PARSONS ENGINEERING SCIENCE, INC.

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STID 3809

August 8, 1995

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. is pleased to present the July 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 July 1995 monthly monitoring report.

Ten groundwater samples were collected at the Oakland facility on July 6, 1995, and analyzed for BTEX compounds (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 Quarterly Status Report. Analytical results are summarized in Table 2.

The next groundwater sampling event will be conducted in October 1995. The Alameda County Department of Environmental Health (ACDEH) will be notified at least 1 week prior to the sampling event so that a representative from ACDEH may be onsite when the samples are collected. The next quarterly status report will be prepared and submitted to your department on or before November 15, 1995.

As we recently discussed, Greyhound requests a meeting with ACDEH and the Regional Water Quality Control Board to discuss the possibility of applying the "Non-Attainment" scenario for this location and establishing a long term monitoring-only program for this site. Please contact us to make arrangements for a meeting date and time. In the interim, 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/lml

cc: T. Portele, GLI, Dallas, TX
Kevin Graves, Regional Water Quality Control Board

JULY 1995
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.

- **Water level measurements from most recent sampling event:**

  Monitoring well data obtained on July 6, 1995 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 southward. Groundwater elevation contours were not drawn because of 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 Table 5. 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:**

  Results from the groundwater samples collected in July 1995 are summarized in Table 2. Ten of the 16 monitoring wells located on or near the site were sampled. Monitoring well MW-6 was sampled on July 5 at the end of site maintenance. All remaining clean wells were sampled on July 6. Monitoring well MW-3 was re-sampled on July 12 following sample bottle breakage. 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 Appendix A.

  BTEX compounds were only detected in three of the samples. Benzene (6 μg/l) and ethylbenzene (7 μg/l) were detected in sample ES-3. Benzene (100 μg/l), toluene (10 μg/l), ethylbenzene (26 μg/l), and xylenes (61 μg/l) were detected in sample ES-4. Xylene (2 μg/l) was detected in sample ES-6.

  TPH-D was detected in samples ES-3 (1.2 mg/l), ES-4 (0.16 mg/l), BC-2 (0.29 mg/l), and BC-3 (0.38 mg/l). TPH-D was not detected in the other six samples. TPH-G was detected in samples ES-3 (0.24 mg/l) and ES-4 (0.60 mg/l). TPH-G was not detected in the other eight samples.

- **Analytical results from previous sampling events:**

A summary of the analytical results from previous groundwater sampling events is presented in Table 3. Table 4 is a summary of the analytical data from previously collected soil samples.

- **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. The figure indicates the extent of groundwater contamination.

  Figure 4 shows the analytical results from soil samples collected during the preliminary site investigation (November 1991) and the supplemental site assessment (October 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, the product recovery system has been active since startup. The system is inspected daily by onsite personnel and monthly during monitoring visits by 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. In addition, 79,676 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.

  The next quarterly status report will be prepared and submitted to ACDEH on or before November 15, 1995.

- **Time schedules for the completion of the investigation of the site and remediation:**

  Greyhound anticipates that the groundwater monitoring program will continue until free product has been removed from the groundwater. After the free product has been removed, a long-term groundwater monitoring program will be proposed to ensure that residual contaminants do not migrate off site.

- **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
July 6, 1995

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	17.28	79.36	0
ES–2[3]	96.44	17.79	78.65	0.01
ES–3	96.96	18.07	78.89	0
ES–4	95.70	17.19	78.51	0
ES–5[3]	95.85	17.09	78.76	0
ES–6	97.84	20.55	77.29	0
ES–7	96.40	18.46	77.94	0
ES–8	96.64	17.56	79.08	0
ES–9	95.78	16.34	79.44	0
ES–10	95.24	15.89	79.35	0
ES–11	95.92	17.54	78.38	0
BC–1[3]	96.16	17.64	78.52	0
BC–2[4]	96.32	16.88	79.44	0
BC–3[4]	96.20	16.87	79.33	0

[1] 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).

[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
JULY 6, 1995

Location	Date Collected	Parameter	Result	Detection Limit
ES-3[4]	7/6, 7/12	Benzene[1]	6	0.3 ug/L
		Toluene[1]	ND	0.3 ug/L
		Ethylbenzene[1]	7	0.3 ug/L
		Xylenes (total)[1]	ND	0.6 ug/L
		TPH-D[2]	1.2	0.1 mg/L
		TPH-G[3]	ND	0.1 mg/L
ES-4	7/6	Benzene[1]	100	1 ug/L
		Toluene[1]	10	1 ug/L
		Ethylbenzene[1]	26	1 ug/L
		Xylenes (total)[1]	61	1 ug/L
		TPH-D[2]	0.16	0.1 mg/L
		TPH-G[3]	0.60	0.1 mg/L
ES-6	7/5	Benzene[1]	ND	0.3 ug/L
		Toluene[1]	ND	0.3 ug/L
		Ethylbenzene[1]	ND	0.3 ug/L
		Xylenes (total)[1]	2	0.6 ug/L
		TPH-D[2]	ND	0.1 mg/L
		TPH-G[3]	ND	0.1 mg/L
ES-7	7/6	Benzene[1]	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-8	7/6	Benzene[1]	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-9	7/6	Benzene[1]	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

TABLE 2
(Continued)

Location	Date Collected	Parameter	Result	Detection Limit
ES–10	7/6	Benzene[1]	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–11	7/6	Benzene[1]	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
BC–2	7/6	Benzene[1]	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]	0.29	0.1 mg/L
		TPH–G[3]	ND	0.1 mg/L
BC–3	4/12	Benzene[1]	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]	0.38	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.

[4] BTEX and TPH–G results reported from sample collected on 7/6/95. TPH–D results reported from sample collected on 7/12/95.

ND – Not detected above the practical quantitation limit.

NA – Not analyzed, sample bottle broken during shipping.

TABLE 3

SUMMARY OF ANALYTICAL DATA
GROUNDWATER ANALYSIS
GREYHOUND TERMINAL, OAKLAND, CALIFORNIA

Sampling Date	Location	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Xylene ug/l	Total BTEX ug/l	TPH–D(*) mg/l	TPH–G(*) mg/l
07/08/92	ES–3	54	21	48	34	157	1.3	NA
	ES–4	31	5.6	ND	2.8	39.4	ND	NA
	BC–2	ND	ND	ND	8.4	8.4	2.1	NA
	BC–3	ND	2.5	ND	6.1	8.6	3.9	NA
10/06/92	ES–3	93	18	ND	11	122	ND	NA
	ES–4	100	8.2	ND	7.6	115.8	ND	NA
	BC–2	ND	1.1	0.9	7.2	9.2	ND	NA
	BC–3	ND	1.9	0.5	1.8	4.2	0.8	NA
01/07/93	ES–3	52	49	100	250	451	ND	NA
	ES–4	30	6.7	7.7	16	60.4	ND	NA
	BC–2	ND	1.1	1.5	9.5	12.1	ND	NA
	BC–3	ND	ND	ND	ND	ND	ND	NA
04/06/93	ES–3	53	ND	67	78	198	0.51	4.5
	ES–4	33	2.3	1.9	4.7	41.9	ND	0.36
	BC–2	ND	ND	ND	ND	ND	0.13	ND
	BC–3	ND	ND	ND	ND	ND	0.12	ND

TABLE 3
(Continued)
SUMMARY OF ANALYTICAL DATA
GROUNDWATER ANALYSIS
GREYHOUND TERMINAL, OAKLAND, CALIFORNIA

Sampling Date	Location	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Xylene ug/l	Total BTEX ug/l	TPH–D(*) mg/l	TPH–G(*) mg/l
07/23/93	ES–3	28.0	5.9	4.6	4.6	43.1	0.6	1.5
	ES–4	24.0	1.1	0.7	8.3	34.1	ND	ND
	ES–6	ND	ND	ND	ND	ND	ND	ND
	ES–7	ND	ND	ND	ND	ND	ND	ND
	ES–8	ND	ND	ND	ND	ND	ND	ND
	ES–9	ND	ND	ND	ND	ND	ND	ND
	ES–10	ND	ND	ND	ND	ND	ND	ND
	ES–11	ND	0.7	ND	1.2	1.9	ND	ND
	BC–2	1.0	2.4	1.8	7.9	13.1	0.5	ND
	BC–3	2.7	3.6	3.6	7.9	17.8	NA	ND
10/07/93	ES–3	2.0	1.0	ND	2.0	5.0	ND	NA
	ES–4	8.0	ND	ND	2.0	10.0	ND	NA
	ES–6	1.0	ND	ND	ND	ND	ND	NA
	ES–7	ND	ND	ND	ND	ND	ND	NA
	ES–8	ND	ND	ND	ND	ND	ND	NA
	ES–9	ND	ND	ND	ND	ND	ND	NA
	ES–10	ND	ND	ND	ND	ND	ND	NA
	ES–11	ND	ND	ND	ND	ND	ND	NA
	BC–2	ND	ND	ND	ND	ND	1.4	NA
	BC–3	ND	ND	1.0	2.0	3.0	1.4	NA

TABLE 3
(Continued)
SUMMARY OF ANALYTICAL DATA
GROUNDWATER ANALYSIS
GREYHOUND TERMINAL, OAKLAND, CALIFORNIA

Sampling Date	Location	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Xylene ug/l	Total BTEX ug/l	TPH–D(*) mg/l	TPH–G(*) mg/l
1/05/94	ES–3	13	2.0	7.0	5.0	27	NA	0.53
	ES–4	15	0.6	0.4	3.0	19	ND	0.13
	ES–6	ND	ND	ND	ND	ND	ND	ND
	ES–7	ND	ND	ND	ND	ND	ND	ND
	ES–8	ND	ND	ND	ND	ND	ND	ND
	ES–9	ND	ND	ND	ND	ND	ND	ND
	ES–10	ND	ND	ND	ND	ND	ND	ND
	ES–11	ND	ND	ND	ND	ND	ND	ND
	BC–2	NA	NA	NA	NA	NA	NA	NA
	BC–3	ND	ND	ND	1.6	1.6	1.8	ND
04/07/94	ES–3	10	9	26	34	79	0.91	0.85
	ES–4	11	ND	ND	ND	11	ND	0.17
	ES–6	ND	ND	ND	ND	ND	ND	0.16
	ES–7	ND	ND	ND	ND	ND	0.10	0.11
	ES–8	ND	ND	ND	ND	ND	ND	ND
	ES–9	ND	ND	ND	ND	ND	ND	ND
	ES–10	ND	ND	ND	ND	ND	ND	ND
	ES–11	ND	ND	ND	ND	ND	0.35	ND
	BC–2	NA	NA	NA	NA	NA	NA	NA
	BC–3	ND	ND	ND	ND	ND	0.85	ND

TABLE 3
(Continued)
SUMMARY OF ANALYTICAL DATA
GROUNDWATER ANALYSIS
GREYHOUND TERMINAL, OAKLAND, CALIFORNIA

Sampling Date	Location	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Xylene ug/l	Total BTEX ug/l	TPH–D(*) mg/l	TPH–G(*) mg/l
07/13/94	ES–3	2.0	0.9	0.8	3.0	6.7	0.28	0.37
	ES–4	9.0	ND	ND	0.7	9.7	ND	0.13
	ES–6	ND	ND	ND	ND	ND	ND	ND
	ES–7	ND	ND	ND	ND	ND	ND	ND
	ES–8	ND	ND	ND	ND	ND	NA	ND
	ES–9	ND	ND	ND	ND	ND	ND	ND
	ES–10	ND	ND	ND	ND	ND	ND	ND
	ES–11	ND	ND	ND	ND	ND	ND	ND
	BC–2	NA	NA	NA	NA	NA	NA	NA
	BC–3	ND	ND	ND	ND	ND	0.20	ND
10/06/94	ES–3	ND	ND	ND	ND	ND	ND	ND
	ES–4	18.0	ND	2.0	3.0	23.0	ND	0.10
	ES–6	ND	ND	ND	ND	ND	ND	ND
	ES–7	ND	ND	ND	ND	ND	ND	ND
	ES–8	ND	ND	ND	ND	ND	ND	ND
	ES–9	ND	ND	ND	ND	ND	ND	ND
	ES–10	ND	ND	ND	ND	ND	ND	ND
	ES–11	ND	ND	ND	ND	ND	ND	ND
	BC–2	NA	NA	NA	NA	NA	NA	NA
	BC–3	ND	ND	ND	ND	ND	0.82	ND

TABLE 3
(Continued)
SUMMARY OF ANALYTICAL DATA
GROUNDWATER ANALYSIS
GREYHOUND TERMINAL, OAKLAND, CALIFORNIA

Sampling Date	Location	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Xylene ug/l	Total BTEX ug/l	TPH–D(*) mg/l	TPH–G(*) mg/l
1/13/95,	ES–3	19	15	72	88	194	1.1	1.6
1/16/95	ES–4	12	ND	ND	2	14	ND	0.15
	ES–6	ND	ND	ND	ND	ND	ND	ND
	ES–7	ND	ND	ND	ND	ND	ND	ND
	ES–8	ND	ND	ND	ND	ND	ND	ND
	ES–9	ND	ND	ND	ND	ND	1.1	ND
	ES–10	ND	ND	ND	ND	ND	ND	ND
	ES–11	ND	ND	ND	ND	ND	ND	ND
	BC–2	ND	ND	ND	ND	ND	1.1	ND
	BC–3	ND	ND	ND	ND	ND	0.89	ND
4/11/95,	ES–3	20	7	36	22	85	0.39	0.94
4/12/95,	ES–4	39	4	12	24	79	ND	0.18
	ES–6	ND	ND	ND	ND	ND	ND	ND
	ES–7	ND	ND	ND	ND	ND	ND	ND
	ES–8	ND	ND	ND	ND	ND	ND	ND
	ES–9	ND	ND	ND	ND	ND	ND	ND
	ES–10	ND	ND	ND	ND	ND	ND	ND
	ES–11	ND	ND	ND	ND	ND	ND	0.17
	BC–2	ND	ND	ND	ND	ND	ND	ND
	BC–3	ND	ND	ND	ND	ND	ND	ND

TABLE 3
(Continued)
SUMMARY OF ANALYTICAL DATA
GROUNDWATER ANALYSIS
GREYHOUND TERMINAL, OAKLAND, CALIFORNIA

Sampling Date	Location	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Xylene ug/l	Total BTEX ug/l	TPH–D(*) mg/l	TPH–G(*) mg/l
7/6/95,	ES–3	6	ND	7	ND	13	1.2	0.24
	ES–4	100	10	26	61	197	0.16	0.60
	ES–6	ND	ND	ND	2	2	ND	ND
	ES–7	ND	ND	ND	ND	ND	ND	ND
	ES–8	ND	ND	ND	ND	ND	ND	ND
	ES–9	ND	ND	ND	ND	ND	ND	ND
	ES–10	ND	ND	ND	ND	ND	ND	ND
	ES–11	ND	ND	ND	ND	ND	ND	ND
	BC–2	ND	ND	ND	ND	ND	0.29	ND
	BC–3	ND	ND	ND	ND	ND	0.38	ND

ND – Parameter analyzed for but not detected above method detection limit.
NA – Parameter not analyzed.
(*) – Total petroleum hydrocarbons diesel (TPH–D) and total petroleum hydrocarbons as gasoline (TPH–G) were analyzed by GCFID by the DHS/LUFT method (modified EPA method 8015/solution preparation method 3510).

TABLE 4
SOIL ANALYTICAL DATA SUMMARY
GREYHOUND TERMINAL, OAKLAND, CALIFORNIA

Location Sample Depth	Date	Benzene ug/kg	Toluene ug/kg	Ethylbenzene ug/kg	Xylenes ug/kg	Total BTEX[1] 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
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.

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

2 TPH-Diesel = 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-Gasoline = 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.

TABLE 5

MONITORING WELL DATA SUMMARY
GREYHOUND TERMINAL, OAKLAND, CALIFORNIA

Date	Well Location	Depth to Liquid (Feet)	Depth to Water (Feet)	Free Product Thickness (Feet)
7/7/92	ES-1 (Screen 10-32')	18.60	18.60	0
	ES-2 (10-30)	20.02	19.62	.40
	ES-3 (15-35)	19.52	19.52	0
	ES-4 (10-30)	18.51	18.51	0
	ES-5 (10-30)	22.23	20.23	2.0
	BC-1	19.55	20.66	1.11
	BC-2	16.89	16.89	0
	BC-3	16.68	16.68	0
11/6/92	ES-1	18.52	18.53	.01
	ES-2	18.84	19.44	.60
	ES-3	18.84	19.84	0
	ES-4	18.94	18.94	0
	ES-5	17.60	20.92	3.32
	BC-1	18.24	20.69	2.45
	BC-2	15.98	15.98	0
	BC-3	16.81	16.81	0
01/07/93	ES-1	20.25	20.26	.01
	ES-2	20.05	20.40	.35
	ES-3	19.20	19.20	0
	ES-4	18.76	18.76	0
	ES-5	19.35	22.00	2.65
	BC-1	19.60	21.76	2.16
	BC-2	13.50	13.50	0
	BC-3	16.55	16.55	0
04/06/93	ES-1	17.08	17.88	0
	ES-2	18.20	18.31	0.11
	ES-3	15.92	15.92	0
	ES-4	17.26	17.26	0
	ES-5	17.28	17.28	0
	BC-1	18.26	18.26	0
	BC-2	15.20	15.20	0
	BC-3	15.44	15.44	0

TABLE 5
(Continued)

MONITORING WELL DATA SUMMARY

Date	Well Location	Depth to Liquid (Feet)	Depth to Water (Feet)	Free Product Thickness (Feet)
07/03/93	ES–1	18.68	18.68	0
	ES–2	19.31	19.32	0.01
	ES–3	18.12	18.12	0
	ES–4	18.08	18.08	0
	ES–5	19.50	19.50	0
	BC–1	19.05	19.15	0.10
	BC–2	17.75	17.75	0
	BC–3	16.81	16.81	0
10/07/93	ES–1	19.02	19.03	0.01
	ES–2	19.57	19.60	0.03
	ES–3	19.62	19.62	0
	ES–4	18.62	18.62	0
	ES–5	18.65	19.33	0.68
	ES–6	21.81	21.81	0
	ES–7	19.99	19.99	0
	ES–8	19.13	19.13	0
	ES–9	17.90	17.90	0
	ES–10	17.40	17.40	0
	ES–11	18.90	18.90	0
	BC–1	19.25	19.43	0.18
	BC–2	19.02	19.02	0
	BC–3	18.58	18.58	0
1/05/94	ES–1	18.96	18.96	0
	ES–2	19.57	19.61	0.04
	ES–3	19.52	19.52	0
	ES–4	18.55	18.55	0
	ES–5	18.42	19.75	1.33
	ES–6	21.76	21.76	0
	ES–7	19.90	19.90	0
	ES–8	19.10	19.10	0
	ES–9	17.80	17.80	0
	ES–10	17.27	17.27	0
	ES–11	18.86	18.86	0
	BC–1	19.25	19.42	0.17
	BC–2	16.76	16.76	0
	BC–3	17.51	17.51	0

TABLE 5
(Continued)

MONITORING WELL DATA SUMMARY

Date	Well Location	Depth to Liquid (Feet)	Depth to Water (Feet)	Free Product Thickness (Feet)
04/07/94	ES-1	18.50	18.68	0.18
	ES-2	19.10	19.19	0.09
	ES-3	19.00	19.00	0
	ES-4	18.80	18.80	0
	ES-5	18.37	18.38	0
	ES-6	21.30	21.30	0
	ES-7	19.44	19.44	0
	ES-8	18.44	18.44	0
	ES-9	17.24	17.24	0
	ES-10	16.74	16.74	0
	ES-11	18.38	18.38	0
	BC-1	18.10	18.20	0.10
	BC-2	NR	NR	NR
	BC-3	17.70	17.70	0
07/13/94	ES-1	NR	18.08	NR
	ES-2	NR	18.78	NR
	ES-3	18.71	18.71	0
	ES-4	18.13	18.13	0
	ES-5	NR	18.30	NR
	ES-6	21.40	21.40	0
	ES-7	19.11	19.11	0
	ES-8	18.50	18.50	0
	ES-9	17.40	17.40	0
	ES-10	16.10	16.10	0
	ES-11	18.60	18.60	0
	BC-1	NR	18.70	NR
	BC-2	17.10	17.10	0
	BC-3	18.10	18.10	0

TABLE 5
(Continued)

MONITORING WELL DATA SUMMARY

Date	Well Location	Depth to Liquid (Feet)	Depth to Water (Feet)	Free Product Thickness (Feet)
10/06/94	ES–1	18.39	18.43	0.04
	ES–2	18.86	18.86	0
	ES–3	19.24	19.24	0
	ES–4	18.25	18.25	0
	ES–5	18.23	18.23	0
	ES–6	21.58	21.58	0
	ES–7	19.73	19.73	0
	ES–8	18.76	18.76	0
	ES–9	17.46	17.46	0
	ES–10	16.96	16.96	0
	ES–11	18.55	18.55	0
	BC–1	18.58	18.58	0
	BC–2	NM	NM	NM
	BC–3	18.58	18.58	0
01/16/95	ES–1	18.39	18.43	0.04
	ES–2	18.86	18.86	0
	ES–3	17.35	17.35	0
	ES–4	16.77	16.77	0
	ES–5	18.23	18.23	0
	ES–6	20.25	20.25	0
	ES–7	18.11	18.11	0
	ES–8	16.83	16.83	0
	ES–9	15.80	15.80	0
	ES–10	15.42	15.42	0
	ES–11	17.16	17.16	0
	BC–1	18.58	18.58	0
	BC–2	12.80	12.80	0
	BC–3	15.40	15.40	0

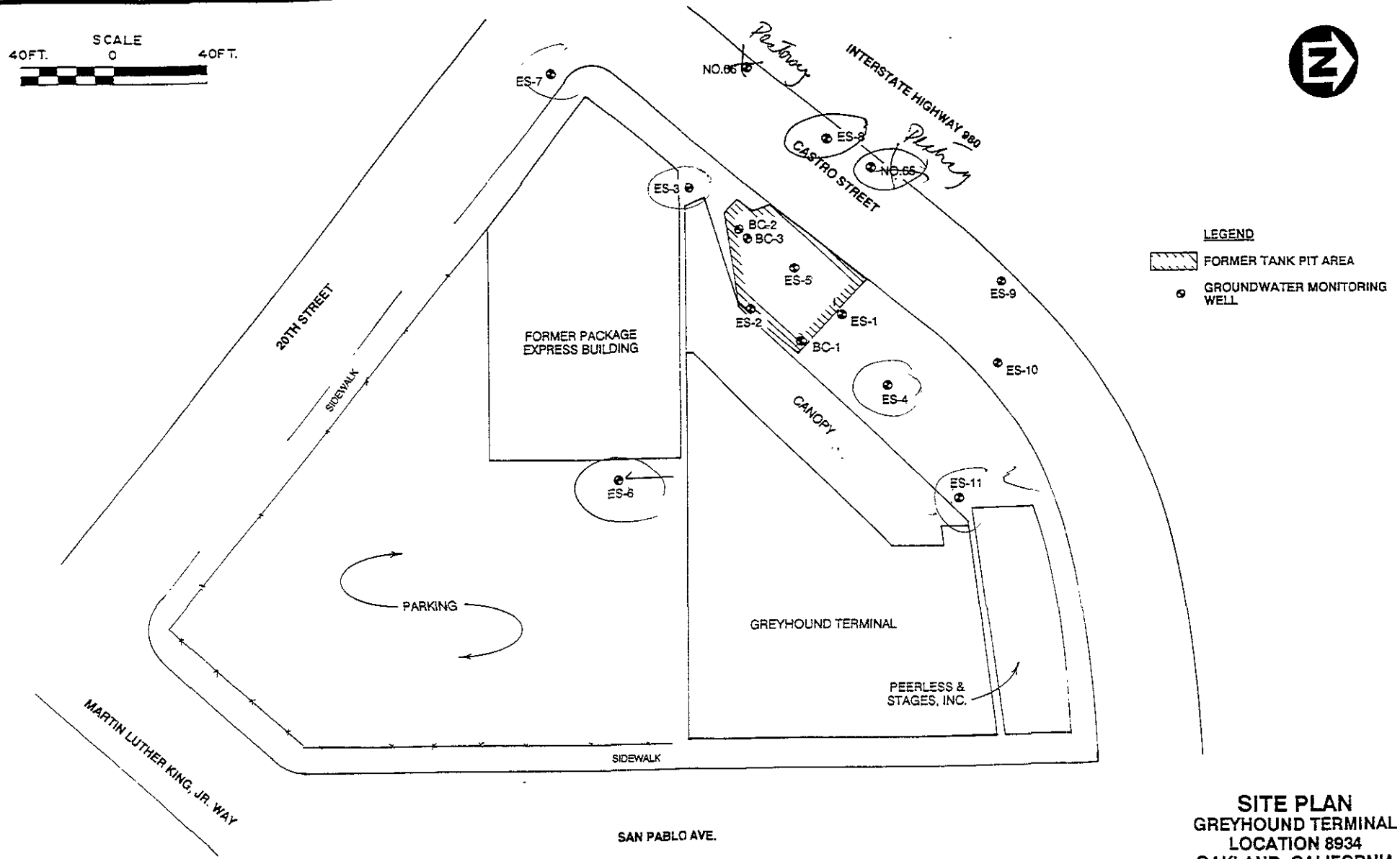
TABLE 5
(Continued)

MONITORING WELL DATA SUMMARY

Date	Well Location	Depth to Liquid (Feet)	Depth to Water (Feet)	Free Product Thickness (Feet)
04/11/95, 04/12/95	ES–1	16.25	16.25	0
	ES–2	16.71	16.71	0
	ES–3	16.95	16.95	0
	ES–4	16.14	16.14	0
	ES–5	16.00	16.00	0
	ES–6	19.56	19.56	0
	ES–7	17.35	17.35	0
	ES–8	16.41	16.41	0
	ES–9	15.23	15.23	0
	ES–10	14.82	14.82	0
	ES–11	16.54	16.54	0
	BC–1	16.55	16.55	0
	BC–2	15.56	15.56	0
	BC–3	15.08	15.08	0
07/6/95	ES–1	17.28	17.28	0
	ES–2	17.78	17.79	0.01
	ES–3	18.07	18.07	0
	ES–4	17.19	17.19	0
	ES–5	17.09	17.09	0
	ES–6	20.55	20.55	0
	ES–7	18.46	18.46	0
	ES–8	17.56	17.56	0
	ES–9	16.34	16.34	0
	ES–10	15.89	15.89	0
	ES–11	17.54	17.54	0
	BC–1	17.64	17.64	0
	BC–2	16.88	16.88	0
	BC–3	16.87	16.87	0

NR = Not recorded due to equipment theft.
NM = Not measured due to dry well.

FIGURE 1

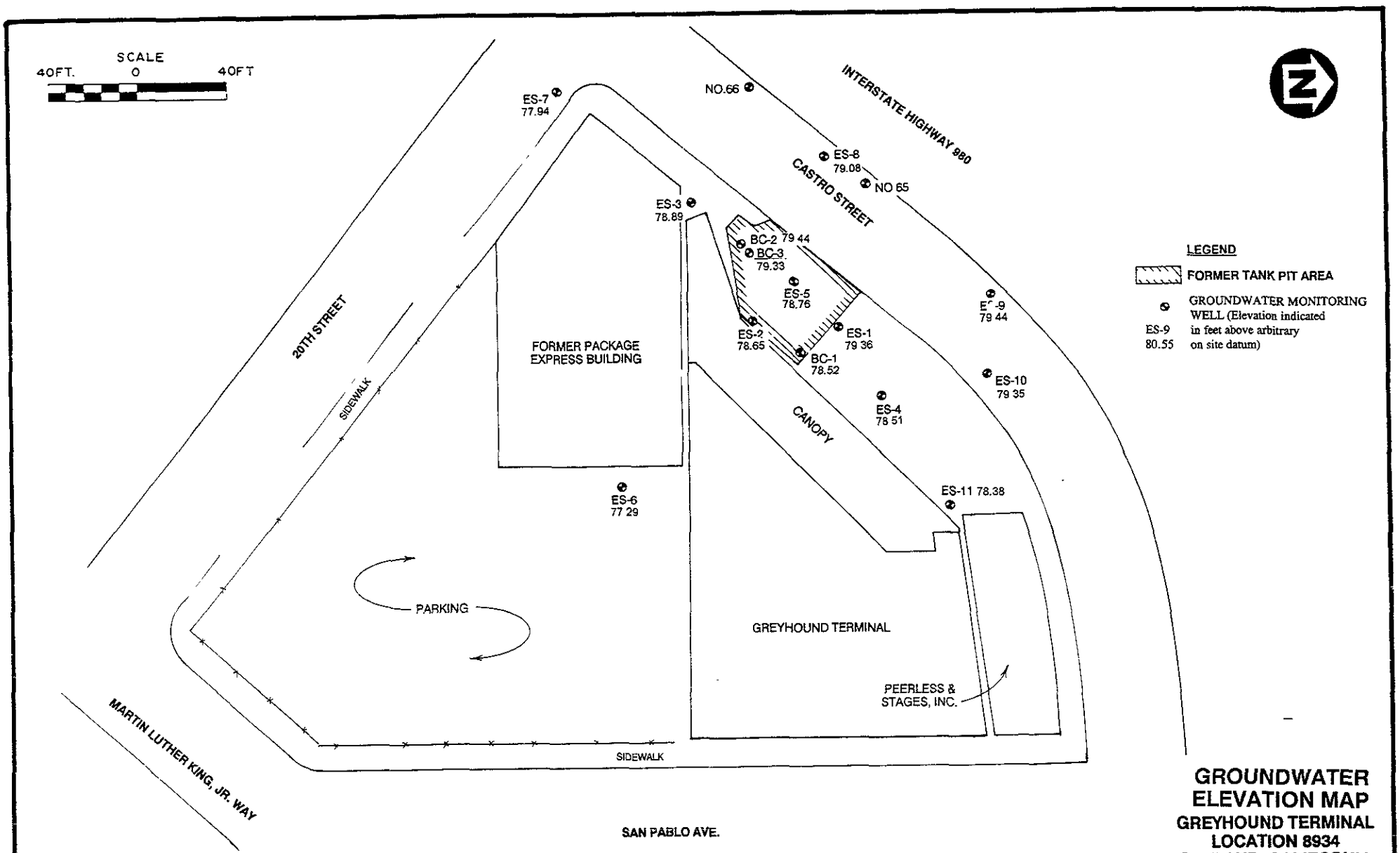


SITE PLAN
GREYHOUND TERMINAL
LOCATION 8934
OAKLAND, CALIFORNIA

SY356 06

ENGINEERING-SCIENCE

FIGURE 2

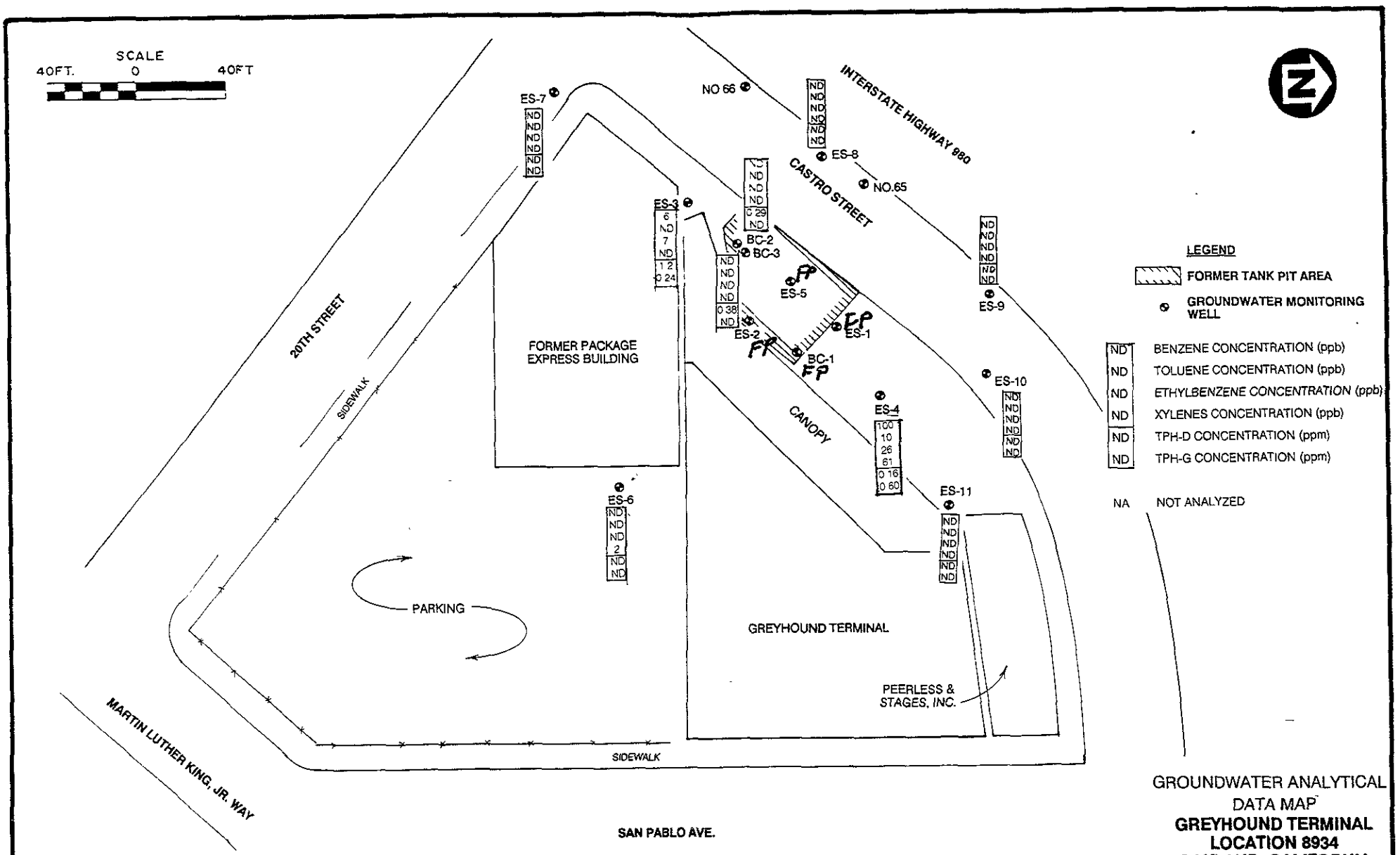


GROUNDWATER ELEVATION MAP
GREYHOUND TERMINAL
LOCATION 8934
OAKLAND, CALIFORNIA
JULY 6, 1995

SY356.06

ENGINEERING-SCIENCE

FIGURE 3



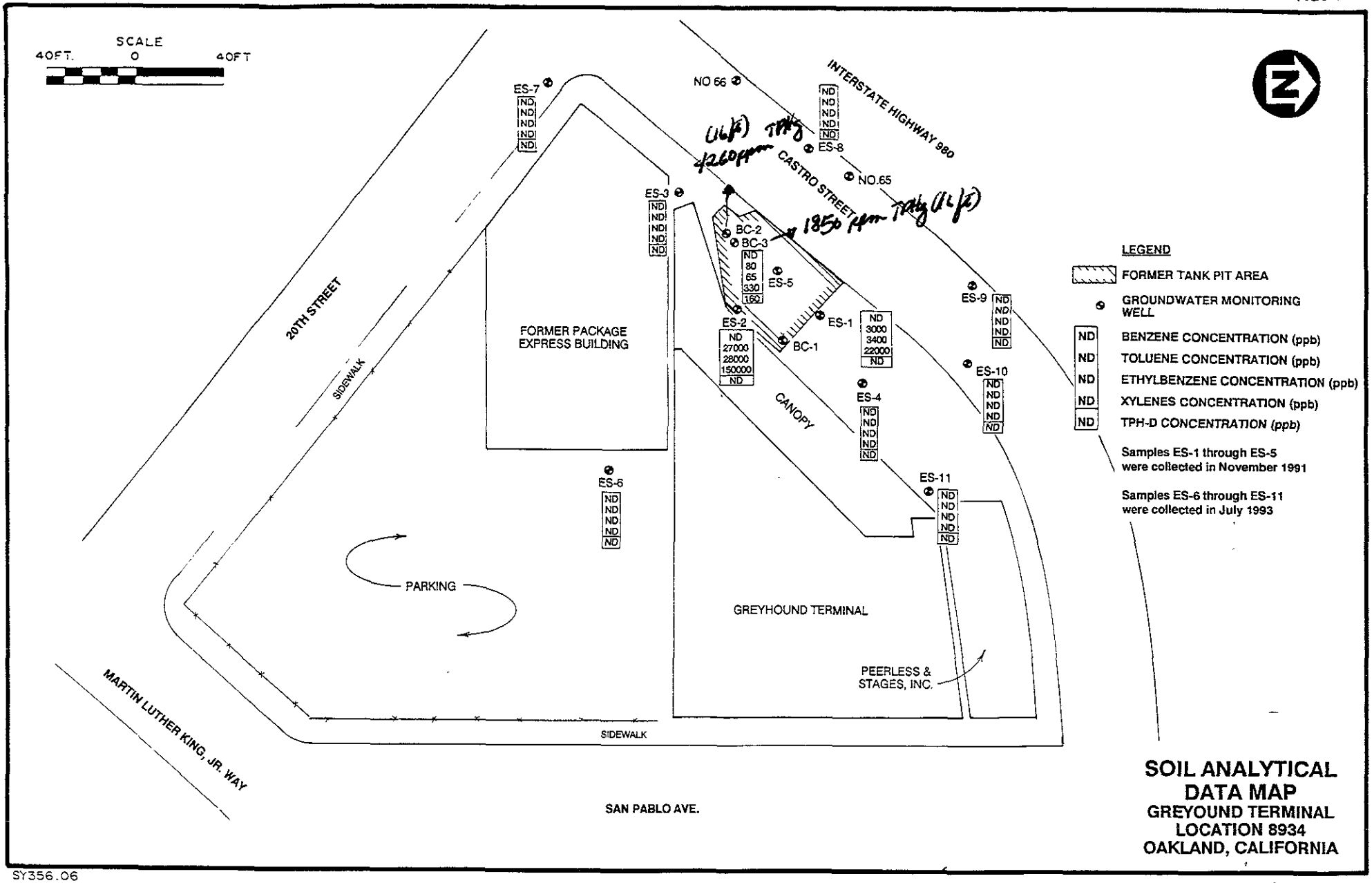
GROUNDWATER ANALYTICAL DATA MAP

GREYHOUND TERMINAL
LOCATION 8934
OAKLAND, CALIFORNIA
JULY 6, 1995

SY356 06

ENGINEERING-SCIENCE

FIGURE 4



SOIL ANALYTICAL DATA MAP
GREYOUND TERMINAL
LOCATION 8934
OAKLAND, CALIFORNIA

SY356.06

ENGINEERING-SCIENCE

APPENDIX A

LABORATORY REPORTS

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

SPL, INC.

REPORT APPROVAL SHEET

WORK ORDER NUMBER: 95 - 07 - 216

Approved for release by:

M. Scott Sample

M. Scott Sample, Laboratory Director *Date:* 7/20/95

Ken Satterfield

Karen Satterfield, Project Manager *Date:* 7/20/95

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

Certificate of Analysis No. H9-9507216-06

Engineering Science, Inc.
290 Elwood Davis Rd
Liverpool, NY 13088
ATTN: Martin Miller

DATE: 07/26/9

PROJECT: Greyhound
SITE: Oakland, CA
SAMPLED BY: Parsons Engineering Science
SAMPLE ID: MW 3

PROJECT NO: 727211-08934
MATRIX: WATER
DATE SAMPLED: 07/06/95 14:40:0
DATE RECEIVED: 07/08/95

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNIT
BENZENE	6	0.3 P	µg/
TOLUENE	ND	0.3 P	µg/
ETHYLBENZENE	7	0.3 P	µg/
TOTAL XYLENE	ND	0.6 P	µg/
TOTAL VOLATILE AROMATIC HYDROCARBONS	13		µg/
Surrogate	**% Recovery**		
1,4-Difluorobenzene	102		
4-Bromofluorobenzene	103		
METHOD 8020***			
Analyzed by: SLB			
Date: 07/11/95			
Petroleum Hydrocarbons - Gasoline	0.24	0.1 P	mg/
Surrogate	**% Recovery**		
1,4-Difluorobenzene	86		
4-Bromofluorobenzene	110		
Modified 8015 - Gasoline			
Analyzed by: SLB			
Date: 07/11/95			

(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, 17th 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. H9-9507216-10

Engineering Science, Inc.
290 Elwood Davis Rd
Liverpool, NY 13088
ATTN: Martin Miller

DATE: 07/26/9

PROJECT: Greyhound
SITE: Oakland, CA
SAMPLED BY: Parsons Engineering Science
SAMPLE ID: MW 4

PROJECT NO: 727211-08934
MATRIX: WATER
DATE SAMPLED: 07/06/95 17:30:0
DATE RECEIVED: 07/08/95

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNIT
BENZENE	100	1 P	µg/
TOLUENE	10	1 P	µg/
ETHYLBENZENE	26	1 P	µg/
TOTAL XYLENE	61	1 P	µg/
TOTAL VOLATILE AROMATIC HYDROCARBONS	197		µg/
Surrogate	**% Recovery**		
1,4-Difluorobenzene	61		
4-Bromofluorobenzene	112		
METHOD 8020***			
Analyzed by: SLB			
Date: 07/12/95			
Petroleum Hydrocarbons - Gasoline	0.60	0.1 P	µg/
Surrogate	**% Recovery**		
1,4-Difluorobenzene	75		
4-Bromofluorobenzene	115		
Modified 8015 - Gasoline			
Analyzed by: SLB			
Date: 07/12/95			
Total Petroleum Hydrocarbons-Diesel	0.16	0.1 P	mg/l

(P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 17th 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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Ka Dalley
SPL, Inc., - Project Manager

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

Certificate of Analysis No. H9-9507216-10

Engineering Science, Inc.
290 Elwood Davis Rd
Liverpool, NY 13088
ATTN: Martin Miller

DATE: 07/26/9

PROJECT: Greyhound
SITE: Oakland, CA
SAMPLED BY: Parsons Engineering Science
SAMPLE ID: MW 4

PROJECT NO: 727211-08934
MATRIX: WATER
DATE SAMPLED: 07/06/95 17:30:0
DATE RECEIVED: 07/08/95

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNIT
Surrogate	**% Recovery**		
o-Terphenyl	101		
2-Fluorobiphenyl	122		
Mod. 8015 - Diesel			
Analyzed by: SEG			
Date: 07/14/95 17:52:00			
Liquid-liquid extraction	07/10/95		
METHOD 3510 ***			
Analyzed by: BV			
Date: 07/10/95 14:00:00			

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 17th 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

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

Certificate of Analysis No. H9-9507216-01

Engineering Science, Inc.
290 Elwood Davis Rd
Liverpool, NY 13088
ATTN: Martin Miller

DATE: 07/26/9

PROJECT: Greyhound
SITE: Oakland, CA
SAMPLED BY: Parsons Engineering Science
SAMPLE ID: MW 6

PROJECT NO: 727211-08934
MATRIX: WATER
DATE SAMPLED: 07/05/95 16:10:0
DATE RECEIVED: 07/08/95

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	2	0.6 P	µg/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	2		µg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	94		
4-Bromofluorobenzene	96		
METHOD 8020***			
Analyzed by: SLB			
Date: 07/11/95			
Petroleum Hydrocarbons - Gasoline	ND	0.1 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	73		
4-Bromofluorobenzene	94		
Modified 8015 - Gasoline			
Analyzed by: SLB			
Date: 07/11/95			
Total Petroleum Hydrocarbons-Diesel	ND	0.1 P	mg/L

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, 17th 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. H9-9507216-01

Engineering Science, Inc.
290 Elwood Davis Rd
Liverpool, NY 13088
ATTN: Martin Miller

DATE: 07/26/95

PROJECT: Greyhound
SITE: Oakland, CA
SAMPLED BY: Parsons Engineering Science
SAMPLE ID: MW 6

PROJECT NO: 727211-08934
MATRIX: WATER
DATE SAMPLED: 07/05/95 16:10:00
DATE RECEIVED: 07/08/95

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
Surrogate	**% Recovery**		
o-Terphenyl	96		
2-Fluorobiphenyl	77		
Mod. 8015 - Diesel			
Analyzed by: SEG			
Date: 07/10/95 05:50:00			
Liquid-liquid extraction	07/08/95		
METHOD 3510 ***			
Analyzed by: DB			
Date: 07/08/95 15:00:00			

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 17th 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. H9-9507216-02

Engineering Science, Inc.
290 Elwood Davis Rd
Liverpool, NY 13088
ATTN: Martin Miller

DATE: 07/26/95

PROJECT: Greyhound
SITE: Oakland, CA
SAMPLED BY: Parsons Engineering Science
SAMPLE ID: MW 7

PROJECT NO: 727211-08934
MATRIX: WATER
DATE SAMPLED: 07/06/95 09:45:00
DATE RECEIVED: 07/08/95

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	96		
4-Bromofluorobenzene	86		
METHOD 8020***			
Analyzed by: SLB			
Date: 07/11/95			
Petroleum Hydrocarbons - Gasoline	ND	0.1 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	75		
4-Bromofluorobenzene	88		
Modified 8015 - Gasoline			
Analyzed by: SLB			
Date: 07/11/95			
Total Petroleum Hydrocarbons-Diesel	ND	0.1 P	mg/L

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, 17th 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

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

Certificate of Analysis No. H9-9507216-02

Engineering Science, Inc.
290 Elwood Davis Rd
Liverpool, NY 13088
ATTN: Martin Miller

DATE: 07/26/95

PROJECT: Greyhound
SITE: Oakland, CA
SAMPLED BY: Parsons Engineering Science
SAMPLE ID: MW 7

PROJECT NO: 727211-08934
MATRIX: WATER
DATE SAMPLED: 07/06/95 09:45:00
DATE RECEIVED: 07/08/95

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
Surrogate	**% Recovery**		
o-Terphenyl	68		
2-Fluorobiphenyl	80		
Mod. 8015 - Diesel			
Analyzed by: SEG			
Date: 07/14/95 11:16:00			
Liquid-liquid extraction	07/10/95		
METHOD 3510 ***			
Analyzed by: BV			
Date: 07/10/95 14:00:00			

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 17th 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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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9507216-03

Engineering Science, Inc.
290 Elwood Davis Rd
Liverpool, NY 13088
ATTN: Martin Miller

DATE: 07/26/95

PROJECT: Greyhound
SITE: Oakland, CA
SAMPLED BY: Parsons Engineering Science
SAMPLE ID: MW 8

PROJECT NO: 727211-08934
MATRIX: WATER
DATE SAMPLED: 07/06/95 10:40:00
DATE RECEIVED: 07/08/95

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	95		
4-Bromofluorobenzene	82		
METHOD 8020***			
Analyzed by: SLB			
Date: 07/11/95			
Petroleum Hydrocarbons - Gasoline	ND	0.1 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	76		
4-Bromofluorobenzene	79		
Modified 8015 - Gasoline			
Analyzed by: SLB			
Date: 07/11/95			
Total Petroleum Hydrocarbons-Diesel	ND	0.1 P	mg/L

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, 17th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

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

Certificate of Analysis No. H9-9507216-03

Engineering Science, Inc.
290 Elwood Davis Rd
Liverpool, NY 13088
ATTN: Martin Miller

DATE: 07/26/95

PROJECT: Greyhound
SITE: Oakland, CA
SAMPLED BY: Parsons Engineering Science
SAMPLE ID: MW 8

PROJECT NO: 727211-08934
MATRIX: WATER
DATE SAMPLED: 07/06/95 10:40:00
DATE RECEIVED: 07/08/95

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
Surrogate	**% Recovery**		
o-Terphenyl	73		
2-Fluorobiphenyl	71		
Mod. 8015 - Diesel			
Analyzed by: SEG			
Date: 07/14/95 11:50:00			
Liquid-liquid extraction	07/10/95		
METHOD 3510 ***			
Analyzed by: BV			
Date: 07/10/95 14:00:00			

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 17th 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. H9-9507216-04

Engineering Science, Inc.
290 Elwood Davis Rd
Liverpool, NY 13088
ATTN: Martin Miller

DATE: 07/26/9

PROJECT: Greyhound
SITE: Oakland, CA
SAMPLED BY: Parsons Engineering Science
SAMPLE ID: MW 9

PROJECT NO: 727211-08934
MATRIX: WATER
DATE SAMPLED: 07/06/95 11:45:0
DATE RECEIVED: 07/08/95

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	96		
4-Bromofluorobenzene	83		
METHOD 8020***			
Analyzed by: SLB			
Date: 07/11/95			
Petroleum Hydrocarbons - Gasoline	ND	0.1 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	74		
4-Bromofluorobenzene	95		
Modified 8015 - Gasoline			
Analyzed by: SLB			
Date: 07/11/95			
Total Petroleum Hydrocarbons-Diesel	ND	0.1 P	mg/L

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, 17th 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

K Sullivan
SPL, Inc., - Project Manager

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

Certificate of Analysis No. H9-9507216-04

Engineering Science, Inc.
290 Elwood Davis Rd
Liverpool, NY 13088
ATTN: Martin Miller

DATE: 07/26/9

PROJECT: Greyhound
SITE: Oakland, CA
SAMPLED BY: Parsons Engineering Science
SAMPLE ID: MW 9

PROJECT NO: 727211-08934
MATRIX: WATER
DATE SAMPLED: 07/06/95 11:45:0(
DATE RECEIVED: 07/08/95

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
Surrogate	**% Recovery**		
o-Terphenyl	33		
2-Fluorobiphenyl	64		
Mod. 8015 - Diesel			
Analyzed by: SEG			
Date: 07/14/95 12:24:00			
Liquid-liquid extraction	07/10/95		
METHOD 3510 ***			
Analyzed by: BV			
Date: 07/10/95 14:00:00			

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 17th 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

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

Certificate of Analysis No. H9-9507216-05

Engineering Science, Inc.
290 Elwood Davis Rd
Liverpool, NY 13088
ATTN: Martin Miller

DATE: 07/26/95

PROJECT: Greyhound
SITE: Oakland, CA
SAMPLED BY: Parsons Engineering Science
SAMPLE ID: MW 10

PROJECT NO: 727211-08934
MATRIX: WATER
DATE SAMPLED: 07/06/95 12:50:00
DATE RECEIVED: 07/08/95

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	98		
4-Bromofluorobenzene	84		
METHOD 8020***			
Analyzed by: SLB			
Date: 07/11/95			
Petroleum Hydrocarbons - Gasoline	ND	0.1 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	72		
4-Bromofluorobenzene	89		
Modified 8015 - Gasoline			
Analyzed by: SLB			
Date: 07/11/95			
Total Petroleum Hydrocarbons-Diesel	ND	0.1 P	mg/L

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, 17th 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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8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9507216-05

Engineering Science, Inc.
290 Elwood Davis Rd
Liverpool, NY 13088
ATTN: Martin Miller

DATE: 07/26/95

PROJECT: Greyhound
SITE: Oakland, CA
SAMPLED BY: Parsons Engineering Science
SAMPLE ID: MW 10

PROJECT NO: 727211-08934
MATRIX: WATER
DATE SAMPLED: 07/06/95 12:50:00
DATE RECEIVED: 07/08/95

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
Surrogate	**% Recovery**		
o-Terphenyl	86		
2-Fluorobiphenyl	84		
Mod. 8015 - Diesel			
Analyzed by: SEG			
Date: 07/14/95 12:59:00			
Liquid-liquid extraction	07/10/95		
METHOD 3510 ***			
Analyzed by: BV			
Date: 07/10/95 14:00:00			

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 17th 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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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9507216-09

Engineering Science, Inc.
290 Elwood Davis Rd
Liverpool, NY 13088
ATTN: Martin Miller

DATE: 07/26/95

PROJECT: Greyhound
SITE: Oakland, CA
SAMPLED BY: Parsons Engineering Science
SAMPLE ID: MW 11

PROJECT NO: 727211-08934
MATRIX: WATER
DATE SAMPLED: 07/06/95 16:35:00
DATE RECEIVED: 07/08/95

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	93		
4-Bromofluorobenzene	85		
METHOD 8020***			
Analyzed by: SLB			
Date: 07/12/95			
Petroleum Hydrocarbons - Gasoline	ND	0.1 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	72		
4-Bromofluorobenzene	88		
Modified 8015 - Gasoline			
Analyzed by: SLB			
Date: 07/12/95			
Total Petroleum Hydrocarbons-Diesel	ND	0.1 P	mg/L

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, 17th 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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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9507216-09

Engineering Science, Inc.
290 Elwood Davis Rd
Liverpool, NY 13088
ATTN: Martin Miller

DATE: 07/26/9

PROJECT: Greyhound
SITE: Oakland, CA
SAMPLED BY: Parsons Engineering Science
SAMPLE ID: MW 11

PROJECT NO: 727211-08934
MATRIX: WATER
DATE SAMPLED: 07/06/95 16:35:0
DATE RECEIVED: 07/08/95

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNIT
Surrogate	**% Recovery**		
o-Terphenyl	89		
2-Fluorobiphenyl	68		
Mod. 8015 - Diesel			
Analyzed by: SEG			
Date: 07/14/95 17:17:00			
Liquid-liquid extraction	07/10/95		
METHOD 3510 ***			
Analyzed by: BV			
Date: 07/10/95 14:00:00			

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 17th 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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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9507216-07

Engineering Science, Inc.
290 Elwood Davis Rd
Liverpool, NY 13088
ATTN: Martin Miller

DATE: 07/26/9

PROJECT: Greyhound
SITE: Oakland, CA
SAMPLED BY: Parsons Engineering Science
SAMPLE ID: BC 2

PROJECT NO: 727211-08934
MATRIX: WATER
DATE SAMPLED: 07/06/95 15:35:0
DATE RECEIVED: 07/08/95

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNIT
BENZENE	ND	0.3 P	µg/
TOLUENE	ND	0.3 P	µg/
ETHYLBENZENE	ND	0.3 P	µg/
TOTAL XYLENE	ND	0.6 P	µg/
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		µg/
Surrogate	**% Recovery**		
1,4-Difluorobenzene	96		
4-Bromofluorobenzene	94		
METHOD 8020***			
Analyzed by: SLB			
Date: 07/12/95			
Petroleum Hydrocarbons - Gasoline	ND	0.1 P	mg/
Surrogate	**% Recovery**		
1,4-Difluorobenzene	73		
4-Bromofluorobenzene	85		
Modified 8015 - Gasoline			
Analyzed by: SLB			
Date: 07/12/95			
Total Petroleum Hydrocarbons-Diesel	0.29	0.1 P	mg/L

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, 17th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

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

Certificate of Analysis No. H9-9507216-07

Engineering Science, Inc.
290 Elwood Davis Rd
Liverpool, NY 13088
ATTN: Martin Miller

DATE: 07/26/95

PROJECT: Greyhound
SITE: Oakland, CA
SAMPLED BY: Parsons Engineering Science
SAMPLE ID: BC 2

PROJECT NO: 727211-08934
MATRIX: WATER
DATE SAMPLED: 07/06/95 15:35:00
DATE RECEIVED: 07/08/95

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
Surrogate	**% Recovery**		
o-Terphenyl	CI		
2-Fluorobiphenyl	49		
Mod. 8015 - Diesel			
Analyzed by: SEG			
Date: 07/14/95 13:33:00			
Liquid-liquid extraction	07/10/95		
METHOD 3510 ***			
Analyzed by: BV			
Date: 07/10/95 14:00:00			

CI - Coeluting interference.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 17th 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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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9507216-08

Engineering Science, Inc.
290 Elwood Davis Rd
Liverpool, NY 13088
ATTN: Martin Miller

DATE: 07/26/95

PROJECT: Greyhound
SITE: Oakland, CA
SAMPLED BY: Parsons Engineering Science
SAMPLE ID: BC 3

PROJECT NO: 727211-08934
MATRIX: WATER
DATE SAMPLED: 07/06/95 15:45:00
DATE RECEIVED: 07/08/95

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	94		
4-Bromofluorobenzene	91		
METHOD 8020***			
Analyzed by: SLB			
Date: 07/12/95			
Petroleum Hydrocarbons - Gasoline	ND	0.1 P	mg/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	71		
4-Bromofluorobenzene	80		
Modified 8015 - Gasoline			
Analyzed by: SLB			
Date: 07/12/95			
Total Petroleum Hydrocarbons-Diesel	0.38	0.1 P	mg/L

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, 17th 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

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

Certificate of Analysis No. H9-9507216-08

Engineering Science, Inc.
290 Elwood Davis Rd
Liverpool, NY 13088
ATTN: Martin Miller

DATE: 07/26/9

PROJECT: Greyhound
SITE: Oakland, CA
SAMPLED BY: Parsons Engineering Science
SAMPLE ID: BC 3

PROJECT NO: 727211-08934
MATRIX: WATER
DATE SAMPLED: 07/06/95 15:45:0
DATE RECEIVED: 07/08/95

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNIT
Surrogate	**% Recovery**		
o-Terphenyl	CI		
2-Fluorobiphenyl	32		
Mod. 8015 - Diesel			
Analyzed by: SEG			
Date: 07/14/95 16:42:00			
Liquid-liquid extraction	07/10/95		
METHOD 3510 ***			
Analyzed by: BV			
Date: 07/10/95 14:00:00			

CI - Coeluting interference.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 17th 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

QUALITY CONTROL

DOCUMENTATION

** SPL BATCH QUALITY CONTROL REPORT **

METHOD 8020

Matrix: Aqueous

Units: µg/L

Batch Id: HP_R950710203700

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Benzene	ND	50	43	86.0	61 - 123
Toluene	ND	150	130	86.7	62 - 122
EthylBenzene	ND	50	43	86.0	56 - 119
O Xylene	ND	100	91	91.0	32 - 160
M & P Xylene	ND	200	190	95.0	32 - 160

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
Benzene	ND	50	62	124	62	124	0	25	39 - 150
Toluene	ND	150	180	120	180	120	0	26	56 - 134
EthylBenzene	ND	50	63	126	63	126	0	38	61 - 128
O Xylene	ND	100	130	130	130	130	0	20	40 - 130
M & P Xylene	ND	100	140	140	140	140	0	20	43 - 152

Analyst: SLB

Sequence Date: 07/10/95

SPL ID of sample spiked: 9507253-01A

Sample File ID: R___361.TX0

Method Blank File ID:

Blank Spike File ID: R___356.TX0

Matrix Spike File ID: R___359.TX0

Matrix Spike Duplicate File ID: R___360.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-Houston Historical Data

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

SAMPLES IN BATCH(SPL ID):

9507126-02A	9507216-02A	9507216-01A	9507211-08A
9507211-07A	9507211-06A	9507211-05A	9507211-04A
9507211-02A	9507221-13A	9507126-06A	9507126-03A
9507126-04A	9507126-08A	9507126-05A	9507126-07A
9507256-01A	9507285-01A	9507254-01A	9507253-01A

Cynthia Schreiner, QC Officer

** SPL BATCH QUALITY CONTROL REPORT **

Modified 8015 - Gasoline

Matrix: Aqueous

Units: mg/L

Batch Id: HP_R950710210801

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Petroleum Hydrocarbons	ND	1.0	0.69	69.0	56 - 139

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
Petroleum Hydrocarbons	ND	0.9	0.98	109	0.94	104	4.69	18	40 - 158

Analyst: SLB

Sequence Date: 07/10/95

SPL ID of sample spiked: 9507253-01A

Sample File ID: RR__361.TX0

Method Blank File ID:

Blank Spike File ID: RR__356.TX0

Matrix Spike File ID: RR__359.TX0

Matrix Spike Duplicate File ID: RR__360.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-Houston Historical Data

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

SAMPLES IN BATCH(SPL ID):

9507216-02A 9507216-01A 9507211-08A 9507211-07A
9507211-06A 9507211-05A 9507211-04A 9507211-02A
9507126-06A 9507126-03A 9507126-04A 9507126-08A
9507126-05A 9507126-07A 9507253-01A

Cynthia Schreiner, QC Officer

METHOD 8020

Matrix: Aqueous
Units: µg/L

Batch Id: HP_R950711203700

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Benzene	ND	50	39	78.0	61 - 123
Toluene	ND	150	120	80.0	62 - 122
EthylBenzene	ND	50	41	82.0	56 - 119
O Xylene	ND	100	85	85.0	32 - 160
M & P Xylene	ND	200	180	90.0	32 - 160

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
Benzene	ND	50	54	108	54	108	0	25	39 - 150
Toluene	ND	150	160	107	150	100	6.76	26	56 - 134
EthylBenzene	ND	50	54	108	53	106	1.87	38	61 - 128
O Xylene	ND	100	110	110	110	110	0	20	40 - 130
M & P Xylene	ND	100	120	120	120	120	0	20	43 - 152

Analyst: SLB
Sequence Date: 07/11/95
SPL ID of sample spiked: 9507216-03A
Sample File ID: R___390.TX0
Method Blank File ID:
Blank Spike File ID: R___385.TX0
Matrix Spike File ID: R___388.TX0
Matrix Spike Duplicate File ID: R___389.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-Houston Historical Data
(***) = Source: SPL-Houston Historical Data

SAMPLES IN BATCH(SPL ID):

9507244-04A 9507211-12A 9507211-11A 9507211-10A
9507211-09A 9507211-03A 9507216-10A 9507216-09A
9507216-08A 9507216-07A 9507216-06A 9507216-05A
9507216-04A 9507216-03A

Cynthia Schreiner, QC Officer

Modified 8015 - Gasoline

Matrix: Aqueous
Units: mg/L

Batch Id: HP_R950711203701

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Petroleum Hydrocarbons	ND	1.0	0.75	75.0	56 - 139

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
Petroleum Hydrocarbons	ND	0.9	0.81	90.0	0.73	81.1	10.4	18	40 - 158

Analyst: SLB
Sequence Date: 07/11/95
SPL ID of sample spiked: 9507216-03A
Sample File ID: RR__390.TX0
Method Blank File ID:
Blank Spike File ID: RR__385.TX0
Matrix Spike File ID: RR__388.TX0
Matrix Spike Duplicate File ID: RR__389.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-Houston Historical Data
(***) = Source: SPL-Houston Historical Data

SAMPLES IN BATCH(SPL ID):

9507211-12A 9507211-11A 9507211-10A 9507211-09A
9507211-03A 9507216-10A 9507216-09A 9507216-08A
9507216-07A 9507216-06A 9507216-05A 9507216-04A
9507216-03A

Cynthia Schreiner

Cynthia Schreiner, QC Officer

** SPL BATCH QUALITY CONTROL REPORT **

Mod. 8015 - Diesel

Matrix: Aqueous

Units: mg/L

Batch Id: HP_T950714015200

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Petroleum Hydrocarbons-Die	ND	5.0	3.87	77.4	20 - 130

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
Petroleum Hydrocarbons-Die	0.45	5.0	4.26	76.2	3.46	60.2	23.5	43	20 - 177

Analyst: SEG

Sequence Date: 07/14/95

SPL ID of sample spiked: 9507232-01B

Sample File ID: TT__843.TX0

Method Blank File ID:

Blank Spike File ID: T___475.TX0

Matrix Spike File ID: TT__755.TX0

Matrix Spike Duplicate File ID: TT__756.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-Houston Historical Data

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

SAMPLES IN BATCH(SPL ID):

9507211-02B 9507211-01B 9507216-10B 9507216-09B
9507216-08B 9507216-07B 9507216-05B 9507216-04B
9507216-03B 9507216-02B 9507211-12B 9507211-11B
9507211-10B 9507211-09B 9507211-08B 9507211-07B
9507211-06B 9507211-05B 9507211-04B 9507211-03B

Cynthia Schreiner, QC Officer

** SPL BATCH QUALITY CONTROL REPORT ** PAGE

Mod. 8015 - Diesel

Matrix: Aqueous

Units: mg/L

Batch Id: HP_T950710040700

BLANK SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits (**) (Advisory) RPD Max.	QC Limits (**) (Advisory) Recovery Range
Petroleum Hydrocarbons-Die	ND	5.0	3.80	75.2	4.36	86.4	13.9	43	20 - 130

Analyst: SEG

Sequence Date: 07/02/95

Method Blank File ID:

Sample File ID:

Blank Spike File ID: TT__431.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): 9507084-01B 9507216-01B 9507084-03B 9507084-02B

Cynthia Schreiner, QC Officer

Matrix: Aqueous
Sample ID: 950708CXLCS
Batch ID: HP_T950710040700

Reported on: 07/25/95 13:13:41
Analyzed on:
Analyst: SEG

LABORATORY CONTROL SAMPLE

Petroleum Hydrocarbons-Diesel (Water)
Mod. 8015 - Diesel

COMPOUND	Measured Concentration mg/L	Theoretical Concentration mg/L	Percent Recovery
Petroleum Hydrocarbons-Die	4.18	5.00	84

Samples in Batch 9507084-01B 9507216-01B 9507084-03B 9507084-02B

Cynthia Schreiner

Cynthia Schreiner, QC Officer

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

9507214

Page 1 of 1

Environmental Laboratory
8880 Interchange Drive
Houston, Texas 77054
713/660-0901

Analysis Request and Chain of Custody Record

Project No.	Client/Project Name	Project Location
727211.08454	Kinder Morgan Oakland	Oakland (Parsons ES)

Field Sample No./ Identification	Date and Time	Grab	Comp	Sample Container (Size/Mat'l)	Sample Type (Liquid, Sludge, Etc.)	Preservative	ANALYSIS REQUESTED	LABORATORY REMARKS
MW 6	7/5/95 1610			10 - 3 VOA	H_2O	HCl	TPH d / TPH g / BTEX	
7	7/6/95 0945							
8	1040							
9	1145							
10	1250							
3	1440							
BC 2	1535	X						Liquid sample 3 liter - not full!
BC 3	1545	X						
MW 11	1635							
MW 4	1730							

Samplers: (Signature)	Relinquished by: (Signature)	Date: 7/6/95 Time: 1800	Received by: (Signature) (FedEx)	Date: Time:	Intact
(Acted)					
Affiliation	Relinquished by: (Signature)	Date: Time:	Received by: (Signature)	Date: Time:	Intact
	Relinquished by: (Signature)	Date: Time:	Received by: (Signature)	Date: Time:	Intact 2°C
SAMPLER REMARKS: watch for small parasites			Received for laboratory: (Signature)	Date: 7/6/95 Time: 1000	Laboratory No.
Seal #			Data Results to:		

SPL HOUSTON ENVIRONMENTAL LABORATORY

SAMPLE LOGIN CHECKLIST

DATE: 7/8/95 TIME: 1000 CLIENT NO. _____
LOT NO. _____ CONTRACT NO. _____

CLIENT SAMPLE NOS. _____

SPL SAMPLE NOS.: 9507210

		YES	NO
1.	Is a Chain-of-Custody form present?	✓	
2.	Is the COC properly completed?	✓	
	If no, describe what is incomplete:		
	If no, has the client been contacted about it? (Attach subsequent documentation from client about the situation)		
3.	Is airbill/packing list/bill of lading with shipment? If yes, ID#: Fed Ex	✓	
4.	Is a USEPA Traffic Report present?		✓
5.	Is a USEPA SAS Packing List present?		✓
6.	Are custody seals present on the package?	✓	
	If yes, were they intact upon receipt?	✓	
7.	Are all samples tagged or labeled?	✓	
	Do the sample tags/labels match the COC?	✓	
	If no, has the client been contacted about it? (Attach subsequent documentation from client about the situation)		
8.	Do all shipping documents agree?	✓	
	If no, describe what is in nonconformity:		

9. Condition/temperature of shipping container: 2°C intact good
10. Condition/temperature of sample bottles: 2°C intact good
11. Sample Disposal?: SPL disposal ✓ Return to client _____

NOTES (reference item number if applicable): _____

ATTEST: R Dinkard DATE: 7/8/95
DELIVERED FOR RESOLUTION: REC'D _____ DATE: _____
RESOLVED: _____ DATE: _____

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

SPL, INC.

REPORT APPROVAL SHEET

WORK ORDER NUMBER: 95 - 07 - 375

Approved for release by:

M. Scott Sample Date: 7/26/95

M. Scott Sample, Laboratory Director

Karen Satterfield Date: 7/26/95

Karen Satterfield, Project Manager

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

Certificate of Analysis No. H9-9507375-01

Engineering Science, Inc.
290 Elwood Davis Rd
Liverpool, NY 13088
ATTN: Martin Miller

DATE: 07/26/9

PROJECT: Parson ES
SITE: Greyhound Oakland
SAMPLED BY: Parson ES
SAMPLE ID: MW-3A

PROJECT NO: 727211.08934
MATRIX: WATER
DATE SAMPLED: 07/12/95 10:35:0
DATE RECEIVED: 07/13/95

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNIT
BENZENE	2	0.3 P	µg/I
TOLUENE	ND	0.3 P	µg/I
ETHYLBENZENE	2	0.3 P	µg/I
TOTAL XYLENE	ND	0.6 P	µg/I
TOTAL VOLATILE AROMATIC HYDROCARBONS	4		µg/I
Surrogate	**% Recovery**		
1,4-Difluorobenzene	103		
4-Bromofluorobenzene	105		
METHOD 8020***			
Analyzed by: SLB			
Date: 07/16/95			
Petroleum Hydrocarbons - Gasoline	ND	0.1 P	mg/I
Surrogate	**% Recovery**		
1,4-Difluorobenzene	81		
4-Bromofluorobenzene	102		
Modified 8015 - Gasoline			
Analyzed by: SLB			
Date: 07/16/95			
Total Petroleum Hydrocarbons-Diesel	1.2	0.1 P	mg/I
Surrogate	**% Recovery**		
o-Terphenyl	CI		

(P) - Practical Quantitation Limit 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, 17th 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
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9507375-01

Engineering Science, Inc.
290 Elwood Davis Rd
Liverpool, NY 13088
ATTN: Martin Miller

DATE: 07/26/9

PROJECT: Parson ES
SITE: Greyhound Oakland
SAMPLED BY: Parson ES
SAMPLE ID: MW-3A

PROJECT NO: 727211.08934
MATRIX: WATER
DATE SAMPLED: 07/12/95 10:35:0
DATE RECEIVED: 07/13/95

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNIT
2-Fluorobiphenyl	CI		
Mod. 8015 - Diesel			
Analyzed by: SEG			
Date: 07/17/95 18:21:00			
Liquid-liquid extraction	07/14/95		
METHOD 3510 ***			
Analyzed by: DB			
Date: 07/14/95 17:00:00			

CI - Coeluting interference.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 17th 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

QUALITY CONTROL

DOCUMENTATION

METHOD 8020

Matrix: Aqueous
Units: µg/L

Batch Id: HP_R950716161700

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Benzene	ND	50	46	92.0	61 - 123
Toluene	ND	150	140	93.3	62 - 122
EthylBenzene	ND	50	48	96.0	56 - 119
O Xylene	ND	100	100	100	32 - 160
M & P Xylene	ND	200	210	105	32 - 160

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
Benzene	16	50	76	120	75	118	1.68	25	39 - 150
Toluene	ND	150	180	120	180	120	0	26	56 - 134
EthylBenzene	11	50	70	118	70	118	0	38	61 - 128
O Xylene	ND	100	130	130	130	130	0	20	40 - 130
M & P Xylene	4	100	140	136	140	136	0	20	43 - 152

Analyst: SLB
Sequence Date: 07/16/95
SPL ID of sample spiked: 9507420-04A
Sample File ID: R___566.TX0
Method Blank File ID:
Blank Spike File ID: R___561.TX0
Matrix Spike File ID: R___564.TX0
Matrix Spike Duplicate File ID: R___565.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-Houston Historical Data
(***) = Source: SPL-Houston Historical Data

SAMPLES IN BATCH(SPL ID):

9507413-01A 9507412-05A 9507412-04A 9507412-03A
9507412-02A 9507412-01A 9507411-01A 9507376-17A
9507376-16A 9507376-07A 9507464-01A 9507445-04A
9507420-03A 9507420-01A 9507375-01A 9507385-02A
9507420-04A

Cynthia Schreiner, QC Officer

Mod. 8015 - Diesel

Matrix: Aqueous
Units: mg/L

Batch Id: HP_T950717160210

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Petroleum Hydrocarbons-Die	ND	5.0	4.54	90.8	20 - 130

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
Petroleum Hydrocarbons-Die	ND	5.0	3.87	76.2	3.57	70.2	8.20	43	20 - 177

Analyst: SEG
Sequence Date: 07/17/95
SPL ID of sample spiked: 9507232-03B
Sample File ID: TT__754.TX0
Method Blank File ID:
Blank Spike File ID: T___554.TX0
Matrix Spike File ID: TT__759.TX0
Matrix Spike Duplicate File ID: TT__760.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-Houston Historical Data
(***) = Source: SPL-Houston Historical Data

SAMPLES IN BATCH(SPL ID): 9507375-01B

Cynthia Schreiner, QC Officer

Modified 8015 - Gasoline

Matrix: Aqueous
Units: mg/L

Batch Id: HP_R950716161701

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Petroleum Hydrocarbons	ND	1.0	0.99	99.0	56 - 139

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
Petroleum Hydrocarbons	1.2	0.9	2.1	100	2.2	111	10.4	18	40 - 158

Analyst: SLB
Sequence Date: 07/16/95
SPL ID of sample spiked: 9507420-04A
Sample File ID: RR__566.TX0
Method Blank File ID:
Blank Spike File ID: RR__561.TX0
Matrix Spike File ID: RR__564.TX0
Matrix Spike Duplicate File ID: RR__565.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-Houston Historical Data
(***) = Source: SPL-Houston Historical Data

SAMPLES IN BATCH(SPL ID): 9507413-01A 9507376-17A 9507376-16A 9507376-07A 9507375-01A 9507420-04A

Cynthia Schreiner, QC Officer

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

T4/65 9507375 Page 1 of 1

Environmental Laboratory
8880 Interchange Drive
Houston, Texas 77054
713/660-0901

Analysis Request and Chain of Custody Record

Project No.	Client/Project Name	Project Location
727211.08934	Parsons ES	Greyhound Oakland

Field Sample No./ Identification	Date and Time	Grab	Comp	Sample Container (Size/Mat'l)	Sample Type (Liquid, Sludge, Etc.)	Preservative	ANALYSIS REQUESTED	LABORATORY REMARKS
MW-3A	7/12/95 1035			1 2 Amber 3 VOAs	H_2O	HCl	TPHg/BTEX TPHd	(TPHd not preserved)

Samplers: (Signature)	Relinquished by: (Signature)	Date: 7/12/95 Time: 1600	Received by: (Signature) FedEx	Date: Time:	Intact
Affiliation	Relinquished by: (Signature)	Date: Time:	Received by: (Signature)	Date: Time:	Intact
	Relinquished by: (Signature)	Date: Time:	Received by: (Signature)	Date: Time:	Intact
SAMPLER REMARKS: Replacement sample for MW-3 (7/6/95)			Received for Laboratory: (Signature)	Date: 7/13/95 Time: 10:30	Laboratory No.
Seal #			Data Results to:		