

12/16/94 0.3



November 3, 1994
File: 10-1682-03/38

ALCO
HAZMAT

94 NOV -9 PM 2:35

① Ask Sun who is lead agency for oversight -
then review rest of file
Response lead!

Mr. Dennis Hunt
District Manager
Industrial Asphalt
P.O. Box 636
Pleasanton, CA 94566

**SUBJECT: Semi-Annual Groundwater Monitoring Report, May and August, 1994
Sampling Events, Industrial Asphalt, Pleasanton, California**

Dear Mr. Hunt:

Kleinfelder, Inc., is pleased to submit this semi-annual report for the May and August, 1994 sampling events for the Industrial Asphalt site in Pleasanton, California (Plate 1). Quarterly sampling activities were requested by the Alameda County Department of Health Services (ACDHS) in their letter to you dated November 13, 1989. Mr. Sun Arigala of the RWQCB has verbally authorized the results of the quarterly groundwater monitoring program to be submitted on a semi-annual basis, and we are currently requesting such authorization from Alameda County. Assuming approval is given, future reports will be submitted on this schedule.

INTRODUCTION

Thirteen monitoring wells and eleven extraction wells are present onsite. Data collected from the monitoring wells have been used to evaluate the nature and extent of the plume and the groundwater gradient beneath the site. The locations of the monitoring and extraction wells are shown on Plate 2. All accessible monitoring wells are monitored for depth to water and product thickness on a quarterly basis in accordance with recommendations in the Remedial Investigation Report dated December 28, 1990. Collected ground water samples have been analyzed for the target compounds including total petroleum hydrocarbons (TPH) as diesel (TPH[d]) and oil (TPH[o]) and polychlorinated biphenyls (PCBs). Additionally, as requested by the ACDHS in their letter to your firm dated February 21, 1991, water samples are also analyzed for Total Oil and Grease (TOG) and Total Hydrocarbons (TH).

FIELD ACTIVITIES

Water samples were collected between May 17 and May 24, and between August 23 and August 26, 1994 from all but one of the thirteen onsite ground water monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-10, MW-14, MW-15, and MW-16). Monitoring well MW-9 was not accessible during either sampling round and was not sampled. Duplicate samples were collected from monitoring wells MW-7 and MW-8 during the May event, and from monitoring wells MW-2 and MW-8 during the August event. In addition to the onsite monitoring wells, an offsite water supply well located on the Jamieson property was sampled via a hose tap. Refer to Plate 2 for the location of all wells and the offsite well.

Ground Water Level Measurements

Ground water surface elevation data were collected from sampled wells on May 16 and August 23, 1994 prior to each well sampling event (Plate 3 and 4). These measurements are provided in Table 1. In General, the ground water surface elevation at the site dropped an average of nearly 3.0 feet between February and May, 1994, and then rose approximately 3.5 feet between May and August.

A review of historical ground water level data collected from the site suggests that an annual variation in ground water flow pattern exists at the site, with winter and spring flow generally towards the west and northwest (away from Arroyo Mocho) and summer and fall flow generally towards the northeast (towards Arroyo Mocho). This pattern, however, is not reflected in the data collected during these two measurement events, particularly that of August. The August measurements reflect a flow direction clearly to the west, very possibly as a result of ground water extraction that was initiated at the site in July. Site extraction wells will be added to future water level measurement activities to assess changes to ground water flow resulting from extraction.

Ground Water Chemistry Monitoring Results

Groundwater samples collected from the site were analyzed by American Environmental Network (AEN) laboratories (formerly Quanteq Laboratories), a State-certified analytical laboratory. The samples were analyzed for TPH(d) and TPH(o) using a modified EPA Test Method 8015 (extraction), for TOG using standard method (SM) 5520C, for TH using SM-5520F, and for PCBs using EPA Test Method 8080. Analytical data are summarized on Table 2. Complete analytical laboratory reports for the May and August sampling events, along with chain of custody records, are included in Appendices A and B, respectively.

A summary of sampling results for the May and August sampling events is as follows:

- A sheen and/or hydrocarbon-like odors were reported for three of the thirteen wells sampled during both sampling rounds (MW-1, MW-2, and MW-3.).
- Detectable concentrations of PCBs were found in one of the tested wells sampled during the May round (MW-1) at a concentration of 0.7 µg/L. PCBs were last detected in a sample collected from this well in August 1993 at a concentration of 1 µg/L. Analyses made on the August 1994 samples yielded no detectable concentrations of PCBs.
- Concentrations of both TPH(d) and TPH(o) were detected in the samples collected from seven of the thirteen sampled wells in May (MW-1, MW-2, MW-3, MW-8, MW-10, MW-15, and MW-16), with the highest concentrations reported from MW-1 (3.2 mg/l TPH(d); 2.6 mg/l TPH(o)). In addition, TPH(o) only was detected in samples collected from three of the sampled wells (MW-4, MW-6, and MW-7), at concentrations ranging from 0.3 to 1 mg/L. Three sampled locations (MW-5, MW-14, and the Jamieson production well 14A2 (sampled from a tap) did not contain either TPH(d) or TPH(o)).
- Concentrations of TPH(d) were detected in the samples collected from four of the thirteen sampled wells in August (MW-1, MW-2, MW-3, and MW-8), with the highest concentrations reported from MW-1 (3.2 mg/L). TPH(o) was detected in one of the thirteen wells (MW-1) at a concentration of 2.6 mg/L.

- Detectable concentrations of both TOG and TH were reported for samples collected from five of the thirteen tested wells (MW-1, MW-2, MW-3, MW-4, and MW-10) during the May 1994 sampling round, and from one of the thirteen wells during the August event (MW-1). TOG only was reported for samples collected from two wells during the May event (MW-7 and MW-8), and from one well (MW-2) during the August event.
- Duplicate samples were collected from wells MW-7 and MW-8 in May, and from wells MW-2 and MW-8 in August. Analytical results for these samples appeared to be in fair agreement with one another indicating acceptable levels of field and laboratory precision during both sampling events.

RECOMMENDED RI ACTIVITIES

The following recommendations are made based on this and previous sampling events:

- Oil and grease, TPH(d), TPH(o), total hydrocarbons, and PCBs have occasionally been found in water samples obtained from some of the onsite monitoring wells. It is recommended that ground water samples continue to be analyzed for these same compounds, allowing for an assessment of possible changes in concentrations of these compounds found in selected water samples.
- We recommend that the 11 ground water extraction wells be added to the quarterly water level measurement program.
- As indicated in the introductory statements made in this report, we hope to obtain authorization from Alameda County to report on quarterly sampling events on a semi-annual basis. Inasmuch as Industrial Asphalt has acted proactively to address contamination problems beneath the site, and considering that a significant database has been developed to assess variations in ground water chemistry, we see no reason to submit sampling documentation on a quarterly basis.

OTHER ACTIVITIES

Industrial Asphalt's ground water treatment system commenced operation in mid-July and has been running successfully since that time. Treatment system monitoring and maintenance activities are reported separate from this report in accordance with the site waste discharge requirements.

LIMITATIONS

This report was prepared in general accordance with the accepted standard of practice which exists in Northern California at the time the investigation was performed. It should be recognized that definition and evaluation of environmental conditions is a difficult and inexact art. Judgements leading to conclusions and recommendations are generally made with an incomplete knowledge of the conditions present. More extensive studies, including additional environmental investigations, can tend to reduce the inherent uncertainties associated with such studies. If the Client wishes to reduce the uncertainty beyond the level associated with this study, Kleinfelder should be notified for additional consultation.

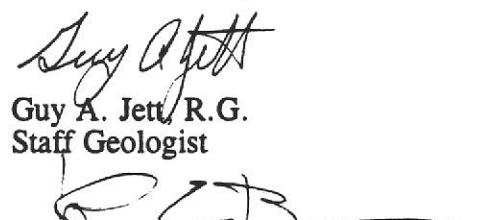
Our firm has prepared this report for the Client's exclusive use for this particular project and in accordance with generally accepted engineering practices within the area at the time of our investigation. No other representations, expressed or implied, and no warranty or guarantee is included or intended.

This report may be used only by the client and only for the purposes stated, within a reasonable time from its issuance. Land use, site conditions (both onsite and offsite) or other factors may change over time, and additional work may be required with the passage of time. Any party other than the client who wishes to use this report shall notify Kleinfelder of such intended use. Based on the intended use of the report, Kleinfelder may require that additional work be performed and that an updated report be issued. Non-compliance with any of these requirements by the client or anyone else will release Kleinfelder from any liability resulting from the use of this report by any unauthorized party.

If you have any questions regarding this report or require additional information, please contact the undersigned.

Sincerely,

KLEINFELDER, INC.


Guy A. Jett, R.G.
Staff Geologist


John E. Romie, R.G.
Senior Project Manager

cc: Dwight Beavers - Industrial Asphalt
Eva Chu - Alameda County Department of Environmental Services
Mr. Sun Arigala - California Regional Water Quality Control Board
Jerry Killingstad - Alameda County Flood Control and Water Conservation District,
Zone 7

TABLE 1
SUMMARY OF GROUND WATER ELEVATIONS
INDUSTRIAL ASPHALT

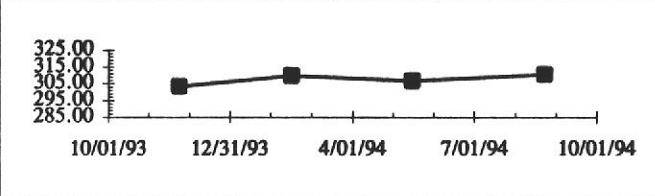
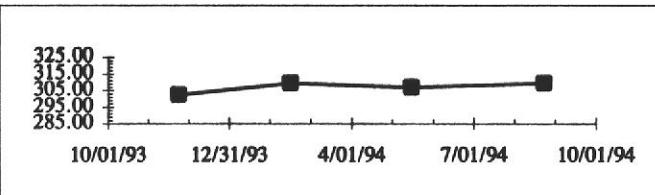
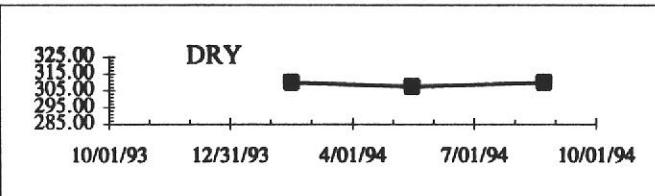
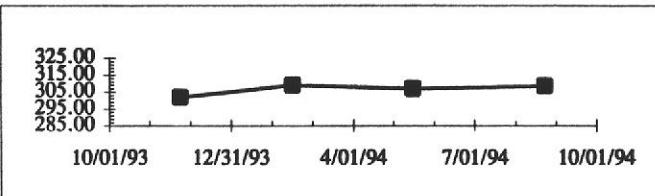
Well Number	Date	Total Well Depth	Survey Elevation	Product Thickness	Depth to Water	Elevation	Trend
		(ft)	(ft, MSL)	(ft)	(ft)	(ft, MSL)	
MW-1	11/23/93	88	379.41	SHEEN	76.11	303.30	
	2/15/94			SHEEN	69.58	309.83	
	5/16/94			SHEEN	72.72	306.69	
	8/23/94			SHEEN	68.82	310.59	
MW-2	11/23/93	90	379.80	SHEEN	77.46	302.34	
	2/15/94			SHEEN	70.39	309.41	
	5/16/94			SHEEN	72.91	306.89	
	8/23/94			SHEEN	70.49	309.31	
MW-3	11/23/93	90	378.54	NA	DRY		
	2/15/94			SHEEN	68.75	309.79	
	5/16/94			SHEEN	71.26	307.28	
	8/23/94			SHEEN	68.82	309.72	
MW-4	11/23/93	95	376.26	NE	74.48	301.78	
	2/15/94			NE	67.18	309.08	
	5/16/94			NE	69.26	307.00	
	8/23/94			NE	67.76	308.50	

TABLE 1
SUMMARY OF GROUND WATER ELEVATIONS
INDUSTRIAL ASPHALT

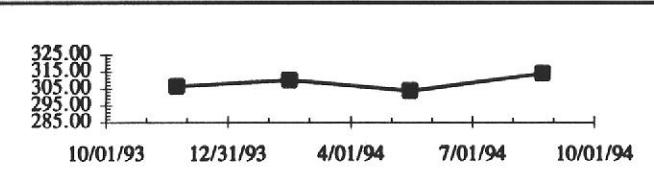
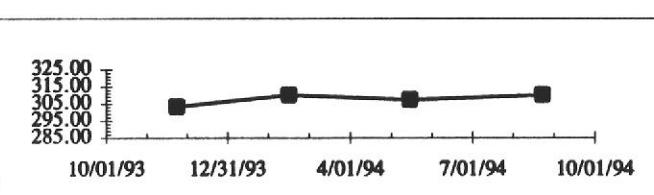
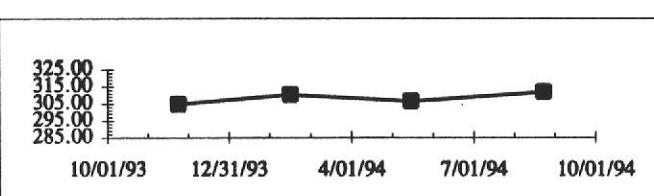
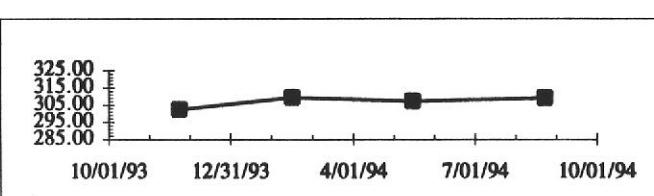
Well Number	Date	Total Well Depth (ft)	Survey Elevation (ft, MSL)	Product Thickness (ft)	Depth to Water (ft)	Elevation (ft, MSL)	Trend
MW-5	11/23/93	110	382.55	NE	76.26	306.29	
	2/15/94			NE	72.49	310.06	
	5/16/94			NE	79.04	303.51	
	8/23/94			NE	68.60	313.95	
MW-6	11/23/93	109	379.15	NE	75.88	303.27	
	2/15/94			NE	69.02	310.13	
	5/16/94			NE	71.74	307.41	
	8/23/94			NE	69.02	310.13	
MW-7	11/23/93	109	378.94	NE	74.17	304.77	
	2/15/94			NE	68.65	310.29	
	5/16/94			NE	72.52	306.42	
	8/23/94			NE	67.01	311.93	
MW-8	11/23/93	109	378.56	ODOR	76.31	302.25	
	2/15/94			ODOR	69.15	309.41	
	5/16/94			ODOR	71.48	307.08	
	8/23/94			ODOR	69.49	309.07	

TABLE 1
SUMMARY OF GROUND WATER ELEVATIONS
INDUSTRIAL ASPHALT

Well Number	Date	Total Well Depth	Survey Elevation	Product Thickness	Depth to Water	Elevation	Trend
		(ft)	(ft, MSL)	(ft)	(ft)	(ft, MSL)	
MW-9	11/23/93	108	377.40	NA	Burried		
	2/15/94			NA	Burried		
	5/16/94			NA	Flooded		
	8/23/94			NA	Burried		
MW-10	12/01/93	111	378.04	NE	74.00	304.04	
	2/15/94			NE	68.53	309.51	
	5/16/94			NE	70.76	307.28	
	8/23/94			NE	69.11	308.93	
MW-14	11/23/93	114.5	380.09	NE	77.65	302.44	
	2/15/94			NE	70.66	309.43	
	5/16/94			NE	73.15	306.94	
	8/23/94			NE	70.69	309.40	
MW-15	11/23/93	117	378.12	NE	75.04	303.08	
	2/15/94			NE	68.81	309.31	
	5/16/94			NE	72.01	306.11	
	8/23/94			NE	67.92	310.20	

TABLE 1
SUMMARY OF GROUND WATER ELEVATIONS
INDUSTRIAL ASPHALT

Well Number	Date	Total Well Depth	Survey Elevation	Product Thickness	Depth to Water	Elevation	Trend
		(ft)	(ft, MSL)	(ft)	(ft)	(ft, MSL)	
MW-16	11/23/93	110	379.65	NE	76.80	302.85	
	2/15/94			NE	69.74	309.91	
	5/16/94			NE	72.22	307.43	
	8/23/94			NE	69.99	309.66	
STAFF GAGE	11/23/93	NA	300.00	NE	-1.6	298.40	
	2/15/94			NE	Above Staff Gage		
	5/16/94			NE	2.4	302.40	
	8/23/94			NE	Above Staff Gage		

NOTES:

Survey elevations refer to Top of Casing, Mean Sea Level (USGS Datum)

Depth to Water in feet below Top of Casing

NA Not Applicable

NE Not Encountered

TABLE 2
MONITORING PARAMETERS
INDUSTRIAL ASPHALT

Well Number	Sample Date	TPH as Diesel ⁽¹⁾ (mg/L)	TPH as Oil ⁽¹⁾ (mg/L)	Oil & Grease ⁽²⁾ (mg/L)	Total Hydrocarbons ⁽³⁾ (mg/L)	PCBs ⁽⁴⁾ (µg/L)
MW-1	Aug. 1993	5.1	11	19	10	1
	Nov. 1993	190	110	28	20	ND
	Feb. 1994	1.0	1	1.6	0.9	ND
	May 1994	31	20	150	100	0.7
	Aug. 1994	3.2	2.6	0.8	0.6	ND
MW-2	Aug. 1993	0.9	0.2	0.7	ND	ND
	Nov. 1993	19	7.2	5.5	3	ND
	Feb. 1994	13	3.9	6.6	4.1	ND
	May 1994	13	7.0	6.1	4.8	ND
	Aug. 1994	0.65(0.64)	ND(ND)	0.8(0.8)	ND(ND)	ND(ND)
MW-3	Aug. 1993	0.4	ND	ND	ND	ND
	Nov. 1993	DRY	DRY	DRY	DRY	DRY
	Feb. 1994	23	15	43	25	0.7
	May 1994	6.0	3.6	6.4	5.6	ND
	Aug. 1994	0.1	ND	ND	ND	ND
MW-4	Aug. 1993	ND	ND	ND	ND	ND
	Nov. 1993	ND	0.5	0.6	ND	ND
	Feb. 1994	ND	ND	4	2	ND
	May 1994	ND	0.4	2	0.6	ND
	Aug. 1994	ND	ND	ND	ND	ND
MW-5	Aug. 1993	0.4	ND	ND	ND	ND
	Nov. 1993	0.4	ND	ND	ND	ND
	Feb. 1994	ND	ND	0.6	0.5	ND
	May 1994	ND	ND	ND	ND	ND
	Aug. 1994	ND	ND	ND	ND	ND
MW-6 ⁽⁸⁾	Aug. 1993	ND	ND	ND	ND	ND
	Nov. 1993	0.96(1.4)	ND(ND)	0.5(ND)	ND(ND)	ND(ND)
	Feb. 1994	0.07	ND	2	2	ND
	May 1994	ND	0.6	ND	ND	ND
	Aug. 1994	ND	ND	ND	ND	ND

Laboratory Detection Limit⁽⁵⁾
Drinking Water Standard⁽⁶⁾

0.05 0.2 0.5 0.5 0.5

— — — — —

TABLE 2
(continued)
MONITORING PARAMETERS
INDUSTRIAL ASPHALT

Well Number	Sample Date	TPH as Diesel ⁽¹⁾ (mg/L)	TPH as Oil ⁽¹⁾ (mg/L)	Oil & Grease ⁽²⁾ (mg/L)	Total Hydrocarbons ⁽³⁾ (mg/L)	PCBs ⁽⁴⁾ (µg/L)
MW-7 ⁽⁸⁾	Aug. 1993	0.6(0.5)	2(2)	ND(ND)	ND(ND)	ND(ND)
	Nov. 1993	3.2	0.9	ND	ND	ND
	Feb. 1994	ND	ND	0.6	ND	ND
	May 1994	ND(ND)	1(0.3)	ND(0.9)	ND(ND)	ND(ND)
	Aug. 1994	ND	ND	ND	ND	ND
MW-8 ⁽⁸⁾	Aug. 1993	0.8(0.8)	ND(ND)	ND(ND)	ND(ND)	ND(ND)
	Nov. 1993	0.3(0.2)	0.5(0.3)	0.6(0.5)	ND(ND)	ND(ND)
	Feb. 1994	1.4(0.99)	4.2(2.7)	4.8(4.3)	3.4(3.5)	ND(ND)
	May 1994	0.5(0.5)	0.9(1.0)	0.6(0.5)	ND(ND)	ND(ND)
	Aug. 1994	0.1(0.1)	ND(ND)	ND(ND)	ND(ND)	ND(ND)
MW-9	Aug. 1993	NT	NT	NT	NT	NT
	Nov. 1993	NT	NT	NT	NT	NT
	Feb. 1994	NT	NT	NT	NT	NT
	May 1994	NT	NT	NT	NT	NT
	Aug. 1994	NT	NT	NT	NT	NT
MW-10	Aug. 1993	0.8	0.3	ND	ND	ND
	Nov. 1993	ND	0.2	ND	ND	ND
	Feb. 1994	0.05(0.1)	0.2(0.4)	4(2)	4(2)	ND(ND)
	May 1994	1.8	2	2	0.7	ND
	Aug. 1994	ND	ND	ND	ND	ND
MW-14	Aug. 1993	ND	ND	ND	ND	ND
	Nov. 1993	0.6	ND	ND	ND	ND
	Feb. 1994	ND	ND	ND	ND	ND
	May 1994	ND	ND	ND	ND	ND
	Aug. 1994	ND	ND	ND	ND	ND
MW-15	Aug. 1993	0.8	ND	ND	ND	ND
	Nov. 1993	0.3	0.4	0.6	ND	ND
	Feb. 1994	0.4	ND	ND	ND	ND
	May 1994	0.4	0.4	ND	ND	ND
	Aug. 1994	ND	ND	ND	ND	ND

Laboratory Detection Limit⁽⁵⁾
Drinking Water Standard⁽⁶⁾

0.05	0.2	0.5	0.5	0.5
—	—	—	—	0.5

TABLE 2
 (continued)
MONITORING PARAMETERS
INDUSTRIAL ASPHALT

Well Number	Sample Date	TPH as Diesel ⁽¹⁾ (mg/L)	TPH as Oil ⁽¹⁾ (mg/L)	Oil & Grease ⁽²⁾ (mg/L)	Total Hydrocarbons ⁽³⁾ (mg/L)	PCBs ⁽⁴⁾ (µg/L)
MW-16	Aug. 1993	ND	ND	ND	ND	ND
	Nov. 1993	ND	ND	ND	ND	ND
	Feb. 1994	0.2	ND	ND	ND	ND
	May 1994	0.08	0.3	ND	ND	ND
	Aug. 1994	ND	ND	ND	ND	ND
14A2 ⁽⁹⁾	Aug. 1993	ND	ND	ND	ND	ND
	Nov. 1993	ND	ND	ND	ND	ND
	Feb. 1994	ND	ND	ND	ND	ND
	May 1994	ND	ND	ND	ND	ND
	Aug. 1994	ND(ND)	ND(ND)	ND(ND)	ND(ND)	ND(ND)

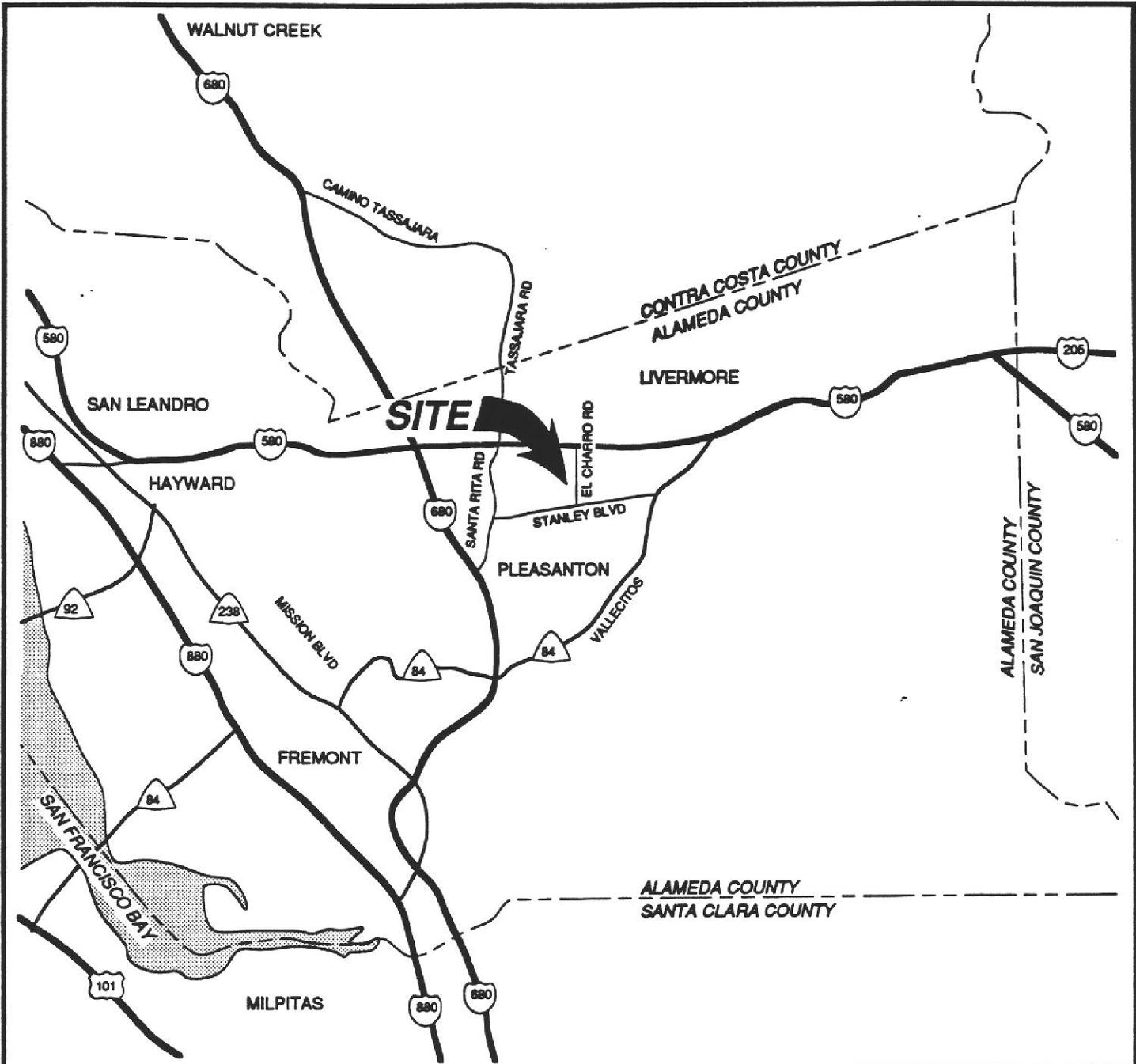
NOTES FOR TABLE 2:

- (1) Sample analysis via SM 3510 GCFID.
- (2) Sample analysis via SM 5520C.
- (3) Sample analysis via SM 5520F.
- (4) Polychlorinated Biphenyl compounds. Sample analysis via EPA Test Method 8080.
- (5) Routine Laboratory detection limits. Some limits may vary. Please refer to attached laboratory reports for specific detection limits.
- (6) California Department of Health Services Drinking Water Standards, Primary Maximum Contaminant Levels (MCL); secondary MCLs listed in parentheses. Source: Water Quality Goals, California Regional Water Quality Control Board, February 1991.
- (7) Extraction Well.
- (8) Duplicate analyses in parentheses.
- (9) Jamieson Well sampled via a tap.

TPH Total Petroleum Hydrocarbons.

ND Not Detected at or above laboratory reporting limits

NT Not Tested



N

5 0 5
Approximate Scale (miles)

© 1994, by Kleinfelder, Inc.



KLEINFELDER

VICINITY MAP

PLATE

1

INDUSTRIAL ASPHALT

52 EL CHARRO ROAD

PLEASANTON, CALIFORNIA

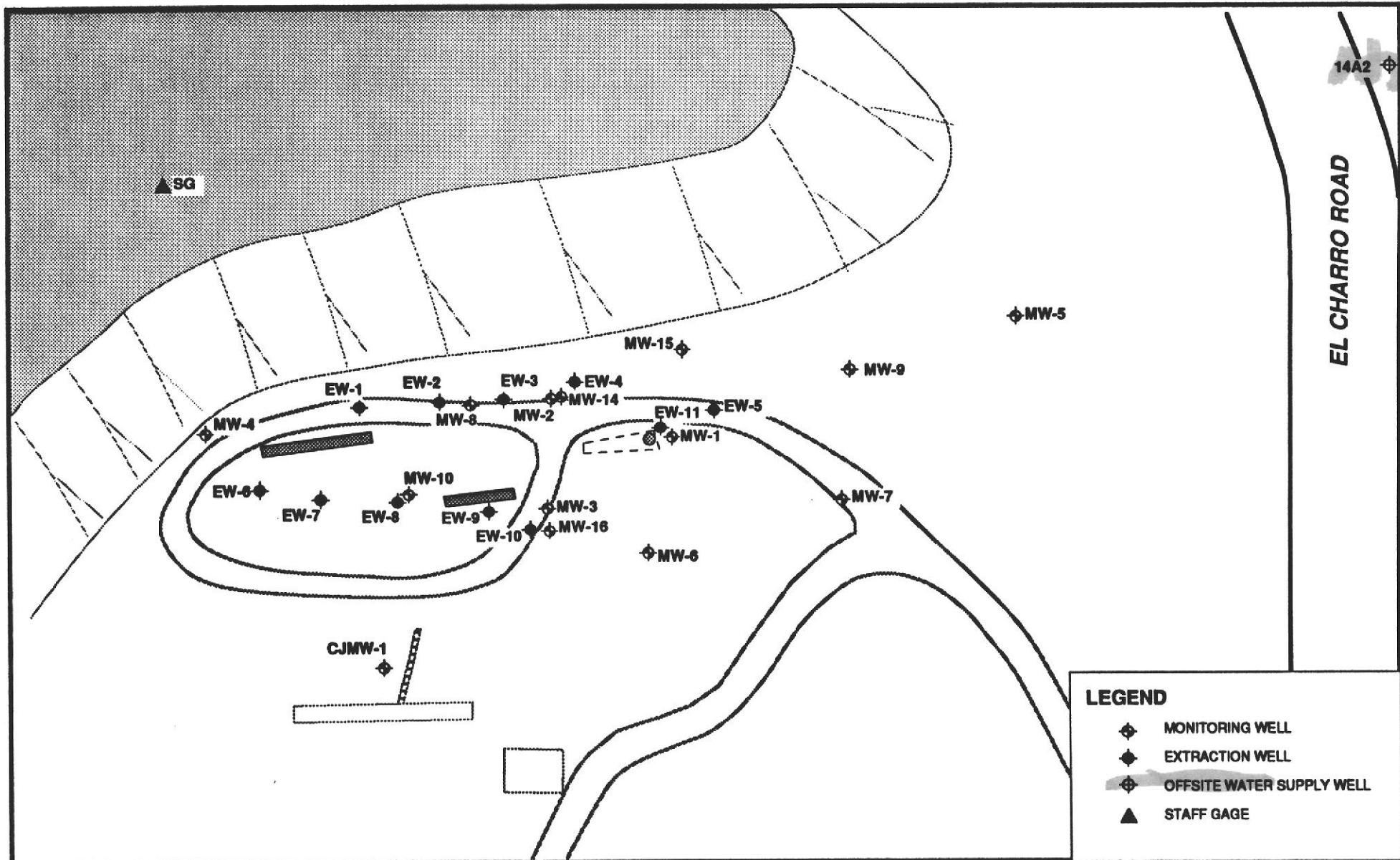
DRAFTED BY: L Sue

DATE: 8-22-94

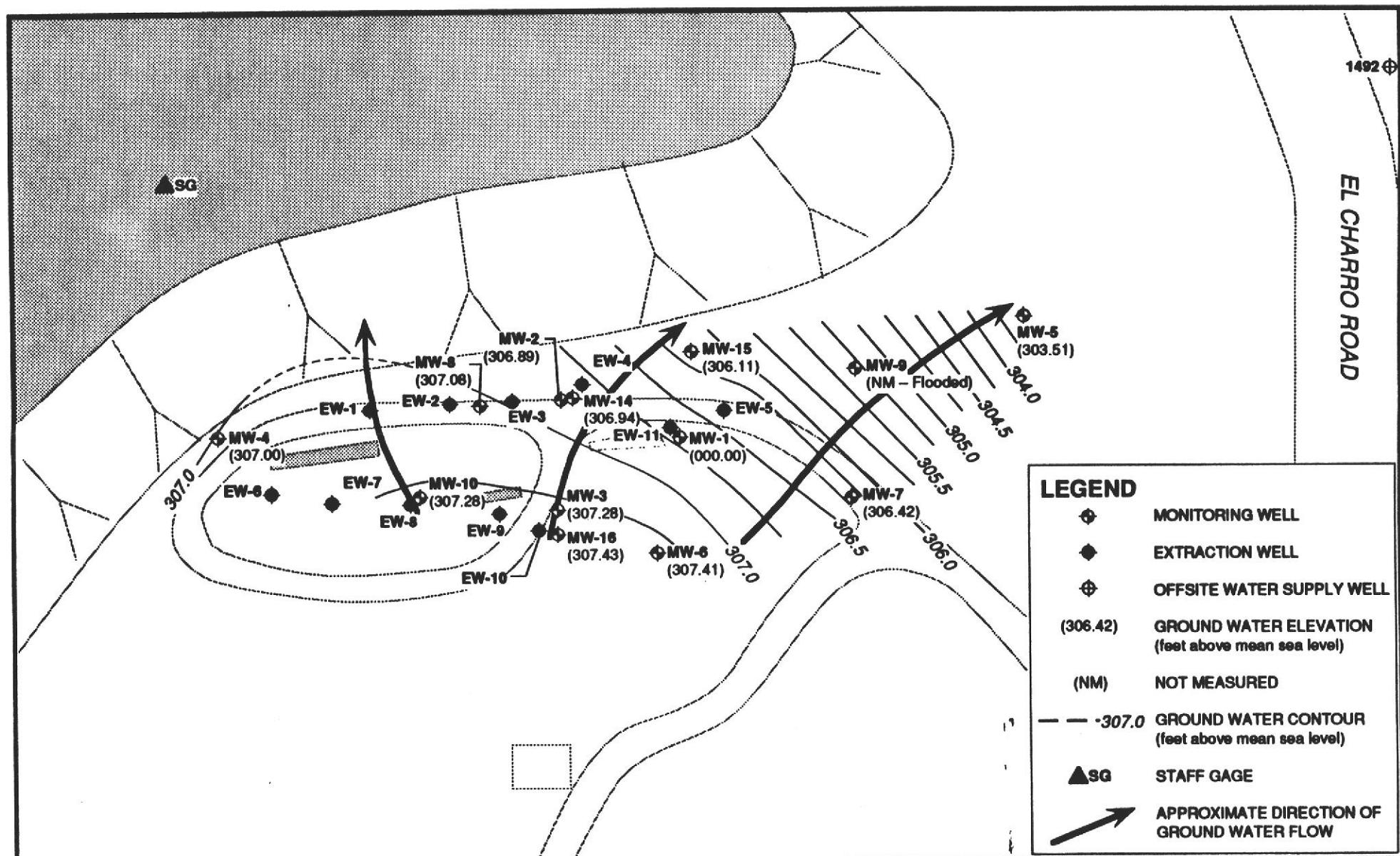
CHECKED BY: J. Romie

DATE: 8-23-94

PROJECT NUMBER 10-1682-03



0 150 Approximate Scale (feet)	N	KLEINFELDER <hr/> DRAFTED BY: L. Sue DATE: 10-7-94 <hr/> CHECKED BY: J. Romie DATE: 10-7-94	MONITORING AND EXTRACTION WELL LOCATION MAP	PLATE 2
			INDUSTRIAL ASPHALT PLEASANTON, CALIFORNIA	



0 150
Approximate Scale (feet)

BASE MAP SOURCE:
Wells surveyed by Associated Professions Inc.
and Kleinfelder Inc. Site details from 1987 photo
(No. HAP-753), Pacific Aerial Surveys

© 1994, by Kleinfelder, Inc.



KLEINFELDER

DRAFTED BY: L. Sue

DATE: 8-22-94

CHECKED BY: J. Romie

DATE: 8-23-94

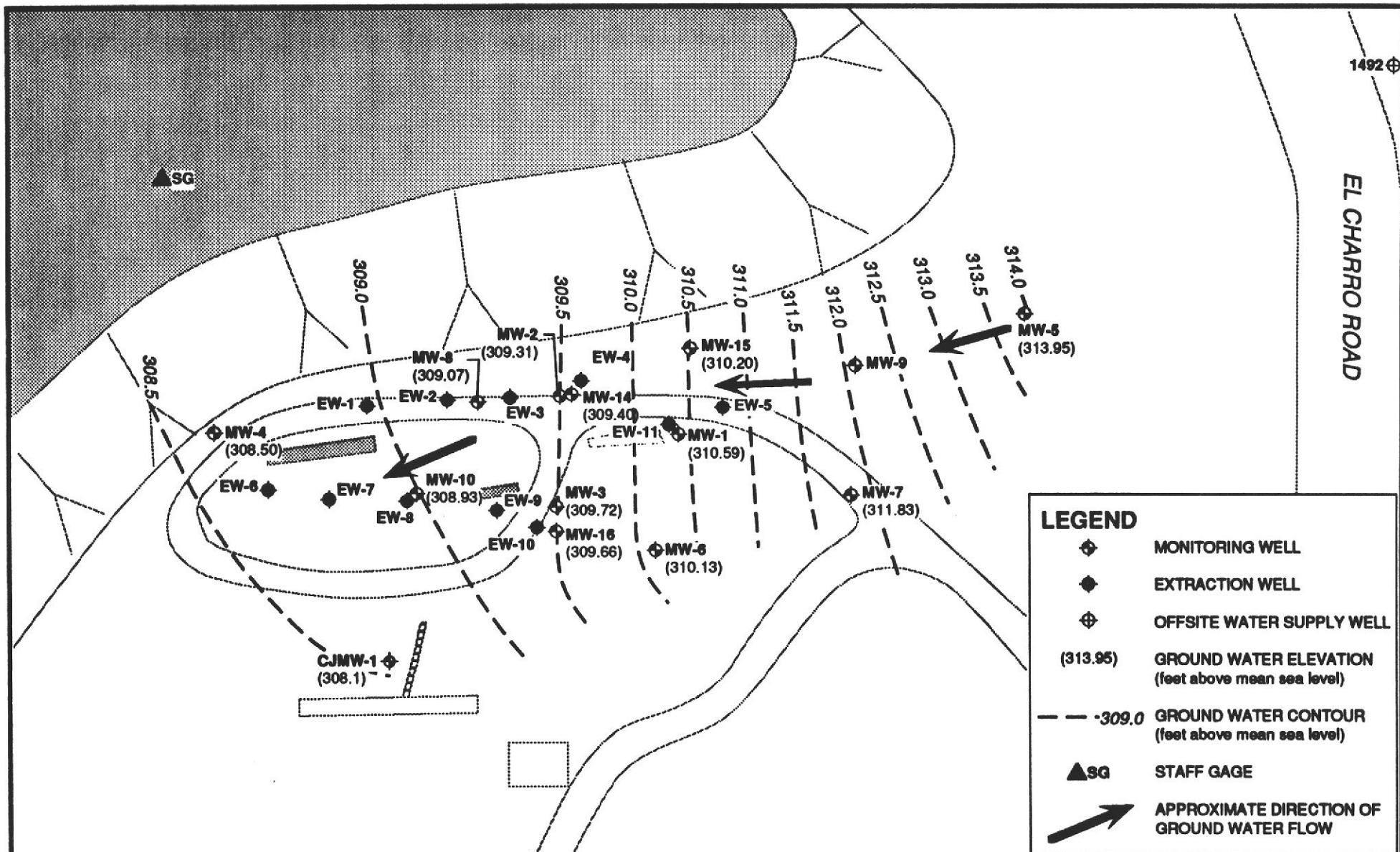
GROUND WATER SURFACE CONTOUR MAP — MAY 16, 1994

INDUSTRIAL ASPHALT
PLEASANTON, CALIFORNIA

PROJECT NUMBER 10-1682-03

PLATE

3



0 150
Approximate Scale (feet)

BASE MAP SOURCE:
Wells surveyed by Associated Professionals Inc.
and Kleinfelder Inc. Site details from 1987 photo
(No. HAP-753), Pacific Aerial Surveys
© 1993, by Kleinfelder, Inc.



KLEINFELDER

DRAFTED BY: L. Sue

DATE: 9-15-94

CHECKED BY: J. Romie

DATE: 10-10-94

PLATE 4

American Environmental Network

Certificate of Analysis

DOHS Certification: 1172

AIHA Accreditation: 11134

FILE COPY PAGE 1

KLEINFELDER, INC.
7133 KOLL CTR PARKWAY STE 100
PLEASANTON, CA 94566

ATTN: GUY JETT
CLIENT PROJ. ID: 10-1682-03
CLIENT PROJ. NAME: INDUS. ASPHALT
C.O.C. NUMBER: 279

REPORT DATE: 06/07/94
DATE(S) SAMPLED: 05/17/94-05/18/94
DATE RECEIVED: 05/19/94
AEN WORK ORDER: 9405245

PROJECT SUMMARY:

On May 19, 1994, this laboratory received 7 water sample(s).

Client requested samples be analyzed for organic parameters. Sample identification, methodologies, results and dates analyzed are summarized on the following pages.

Please see quality control report for a summary of QC data pertaining to this project.

If you have any questions, please contact Client Services at (510) 930-9090.



Larry Klein
Laboratory Director

KLEINFELDER, INC.

SAMPLE ID: 63335 MW-5
 AEN LAB NO: 9405245-01
 AEN WORK ORDER: 9405245
 CLIENT PROJ. ID: 10-1682-03

DATE SAMPLED: 05/17/94
 DATE RECEIVED: 05/19/94
 REPORT DATE: 06/07/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for Diesel/Oil	EPA 3510	-		Extrn Date	05/19/94
TPH as Diesel	GC-FID	ND	0.05	mg/L	05/22/94
TPH as Oil	GC-FID	ND	0.2	mg/L	05/22/94
#Water Extrn for O&G/HCs	SM 5520B/CF	-		Extrn Date	05/19/94
Hydrocarbons by IR	SM 5520F	ND	0.5	mg/L	05/19/94
Oil and Grease by IR	SM 5520C	ND	0.5	mg/L	05/19/94
#Extraction for Pest/PCBs	EPA 3510	-		Extrn Date	05/20/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	05/20/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	05/20/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	05/20/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	05/20/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	05/20/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	05/20/94
Aroclor 1260	11096-82-5	ND	0.5	ug/L	05/20/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit

KLEINFELDER, INC.

SAMPLE ID: 63334 MW-15
 AEN LAB NO: 9405245-02
 AEN WORK ORDER: 9405245
 CLIENT PROJ. ID: 10-1682-03

DATE SAMPLED: 05/17/94
 DATE RECEIVED: 05/19/94
 REPORT DATE: 06/07/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for Diesel/Oil	EPA 3510	-		Extrn Date	05/19/94
TPH as Diesel	GC-FID	0.4 *	0.05	mg/L	05/22/94
TPH as Oil	GC-FID	0.4 *	0.2	mg/L	05/22/94
#Water Extrn for O&G/HCs	SM 5520B/CF	-		Extrn Date	05/19/94
Hydrocarbons by IR	SM 5520F	ND	0.5	mg/L	05/19/94
Oil and Grease by IR	SM 5520C	ND	0.5	mg/L	05/19/94
#Extraction for Pest/PCBs	EPA 3510	-		Extrn Date	05/20/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	05/20/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	05/20/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	05/20/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	05/20/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	05/20/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	05/20/94
Aroclor 1260	11096-82-5	ND	0.5	ug/L	05/20/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit

KLEINFELDER, INC.

SAMPLE ID: 63332 T-^a
 AEN LAB NO: 9405245-03
 AEN WORK ORDER: 9405245
 CLIENT PROJ. ID: 10-1682-03

DATE SAMPLED: 05/17/94
 DATE RECEIVED: 05/19/94
 REPORT DATE: 06/07/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for Diesel/Oil	EPA 3510	-		Extrn Date	05/19/94
TPH as Diesel	GC-FID	ND	0.05	mg/L	05/22/94
TPH as Oil	GC-FID	ND	0.2	mg/L	05/22/94
#Water Extrn for O&G/HCs	SM 5520B/CF	-		Extrn Date	05/19/94
Hydrocarbons by IR	SM 5520F	ND	0.5	mg/L	05/19/94
Oil and Grease by IR	SM 5520C	ND	0.5	mg/L	05/19/94
#Extraction for Pest/PCBs	EPA 3510	-		Extrn Date	05/20/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	05/20/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	05/20/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	05/20/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	05/20/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	05/20/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	05/20/94
Aroclor 1260	11096-82-5	ND	0.5	ug/L	05/20/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit

KLEINFELDER, INC.

SAMPLE ID: 63357 MW-4
 AEN LAB NO: 9405245-04
 AEN WORK ORDER: 9405245
 CLIENT PROJ. ID: 10-1682-03

DATE SAMPLED: 05/18/94
 DATE RECEIVED: 05/19/94
 REPORT DATE: 06/07/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for Diesel/Oil	EPA 3510	-		Extrn Date	05/19/94
TPH as Diesel	GC-FID	ND	0.05	mg/L	05/22/94
TPH as Oil	GC-FID	0.4 *	0.2	mg/L	05/22/94
#Water Extrn for O&G/HCs	SM 5520B/CF	-		Extrn Date	05/19/94
Hydrocarbons by IR	SM 5520F	0.6 *	0.5	mg/L	05/19/94
Oil and Grease by IR	SM 5520C	2 *	0.5	mg/L	05/19/94
#Extraction for Pest/PCBs	EPA 3510	-		Extrn Date	05/20/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	05/20/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	05/20/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	05/20/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	05/20/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	05/20/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	05/20/94
Aroclor 1260	11096-82-5	ND	0.5	ug/L	05/20/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit

KLEINFELDER, INC.

SAMPLE ID: 63333 MW-1
 AEN LAB NO: 9405245-05
 AEN WORK ORDER: 9405245
 CLIENT PROJ. ID: 10-1682-03

DATE SAMPLED: 05/18/94
 DATE RECEIVED: 05/19/94
 REPORT DATE: 06/07/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for Diesel/Oil	EPA 3510	-		Extrn Date	05/19/94
TPH as Diesel	GC-FID	31 *	0.05	mg/L	05/25/94
TPH as Oil	GC-FID	20 *	0.2	mg/L	05/25/94
#Water Extrn for O&G/HCs	SM 5520B/CF	-		Extrn Date	05/19/94
Hydrocarbons by IR	SM 5520F	100 *	0.5	mg/L	05/19/94
Oil and Grease by IR	SM 5520C	150 *	0.5	mg/L	05/19/94
#Extraction for Pest/PCBs	EPA 3510	-		Extrn Date	05/20/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	05/20/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	05/20/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	05/20/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	05/20/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	05/20/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	05/20/94
Aroclor 1260	11096-82-5	0.7 *	0.5	ug/L	05/20/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit

KLEINFELDER, INC.

SAMPLE ID: 63445 MW-14
 AEN LAB NO: 9405245-06
 AEN WORK ORDER: 9405245
 CLIENT PROJ. ID: 10-1682-03

DATE SAMPLED: 05/18/94
 DATE RECEIVED: 05/19/94
 REPORT DATE: 06/07/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for Diesel/Oil	EPA 3510	-		Extrn Date	05/19/94
TPH as Diesel	GC-FID	ND	0.05	mg/L	05/22/94
TPH as Oil	GC-FID	ND	0.2	mg/L	05/22/94
#Water Extrn for O&G/HCs	SM 5520B/CF	-		Extrn Date	05/19/94
Hydrocarbons by IR	SM 5520F	ND	0.5	mg/L	05/19/94
Oil and Grease by IR	SM 5520C	ND	0.5	mg/L	05/19/94
#Extraction for Pest/PCBs	EPA 3510	-		Extrn Date	05/20/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	05/20/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	05/20/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	05/20/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	05/20/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	05/20/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	05/20/94
Aroclor 1260	11096-82-5	ND	0.5	ug/L	05/20/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit

KLEINFELDER, INC.

SAMPLE ID: 63448 MW-1b
 AEN LAB NO: 9405245-07
 AEN WORK ORDER: 9405245
 CLIENT PROJ. ID: 10-1682-03

DATE SAMPLED: 05/18/94
 DATE RECEIVED: 05/19/94
 REPORT DATE: 06/07/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for Diesel/Oil	EPA 3510	-		Extrn Date	05/19/94
TPH as Diesel	GC-FID	0.08 *	0.05	mg/L	05/22/94
TPH as Oil	GC-FID	0.3 *	0.2	mg/L	05/22/94
#Water Extrn for O&G/HCs	SM 5520B/CF	-		Extrn Date	05/19/94
Hydrocarbons by IR	SM 5520F	ND	0.5	mg/L	05/19/94
Oil and Grease by IR	SM 5520C	ND	0.5	mg/L	05/19/94
#Extraction for Pest/PCBs	EPA 3510	-		Extrn Date	05/20/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	05/20/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	05/20/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	05/20/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	05/20/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	05/20/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	05/20/94
Aroclor 1260	11096-82-5	ND	0.5	ug/L	05/20/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit

AEN (CALIFORNIA)
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9405245

CLIENT PROJECT ID: 10-1682-03

Quality Control Summary

All laboratory quality control parameters were found to be within established limits.

Definitions

The following abbreviations are found throughout the QC report:

ND = Not Detected at or above the reporting limit
RPD = Relative Percent Difference
< = Less Than

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QUALITY CONTROL DATA

DATE EXTRACTED: 05/17/94
DATE ANALYZED: 05/18/94
CLIENT PROJ. ID: 10-1682-03

AEN JOB NO: 9405245
SAMPLE SPIKED: DI WATER
INSTRUMENT: IR

IR DETERMINATION FOR OIL & GREASE/HYDROCARBONS
METHOD SPIKE RECOVERY SUMMARY
(WATER MATRIX)

ANALYTE	Spike Added (mg/L)	Average Percent Recovery	RPD
Oil	6.78	95	2

CURRENT QC LIMITS

<u>Analyte</u>	<u>Percent Recovery</u>	<u>RPD</u>
Oil	(83-107)	5

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

QUALITY CONTROL DATA

DATE EXTRACTED: 05/17/94
DATE ANALYZED: 05/18/94
CLIENT PROJ. ID: 10-1682-03

AEN JOB NO: 9405245
SAMPLE SPIKED: DI WATER
INSTRUMENT: IR

IR DETERMINATION FOR OIL & GREASE/HYDROCARBONS
METHOD SPIKE RECOVERY SUMMARY
(WATER MATRIX)

ANALYTE	Spike Added (mg/L)	Average Percent Recovery	RPD
Oil	6.78	95	2

CURRENT QC LIMITS

<u>Analyte</u>	<u>Percent Recovery</u>	<u>RPD</u>
Oil	(83-107)	5

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

QUALITY CONTROL DATA

DATE EXTRACTED: 05/16/94
DATE ANALYZED: 05/17/94
CLIENT PROJ. ID: 10-1682-03

AEN JOB NO: 9405245
SAMPLE SPIKED: DI WATER
INSTRUMENT: C

METHOD SPIKE RECOVERY SUMMARY
TPH EXTRACTABLE WATER
METHOD: EPA 3510 GCFID

ANALYTE	Spike Added (mg/L)	Average Percent Recovery	RPD
Diesel	2.04	81	4

CURRENT QC LIMITS

<u>Analyte</u>	<u>Percent Recovery</u>	<u>RPD</u>
Diesel	(63-109)	10

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

QUALITY CONTROL DATA

DATE EXTRACTED: 05/20/94

AEN JOB NO: 9405245

CLIENT PROJ. ID: 10-1682-03

INSTRUMENT: A

SURROGATE STANDARD RECOVERY SUMMARY

METHOD: EPA 8080
(WATER MATRIX)

SAMPLE IDENTIFICATION		SURROGATE RECOVERY (PERCENT)	
Date Analyzed	Sample Id.	Lab Id.	2,4,5,6-Tetrachloro-meta-xylene
05/20/94	63335	01	120
05/20/94	63334	02	107
05/20/94	63332	03	114
05/20/94	63357	04	107
05/20/94	63333	05	86
05/20/94	63445	06	106
05/20/94	63448	07	105

CURRENT QC LIMITS

<u>ANALYTE</u>	<u>PERCENT RECOVERY</u>
2,4,5,6-Tetrachloro-meta-xylene	(30-131)

QUALITY CONTROL DATA

DATE EXTRACTED: 05/12/94
DATE ANALYZED: 05/12/94
CLIENT PROJ. ID: 10-1682-03

AEN JOB NO: 9405245
SAMPLE SPIKED: DI WATER
INSTRUMENT: A

METHOD SPIKE RECOVERY SUMMARY
METHOD: EPA 8080
(WATER MATRIX)

ANALYTE	Spike Added (ug/L)	Average Percent Recovery	RPD
A1260	4.0	103	3

CURRENT QC LIMITS

<u>Analyte</u>	<u>Percent Recovery</u>	<u>RPD</u>
A1260	(53-133)	16

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

*** END OF REPORT ***

American Environmental Network

Certificate of Analysis

DOHS Certification: 1172

AIHA Accreditation: 11134

FILE COPY PAGE 1

KLEINFELDER, INC.
7133 KOLL CTR PARKWAY STE 100
PLEASANTON, CA 94566

ATTN: GUY JETT
CLIENT PROJ. ID: 10-1682-03
CLIENT PROJ. NAME: INDUS. ASPHALT
C.O.C. NUMBER: 282

REPORT DATE: 06/09/94
DATE(S) SAMPLED: 05/23/94
DATE RECEIVED: 05/24/94
AEN WORK ORDER: 9405297

PROJECT SUMMARY:

On May 24, 1994, this laboratory received 4 water sample(s).

Client requested samples be analyzed for organic parameters. Sample identification, methodologies, results and dates analyzed are summarized on the following pages.

Please see quality control report for a summary of QC data pertaining to this project.

If you have any questions, please contact Client Services at (510) 930-9090.


Larry Klein
Laboratory Director

KLEINFELDER, INC.

SAMPLE ID: 55440 MW-15
 AEN LAB NO: 9405297-01
 AEN WORK ORDER: 9405297
 CLIENT PROJ. ID: 10-1682-03

DATE SAMPLED: 05/23/94
 DATE RECEIVED: 05/24/94
 REPORT DATE: 06/09/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for Diesel/Oil	EPA 3510	-		Extrn Date	05/24/94
TPH as Diesel	GC-FID	1.8 *	0.05	mg/L	05/26/94
TPH as Oil	GC-FID	2 *	0.2	mg/L	05/26/94
#Water Extrn for O&G/HCs	SM 5520B/CF	-		Extrn Date	05/24/94
Hydrocarbons by IR	SM 5520F	0.7 *	0.5	mg/L	05/26/94
Oil and Grease by IR	SM 5520C	2 *	0.5	mg/L	05/26/94
#Extraction for Pest/PCBs	EPA 3510	-		Extrn Date	05/24/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	05/26/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	05/26/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	05/26/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	05/26/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	05/26/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	05/26/94
Aroclor 1260	11096-82-5	ND	0.5	ug/L	05/26/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit

KLEINFELDER, INC.

SAMPLE ID: 55441 *MW-7*
 AEN LAB NO: 9405297-02
 AEN WORK ORDER: 9405297
 CLIENT PROJ. ID: 10-1682-03

DATE SAMPLED: 05/23/94
 DATE RECEIVED: 05/24/94
 REPORT DATE: 06/09/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for Diesel/Oil	EPA 3510	-		Extrn Date	05/24/94
TPH as Diesel	GC-FID	ND	0.05	mg/L	05/26/94
TPH as Oil	GC-FID	1 *	0.2	mg/L	05/26/94
#Water Extrn for O&G/HCs	SM 5520B/CF	-		Extrn Date	05/24/94
Hydrocarbons by IR	SM 5520F	ND	0.5	mg/L	05/26/94
Oil and Grease by IR	SM 5520C	ND	0.5	mg/L	05/26/94
#Extraction for Pest/PCBs	EPA 3510	-		Extrn Date	05/24/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	05/26/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	05/26/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	05/26/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	05/26/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	05/26/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	05/26/94
Aroclor 1260	11096-82-5	ND	0.5	ug/L	05/26/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit

KLEINFELDER, INC.

SAMPLE ID: 59230 MW-7 (d)
 AEN LAB NO: 9405297-03
 AEN WORK ORDER: 9405297
 CLIENT PROJ. ID: 10-1682-03

DATE SAMPLED: 05/23/94
 DATE RECEIVED: 05/24/94
 REPORT DATE: 06/09/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for Diesel/Oil	EPA 3510	-		Extrn Date	05/24/94
TPH as Diesel	GC-FID	ND	0.05	mg/L	05/26/94
TPH as Oil	GC-FID	0.3 *	0.2	mg/L	05/26/94
#Water Extrn for O&G/HCs	SM 5520B/CF	-		Extrn Date	05/24/94
Hydrocarbons by IR	SM 5520F	ND	0.5	mg/L	05/26/94
Oil and Grease by IR	SM 5520C	0.9 *	0.5	mg/L	05/26/94
#Extraction for Pest/PCBs	EPA 3510	-		Extrn Date	05/24/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	05/26/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	05/26/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	05/26/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	05/26/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	05/26/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	05/26/94
Aroclor 1260	11096-82-5	ND	0.5	ug/L	05/26/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit

KLEINFELDER, INC.

SAMPLE ID: 59231 MW-6
 AEN LAB NO: 9405297-04
 AEN WORK ORDER: 9405297
 CLIENT PROJ. ID: 10-1682-03

DATE SAMPLED: 05/23/94
 DATE RECEIVED: 05/24/94
 REPORT DATE: 06/09/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for Diesel/Oil	EPA 3510	-		Extrn Date	05/24/94
TPH as Diesel	GC-FID	ND	0.05	mg/L	05/25/94
TPH as Oil	GC-FID	0.6 *	0.2	mg/L	05/25/94
#Water Extrn for O&G/HCs	SM 5520B/CF	-		Extrn Date	05/24/94
Hydrocarbons by IR	SM 5520F	ND	0.5	mg/L	05/26/94
Oil and Grease by IR	SM 5520C	ND	0.5	mg/L	05/26/94
#Extraction for Pest/PCBs	EPA 3510	-		Extrn Date	05/24/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	05/26/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	05/26/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	05/26/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	05/26/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	05/26/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	05/26/94
Aroclor 1260	11096-82-5	ND	0.5	ug/L	05/26/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit

AEN (CALIFORNIA)
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9405297

CLIENT PROJECT ID: 10-1682-03

Quality Control Summary

All laboratory quality control parameters were found to be within established limits.

Definitions

The following abbreviations are found throughout the QC report:

ND = Not Detected at or above the reporting limit

RPD = Relative Percent Difference

< = Less Than

QUALITY CONTROL DATA

DATE EXTRACTED: 05/24/94
DATE ANALYZED: 05/24/94
CLIENT PROJ. ID: 10-1682-03

AEN JOB NO: 9405297
SAMPLE SPIKED: DI WATER
INSTRUMENT: IR

IR DETERMINATION FOR OIL & GREASE/HYDROCARBONS
METHOD SPIKE RECOVERY SUMMARY
(WATER MATRIX)

ANALYTE	Spike Added (mg/L)	Average Percent Recovery	RPD
Oil	6.93	92	<1

CURRENT QC LIMITS

<u>Analyte</u>	<u>Percent Recovery</u>	<u>RPD</u>
Oil	(83-107)	5

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

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QUALITY CONTROL DATA

DATE EXTRACTED: 05/23/94
DATE ANALYZED: 05/25/94
CLIENT PROJ. ID: 10-1682-03

AEN JOB NO: 9405297
SAMPLE SPIKED: DI WATER
INSTRUMENT: C

METHOD SPIKE RECOVERY SUMMARY
TPH EXTRACTABLE WATER
METHOD: EPA 3510 GCFID

ANALYTE	Spike Added (mg/L)	Average Percent Recovery	RPD
Diesel	2.04	84	4

CURRENT QC LIMITS

<u>Analyte</u>	<u>Percent Recovery</u>	<u>RPD</u>
Diesel	(63-109)	10

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

QUALITY CONTROL DATA

DATE EXTRACTED: 05/24/94

AEN JOB NO: 9405297

CLIENT PROJ. ID: 10-1682-03

INSTRUMENT: A

SURROGATE STANDARD RECOVERY SUMMARY

METHOD: EPA 8080
(WATER MATRIX)

SAMPLE IDENTIFICATION		SURROGATE RECOVERY (PERCENT)	
Date Analyzed	Sample Id.	Lab Id.	2,4,5,6-Tetrachloro-meta-xylene
05/26/94	55440	01	97
05/26/94	55441	02	107
05/26/94	59230	03	107
05/26/94	59231	04	109

CURRENT QC LIMITS

ANALYTEPERCENT RECOVERY

2,4,5,6-Tetrachloro-meta-xylene

(30-131)

QUALITY CONTROL DATA

DATE EXTRACTED: 05/12/94
DATE ANALYZED: 05/12/94
CLIENT PROJ. ID: 10-1682-03

AEN JOB NO: 9405297
SAMPLE SPIKED: DI WATER
INSTRUMENT: A

METHOD SPIKE RECOVERY SUMMARY
METHOD: EPA 8080
(WATER MATRIX)

ANALYTE	Spike Added (ug/L)	Average Percent Recovery	RPD
A1260	4.0	103	3

CURRENT QC LIMITS

<u>Analyte</u>	<u>Percent Recovery</u>	<u>RPD</u>
A1260	(53-133)	16

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

*** END OF REPORT ***

10

REF ID: EEPER

R-1

940547

Retrieved by: (Signature)	Date/Time	Received by: (Signature)	Remarks	Send Results To:
<i>Caroleen</i>	5/21/94 11:10	<i>John</i>	<i>Standard T.A.T</i>	<i>Guy Jett</i>
<i>Caroleen</i>	5/24 11:10	<i>Michele Edmire</i>		KLEINFELDER 7133 KOLL CENTER PARKWAY SUITE 100 PLEASANTON, CA 94566 (510) 484-1700
<i>Michele Edmire</i>	5/24/94 11:30	<i>Liz Pruitt</i>		

9405aq7

Retrieved by: (Signature)	Date/Time	Received by: (Signature)	Remarks	Send Results To:
	5/24-94 11/10		Standard T.A.T	Guy Jett KLEINFELDER 7133 KOLL CENTER PARKWAY SUITE 100 PLEASANTON, CA 94568 (510) 484-1700
Retrieved by: (Signature)	Date/Time	Received by: (Signature)		
	5/24 11/10			

American Environmental Network

Certificate of Analysis

DOHS Certification: 1172

AJHA Accreditation: 11134

PAGE 1

KLEINFELDER, INC.
7133 KOLL CTR PARKWAY, STE 100
PLEASANTON, CA 94566

ATTN: GUY JETT
CLIENT PROJ. ID: 10-1682-03
CLIENT PROJ. NAME: INDUS. ASPHALT
C.O.C. NUMBER: 283

REPORT DATE: 06/13/94
DATE(S) SAMPLED: 05/24/94
DATE RECEIVED: 05/25/94
AEN WORK ORDER: 9405316

PROJECT SUMMARY:

On May 25, 1994, this laboratory received 4 water sample(s).

Client requested samples be analyzed for organic parameters. Sample identification, methodologies, results and dates analyzed are summarized on the following pages.

Please see quality control report for a summary of QC data pertaining to this project.

If you have any questions, please contact Client Services at (510) 930-9090.



Larry Klein
Laboratory Director

KLEINFELDER, INC.

SAMPLE ID: 59232 MW-B
 AEN LAB NO: 9405316-01
 AEN WORK ORDER: 9405316
 CLIENT PROJ. ID: 10-1682-03

DATE SAMPLED: 05/24/94
 DATE RECEIVED: 05/25/94
 REPORT DATE: 06/13/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for Diesel/Oil	EPA 3510	-		Extrn Date	05/25/94
TPH as Diesel	GC-FID	0.5 *	0.05	mg/L	06/01/94
TPH as Oil	GC-FID	0.9 *	0.2	mg/L	06/01/94
#Water Extrn for O&G/HCs	SM 5520B/CF	-		Extrn Date	05/25/94
Hydrocarbons by IR	SM 5520F	ND	0.5	mg/L	05/26/94
Oil and Grease by IR	SM 5520C	0.6 *	0.5	mg/L	05/26/94
#Extraction for Pest/PCBs	EPA 3510	-		Extrn Date	05/25/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	05/26/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	05/26/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	05/26/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	05/26/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	05/26/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	05/26/94
Aroclor 1260	11096-82-5	ND	0.5	ug/L	05/26/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit

KLEINFELDER, INC.

SAMPLE ID: 59226 mw-3
 AEN LAB NO: 9405316-03
 AEN WORK ORDER: 9405316
 CLIENT PROJ. ID: 10-1682-03

DATE SAMPLED: 05/24/94
 DATE RECEIVED: 05/25/94
 REPORT DATE: 06/13/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for Diesel/Oil	EPA 3510	-		Extrn Date	05/25/94
TPH as Diesel	GC-FID	6.0 *	0.05	mg/L	06/01/94
TPH as Oil	GC-FID	3.6 *	0.2	mg/L	06/01/94
#Water Extrn for O&G/HCs	SM 5520B/CF	-		Extrn Date	05/25/94
Hydrocarbons by IR	SM 5520F	5.6 *	0.5	mg/L	05/26/94
Oil and Grease by IR	SM 5520C	6.4 *	0.5	mg/L	05/26/94
#Extraction for Pest/PCBs	EPA 3510	-		Extrn Date	05/25/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	05/26/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	05/26/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	05/26/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	05/26/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	05/26/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	05/26/94
Aroclor 1260	11096-82-5	ND	0.5	ug/L	05/26/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit

KLEINFELDER, INC.

SAMPLE ID: 59228 MW-2
 AEN LAB NO: 9405316-04
 AEN WORK ORDER: 9405316
 CLIENT PROJ. ID: 10-1682-03

DATE SAMPLED: 05/24/94
 DATE RECEIVED: 05/25/94
 REPORT DATE: 06/13/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for Diesel/Oil	EPA 3510	-		Extrn Date	05/25/94
TPH as Diesel	GC-FID	13 *	0.05	mg/L	06/01/94
TPH as Oil	GC-FID	7.0 *	0.2	mg/L	06/01/94
#Water Extrn for O&G/HCs	SM 5520B/CF	-		Extrn Date	05/25/94
Hydrocarbons by IR	SM 5520F	4.8 *	0.5	mg/L	05/26/94
Oil and Grease by IR	SM 5520C	6.1 *	0.5	mg/L	05/26/94
#Extraction for Pest/PCBs	EPA 3510	-		Extrn Date	05/25/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	05/26/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	05/26/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	05/26/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	05/26/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	05/26/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	05/26/94
Aroclor 1260	11096-82-5	ND	0.5	ug/L	05/26/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit

AEN (CALIFORNIA)
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9405316

CLIENT PROJECT ID: 10-1682-03

Quality Control Summary

All laboratory quality control parameters were found to be within established limits.

Definitions

The following abbreviations are found throughout the QC report:

ND = Not Detected at or above the reporting limit
RPD = Relative Percent Difference
< = Less Than

QUALITY CONTROL DATA

DATE EXTRACTED: 05/24/94
DATE ANALYZED: 05/24/94
CLIENT PROJ. ID: 10-1682-03

AEN JOB NO: 9405316
SAMPLE SPIKED: DI WATER
INSTRUMENT: IR

IR DETERMINATION FOR OIL & GREASE/HYDROCARBONS
METHOD SPIKE RECOVERY SUMMARY
(WATER MATRIX)

ANALYTE	Spike Added (mg/L)	Average Percent Recovery	RPD
Oil	6.93	92	<1

CURRENT QC LIMITS

<u>Analyte</u>	<u>Percent Recovery</u>	<u>RPD</u>
Oil	(83-107)	5

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

QUALITY CONTROL DATA

DATE EXTRACTED: 05/25/94
DATE ANALYZED: 05/29/94
CLIENT PROJ. ID: 10-1682-03

AEN JOB NO: 9405316
SAMPLE SPIKED: DI WATER
INSTRUMENT: C

METHOD SPIKE RECOVERY SUMMARY
TPH EXTRACTABLE WATER
METHOD: EPA 3510 GCFID

ANALYTE	Spike Added (mg/L)	Average Percent Recovery	RPD
Diesel	2.04	96	6

CURRENT QC LIMITS

<u>Analyte</u>	<u>Percent Recovery</u>	<u>RPD</u>
Diesel	(63-109)	10

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

QUALITY CONTROL DATA

DATE EXTRACTED: 05/25/94

AEN JOB NO: 9405316

CLIENT PROJ. ID: 10-1682-03

INSTRUMENT: A

SURROGATE STANDARD RECOVERY SUMMARY

METHOD: EPA 8080
(WATER MATRIX)

SAMPLE IDENTIFICATION		SURROGATE RECOVERY (PERCENT)	
Date Analyzed	Sample Id.	Lab Id.	2,4,5,6-Tetrachloro-meta-xylene
05/26/94	59232	01	102
05/26/94	59227	02	100
05/26/94	59226	03	84
05/26/94	59228	04	89

CURRENT QC LIMITS

ANALYTEPERCENT RECOVERY

2,4,5,6-Tetrachloro-meta-xylene

(30-131)

QUALITY CONTROL DATA

DATE EXTRACTED: 05/12/94
DATE ANALYZED: 05/12/94
CLIENT PROJ. ID: 10-1682-03

AEN JOB NO: 9405316
SAMPLE SPIKED: DI WATER
INSTRUMENT: A

METHOD SPIKE RECOVERY SUMMARY

METHOD: EPA 8080
(WATER MATRIX)

ANALYTE	Spike Added (ug/L)	Average Percent Recovery	RPD
A1260	4.0	103	3

CURRENT QC LIMITS

<u>Analyte</u>	<u>Percent Recovery</u>	<u>RPD</u>
A1260	(53-133)	16

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

*** END OF REPORT ***

KLEINFELDER, INC.

SAMPLE ID: 64221 ^{MW-14}
 AEN LAB NO: 9408352-04
 AEN WORK ORDER: 9408352
 CLIENT PROJ. ID: 10-1682-03

DATE SAMPLED: 08/24/94
 DATE RECEIVED: 08/25/94
 REPORT DATE: 09/16/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	08/27/94
TPH as Diesel	GC-FID	ND	0.05	mg/L	08/28/94
TPH as Oil	GC-FID	ND	0.2	mg/L	08/28/94
#Water Extrn for HCs (IR)	SM 5520CF	-		Extrn Date	08/30/94
#Water Extrn for O&G (IR)	SM 5520C	-		Extrn Date	08/30/94
Hydrocarbons (IR)	SM 5520CF	ND	0.5	mg/L	08/31/94
Oil & Grease (IR)	SM 5520C	ND	0.5	mg/L	08/31/94
#Extraction for Pest/PCBs	EPA 3510	-		Extrn Date	08/26/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	08/26/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	08/26/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	08/26/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	08/26/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	08/26/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	08/26/94
Aroclor 1260	11096-82-5	ND	0.5	ug/L	08/26/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit

KLEINFELDER, INC.

SAMPLE ID: 64197 MW-S
 AEN LAB NO: 9408352-05
 AEN WORK ORDER: 9408352
 CLIENT PROJ. ID: 10-1682-03

DATE SAMPLED: 08/24/94
 DATE RECEIVED: 08/25/94
 REPORT DATE: 09/16/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	08/27/94
TPH as Diesel	GC-FID	ND	0.05	mg/L	08/28/94
TPH as Oil	GC-FID	ND	0.2	mg/L	08/28/94
#Water Extrn for HCs (IR)	SM 5520CF	-		Extrn Date	08/30/94
#Water Extrn for O&G (IR)	SM 5520C	-		Extrn Date	08/30/94
Hydrocarbons (IR)	SM 5520CF	ND	0.5	mg/L	08/31/94
Oil & Grease (IR)	SM 5520C	ND	0.5	mg/L	08/31/94
#Extraction for Pest/PCBs	EPA 3510	-		Extrn Date	08/26/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	08/27/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	08/27/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	08/27/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	08/27/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	08/27/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	08/27/94
Aroclor 1260	11096-82-5	ND	0.5	ug/L	08/27/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit

KLEINFELDER, INC.

SAMPLE ID: 64106 ^{WW-4}
 AEN LAB NO: 9408352-06
 AEN WORK ORDER: 9408352
 CLIENT PROJ. ID: 10-1682-03

DATE SAMPLED: 08/25/94
 DATE RECEIVED: 08/25/94
 REPORT DATE: 09/16/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	08/27/94
TPH as Diesel	GC-FID	ND	0.05	mg/L	08/28/94
TPH as Oil	GC-FID	ND	0.2	mg/L	08/28/94
#Water Extrn for HCs (IR)	SM 5520CF	-		Extrn Date	08/30/94
#Water Extrn for O&G (IR)	SM 5520C	-		Extrn Date	08/30/94
Hydrocarbons (IR)	SM 5520CF	ND	0.5	mg/L	08/31/94
Oil & Grease (IR)	SM 5520C	ND	0.5	mg/L	08/31/94
#Extraction for Pest/PCBs	EPA 3510	-		Extrn Date	08/26/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	08/27/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	08/27/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	08/27/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	08/27/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	08/27/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	08/27/94
Aroclor 1260	11096-82-5	ND	0.5	ug/L	08/27/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit

KLEINFELDER, INC.

SAMPLE ID: 64108 ^{MJN-10}
 AEN LAB NO: 9408352-07
 AEN WORK ORDER: 9408352
 CLIENT PROJ. ID: 10-1682-03

DATE SAMPLED: 08/25/94
 DATE RECEIVED: 08/25/94
 REPORT DATE: 09/16/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	08/27/94
TPH as Diesel	GC-FID	ND	0.05	mg/L	08/28/94
TPH as Oil	GC-FID	ND	0.2	mg/L	08/28/94
#Water Extrn for HC's (IR)	SM 5520CF	-		Extrn Date	08/30/94
#Water Extrn for O&G (IR)	SM 5520C	-		Extrn Date	08/30/94
Hydrocarbons (IR)	SM 5520CF	ND	0.5	mg/L	08/31/94
Oil & Grease (IR)	SM 5520C	ND	0.5	mg/L	08/31/94
#Extraction for Pest/PCBs	EPA 3510	-		Extrn Date	08/26/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	08/27/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	08/27/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	08/27/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	08/27/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	08/27/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	08/27/94
Aroclor 1260	11096-82-5	ND	0.5	ug/L	08/27/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit

AEN (CALIFORNIA)
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9408352

CLIENT PROJECT ID: 10-1682-03

Quality Control and Project Summary

All laboratory quality control parameters were found to be within established limits.

Definitions

Laboratory Control Sample (LCS)/Method Spike(s): Control samples of known composition. LCS and Method Spike data are used to validate batch analytical results.

Matrix Spike(s): Aliquot of a sample (aqueous or solid) with added quantities of specific compounds and subjected to the entire analytical procedure. Matrix spike and matrix spike duplicate QC data are advisory.

Method Blank: An analytical control consisting of all reagents, internal standards, and surrogate standards carried through the entire analytical process. Used to monitor laboratory background and reagent contamination.

Not Detected (ND): Not detected at or above the reporting limit.

Relative Percent Difference (RPD): An indication of method precision based on duplicate analysis.

Reporting Limit (RL): The lowest concentration that can reliably be determined during routine laboratory operations. The RL is generally 1 to 10 times the Method Detection Limit (MDL). Reporting limits are matrix and method dependent and take into account any dilutions performed as part of the analysis.

Surrogates: Organic compounds which are similar to analytes of interest in chemical behavior, but are not found in environmental samples. Surrogates are added to all blanks, calibration and check standards, samples, and spiked samples. Surrogate recovery is monitored as an indication of acceptable sample preparation and instrumental performance.

D: Surrogates diluted out.

#: Indicates result outside of established laboratory QC limits.

QUALITY CONTROL DATA

AEN JOB NO: 9408352
DATE EXTRACTED: 08/27/94
INSTRUMENT: C
MATRIX: WATER

Surrogate Standard Recovery Summary
Method: EPA 3510 GCFID

Date Analyzed	Client Id.	Lab Id.	Percent Recovery
			n-Pentacosane
08/28/94	64220	01	61
08/28/94	64216	02	64
08/28/94	64204	03	45
08/28/94	64221	04	45
08/28/94	64197	05	49
08/28/94	64106	06	60
08/28/94	64108	07	63

Current QC Limits

<u>Surrogate</u>	<u>Percent Recovery</u>
n-Pentacosane	30-120

QUALITY CONTROL DATA

AEN JOB NO: 9408352
DATE EXTRACTED: 08/27/94
DATE ANALYZED: 08/28/94
INSTRUMENT: C
MATRIX: WATER

Method Spike Recovery Summary
Method: EPA 3510 GCFID

Analyte	Spike Added (mg/L)	Average Percent Recovery	RPD	QC Limits	
				Percent Recovery	RPD
Diesel	2.01	85	2	65-103	12

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

QUALITY CONTROL DATA

AEN JOB NO: 9408352
DATE EXTRACTED: 08/19/94
DATE ANALYZED: 08/21/94
INSTRUMENT: IR
MATRIX: WATER

Method Spike Recovery Summary
Method: EPA 5520

Analyte	Spike Added (mg/L)	Average Percent Recovery	QC Limits		
			RPD	Percent Recovery	RPD
Oil	7.23	103	4	83-107	5

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

QUALITY CONTROL DATA

AEN JOB NO: 9408352
DATE EXTRACTED: 08/26/94
INSTRUMENT: B
MATRIX: WATER

Surrogate Standard Recovery Summary
Method: EPA 8080

Date Analyzed	Client Id.	Lab Id.	Percent Recovery
			2,4,5,6-Tetrachloro-meta-xylene
08/26/94	64220	01	109
08/26/94	64216	02	108
08/26/94	64204	03	110
08/26/94	64221	04	107
08/27/94	64197	05	107
08/27/94	64106	06	106
08/27/94	64108	07	106

Current QC Limits

<u>Surrogate</u>	<u>Percent Recovery</u>
2,4,5,6-Tetrachloro-meta-xylene	30-131

QUALITY CONTROL DATA

AEN JOB NO: 9408352
DATE EXTRACTED: 08/05/94
DATE ANALYZED: 08/06/94
INSTRUMENT: B
MATRIX: WATER

Method Spike Recovery Summary
Method: EPA 8080

Analyte	Spike Added (ug/L)	Average Percent Recovery	RPD	QC Limits	
				Percent Recovery	RPD
A1260	4.00	108	1	53-133	16

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

*** END OF REPORT ***

KLEINFELDER

R-1,S-A (REF-414) 9408352

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Remarks	Send Results To:
<i>Jay Neal</i>	8/25/94 12:54	<i>Jamal Falkenhorn</i>	Standard T.A.T	<i>GUY JETT</i>
Relinquished by: (Signature)	Date/Time	Received by: (Signature)		KLEINFELDER 7133 KOLL CENTER PARKWAY SUITE 100 PLEASANTON, CA 94566 (510) 484-1700
<i>Jamal Falkenhorn</i>	8/25/94 15:25	<i>Michael Decker</i>		
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)		
<i>Mark L. Smith</i>	8/25 16:30	<i>Dr. L. Smith</i>		

KLEINFELDER

$$R, S - F \Rightarrow (S \wedge \neg T \wedge \neg E)$$

R-1, S-A (40E-40S) 9408352

Relinquished by: (Signature) <i>John Head</i>	Date/Time 02/25/1254	Received by: (Signature) <i>James F. Kelleher</i>	Remarks Standard I AT	Send Results To <i>P Jet</i> KLEINFELDER 7133 KODIAK CENTER PARKWAY SUITE 100 PLEASANTON, CA 94566 (510) 484-1900
Relinquished by: (Signature) <i>James F. Kelleher</i>	Date/Time 02/25/1254	Received by: (Signature) <i>Michael DeMille</i>		
Relinquished by: (Signature) <i>Michael DeMille</i>	Date/Time 8/25/1254	Received for Laboratory by: (Signature) <i>Dr. L. Knut</i>		

American Environmental Network

Certificate of Analysis

DOHS Certification: 1172

AIHA Accreditation: 11134

PAGE 1

KLEINFELDER, INC.
7133 KOLL CTR PARKWAY, STE 100
PLEASANTON, CA 94566

ATTN: GUY JETT
CLIENT PROJ. ID: 10-1682-03
CLIENT PROJ. NAME: IND. ASPHALT
C.O.C. NUMBER: 620
P.O. NUMBER: R1743

REPORT DATE: 09/20/94
DATE(S) SAMPLED: 08/24/94-08/26/94
DATE RECEIVED: 08/26/94
AEN WORK ORDER: 9408368

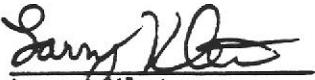
PROJECT SUMMARY:

On August 26, 1994, this laboratory received 8 water sample(s).

Client requested sample(s) be analyzed for organic parameters. Results of analysis are summarized on the following page(s).

Please see quality control report for a summary of QC data pertaining to this project.

If you have any questions, please contact Client Services at (510) 930-9090.


Larry Klein
Laboratory Director

KLEINFELDER, INC.

SAMPLE ID: 64107 *mw-L*
 AEN LAB NO: 9408368-01
 AEN WORK ORDER: 9408368
 CLIENT PROJ. ID: 10-1682-03

DATE SAMPLED: 08/25/94
 DATE RECEIVED: 08/26/94
 REPORT DATE: 09/20/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	08/30/94
TPH as Diesel	GC-FID	ND	0.05	mg/L	08/31/94
TPH as Oil	GC-FID	ND	0.2	mg/L	08/31/94
#Water Extrn for HCs (IR)	SM 5520CF	-		Extrn Date	08/30/94
#Water Extrn for O&G (IR)	SM 5520C	-		Extrn Date	08/30/94
Hydrocarbons (IR)	SM 5520CF	ND	0.5	mg/L	08/31/94
Oil & Grease (IR)	SM 5520C	ND	0.5	mg/L	08/31/94
#Extraction for Pest/PCBs	EPA 3510	-		Extrn Date	08/29/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	08/30/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	08/30/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	08/30/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	08/30/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	08/30/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	08/30/94
Aroclor 1260	11096-82-5	ND	0.5	ug/L	08/30/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit

KLEINFELDER, INC.

SAMPLE ID: 64103 ^{WW-1}
 AEN LAB NO: 9408368-02
 AEN WORK ORDER: 9408368
 CLIENT PROJ. ID: 10-1682-03

DATE SAMPLED: 08/24/94
 DATE RECEIVED: 08/26/94
 REPORT DATE: 09/20/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	08/30/94
TPH as Diesel	GC-FID	ND	0.05	mg/L	08/31/94
TPH as Oil	GC-FID	ND	0.2	mg/L	08/31/94
#Water Extn for HCs (IR)	SM 5520CF	-		Extrn Date	08/30/94
#Water Extn for O&G (IR)	SM 5520C	-		Extrn Date	08/30/94
Hydrocarbons (IR)	SM 5520CF	ND	0.5	mg/L	08/31/94
Oil & Grease (IR)	SM 5520C	ND	0.5	mg/L	08/31/94
#Extraction for Pest/PCBs	EPA 3510	-		Extrn Date	08/29/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	08/30/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	08/30/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	08/30/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	08/30/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	08/30/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	08/30/94
Aroclor 1260	11096-82-5	ND	0.5	ug/L	08/30/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit

KLEINFELDER, INC.

SAMPLE ID: 64171
 AEN LAB NO: 9408368-03
 AEN WORK ORDER: 9408368
 CLIENT PROJ. ID: 10-1682-03

DATE SAMPLED: 08/26/94
 DATE RECEIVED: 08/26/94
 REPORT DATE: 09/20/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	08/30/94
TPH as Diesel	GC-FID	3.2 *	0.05	mg/L	09/01/94
TPH as Oil	GC-FID	2.6 *	0.2	mg/L	09/01/94
#Water Extrn for HCs (IR)	SM 5520CF	-		Extrn Date	08/30/94
#Water Extrn for O&G (IR)	SM 5520C	-		Extrn Date	08/30/94
Hydrocarbons (IR)	SM 5520CF	0.6 *	0.5	mg/L	08/31/94
Oil & Grease (IR)	SM 5520C	0.8 *	0.5	mg/L	08/31/94
#Extraction for Pest/PCBs	EPA 3510	-		Extrn Date	08/29/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	08/30/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	08/30/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	08/30/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	08/30/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	08/30/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	08/30/94
Aroclor 1260	11096-82-5	ND	0.5	ug/L	08/30/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit

KLEINFELDER, INC.

SAMPLE ID: 64149 ^{MW-2}
 AEN LAB NO: 9408368-04
 AEN WORK ORDER: 9408368
 CLIENT PROJ. ID: 10-1682-03

DATE SAMPLED: 08/26/94
 DATE RECEIVED: 08/26/94
 REPORT DATE: 09/20/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	08/30/94
TPH as Diesel	GC-FID	0.65 *	0.05	mg/L	08/31/94
TPH as Oil	GC-FID	ND	0.2	mg/L	08/31/94
#Water Extrn for HCs (IR)	SM 5520CF	-		Extrn Date	08/30/90
#Water Extrn for O&G (IR)	SM 5520C	-		Extrn Date	08/30/94
Hydrocarbons (IR)	SM 5520CF	ND	0.5	mg/L	08/31/94
Oil & Grease (IR)	SM 5520C	0.8 *	0.5	mg/L	08/31/94
#Extraction for Pest/PCBs	EPA 3510	-		Extrn Date	08/29/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	08/30/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	08/30/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	08/30/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	08/30/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	08/30/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	08/30/94
Aroclor 1260	11096-82-5	ND	0.5	ug/L	08/30/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit

KLEINFELDER, INC.

SAMPLE ID: 61815 *MW-2 (d)*
 AEN LAB NO: 9408368-05
 AEN WORK ORDER: 9408368
 CLIENT PROJ. ID: 10-1682-03

DATE SAMPLED: 08/26/94
 DATE RECEIVED: 08/26/94
 REPORT DATE: 09/20/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	08/30/94
TPH as Diesel	GC-FID	0.64 *	0.05	mg/L	08/31/94
TPH as Oil	GC-FID	ND	0.2	mg/L	08/31/94
#Water Extn for HCs (IR)	SM 5520CF	-		Extrn Date	08/30/94
#Water Extn for O&G (IR)	SM 5520C	-		Extrn Date	08/30/94
Hydrocarbons (IR)	SM 5520CF	ND	0.5	mg/L	08/31/94
Oil & Grease (IR)	SM 5520C	0.8 *	0.5	mg/L	08/31/94
#Extraction for Pest/PCBs	EPA 3510	-		Extrn Date	08/29/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	08/30/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	08/30/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	08/30/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	08/30/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	08/30/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	08/30/94
Aroclor 1260	11096-82-5	ND	0.5	ug/L	08/30/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit

KLEINFELDER, INC.

SAMPLE ID: 64150 *MW-3*
 AEN LAB NO: 9408368-06
 AEN WORK ORDER: 9408368
 CLIENT PROJ. ID: 10-1682-03

DATE SAMPLED: 08/26/94
 DATE RECEIVED: 08/26/94
 REPORT DATE: 09/20/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-			Extrn Date 08/30/94
TPH as Diesel	GC-FID	0.1 *	0.05	mg/L	09/01/94
TPH as Oil	GC-FID	ND	0.2	mg/L	09/01/94
#Water Extrn for HC's (IR)	SM 5520CF	-			Extrn Date 08/30/94
#Water Extrn for O&G (IR)	SM 5520C	-			Extrn Date 08/30/94
Hydrocarbons (IR)	SM 5520CF	ND	0.5	mg/L	08/31/94
Oil & Grease (IR)	SM 5520C	ND	0.5	mg/L	08/31/94
#Extraction for Pest/PCBs	EPA 3510	-			Extrn Date 08/29/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	09/01/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	09/01/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	09/01/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	09/01/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	09/01/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	09/01/94
Aroclor 1260	11096-82-5	ND	0.5	ug/L	09/01/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit

KLEINFELDER, INC.

SAMPLE ID: 64094 MW-8
 AEN LAB NO: 9408368-07
 AEN WORK ORDER: 9408368
 CLIENT PROJ. ID: 10-1682-03

DATE SAMPLED: 08/25/94
 DATE RECEIVED: 08/26/94
 REPORT DATE: 09/20/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	08/30/94
TPH as Diesel	GC-FID	0.1 *	0.05	mg/L	09/01/94
TPH as Oil	GC-FID	ND	0.2	mg/L	09/01/94
#Water Extrn for HCs (IR)	SM 5520CF	-		Extrn Date	08/30/94
#Water Extrn for O&G (IR)	SM 5520C	-		Extrn Date	08/30/94
Hydrocarbons (IR)	SM 5520CF	ND	0.5	mg/L	08/31/94
Oil & Grease (IR)	SM 5520C	ND	0.5	mg/L	08/31/94
#Extraction for Pest/PCBs	EPA 3510	-		Extrn Date	08/29/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	09/01/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	09/01/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	09/01/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	09/01/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	09/01/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	09/01/94
Aroclor 1260	11096-82-5	ND	0.5	ug/L	09/01/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit

KLEINFELDER, INC.

SAMPLE ID: 64093 ^{MW-8 (d)}
 AEN LAB NO: 9408368-08
 AEN WORK ORDER: 9408368
 CLIENT PROJ. ID: 10-1682-03

DATE SAMPLED: 08/25/94
 DATE RECEIVED: 08/26/94
 REPORT DATE: 09/20/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	08/30/94
TPH as Diesel	GC-FID	0.1 *	0.05	mg/L	09/01/94
TPH as Oil	GC-FID	ND	0.2	mg/L	09/01/94
#Water Extn for HCs (IR)	SM 5520CF	-		Extrn Date	08/30/94
#Water Extn for O&G (IR)	SM 5520C	-		Extrn Date	08/30/94
Hydrocarbons (IR)	SM 5520CF	ND	0.5	mg/L	08/31/94
Oil & Grease (IR)	SM 5520C	ND	0.5	mg/L	08/31/94
#Extraction for Pest/PCBs	EPA 3510	-		Extrn Date	08/29/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	09/01/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	09/01/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	09/01/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	09/01/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	09/01/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	09/01/94
Aroclor 1260	11096-82-5	ND	0.5	ug/L	09/01/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit

AEN (CALIFORNIA)
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9408368

CLIENT PROJECT ID: 10-1682-03

Quality Control and Project Summary

All laboratory quality control parameters were found to be within established limits.

Definitions

Laboratory Control Sample (LCS)/Method Spike(s): Control samples of known composition. LCS and Method Spike data are used to validate batch analytical results.

Matrix Spike(s): Aliquot of a sample (aqueous or solid) with added quantities of specific compounds and subjected to the entire analytical procedure. Matrix spike and matrix spike duplicate QC data are advisory.

Method Blank: An analytical control consisting of all reagents, internal standards, and surrogate standards carried through the entire analytical process. Used to monitor laboratory background and reagent contamination.

Not Detected (ND): Not detected at or above the reporting limit.

Relative Percent Difference (RPD): An indication of method precision based on duplicate analysis.

Reporting Limit (RL): The lowest concentration routinely determined during laboratory operations. The RL is generally 1 to 10 times the Method Detection Limit (MDL). Reporting limits are matrix, method, and analyte dependent and take into account any dilutions performed as part of the analysis.

Surrogates: Organic compounds which are similar to analytes of interest in chemical behavior, but are not found in environmental samples. Surrogates are added to all blanks, calibration and check standards, samples, and spiked samples. Surrogate recovery is monitored as an indication of acceptable sample preparation and instrumental performance.

D: Surrogates diluted out.

#: Indicates result outside of established laboratory QC limits.

QUALITY CONTROL DATA

AEN JOB NO: 9408368
DATE EXTRACTED: 08/30/94
INSTRUMENT: C
MATRIX: WATER

Surrogate Standard Recovery Summary
Method: EPA 3510 GCFID

Date Analyzed	Client Id.	Lab Id.	Percent Recovery	
			n-Pentacosane	
08/31/94	64107	01		89
08/31/94	64103	02		86
09/01/94	64171	03		93
08/31/94	64149	04		92
08/31/94	64815	05		89
09/01/94	64150	06		89
09/01/94	64094	07		90
09/01/94	64093	08		88

Current QC Limits

<u>Surrogate</u>	<u>Percent Recovery</u>
n-Pentacosane	30-120

QUALITY CONTROL DATA

AEN JOB NO: 9408368
DATE EXTRACTED: 08/27/94
DATE ANALYZED: 08/28/94
INSTRUMENT: C
MATRIX: WATER

Method Spike Recovery Summary
Method: EPA 3510 GCFID

Analyte	Spike Added (mg/L)	Average Percent Recovery	QC Limits		
			RPD	Percent Recovery	RPD
Diesel	2.01	85	2	65-103	12

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

QUALITY CONTROL DATA

AEN JOB NO: 9408368
DATE EXTRACTED: 08/19/94
DATE ANALYZED: 08/21/94
INSTRUMENT: IR
MATRIX: WATER

Method Spike Recovery Summary
Method: EPA 5520

Analyte	Spike Added (mg/L)	Average Percent Recovery	QC Limits		
			RPD	Percent Recovery	RPD
Oil	7.23	103	4	83-107	5

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

QUALITY CONTROL DATA

AEN JOB NO: 9408368
DATE EXTRACTED: 08/29/94
INSTRUMENT: B
MATRIX: WATER

Surrogate Standard Recovery Summary
Method: EPA 8080

Date Analyzed	Client Id.	Lab Id.	Percent Recovery 2,4,5,6-Tetrachloro-meta-xylene
08/30/94	64107	01	100
08/30/94	64103	02	95
08/30/94	64171	03	87
08/30/94	64149	04	95
08/30/94	64815	05	101
09/01/94	64150	06	89
09/01/94	64094	07	90
09/01/94	64093	08	91

Current QC Limits

<u>Surrogate</u>	<u>Percent Recovery</u>
2,4,5,6-Tetrachloro-meta-xylene	30-131

QUALITY CONTROL DATA

AEN JOB NO: 9408368
DATE EXTRACTED: 08/29/94
DATE ANALYZED: 09/01/94
INSTRUMENT: B
MATRIX: WATER

Method Spike Recovery Summary
Method: EPA 8080

Analyte	Spike Added (ug/L)	Average Percent Recovery	RPD	QC Limits	
				Percent Recovery	RPD
A1260	4.00	99	<1	53-133	16

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

*** END OF REPORT ***

WILHELM KLEINFELDER

9408368

M-80

White - Sample

Category - Return Copy To Shippers

Pink - Lab Copy

No.

620

KLEINFEEDER

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.9408368

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Remarks	Send Results To
<i>D. J. Head</i>	8-26-94 / 19:45	<i>Mike Head</i>	<i>Standard T.A.T</i>	<i>GUY JEFF</i>
Relinquished by: (Signature)	Date/Time	Received by: (Signature)		KLEINFELDER 7133 KOLL CENTER PARKWAY SUITE 100 PLEASANTON, CA 94566 (510) 484-1700
<i>M. Head</i>	8-26-94 16:51			
Relinquished by: (Signature)	Date/Time	Received by Laboratory by: (Signature)		
<i>M. Head</i>	8-26-94 16:50	<i>Eric L. Pruitt</i>		

R-1, S-G

9405316

Relinquished by: (Signature) <i>John L. Smith</i>	Date/Time 5/25 10:00	Received by: (Signature) <i>Bob T. B.</i>	Remarks Standard T.A.T.
Relinquished by: (Signature) <i>John L. Smith</i>	Date/Time 10:10 5/25	Received by: (Signature) <i>Michael E. Miller</i>	
Relinquished by: (Signature) <i>Michael E. Miller</i>	Date/Time 5/25 10:45	Received for Laboratory by: (Signature) <i>Denise Harrington</i>	

Send Results To
Guy Tett
KLEINFELDER
7133 KOLL CENTER PARKWAY
SUITE 100
PLEASANTON, CA 94566
(510) 484-1700

R-1, S-G

9405316

Distinguished by: (Signature)

Date/time
Sister 10:00

Received by: (Signature)

Remarks

Send Results To John Smith

WITNESSED BY: (Signature)

Date/Time

Received by: (Signature)

**KLEINFELDER
7133 KOLL CENTER PARKWAY
SUITE 100
PLEASANTON, CA 94566
(510) 484-1700**

Reproduced by Sanganer

Date/Time

Received for Laboratory by:
(Signature) /

White - Sampler

Category : Return Copy To Shipper

Pink - Lab Copy

No

283



KLEINFELDER

R-S, S-K/m/N

9405245

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Remarks	Send Results To
Todd Dio	5/19/94 11:39	Jeff	Standard T.A.T. Attn. Guy Sett	KLEINFELDER 7133 KOLL CENTER PARKWAY SUITE 100 PLEASANTON, CA 94566 (510) 484-1700
Relinquished by: (Signature)	Date/Time	Received by: (Signature)		
Myself	5-17-94 12:00			
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)		
	5/19/94 12:00	Dennis Harrington		

KLEINFELDER

R-S, S-K/M/N

9405.245

40

White - Sample

Cancel - Return Copy To Shippers

Print - Lab Copy

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APPENDIX B
LABORATORY ANALYTICAL REPORTS
AUGUST, 1994

American Environmental Network

Certificate of Analysis

DOHS Certification: 1172

AIHA Accreditation: 11134

PAGE 1

KLEINFELDER, INC.
7133 KOLL CTR PARKWAY, STE 100
PLEASANTON, CA 94566

ATTN: GUY JETT
CLIENT PROJ. ID: 10-1682-03
CLIENT PROJ. NAME: IND. ASPHALT
C.O.C. NUMBER: 619

REPORT DATE: 09/16/94

DATE(S) SAMPLED: 08/23/94-08/25/94

DATE RECEIVED: 08/25/94

AEN WORK ORDER: 9408352

PROJECT SUMMARY:

On August 25, 1994, this laboratory received 7 water sample(s).

Client requested sample(s) be analyzed for organic parameters. Results of analysis are summarized on the following page(s).

Please see quality control report for a summary of QC data pertaining to this project.

If you have any questions, please contact Client Services at (510) 930-9090.



Larry Klein
Laboratory Director

KLEINFELDER, INC.

SAMPLE ID: 64220
 AEN LAB NO: 9408352-01
 AEN WORK ORDER: 9408352
 CLIENT PROJ. ID: 10-1682-03
 14A2 TAP

DATE SAMPLED: 08/23/94
 DATE RECEIVED: 08/25/94
 REPORT DATE: 09/16/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	08/27/94
TPH as Diesel	GC-FID	ND	0.05	mg/L	08/28/94
TPH as Oil	GC-FID	ND	0.2	mg/L	08/28/94
#Water Extrn for HC's (IR)	SM 5520CF	-		Extrn Date	08/30/94
#Water Extrn for O&G (IR)	SM 5520C	-		Extrn Date	08/30/94
Hydrocarbons (IR)	SM 5520CF	ND	0.5	mg/L	08/31/94
Oil & Grease (IR)	SM 5520C	ND	0.5	mg/L	08/31/94
#Extraction for Pest/PCBs	EPA 3510	-		Extrn Date	08/26/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	08/26/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	08/26/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	08/26/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	08/26/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	08/26/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	08/26/94
Aroclor 1260	11096-82-5	ND	0.5	ug/L	08/26/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit

KLEINFELDER, INC.

SAMPLE ID: 64216 MW-15
 AEN LAB NO: 9408352-02
 AEN WORK ORDER: 9408352
 CLIENT PROJ. ID: 10-1682-03

DATE SAMPLED: 08/24/94
 DATE RECEIVED: 08/25/94
 REPORT DATE: 09/16/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	08/27/94
TPH as Diesel	GC-FID	ND	0.05	mg/L	08/28/94
TPH as Oil	GC-FID	ND	0.2	mg/L	08/28/94
#Water Extn for HCs (IR)	SM 5520CF	-		Extrn Date	08/30/94
#Water Extn for O&G (IR)	SM 5520C	-		Extrn Date	08/30/94
Hydrocarbons (IR)	SM 5520CF	ND	0.5	mg/L	08/31/94
Oil & Grease (IR)	SM 5520C	ND	0.5	mg/L	08/31/94
#Extraction for Pest/PCBs	EPA 3510	-		Extrn Date	08/26/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	08/26/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	08/26/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	08/26/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	08/26/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	08/26/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	08/26/94
Aroclor 1260	11096-82-5	ND	0.5	ug/L	08/26/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit

KLEINFELDER, INC.

SAMPLE ID: 64204 ^{MW-16}
 AEN LAB NO: 9408352-03
 AEN WORK ORDER: 9408352
 CLIENT PROJ. ID: 10-1682-03

DATE SAMPLED: 08/24/94
 DATE RECEIVED: 08/25/94
 REPORT DATE: 09/16/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	08/27/94
TPH as Diesel	GC-FID	ND	0.05	mg/L	08/28/94
TPH as Oil	GC-FID	ND	0.2	mg/L	08/28/94
#Water Extrn for HC's (IR)	SM 5520CF	-		Extrn Date	08/30/94
#Water Extrn for O&G (IR)	SM 5520C	-		Extrn Date	08/30/94
Hydrocarbons (IR)	SM 5520CF	ND	0.5	mg/L	08/31/94
Oil & Grease (IR)	SM 5520C	ND	0.5	mg/L	08/31/94
#Extraction for Pest/PCBs	EPA 3510	-		Extrn Date	08/26/94
Polychlorinated Biphenyls	EPA 8080				
Aroclor 1016	12674-11-2	ND	0.5	ug/L	08/26/94
Aroclor 1221	11104-28-2	ND	0.5	ug/L	08/26/94
Aroclor 1232	11141-16-5	ND	0.5	ug/L	08/26/94
Aroclor 1242	53469-21-9	ND	0.5	ug/L	08/26/94
Aroclor 1248	12672-29-6	ND	0.5	ug/L	08/26/94
Aroclor 1254	11097-69-1	ND	0.5	ug/L	08/26/94
Aroclor 1260	11096-82-5	ND	0.5	ug/L	08/26/94

ND = Not detected at or above the reporting limit

* = Value above reporting limit