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

February 26, 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 January 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 January 1996 monthly monitoring report.

Monthly monitoring activities were performed on January 3, 1996. Groundwater samples were collected on January 5, 1996. In accordance with the sampling program discussed during the October 13, 1995 meeting between Greyhound and ACDEH, three groundwater samples were collected and analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) (EPA Method 8020), total diesel petroleum hydrocarbons (TPH-D, Modified EPA Method 8015), and total gasoline petroleum hydrocarbons (TPH-G, Modified EPA Method 8015). Monitoring well locations are shown in Figure 1 of the Ouarterly Status Report. Analytical results are summarized in Table 2.

The next groundwater sampling event will be conducted in April 1996. Wells will be sampled in accordance with the new sampling program. The next quarterly status report will be prepared and submitted to your department on or before May 15, 1996.



PARSONS ENGINEERING SCIENCE, INC.

Ms. Susan Hugo February 26, 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

D. Oreffin

David L. Chaffin, R.G. California Registered Geologist (No. 4885)

went a Hill

DAN/DLC/ejs

cc:

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

JANUARY 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. Samples analysis were not changed (BTEX, TPH-D, and TPH-G).

· Water level measurements from most recent sampling event:

Monitoring well data obtained on January 3, 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 south. Groundwater elevation contours were not drawn due to significant drawdown in the area of the recovery wells.

· 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 or significantly reduced 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 January 1996 are summarized in Table 2. Three of the 16 monitoring wells (ES-3, ES-4, and ES-6) were sampled on January 5, 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; for total diesel petroleum hydrocarbons (TPH-D) by Modified EPA Method 8015; and for total gasoline petroleum hydrocarbons (TPH-G) 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 (34 μ g/l), ethylbenzene (5 μ g/l), and xylenes (4 μ g/l) were detected in sample ES-4.

TPH-D was not detected in any of the samples. TPH-G was detected in sample ES-4 (0.12 mg/l).

· 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:

With the exception of a brief shutdown between October 6 and October 21, 1993 due to an air compressor problem, and a brief shutdown period between November and December 1995 to monitor the return of measurable thicknesses at the recovery location, the product recovery system has been active since startup. The system is inspected daily by onsite personnel and 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 Clean, Inc. and Evergreen Vacuum Services, State of California-certified waste haulers. No additional product product has been recovered since the September 1994 monitoring period. In addition, 81,280 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 no further 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.

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

Greyhound anticipates that the groundwater monitoring program will continue for approximately 2 more years. After all free product has been removed, 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
January 3, 1996

Location	Elevation of T.O,C ¹ (Ft.)	Groundwater	Groundwater Elevation ² (Ft.)	Product Layer Thickness (Ft.)
	ere issa v w g	S. C. S. W. P. S.	drast.	V MI
ES-13	96.64	18.04	78.60	0
ES-2 ³	96.44	18.55	77.89	0.01
ES-3	96.96	17.55	79.41	0
ES-4	95.70	18.87	76.83	0
ES-5 ³	95.85	17.89	77.96	0
ES-6	97.84	21.24	76.60	0
ES-7	96.40	19.29	77.11	0
ES-8	96.64	18.36	78.28	0
ES-9	95.78	17.12	78.66	0
ES-10	95.24	16.61	78.63	0
ES-11	95.92	18.21	77.71	0
BC-1 ^{3,4}	96.16	18.36	77.80	0
BC-2 ⁴	96.32	17.86	78.46	0
BC-3⁴	96.20	18.88	77.32	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.

TABLE 2

GROUNDWATER ANALYTICAL RESULTS GREYHOUND TERMINAL, OAKLAND, CALIFORNIA JANUARY 3 AND 5, 1996

Location	Date Collected	Parameter	Result	Detection Limit
ES-3	1/5/96	Benzene¹	ND	0.3 ug/L
	• •	Toluene ¹	ND	0.3 ug/L
		Ethylbenzene ¹	ND	0.3 ug/L
		Xylenes (total)1	ND	0.6 ug/L
		TPH-D ²	ND	0.1 mg/L
		TPH-G ³	ND	0.1 mg/L
ES-4	1/5/96	Benzene¹	34	1 ug/L
		Toluene ¹	ND	1 ug/L
		Ethylbenzene ¹	5	1 ug/L
		Xylenes (total)1	4	1 ug/L
		TPH-D ²	ND	0.1 mg/L
		TPH-G ³	0.12	0.1 mg/L
ES-6	1/5/96	Benzene¹	ND	0.3 ug/L
	., -,	Toluene ¹	ND	0.3 ug/L
		Ethylbenzene ¹	ND	0.3 ug/L
		Xylenes (total)1	ND	0.6 ug/L
		TPH-D²	ND	0.1 mg/L
		TPH-G ³	ND	0.1 mg/L

Notes:

- 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.
- ³ Analyzed by DHS/LUFT Method Modified EPA 8015 for Gasoline. Concentrations in mg/l.
- ND Not detected above the practical quantitation limit.
- NA Not analyzed, sample bottle broken during shipping.
- BC Wells constructed by Brown and Caldwell, Inc. during earlier phases of investigation.

TABLE 3

SOIL ANALYTICAL DATA SUMMARY
GREYHOUND TERMINAL, OAKLAND, CALIFORNIA

Location Sample Depth	Date	Benzene ug/kg	Tolvene ug/kg	Ethylbenzene ug/kg	Xylene ug/kg	Total BTEX I ug/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	NĐ	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
ES-8 (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.

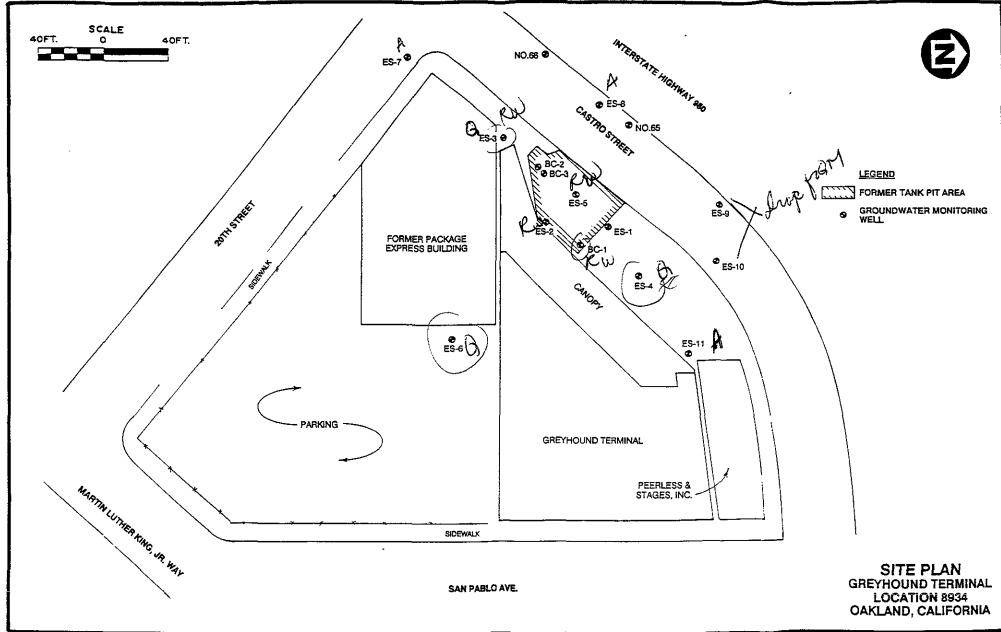
ND - Non-detect; sample analyzed but did not exceed Method Detection Limit.

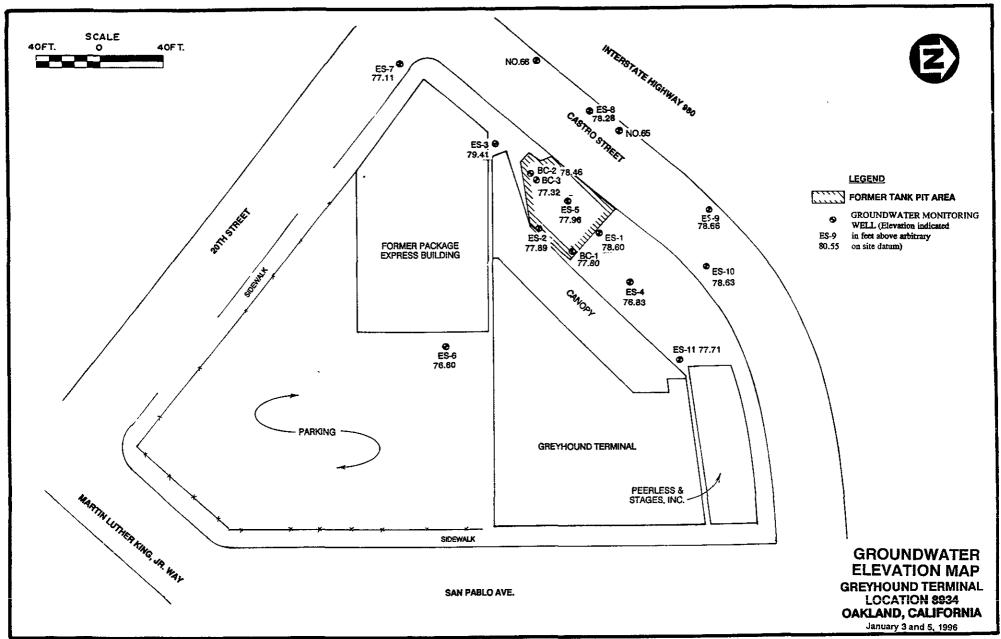
Total BTEX = analyzed by EPA Method 8020. Results reported in ug/kg. Refer to analytical laboratory reports for method detection limits.

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.





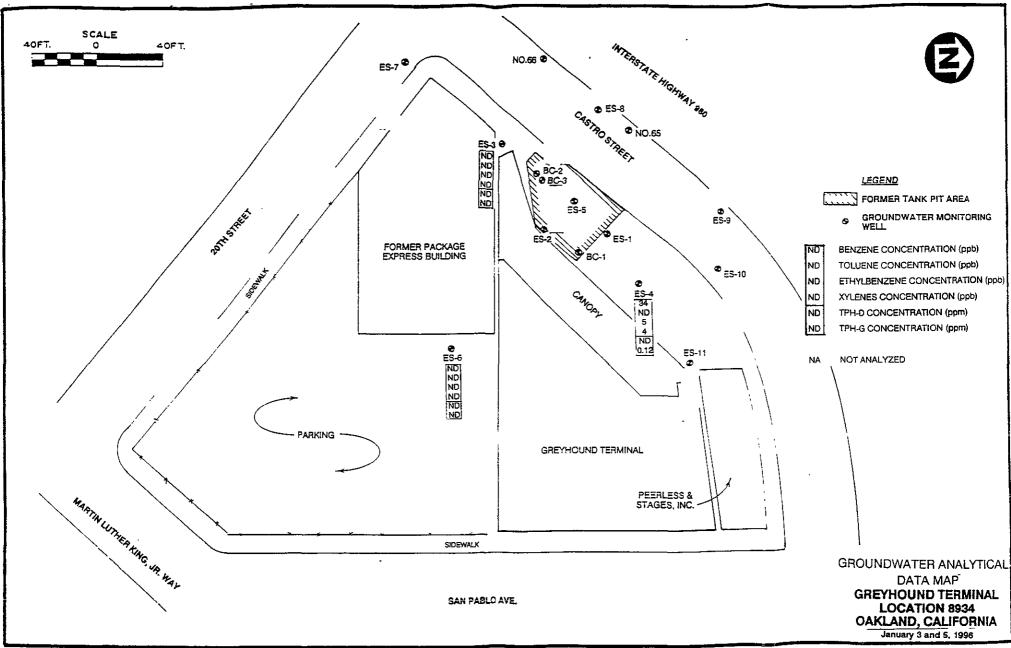
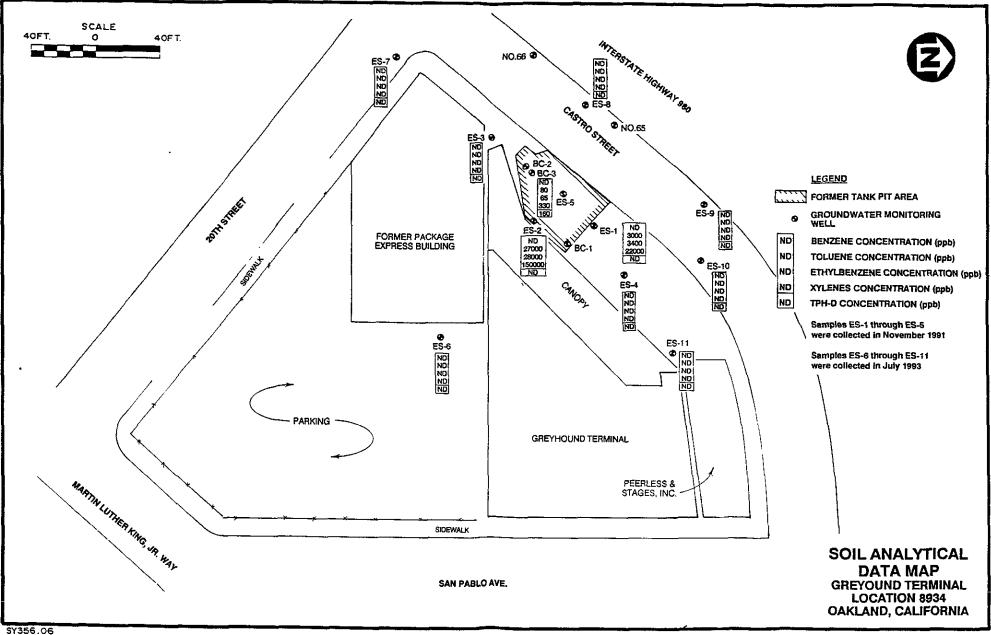


FIGURE 4



ATTACHMENT A ANALYTICAL DATA REPORTS





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



SPL, INC.

REPORT APPROVAL SHEET

WORK ORDER NUMBER: <u>96 - 01 - 268</u>

Approved for release by:

M. Scott Sample, Laboratory Director	Date: _	1/19/96
Karen Satterfield, Project Manager	Date: _	1/19/54



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

Company: Engineering Science, Inc.

Site:

Project No: Oa

Oakland

Project: Gr

Greyhound Lines Facility

ANALYTICAL DATA
NOTE: ND - Not Detected

SPL ID MATRIX	CLIENT ID DATE SAMPLED	BENZENE PQL	TOLUENE PQL	ETHYLSENZ. PQL	XYLENE PQL	TPH-G PQL	TPH-D PQL	LEAD	MTBE
9601268-01 Water	MW-6 01/05/96 12:55:00	ND 0.3μg/L	ND 0.3μg/L	ND 0.3μg/L	ND 0.6μg/L	ND 0.1mg/L	ND 0.1mg/L		
9601268-02 WATER	MW-3 01/05/96 13:50:00	ND 0.3μg/L	ND 0.3μg/L	ND 0.3μg/L	ND 0-6μg/L	ND 0.1mg/L	ND 0.1mg/L		
9601268-03 Water	MW-4 01/05/96 14:55:00	34 0.3μg/L	ND 0.3μg/L	5 0.3μg/L	4 0.6μg/L	0.12 0.1mg/L	ND 0.1mg/L		
9601268-07 WATER	Trip Blank 12/29/95	ND 0.3μg/L	ΝD 0.3μg/L	ND 0.3μg/L	ND 0.6μg/L				

BTEX - METHOD 8020***

TPH-G - Modified 8015 - Gasoline

TPH-D - Mod. 8015 - Diesel



HOUSTON LABORATORY 8880 INTERCHANGE DRIVE

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HOUSTON, TEXAS 77054 PHONE (713) 660-0901

Certificate of Analysis No. H9-9601268-01

Engineering Science, Inc.

290 Elwood Davis Rd Liverpool, NY 13088 ATTN: Martin Miller

DATE: 01/19/96

PROJECT: Greyhound Lines Facility

PROJECT NO: Oakland MATRIX: WATER

SAMPLED BY: Greyhound Oakland

DATE SAMPLED: 01/05/96 12:55:00

SAMPLE ID: MW-6

DATE RECEIVED: 01/08/96

ANALYTICAL	DATA		
PARAMETER	RESULTS	DETECTION	UNITS
BENZENE	MD	LIMIT	
TOLUENE	ND ND	0.3 P 0.3 P	μg/I
ETHYLBENZENE	ND	0.3 P 0.3 P	μg/I
TOTAL XYLENE	ND	0.5 P	μg/I μg/I
TOTAL VOLATILE AROMATIC HYDROCARBONS		0.0 F	μg/L μg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	110		
4-Bromofluorobenzene	76		
METHOD 8020***			
Analyzed by: YN			
Date: 01/10/96			
Petroleum Hydrocarbons - Gasoline	ND	0.1 P	mg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	120		
4-Bromofluorobenzene	61		
Modified 8015 - Gasoline			
Analyzed by: YN			
Date: 01/10/96			
Fotal Petroleum Hydrocarbons-Diesel	ND	0.1 P	mg/L
Surrogate	% Recovery		
o-Terphenyl	95		
2-Fluorobiphenyl	65		
Mod. 8015 - Diesel			
Analyzed by: RR/			

ND - Not detected.

Date: 01/17/96 11:27:00

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

⁽P) - Practical Quantitation Limit



HOUSTON LABORATORY 8880 INTERCHANGE DRIVE

HOUSTON, TEXAS 77054 PHONE (713) 660-0901

Certificate of Analysis No. H9-9601268-01

Engineering Science, Inc.

290 Elwood Davis Rd Liverpool, NY 13088 ATTN: Martin Miller

DATE: 01/19/96

PROJECT: Greyhound Lines Facility

SITE:

SAMPLED BY: Greyhound Oakland

SAMPLE ID: MW-6

PROJECT NO: Oakland MATRIX: WATER

of the same

DATE SAMPLED: 01/05/96 12:55:00

DATE RECEIVED: 01/08/96

01/08/96

ANALYTICAL DATA

RESULTS PARAMETER

DETECTION

LIMIT

UNITS

Liquid-liquid extraction

METHOD 3510 *** Analyzed by: LD

Date: 01/08/96 11:00:00

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.



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

Certificate of Analysis No. H9-9601268-02

Engineering Science, Inc.

290 Elwood Davis Rd Liverpool, NY 13088 ATTN: Martin Miller

DATE: 01/19/96

PROJECT: Greyhound Lines Facility

ITE:

PROJECT NO: Oakland MATRIX: WATER

SAMPLED BY: Greyhound Oakland

DATE SAMPLED: 01/05/96 13:50:00

SAMPLE ID: MW-3

DATE RECEIVED: 01/08/96

ANALYTICAL	DATA		
PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	0.3 P	μg/I
TOLUENE	ND	0.3 P	μg/I
ETHYLBENZENE	ND	0.3 P	μg/L
TOTAL XYLENE	ND	0.6 P	μg/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ИД		μg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	115		
4-Bromofluorobenzene	88		
METHOD 8020***			
Analyzed by: YN			
Date: 01/10/96			
Petroleum Hydrocarbons - Gasoline	ND	0.1 P	mg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	111		
4-Bromofluorobenzene	67		
Modified 8015 - Gasoline			
Analyzed by: YN			
Date: 01/10/96			
Total Petroleum Hydrocarbons-Diesel	ND	0.1 P	mg/L
Surrogate	% Recovery		
o-Terphenyl	68		
2-Fluorobiphenyl	110		
Mod. 8015 - Diesel			

ND - Not detected.

Analyzed by: RR/

Date: 01/17/96 11:27:00

(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



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

Certificate of Analysis No. H9-9601268-02

Engineering Science, Inc.

290 Elwood Davis Rd Liverpool, NY 13088 ATTN: Martin Miller

DATE: 01/19/96

PROJECT: Greyhound Lines Facility

SITE:

SAMPLED BY: Greyhound Oakland

SAMPLE ID: MW-3

PROJECT NO: Oakland
MATRIX: WATER

DATE SAMPLED: 01/05/96 13:50:00

DATE RECEIVED: 01/08/96

01/08/96

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ANALYTICAL DATA

PARAMETER RESULTS DETECTION UNITS

Liquid-liquid extraction

METHOD 3510 ***
Analyzed by: LD

Date: 01/08/96 11:00:00

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.



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

Certificate of Analysis No. H9-9601268-03

Engineering Science, Inc.

290 Elwood Davis Rd Liverpool, NY 13088 ATTN: Martin Miller

DATE: 01/19/96

PROJECT: Greyhound Lines Facility

SITE:

PROJECT NO: Oakland
MATRIX: WATER

SAMPLED BY: Greyhound Oakland

DATE SAMPLED: 01/05/96 14:55:00

45 235

SAMPLE ID: MW-4

DATE RECEIVED: 01/08/96

ANALYTICAL	DATA		
PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	34	0.3 P	μg/L
TOLUENE	ND	0.3 P	μg/L
ETHYLBENZENE	5	0.3 P	μg/L
TOTAL XYLENE	4	0.6 P	μg/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	43		μg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	129		
4-Bromofluorobenzene	100		
METHOD 8020***			
Analyzed by: YN			
Date: 01/09/96			
Petroleum Hydrocarbons - Gasoline	0.12	0.1 P	mg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	120		
4-Bromofluorobenzene	76		
Modified 8015 - Gasoline			
Analyzed by: YN			
Date: 01/09/96			
Total Petroleum Hydrocarbons-Diesel	ND	0.1 P	mg/L
Surrogate	% Recovery		
o-Terphenyl	86		
2-Fluorobiphenyl	113		
Mod. 8015 - Diesel			
Analyzed by: DR/			
Date: 01/13/96 18:48:00			

⁽P) - Practical Quantitation Limit ND - Not detected.

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



HOUSTON LABORATORY 8890 INTERCHANGE DRIVE HOUSTON, TEXAS 77054 PHONE (713) 660-0901

Certificate of Analysis No. H9-9601268-03

Engineering Science, Inc.

290 Elwood Davis Rd Liverpool, NY 13088

ATTN: Martin Miller

DATE: 01/19/96

PROJECT: Greyhound Lines Facility

SITE:

SAMPLED BY: Greyhound Oakland

SAMPLE ID: MW-4

PROJECT NO: Oakland
MATRIX: WATER

DATE SAMPLED: 01/05/96 14:55:00

DATE RECEIVED: 01/08/96

ANALYTICAL DATA

PARAMETER RESULTS DETECTION UNITS

Liquid-liquid extraction

METHOD 3510 ***
Analyzed by: LD

Date: 01/08/96 11:00:00

01/08/96

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.



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

Certificate of Analysis No. H9-9601268-07

Engineering Science, Inc.

290 Elwood Davis Rd Liverpool, NY 13088 ATTN: Martin Miller

DATE: 01/19/96

PROJECT: Greyhound Lines Facility

SITE:

SAMPLED BY: Provided by SPL

SAMPLE ID: Trip Blank

PROJECT NO: Oakland

MATRIX: WATER

DATE SAMPLED: 12/29/95

DATE RECEIVED: 01/08/96

ANALYTICAL	DATA		
PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	0.3 P	μg/L
TOLUENE	ND	0.3 P	μg/L
ETHYLBENZENE	ND	0.3 P	μg/L
TOTAL XYLENE	ND	0.6 P	μg/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		μg/L
Surrogate	% Recovery		

1,4-Difluorobenzene 109
4-Bromofluorobenzene 70

METHOD 8020***

Analyzed by: YN

Date: 01/09/96

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 CONTROL DOCUMENTATION

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPL

Contract:

Lab Code:

Case No.: 9601176 SAS No.:

SDG No.:

Matrix Spike - EPA Sample No.: WHT 010496 A

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
	=======	=========		=====	=====
1,1-Dichloroethene	20	0	18	90	61-145
Trichloroethene	20	0	19	95	71-120
Benzene	20	0	19	95	76-127
Toluene	20	0	20	100	76-125
Chlorobenzene	20	0	21	105	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD#	QC L: RPD	IMITS REC.
=======================================	=======	=======================================	=====	=====	=====	======
1,1-Dichloroethene	20	18	90	0	14	61-145
Trichloroethene	20	19	95	0	14	71-120
Benzene	20	19	95	0	11	76-127
Toluene	20	20	100	0	13	76-125
Chlorobenzene	20	21	105	0	13	75-130
						ļ

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

FORM III VOA-1

3/90

Aqueous

μg/L

Units:

BATCH QUALITY CONTROL REPORT ** METHOD 8020***

PAGE HOUSTON LABORATORY

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

Batch Id: HP R960109150600

LABORATORY CONTROL SAMPLE

S P I K B C O M P O U N D S	Method Blank Result <2>	Spike Added <3>	Result	Spike Recovery	QC Limits(**) (Mandatory) % Recovery Range
Benzene	ДИ	50	40	80.0	61 - 123
Toluene	ND	150	130	86.7	62 - 122
EthylBenzene	ND	50	44	88.0	56 - 119
O Xylene	ИD	100	91	91.0	32 - 160
M & P Xylene	ОИ	200	170	85.0	32 - 160
				1	

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Spike Results Added		Matrix	atrix Spike Matrix Dupli		Spike	MS/MSD Relative %	QC Limits(***) (Advisory)		
			Result	Recovery		-	Difference		_	
	<2>	<3>	<1>	<4>	<1>	<5>		Max.	Recovery Range	
BENZENE	סמ	50	60	120	60	120	0	25	39 - 150	
TOLUENE	ND	150	180	120	190	127	5.67	26	56 - 134	
ETHYLBENZENE	ND	50	60	120	61	122	1.65	38	61 - 128	
O XYLENE	DΙΝ	100	130	130	130	130	0	20	40 - 130	
M & P XYLENE	DIN	100	140	140	140	140	0	20	43 - 152	

Analyst: YN

Sequence Date: 01/09/96

SPL ID of sample spiked: 9601292-02A

Sample File ID: R___393.TX0

Method Blank File ID:

Blank Spike File ID: R___385.TX0 Matrix Spike File ID: R___387.TX0

Matrix Spike Duplicate File ID: R___388.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 = |(<4> - <5>)| / [(<4> + <5>) x 0.5] x 100

(**) = Source: SPL Historical Data

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

SAMPLES IN BATCH (SPL ID):

9601257-01A 9601250-10A 9601294-01A 9601294-02A 9601292-01A 9601268-07B 9601268-03A 9601268-02A 9601268-01A 9601294-03A 9601250-09A 9601250-07A 9601250-06A 9601250-08A 9601250-12A 9601257-02A

9601250-15A 9601250-14A 9601292-02A

BATCH QUALITY CONTROL REPORT ***
Modified 8015 - Gasoline

PAGE HOUSTON LABORATORY 8880 INTERCHANGE DRIVE

HOUSTON, TEXAS 77054 PHONE (713) 660-0901

Matrix: Units: Aqueous mg/L Batch Id: HP_R960109150610

LABORATORY CONTROL SAMPLE

SPIKB COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Result <1>	Spike Recovery	QC Limits(**) (Mandatory) * Recovery Range
Gasoline Petr. Hydrocarbon	ND	1.00	0.91	91.0	56 - 139

MATRIX SPIKES

S P I K E C O M P O U N D S	Sample Results	Spike Added	Matrix Spike		Matrix Spike Duplicate		MS/MSD Relative %	QC Limits(***) (Advisory)	
	<2>	<3>	Result	Recovery <4>	Result	Recovery	Difference	RPD Max.	Recovery Range
GASOLINE PETR. HYDROCARBON	ND	0.9	1.18	131	1.19	132	0.760	18	40 - 158

Analyst: YN

Sequence Date: 01/09/96

SPL ID of sample spiked: 9601292-02A

Sample File ID: RR__393.TX0

Method Blank File ID:

Blank Spike File ID: RR_385.TX0
Matrix Spike File ID: RR_387.TX0

Matrix Spike Duplicate File ID: RR_ 388.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 = $\{(<4> - <5>) / [(<4> + <5>) x 0.5] x 100$

(**) = Source: SPL Historical data

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

SAMPLES IN BATCH (SPL ID):

 9601250-10A
 9601268-07B
 9601268-03A
 9601268-02A

 9601268-01A
 9601250-09A
 9601250-07A
 9601250-06A

 9601250-08A
 9601250-12A
 9601250-15A
 9601250-14A

9601292-02A

QC Officer



PL 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: HP_T960117090600

LABORATORY CONTROL SAMPLE

SPIKE	Method Blank Result <2>	Spike Added <3>	Blank Result <1>	Spike Recovery	QC Limits(**) (Mandatory) * Recovery Range
Diesel Petr. Hydrocarbons	סוא	5.0	5.88	118	20 - 130

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results	Spike Added	Matrix Spike		Matrix Dupli	Spike cate	MS/MSD Relative %		
	<2>	<3>	Result	Recovery	Result	Recovery	Difference	RPD Max.	Recovery Range
DIESEL PETR. HYDROCARBONS	ND	5.00	2.81	56.2	2.96	59.2	5.20	43	20 - 177

Analyst: DR/

Sequence Date: 01/13/96

SPL ID of sample spiked: 9601239-08B

Sample File ID: T___105.TX0

Method Blank File ID:

Blank Spike File ID: T___096.TX0

Matrix Spike File ID: T__106.TX0

Matrix Spike Duplicate File ID: T___107.TX0

SAMPLES IN BATCH (SPL 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

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

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

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

(***) = Source:

9601268-03B 9601268-02B 9601268-01B

QC Officer

CHAIN OF CUSTODY AND SAMPLE RECEIPT CHECKLIST

SPL, Inc.									SPL Workorder No: H- 02526									
	Aı	nalysis R	eque:	<u>s</u> t &	c Chai	n of C	Custod	istody Record 9651				121	200 page 1 of 1					
Client Name: Greyloud	Oaklan	2/Pars	ms i	ES	matrix	bottle	size	pres.				Requested Analysis						
Address/Phone: (5/0) 7	69-0101	<u> </u>				glass	vial	1								-		
Client Contact: Alan T	Peel, M	artin A	1:16	<u>-</u>	Jer:	per _	= 0 1	103 ier:	lers		3						1	
Project Name: #07934	-·				S=soil O=other:	A=amber V=vial	7 70	2=HNO3 O=other:	rair	12	3		ىد ا					
Project Number:				<u>.</u>	ΩÖ	4 5	1=40z 40=vial 6=160z		Ō	13	1 1		729					
Project Location:					ter	tic	1 √ .	0.0	r of	10	9	*						{
Invoice To: Pason E	5 Syra	cuse, N	14		=water =sludge	P=plastic G=glass	1=1 liter 8=80z	1=HCi 3=H2SO4	Number of Containers	PHD's	TPH Grant	87EX	EPA					
SAMPLE ID	DATE	TIME	comp	grab		12 E	~ = &	3 11	ž		7	30	T I					
MW-6	61/05/96	1255			W	G.V	1,4	1,1	4	×	X	X						
MW-3		1350				5	4	9	4	K	4	×						
MW-4		1455			1	1	1	1	1	×	X	X						
MW-4 A-1/5 B-V5 C-1/5		1510			T	V	4	1	3				X					
B-V5		1515			1	17		1					X					
C-1/5	V	1520			V	d	V		V				X					
g.					<u> </u>		 '	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	 									
1.00					 	 			-	<u> </u>								
	l <u></u>				 	<u> </u>	 	<u> </u>		 		<u> </u>						
.4			1				 				}			<u> </u>				
Client/Consultant Remarks:	<u>i </u>	<u></u>			Laborato	ory remark	<u> </u> ks:	<u></u> _	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u></u>			<i>I</i>	
**							05 JP	55 101	•						Intact		€ 0□	N
Requested TAT	Special Report	ing Requireme	ents	Fax R	l lesults		Raw Da			Detection	on Limits	s (specify	r):		Temp	PM revi	iew (initi	al):
Acquested IIII					3 QC			∞ []				. ,				10	1/8/75	
24hr 🔲 72hr 🔲	72hr I. Relingstithed by Sampler					<u> </u>	date		time		2. Rece	Wed by:				<u> </u>	10116	
48hr Standard 🔀	3. Relinguished by:						date	P C	173	<u> </u>	4 Pag-	Fed ived by:				11	· · · · · · · · · · · · · · · · · · ·	
												£	Br	our	<u> </u>	18/9	4 10):30
Other . 5. Relinquished by:							date		time	->-	6. Rece	ived by	Laborato	гу:		,		
8880 Interchange Drive,	Houston, T	X 77054 (7	13) 60	60-0	901	<u> </u>		500 A	mbass	dor C	affery I	Parkwa	v. Scot	1 IA 7	70583	(318)	237-47	_ 75
459 Hughes Drive, Trave							Ö				_		•			(714)		
	,	,	•	-						· O · ·	1			,		(· · · /	 	

SPL Houston Environmental Laboratory Sample Login Checklist

Date: 1-8-96	Time: 1030

SPL Sample ID:	
9661268	

L				
			Yes	No
1	Chain-of-Custody (COC) form is pre	esent.	سا	
2	COC is properly completed.			
3	If no, Non-Conformance Worksheet			
4	Custody seals are present on the ship			
5	If yes, custody seals are intact.			
6	All samples are tagged or labeled.			
7	If no, Non-Conformance Worksheet			
8	Sample containers arrived intact	-		
9	Temperature of samples upon arrival	<	$\int_{\mathbf{C}} \mathbf{C}$	
10	Method of sample delivery to SPL:	SPL Delivery		
		Client Delivery		
		FedEx Delivery (airbill #)	9655	3914
		Other:		
11	Method of sample disposal:	SPL Disposal		
		HOLD		
		Return to Client		

Name:		Date:
lan	altona)	1-8-96

ATTACHMENT B PRIOR MONITORING WELL DATA

FACILITY NO.: FACILITY NAME: 8934 OAKLAND

CA

STATE: FACILITY TYPE: TERMINAL

Well ID	Date	DEPTH TO LIQUID (ft)	DEPTH TO WATER (ft)	PRODUCT THICKNESS (ft)
BC-001 BC-001	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 12/07/94 1/13/95 2/14/95 3/07/95 4/11/95 5/09/95 6/09/95 8/10/95 9/07/95	18.40 18.65 18.65 18.70 18.40 18.72 18.58 18.58 16.76 17.08 16.99 17.64 17.89 17.96 18.23	19.42 19.50 18.60 18.20 18.84 18.52 18.70 18.40 18.73 18.58 18.82 17.94 18.58 16.80 17.08 16.55 17.00 17.39 17.64 17.96 18.23 18.23 18.64 18.36	.17 .20 .10 .19 .27 0.00 0.00 .01 .01 0.00 .04 0.00 0.00 0.
BC-002	1/05/94 2/02/94 5/05/94 6/07/94 7/13/94 8/03/94 9/14/94 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 10/03/95 10/03/96	17.70 17.10 18.36 17.04 12.80	16.76 16.42 17.30 17.70 17.10 18.36 17.04 12.80 15.11 16.21 15.56 15.81 16.88 16.88 17.55 18.03 18.24 18.24 18.36 17.86	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

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

CA

Well ID	Date	DEPTH TO LIQUID (ft)	DEPTH TO WATER (ft)	PRODUCT THICKNESS (ft)
BC-003	1/05/94 2/02/94 3/02/94 4/07/94 5/05/94 6/07/94 7/13/94 8/03/94 10/06/94 11/02/94 12/07/94 1/13/95 2/14/95 3/07/95 4/11/95 5/09/95 4/11/95 5/09/95 6/09/95 10/03/95 10/05/95 11/02/96	17.70 17.90 17.34 18.10 18.36 18.58 18.58 16.29 15.40 15.86 16.21 15.92 16.92 16.92 16.90 17.54 17.95 17.95 18.33	17.51 16.40 15.00 17.70 17.34 18.10 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 18.33 17.55	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	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 12/07/94 1/13/95 2/14/95 3/07/95 4/11/95 5/09/95 6/09/95 8/10/95 9/07/95 10/03/95 10/05/95 11/02/95	18.50 17.88 18.04 18.08	18.96 18.92 18.08 18.68 18.02 18.21 18.08 18.44 18.43 18.43 17.70 18.43 16.45 16.74 16.25 16.66 17.16 17.28 17.61 17.79 18.01 18.00	0.00 0.00 .17 .18 .14 .17 0.00 0.00 .02 .04 .01 0.00 0

FACILITY NO.: FACILITY NAME: 8934 OAKLAND

STATE: FACILITY TYPE: CA

Well ID	Date	DEPTH TO LIQUID (ft)	DEPTH TO WATER (ft)	PRODUCT THICKNESS (ft)
ES-001 ES-001	12/07/95 1/03/96	18.39	18.40 18.04	.01
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 ES-002 ES-002 ES-002	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 12/07/94 1/13/95 2/14/95	18.86 16.92 17.25 16.71 17.15 17.60 17.78 18.09	18.78 18.72 19.14 18.86 19.91 18.14 18.86 16.92 17.25 16.71 17.15 17.61	.04 .05 .50 .09 .02 0.00 0.00 0.00 0.00 0.00 0.00
ES-003 ES-003 ES-003 ES-003 ES-003 ES-003 ES-003 ES-003 ES-003 ES-003 ES-003 ES-003 ES-003 ES-003	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 12/07/94 1/13/95 2/14/95 3/07/95 4/11/95 5/09/95 6/09/95 7/06/95	19.52 19.30 18.68 19.00 18.78 18.90 18.71 19.03 19.84 19.24 19.37 18.44 17.35 17.22 16.95 17.87 18.07	19.52 19.30 18.68 19.00 18.78 18.90 18.71 19.03 19.84 19.24 19.37 18.44 17.35 17.35 17.22 16.95 17.87 18.07	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0

FACILITY NO.: FACILITY NAME: 8934 OAKLAND CA

STATE: FACILITY TYPE: TERMINAL

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	8/10/95 9/07/95 10/03/95 10/05/95 11/02/95 12/07/95 1/03/96	18.40 18.59 18.76 18.76 18.96 19.19 17.55	18.40 18.59 18.76 18.76 18.96 19.19	0.00 0.00 0.00 0.00 0.00 0.00
ES-004 ES-004	1/05/94 2/02/94 3/02/94 4/07/94 5/05/94 6/07/94 7/13/94 8/03/94 10/06/94 11/02/94 12/07/94 1/13/95 2/14/95 3/07/95 4/11/95 5/09/95 5/09/95 6/09/95 7/06/95 10/03/95 10/05/95 11/02/95 12/07/95 1/03/96	18.55 18.42 17.86 18.80 17.86 17.94 18.13 17.94 18.25 18.35 17.56 16.77 16.66 16.14 16.57 17.02 17.19 17.84 17.84 17.84 17.84 17.84 17.84 17.84 17.84 17.84 17.84 18.23 17.87	18.55 18.42 17.86 18.80 17.86 17.94 18.13 17.94 18.25 18.35 17.56 16.77 16.37 16.66 16.14 16.57 17.02 17.19 17.84 17.68 17.84 17.84 17.84 17.84 17.84 17.87	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
ES-005 ES-005 ES-005 ES-005 ES-005 ES-005 ES-005 ES-005 ES-005 ES-005	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 12/07/94 1/13/95 2/14/95 3/07/95	18.18 18.07 18.37 18.24 18.26 18.30 17.90 18.41 18.23 18.47 17.45 18.23 16.45 16.53	19.98 18.30 18.38 18.26 18.27 18.30 17.90 18.42 18.23 18.47 17.45 18.23 16.45 16.53	1.80 .23 .01 .02 .01 0.00 0.00 .01 0.00 0.00 0.0

FACILITY NO.: FACILITY NAME: 8934 OAKLAND

STATE: FACILITY TYPE: CA

Well ID	Date	DEPTH TO LIQUID (ft)	DEPTH TO WATER (ft)	PRODUCT THICKNESS (ft)
ES-005 ES-005 ES-005 ES-005 ES-005 ES-005 ES-005 ES-005 ES-005	4/11/95 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	17.44 17.61 18.74 18.74 17.98 18.21	16.00 16.45 16.90 17.09 17.44 17.61 18.74 18.74 17.98 18.22 17.89	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
ES-006	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 12/07/94 1/13/95 2/14/95 3/07/95 4/11/95 5/09/95 7/06/95 8/10/95 9/07/95 10/03/95 10/03/95 11/02/95 12/07/95 1/03/96	21.30 21.16 21.02 21.40 21.58 21.52 21.58 21.64 20.94 20.25 19.82 20.06 19.56 97.84 20.37 20.55 20.81	21.74 21.10 21.30 21.16 21.02 21.40 21.58 21.52 21.64 20.94 20.95 19.82 20.06 19.56 97.84 20.37 20.37 20.37 20.37 20.37 20.40	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-007 ES-007 ES-007 ES-007 ES-007 ES-007 ES-007 ES-007 ES-007	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 12/07/94	19.79 19.14 19.44 19.30 19.33 19.11 19.40 19.64 19.73 19.79	19.79 19.14 19.44 19.30 19.33 19.11 19.40 19.64 19.73 19.79	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0

FACILITY NO.: FACILITY NAME: 8934 OAKLAND

STATE: FACILITY TYPE:

CA

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	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 10/03/95 11/02/95 12/07/95 1/03/96	18.11 17.63 17.92 17.35 17.79 18.29 18.46 18.77 18.98 19.15 19.36	18.11 17.63 17.92 17.35 17.79 18.29 18.46 18.77 18.98 19.15 19.15 19.36 19.57	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
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 ES-008 ES-008 ES-008 ES-008 ES-008 ES-008	1/05/94 2/02/94 3/02/94 4/07/94 5/05/94 6/07/94 7/13/94 8/03/94 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 10/03/95 10/05/95 11/02/95 12/07/95 1/03/96	19.10 19.08 18.28 18.44 18.26 18.32 18.50 18.42 18.50 18.76 18.76 18.00 16.83 16.67 16.99 16.41 16.92 17.56 17.56 17.89 18.27 18.27 18.27 18.36	19.08 18.28 18.44 18.26 18.32 18.50 18.50 18.76 18.76 18.00 16.87 16.92 17.56 17.59 18.09 18.27 18.27 18.36	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
ES-009 ES-009 ES-009 ES-009 ES-009 ES-009	1/05/94 2/02/94 3/02/94 4/07/94 5/05/94 6/07/94 7/13/94	17.80 17.02 17.12 17.24 17.04 17.06 17.40	17.80 17.02 17.12 17.24 17.04 17.06 17.40	0.00 0.00 0.00 0.00 0.00 0.00

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

Well ID	Date	DEPTH TO LIQUID (ft)	DEPTH TO WATER (ft)	PRODUCT THICKNESS (ft)
ES-009 ES-009 ES-009 ES-009 ES-009 ES-009 ES-009 ES-009 ES-009 ES-009 ES-009 ES-009	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 8/10/95 9/07/95 10/03/95 11/02/95 12/07/95 1/03/96	17.10 17.09 17.46 17.55 16.79 15.80 15.49 15.72 16.13 16.34 16.67 16.87 17.09 17.09 17.09 17.30 17.48 17.12	17.10 17.09 17.46 17.55 16.79 15.80 15.49 15.72 16.13 16.67 16.87 17.09 17.30 17.48 17.12	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
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	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 12/07/95 3/07/95 4/11/95 5/09/95 5/09/95 7/06/95 8/10/95 10/03/95 10/05/95 11/02/95 12/07/95 1/03/96	17.27 17.25 16.61 16.74 16.55 17.50 16.10 16.20 16.48 16.96 17.05 16.29 15.42 15.05 15.34 14.82 15.70 15.89 16.59 16.59 16.59 16.59 16.59 16.59	17.25 16.61 16.74 16.55 17.50 16.10 16.95 16.95 16.95 16.95 15.34 14.82 15.38 15.38 16.57 16.57 16.57 16.95 16.95	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
ES-011 ES-011	1/05/94 2/02/94	18.86 18.74	18.86 18.74	0.00

FACILITY NO.: 8934 FACILITY NAME: OAKLAND

CA

STATE: FACILITY TYPE: TERMINAL

Well ID	Date	DEPTH TO LIQUID (ft)	DEPTH TO WATER (ft)	PRODUCT THICKNESS (ft)
ES-011	3/02/94	18.14	18.14	0.00
ES-011	4/07/94	18.38	18.38	0.00
ES-011	5/05/94	18.15	18.15	0.00
ES-011	6/07/94	18.28	18.28	0.00
ES-011	7/13/94	18.60	18.60	0.00
ES-011	8/03/94	18.18	18.18	0.00
ES-011	9/14/94	18.47	18.47	0.00
ES-011	10/06/94	18.55	18.55	0.00
ES-011	11/02/94	18.64	18.64	0.00
ES-011	12/07/94	17.49	17.49	0.00
ES-011	1/13/95	17.16	17.16	0.00
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	1/03/96	18.21	18.21	0.00

ATTACHMENT C PREVIOUS ANALYTICAL DATA SUMMARY

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

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 BC-02	10/06/92	ND	1.1	0.9	7.2	9.2	ND	NA
	1/07/93	ND	1.1	1.5	9.5	12.1	ND	NA
BC-02 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	NA
BC-02	1/13/95	ND	ND	ND	ND	ND	1.1	ND
BC-02	4/11/95	ND	ND	ND	ND	ND	ND	ND
	7/06/95	ND	ND	ND	ND	ND	0.29	ND
BC-02	10/05/95	1	ND	ND	1	2	1.5	ND
					'ae			
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		1.8			
				0.5		4.2	0.8	NA
BC-03	1/07/93	ND	ИD	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: 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-03 ES-03	7/08/92	54	21	48	34	157	1.3	NA
ES-03 ES-03	10/06/92 1/07/93	93	18	ND	11	122	ND	NA
ES-03	4/06/93	52 53	49 ND	100 67	250 78	451	ND	NA
ES-03	7/23/93	28	5.9	4.6	4.6	198	0.51	4.5
ES-03	10/07/93	2.0	1.0	ND	2.0	43.1	0.06	1500
ES-03	1/05/94	13	2.0	7.0	5.0	5.0 27	ND NA	NA 0.53
ES-03	4/07/94	10	9	26	34	79	0.91	
ES-03	7/13/94	2.0	0.9	0.8	3.0	6.7		0.85
ES-03	10/06/94	ND	ND	ND	ND	ND	0.28 ND	0.37 ND
ES-03	1/13/95	19	15	72	88	194	1.1	1.6
ES-03	4/11/95	20	7	36	22	85		0.94
ES-03	7/06/95	6	ND	7	ND	13	0.39 1.2	0.24
ES-03	10/05/95	2	2	, ND	ND	4	0.11	ND
ES-03	1/05/96	ND	ND	ND	ND	ND	ND	ND
E9-03	1/03/90	ND	ND	ND	ND	ND	ND	ND
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
ES-04	4/11/95	39	4	12	24	79	ND	0.18
ES-04	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
ES-04	1/05/96	34	ND	5	4	ND	ND	0.12

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

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-06	7/23/93	ND	ND	ND	ND	ND	ND	ND
ES-06	10/07/93	1.0	ND	ND	ND	ND	ND	NA
ES-06	1/05/94	ND	ND	ND	ND	ND	ND	ND
ES-06	4/07/94	ND	ND	ND	ND	ND	ND	0.16
ES-06	7/13/94	ND	ND	ND	ND	ND	ND	ND
ES-06	10/06/94	ND	ND	ND	ND	ND	ND	ND
ES-06	1/13/95	ND	ND	ND	ND	ND	ND	ND
ES-06	4/11/95	ND	ND	ND	ND	ND	ND	ND
ES-06	7/06/95	ND	ND	ND	2	2	ND	ND
ES-06	10/05/95	ND	ND	ND	ND	ND	ND	ND
ES-06	1/05/96	ND	ND	ND	ND	ND	ND	ND
ES-07	7/23/93	ND	ND	ND	ND	ND	ND	ND
ES-07	10/07/93	ND	ND	ND	ND	ND	ND	NA
ES-07	1/05/94	ND	ND	ND	ND	ND	ND	ND
ES-07	4/07/94	ND	ND	ND	ND	ND	0.10	0.11
ES-07	7/13/94	ND	ND	ND	ND	ND	ND	ND
ES-07	10/06/94	ND	ND	ND	ND	ND	ND	ND
ES-07	1/13/95	ND	ND	ND	ND	ND	ND	ND
ES-07	4/11/95	ND	ND	ND	ND	ND	ND	ND
ES-07	7/06/95	ND	ND	ND	ND	ND	ND	ND
ES-07	10/05/95	ND	ND	ND	ND	ND	ND	ND
ES-08	7/23/93	ND	ND	ND	ND	ND	ND	ND
ES-08	10/07/93	ND	ND	ND	ND	ND	ND	NA
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

Facility Number: 8934
Facility Name: OAKLAND
State: CA

CA TERMINAL Facility Type:

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-08 ES-08 ES-08 ES-08	10/06/94 1/13/95 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 ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND
ES-09 ES-09 ES-09 ES-09 ES-09 ES-09 ES-09 ES-09	7/23/93 10/07/93 1/05/94 4/07/94 7/13/94 10/06/94 1/13/95 4/11/95 7/06/95 10/05/95	ND N	ND N	ND N	ND N	ND N	ND ND ND ND ND ND ND ND ND 1.1 ND ND ND	ND NA ND
ES-10 ES-10 ES-10 ES-10 ES-10 ES-10 ES-10 ES-10	7/23/93 10/07/93 1/05/94 4/07/94 7/13/94 10/06/94 1/13/95 4/11/95 7/06/95 10/05/95	ND	ND	ND	ND N	ND N	ND N	ND NA ND
ES-11	7/23/93	ND	0.7	ND	1.2	1.9	ND	ND

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-11	10/07/93	ND	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	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