KLEINFELDER

91 AUG 22 AM 11:55

August 9, 1991
File: 10-1682-03/38

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

SUBJECT: Quarterly Report (May 1991 - July 1991), Industrial Asphalt, Pleasanton, California

Dear Mr. Hunt:

Kleinfelder, Inc., is pleased to submit this quarterly report for the second quarter of 1991 (May 1991 through July 1991) for the Industrial Asphalt site in Pleasanton, California (Plate 1). Quarterly progress reports were requested by the Alameda County Department of Health Services (ACDHS) in their letter to you dated 13 November 1989.

INTRODUCTION

Thirteen monitoring wells and one extraction well (MW-13) are present onsite. Data collected from these wells were used to evaluate the nature and extent of the plume. The location of monitoring wells along with the extraction well are shown on Plate 2. Wells are being monitored for depth to water and product thickness on a quarterly basis in accordance with recommendations in the Remedial Investigation Report dated 28 December 1990. Collected ground water samples have been analyzed for the target compounds including total petroleum hydrocarbons (TPH) as diesel/waste oil and polychlorinated biphenyls (PCBs). Additionally, as requested by the ACDHS in their letter to your firm dated February 21, 1991, water samples were also analyzed for BTXE (benzene, tolulene, xylenes and ethylbenzene) using EPA Method 8020, Oil and Grease (Standard Method 5520 C & F) and halogenated volatile organics using EPA Method 8010.

Water samples were collected from onsite wells MW-1, MW-2 MW-3, MW-4, MW-5, MW-7, MW-8, MW-9, MW-10, MW-13, MW-14, MW-15 and MW-16 during this sampling round. Monitoring well MW-6 was not accessible on the sampling days, and therefore, was not sampled. In addition to the onsite monitoring wells, an offsite water supply well located on the Jamieson property was sampled. Refer to Plate 2 for the location of the wells and the offsite well.

Wells were purged with a submersible pump in accordance with Kleinfelder protocol and established procedures. Approximately 4 casing volumes were removed from the wells, and sampling, by disposable Teflon™ bailers, was accomplished after physical parameters, i.e., temperature, pH, and electrical conductivity, were relatively stable.

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A 4-inch nominal diameter stainless steel, Grundfos™ submersible pump, used for purging, was not retrievable from MW-3 due to an apparent casing restriction. Attached electrical and lifting cable was retrieved, and the pump now rests at the bottom of the well at a depth of approximately 90 ft.

WATER LEVEL MONITORING DATA

Ground water surface elevation data were collected in sampled wells prior to their sampling. These measurements are provided in Table 1. Generally, the ground water surface elevation has dropped several feet since the previous sampling round, which occurred in April 1991.

Based on the information collected during this round of sampling, a ground water surface contour map was constructed (Plate 3). This map indicates a general flow direction to the northeast, a change from the easterly flow direction noted during the previous sampling round, but in general accordance with flow directions noted prior to the April 1991 sampling event.

A measurement from staff gauge located in the adjacent settlement pond collected during this sampling round indicates that the water surface in the pond has dropped several feet since the last sampling round in April 1991.

GROUND WATER CHEMISTRY MONITORING RESULTS

Sheen was observed in the following wells during this sampling round: MW-1, MW-2 and MW-8. In addition, some monitoring wells exhibited hydrocarbon odors. These include: MW-1, MW-2, MW-3, MW-8, MW-9 and MW-13.

Analytical data are provided in Tables 1, 2 and 3. Complete analytical laboratory reports along with chain of custody records are included in the Appendix.

Detectable concentrations of PCBs at 0.8 micrograms per liter (μg/l) were found only in the ground water sample collected from monitoring well MW-2. In April 1991, PCBs were reported in samples from this well at concentrations of 5.1 μg/l, in MW-3 (0.8 μg/l) and in MW-8 (0.8 μg/l). Therefore, there has been a decrease in concentrations of PCBs in ground water samples collected from the site.

Analyses of the water samples collected from wells MW-1, MW-2, MW-7, MW-13 and MW-15, revealed the presence of dissolved hydrocarbons (TPH) as both diesel and waste oil in ground water at these sampling locations. TPH as "waste oil only" was detected in the samples collected from MW-5 and MW-14. TPH as "diesel only" was detected in wells MW-3, MW-8, and MW-9. The concentrations for diesel range between 32 milligrams per liter (mg/l) to 0.3 mg/l, with MW-2 continuing to exhibit the highest concentrations. Analytical data indicate a drop in the concentrations of TPH as diesel and waste oil in the water samples collected as compared to the April 1991 data, although waste oil was detected at low concentrations in monitoring wells MW-5, MW-7 MW-13 and MW-15. As in the past, concentrations of hydrocarbons generally decrease as water surface elevations decrease.

Chemical analyses for oil and grease and hydrocarbons revealed the presence of these compounds in the water samples obtained from wells MW-1, MW-2, MW-13 and MW-16. Oil and grease was detected in MW-15. (Table 1).

Volatile Organic Compounds (VOCs),1,1 - dichloroethane, and vinyl chloride were detected in the sample from well MW-2 (Table 2). During the previous sampling, VOCs were detected in MW-3 and MW-8. VOCs were not reported in samples collected from these wells in July 1991.

Benzene was detected in samples from monitoring well MW-2 and ethylbenzene in well MW-8.

An offsite water supply well located east of the site (Jamieson Well) was sampled (Plate 2). The well was purged by opening a tap and running the water for about 30 minutes in order to empty the surge tank. Approximately 200 gallons of water were purged prior to collecting a sample. The ground water samples were analyzed for the same constituents as the onsite monitoring wells. None of the target compounds were detected in concentrations above their respective laboratory reporting limits.

In summary, based on the available data, the ground water surface elevation beneath the site is lower than the previous sampling round and ground water flow is generally to the north east. The ground water chemistry has remained, for the most part, consistent between sampling rounds. The ground water samples collected from monitoring wells MW-1 and MW-2 exhibit the highest concentrations of the target compounds. The ground water samples collected from the offsite water production well (Jamieson well) did not exhibit concentrations of the target chemical above the laboratory reporting limits for each of the compounds requested.

RECOMMENDED ACTIVITIES

Volatile organic compounds, diesel, oil, and grease and aromatic hydrocarbons were found in the water samples obtained from the onsite monitoring wells. Therefore, it is recommended that during the next quarterly round (October 1991), water samples be analyzed for the same compounds. This is to confirm low concentrations of these compounds found in selected water samples.

The following monitoring wells are damaged and we recommend repairs:

- MW-1 - Top of well is damaged. Needs new steel cover;
- MW-4 - Needs new steel cover;
- MW-7 - Needs new steel cover;
- MW-16 - Needs new "Christy Box".

OTHER ACTIVITIES

A feasibility study (FS) has been conducted on behalf of Industrial Asphalt which described Remedial action alternatives for soil and ground water cleanup. The FS Report was mailed to the regulatory agencies August 14-15, 1991.

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.

Krzysztof (Krys) S. Jesionek,
Project Manager

Lloyd C. Venburg, R.G.
Senior Project Manager

KSJ:LCV:lwg

cc: Dwight Beavers - Industrial Asphalt
Robi Arulanantham - Alameda County Department of Environmental Services
Linda Spencer - California Regional Water Quality Control Board
Jerry Killingstad - Alameda County Flood Control and Water
Conservation District - Zone 7

Table 1
MONITORING PARAMETERS (JULY 1991)
INDUSTRIAL ASPHALT

Monitoring Well	Total Depth (feet)	Depth to Water[1] (feet)	Ground Water Elevation[2] (feet)	Product Thickness (feet)	TPH as Diesel[3] (mg/l)	TPH as Waste Oil[4] (mg/l)	PCBs µg/l[5]	Oil & Grease (mg/l)[10]	Total Hydrocarbons (mg/l)[11]
MW-1[13]	88	76.84	302.57	SHEEN	29	8	ND	60	55
MW-2	90	76.61	303.19	SHEEN	32	14	0.8	73	64
MW-3	90	74.14	304.40	NE	0.7	ND	ND	ND	ND
MW-4[13]	95	72.69	303.57	NE	ND	ND	ND	ND	ND
MW-5	110	85.21	297.34	NE	ND	0.8	ND	ND	ND
MW-6	109	NC	NA	NA	NT	NT	NT	NT	NT
MW-7	109	76.42	302.52	NE	0.09	0.1	ND	ND	ND
MW-8	109	74.64	303.92	SHEEN	0.3	ND	ND	ND	ND
MW-9	108	77.20	300.2	NE	0.4	ND	ND	ND	ND
MW-10	111	73.72	304.32	NE	ND	ND	ND	ND	ND
MW-11[8]	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-13[9][13]	116	76.66	303.55	NE	0.8	0.3	ND	0.9	0.6
MW-14	114.5	76.43	303.66	NE	ND	0.3	ND	0.6	ND
MW-15	117	76.13	301.99	NE	1.0	1.5	ND	0.7	ND
MW-16	110	75.08	304.57	NE	ND	0.5	ND	ND	ND
14A2[12]	UNK	UNK	UNK	UNK	ND	ND	ND	ND	ND
SG	NA	-1.5	298.5	NA	NA	NA	NA	NA	NA

(1) Below top of casing
(2) Feet above mean sea level (USGS Datum)
(3) Laboratory detection limits - 0.05 mg/l
(4) Laboratory detection limit - 0.1 mg/l
(5) Laboratory detection limit - 0.5 µg/l
(6) Reading on the staff gage
(7) Surface water elevation in the pit
(8) Well abandoned on August 8, 1990
(9) Extraction well
(10) Laboratory detection limit - 0.5 mg/l
(11) Laboratory detection limit - 0.5 mg/l
(12) Jamieson Well
(13) Measured 7/09/91, other wells measured 7/08/91
TPH Total Petroleum Hydrocarbons
PCBs Polychlorinated Biphenyls (Aroclor 1260)
NE Not Encountered
ND Not Detected at or above laboratory detection limits
NA Not Applicable
SG Staff Gage
NC Not Acessible
NT Not Tested
UNK Unknown

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Table 2
HALOGENATED ORGANICS (EPA METHOD 8010)[1]
INDUSTRIAL ASPHALT

Monitoring Well	1,1 - DCA	VC
MW-1	ND	ND
MW-2	ND	ND
MW-3	2	8
MW-4	ND	ND
MW-5	ND	ND
MW-6	NT	NT
MW-7	ND	ND
MW-8	ND	ND
MW-9	NT	NT
MW-10	ND	ND
MW-13	ND	ND
MW-14	ND	ND
MW-15	ND	ND
MW-16	ND	ND
14A2	ND	ND

Notes:
Concentrations in µg/l

(1) Laboratory detection limits - 0.5 µg/l
NT Not Tested
1,1 - DCA = 1,1 - Dichloroethane
VC Vinyl Chloride
14A2 Jamieson Well

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Table 3
BTXE (EPA METHOD 8020)
INDUSTRIAL ASPHALT

Monitoring Well	Benzene[1]	Toluene[1]	Ethylbenzene[1]	Xylenes[2]
MW-1	ND	ND	ND	ND
MW-2	0.8	ND	ND	ND
MW-3	ND	ND	ND	ND
MW-4	ND	ND	ND	ND
MW-5	ND	ND	ND	ND
MW-6	NT	NT	NT	NT
MW-7	ND	ND	ND	ND
MW-8	ND	ND	1	ND
MW-9	ND	ND	ND	ND
MW-10	ND	ND	ND	ND
MW-13	ND	ND	ND	ND
MW-14	ND	ND	ND	ND
MW-15	ND	ND	ND	ND
MW-16	ND	ND	ND	ND
14A2	ND	ND	ND	ND

Notes:

Concentrations in μg/l

(1) Laboratory detection limit - 0.5 μg/l
(2) Laboratory detection limit - 2 μg/l
MA-2 Jamiscon Code

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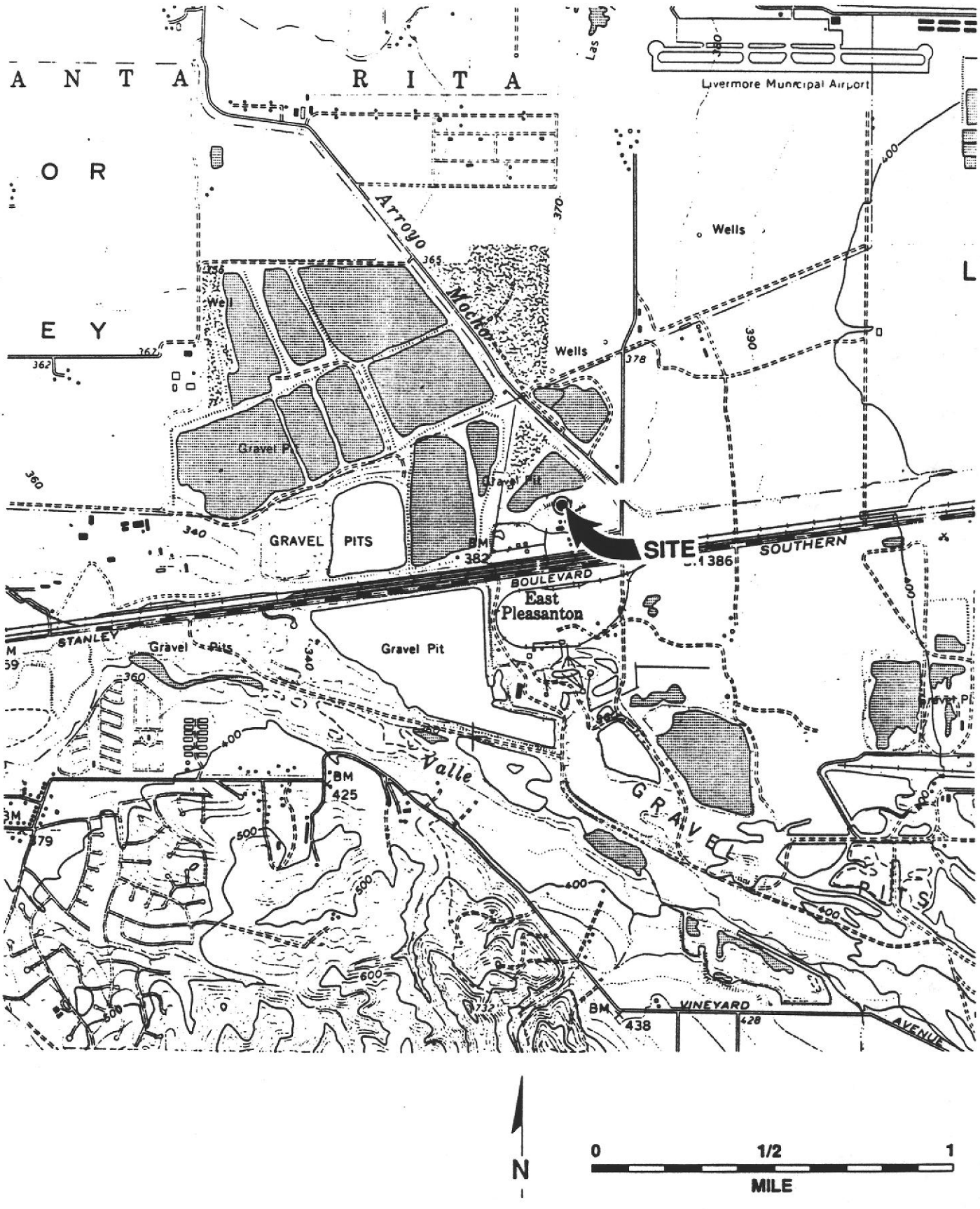


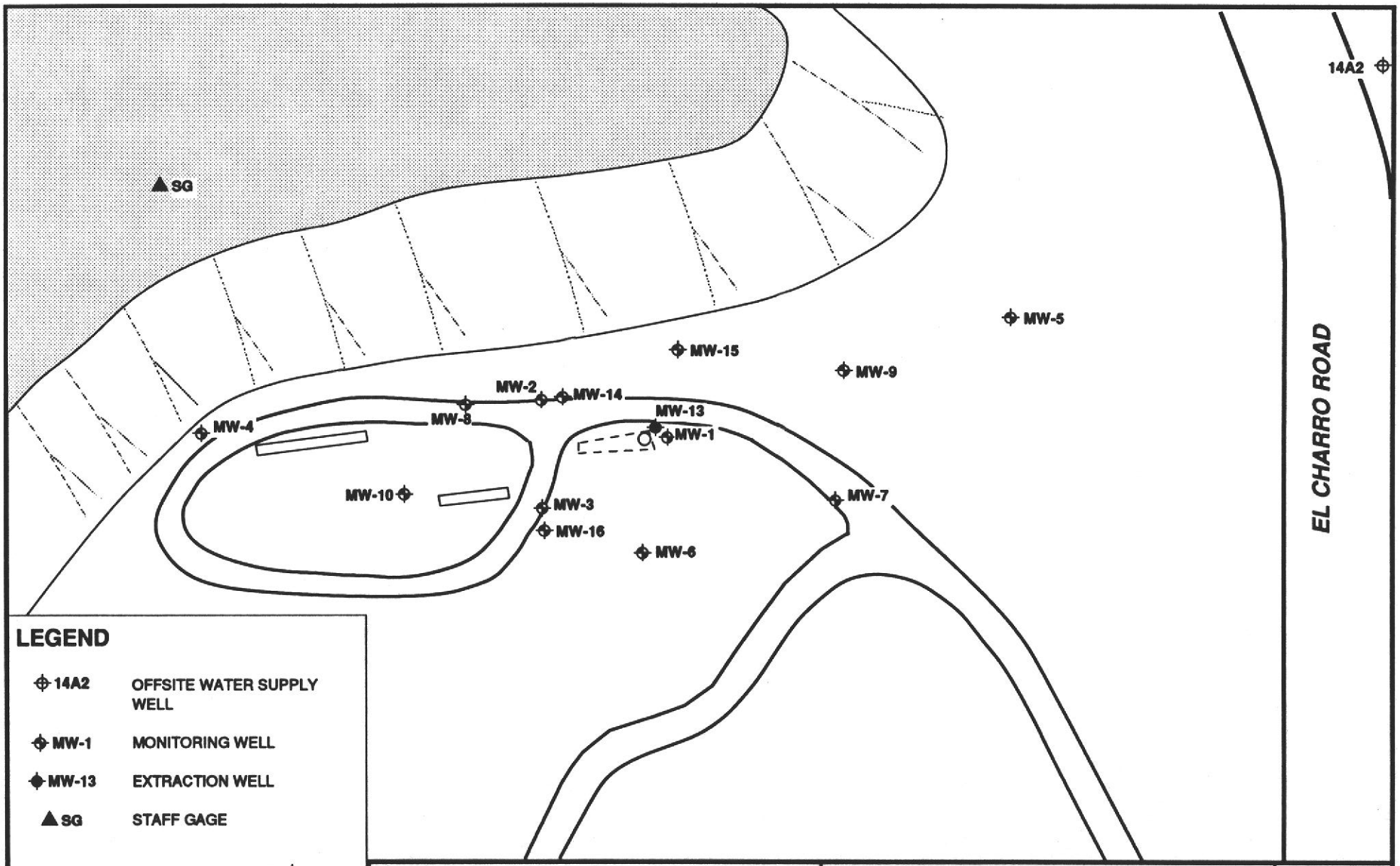
KLEINFELDER

PROJECT NO. **10-1682-03**

SITE LOCATION MAP

INDUSTRIAL ASPHALT
PLEASANTON, CALIFORNIA

PLATE
1



LEGEND

14A2	OFFSITE WATER SUPPLY WELL
MW-1	MONITORING WELL
MW-13	EXTRACTION WELL
SG	STAFF GAGE

0 150
Approximate Scale (feet)

N

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

KLEINFELDER

DRAFTED BY: L. Sue DATE: 8-16-91

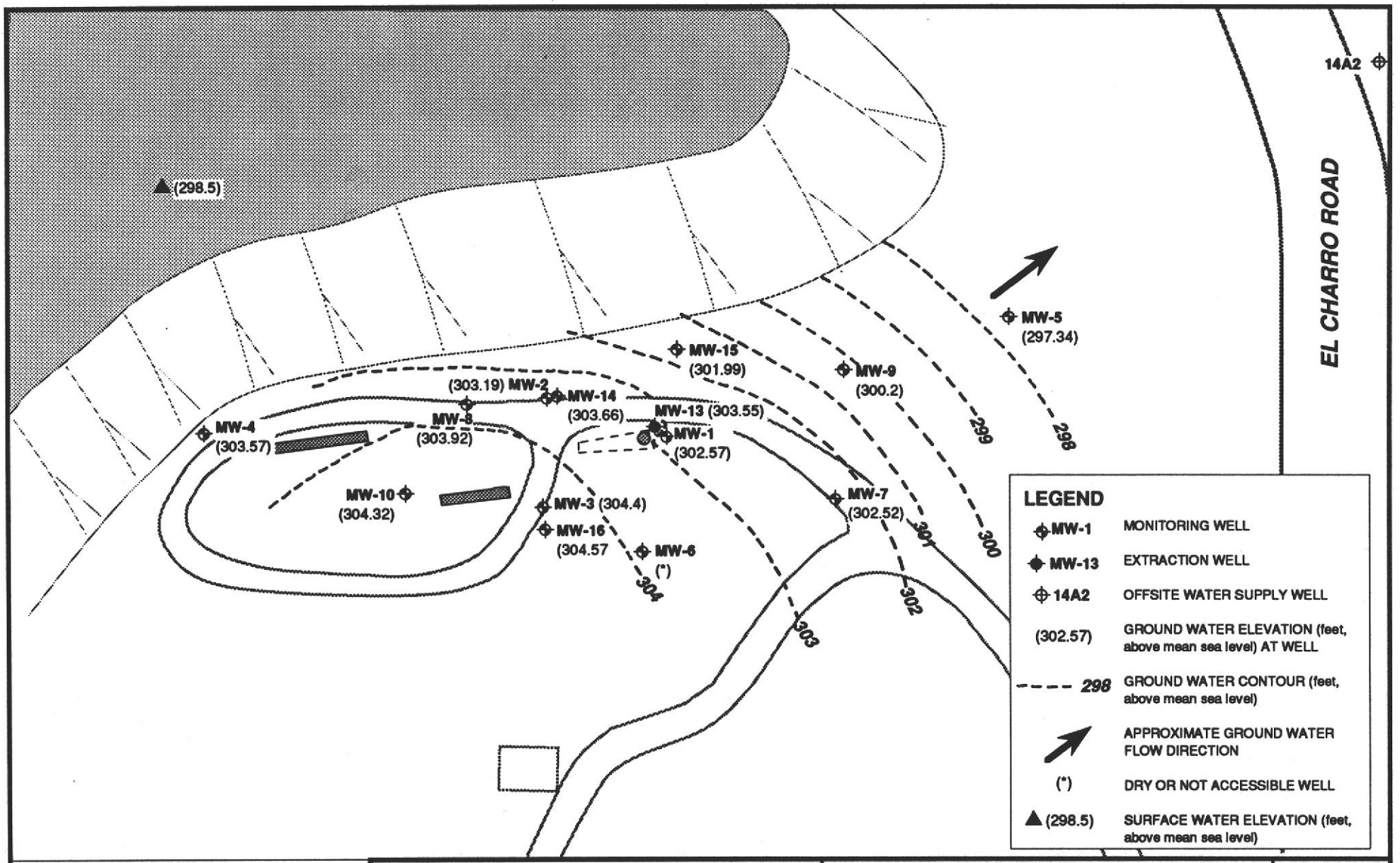
CHECKED BY: L. Venburg DATE: 8-16-91

MONITORING WELL LOCATION MAP

INDUSTRIAL ASPHALT
PLEASANTON, CALIFORNIA

PROJECT NO. 10-1682-03

PLATE 2



0 150
Approximate Scale (feet)

N

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

KLEINFELDER

DRAFTED BY: L. Sue DATE: 8-16-91

CHECKED BY: L. Venbrug DATE: 8-16-91

GROUND WATER SURFACE CONTOUR MAP — JULY 1991

INDUSTRIAL ASPHALT
PLEASANTON, CALIFORNIA

PROJECT NO. 10-1682-03

PLATE 3

ANALYTICAL SERVICES

DOHS CERTIFICATION NO: E772

MED-TOX ASSOCIATES, INC

CERTIFICATE OF ANALYSIS

WORKING COPY

KLEINFELDER, INC.
2121 N. CALIFORNIA STREET
SUITE 570
WALNUT CREEK, CA 94596
ATTN: KRYS JESIONEK

CLIENT PROJ. ID: 10-1682-03
C.O.C. NO: 1302

REPORT DATE: 07/26/91

DATE SAMPLED: 07/11/91

DATE RECEIVED: 07/11/91

MED-TOX JOB NOS: 9107058, 9107059

ANALYSIS OF: WATER SAMPLES

See attached for results

Andrew Bradeen

Andrew Bradeen, Manager
Organic Laboratory

Results FAXed 07/24/91

KLEINFELDER, INC.

DATE SAMPLED: 07/11/91
DATE RECEIVED: 07/11/91
CLIENT PROJ. ID: 10-1682-03

REPORT DATE: 07/26/91

MED-TOX JOB NOS: 9107058, 9107059

Sample Identification Client Id.	Lab No.		Extractable Hydrocarbons as Diesel (mg/L)	Extractable Hydrocarbons as Oil (mg/L)	Oil & Grease (mg/L)	Hydrocarbons (mg/L)
9107058						
61088	01E	MW-9	0.4	ND	---	---
61088	01I		---	---	ND	ND
61098	02E	MW-8	0.3	ND	---	---
61098	02I		---	---	ND	ND
61118	03E	MW-2	32	14	---	---
61118	03I		---	---	73	64
9107059						
61108	01E	MW-3	0.7	ND	---	---
61108	01I		---	---	ND	ND
61128	02E	MW-1	29	8	---	---
61128	02I		---	---	60	55
61138	03E	Tank	ND	ND	---	---
61138	03I	Jamieson well	---	---	ND	ND
Detection Limit			0.05	0.1	0.5	0.5
Method:			3520 GCFID	3520 GCFID	5520C	5520F
Instrument:			C	C	IR	IR
Date Extracted:			07/19/91	07/19/91	07/22/91	07/22/91
Date Analyzed:			07/21-22/91	07/21-22/91	07/23/91	07/23/91

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 61088
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 07/11/91
DATE RECEIVED: 07/11/91
REPORT DATE: 07/26/91

MED-TOX LAB NO: 9107058-01A
MED-TOX JOB NO: 9107058
DATE ANALYZED: 07/15/91
INSTRUMENT: G

EPA METHOD 8010 (WATER MATRIX)
HALOGENATED VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-34-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
cis-1,2-Dichloroethene	156-69-4	ND	0.5
trans-1,2-Dichloroethene	156-60-5	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	ND	0.5

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 61098
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 07/11/91
DATE RECEIVED: 07/11/91
REPORT DATE: 07/26/91

MED-TOX LAB NO: 9107058-02A
MED-TOX JOB NO: 9107058
DATE ANALYZED: 07/16/91
INSTRUMENT: G

EPA METHOD 8010 (WATER MATRIX)
HALOGENATED VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-34-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
cis-1,2-Dichloroethene	156-69-4	ND	0.5
trans-1,2-Dichloroethene	156-60-5	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	ND	0.5

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 61118
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 07/11/91
DATE RECEIVED: 07/11/91
REPORT DATE: 07/26/91

MED-TOX LAB NO: 9107058-03A
MED-TOX JOB NO: 9107058
DATE ANALYZED: 07/16/91
INSTRUMENT: G

EPA METHOD 8010 (WATER MATRIX)
HALOGENATED VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	**75-34-3**	**0.9**	**0.5**
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
cis-1,2-Dichloroethene	156-69-4	ND	0.5
trans-1,2-Dichloroethene	156-60-5	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	**75-01-4**	**5**	**0.5**

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 61108
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 07/11/91
DATE RECEIVED: 07/11/91
REPORT DATE: 07/26/91

MED-TOX LAB NO: 9107059-01A
MED-TOX JOB NO: 9107059
DATE ANALYZED: 07/16/91
INSTRUMENT: G

EPA METHOD 8010 (WATER MATRIX)
HALOGENATED VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-34-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
cis-1,2-Dichloroethene	156-69-4	ND	0.5
trans-1,2-Dichloroethene	156-60-5	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	ND	0.5

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 61128
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 07/11/91
DATE RECEIVED: 07/11/91
REPORT DATE: 07/26/91

MED-TOX LAB NO: 9107059-02A
MED-TOX JOB NO: 9107059
DATE ANALYZED: 07/16/91
INSTRUMENT: G

EPA METHOD 8010 (WATER MATRIX)
HALOGENATED VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-34-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
cis-1,2-Dichloroethene	156-69-4	ND	0.5
trans-1,2-Dichloroethene	156-60-5	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	ND	0.5

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 61138
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 07/11/91
DATE RECEIVED: 07/11/91
REPORT DATE: 07/26/91

MED-TOX LAB NO: 9107059-03A
MED-TOX JOB NO: 9107059
DATE ANALYZED: 07/16/91
INSTRUMENT: G

EPA METHOD 8010 (WATER MATRIX)
HALOGENATED VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-34-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
cis-1,2-Dichloroethene	156-69-4	ND	0.5
trans-1,2-Dichloroethene	156-60-5	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	ND	0.5

ND = Not Detected

KLEINFELDER, INC.

CLIENT PROJ. ID: 10-1682-03
CLIENT ID: 61088
DATE SAMPLED: 07/11/91
DATE RECEIVED: 07/11/91
REPORT DATE: 07/26/91

MED-TOX LAB NO: 9107058-01C
MED-TOX JOB NO: 9107058

DATE ANALYZED: 07/15/91
INSTRUMENT: G

BTEX (WATER MATRIX)

METHOD: EPA 8020 (5030)

	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.5
Toluene	108-88-3	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
Xylenes, Total	1330-20-7	ND	2

ND = Not Detected

KLEINFELDER, INC.

CLIENT PROJ. ID: 10-1682-03
CLIENT ID: 61098
DATE SAMPLED: 07/11/91
DATE RECEIVED: 07/11/91
REPORT DATE: 07/26/91

MED-TOX LAB NO: 9107058-02C
MED-TOX JOB NO: 9107058

DATE ANALYZED: 07/16/91
INSTRUMENT: G

BTEX (WATER MATRIX)

METHOD: EPA 8020 (5030)

	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.5
Toluene	108-88-3	ND	0.5
Ethylbenzene	100-41-4	1	0.5
Xylenes, Total	1330-20-7	ND	2

ND = Not Detected

KLEINFELDER, INC.

CLIENT PROJ. ID: 10-1682-03
CLIENT ID: 61118
DATE SAMPLED: 07/11/91
DATE RECEIVED: 07/11/91
REPORT DATE: 07/26/91

MED-TOX LAB NO: 9107058-03C
MED-TOX JOB NO: 9107058

DATE ANALYZED: 07/16/91
INSTRUMENT: G

BTEX (WATER MATRIX)

METHOD: EPA 8020 (5030)

	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	0.8	0.5
Toluene	108-88-3	ND	0.5
Ethylbenzene	100-41-4	5	0.5
Xylenes, Total	1330-20-7	3	2

ND = Not Detected

KLEINFELDER, INC.

CLIENT PROJ. ID: 10-1682-03
CLIENT ID: 61108
DATE SAMPLED: 07/11/91
DATE RECEIVED: 07/11/91
REPORT DATE: 07/26/91

MED-TOX LAB NO: 9107059-01C
MED-TOX JOB NO: 9107059

DATE ANALYZED: 07/16/91
INSTRUMENT: G

BTEX (WATER MATRIX)

METHOD: EPA 8020 (5030)

	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.5
Toluene	108-88-3	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
Xylenes, Total	1330-20-7	ND	2

ND = Not Detected

KLEINFELDER, INC.

CLIENT PROJ. ID: 10-1682-03
CLIENT ID: 61128
DATE SAMPLED: 07/11/91
DATE RECEIVED: 07/11/91
REPORT DATE: 07/26/91

MED-TOX LAB NO: 9107059-02C
MED-TOX JOB NO: 9107059

DATE ANALYZED: 07/16/91
INSTRUMENT: G

BTEX (WATER MATRIX)

METHOD: EPA 8020 (5030)

	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.5
Toluene	108-88-3	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
Xylenes, Total	1330-20-7	ND	2

ND = Not Detected

KLEINFELDER, INC.

CLIENT PROJ. ID: 10-1682-03
CLIENT ID: 61138
DATE SAMPLED: 07/11/91
DATE RECEIVED: 07/11/91
REPORT DATE: 07/26/91

MED-TOX LAB NO: 9107059-03C
MED-TOX JOB NO: 9107059

DATE ANALYZED: 07/16/91
INSTRUMENT: G

BTEX (WATER MATRIX)

METHOD: EPA 8020 (5030)

	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.5
Toluene	108-88-3	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
Xylenes, Total	1330-20-7	ND	2

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 61088
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 07/11/91
DATE RECEIVED: 07/11/91
REPORT DATE: 07/26/91

MED-TOX LAB NO: 9107058-01G
MED-TOX JOB NO: 9107058
DATE EXTRACTED: 07/18/91
DATE ANALYZED: 07/21/91
INSTRUMENT: B

EPA METHOD 8080

POLYCHLORINATED BIPHENYLS

AROCLOR	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Aroclor 1016	12674-11-2	ND	0.5
Aroclor 1221	11104-28-2	ND	0.5
Aroclor 1232	11141-16-5	ND	0.5
Aroclor 1242	53469-21-9	ND	0.5
Aroclor 1248	12672-29-6	ND	0.5
Aroclor 1254	11097-69-1	ND	0.5
Aroclor 1260	11096-82-5	ND	0.5

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 61098
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 07/11/91
DATE RECEIVED: 07/11/91
REPORT DATE: 07/26/91

MED-TOX LAB NO: 9107058-02G
MED-TOX JOB NO: 9107058
DATE EXTRACTED: 07/18/91
DATE ANALYZED: 07/21/91
INSTRUMENT: B

EPA METHOD 8080

POLYCHLORINATED BIPHENYLS

AROCLOR	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Aroclor 1016	12674-11-2	ND	0.5
Aroclor 1221	11104-28-2	ND	0.5
Aroclor 1232	11141-16-5	ND	0.5
Aroclor 1242	53469-21-9	ND	0.5
Aroclor 1248	12672-29-6	ND	0.5
Aroclor 1254	11097-69-1	ND	0.5
Aroclor 1260	11096-82-5	ND	0.5

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 61118
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 07/11/91
DATE RECEIVED: 07/11/91
REPORT DATE: 07/26/91

MED-TOX LAB NO: 9107058-03G
MED-TOX JOB NO: 9107058
DATE EXTRACTED: 07/18/91
DATE ANALYZED: 07/21/91
INSTRUMENT: B

EPA METHOD 8080

POLYCHLORINATED BIPHENYLS

AROCLOR	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Aroclor 1016	12674-11-2	ND	0.5
Aroclor 1221	11104-28-2	ND	0.5
Aroclor 1232	11141-16-5	ND	0.5
Aroclor 1242	53469-21-9	ND	0.5
Aroclor 1248	12672-29-6	ND	0.5
Aroclor 1254	11097-69-1	ND	0.5
Aroclor 1260	11096-82-5	0.8	0.5

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 61108
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 07/11/91
DATE RECEIVED: 07/11/91
REPORT DATE: 07/26/91

MED-TOX LAB NO: 9107059-01G
MED-TOX JOB NO: 9107059
DATE EXTRACTED: 07/18/91
DATE ANALYZED: 07/21/91
INSTRUMENT: B

EPA METHOD 8080

POLYCHLORINATED BIPHENYLS

AROCLOR	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Aroclor 1016	12674-11-2	ND	0.5
Aroclor 1221	11104-28-2	ND	0.5
Aroclor 1232	11141-16-5	ND	0.5
Aroclor 1242	53469-21-9	ND	0.5
Aroclor 1248	12672-29-6	ND	0.5
Aroclor 1254	11097-69-1	ND	0.5
Aroclor 1260	11096-82-5	ND	0.5

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 61128
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 07/11/91
DATE RECEIVED: 07/11/91
REPORT DATE: 07/26/91

MED-TOX LAB NO: 9107059-02G
MED-TOX JOB NO: 9107059
DATE EXTRACTED: 07/18/91
DATE ANALYZED: 07/21/91
INSTRUMENT: B

EPA METHOD 8080

POLYCHLORINATED BIPHENYLS

AROCLOR	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Aroclor 1016	12674-11-2	ND	0.5
Aroclor 1221	11104-28-2	ND	0.5
Aroclor 1232	11141-16-5	ND	0.5
Aroclor 1242	53469-21-9	ND	0.5
Aroclor 1248	12672-29-6	ND	0.5
Aroclor 1254	11097-69-1	ND	0.5
Aroclor 1260	11096-82-5	ND	0.5

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 61138
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 07/11/91
DATE RECEIVED: 07/11/91
REPORT DATE: 07/26/91

MED-TOX LAB NO: 9107059-03G
MED-TOX JOB NO: 9107059
DATE EXTRACTED: 07/18/91
DATE ANALYZED: 07/21/91
INSTRUMENT: B

EPA METHOD 8080

POLYCHLORINATED BIPHENYLS

AROCLOR	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Aroclor 1016	12674-11-2	ND	0.5
Aroclor 1221	11104-28-2	ND	0.5
Aroclor 1232	11141-16-5	ND	0.5
Aroclor 1242	53469-21-9	ND	0.5
Aroclor 1248	12672-29-6	ND	0.5
Aroclor 1254	11097-69-1	ND	0.5
Aroclor 1260	11096-82-5	ND	0.5

ND = Not Detected

MED-TOX ASSOCIATES, INC.

QUALITY CONTROL DATA

KLEINFELDER, INC.

CLIENT PROJECT ID: 10-1682-03

MED-TOX JOB NOS: 9107058 & 9107059

DATE EXTRACTED: 07/22/91
DATE ANALYZED: 07/23/91
INSTRUMENT: IR

MED-TOX JOB NOS: 9107058, 9107059
SAMPLE SPIKED: D.I. WATER
CLIENT PROJ ID: 10-1682-03

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

ANALYTE	Spike Conc. (mg/L)	Sample Result (mg/L)	MS Result (mg/L)	MSD Result (mg/L)	Average Percent Recovery	RPD
Oil	7.02	ND	6.86	7.02	98.9	2.3

CURRENT QC LIMITS (Revised 03/14/91)

Analyte	Percent Recovery	RPD
OIL	(70-121)	7.1

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
ND = Not Detected

DATE EXTRACTED: 07/19/91
DATE ANALYZED: 07/22/91
SAMPLE SPIKED: D.I. WATER

MED-TOX JOB NOS: 9107058, 9107059
INSTRUMENT: C
CLIENT PROJ. ID: 10-1682-03

MATRIX SPIKE RECOVERY SUMMARY
TPH EXTRACTABLE WATERS
METHOD 3520 GCFID
(WATER MATRIX; EXTRACTION METHOD)

ANALYTE	Spike Conc. (mg/L)	Sample Result (mg/L)	MS Result (mg/L)	MSD Result (mg/L)	Average Percent Recovery	RPD
Diesel	0.636	ND	0.563	0.629	93.7	5.5

CURRENT QC LIMITS (Revised 05/02/91)

Analyte	Percent Recovery	RPD
Diesel	(49.8-100.0)	30.1

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
ND = Not Detected

INSTRUMEMT: G

MED-TOX JOB NOS: 9107058, 9107059

CLIENT PROJ ID: 10-1682-03

SURROGATE STANDARD RECOVERY SUMMARY

METHOD 8010/8020
(WATER MATRIX)

SAMPLE IDENTIFICATION			SURROGATE RECOVERY (PERCENT)	
Date Analyzed	Client Id.	Lab No.	Bromochloro-methane	1,4-Dichloro-butane
	9107058			
07/15/91	61088	01A	94.4	91.1
07/15/91	61098	02A	106.3	95.0
07/15/91	61118	03B	97.9	93.9
	9107059			
07/16/91	61108	01B	88.2	90.4
07/16/91	61128	02B	93.5	87.9
07/16/91	61138	03B	101.5	89.3

CURRENT QC LIMITS

ANALYTE	PERCENT RECOVERY
Bromochloromethane	(79.5-115.3)
1,4-Dichlorobutane	(82.3-110.3)

DATE ANALYZED: 07/15/91
INSTRUMENT: G
SAMPLE SPIKED: D.I. WATER

MED-TOX JOB NO: 9107058
CLIENT PROJ ID: 10-1682-03

METHOD SPIKE RECOVERY SUMMARY

METHOD 8010/8020
WATER

ANALYTE	Spike Conc. (ug/L)	Sample Result (ug/L)	MS Result (ug/L)	MSD Result (ug/L)	Average Percent Recovery	RPD
1,1-Dichloroethene	50.0	ND	32.4	35.8	68.2	10.0
Trichloroethene	50.0	ND	43.9	47.6	91.5	8.1
Benzene	50.0	ND	38.9	42.1	81.0	7.9
Toluene	50.0	ND	39.4	42.5	81.9	7.6
Chlorobenzene	50.0	ND	39.2	41.4	80.6	5.5

CURRENT QC LIMITS (Revised 07/11/91)

Analyte	Percent Recovery	RPD
1,1-Dichloroethene	(66-130)	17.0
Trichloroethene	(83-128)	15.2
Benzene	(81-121)	9.5
Toluene	(81-119)	10.1
Chlorobenzene	(74-118)	9.8

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
ND = Not Detected

DATE ANALYZED: 07/16/91
INSTRUMENT: G
SAMPLE SPIKED: D.I. WATER

MED-TOX JOB NO: 9107059
CLIENT PROJ ID: 10-1682-03

METHOD SPIKE RECOVERY SUMMARY

METHOD 8010/8020
WATER

ANALYTE	Spike Conc. (ug/L)	Sample Result (ug/L)	MS Result (ug/L)	MSD Result (ug/L)	Average Percent Recovery	RPD
1,1-Dichloroethene	50.0	ND	36.7	35.6	72.3	3.0
Trichloroethene	50.0	ND	49.4	47.3	96.7	4.3
Benzene	50.0	ND	40.6	41.4	82.0	2.0
Toluene	50.0	ND	41.0	41.9	82.9	2.2
Chlorobenzene	50.0	ND	40.6	41.4	82.0	2.0

CURRENT QC LIMITS (Revised 07/11/91)

Analyte	Percent Recovery	RPD
1,1-Dichloroethene	(66-130)	17.0
Trichloroethene	(83-128)	15.2
Benzene	(81-121)	9.5
Toluene	(81-119)	10.1
Chlorobenzene	(74-118)	9.8

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
ND = Not Detected

DATE EXTRACTED: 07/18/91

MED-TOX JOB NOS: 9107058, 9107059

CLIENT PROJ ID: 10-1682-03

INSTRUMENT: B

SURROGATE STANDARD RECOVERY SUMMARY

METHOD 8080
(WATER MATRIX)

SAMPLE IDENTIFICATION			SURROGATE RECOVERY (PERCENT)
Date Analyzed	Client Id.	Lab No.	2,4,5,6-Tetrachloro-meta-xylene
	9107058		
07/21/91	61088	01G	51
07/21/91	61098	02G	97
07/21/91	61118	03G	77
	9107059		
07/21/91	61108	01G	95
07/21/91	61128	02G	50
07/21/91	61138	03G	99

CURRENT QC LIMITS

ANALYTE	PERCENT RECOVERY
2,4,5,6-Tetrachloro-meta-xylene	(46-134)

DATE EXTRACTED: 07/18/91
DATE ANALYZED: 07/21/91
SAMPLE SPIKED: D.I. WATER

MED-TOX JOB NOS: 9107058, 9107059
INSTRUMENT: B
CLIENT PROJ. ID: 10-1682-03

MATRIX SPIKE RECOVERY SUMMARY

METHOD 8080 (PCBs)
(WATER MATRIX)

COMPOUND	Spike Amount (ug/L)	Sample Result (ug/L)	MS Result (ug/L)	MSD Result (ug/L)	Average Percent Recovery	RPD
A1260	5.22	ND	4.87	4.85	93.1	0.4

CURRENT QC LIMITS

Analyte	Percent Recovery	RPD
A1260	(57-127)	24

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
ND = Not Detected

KLEINFELDER

9107058 + 9107059

PROJ. NO.	PROJECT NAME
10-1682-03	Industrial Asphalt
L.P. NO. (P.O. NO.)	SAMPLERS: (Signature/Number) Will McPhail + Bill Geul #1502

DATE MM/DD/YY	SAMPLE I.D. TIME HH:MM:SS	SAMPLE I.D.	NO. OF CONTAINERS	ANALYSIS: EPA 601	BTXE	TPH @ Diesel/Oil	PCB	D.I + Grease	REMARKS
7-11-91	7:27	61088	10	X	X	X	X	X	
	8:16	61098							
	9:00	61118							
	10:02	61108							
	11:15	61128							
	12:30	61138							

9107058
9107059

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Will McPhail	7-11-91 12:30	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)
	7/11/91 1230	Gina Gillespie

Remarks
Attn: Krys Jesionek
S.F.

Send Results To

KLEINFELDER
2121 N. CALIFORNIA BLVD.
SUITE 570
WALNUT CREEK, CA 94596
(415) 938-5610

M-60 White - Sampler Canary - Return Copy To Shipper Pink - Lab Copy

CHAIN OF CUSTODY

No. 1302

ANALYTICAL SERVICES

MED-TOX ASSOCIATES, INC

CERTIFICATE OF ANALYSIS

KLEINFELDER, INC.
2121 N. CALIFORNIA STREET
SUITE 570
WALNUT CREEK, CA 94596
ATTN: KRYS JESIONEK

CLIENT PROJ. ID: 10-1682-03
C.O.C. NO: 1305

ANALYSIS OF: WATER SAMPLES

REPORT DATE: 07/20/91

DATE SAMPLED: 07/09/91

DATE RECEIVED: 07/09/91

MED-TOX JOB NO: 9107039

Sample Identification Client Id.		Lab No.	Extractable Hydrocarbons as Diesel (mg/L)	Extractable Hydrocarbons as Oil (mg/L)	Oil & Grease (mg/L)	Hydrocarbons (mg/L)
61002	MW-5	01E	ND	0.8	---	---
61002		01I	---	---	ND	ND
61012	MW-4	02E	ND	ND	---	---
61012		02I	---	---	ND	ND
61038	MW-10	03E	ND	ND	---	---
61038		03I	---	---	ND	ND
61028	MW-7	04E	0.09	0.1	---	---
61028		04I	---	---	ND	ND
Detection Limit			0.05	0.1	0.5	0.5
Method:			3520 GCFID	3520 GCFID	5520C	5520F
Instrument:			C	C	IR	IR
Date Extracted:			07/17/91	07/17/91	07/18/91	07/18/91
Date Analyzed:			07/17/91	07/17/91	07/18/91	07/18/91

ND = Not Detected

Andrew Bradeen

Andrew Bradeen, Manager
Organic Laboratory

Results FAXed 07/18/91

KLEINFELDER, INC.

CLIENT ID: 61002
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 07/09/91
DATE RECEIVED: 07/09/91
REPORT DATE: 07/20/91

MED-TOX LAB NO: 9107039-01A
MED-TOX JOB NO: 9107039
DATE ANALYZED: 07/15/91
INSTRUMENT: G

EPA METHOD 8010 (WATER MATRIX)
HALOGENATED VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-34-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
cis-1,2-Dichloroethene	156-69-4	ND	0.5
trans-1,2-Dichloroethene	156-60-5	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	ND	0.5

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 61012
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 07/09/91
DATE RECEIVED: 07/09/91
REPORT DATE: 07/20/91

MED-TOX LAB NO: 9107039-02A
MED-TOX JOB NO: 9107039
DATE ANALYZED: 07/15/91
INSTRUMENT: G

EPA METHOD 8010 (WATER MATRIX)
HALOGENATED VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-34-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
cis-1,2-Dichloroethene	156-69-4	ND	0.5
trans-1,2-Dichloroethene	156-60-5	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	ND	0.5

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 61038
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 07/09/91
DATE RECEIVED: 07/09/91
REPORT DATE: 07/20/91

MED-TOX LAB NO: 9107039-03A
MED-TOX JOB NO: 9107039
DATE ANALYZED: 07/15/91
INSTRUMENT: G

EPA METHOD 8010 (WATER MATRIX)
HALOGENATED VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-34-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
cis-1,2-Dichloroethene	156-69-4	ND	0.5
trans-1,2-Dichloroethene	156-60-5	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	ND	0.5

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 61028
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 07/09/91
DATE RECEIVED: 07/09/91
REPORT DATE: 07/20/91

MED-TOX LAB NO: 9107039-04A
MED-TOX JOB NO: 9107039
DATE ANALYZED: 07/15/91
INSTRUMENT: G

EPA METHOD 8010 (WATER MATRIX)
HALOGENATED VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-34-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
cis-1,2-Dichloroethene	156-69-4	ND	0.5
trans-1,2-Dichloroethene	156-60-5	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	ND	0.5

ND = Not Detected

KLEINFELDER, INC.

CLIENT PROJ. ID: 10-1682-03
CLIENT ID: 61002
DATE SAMPLED: 07/09/91
DATE RECEIVED: 07/09/91
REPORT DATE: 07/20/91

MED-TOX LAB NO: 9107039-01C
MED-TOX JOB NO: 9107039

DATE ANALYZED: 07/15/91
INSTRUMENT: G

BTEX (WATER MATRIX)

METHOD: EPA 8020 (5030)

	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.5
Toluene	108-88-3	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
Xylenes, Total	1330-20-7	ND	2

ND = Not Detected

KLEINFELDER, INC.

CLIENT PROJ. ID: 10-1682-03
CLIENT ID: 61012
DATE SAMPLED: 07/09/91
DATE RECEIVED: 07/09/91
REPORT DATE: 07/20/91

MED-TOX LAB NO: 9107039-02C
MED-TOX JOB NO: 9107039

DATE ANALYZED: 07/15/91
INSTRUMENT: G

BTEX (WATER MATRIX)

METHOD: EPA 8020 (5030)

	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.5
Toluene	108-88-3	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
Xylenes, Total	1330-20-7	ND	2

ND = Not Detected

KLEINFELDER, INC.

CLIENT PROJ. ID: 10-1682-03
CLIENT ID: 61038
DATE SAMPLED: 07/09/91
DATE RECEIVED: 07/09/91
REPORT DATE: 07/20/91

MED-TOX LAB NO: 9107039-03C
MED-TOX JOB NO: 9107039

DATE ANALYZED: 07/15/91
INSTRUMENT: G

BTEX (WATER MATRIX)

METHOD: EPA 8020 (5030)

	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.5
Toluene	108-88-3	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
Xylenes, Total	1330-20-7	ND	2

ND = Not Detected

KLEINFELDER, INC.

CLIENT PROJ. ID: 10-1682-03
CLIENT ID: 61028
DATE SAMPLED: 07/09/91
DATE RECEIVED: 07/09/91
REPORT DATE: 07/20/91

MED-TOX LAB NO: 9107039-04C
MED-TOX JOB NO: 9107039

DATE ANALYZED: 07/15/91
INSTRUMENT: G

BTEX (WATER MATRIX)

METHOD: EPA 8020 (5030)

	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.5
Toluene	108-88-3	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
Xylenes, Total	1330-20-7	ND	2

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 61002
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 07/09/91
DATE RECEIVED: 07/09/91
REPORT DATE: 07/20/91

MED-TOX LAB NO: 9107039-01G
MED-TOX JOB NO: 9107039
DATE EXTRACTED: 07/15/91
DATE ANALYZED: 07/17/91
INSTRUMENT: B

EPA METHOD 8080

POLYCHLORINATED BIPHENYLS

AROCLOR	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Aroclor 1016	12674-11-2	ND	0.5
Aroclor 1221	11104-28-2	ND	0.5
Aroclor 1232	11141-16-5	ND	0.5
Aroclor 1242	53469-21-9	ND	0.5
Aroclor 1248	12672-29-6	ND	0.5
Aroclor 1254	11097-69-1	ND	0.5
Aroclor 1260	11096-82-5	ND	0.5

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 61012
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 07/09/91
DATE RECEIVED: 07/09/91
REPORT DATE: 07/20/91

MED-TOX LAB NO: 9107039-02G
MED-TOX JOB NO: 9107039
DATE EXTRACTED: 07/15/91
DATE ANALYZED: 07/17/91
INSTRUMENT: B

EPA METHOD 8080

POLYCHLORINATED BIPHENYLS

AROCLOR	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Aroclor 1016	12674-11-2	ND	0.5
Aroclor 1221	11104-28-2	ND	0.5
Aroclor 1232	11141-16-5	ND	0.5
Aroclor 1242	53469-21-9	ND	0.5
Aroclor 1248	12672-29-6	ND	0.5
Aroclor 1254	11097-69-1	ND	0.5
Aroclor 1260	11096-82-5	ND	0.5

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 61038
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 07/09/91
DATE RECEIVED: 07/09/91
REPORT DATE: 07/20/91

MED-TOX LAB NO: 9107039-03G
MED-TOX JOB NO: 9107039
DATE EXTRACTED: 07/15/91
DATE ANALYZED: 07/17/91
INSTRUMENT: B

EPA METHOD 8080

POLYCHLORINATED BIPHENYLS

AROCLOR	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Aroclor 1016	12674-11-2	ND	0.5
Aroclor 1221	11104-28-2	ND	0.5
Aroclor 1232	11141-16-5	ND	0.5
Aroclor 1242	53469-21-9	ND	0.5
Aroclor 1248	12672-29-6	ND	0.5
Aroclor 1254	11097-69-1	ND	0.5
Aroclor 1260	11096-82-5	ND	0.5

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 61028
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 07/09/91
DATE RECEIVED: 07/09/91
REPORT DATE: 07/20/91

MED-TOX LAB NO: 9107039-04G
MED-TOX JOB NO: 9107039
DATE EXTRACTED: 07/15/91
DATE ANALYZED: 07/17/91
INSTRUMENT: B

EPA METHOD 8080

POLYCHLORINATED BIPHENYLS

AROCLOR	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Aroclor 1016	12674-11-2	ND	0.5
Aroclor 1221	11104-28-2	ND	0.5
Aroclor 1232	11141-16-5	ND	0.5
Aroclor 1242	53469-21-9	ND	0.5
Aroclor 1248	12672-29-6	ND	0.5
Aroclor 1254	11097-69-1	ND	0.5
Aroclor 1260	11096-82-5	ND	0.5

ND = Not Detected

MED-TOX ASSOCIATES, INC.

QUALITY CONTROL DATA

KLEINFELDER, INC.

CLIENT PROJ. ID: 10-1682-03

MED-TOX JOB NO: 9107039

DATE EXTRACTED: 07/18/91
DATE ANALYZED: 07/19/91
INSTRUMENT: IR

MED-TOX JOB NO: 9107039
SAMPLE SPIKED: D.I. WATER
CLIENT PROJ ID: 10-1682-03

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

ANALYTE	Spike Conc. (mg/L)	Sample Result (mg/L)	MS Result (mg/L)	MSD Result (mg/L)	Average Percent Recovery	RPD
Oil	7.02	ND	6.70	6.86	96.6	2.4

CURRENT QC LIMITS (Revised 03/14/91)

Analyte	Percent Recovery	RPD
OIL	(70-121)	7.1

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
ND = Not Detected

DATE EXTRACTED: 07/17/91
DATE ANALYZED: 07/17/91
SAMPLE SPIKED: D.I. WATER

MED-TOX JOB NO: 9107039
INSTRUMENT: C
CLIENT PROJ. ID: 10-1682-03

MATRIX SPIKE RECOVERY SUMMARY
TPH EXTRACTABLE WATERS
METHOD 3520 GCFID
(WATER MATRIX; EXTRACTION METHOD)

ANALYTE	Spike Conc. (mg/L)	Sample Result (mg/L)	MS Result (mg/L)	MSD Result (mg/L)	Average Percent Recovery	RPD
Diesel	0.636	ND	0.475	0.479	73.6	4.7

CURRENT QC LIMITS (Revised 05/02/91)

Analyte	Percent Recovery	RPD
Diesel	(49.8-100.0)	30.1

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
ND = Not Detected

INSTRUMEMT: G

MED-TOX JOB NO: 9107039

CLIENT PROJ ID: 10-1682-03

SURROGATE STANDARD RECOVERY SUMMARY

METHOD 8010/8020
(WATER MATRIX)

SAMPLE IDENTIFICATION			SURROGATE RECOVERY (PERCENT)	
Date Analyzed	Client Id.	Lab No.	Bromochloro-methane	1,4-Dichloro-butane
07/15/91	61002	01A	97.5	90.4
07/15/91	61012	02A	95.8	91.9
07/15/91	61038	03A	103	91.9
07/15/91	61028	04A	104	88.5

CURRENT QC LIMITS

ANALYTE	PERCENT RECOVERY
Bromochloromethane	(79.5-115.1)
1,4-Dichlorobutane	(82.3-110.3)

MED-TOX ASSOCIATES, INC.

DATE ANALYZED: 07/15/91
INSTRUMENT: G
SAMPLE SPIKED: D.I. WATER

MED-TOX JOB NO: 9107039
CLIENT PROJ ID: 10-1682-03

METHOD SPIKE RECOVERY SUMMARY

METHOD 8010/8020
WATER

ANALYTE	Spike Conc. (ug/L)	Sample Result (ug/L)	MS Result (ug/L)	MSD Result (ug/L)	Average Percent Recovery	RPD
1,1-Dichloroethene	50.0	ND	36.3	37.2	73.3	2.4
Trichloroethene	50.0	ND	48.6	49.4	98.0	1.6
Benzene	50.0	ND	41.3	41.9	83.2	1.4
Toluene	50.0	ND	41.4	41.9	83.3	1.2
Chlorobenzene	50.0	ND	40.4	40.9	81.3	1.2

CURRENT QC LIMITS (Revised 07/11/91)

Analyte	Percent Recovery	RPD
1,1-Dichloroethene	(66-130)	17.0
Trichloroethene	(83-128)	15.2
Benzene	(81-121)	9.5
Toluene	(81-119)	10.1
Chlorobenzene	(74-118)	9.8

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
ND = Not Detected

DATE EXTRACTED: 07/15/91

MED-TOX JOB NO: 9107039

CLIENT PROJ ID: 10-1682-03

INSTRUMENT: B

SURROGATE STANDARD RECOVERY SUMMARY

METHOD 8080
(WATER MATRIX)

SAMPLE IDENTIFICATION			SURROGATE RECOVERY (PERCENT)
Date Analyzed	Client Id.	Lab No.	2,4,5,6-Tetrachloro-meta-xylene
07/17/91	61002	01G	68
07/17/91	61012	02G	73
07/17/91	61038	03G	77
07/17/91	61028	04G	81

CURRENT QC LIMITS

ANALYTE	PERCENT RECOVERY
2,4,5,6-Tetrachloro-meta-xylene	(46-134)

DATE EXTRACTED: 07/15/91
DATE ANALYZED: 07/17/91
SAMPLE SPIKED: D.I. WATER

MED-TOX JOB NO: 9107039
INSTRUMENT: B
CLIENT PROJ. ID: 10-1682-03

MATRIX SPIKE RECOVERY SUMMARY

METHOD 8080 (PCBs)
(WATER MATRIX)

COMPOUND	Spike Amount (ug/L)	Sample Result (ug/L)	MS Result (ug/L)	MSD Result (ug/L)	Average Percent Recovery	RPD
A1260	5.22	ND	4.69	4.69	89.8	0.0

CURRENT QC LIMITS

Analyte	Percent Recovery	RPD
A1260	(57-127)	24

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
ND = Not Detected

9107039

PROJ. NO.	PROJECT NAME
10-1682-03	Industrial Asphalt
L.P. NO. (P.O. NO.)	SAMPLERS: (Signature/Number) Will J. Mitchell + B. Gaul #1502

DATE MM/DD/YY	SAMPLE I.D. TIME HH:MM:SS	SAMPLE I.D.	NO. OF CONTAINERS	ANALYSIS: EPA 601	BTXE	TPHD Diesel/Oil	PCB	Oil & Grease	REMARKS
7-9-91	8:47	61002	10	X	X	X	X	X	
	9.46	61012							
	10.36	61028							
	11.37	61038							

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Will J. Mitchell	7-9-91	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)
	9/9/91 1245	Gina Gillespie

Remarks
Attn: Krys Jesionek
S.T.A.

Send Results To
KLEINFELDER
2121 N. CALIFORNIA BLVD.
SUITE 570
WALNUT CREEK, CA 94596
(415) 938-5610

M-60 White - Sampler Canary - Return Copy To Shipper Pink - Lab Copy

No 1305

CHAIN OF CUSTODY

ANALYTICAL SERVICES

MED-TOX ASSOCIATES, INC

CERTIFICATE OF ANALYSIS

WORKING COPY

KLEINFELDER, INC.
2121 N. CALIFORNIA STREET
SUITE 570
WALNUT CREEK, CA 94596
ATTN: KRYS JESIONEK

REPORT DATE: 07/23/91

DATE SAMPLED: 07/10/91

DATE RECEIVED: 07/10/91

MED-TOX JOB NO: 9107051

CLIENT PROJ. ID: 10-1682-03
C.O.C. NO: 1303

ANALYSIS OF: WATER SAMPLES

Sample Identification Client Id.	Lab No.	Extractable Hydrocarbons as Diesel (mg/L)	Extractable Hydrocarbons as Oil (mg/L)	Oil & Grease (mg/L)	Hydrocarbons (mg/L)
61048 MW-15	01E	1.0	1.5	---	---
61048	01I	---	---	0.7	ND
61058 MW-16	02E	ND	0.5	---	---
61058	02I	---	---	ND	ND
61068 MW-14	03E	ND	0.3	---	---
61068	03I	---	---	0.6	ND
61078 MW13	04E	0.8	0.3	---	---
61078	04I	---	---	0.9	0.6
Detection Limit		0.05	0.1	0.5	0.5
Method:		3520 GCFID	3520 GCFID	5520C	5520F
Instrument:		C	C	IR	IR
Date Extracted:		07/17,18/91	07/18,19/91	07/18/91	07/18/91
Date Analyzed:		07/17-18/91	07/17-18/91	07/19/91	07/19/91

ND = Not Detected

Andrew Bradeen

Andrew Bradeen, Manager
Organic Laboratory

Results FAXed 07/19/91

KLEINFELDER, INC.

CLIENT ID: 61048
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 07/10/91
DATE RECEIVED: 07/10/91
REPORT DATE: 07/23/91

MED-TOX LAB NO: 9107051-01A
MED-TOX JOB NO: 9107051
DATE ANALYZED: 07/15/91
INSTRUMENT: G

EPA METHOD 8010 (WATER MATRIX)
HALOGENATED VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-34-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
cis-1,2-Dichloroethene	156-69-4	ND	0.5
trans-1,2-Dichloroethene	156-60-5	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	ND	0.5

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 61058
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 07/10/91
DATE RECEIVED: 07/10/91
REPORT DATE: 07/23/91

MED-TOX LAB NO: 9107051-02A
MED-TOX JOB NO: 9107051
DATE ANALYZED: 07/15/91
INSTRUMENT: G

EPA METHOD 8010 (WATER MATRIX)
HALOGENATED VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-34-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
cis-1,2-Dichloroethene	156-69-4	ND	0.5
trans-1,2-Dichloroethene	156-60-5	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	ND	0.5

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 61068
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 07/10/91
DATE RECEIVED: 07/10/91
REPORT DATE: 07/23/91

MED-TOX LAB NO: 9107051-03A
MED-TOX JOB NO: 9107051
DATE ANALYZED: 07/15/91
INSTRUMENT: G

EPA METHOD 8010 (WATER MATRIX)
HALOGENATED VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-34-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
cis-1,2-Dichloroethene	156-69-4	ND	0.5
trans-1,2-Dichloroethene	156-60-5	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	ND	0.5

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 61078
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 07/10/91
DATE RECEIVED: 07/10/91
REPORT DATE: 07/23/91

MED-TOX LAB NO: 9107051-04A
MED-TOX JOB NO: 9107051
DATE ANALYZED: 07/15/91
INSTRUMENT: G

EPA METHOD 8010 (WATER MATRIX)
HALOGENATED VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-34-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
cis-1,2-Dichloroethene	156-69-4	ND	0.5
trans-1,2-Dichloroethene	156-60-5	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	ND	0.5

ND = Not Detected

KLEINFELDER, INC.

CLIENT PROJ. ID: 10-1682-03
CLIENT ID: 61048
DATE SAMPLED: 07/10/91
DATE RECEIVED: 07/10/91
REPORT DATE: 07/23/91

MED-TOX LAB NO: 9107051-01C
MED-TOX JOB NO: 9107051

DATE ANALYZED: 07/15/91
INSTRUMENT: G

BTEX (WATER MATRIX)

METHOD: EPA 8020 (5030)

	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.5
Toluene	108-88-3	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
Xylenes, Total	1330-20-7	ND	2

ND = Not Detected

KLEINFELDER, INC.

CLIENT PROJ. ID: 10-1682-03
CLIENT ID: 61058
DATE SAMPLED: 07/10/91
DATE RECEIVED: 07/10/91
REPORT DATE: 07/23/91

MED-TOX LAB NO: 9107051-02C
MED-TOX JOB NO: 9107051

DATE ANALYZED: 07/15/91
INSTRUMENT: G

BTEX (WATER MATRIX)

METHOD: EPA 8020 (5030)

	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.5
Toluene	108-88-3	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
Xylenes, Total	1330-20-7	ND	2

ND = Not Detected

KLEINFELDER, INC.

CLIENT PROJ. ID: 10-1682-03
CLIENT ID: 61068
DATE SAMPLED: 07/10/91
DATE RECEIVED: 07/10/91
REPORT DATE: 07/23/91

MED-TOX LAB NO: 9107051-03C
MED-TOX JOB NO: 9107051

DATE ANALYZED: 07/15/91
INSTRUMENT: G

BTEX (WATER MATRIX)

METHOD: EPA 8020 (5030)

	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.5
Toluene	108-88-3	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
Xylenes, Total	1330-20-7	ND	2

ND = Not Detected

KLEINFELDER, INC.

CLIENT PROJ. ID: 10-1682-03
CLIENT ID: 61078
DATE SAMPLED: 07/10/91
DATE RECEIVED: 07/10/91
REPORT DATE: 07/23/91

MED-TOX LAB NO: 9107051-04C
MED-TOX JOB NO: 9107051

DATE ANALYZED: 07/15/91
INSTRUMENT: G

BTEX (WATER MATRIX)

METHOD: EPA 8020 (5030)

	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.5
Toluene	108-88-3	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
Xylenes, Total	1330-20-7	ND	2

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 61048
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 07/10/91
DATE RECEIVED: 07/10/91
REPORT DATE: 07/23/91

MED-TOX LAB NO: 9107051-01G
MED-TOX JOB NO: 9107051
DATE EXTRACTED: 07/15/91
DATE ANALYZED: 07/17/91
INSTRUMENT: B

EPA METHOD 8080

POLYCHLORINATED BIPHENYLS

AROCLOR	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Aroclor 1016	12674-11-2	ND	0.5
Aroclor 1221	11104-28-2	ND	0.5
Aroclor 1232	11141-16-5	ND	0.5
Aroclor 1242	53469-21-9	ND	0.5
Aroclor 1248	12672-29-6	ND	0.5
Aroclor 1254	11097-69-1	ND	0.5
Aroclor 1260	11096-82-5	ND	0.5

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 61058
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 07/10/91
DATE RECEIVED: 07/10/91
REPORT DATE: 07/23/91

MED-TOX LAB NO: 9107051-02G
MED-TOX JOB NO: 9107051
DATE EXTRACTED: 07/15/91
DATE ANALYZED: 07/17/91
INSTRUMENT: B

EPA METHOD 8080

POLYCHLORINATED BIPHENYLS

AROCLOR	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Aroclor 1016	12674-11-2	ND	0.5
Aroclor 1221	11104-28-2	ND	0.5
Aroclor 1232	11141-16-5	ND	0.5
Aroclor 1242	53469-21-9	ND	0.5
Aroclor 1248	12672-29-6	ND	0.5
Aroclor 1254	11097-69-1	ND	0.5
Aroclor 1260	11096-82-5	ND	0.5

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 61068
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 07/10/91
DATE RECEIVED: 07/10/91
REPORT DATE: 07/23/91

MED-TOX LAB NO: 9107051-03G
MED-TOX JOB NO: 9107051
DATE EXTRACTED: 07/15/91
DATE ANALYZED: 07/17/91
INSTRUMENT: B

EPA METHOD 8080

POLYCHLORINATED BIPHENYLS

AROCLOR	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Aroclor 1016	12674-11-2	ND	0.5
Aroclor 1221	11104-28-2	ND	0.5
Aroclor 1232	11141-16-5	ND	0.5
Aroclor 1242	53469-21-9	ND	0.5
Aroclor 1248	12672-29-6	ND	0.5
Aroclor 1254	11097-69-1	ND	0.5
Aroclor 1260	11096-82-5	ND	0.5

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 61078
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 07/10/91
DATE RECEIVED: 07/10/91
REPORT DATE: 07/23/91

MED-TOX LAB NO: 9107051-04G
MED-TOX JOB NO: 9107051
DATE EXTRACTED: 07/15/91
DATE ANALYZED: 07/17/91
INSTRUMENT: B

EPA METHOD 8080

POLYCHLORINATED BIPHENYLS

AROCLOR	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Aroclor 1016	12674-11-2	ND	0.5
Aroclor 1221	11104-28-2	ND	0.5
Aroclor 1232	11141-16-5	ND	0.5
Aroclor 1242	53469-21-9	ND	0.5
Aroclor 1248	12672-29-6	ND	0.5
Aroclor 1254	11097-69-1	ND	0.5
Aroclor 1260	11096-82-5	ND	0.5

ND = Not Detected

MED-TOX ASSOCIATES, INC.

QUALITY CONTROL DATA

KLEINFELDER, INC.

CLIENT PROJ. ID: 10-1682-03

MED-TOX JOB NO: 9107051

DATE EXTRACTED: 07/18/91
DATE ANALYZED: 07/19/91
INSTRUMENT: IR

MED-TOX JOB NO: 9107051
SAMPLE SPIKED: D.I. WATER
CLIENT PROJ ID: 10-1682-03

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

ANALYTE	Spike Conc. (mg/L)	Sample Result (mg/L)	MS Result (mg/L)	MSD Result (mg/L)	Average Percent Recovery	RPD
Oil	7.02	ND	6.70	6.86	96.6	2.4

CURRENT QC LIMITS (Revised 03/14/91)

Analyte	Percent Recovery	RPD
OIL	(70-121)	7.1

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
ND = Not Detected

DATE EXTRACTED: 07/17/91
DATE ANALYZED: 07/17/91
SAMPLE SPIKED: D.I. WATER

MED-TOX JOB NO: 9107051
INSTRUMENT: C
CLIENT PROJ. ID: 10-1682-03

MATRIX SPIKE RECOVERY SUMMARY
TPH EXTRACTABLE WATERS
METHOD 3520 GCFID
(WATER MATRIX; EXTRACTION METHOD)

ANALYTE	Spike Conc. (mg/L)	Sample Result (mg/L)	MS Result (mg/L)	MSD Result (mg/L)	Average Percent Recovery	RPD
Diesel	0.636	ND	0.457	0.479	73.6	4.7

CURRENT QC LIMITS (Revised 05/02/91)

Analyte	Percent Recovery	RPD
Diesel	(49.8-100.0)	30.1

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
ND = Not Detected

INSTRUMEMT: G

MED-TOX JOB NO: 9107051

CLIENT PROJ ID: 10-1682-03

SURROGATE STANDARD RECOVERY SUMMARY

METHOD 8010/8020
(WATER MATRIX)

SAMPLE IDENTIFICATION			SURROGATE RECOVERY (PERCENT)	
Date Analyzed	Client Id.	Lab No.	Bromochloro-methane	1,4-Dichloro-butane
07/15/91	61048	01C	95.6	90.1
07/15/91	61058	02A	94.5	91.6
07/15/91	61068	03A	91.8	90.4
07/15/91	61078	04A	89.5	93.6

CURRENT QC LIMITS

ANALYTE	PERCENT RECOVERY
Bromochloromethane	(79.5-115.1)
1,4-Dichlorobutane	(82.3-110.3)

DATE ANALYZED: 07/15/91
INSTRUMENT: G
SAMPLE SPIKED: D.I. WATER

MED-TOX JOB NO: 9107051
CLIENT PROJ ID: 10-1682-03

METHOD SPIKE RECOVERY SUMMARY

METHOD 8010/8020
WATER

ANALYTE	Spike Conc. (ug/L)	Sample Result (ug/L)	MS Result (ug/L)	MSD Result (ug/L)	Average Percent Recovery	RPD
1,1-Dichloroethene	50.0	ND	38.9	42.2	81.1	8.1
Trichloroethene	50.0	ND	51.1	53.5	104.6	4.5
Benzene	50.0	ND	44.5	47.3	91.8	6.1
Toluene	50.0	ND	45.7	48.3	93.4	6.9
Chlorobenzene	50.0	ND	44.7	47.3	92.0	5.7

CURRENT QC LIMITS (Revised 07/11/91)

Analyte	Percent Recovery	RPD
1,1-Dichloroethene	(66-130)	17.0
Trichloroethene	(83-128)	15.2
Benzene	(81-121)	9.5
Toluene	(81-119)	10.1
Chlorobenzene	(74-118)	9.8

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
ND = Not Detected

DATE EXTRACTED: 07/15/91

MED-TOX JOB NO: 9107051

CLIENT PROJ ID: 10-1682-03

INSTRUMENT: B

SURROGATE STANDARD RECOVERY SUMMARY

METHOD 8080
(WATER MATRIX)

SAMPLE IDENTIFICATION			SURROGATE RECOVERY (PERCENT)
Date Analyzed	Client Id.	Lab No.	2,4,5,6-Tetrachloro-meta-xylene
07/17/91	61048	01G	80
07/17/91	61058	02G	83
07/17/91	61068	03G	86
07/17/91	61078	04G	82

CURRENT QC LIMITS

ANALYTE	PERCENT RECOVERY
2,4,5,6-Tetrachloro-meta-xylene	(46-134)

DATE EXTRACTED: 07/15/91
DATE ANALYZED: 07/17/91
SAMPLE SPIKED: D.I. WATER

MED-TOX JOB NO: 9107051
INSTRUMENT: B
CLIENT PROJ. ID: 10-1682-03

MATRIX SPIKE RECOVERY SUMMARY

METHOD 8080 (PCBs)
(WATER MATRIX)

COMPOUND	Spike Amount (ug/L)	Sample Result (ug/L)	MS Result (ug/L)	MSD Result (ug/L)	Average Percent Recovery	RPD
A1260	5.22	ND	4.69	4.69	89.8	0.0

CURRENT QC LIMITS

Analyte	Percent Recovery	RPD
A1260	(57-127)	24

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
ND = Not Detected

KLEINFELDER

9107051

PROJ. NO.	PROJECT NAME
10.1682-03	Industrial Asphalt
L.P. NO. (P.O. NO.)	SAMPLERS: (Signature/Number) Willa J. McPhell

DATE MM/DD/YY	SAMPLE I.D. TIME HH:MM:SS	SAMPLE I.D.		NO. OF CON-TAINERS	ANALYSIS EPA 601	BTXE	TPH-Diesel & Oil	PCB	Oil & Grease	REMARKS
7-10-91	8:52	61048	MW-15	10	X	X	X	X	X	
	9:50	61058	MW-16							
	10:49	61068	MW-14							
	12:42	61078	MW-13							

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Willa J McPhell	7-10-91 13:35	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)
	7/10/91 13:35	Georgia Van Vleck

Remarks
Attn: Kris Jesionek
S.I.A.

Send Results To

KLEINFELDER
2121 N. CALIFORNIA BLVD.
SUITE 570
WALNUT CREEK, CA 94596
(415) 938-5610

M-60 White Sampler Canary - Return Copy To Shipper Pink Lab Copy

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