PARSONS ENGINEERING SCIENCE, INC.

290 Elwood Davis Road, Suite 312 • Liverpool, New York 13088 • (315) 451-9560 • Fax (315) 451-9570 •

May 2, 1996

Ms. Susan Hugo Alameda County Department of Environmental Health 1131 Harbor Bay Parkway Alameda, CA 94502

Re: Quarterly Status Report

Greyhound Terminal (Location No. 8934)

Oakland, California

Dear Ms. Hugo:

On behalf of Greyhound Lines, Inc. (Greyhound), Parsons Engineering Science, Inc. (Parsons ES) is pleased to present the April Quarterly Status Report for the Greyhound terminal in Oakland, California. The Quarterly Status Report provides the information specified in "Appendix A" of the "Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites" (August 1990). Greyhound has reviewed and approved the enclosed report, and agrees with the conclusions and recommendations provided in the report. The report also serves as the April 1996 monthly monitoring report.

Monthly monitoring activities were performed on April 9, 1996. Groundwater samples were collected on April 9 and April 11, 1996. Three groundwater samples were collected and analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) (EPA Method 8020) and total diesel petroleum hydrocarbons (TPH-D, Modified EPA Method 8015). Monitoring well locations are shown in Figure 1 of the Quarterly Status Report. Analytical results are summarized in Table 2.

During the April monitoring visit, the remediation system air compressor was found to have completely depressurized. Efforts are currently underway to repair the compressor and restart the groundwater pumping system. Although the system was off-line for an unknown period of time (maximum 4 weeks), no measurable free product was detected in any of the monitoring or recovery wells on-site.

The next groundwater sampling event will be conducted in July 1996. The next quarterly status report will be prepared and submitted to your department on or before August 15, 1996.



PARSONS ENGINEERING SCIENCE, INC.

Ms. Susan Hugo May 2, 1996 Page 2

If you have any questions or require additional information, please call us at (315) 451-9560.

Sincerely,

PARSONS ENGINEERING SCIENCE, INC.

David A. Nickerson Project Manager

David L. Chaffin, R.G.

California Registered Geologist (No. 4885)

DAN/DLC/ejs

cc:

R. Felton, GLI, Dallas, TX
Kevin Graves, Regional Water Quality Control Board

APRIL 1996 QUARTERLY STATUS REPORT GREYHOUND TERMINAL OAKLAND, CALIFORNIA

· Site Background:

A preliminary site investigation was completed by Engineering-Science, Inc. (ES) in January 1992. Five monitoring wells (ES-1 through ES-5 in Figure 1) were installed on site and sampled during the investigation. The Preliminary Site Investigation report was submitted to the Alameda County Department of Environmental Health (ACDEH) on January 27, 1992.

Based on the results of the preliminary investigation, a groundwater monitoring program was initiated by Greyhound in June 1992 to assess the impact of former UST operations on groundwater. The program includes monthly groundwater level measurements, quarterly groundwater sampling, and reporting.

Based on the presence of measurable thicknesses of free product discovered in four onsite monitoring wells, Greyhound subsequently proposed the installation of an automated free product recovery system. Upon ACDEH approval in October 1992, Greyhound obtained the required permits and installed a recovery system on site during the week of November 9, 1992. A report detailing recovery system installation was submitted to ACDEH on December 18, 1992. The recovery system was placed in operation during the week of January 4, 1993 after discharge permit conditions were finalized with the East Bay Municipal Utility District (EBMUD).

In a letter to Greyhound dated October 23, 1992, ACDEH requested that Greyhound provide documentation regarding the underground fuel storage tank system (UST) removal, including disposal documentation. Greyhound subsequently prepared a Tank Closure Documentation Report for the facility. The report was submitted to ACDEH on December 15, 1992.

In July 1993, Greyhound implemented a Supplemental Site Assessment at the facility to define the full extent of contamination both on and off site. Six monitoring wells (ES-6 through ES-11 in Figure 1) were installed and sampled during the investigation. Results of the Supplemental Site Assessment indicated that the residual soil and groundwater contamination is limited to the former tank pit area on site. Greyhound presented these results to ACDEH in a meeting on September 1, 1993. At that time, ACDEH indicated that a risk assessment could be prepared to support "alternative points of compliance" or site-specific cleanup levels for this site. Greyhound submitted a Preliminary Risk Evaluation Report to ACDEH in October 1993. A Supplemental Site Assessment Report was submitted in November 1993.

During October 1995, the scope of the quarterly groundwater sampling program was reduced to consist of collecting and analyzing samples from three monitoring wells (ES-3, ES-4, and ES-6). The reduction was discussed during an October 13, 1995 meeting between Greyhound and ACDEH and confirmed in an October 31, 1995 letter from Greyhound to ACDEH.

· Water level measurements from most recent sampling event:

Monitoring well data obtained on April 9, 1996 are presented in Table 1. Groundwater elevations determined from the water level measurements are shown in Figure 2. The elevations indicate that the groundwater flow direction across the site is generally to the southwest.

· Water level measurements from previous monitoring visits:

Monitoring well data obtained during prior quarterly sampling events are presented in Attachment B. Free product thicknesses have been eliminated in the four onsite recovery wells (ES-1, ES-2, ES-5, and BC-1) since the product recovery system was activated in January 1993.

· Analytical results from most recent sampling event:

Analytical results from the groundwater samples collected in April 1996 are summarized in Table 2. Three of the 16 monitoring wells (ES-3, ES-4, and ES-6) were sampled on April 9 and 11, 1996 in accordance with the sampling modifications outlined in the October 31, 1995 correspondence from Greyhound to ACDEH. The samples were analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) by EPA Method 8020 and for total diesel petroleum hydrocarbons (TPH-D) by Modified EPA Method 8015. Laboratory reports including chain-of-custody documentation, are included in Attachment A.

BTEX compounds were only detected in one of the three samples. Benzene (57 μ g/l), toluene (3 μ g/l) ethylbenzene (17 μ g/l), and xylenes (19 μ g/l) were detected in sample ES-4.

TPH-D was detected just above the 0.1 mg/L quantitation limit in ES-3 (0.12 mg/L) and ES-6 (0.22 mg/L). TPH-D was not detected in sample ES-4.

Analytical results from previous sampling events:

A summary of the analytical results from previous groundwater sampling events is presented in Attachment C.

 Site map delineating contamination contours for soil and groundwater based on recent data:

Figure 3 shows the analytical results from the most recent groundwater sampling event.

Figure 4 shows the analytical results from soil samples collected during the preliminary site investigation (November 1991) and the supplemental site assessment (July 1993). The figure indicates that soil contamination is limited to the area near sample locations ES-1, ES-2, and ES-5.

• Estimates of the quantity of contamination remaining in soil and groundwater, and time for completing remediation:

Greyhound has not prepared an estimate of the remaining volume of residual soil contamination, based on the recommendation presented in the Supplemental Site Assessment Report that no soil remediation be conducted at the site.

Method of cleanup proposed or implemented to date:

In October 1992, Greyhound proposed a free product recovery system to remove free product discovered in four onsite wells. A hydrocarbon recovery system was installed in November 1992 after receiving approval from Ms. Susan Hugo (ACDEH). The recovery system was activated during the week of January 4, 1993.

- Times and dates equipment was not operating, cause of shutdown, and a corrective action plan to insure similar shutdowns do not reoccur:
 - October 6 to October 21, 1993: System shutdown due to an air compressor malfunction.
 - November and December 1995: System shutdown to monitor hydrocarbon thicknesses.
 - March and April 1996 (4 weeks maximum): System shutdown due to an air compressor malfunction.

The system is inspected monthly during monitoring visits by Parsons ES personnel.

· Method and location of disposal of the released hazardous substance and any contaminated soil, groundwater, or surface water:

To date, approximately 1,015 gallons of free product and contaminated groundwater have been recovered and properly disposed off site by Safety Kleen, Inc. and Evergreen Vacuum Services, State of California-certified waste haulers. No additional product has been recovered since the September 1994 monitoring period. In addition, 81,394 gallons of carbon-treated groundwater have been processed through the recovery system on site and discharged to the sanitary sewer under a permit issued by EBMUD.

Manifest required for transport of hazardous substances:

Previously received disposal/transport manifests for diesel fuel and contaminated groundwater recovered from the site were included in Appendix A of the January 1993 Quarterly Status Report. Future manifests will be included in future quarterly status reports.

· Proposed continuing or next phase of investigation:

In November 1993, based on the results of the Supplemental Site Assessment and Preliminary Risk Evaluation, Greyhound proposed: (1) to continue free product recovery at the site; (2) to continue the groundwater monitoring program, including monthly water level measurements, quarterly groundwater sampling and analysis, and reporting; and (3) that site-specific cleanup levels be established for the site based on the non-attainment area for groundwater contamination.

During a second meeting between ACDEH, Greyhound and the Regional Water Quality Control Board (RWQCB) in October 1995, a more streamlined groundwater monitoring program was developed. Based on anticipated changes to existing regulations, Greyhound agreed to continue with the monitoring and recovery program until a nofurther-action scenario without deed stipulations is achievable.

The next quarterly status report will be prepared and submitted to ACDEH on or before May 15, 1996. In the interim, Greyhound requests a review of the Preliminary Risk Evaluation originally submitted in November 1993. The data gathered since the risk evaluation was submitted indicate it may now be possible to achieve a no-further-action.

• Time schedules for the completion of the investigation of the site and remediation:

Greyhound anticipates that the groundwater monitoring program will continue for less than 2 more years. If no measurable product continues to be found over a period of several months, a no-further-action scenario will be proposed based on the risk assessment previously submitted to ACDEH and analytical results obtained from the monitoring program.

· Tank owner commitment letter:

The cover letter submitted with this report is intended to serve as the tank owner commitment letter.

TABLE 1

MONITORING WELL DATA SUMMARY
GREYHOUND TERMINAL, OAKLAND, CALIFORNIA
April 9, 1996

| Location | Elevation of T.O.C ¹ (Ft.) | Depth to Groundwater (Ft.) | Groundwater Elevation ² (Ft.) | Product Layer Thickness (Ft.) |
|---------------------|---|----------------------------------|--|-------------------------------------|
| ES-1 ³ | 96.64 | 17.40 | 79.24 | 0 |
| ES-23 | 96.44 | 17.18 | 79.26 | 0 |
| ES-3 | 96.96 | 17.65 | 79.31 | 0 |
| ES-4 | 95.70 | 16.76 | 78.94 | 0 |
| ES-5 ³ | 95.85 | 16.70 | 79.15 | 0 |
| ES-6 | 97.84 | 20.14 | 77.70 | 0 |
| ES-7 | 96.40 | 18.05 | 78.35 | 0 |
| ES-8 | 96.64 | 17.10 | 79.54 | 0 |
| ES-9 | 95.78 | 15.92 | 79.86 | 0 |
| ES-10 | 95.24 | 15.44 | 79.80 | 0 |
| ES-11 | 95.92 | 17.13 | 78.79 | 0 |
| BC-1 ^{3,4} | 96.16 | INACCESSIBL | .E | |
| BC-2 ⁴ | 96.32 | 16.90 | 79.42 | 0 |
| BC-3 ⁴ | 96.20 | 16.60 | 79.60 | 0 |

Elevations of top of PVC casing measured with respect to on—site datum (97.50 feet, measured on steel grate for storm sewer near wash rack).

BC = Wells constructed by Brown and Caldwell, Inc., during during earlier phases of investigation.

² Groundwater elevation (Elevation of T.O.C. – depth to groundwater).

³ Recovery Wells.

⁴ Approximate elevation – well casings not vertical.

GROUNDWATER ANALYTICAL RESULTS
GREYHOUND TERMINAL, OAKLAND, CALIFORNIA
APRIL 9 AND 11, 1996

TABLE 2

| Location | Date Collected | Parameter | Result | Detection Limit |
|----------|----------------|---------------------------|--------|-----------------|
| ES-3 | 4/9/96 | Benzene ¹ | ND | 1 ug/L |
| | | Toluene ¹ | ND | 1 ug/L |
| | | Ethylbenzene ¹ | ND | 1 ug/L |
| | | Xylenes (total)1 | ND | 1 ug/L |
| | | TPHD ² | 0.12 | 0.1 mg/L |
| ES-4 | 4/11/96 | Benzene¹ | 57 | 1 ug/L |
| | | Toluene ¹ | 3 | 1 ug/L |
| | | Ethylbenzene ¹ | 17 | 1 ug/L |
| | | Xylenes (total)1 | 19 | 1 ug/L |
| | | TPH-D2 | ND | 0.1 mg/L |
| ES-6 | 4/9/96 | Benzene¹ | ND | 1 ug/L |
| | ,, -, | Toluene ¹ | ND | 1 ug/L |
| | | Ethylbenzene ¹ | ND | 1 ug/L |
| | | Xylenes (total)1 | 0.22 | 1 ug/L |
| | | TPH-D ² | ND | 0.1 mg/L |

Notes:

ND - Not detected above the practical quantitation limit.

¹ Analyzed by EPA Method 8020. Concentrations in ug/l.

² Analyzed by DHS/LUFT Method Modified EPA 8015 for Diesel. Concentrations in mg/l.

TABLE 3

SOIL ANALYTICAL DATA SUMMARY
GREYHOUND TERMINAL, OAKLAND, CALIFORNIA

| Location Sample Depth | Date | Benzene ug/kg | Toluene ug/kg | Ethylbenzene ug/kg | Xylene ug/kg | Total BTEX ug/kg | TPH-D ² mg/kg | TPH-G ³ mg/kg |
|--------------------------|-------|------------------|------------------|-----------------------|-----------------|------------------|-----------------------------|-----------------------------|
| ES-1 (16-18) | 11/91 | ND | 3,000 | 3,400 | 22,000 | 28,400 | ND | NA |
| ES-2 (16-18) | 11/91 | ND | 27,000 | 28,000 | 150,000 | 205,000 | ND | NA |
| ES-3 (18-19) | 11/91 | ND | ND | ND | ND | ND | ND | NA |
| ES-4 (16-16.5) | 11/91 | ND | ND | ND | ND | ND | ND | NA |
| ES-5 (15-17) | 11/91 | ND | 80 | 65 | 330 | 475 | 160 | NA |
| ES-6 (15-16.5) | 7/93 | ND | ND | ND | ND | ND | ND | ND |
| ES-7 (20-21.5) | 7/93 | ND | ND | ND | ND | ND | ND | ND |
| ES8 (20-21.5) | 7/93 | ND | ND | ND | ND | ND | ND | ND |
| ES-9 (15-16.5) | 7/93 | ND | ND | ND | ND | ND | ND | ND |
| ES-10 (20-21.5) | 7/93 | ND | ND | ND | ND | ND | ND | ND |
| ES-11 (20-21.5) | 7/93 | ND | ND | ND | ND | ND | ND | ND |

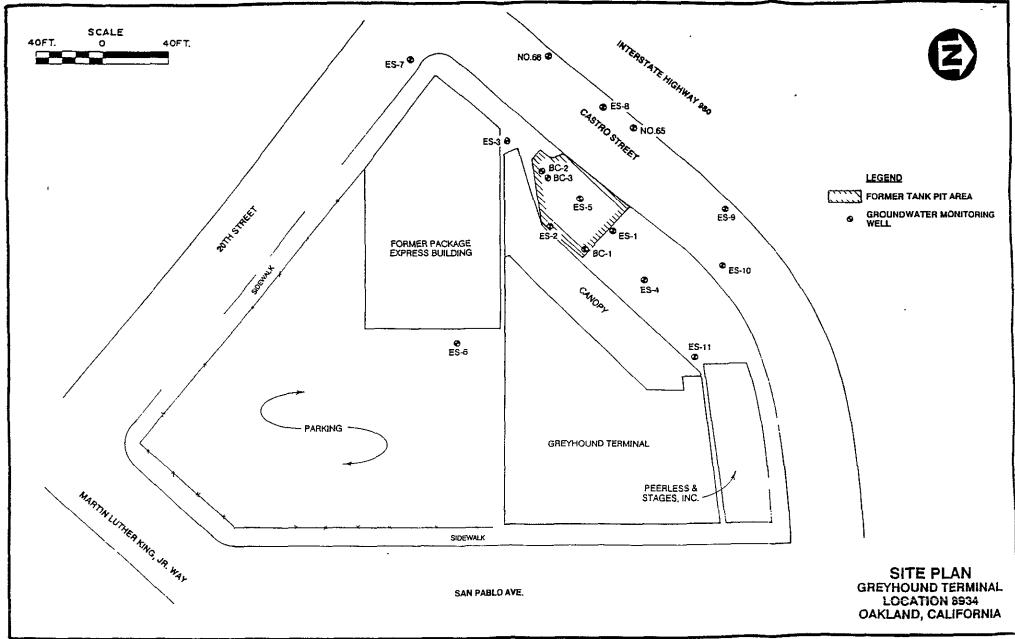
NA - Not analyzed.

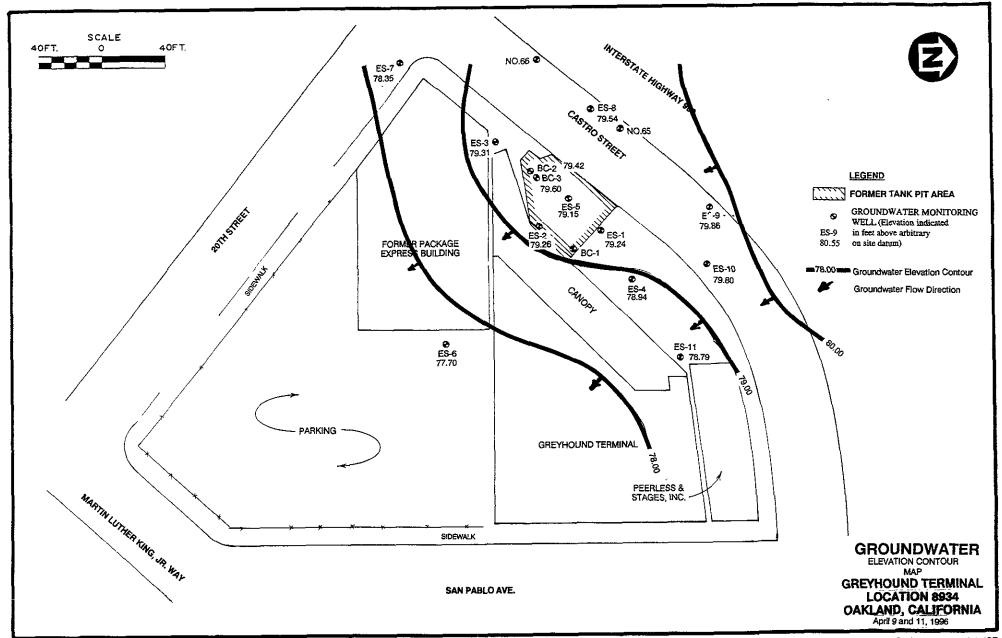
ND - Non-detect; sample analyzed but did not exceed Method Detection Limit.

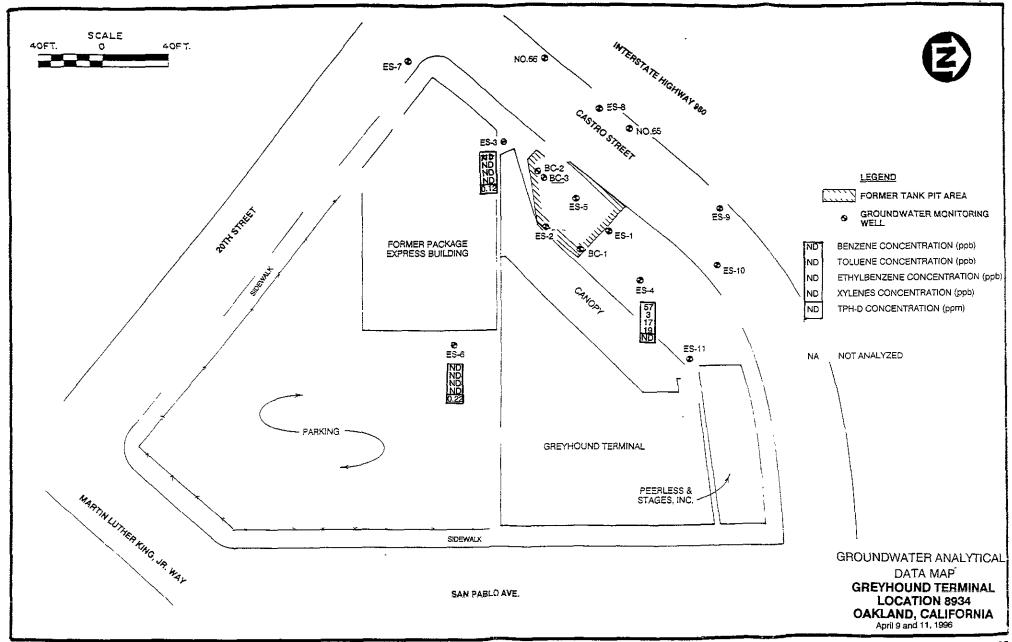
Total BTEX = analyzed by EPA Method 8020. Results reported in ug/kg. Refer to analytical laboratory reports for method detection limits.

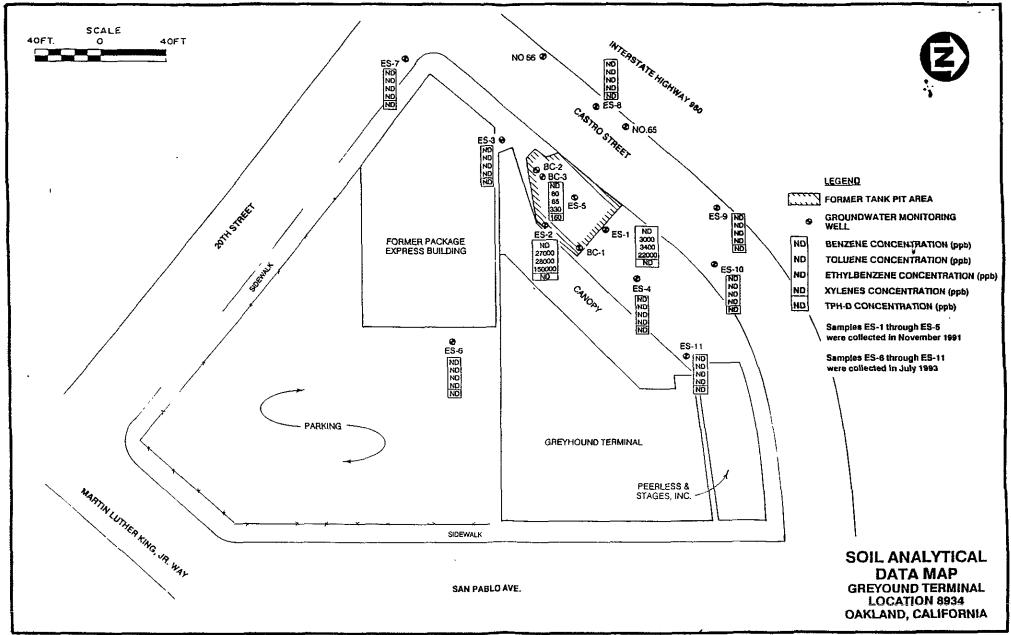
² TPH-D = Total Petroleum Hydrocarbons (TPH) for Diesel by EPA Method 3510/8015. Results reported in mg/kg. Refer to analytical laboratory reports for method detection limits.

³ TPH-G = Total Petroleum Hydrocarbons (TPH) for Gasoline by EPA Method 3510/8015. Results reported in mg/kg. Refer to analytical laboratory reports for method detection limits.









ATTACHMENT A ANALYTICAL DATA REPORTS



HOUSTON LABORATORY

8880 INTERCHANGE DRIVE HOUSTON, TEXAS 77054 PHONE (713) 660-0901

SPL, INC.

REPORT APPROVAL SHEET

WORK ORDER NUMBER: <u>96 - 04 - 731</u>

Approved for release by:

M. Scott Sample, Laboratory Director



8880 INTERCHANGE DRIVE HOUSTON, TEXAS 77054 PHONE (713) 660-0901

CASE NARRATIVE

QUALITY CONTROL RESULTS SUMMARY

WORK ORDER NO(S).: 96-04-731

The SPL-Houston laboratory received three liquid samples on April 15, 1996. The samples were properly preserved and collected in the proper containers. However, the liter container intended for TPH-Diesel analysis for sample "ES-6" was received broken at the laboratory, therefore, the analysis was performed on the liquid from two preserved voa vials provided for the BTEX analysis of the same sample. The samples were received at eight degrees Celsius and were analyzed at the request of David Nickerson of Parsons Engineering Science. The samples were analyzed by the methods on the chain-of-custody and no deviations from the methods occurred.

SOUTHERN PETROLEUM LABORATORIES

Shari Brock

UST Coordinator



8880 INTERCHANGE DRIVE HOUSTON, TEXAS 77054 PHONE (713) 660-0901

Certificate of Analysis No. H9-9604731-01

Greyhound Lines, Inc.

P.O. Box 660362

Dallas, TX 75226-0362

ATTN: Rhonda Derk

DATE: 04/23/96

PROJECT: Greyhound Terminal

PROJECT NO: 728878.08934

SITE: Oakland, CA

MATRIX: WATER

SAMPLED BY: Parsons Engineering Science

DATE SAMPLED: 04/09/96 15:55:00

SAMPLE ID: ES-6

DATE RECEIVED: 04/15/96

| ANALYTICAL | DATA | | |
|--------------------------------------|----------------|--------------------|-------|
| PARAMETER | RESULTS | DETECTION LIMIT | UNITS |
| BENZENE | ND | 1 P | μg/L |
| TOLUENE | ND | 1 P | μg/L |
| ETHYLBENZENE | ND | 1 P | μg/L |
| TOTAL XYLENE | ND | 1 P | μg/L |
| TOTAL VOLATILE AROMATIC HYDROCARBONS | ND | | μg/L |
| Surrogate | % Recovery | | |
| 1,4-Difluorobenzene | 9 - | | |
| 4-Bromofluorobenzene | 84 | | |
| METHOD 8020A *** | | | |
| Analyzed by: VHZ | | | |
| Date: 04/17/96 | | | |
| Total Petroleum Hydrocarbons-Diesel | 0.22 | 0.1 P | mg/L |
| Surrogate | % Recovery | | |
| o-Terphenyl | 81 | | |
| 2-Fluorobiphenyl | CI | | |
| Mod. 8015 - Diesel | | | |
| Analyzed by: RR | | | |
| Date: 04/18/96 19:44:00 | | | |

ND - Not detected.

(P) - Practical Quantitation Limit

CI - Coeluting interference.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA

**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.

***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPL California License # 1903

SPL, Inc., - Project Manager



HOUSTON LABORATORY

8880 INTERCHANGE DRIVE HOUSTON, TEXAS 77054 PHONE (713) 660-0901

Certificate of Analysis No. H9-9604731-01

Greyhound Lines, Inc.

P.O. Box 660362

Dallas, TX 75226-0362

ATTN: Rhonda Derk

DATE: 04/23/96

PROJECT: Greyhound Terminal

PROJECT NO: 728878.08934

SITE: Oakland, CA

MATRIX: WATER

SAMPLED BY: Parsons Engineering Science

DATE SAMPLED: 04/09/96 15:55:00

SAMPLE ID: ES-6

DATE RECEIVED: 04/15/96

ANALYTICAL DATA

PARAMETER

RESULTS

DETECTION

UNITS

Liquid-liquid extraction

LIMIT

04/16/96

METHOD 3510B *** Analyzed by: JK

Date: 04/16/96 14:00:00

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA

**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.

***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance. SPL California License # 1903



8880 INTERCHANGE DRIVE HOUSTON, TEXAS 77054 PHONE (713) 660-0901

Certificate of Analysis No. H9-9604731-02

Greyhound Lines, Inc.

P.O. Box 660362

Dallas, TX 75226-0362

ATTN: Rhonda Derk

DATE: 04/23/96

PROJECT: Greyhound Terminal

PROJECT NO: 728878.08934

SITE: Oakland, CA

MATRIX: WATER

SAMPLED BY: Parsons Engineering Science

DATE SAMPLED: 04/09/96 17:10:00

SAMPLE ID: ES-3

DATE RECEIVED: 04/15/96

| ANALYTICAL | DATA | | |
|--|----------------|--------------------|----------------|
| PARAMETER | RESULTS | DETECTION LIMIT | UNITS |
| BENZENE | ND | 1 P | $\mu { m g/L}$ |
| TOLUENE | ND | 1 P | μg/L |
| ETHYLBENZENE | ND | 1 P | μg/L |
| TOTAL XYLENE | ND | 1 P | μg/L |
| TOTAL VOLATILE AROMATIC HYDROCARBONS | ND | | $\mu g/L$ |
| Surrogate | % Recovery | | |
| 1,4-Difluorobenzene | 9 7 | | |
| 4-Bromofluorobenzene | 95 | | |
| METHOD 8020A *** | | | |
| Analyzed by: VHZ | | | |
| Date: 04/17/96 | | | |
| Total Petroleum Hydrocarbons-Diesel | 0.12 | 0.1 P | mg/L |
| Surrogate | % Recovery | | |
| o-Terphenyl | СĪ | | |
| 2-Fluorobiphenyl Mod. 8015 - Diesel | CI | | |

ND - Not detected.

Analyzed by: RR

(P) - Practical Quantitation Limit

CI - Coeluting interference.

Date: 04/18/96 20:28:00

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA

**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.

***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

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SPL, Inc., - Project Manager



8880 INTERCHANGE DRIVE HOUSTON, TEXAS 77054 PHONE (713) 660-0901

Certificate of Analysis No. H9-9604731-02

Greyhound Lines, Inc.

P.O. Box 660362

Dallas, TX 75226-0362

ATTN: Rhonda Derk

DATE: 04/23/96

PROJECT: Greyhound Terminal

PROJECT NO: 728878.08934

SITE: Oakland, CA

MATRIX: WATER

SAMPLED BY: Parsons Engineering Science

DATE SAMPLED: 04/09/96 17:10:00

SAMPLE ID: ES-3

DATE RECEIVED: 04/15/96

ANALYTICAL DATA

PARAMETER

RESULTS

DETECTION

UNITS

Liquid-liquid extraction

04/16/96

LIMIT

METHOD 3510B ***
Analyzed by: JK

Date: 04/16/96 14:00:00

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA

**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.

***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

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SPL, Inc., - Project Manager



MATRIX: WATER

8880 INTERCHANGE DRIVE HOUSTON, TEXAS 77054 PHONE (713) 660-0901

DATE: 04/23/96

Certificate of Analysis No. H9-9604731-03

Greyhound Lines, Inc.

P.O. Box 660362

Dallas, TX 75226-0362

ATTN: Rhonda Derk

PROJECT: Greyhound Terminal **PROJECT NO:** 728878.08934

SITE: Oakland, CA

SAMPLED BY: Parsons Engineering Science **DATE SAMPLED:** 04/11/96 DATE RECEIVED: 04/15/96

SAMPLE ID: ES-4

| ANALYTICAL | DATA | | | |
|--------------------------------------|------------|--------------|------------|-------|
| PARAMETER | RESULTS | DETE LIMI | CTION T | UNITS |
| BENZENE | 57 | 1 | P | μg/L |
| TOLUENE | 3 | 1 | P | μg/L |
| ETHYLBENZENE | 17 | 1 | P | μg/L |
| TOTAL XYLENE | 19 | 1 | P | μg/L |
| TOTAL VOLATILE AROMATIC HYDROCARBONS | 96 | | | μg/L |
| Surrogate | % Recovery | | | |
| 1,4-Difluorobenzene | 132 « | | | |
| 4-Bromofluorobenzene | 104 | | | |
| METHOD 8020A *** | | | | |
| Analyzed by: VHZ | | | | |
| Date: 04/17/96 | | | | |
| Total Petroleum Hydrocarbons-Diesel | ND | 0.1 | P | mg/L |

| | | | - |
|-----------|---|--------|-----|
| Surrogate | _ | % Reco | ver |

ry o-Terphenyl 84 2-Fluorobiphenyl CI

Mod. 8015 - Diesel Analyzed by: RR

Date: 04/18/96 21:11:00

(P) - Practical Quantitation Limit « - Recovery beyond control limits. ND - Not detected. CI - Coeluting interference.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA **Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.

***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance. SPL California License # 1903



8880 INTERCHANGE DRIVE HOUSTON, TEXAS 77054 PHONE (713) 660-0901

Certificate of Analysis No. H9-9604731-03

Greyhound Lines, Inc.

P.O. Box 660362

Dallas, TX 75226-0362

ATTN: Rhonda Derk

DATE: 04/23/96

PROJECT: Greyhound Terminal

PROJECT NO: 728878.08934

SITE: Oakland, CA

MATRIX: WATER

SAMPLED BY: Parsons Engineering Science **SAMPLE ID:** ES-4

DATE SAMPLED: 04/11/96
DATE RECEIVED: 04/15/96

ANALYTICAL DATA

PARAMETER

RESULTS

DETECTION

UNITS

Liquid-liquid extraction

04/16/96

LIMIT

METHOD 3510B ***
Analyzed by: JK

Date: 04/16/96 14:00:00

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA

**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.

***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPL California License # 1903

SPL, Inc., - Project Manager



HOUSTON LABORATORY

8880 INTERCHANGE DRIVE HOUSTON, TEXAS 77054 PHONE (713) 660-0901

Certificate of Analysis No. H9-9604731-04

Greyhound Lines, Inc.

P.O. Box 660362

Dallas, TX 75226-0362

ATTN: Rhonda Derk

DATE: 04/23/96

PROJECT: Greyhound Terminal

SITE: Oakland, CA

SAMPLED BY: Provided by SPL

SAMPLE ID: Trip Blank

PROJECT NO: 728878.08934

MATRIX: WATER

DATE SAMPLED: 04/02/96

DATE RECEIVED: 04/15/96

| ANALYTICAL 1 | DAT? | 7 | | | |
|--------------------------------------|------|----------|-------------|--------------|-----------|
| PARAMETER | | RESULTS | DET: LIM | ECTION IT | UNITS |
| BENZENE | | ND | 1 | P | μg/L |
| TOLUENE | | ND | 1 | P | μg/L |
| ETHYLBENZENE | | ND | 1 | P | μg/L |
| TOTAL XYLENE | | ND | 1 | P | μg/L |
| TOTAL VOLATILE AROMATIC HYDROCARBONS | | ND | | | $\mu g/L$ |
| Surrogate | ૠ | Recovery | | | |
| 1,4-Difluorobenzene | | 98 | | | |
| 4-Bromofluorobenzene | | 96 | | • | |
| METHOD 8020A *** | | | | | |
| Analyzed by: VHZ | | | | | |
| Date: 04/17/96 | | | | | |

ND - Not detected.

(P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA **Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.

***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPL California License # 1903

SPL, Inc., - Project Manager

QUALITY CONTROL DOCUMENTATION



SPL BATCH QUALITY CONTROL REPORT ** METHOD 8020***

PAGHOUSTON LABORATORY

8880 INTERCHANGE DRIVE HOUSTON, TEXAS 77054 PHONE (713) 660-0901

Matrix: Units: Aqueous

μg/L

Batch Id: HP_R960417093200

LABORATORY CONTROL SAMPLE

| SPIKE | Method | Spike | Blank | Spike | QC Limits(**) | | | | |
|--------------|---------------------|--------------|---------------|----------|------------------------------|--|--|--|--|
| COMPOUNDS | Blank Result <2> | Added <3> | Result <1> | Recovery | (Mandatory) * Recovery Range | | | | |
| Benzene | ND | 50 | 43 | 86.0 | 62 - 121 | | | | |
| Toluene | ND | 50 | 43 | 86.0 | 66 - 136 | | | | |
| EthylBenzene | ND | 50 | 43 | 86.0 | 70 - 136 | | | | |
| O Xylene | ND | 50 | 49 | 98.0 | 74 - 134 | | | | |
| M & P Xylene | ND | 100 | 97 | 97.0 | 77 - 140 | | | | |

MATRIX SPIKES

| S P I K B C O M P O U N D S | Sample Results | Spike Added | Matrix Spike | | Matrix Spike Duplicate | | MS/MSD Relative % | 7 | imits(***) (Advisory) |
|--------------------------------|-------------------|----------------|--------------|----------|------------------------|----------|----------------------|------|--------------------------|
| | ĺ | | Result | Recovery | Result | Recovery | Difference | RPD | |
| | <2> | <3> | <1> | <4> | <1> | <5> | | Max. | Recovery Range |
| BENZENE | 38 | 20 | 59 | 105 | 58 | 100 | 4.88 | 25 | 39 - 150 |
| TOLUENE | 38 | 20 | 56 | 90.0 | 57 | 95.0 | 5.41 | 26 | 56 - 134 |
| ETHYLBENZENE | 6 | 20 | 23 | 85.0 | 24 | 90.0 | 5.71 | 38 | 61 - 128 |
| O XYLENE | 18 | 20 | 36 | 90.0 | 37 | 95.0 | 5.41 | 29 | 40 130 |
| 4 & P XYLENE | 24 | 40 | 63 | 97.5 | 64 | 100 | 2.53 | 20 | 43 - 152 |

Analyst: VHZ

Sequence Date: 04/17/96

SPL ID of sample spiked: 9604759-02A

Sample File ID: R 963.TX0

Method Blank File ID:

Blank Spike File ID: R___957.TX0

Matrix Spike File ID: R___959.TX0

Matrix Spike Duplicate File ID: R___960.TX0

* = Values Outside QC Range

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

Recovery = ((<1> - <2>) / <3>) x 100

LCS % Recovery = (<1> / <3>) x 100

Relative Percent Difference $= \left| \left(<4 \right> - <5 \right> \right| / \left[\left(<4 \right> + <5 \right> \right) \times 0.5 \right] \times 100$

(**) = Source: SPL-Houston Historical Data (3rd Q '95)

(***) = Source: SPL-Houston Historical Data (4th Q '94)

SAMPLES IN BATCH (SPL ID):

9604731-04A 9604731-01A 9604731-02A 9604731-03A

9604759-01A 9604722-05A 9604678-01A 9604749-03A

9604749-04A 9604749-05A 9604531-09A 9604722-02A

9604713-02A 9604722-03A 9604722-01A 9604531-10A

9604759-02A

QC Officer



** SPL BATCH QUALITY CONTROL REPORT **
Mod. 8015 - Diesel

PAGE

HOUSTON LABORATORY

8880 INTERCHANGE DRIVE HOUSTON, TEXAS 77054 PHONE (713) 660-0901

Matrix: Units: Aqueous

mg/L

Batch Id: HPTT960418173201

BLANK SPIKES

| SPIKE COMPOUNDS | Sample Results | Spike Added | Matrix | Spike | Matrix Spike <u>Duplicate</u> | | MS/MSD Relative % | QC Limits(**) (Advisory) | | | |
|---------------------------|-------------------|----------------|--------|-----------------|-------------------------------|----------|----------------------|--------------------------|----------------|--|--|
| | <2> | <3> | Result | Recovery <4> | Result <1> | Recovery | Difference | | Recovery Range | | |
| DIESEL PETR. HYDROCARBONS | ND | 5.0 | 5.39 | 108 | 5.83 | 117 | 8.00 | 43 | 20 - 130 | | |

Analyst: RR

Sequence Date: 04/18/96 Method Blank File ID:

Sample File ID:

Blank Spike File ID: T___385.TX0

Matrix Spike File ID:

Matrix Spike Duplicate File ID:

* = Values Outside QC Range

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit % Recovery = [(<1> - <2>) / <3>] x 100

Relative Percent Difference = |(<4> - <5>)| / [(<4> + <5>) x 0.5] x 100

(**) = Source: SPL-Houston Historical Data

SAMPLES IN BATCH (SPL ID):

9604731-01B 9604731-02B 9604731-03B

QC Officer

CHAIN OF CUSTODY AND SAMPLE RECEIPT CHECKLIST

| / F 199 / I | 7 | | S | PL, I | nc. | | | | SPL Workorder No: | | | | | 03595 | | | |
|----------------------------|-------------------------|-------------|-------------|----------------------|----------------------|--------------------------|--------------------|----------------------|-------------------|--|----------|-------------|-------|--------------|-------------------|--|--------|
| | A n | alysis Re | | - | | ustod | y Reco | ord | | 94 | 647 | 31 | | ٲ | page _ | J of | |
| Client Name: PARSONS | ES | | | matrix | , | size | pres. | | | | Re | ques | ted A | nalys | is | | |
| Address/Phone: (576) & 7 | 19-010 | 0 | | | glass | vial | | | | | | | | | | | |
| | PEU | | | S=soil O=other: | A=amber g V=vial | 4=40z 40=vial 16=160z | 2=HNO3 O=other: | Number of Containers | . 0 | | | | | | | | П |
| Project Name: GREY | Name: GREYHOUND Sapland | | | | = an =vis | loz 160 | =H] =ot | onta | \ \ y 9' | | | | | | | | # |
| Project Number: 72887 | 8-0893 | 4 | | | 1 | 4=4 16= | | f Cc | ď | | | | | | | | 3 |
| Project Location: Oaklan | | | | W=water SL=sludge | P=plastic G=glass | ter | 1=HCl 3=H2SO4 | o sec | No. | TIN | | | | | | | Cooler |
| | l, N.4. | | | | =pla =gla | 1=1 liter 8=80z | H H H | umb | $ \mathcal{X} $ | v ` | | | | | | | Y |
| SAMPLE ID | DATE | TIME | comp grab | ≥ ½ | ق ٿ | - 8 | | <u> </u> | | | | | | | - | | |
| E2-6 | 4/9/96 | 1555 | | W | GV | 1,4 | | 4 | X | 人 | | | - | | | | 2 |
| E5-3 | 4/9/96 | 1710 | | | 11 | | 1 | 4 | 入 | 4 | | | | _ | | | 2 |
| ES-4 | 41,196 | | | V | VV | V | 1 | 4 | X | X | | | | ļ | | | 2 |
| • | , , | | | | | | | | | | | | | <u>_</u> | | | |
| | | | | | <u> </u> | | | | | | | | | | | | |
| | | | | | | | | | | | | | | . <u></u> . | | | |
| | | | | | | | | | | | | | | | | <u>: </u> | |
| | | | | | | | | | | | | | | | | | |
| | | | | 1 | | | | | <u> </u> | | ! | | | | | | |
| | | | | | | | | | | | - | | | | | | |
| Client/Consultant Remarks: | | | | Laborate | ory remark | ks: | <u>. I</u> | <u> </u> | <u> </u> | <u> </u> | <u></u> | | | Intact | 200 | Y O | N |
| | Special Report | Paguirara | 210 | <u> </u> | | | | Special | Detection | n Limits | (specify | ·): | | Temp | : () (IPM rev | iew (initi | ial): |
| Requested TAT |] | ndard QC | | Results 13 QC | | Raw Da | œ [] ∞ [] | Special | Betteta | | (-p-c) | ,- | | | SUB | - | - |
| 24hr 72hr | 1. Relinquistre | | 1 22.10 | | | date / 12 | | time 2 | 30 | 2. Recei | ved by: | 10,0 | PEY) | <u>.</u> | 1/// | 4/16 | 1 10 |
| 48hr Standard 🔀 | 3. Relinquished | d by: | | | | date | 176 | time | | 4. Recei | ved by: | (100 | | | | | |
| | | | | | | date | | time | | 6. Recei | ved by ! | aborato | iv: | - | ~l~ | नद्भ | 6/ |
| Other | 5. Relinquished | Fed E) | c) | | | | | | <u>> '</u> | ו וווי | um | / · · · · · | 20a | <u>101</u> | | 00 | Ž |
| 8880 Interchange Drive, | Houston, T | χ 77054 (71 | 13) 660-0 | 901 | | | | | | affery P | | | | | | | |
| 459 Hughes Drive, Trave | erse City, MI | 49684 (61 | 6) 947-57 | 777 | | | 1511 | E. Orai | ngetho: | rpe Ave | nue, F | ullerto | n, CA | 92631 | (714) | 447-6 | 868 |

SPL Houston Environmental Laboratory

Sample Login Checklist

| Dat | te: 4-15-96 Time: | 10:00 | | |
|-----|--------------------------------------|----------------------------|------------|-----------|
| SPI | _ Sample ID: | | | |
| | • | 473/ | | |
| | | | <u>Yes</u> | <u>No</u> |
| 1 | Chain-of-Custody (COC) form is pr | esent. | V | |
| 2 | COC is properly completed. | | | |
| 3 | If no, Non-Conformance Worksheet | has been completed. | | |
| 4 | Custody seals are present on the shi | 4 | | |
| 5 | If yes, custody seals are intact. | 4 | | |
| 6 | All samples are tagged or labeled. | | | |
| 7 | If no, Non-Conformance Worksheet | t has been completed. | | |
| 8 | Sample containers arrived intact | | | 1 |
| 9 | Temperature of samples upon arriva | 1: | | 8´c |
| 10 | Method of sample delivery to SPL: | SPL Delivery | | |
| | | Client Delivery | | |
| ı | | FedEx Delivery (airbill #) | 82773 | 00684 |
| | | Other: | | |
| 11 | Method of sample disposal: | SPL Disposal | | |
| | | HOLD | | |

| Elieta Brown 4/15/96 |
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|----------------------|

Return to Client

ATTACHMENT B PRIOR MONITORING WELL DATA

FACILITY NO.: 8934
FACILITY NAME: OAKLAND
STATE: CA

FACILITY TYPE: TERMINAL

| Well ID | Date | Depth to Liquid (ft) | Depth to Water (ft) | Product Thickness (ft) |
|---|--|---|--|---|
| BC-001 | 7/07/92 8/04/92 8/04/92 10/06/92 11/06/92 11/06/93 4/06/93 7/03/93 8/04/93 9/01/93 11/02/93 11/05/94 4/07/94 5/05/94 4/07/94 5/05/94 6/07/94 11/02/94 11/03/94 11/02/94 11/03/95 5/09/95 5/09/95 5/09/95 10/03/95 10/03/95 10/03/95 10/03/95 10/03/95 10/03/95 10/03/95 10/03/95 10/03/95 10/03/95 10/03/95 10/03/95 10/03/95 10/03/95 10/03/95 10/03/95 10/03/95 10/03/96 3/12/96 | 19.55 18.47 18.68 18.82 19.60 18.26 19.30 19.25 19.31 19.25 19.32 19.31 19.25 19.30 18.40 18.65 18.70 18.40 18.65 18.70 18.65 18.70 18.72 18.58 18.70 18.64 17.89 17.64 17.89 17.64 17.89 17.64 17.89 17.64 17.89 17.64 17.89 17.64 17.85 18.32 18.64 17.43 16.85 | 20.66 20.90 21.02 21.14 20.69 21.76 18.26 19.32 19.40 19.32 19.43 19.53 19.53 19.50 18.82 19.50 18.82 17.58 18.82 17.38 16.89 17.39 17.64 17.96 18.23 18.36 17.39 17.64 17.96 18.36 17.39 17.64 17.96 18.36 17.38 18.36 17.38 18.36 17.38 18.36 17.38 18.36 17.38 18.36 17.38 18.36 17.38 18.36 17.38 18.36 17.38 18.36 17.38 18.36 17.36 18.36 17.38 18.36 17.36 18.36 17.36 18.36 17.36 18.36 17.36 18.36 17.36 18.36 17.36 18.36 17.36 18.36 18.36 17.36 18.36 18.36 18.36 17.36 18.36 18.36 18.36 17.36 18 | 1.11 2.43 2.34 2.32 2.45 2.16 0.00 .10 .10 .09 .18 .19 .22 .17 .20 .20 .10 .19 .27 0.00 0.00 .01 0.01 0.00 0.01 0.01 0.00 |
| BC-002 BC-002 BC-002 BC-002 BC-002 | 7/07/92 8/04/92 8/31/92 10/06/92 11/06/92 | 16.89 18.46 18.89 18.50 15.98 | 16.89 18.46 18.89 18.50 15.98 | 0.00 0.00 0.00 0.00 0.00 |

| Well ID | Date | Depth to Liquid (ft) | Depth to Water (ft) | Product Thickness (ft) |
|--|--|--|--|--|
| BC-002 | 1/07/93 4/06/93 7/03/93 8/04/93 9/01/93 10/07/93 11/02/93 12/06/93 1/05/94 2/02/94 5/05/94 6/07/94 7/13/94 8/03/94 9/14/95 3/07/95 4/11/95 | 13.50 15.20 17.75 18.10 18.48 19.02 18.76 18.87 16.42 17.30 17.70 17.10 18.36 17.04 12.80 15.11 16.21 15.56 15.81 16.88 17.55 18.87 16.88 17.55 18.03 18.24 18.36 17.86 17.86 16.31 16.50 16.90 | 13.50 15.20 17.75 18.10 18.48 19.02 18.76 18.87 16.42 17.30 17.70 17.10 18.36 17.70 15.11 16.21 15.56 15.81 16.88 16.88 17.55 18.87 16.88 17.55 18.87 16.88 17.55 18.87 16.88 17.55 18.87 16.88 17.55 18.87 16.88 17.55 18.87 16.88 17.55 18.90 18 | 0.00 |
| BC-003 BC-003 BC-003 BC-003 BC-003 BC-003 BC-003 BC-003 BC-003 BC-003 BC-003 BC-003 BC-003 BC-003 | 7/07/92 8/04/92 8/31/92 10/06/92 11/06/92 1/07/93 4/06/93 7/03/93 8/04/93 9/01/93 10/07/93 11/02/93 12/06/93 1/05/94 2/02/94 3/02/94 | 16.68 19.24 19.10 18.93 16.81 16.55 15.44 16.81 18.82 18.40 18.58 18.53 18.67 17.51 16.40 15.00 | 16.68 19.24 19.10 18.93 16.81 16.55 15.44 16.81 18.82 18.40 18.58 18.53 18.67 17.51 16.40 15.00 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 |

| Well ID | Date | Depth to Liquid (ft) | Depth to Water (ft) | Product Thickness (ft) |
|--|---|--|---|--|
| BC-003 | 12/07/94 1/13/95 2/14/95 3/07/95 4/11/95 5/09/95 | 17.70 17.90 17.34 18.36 18.31 18.58 18.61 16.29 15.40 15.86 16.21 15.08 16.92 16.90 16.87 17.54 17.95 17.95 17.95 17.95 17.95 18.35 17.55 16.60 | 17.70 17.34 18.10 18.36 18.31 18.58 18.61 16.29 15.40 15.86 16.21 15.92 16.92 16.92 16.97 17.54 17.80 17.95 17.95 17.55 16.60 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 |
| ES-001 ES-001 ES-001 ES-001 ES-001 ES-001 ES-001 ES-001 ES-001 ES-001 ES-001 ES-001 ES-001 ES-001 ES-001 ES-001 ES-001 | 6/16/92 7/07/92 8/04/92 8/31/92 10/06/92 1/06/93 4/06/93 7/03/93 8/04/93 9/01/93 10/07/93 11/02/93 12/06/93 1/05/94 2/02/94 3/02/94 4/07/94 5/05/94 6/07/94 7/13/94 8/03/94 | 20.18 18.60 18.80 18.96 19.08 18.52 20.25 17.08 18.68 18.85 18.90 19.02 19.20 19.15 18.96 18.92 17.91 18.50 17.88 18.04 18.08 18.48 | 23.78 18.60 18.81 18.97 19.10 18.53 20.26 17.88 18.68 18.85 18.90 19.03 19.20 19.15 18.96 18.92 18.08 18.68 18.02 18.08 18.08 | 3.60 0.00 .01 .01 .02 .01 .80 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.17 .18 .14 .17 0.00 0.00 |

| Well ID | Date | Depth to Liquid (ft) | Depth to Water (ft) | Product Thickness (ft) |
|--|--|---|---|---|
| ES-001 ES-001 ES-001 ES-001 ES-001 ES-001 ES-001 ES-001 ES-001 ES-001 | 9/14/94 10/06/94 11/02/94 12/07/94 1/13/95 2/14/95 3/07/95 4/11/95 5/09/95 6/09/95 7/06/95 8/10/95 9/07/95 | 18.62 18.39 18.39 17.70 18.39 16.44 16.25 16.66 17.15 17.28 17.60 17.79 18.01 18.01 18.00 18.39 18.04 | 18.64 18.43 18.39 17.70 18.43 16.45 16.25 16.66 17.16 17.28 17.61 17.79 18.01 | |
| ES-002 ES-002 ES-002 ES-002 ES-002 | 8/04/92 8/31/92 10/06/92 11/06/92 1/07/93 4/06/93 7/03/93 8/04/93 9/01/93 10/07/93 | 19.17 | 19.44 20.40 18.31 19.32 19.18 19.59 19.60 19.61 | .01 0.00 .59 .61 .59 .60 .35 .11 .03 .09 .03 .01 .03 .04 .05 .50 .09 .02 0.00 0.00 0.00 0.00 |

| Well ID | Date | Depth to Liquid (ft) | Depth to Water (ft) | Product Thickness (ft) |
|--|---|---|---|---|
| ES-002 ES-002 ES-002 ES-002 ES-002 ES-002 ES-002 ES-002 ES-002 ES-002 ES-002 ES-002 ES-002 | 4/11/95 5/09/95 | 16.71 17.15 17.60 17.78 18.09 18.29 18.48 18.45 | 18.86 16.92 17.25 16.71 17.15 17.61 17.79 18.10 18.29 18.45 18.48 18.65 18.90 18.54 17.60 17.08 17.18 | 0.00 0.00 0.00 0.00 0.00 .01 .01 |
| ES-003 ES-003 ES-003 ES-003 ES-003 | 10/07/93 11/02/93 12/06/93 1/05/94 | 19.41 19.52 19.68 19.80 19.96 18.84 19.20 15.92 18.12 19.36 19.62 19.62 19.68 19.62 19.68 19.68 19.00 18.78 18.90 18.71 19.84 19.37 18.44 19.37 18.44 17.35 17.52 17.52 16.95 | 19.41 19.52 19.68 19.80 19.96 19.84 19.20 15.92 18.12 19.36 19.70 19.68 19.52 19.30 18.68 19.00 18.78 18.90 18.71 19.84 19.36 19.24 19.37 18.44 19.35 19.36 19.36 19.37 19.68 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 |

| Well ID | Date | Depth to Liquid (ft) | Depth to Water (ft) | Product Thickness (ft) |
|--|---|--|---|--|
| ES-003 ES-003 ES-003 ES-003 ES-003 ES-003 ES-003 ES-003 ES-003 ES-003 | 5/09/95 6/09/95 7/06/95 8/10/95 9/07/95 10/03/95 10/05/95 11/02/95 12/07/95 1/03/96 2/06/96 3/12/96 4/09/96 | 17.34 17.87 18.07 18.40 18.59 18.76 18.76 19.19 17.55 17.86 17.35 | 17.39 17.87 18.07 18.40 18.59 18.76 18.76 18.96 19.19 17.55 17.86 17.35 | .05 0.00 0.00 0.00 0.00 0.00 0.00 0.00 |
| ES-004 ES | 6/16/92 7/07/92 8/04/92 8/31/92 10/06/92 1/06/93 4/06/93 7/03/93 8/04/93 10/07/93 11/02/93 12/06/93 12/06/93 12/06/94 4/07/94 5/05/94 6/07/94 5/05/94 6/07/94 1/13/95 6/07/94 1/13/95 5/09/95 5/09/95 8/10/95 | 18.63 18.51 18.66 18.79 18.92 18.94 18.76 18.16 18.46 18.46 18.72 18.42 18.75 18.42 18.86 17.86 17.94 18.35 17.94 18.35 17.94 18.35 17.16.37 16.37 16.57 17.02 17.19 | 18.98 18.51 18.66 18.79 18.92 18.94 18.72 18.46 18.46 18.46 18.75 18.48 18.75 18.48 17.94 18.13 17.94 18.35 17.94 18.35 17.94 18.35 17.91 16.36 16.14 17.02 17.19 | .35 0.00 0 |

| Well ID | Date | Depth to Liquid (ft) | Depth to Water (ft) | Product Thickness (ft) |
|--|---|--|--|--|
| ES-004 ES-004 ES-004 ES-004 ES-004 ES-004 ES-004 ES-004 | | 17.68 17.84 17.84 18.02 18.23 17.87 17.02 16.54 | 17.68 17.84 17.84 18.02 18.23 17.87 17.02 16.54 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 |
| 55555555555555555555555555555555555555 | 6/16/92 7/07/92 8/04/92 8/04/92 1/06/92 1/05/93 1/05/93 1/06/93 1/06/93 10/07/93 11/02/93 12/06/94 4/07/94 5/05/94 4/07/94 5/05/94 7/13/94 8/03/94 11/02/94 11/02/94 11/02/94 11/03/95 10/05/95 10/05/95 10/05/95 11/02/95 | 18.40 20.23 18.16 18.24 17.60 18.42 19.35 19.50 18.62 19.50 18.79 18.8.9 18.97 18.8.97 18.37 18.26 18.30 17.45 18.47 17.45 18.45 16.50 16.45 16.50 17.61 18.74 17.61 18.74 17.61 18.74 17.61 | 20.43 20.43 20.43 20.37 20.75 20.75 20.75 219.61 18.83 19.45 19.30 18.39 19.30 18.27 19.30 18.45 | 2.00 0.00 2.27 2.56 3.13 3.32 1.33 2.65 0.00 0.00 0.00 0.01 0.68 .54 .47 1.80 .23 .01 .02 .01 0.00 |

| Well ID | Date | Depth to Liquid (ft) | Depth to Water (ft) | Product Thickness (ft) |
|--|---|---|---|--|
| ES-005 ES-005 ES-005 ES-005 ES-005 | 12/07/95 1/03/96 2/06/96 3/12/96 4/09/96 | 18.21 17.89 16.76 16.36 | 18.22 17.89 16.76 16.36 | .01 0.00 0.00 0.00 0.00 |
| ES-006 ES-006 ES-006 ES-0006 ESS-0006 ESS-0006 ESS-0006 ESS-0006 ESS-0006 ESS-0006 | 9/01/93 10/07/93 11/02/93 12/06/93 22/02/94 4/07/94 5/05/94 6/07/94 6/07/94 8/03/94 10/06/94 11/02/94 12/07/94 1/13/95 2/14/95 3/07/95 5/09/95 5/09/95 10/05/95 10/05/95 11/02/95 | 21.76 21.94 21.81 21.90 21.74 21.10 21.30 21.16 21.02 21.40 21.58 21.52 21.64 20.94 20.25 19.82 20.84 20.97 20.55 20.81 20.94 21.14 21.14 21.14 21.14 21.31 21.48 21.24 20.52 19.85 | 21.76 21.81 21.90 21.74 21.30 21.30 21.40 21.52 21.58 21.58 21.58 21.69 21.37 20.87 20.87 20.81 21.44 21.31 21.48 21.52 19.85 | 0.00 |
| ES-006 ES-007 ES-007 ES-007 ES-007 ES-007 ES-007 | 1/05/93 9/01/93 10/07/93 11/02/93 12/06/93 2/02/94 3/02/94 | 20.14 19.90 19.71 19.99 20.12 20.15 19.79 19.14 | 20.14 19.90 19.71 19.99 20.12 20.15 19.79 19.14 | 0.00 0.00 0.00 0.00 0.00 0.00 |

| Well ID | Date | Depth to Liquid (ft) | Depth to Water (ft) | Product Thickness (ft) |
|--|--|---|---|--|
| ES-007 ES-007 ES-007 ES-007 ES-007 ES-007 ES-007 ES-007 ES-007 ES-007 ES-007 ES-007 ES-007 ES-007 ES-007 | 7/13/94 8/03/94 9/14/94 10/06/94 11/02/94 12/07/94 1/13/95 2/14/95 3/07/95 4/11/95 5/09/95 7/06/95 7/06/95 10/03/95 10/05/95 12/07/95 12/07/95 1/03/96 2/06/96 | 19.64 19.73 19.79 19.89 18.11 17.63 17.92 | 19.44 19.30 19.33 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 |
| ES-008 ES-008 ES-008 ES-008 ES-008 ES-008 ES-008 ES-008 ES-008 ES-008 ES-008 ES-008 ES-008 | 10/07/93 11/02/93 12/06/93 1/05/94 2/02/94 | 18.88 19.13 19.26 19.24 19.10 19.08 18.28 18.44 18.26 18.32 18.50 18.42 18.50 18.76 18.76 18.76 18.76 18.76 18.76 18.76 | 18.88 19.13 19.26 19.24 19.10 19.08 18.28 18.44 18.26 18.32 18.50 18.76 18.76 18.76 18.76 18.76 18.76 18.99 16.99 16.91 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 |

| Well ID | Date | Depth to Liquid (ft) | Depth to Water (ft) | Product Thickness (ft) |
|--|---|--|---|---|
| ES-008 ES-008 ES-008 ES-008 ES-008 ES-008 ES-008 ES-008 ES-008 ES-008 | 6/09/95 7/06/95 8/10/95 9/07/95 10/03/95 10/05/95 11/02/95 | 17.35 17.56 17.89 18.09 18.27 18.27 18.51 18.72 18.36 17.07 16.79 | 17.35 17.56 17.89 18.09 18.27 18.27 18.51 18.72 18.72 18.36 17.07 16.79 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 |
| 99999999999999999999999999999999999999 | 9/01/93 10/07/93 12/06/93 1/05/94 2/02/94 3/02/94 4/07/94 5/05/94 6/07/94 7/13/94 9/14/94 10/06/94 11/02/94 11/02/94 11/02/94 11/02/94 11/13/95 2/14/95 3/07/95 4/11/95 5/09/95 7/06/95 8/10/95 10/03/96 10/05/95 11/02/95 12/07/95 12/07/95 12/07/96 3/12/96 4/09/96 | 19.74 17.90 18.00 17.02 17.12 17.12 17.04 17.09 17.40 17.55 16.79 15.49 15.72 16.13 16.87 17.09 17.48 17.09 17.09 17.30 17.30 17.31 16.87 17.09 17.30 17 | 19.74 17.90 18.00 17.02 17.12 17.24 17.04 17.09 17.40 17.55 16.87 15.79 15.49 15.79 15.23 16.67 16.87 17.09 17.30 16.67 16.87 17.09 17.30 16.67 17.09 17.30 17.30 16.67 17.10 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 |
| ES-010 | 9/01/93 | 18.04 | 18.04 | 0.00 |

| Well ID | Date | Depth to Liquid (ft) | Depth to Water (ft) | Product Thickness (ft) |
|--|---|---|--|--|
| ES-010 ES-010 ES-010 ES-010 ES-010 ES-010 ES-010 ES-010 ES-010 ES-010 ES-010 ES-010 ES-010 ES-010 ES-010 ES-010 ES-010 ES-010 ES-010 | 10/07/93 11/02/93 12/06/93 1/05/94 2/02/94 3/02/94 4/07/94 5/05/94 6/07/94 7/13/94 8/03/94 9/14/94 10/06/94 11/02/94 11/02/94 11/02/94 12/07/94 12/07/95 3/07/95 4/11/95 5/09/95 5/09/95 10/03/95 10/05/95 11/02/95 12/07/95 12/07/95 12/06/96 | 17.46 17.44 17.44 17.25 16.74 16.50 16.48 16.90 16.90 16.34 17.03 16.34 17.03 16.34 17.03 16.34 17.03 16.34 17.03 16.34 17.03 16.34 17.03 16.34 17.03 16.35 17.03 16.35 17.03 16.35 17.03 | | 0.00 |
| ES-011 | | | 18.74 18.90 19.00 19.02 18.86 18.74 18.14 18.38 18.15 18.28 18.60 18.18 18.47 18.55 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 |

| Well ID | Date | Depth to Liquid (ft) | Depth to Water (ft) | Product Thickness (ft) |
|--------------------------------------|--|----------------------------------|----------------------------------|---------------------------|
| ES-011 | 12/07/94 | 17.49 | 17.49 | 0.00 |
| ES-011 | 1/13/95 | 17.16 | 17.16 | |
| ES-011 | 2/14/95 | 16.76 | 16.76 | 0.00 |
| ES-011 | 3/07/95 | 17.04 | 17.04 | 0.00 |
| ES-011 | 4/11/95 | 16.54 | 16.54 | 0.00 |
| ES-011 | 5/09/95 | 16.95 | 16.95 | 0.00 |
| ES-011 | 6/09/95 | 17.34 | 17.34 | 0.00 |
| ES-011 | 7/06/95 | 17.54 | 17.54 | 0.00 |
| ES-011 | 8/10/95 | 17.85 | 17.85 | 0.00 |
| ES-011 | 9/07/95 | 18.03 | 18.03 | 0.00 |
| ES-011 | 10/03/95 | 18.20 | 18.20 | 0.00 |
| ES-011 | 10/05/95 | 18.20 | 18.20 | 0.00 |
| ES-011 | 11/02/95 | 18.38 | 18.38 | 0.00 |
| ES-011 | 12/07/95 | 18.59 | 18.59 | 0.00 |
| ES-011 ES-011 ES-011 ES-011 | 1/03/96 2/06/96 3/12/96 4/09/96 | 18.21 17.45 16.83 17.13 | 18.21 17.45 16.83 17.13 | 0.00 0.00 0.00 |
| ES-011 | 3/12/96 | 16.83 | 16.83 | 0.00 |
| ES-011 | 4/09/96 | 17.13 | 17.13 | 0.00 |

ATTACHMENT C PREVIOUS ANALYTICAL DATA SUMMARY

Facility Number: 8934
Facility Name: OAKLAND
State: CA

Facility Type: TERMINAL

| Location | Date | Benzene (ug/l) | Toulene (ug/l) | Ethyl- benzene(ug/l) | Total Xylenes(ug/l) | Total Btex(ug/l) | TPH diesel (mg/l) | TPH gasoline(mg/l) |
|----------|----------|----------------|----------------|-------------------------|---------------------|---------------------|-------------------|--------------------|
| BC-02 | 7/08/92 | ND | ND | ND | 8.4 | 8.4 | 2.1 | NA |
| BC-02 | 10/06/92 | ND | 1.1 | 0.9 | 7.2 | 9.2 | ND | NA |
| BC-02 | 1/07/93 | ND | 1.1 | 1.5 | 9.5 | 12.1 | ND | NA |
| BC-02 | 4/06/93 | ND | ND | ND | ND | ND | 0.13 | ND |
| BC-02 | 10/07/93 | ND | ND | ND | ND | ND | 1.4 | NA |
| BC-02 | 1/05/94 | NA | NA | NA | NA | NA | NA | NA |
| BC-02 | 4/07/94 | NA | NA | NA | NA | NA | NA | NA |
| BC-02 | 7/13/94 | NA | NA | NA | NA | NA | NA | NA |
| BC-02 | 10/06/94 | NA | NA | NA | NA | NA | NA | AN |
| BC-02 | 1/13/95 | ND | ИD | ND | ND | ND | 1.1 | ND |
| BC-02 | 4/11/95 | ND | ND | ND | ND | ND | ND | ND |
| BC-02 | 7/06/95 | ND | ND | ND | ND | ND | 0.29 | ND |
| BC-02 | 10/05/95 | 1 | ND | ND | 1 | 2 | 1.5 | ND |
| | | | | | | | | |
| BC-03 | 7/08/92 | ND | 2.5 | ND | 6.1 | 8.6 | 3.9 | NA |
| BC-03 | 7/08/92 | ND | 2.5 | ND | 6.1 | 8.6 | 3.9 | NA |
| BC-03 | 10/06/92 | ND | 1.9 | 0.5 | 1.8 | 4.2 | 0.8 | NA |
| BC-03 | 1/07/93 | ND | ND | ND | ND | ND | ND | NA |
| BC-03 | 4/06/93 | ND | ND | ND | ND | ND | 0.12 | ND |
| BC-03 | 10/07/93 | ND | ND | 1.0 | 2.0 | 3.0 | 1.4 | NA |
| BC-03 | 1/05/94 | ND | ND | ND | 1.6 | 1.6 | 1.8 | ND |
| BC-03 | 4/07/94 | ND | ND | ND | ND | ND | 0.85 | ND |
| BC-03 | 7/13/94 | ND | ND | ND | ND | ND | 0.20 | ND |
| BC-03 | 10/06/94 | ND | ND | ND | ND | ND | 0.82 | ND |
| BC-03 | 1/13/95 | ND | ND | ND | ND | ND | 0.89 | ND |
| BC-03 | 4/11/95 | ND | ND | ND | ND | ND | ND | ND |
| BC-03 | 7/06/95 | ND | ND | ND | ND | ND | 0.38 | ND |
| BC-03 | 10/05/95 | ND | ND | ND | ND | ND | ND | ND |

Facility Number: 8934
Facility Name: OAKLA
State: CA
Facility Type: TERMI OAKLAND

TERMINAL

| Location | Date | Benzene (ug/l) | Toulene (ug/l) | | Total Xylenes(ug/l) | Total Btex(ug/l) | TPH diesel(mg/l) | TPH gasoline(mg/l) |
|----------------|--------------------------------|-------------------|-----------------|------------------|---------------------|---------------------|--------------------|--------------------|
| ES-03 | 7/08/92 10/06/92 | 54 93 | 21 18 | 48 ND | 34 | 157 122 | 1.3 ND | NA NA |
| ES-03 ES-03 | 1/07/93 4/06/93 7/23/93 | 52 53 28 | 49 ND 5.9 | 100 67 4.6 | 250 78 4.6 | 451 198 43.1 | ND 0.51 0.06 | NA 4.5 1500 |
| ES-03 | 10/07/93 | 2.0 | 1.0 | ND | 2.0 | 5.0 | ND | NA |
| ES-03 | 1/05/94 | 13 | 2.0 | 7.0 | 5.0 | 27 | NA | 0.53 |
| ES-03 | 4/07/94 | 10 | 9 | 26 | 34 | 79 | 0.91 | 0.85 |
| ES-03 ES-03 | 7/13/94 10/06/94 1/13/95 | 2.0 ND 19 | 0.9 ND 15 | 0.8 ND 72 | 3.0 ND 88 | 6.7 ND 194 | 0.28 ND 1.1 | 0.37 ND 1.6 |
| ES-03 | 4/11/95 | 20 | 7 | 36 | 22 | 85 | 0.39 | 0.94 |
| | 7/06/95 | 6 | ND | 7 | ND | 13 | 1.2 | 0.24 |
| | 10/05/95 | 2 | 2 | ND | ND | 4 | 0.11 | ND |
| | 1/05/96 | ND | ND | ND | ND | ND | ND | ND |
| | 4/09/96 | ND | ND | ND | ND | ND | 0.12 | NA |
| ES-04 | 7/08/92 | 31 | 5.6 | ND | 2.8 | 39.4 | ND | NA |
| ES-04 | 10/06/92 | 100 | 8.2 | ND | 7.6 | 115.8 | ND | NA |
| ES-04 | 1/07/93 | 30 | 6.7 | 7.7 | 16 | 60.4 | ND | NA |
| ES-04 | 4/06/93 | 33 | 2.3 | 1.9 | 4.7 | 41.9 | ND | 0.36 |
| ES-04 | 7/23/93 | 24 | 1.1 | 0.07 | 8.3 | 33.47 | ND | ND |
| ES-04 | 10/07/93 | 8.0 | ND | ND | 2.0 | 10.0 | ND | NA |
| ES-04 | 1/05/94 | 15 | 0.6 | 0.4 | 3.0 | 19 | ND | 0.13 |
| ES-04 | 4/07/94 | 11 | ND | ND | ND | 11 | ND | 0.17 |
| ES-04 | 7/13/94 | 9.0 | ND | ND | 0.7 | 9.7 | ND | 0.13 |
| ES-04 | 10/06/94 | 18.0 | ND | 2.0 | 3.0 | 23.0 | ND | 0.10 |
| ES-04 | 1/13/95 | 12 | ND | ND | 2 | 14 | ND | 0.15 |
| | 4/11/95 | 39 | 4 | 12 | 24 | 79 | ND | 0.18 |
| | 7/06/95 | 100 | 10 | 26 | 61 | 197 | 0.16 | 0.60 |
| ES-04 | 10/05/95 | 210 | 16 | 71 | 84 | 381 | 0.17 | 1.2 |

Facility Number: 8934
Facility Name: OAKLAND
State: CA

Facility Type: TERMINAL

| Location | Date | Benzene (ug/l) | Toulene (ug/l) | Ethyl- benzene(ug/l) | Total Xylenes(ug/l) | Total Btex(ug/l) | TPH diesel (mg/l) | TPH gasoline(mg/l) |
|----------------------------------|---|----------------------|----------------------|-------------------------|------------------------|---------------------|------------------------|----------------------|
| ES-04 ES-04 | 1/05/96 4/11/96 | 34 57 | ND 3 | 5 17 | 4 19 | N D 96 | ND ND | 0.12 NA |
| ES-06 ES-06 | 7/23/93 10/07/93 | ND 1.0 | ND ND | ND ND | ND ND | ND ND | ND ND | ND NA |
| ES-06 ES-06 ES-06 | 1/05/94 4/07/94 7/13/94 | ND ND ND | ND ND ND | ND ND ND | ND ND ND | ND ND ND | ND ND ND | ND 0.16 ND |
| ES-06 ES-06 | 10/06/94 1/13/95 4/11/95 | ND ND ND | ND ND ND | ND ND ND | ND ND ND | ND ND ND | ND ND ND | ND ND ND |
| ES-06 ES-06 ES-06 ES-06 | 7/06/95 10/05/95 1/05/96 4/09/96 | ND ND ND ND | ND ND ND ND | ND ND ND ND | 2 ND ND ND | 2 ND ND ND | ND ND ND 0.22 | ND ND ND NA |
| ES-07 | 7/23/93 | ND | ND | ND | ND | ND | ND | ND |
| ES-07 ES-07 ES-07 | 10/07/93 1/05/94 4/07/94 | ND ND ND | ND ND ND | ND ND ND | ND ND ND | ND ND | ND ND 0.10 | NA ND 0.11 |
| ES-07 ES-07 ES-07 | 7/13/94 10/06/94 1/13/95 | ND ND ND | ND ND ND | ND ND ND | ND ND ND | ND ND | ND ND ND | ND ND ND |
| ES-07 ES-07 ES-07 | 4/11/95 7/06/95 10/05/95 | ND ND ND | ND ND ND | ND ND | ND ND ND | ND ND | ND ND ND | ND ND ND |
| ES-08 ES-08 | 7/23/93 10/07/93 | ND ND | ND ND | ND ND | ND ND | ND ND | ND ND | ND NA |

Facility Number: 8934
Facility Name: OAKLAND
State: CA
Facility Type: TERMINAL

TERMINAL

| Location | Date | Benzene (ug/l) | Toulene (ug/l) | Ethyl- benzene(ug/l) | Total Xylenes(ug/l) | Total Btex(ug/l) | TPH diesel (mg/l) | TPH gasoline(mg/l) |
|----------|-----------|----------------|----------------|-------------------------|---------------------|---------------------|-------------------|--------------------|
| | 1 /05 /04 | | | | | | | |
| ES-08 | 1/05/94 | ND | ND | ND | ND | ND | ND | ND |
| ES-08 | 4/07/94 | ND | ND | ND | ND | ND | ND | ND |
| ES-08 | 7/13/94 | ND | ND | ND | ND | ND | NA | ND |
| ES-08 | 10/06/94 | ND | ND | ND | ND | ND | ND | ND |
| ES-08 | 1/13/95 | ND | ND | ND | ND | ND | ND | ND |
| ES-08 | 4/11/95 | ND | ND | ND | ND | ND | ND | ND |
| ES-08 | 7/06/95 | ND | ND | ND | ND | ND | ND | ND |
| ES-08 | 10/05/95 | ND | ND | ND | ND | ND | ND | ND |
| | | | | | | | | |
| ES-09 | 7/23/93 | ND | ND | ND | ND | ND | ND | ND |
| ES-09 | 10/07/93 | ND | ND | ND | ND | ND | ND | NA |
| ES-09 | 1/05/94 | ND | ND | ND | ND | ND | ND | ND |
| ES-09 | 4/07/94 | ND | ND | ND | ND | ND | ND | ND |
| ES-09 | 7/13/94 | ND | ND | ND | ND | ND | ND | ND |
| ES-09 | 10/06/94 | ND | ND | ND | ND | ND | ND | ND |
| ES-09 | 1/13/95 | ND | ND | ND | ND | ND | 1.1 | ND |
| ES-09 | 4/11/95 | ND | ND | ND | ND | ND | ND | ND |
| ES-09 | 7/06/95 | ND | ND | ND | ND | ND | ND | ND |
| ES-09 | 10/05/95 | ND | ND | ND | ND | ND | ND | ND |
| | | | | | | | | |
| ES-10 | 7/23/93 | ND | ND | ND | ND | ND | ND | ND |
| ES-10 | 10/07/93 | ND | ND | ND | ND | ND | ND | NA |
| ES-10 | 1/05/94 | ND | ИD | ИD | ND | ND | ND | ND |
| ES-10 | 4/07/94 | ND | ND | ND | ND | ND | ND | ND |
| ES-10 | 7/13/94 | ND | ND | ND | ND | ND | ND | ND |
| ES-10 | 10/06/94 | ND | ND | ND | ND | ND | ND | ND |
| ES-10 | 1/13/95 | ND | ND | ND | ND | ND | ND | ND |
| ES-10 | 4/11/95 | ND | ND | ND | ND | ND | ND | ND |
| ES-10 | 7/06/95 | ND | ND | ND | ND | ND | ND | ND |
| ES-10 | 10/05/95 | ND | ND | ND | ND | ND | ND | ND |

Facility Number: 8934
Facility Name: OAKLAND
State: CA

Facility Type: TERMINAL

| | g/l) |
|---------------------------------------|------|
| | |
| | |
| ES-11 7/23/93 ND 0.7 ND 1.2 1.9 ND ND | |
| ES-11 10/07/93 ND ND ND ND ND NA | |
| ES-11 1/05/94 ND ND ND ND ND ND ND | |
| ES-11 4/07/94 ND ND ND ND ND 0.35 ND | |
| ES-11 7/13/94 ND ND ND ND ND ND ND | |
| ES-11 10/06/94 ND ND ND ND ND ND ND | |
| ES-11 1/13/95 ND ND ND ND ND ND ND | |
| ES-11 4/11/95 ND ND ND ND ND 0.17 | |
| ES-11 7/06/95 ND ND ND ND ND ND ND | |
| ES-11 10/05/95 ND ND ND ND ND ND ND | |