | moist | stiff | dark gray green brown | | |
| 5 | 1 | | | Clay, trace Silt | CH | slightly moist | stiff | dark gray green brown | | |
| | 2 | | | Silty Clay, little Silt | CL | slightly moist | stiff | dark gray green brown | | |
| 10 | | | | Total Depth of Boring: 10 ft. | | | | | | |
| | | | | Backfilled with Concrete and Bentonite | | | | | | |
| 15 | | | | | | | | | | |
| 20 | | | | | | | | | | |

REGISTERED GEOLOGIST
GERARD L. SLATTERY
No. 5038
STATE OF CALIFORNIA

SHELL OIL COMPANY
2724 Castro Valley Boulevard
Castro Valley, California

Project No.
88-44-380-20

Converse Environmental West

Drawing No.
A-5

# APPENDIX B

## Laboratory Reports and Chain of Custody Documents

NATIONAL
ENVIRONMENTAL
TESTING, INC.

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

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

Date: 09-25-91
NET Client Acct No: 18.02
NET Pacific Log No: 9895
Received: 09-19-91 0800

Client Reference Information

SHELL, 2724 Castro Valley Blvd., Project: 88-44-380-20

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., Project: 88-44-380-20

| Parameter | Method | Reporting Limit | Descriptor, Lab No. and Results<br>SB-6 5'<br>09-18-91<br>0933<br>97770** | <br>SB-6 10'<br>09-18-91<br>0947<br>97771*** | Units |
|---|---|---|---|---|---|
| Oil & Grease(IR,Non-Polar) | SM5520CEF | 50 | 740 | ND | mg/Kg |
| PETROLEUM HYDROCARBONS | | | -- | -- | |
| VOLATILE (SOIL) | | | -- | -- | |
| DILUTION FACTOR * | | | 100 | 1 | |
| DATE ANALYZED | | | 09-19-91 | 09-19-91 | |
| METHOD GC FID/5030 | | | -- | -- | |
| as Gasoline | | 1 | 770 | 1.7 | mg/Kg |
| METHOD 8020 | | | -- | -- | |
| DILUTION FACTOR * | | | 100 | 1 | |
| DATE ANALYZED | | | 09-19-91 | 09-19-91 | |
| Benzene | | 2.5 | ND | 110 | ug/Kg |
| Ethylbenzene | | 2.5 | 3,600 | 32 | ug/Kg |
| Toluene | | 2.5 | 5,400 | 2.8 | ug/Kg |
| Xylenes, total | | 2.5 | 22,000 | 33 | ug/Kg |
| PETROLEUM HYDROCARBONS | | | -- | -- | |
| EXTRACTABLE (SOIL) | | | -- | -- | |
| DILUTION FACTOR * | | | 5 | 1 | |
| DATE EXTRACTED | | | 09-20-91 | 09-20-91 | |
| DATE ANALYZED | | | 09-21-91 | 09-21-91 | |
| METHOD GC FID/3550 | | | -- | -- | |
| as Diesel | | 1 | 280 | 5.0 | mg/Kg |
| as Motor Oil | | 10 | 160 | 13 | mg/Kg |

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

*** 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., Project: 88-44-380-20

| Parameter | Method | Reporting Limit | Descriptor, Lab No. and Results<br>SB-9 5'<br>09-18-91<br>1110<br>97772** | <br>SB-9 10'<br>09-18-91<br>1122<br>97773** | Units |
|---|---|---|---|---|---|
| Oil & Grease(IR,Non-Polar) | SM5520CEF | 50 | 1,800 | 460 | mg/Kg |
| PETROLEUM HYDROCARBONS | | | -- | -- | |
| VOLATILE (SOIL) | | | -- | -- | |
| DILUTION FACTOR * | | | 500 | 100 | |
| DATE ANALYZED | | | 09-19-91 | 09-19-91 | |
| METHOD GC FID/5030 | | | -- | -- | |
| as Gasoline | | 1 | 1,800 | 240 | mg/Kg |
| METHOD 8020 | | | -- | -- | |
| DILUTION FACTOR * | | | 500 | 100 | |
| DATE ANALYZED | | | 09-19-91 | 09-19-91 | |
| Benzene | | 2.5 | ND | ND | ug/Kg |
| Ethylbenzene | | 2.5 | ND | ND | ug/Kg |
| Toluene | | 2.5 | ND | ND | ug/Kg |
| Xylenes, total | | 2.5 | 30,000 | 3,700 | ug/Kg |
| PETROLEUM HYDROCARBONS | | | -- | -- | |
| EXTRACTABLE (SOIL) | | | -- | -- | |
| DILUTION FACTOR * | | | 10 | 5 | |
| DATE EXTRACTED | | | 09-20-91 | 09-20-91 | |
| DATE ANALYZED | | | 09-21-91 | 09-21-91 | |
| METHOD GC FID/3550 | | | -- | -- | |
| as Diesel | | 1 | 380 | 190 | mg/Kg |
| as Motor Oil | | 10 | 470 | 190 | mg/Kg |

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

NET Pacific, Inc.

Client No: 18.02 Date: 09-25-91
Client Name: Converse Consultants
NET Log No: 9895 Page: 4

Ref: SHELL, 2724 Castro Valley Blvd., Project: 88-44-380-20

| | | | Descriptor, Lab No. and Results | | |
|---|---|---|---|---|---|
| | | | SB-7 5' 09-18-91 1010 | SB-7 10' 09-18-91 1020 | |
| Parameter | Method | Reporting Limit | 97774 | 97775 | Units |
| Oil & Grease(IR,Non-Polar) | SM5520CEF | 50 | 880 | 160 | mg/Kg |

NET Pacific, Inc.

Client No: 18.02 Date: 09-25-91
Client Name: Converse Consultants
NET Log No: 9895 Page: 5

Ref: SHELL, 2724 Castro Valley Blvd., Project: 88-44-380-20

| | | | Descriptor, Lab No. and Results | | |
|---|---|---|---|---|---|
| | | | SB-8 5' 09-18-91 1034 | SB-8 10' 09-18-91 1045 | |
| Parameter | Method | Reporting Limit | 97776 | 97777 | Units |
| Oil & Grease(IR,Non-Polar) | SM5520CEF | 50 | ND | ND | mg/Kg |

NET Pacific, Inc.

Client Acct: 18.02
Client Name: Converse Consultants
NET Log No: 9895

Date: 09-24-91
Page: 6

Ref: SHELL, 2724 Castro Valley Blvd., Project: 88-44-380-20

QUALITY CONTROL DATA

| Parameter | Reporting Limits | Units | Cal Verf Stand % Recovery | Blank Data | Spike % Recovery | Duplicate Spike % Recovery | RPD |
|---|---|---|---|---|---|---|---|
| O&G(IR,Non-Polar) | 50 | mg/Kg | 101 | ND | 93 | 87 | 6.7 |
| Diesel | 1 | mg/Kg | 118 | ND | 58 | 54 | 5.4 |
| Motor Oil | 10 | mg/Kg | 147 | ND | N/A | N/A | N/A |
| Gasoline | 1 | mg/Kg | 99 | ND | 99 | 97 | 1.6 |
| Benzene | 2.5 | ug/Kg | 91 | ND | 93 | 99 | 5.2 |
| Toluene | 2.5 | ug/Kg | 91 | ND | 95 | 99 | 3.0 |

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 (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 (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.

WIC#: 204-1381-0407

CONVERSE ENVIRONMENTAL WEST

# CHAIN OF CUSTODY RECORD

PM: D.S. 9895

| PROJECT NO.: | PROJECT NAME / CROSS STREET |
|---|---|
| 88-44-380-20 | Shell / 2724 Castro Valley Bl. Castro Valley, CA Lake Chabot Rd. |
| SAMPLERS (Signature) | |

| STATION NO. | DATE | TIME | COMP. | GRAB | STATION LOCATION | NUMBER OF CONTAINERS | ANALYSES: TPH-G | TPH-D | TRPH | BTEX | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 9/10/91 | 9:33 | | X | SB-6, 5' | 1 | X | X | X | X | | | odors Detection limits (ppm) |
| | | 9:47 | | X | " 10' | 1 | X | X | X | X | | | " Tph-g: 1 |
| | | 10:10 | | X | SB-7, 5' | 1 | | | X | | | | Tph-D: 1 |
| | | 10:20 | | X | " 10' | 1 | | | X | | | | Btex: 0.0025 |
| | | 10:34 | | X | SB-8, 5' | 1 | | | X | | | | |
| | | 10:45 | | X | " 10' | 1 | | | X | | | | |
| | | 11:10 | | X | SB-9, 5' | 1 | X | X | X | X | | | odors |
| | | 11:22 | | X | " 10' | 1 | X | X | X | X | | | " |

CUSTODY SEALED 9/10/91 @ 1400 MM

JMF

| RELINQUISHED BY : (Signature) | DATE : 9/10/91 | RECEIVED BY : (Signature) | RELINQUISHED BY : (Signature) | DATE : 9/10/91 | RECEIVED BY : (Signature) |
|---|---|---|---|---|---|
| | TIME : 3:08 PM | | | TIME : | |
| RELINQUISHED BY : (Signature) | DATE : | RECEIVED BY : (Signature) | RELINQUISHED BY : (Signature) | DATE : | RECEIVED BY : (Signature) |
| | TIME : | | | TIME : | |
| RELINQUISHED BY COURIER: (Sign.) | DATE : | RECEIVED BY MOBILE LAB : (Sign.) | RELINQ. BY MOBILE LAB : (Signature) | DATE : | RECEIVED BY COURIER : (Signature) |
| | TIME : | | | TIME : | |
| METHOD OF SHIPMENT | | SHIPPED BY : (Signature) | RECEIVED FOR LAB : (Signature) | DATE : 9-19-91 | COURIER FROM AIRPORT : (Signature) |