QUARTERLY REPORT
(FEBRUARY - APRIL 1992)
INDUSTRIAL ASPHALT
PLEASANTON, CALIFORNIA

May 5, 1992

KLEINFELDER

May 5, 1992
File: 10-1682-03/38

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

SUBJECT: Quarterly Report (February - April 1992) Industrial Asphalt, Pleasanton, California

Dear Mr. Hunt:

Kleinfelder, Inc., is pleased to submit this quarterly report for the first quarter of 1992 (February - April 1992) 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 and the ground water gradient beneath the site. The location of monitoring wells along with the extraction well are shown on Plate 2. All 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 and 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 Oil and Grease (Standard Method 5520 C & F). A request for sample analysis for BTXE (benzene, toluene, xylenes and ethylbenzene) using EPA Method 8020, and halogenated volatile organics using EPA Method 8010 in that same letter has been subsequently modified by ACDHS to include only wells MW-3 (8010 and 8020) and MW-2 and MW-8 (8020 only).

Water samples were collected on March 4 through 10, 1992, from onsite wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-7, MW-8, MW-10, MW-13, MW-14, MW-15 and MW-16. Monitoring wells MW-6 and MW-9 were not accessible on the sampling days, and therefore, not sampled. 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.

KLEINFELDER 2121 N. California Blvd., Suite 570, Walnut Creek, CA 94596 (415) 938-5610

WATER LEVEL MONITORING DATA

Ground water surface elevation data were collected from sampled wells prior to their sampling. These measurements are provided in Table 1. Generally, the ground water surface elevation at the site has risen an average of 2.8 feet since the last measurement on November 13, 1991. A measurement from the staff gauge located in the adjacent storage pond (R-4) collected during this sampling round indicates that the elevation of the water surface in the pond has fallen approximately 1 foot since the last measurement in November 1991.

Based on the information collected during this round of sampling, a ground water gradient map was constructed (Plate 3). This map indicates a general flow direction towards the northeast, with local flow directions toward the north and northwest beneath the western portion of the site (the vicinity of MW-10). The flow direction is as noted in previous sampling rounds.

Water level elevations beneath the site vary between 301 and 305 feet (MW-5 and MW-10, respectively). Water levels in the area of MW-5 are again the lowest on the site, which conforms with historical observations. The overall gradient is relatively flat (0.007 feet per foot) with locally steeper gradients in the vicinity of MW-10 (0.014 feet per foot).

GROUND WATER CHEMISTRY MONITORING RESULTS

The presence of a sheen in wells is noted on Table 1 along with the water level data. Analytical data are provided on Tables 2 and 3. Complete analytical laboratory reports along with chain of custody records are included in the Appendix.

Sheen was observed in the following wells during this sampling round: MW-1, MW-2, MW-3, and MW-8. In addition, these four wells also exhibited hydrocarbon-like odors.

Detectable concentrations of PCBs were found only in the ground water samples collected from monitoring well MW-1 (0.7 ug/L). PCBs had not been detected in samples collected from that well since February 1991 (9.6 ug/L).

Detectable concentrations of total petroleum hydrocarbons as diesel (TPH(d)) and total petroleum hydrocarbons as waste oil (TPH(wo)) were found in samples collected from MW-1, MW-2, MW-3, MW-8, and MW-13. TPH(d) was detected in the samples collected from MW-15 and MW-16. Detected concentrations for TPH(d) ranged from 11 mg/L in MW-1 to 0.3 mg/L in MW-15. Detected concentrations for TPH(wo) ranged from 4.9 mg/L in MW-1 to 0.1 mg/L in MW-8. TPH(wo) was not detected in MW-15 or MW-16. Generally, analytical data indicate a decrease in the concentrations of TPH as diesel and waste oil in the water samples collected as compared to the November 1991 data.

Detectable concentrations of oil and grease and total hydrocarbons revealed the presence of these compounds in the water samples obtained from wells MW-1, MW-2, MW-3 and MW-4. Oil and grease were detected in MW-8, MW-15, and MW-16. (Table 2). Detected concentrations of oil and grease ranged from 31 mg/L in MW-3 to 0.6 mg/L in MW-8. Detected concentrations of total hydrocarbons ranged from 27 mg/L in MW-3 to 1 mg/L in MW-4. Concentrations of these compounds have generally decreased or remained about the same since the November 1991 sampling round.

Sample analysis for volatile organic compounds has been discontinued for most monitoring wells at this site since the November 1991 sampling round with concurrence from the Alameda Department of Health. Samples collected from three wells only (MW-2, MW-3 and MW-8) were tested for volatile aromatic hydrocarbons via EPA Test Method 8020. Samples collected

from one well only (MW-8) was tested for halogenated volatile organic compounds via EPA Test Method 8010 (Table 3). The following compounds were detected: benzene, ethylbenzene, and total xylenes in MW-2; and benzene only in MW-8. No volatile organic compounds were detected in MW-3.

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 20 gallons of water were purged prior to collecting a sample. This sample was 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.

SUMMARY

In summary, based on the available data, the ground water surface elevation beneath the site is higher than the previous sampling round and ground water flow remains generally toward the northeast. The ground water chemistry has remained, for the most part, consistent between sampling rounds although concentrations have decreased since November 1991. The ground water samples collected from monitoring wells MW-1, MW-2, MW-3, and MW-8 continue to exhibit higher concentrations of the target compounds with lower concentrations in wells MW-15 and MW-16. The ground water samples collected from the offsite water production well (Jamieson well) did not exhibit concentrations of the target chemicals at concentrations above the laboratory reporting limits for the compounds requested.

RECOMMENDED RI ACTIVITIES

Volatile organic compounds, oil and grease and BTXE were found in the water samples obtained from some of the onsite monitoring wells. Therefore, it is recommended that during the next quarterly round (June 1992), water samples be analyzed for these same compounds. This is to allow an assessment of possible changes in concentrations of these compounds found in selected water samples.

OTHER ACTIVITIES

Bids from three water well drilling companies have been solicited and received for drilling and installation of the proposed groundwater extraction wells. The extraction well construction is underway by the selected drilling company, Water Development Corporation.

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
Staff Geologist

David K. Behrens, P.E.,
Senior Project Manager

GAJ/DKB:dpb

cc: Dwight Beavers - Industrial Asphalt
Ravi 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
SUMMARY OF 1992 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)
MW-1	3/03/92	88	379.41	SHEEN	76.01	303.40
MW-2	3/03/92	90	379.80	SHEEN	76.59	303.21
MW-3	3/03/92	90	378.54	SHEEN	74.72	303.82
MW-4	3/03/92	95	376.26	NE	73.20	303.06
MW-5	3/03/92	110	382.55	NE	81.23	301.32
MW-6	3/03/92	109	379.15	NA	NM	
MW-7	3/03/92	109	378.94	NE	75.29	303.65
MW-8	3/03/92	109	378.56	SHEEN	75.20	303.36
MW-9	3/03/92	108	377.40	NA	NM	
MW-10	3/03/92	111	378.04	NE	73.10	304.94
MW-13 Extraction Well	3/03/92	116	380.21	NE	76.03	304.18
MW-14	3/03/92	114.5	380.09	NE	76.63	303.46

TABLE 1
SUMMARY OF 1992 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)
MW-15	3/03/92	117	378.12	NE	75.54	302.58
MW-16	3/03/92	110	379.65	NE	75.61	304.04
STAFF GAGE	3/03/92	NA	300.00	NE	-1	299.00

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

NM Not Measured

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TABLE 2
MONITORING PARAMETERS
INDUSTRIAL ASPHALT

Well Number	Sample Date	TPH as Diesel[1] (mg/L)	TPH as Waste Oil[1] (mg/L)	Oil & Grease[2] (mg/L)	Total Hydrocarbons[3] (mg/L)	PCBs[4] (µg/L)
MW-1	Apr. 1991	40	27	91	74	ND
	July 1991	29	8	60	55	ND
	Nov. 1991	9.5	4.9	22	19	ND
	Mar. 1992	11	4.9	27	20	0.7
MW-2	Apr. 1991	44	35	150	130	5.1
	July 1991	32	14	73	64	0.8
	Nov. 1991	110	57	110	96	1
	Mar. 1992	4.1	1.5	10	8	ND
MW-3	Apr. 1991	19	14	34	30	0.8
	July 1991	0.7	ND	ND	ND	ND
	Nov. 1991	210	120	360	330	7.4
	Mar. 1992	4.2	2.4	31	27	ND
MW-4	Apr. 1991	0.7	9.7	11	6	ND
	July 1991	ND	ND	ND	ND	ND
	Nov. 1991	ND	ND	2	0.9	ND
	Mar. 1992	ND	ND	3	1	ND
MW-5	Apr. 1991	ND	ND	ND	ND	ND
	July 1991	ND	0.8	ND	ND	ND
	Nov. 1991	ND	ND	ND	ND	ND
	Mar. 1992	ND	ND	ND	ND	ND
Laboratory Detection Limit[5]		0.05	0.1	0.5	0.5	0.5
Drinking Water Standard[6]		--	--	--	--	0.5

Please see notes on last page of Table 2

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TABLE 2
(Continued)
MONITORING PARAMETERS
INDUSTRIAL ASPHALT

Well Number	Sample Date	TPH as Diesel[1] (mg/L)	TPH as Waste Oil[1] (mg/L)	Oil & Grease[2] (mg/L)	Total Hydrocarbons[3] (mg/L)	PCBs[4] (µg/L)
MW-6	Apr. 1991	NT	NT	NT	NT	NT
	July 1991	NT	NT	NT	NT	NT
	Nov. 1991	NT	NT	NT	NT	NT
	Mar. 1992	NT	NT	NT	NT	NT
MW-7	Apr. 1991	0.5	ND	1	ND	ND
	July 1991	0.09	0.1	ND	ND	ND
	Nov. 1991	0.07	ND	ND	ND	ND
	Mar. 1992	ND	ND	ND	ND	ND
MW-8	Apr. 1991	4.1	4.8	15	11	0.8
	July 1991	0.3	ND	ND	ND	ND
	Nov. 1991	4.1	4.8	15	11	0.8
	Mar. 1992	0.5	0.1	0.6	ND	ND
MW-9	Apr. 1991	NT	NT	NT	NT	NT
	July 1991	0.4	ND	ND	ND	ND
	Nov. 1991	0.1	ND	ND	ND	ND
	Mar. 1992	NT	NT	NT	NT	NT
MW-10	Apr. 1991	3	ND	4	1	ND
	July 1991	ND	ND	ND	ND	ND
	Nov. 1991	ND	ND	ND	ND	ND
	Mar. 1992	ND	ND	ND	ND	ND
Laboratory Detection Limit[5]		0.05	0.1	0.5	0.5	0.5
Drinking Water Standard[6]		--	--	--	--	0.5

Please see notes on last page of Table 2

TABLE 2
(Continued)
MONITORING PARAMETERS
INDUSTRIAL ASPHALT

Well Number	Sample Date	TPH as Diesel[1] (mg/L)	TPH as Waste Oil[1] (mg/L)	Oil & Grease[2] (mg/L)	Total Hydrocarbons[3] (mg/L)	PCBs[4] (µg/L)
MW-13[7,8]	Feb. 1991	0.5	0.2	NT	NT	ND
	Apr. 1991	0.7	ND	ND	ND	ND
	July 1991	0.8	0.3	0.9	0.6	ND
	Nov. 1991	0.6(0.6)	ND(ND)	(0.9(0.9)	0.8(0.9)	ND(ND)
	Mar. 1992	0.58(0.61)	ND(0.1)	ND(ND)	ND(ND)	ND(ND)
MW-14	Apr. 1991	ND	ND	ND	ND	ND
	July 1991	ND	0.3	0.6	ND	ND
	Nov. 1991	ND	ND	ND	ND	ND
	Mar. 1992	ND	ND	ND	ND	ND
MW-15	Apr. 1991	0.5	ND	2	1	ND
	July 1991	1.0	1.5	0.7	ND	ND
	Nov. 1991	0.07	ND	2	ND	ND
	Mar. 1992	0.3	ND	0.5	ND	ND
MW-16	Feb. 1991	0.3	0.4	NT	NT	ND
	Apr. 1991	ND	0.5	0.9	ND	ND
	July 1991	ND	0.5	ND	ND	ND
	Nov. 1991	0.08	ND	ND	ND	ND
	Mar. 1992	1.4(1.5)	ND(ND)	1(2)	ND(ND)	ND(ND)
14A2[9]	Apr. 1991	ND	ND	ND	ND	ND
	July 1991	ND	ND	ND	ND	ND
	Nov. 1991	ND	ND	ND	ND	ND
	Mar. 1992	ND	ND	ND	ND	ND
Laboratory Detection Limit[5]		0.05	0.1	0.5	0.5	0.5
Drinking Water Standard[6]		--	--	--	--	0.5

Please see notes on last page of Table 2

TABLE 2
(Continued)
MONITORING PARAMETERS
INDUSTRIAL ASPHALT

NOTES:

(1) Sample analysis via SM 3520 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) Dplicate 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

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TABLE 3
VOLATILE ORGANIC COMPOUNDS[1]
INDUSTRIAL ASPHALT

Well Number	Sample Date	Benzene (µg/L)	Ethyl-benzene (µg/L)	Toluene (µg/L)	Total Xylenes (µg/L)	1,1-DCA[2] (µg/L)	1,2-DCE[3] (µg/L)	TCFM[4] (µg/L)	Vinyl Chloride (µg/L)	Other 8010 Compounds
MW-1	Apr. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	July 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Nov. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mar. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW-2	Apr. 1991	0.7	ND	ND	ND	ND	ND	ND	ND	ND
	July 1991	0.8	ND	ND	ND	ND	ND	ND	ND	ND
	Nov. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mar. 1992	1	4	ND	2	NT	NT	NT	NT	NT
MW-3	Apr. 1991	0.9	6	ND	3	2	ND	1	8	ND
	July 1991	ND	ND	ND	ND	2	ND	ND	8	ND
	Nov. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mar. 1992	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-4	Apr. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	July 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Nov. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mar. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW-5	Apr. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	July 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Nov. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mar. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
Laboratory Detection Limit		0.5	0.5	2	0.5	0.5	0.5	0.5	0.5	
Drinking Water Standard[6]	1	680	1,000(40)	1,750(20)	5	6	150	0.5	--	

Please see notes on last page of Table

TABLE 3
(Continued)
VOLATILE ORGANIC COMPOUNDS[1]
INDUSTRIAL ASPHALT

Well Number	Sample Date	Benzene (µg/L)	Ethyl-benzene (µg/L)	Toluene (µg/L)	Total Xylenes (µg/L)	1,1-DCA[2] (µg/L)	1,2-DCE[3] (µg/L)	TCFM[4] (µg/L)	Vinyl Chloride (µg/L)	Other 8010 Compounds
MW-6	Apr. 1991	NT	NT	NT	NT	NT	NT	NT	NT	NT
	July 1991	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Nov. 1991	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Mar. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW-7	Apr. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	July 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Nov. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mar. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW-8	Apr. 1991	ND	3	ND	ND	ND	1	ND	ND	ND
	July 1991	ND	1	ND	ND	ND	ND	ND	ND	ND
	Nov. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mar. 1992	ND	0.8	ND	ND	NT	NT	NT	NT	NT
MW-9	Apr. 1991	NT	NT	NT	NT	NT	NT	NT	NT	NT
	July 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Nov. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mar. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW-10	Apr. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	July 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Nov. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mar. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
Laboratory Detection Limit		0.5	0.5	2	0.5	0.5	0.5	0.5	0.5	
Drinking Water Standard[6]		1	680	1,000(40)	1,750(20)	5	6	150	0.5	--

Please see notes on last page of Table

TABLE 3
(Continued)
VOLATILE ORGANIC COMPOUNDS[1]
INDUSTRIAL ASPHALT

Well Number	Sample Date	Benzene (µg/L)	Ethyl-benzene (µg/L)	Toluene (µg/L)	Total Xylenes (µg/L)	1,1-DCA[2] (µg/L)	1,2-DCE[3] (µg/L)	TCFM[4] (µg/L)	Vinyl Chloride (µg/L)	Other 8010 Compounds
MW-13	Apr. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	July 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Nov. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mar. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW-14	Apr. 1991	ND	0.7	ND	ND	ND	ND	ND	ND	ND
	July 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Nov. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mar. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW-15	Apr. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	July 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Nov. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mar. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW-16	Apr. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	July 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Nov. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mar. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
14A2[5]	Apr. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	July 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Nov. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mar. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
Laboratory Detection Limit	0.5	0.5	0.5	2	0.5	0.5	0.5	0.5	0.5	
Drinking Water Standard[6]	1	680	1,000(40)	1,750(20)	5	6	150	0.5	--	

Please see notes on last page of Table

TABLE 3
NOTES
VOLATILE ORGANIC COMPOUNDS
INDUSTRIAL ASPHALT

NOTES:

(1) Sample analysis for benzene, ethylbenzene, toluene, and total xylenes via EPA Test Method 8020 (volatile aromatic compounds). Sample analysis for other compounds via EPA Test Method 8010 (halogenated volatile organic compounds). Compounds not listed were not detected at concentrations above the laboratory detection limit.

(2) 1,1-Dichloroethane

(3) 1,2-Dichloroethene, total

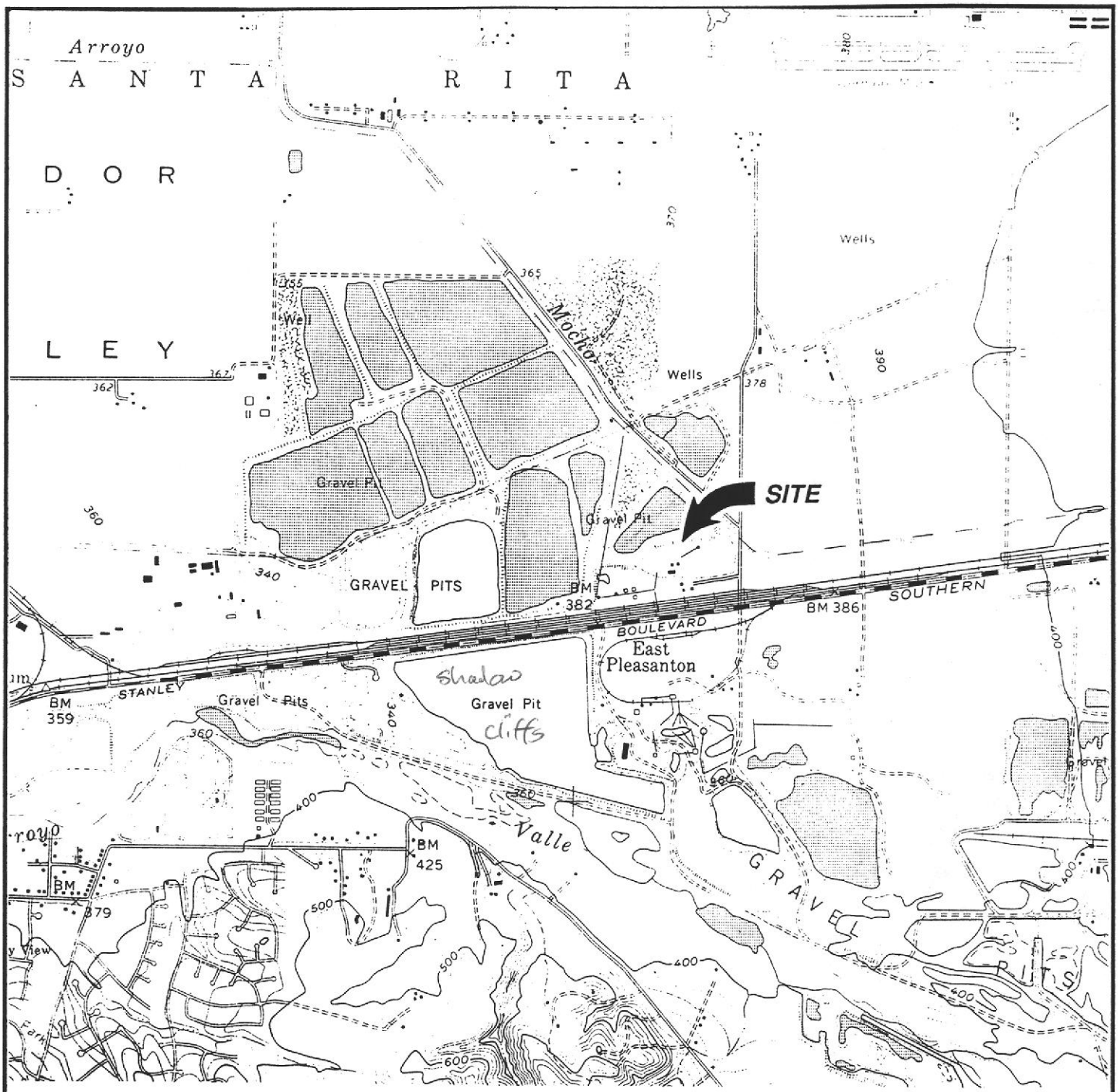
(4) Trichlorofluoromethane

(5) Jamieson water supply well sampled via a tap.

(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.

ND Not Detected at or above laboratory detection limits (Only those compounds which were detected in one or more samples are tabulated.

NT Not Tested



SOURCE:
U.S.G.S. 7.5' Topographic Series, Livermore Quadrangle, California Quadrangles.

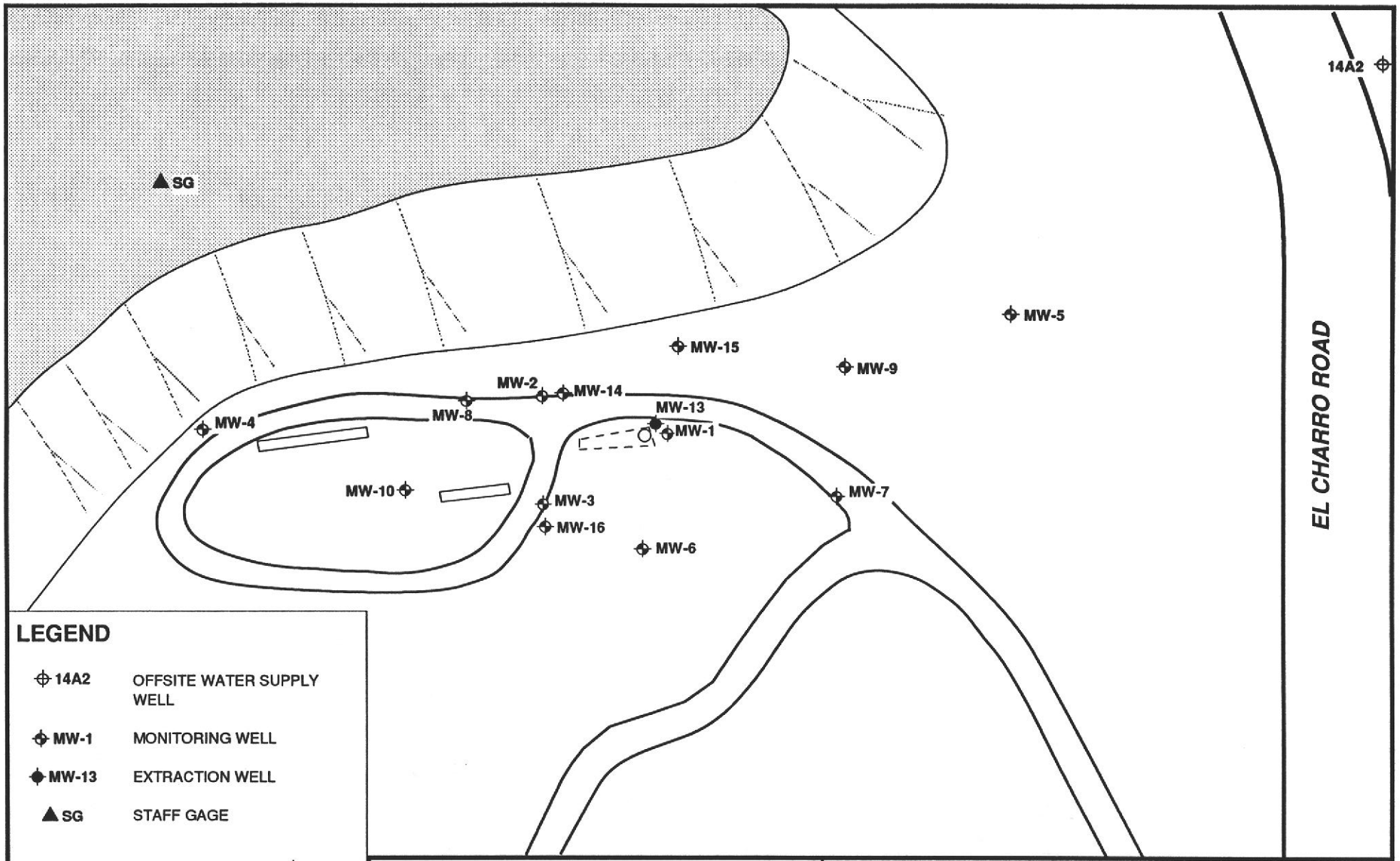
KLEINFELDER

PROJECT NUMBER 10-1682-08

SITE LOCATION MAP

INDUSTRIAL ASPHALT
52 EL CHARRO ROAD
PLEASNATON, 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: 4-16-92

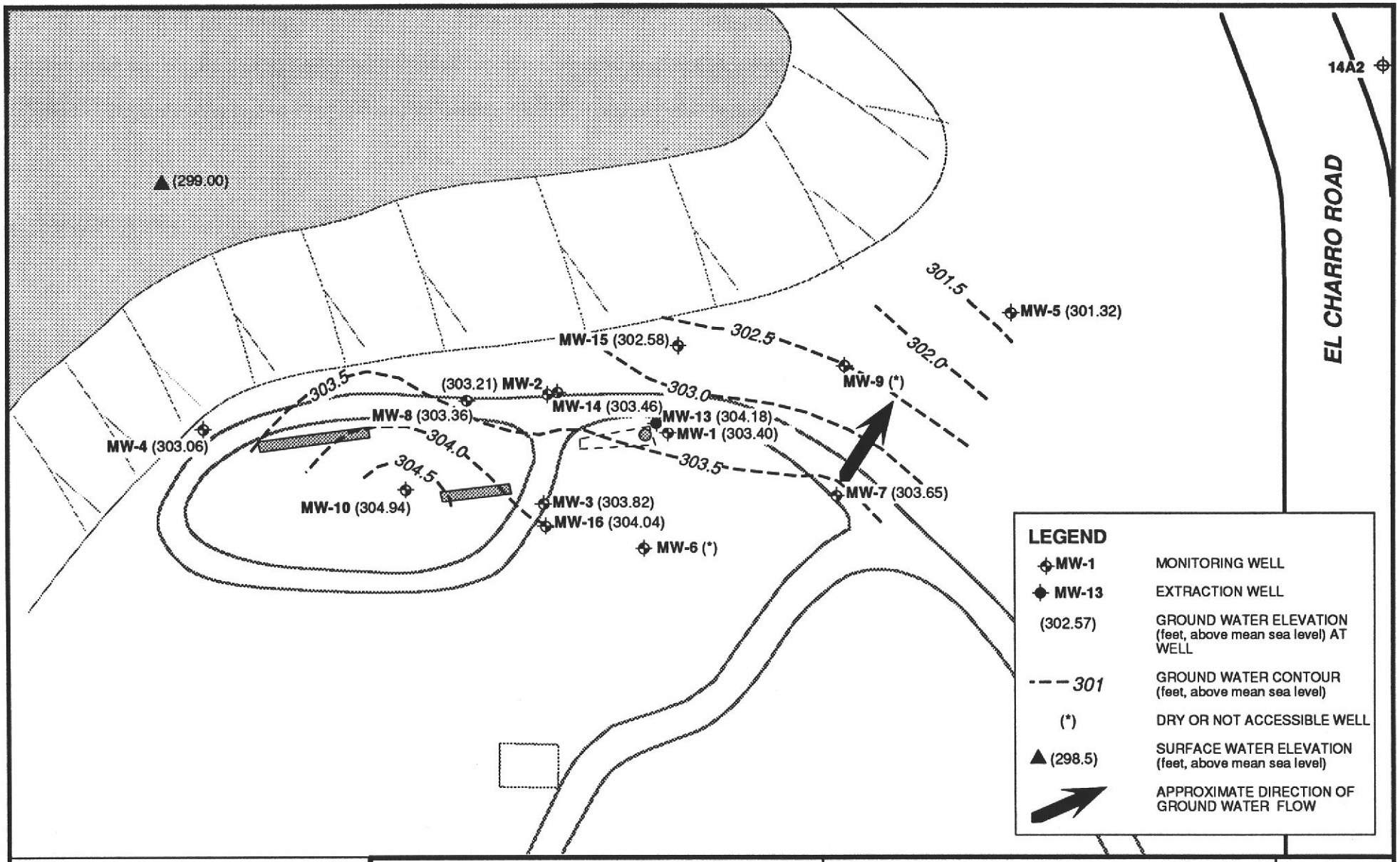
CHECKED BY: D. Behrens DATE: 4-16-92

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: 4-16-92

CHECKED BY: D. Behrens DATE: 5-5-92

GROUND WATER SURFACE CONTOUR MAP — MARCH 1992

INDUSTRIAL ASPHALT
PLEASANTON, CALIFORNIA

PROJECT NO. 10-1682-03

PLATE
3

KLEINFELDER

9203029

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

DATE MM/DD/YY	SAMPLE I.D. TIME HH:MM:SS	SAMPLE I.D.	NO. OF CONTAINERS	ANALYSIS: TPH @ Diesel	TPH @ Waste Oil	Oil & Grease SM5520 C	Total Hydrocarbons	PCB's	REMARKS
3/4/92	8:49	56860 MW-5	6	X	X	X	X	X	
	9:30	56866 MW-4	1						
	10:35	56870 MW-7							
	11:35	56880 MW-15							
	12:22	56884 MW-16							
	12:28	56890 MW-16 Dup.							
~~3/4/92~~	~~8:40~~	~~56894 TVL Blnk.~~	2						

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Will J. Mitchell	3/4/92	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)
	3/4/92 1340	Denise Harrington

Remarks
Attn: Guy Jett
Standard TAT

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

№ 1747

CHAIN OF CUSTODY

KLEINFELDER

9203063
9203064

PROJ. NO.	PROJECT NAME
10-1682-03	Industrial Asphalt
L.P. NO. (P.O. NO.)	SAMPLERS: (Signature/Number) Willy J. McKell #1502

DATE MM/DD/YY	SAMPLE I.D. TIME HH:MM:SS	SAMPLE I.D.	NO. OF CONTAINERS	ANALYSIS: TPHd Diesel	TPHd w/silica gel	TPHd w/Florisil	Total Hydrocarbons	PCB's	EPA 8020	REMARKS
3/6/92	10:34	56920 MW-8	8	X	X	X	X	X	X	
"	8:20	56900 MW-10	6	↓	↓	↓	↓	↓		
"	8:52	56904 MW-14	6	↓	↓	↓	↓	↓		
"	9:58	56910 MW-3	6	↓	↓	↓	↓	↓		
"	10:06	56918 MW-13 "Dup"	6	↓	↓	↓	↓	↓		
↓	11:15	56930 MW-1	6	X	X	X	X	X		
~~3/10/92~~	~~12:59~~	~~62812 TVL Blank~~	~~2~~							Does not need to be run because no sample came in for volatile analysis.
		62812 TVL Blnk	2						X	

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Willy J McKell	3/9/92	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)
	3/9/92 1300	Gina Gillespie

Remarks
Attn: Gay Jett

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

№ 1746

CHAIN OF CUSTODY

KLEINFELDER

9203069

PROJ. NO.	PROJECT NAME
10-1682-03	
L.P. NO. (P.O. NO.)	SAMPLERS: (Signature/Number) Wilbur Mitchell #1502

DATE MM/DD/YY	SAMPLE I.D. TIME HH:MM:SS	SAMPLE I.D.	NO. OF CONTAINERS	ANALYSIS: TPHd Diesel	TPHg Waste Oil	Oil & Grease SM5520 C&F	Total Hydrocarbons	PCB's EPA 8010	EPA 8020	REMARKS
3-10-92	9:09	56938 MW-2	8	X	X	X	X	X	X	
"	10:15	56942 MW-3	10	X	X	X	X	X	X	
"	10:47	56956 "TAP"	6	X	X	X	X	X		
"	11:27	56958 TUL BLNK.	2					X	X	

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Wilbur Mitchell	3/10/92 11:30	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)
	3/10/92 1130	Denise Harrington

Remarks
Attn: Guy Jett

Standard TAT

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

№ 1745

CHAIN OF CUSTODY

QuanteQ Laboratories

An Ecologics Company

WORKING COPY FORMERLY MED-TOX

Certificate of Analysis

DOHS CERTIFICATION NO. E772

AIHA ACCREDITATION NO. 332

KLEINFELDER, INC.
2121 N. CALIFORNIA BLVD.
SUITE 570
WALNUT CREEK, CA 94596
ATTN: GUY JETT

CLIENT PROJ. ID: 10-1682-03
C.O.C. NO: 1745

REPORT DATE: 04/08/92

DATE SAMPLED: 03/10/92

DATE RECEIVED: 03/10/92

QUANTEQ JOB NO: 9203069

ANALYSIS OF: WATER SAMPLES

See attached for results

Andrew Bradeen, Manager
Organic Laboratory

Results FAXed 03/20/92

KLEINFELDER, INC.

DATE SAMPLED: 03/10/92
DATE RECEIVED: 03/10/92
CLIENT PROJ. ID: 10-1682-03

REPORT DATE: 04/08/92

QUANTEQ JOB NO: 9203069

Client Sample Id.	Quanteq Lab Id.	Extractable Hydrocarbons as Diesel (mg/L)	Extractable Hydrocarbons as Oil (mg/L)	Oil & Grease (mg/L)	Hydrocarbons (mg/L)
56938 MW-2	01A	4.1	1.5	---	---
56938	01C	---	---	10	8
56942 MW-3	02A	4.2	2.4	---	---
56942	02C	---	---	31	27
56956	03A	ND	ND	---	---
56956 TAP	03C	---	---	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:		03/18/92	03/18/92	03/19/92	03/19/92
Date Analyzed:		03/20/92	03/20/92	03/20/92	03/20/92

ND = Not Detected

KLEINFELDER, INC.

SAMPLE ID: 56942 MW-3
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 03/10/92
DATE RECEIVED: 03/10/92
REPORT DATE: 04/08/92

QUANTEQ LAB NO: 9203069-02E
QUANTEQ JOB NO: 9203069
DATE ANALYZED: 03/17/92
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	156-59-2	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.

SAMPLE ID: 56958 Travel Blank
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 03/10/92
DATE RECEIVED: 03/10/92
REPORT DATE: 04/08/92

QUANTEQ LAB NO: 9203069-04A
QUANTEQ JOB NO: 9203069
DATE ANALYZED: 03/17/92
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	156-59-2	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: 56938 MW-2
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 03/10/92
DATE RECEIVED: 03/10/92
REPORT DATE: 04/08/92

QUANTEQ LAB NO: 9203069-01E
QUANTEQ JOB NO: 9203069
DATE ANALYZED: 03/17/92
INSTRUMENT: G

EPA METHOD 8020 (WATER MATRIX)
AROMATIC VOLATILE HYDROCARBONS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	**71-43-2**	**1**	**0.5**
Chlorobenzene	108-90-7	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
Ethylbenzene	**100-41-4**	**4**	**0.5**
Toluene	108-88-3	ND	0.5
Xylenes, Total	**1330-20-7**	**2**	**2**

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 56942 MW-3
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 03/10/92
DATE RECEIVED: 03/10/92
REPORT DATE: 04/08/92

QUANTEQ LAB NO: 9203069-02E
QUANTEQ JOB NO: 9203069
DATE ANALYZED: 03/17/92
INSTRUMENT: G

EPA METHOD 8020 (WATER MATRIX)
AROMATIC VOLATILE HYDROCARBONS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.5
Chlorobenzene	108-90-7	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
Ethylbenzene	100-41-4	ND	0.5
Toluene	108-88-3	ND	0.5
Xylenes, Total	1330-20-7	ND	2

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 56958 Travel Blank
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 03/10/92
DATE RECEIVED: 03/10/92
REPORT DATE: 04/08/92

QUANTEQ LAB NO: 9203069-04A
QUANTEQ JOB NO: 9203069
DATE ANALYZED: 03/17/92
INSTRUMENT: G

EPA METHOD 8020 (WATER MATRIX)
AROMATIC VOLATILE HYDROCARBONS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.5
Chlorobenzene	108-90-7	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
Ethylbenzene	100-41-4	ND	0.5
Toluene	108-88-3	ND	0.5
Xylenes, Total	1330-20-7	ND	2

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 56938 MW-2
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 03/10/92
DATE RECEIVED: 03/10/92
REPORT DATE: 04/08/92

QUANTEQ LAB NO: 9203069-01G
QUANTEQ JOB NO: 9203069
DATE EXTRACTED: 03/16/92
DATE ANALYZED: 03/18/92
INSTRUMENT: B

EPA METHOD 8080
POLYCHLORINATED BIPHENYLS
(WATER MATRIX)

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: 56942 MW-2
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 03/10/92
DATE RECEIVED: 03/10/92
REPORT DATE: 04/08/92

QUANTEQ LAB NO: 9203069-02I
QUANTEQ JOB NO: 9203069
DATE EXTRACTED: 03/16,19/92
DATE ANALYZED: 03/18-23/92
INSTRUMENT: B

EPA METHOD 8080
POLYCHLORINATED BIPHENYLS
(WATER MATRIX)

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

Duplicate sample extractions showed surrogate recoveries outside our Quality control limits due to sample matrix effects, therefore all results are 'estimated concentrations'.

KLEINFELDER, INC.

CLIENT ID: 56956 Tar
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 03/10/92
DATE RECEIVED: 03/10/92
REPORT DATE: 04/08/92

QUANTEQ LAB NO: 9203069-03E
QUANTEQ JOB NO: 9203069
DATE EXTRACTED: 03/16/92
DATE ANALYZED: 03/18/92
INSTRUMENT: B

EPA METHOD 8080
POLYCHLORINATED BIPHENYLS
(WATER MATRIX)

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

QUALITY CONTROL DATA

DATE EXTRACTED: 03/19/92
DATE ANALYZED: 03/20/92
CLIENT PROJ. ID: 10-1682-03

QUANTEQ JOB NO: 9203069
SAMPLE SPIKED: D.I. WATER
INSTRUMENT: IR

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

ANALYTE	MS Conc. (mg/L)	Sample Result (mg/L)	MS Result (mg/L)	MSD Result (mg/L)	Average Percent Recovery	RPD
Oil	6.03	ND	6.03	5.89	98.9 ✓	2.3 ✓

CURRENT QC LIMITS (Revised 01/09/92)

Analyte	Percent Recovery	RPD
Oil	(87-112)	5.4

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

QUALITY CONTROL DATA

DATE EXTRACTED: 03/18/92
DATE ANALYZED: 03/20/92
CLIENT PROJ. ID: 10-1682-03

QUANTEQ JOB NO: 9203069
SAMPLE SPIKED: D.I. WATER
INSTRUMENT: C

METHOD 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	2.42	ND	1.32	1.45	57.2	9.4

CURRENT QC LIMITS (Revised 08/15/91)

Analyte	Percent Recovery	RPD
Diesel	(49.3-101.4)	29.0

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

QUALITY CONTROL DATA

INSTRUMEMT: G

QUANTEQ JOB NO: 9203069

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-Bromo-2-chloro-propane	1-Chloro-2-fluoro-benzene
03/17/92	56938	01E	104.8 ✓	109.8 ✓	111.4 ✓
03/17/92	56942	02E	102.5 ✓	104.3 ✓	105.2 ✓
03/17/92	56958	04A	99.4 ✓	103.0 ✓	102.0 ✓

CURRENT QC LIMITS (Revised 01/06/92)

ANALYTE	PERCENT RECOVERY
Bromochloromethane	(69.5-127.1)
1-Bromo-2-chloropropane	(70.9-128.3)
1-Chloro-2-fluorobenzene	(75.6-124.0)

QUALITY CONTROL DATA

DATE ANALYZED: 03/17/92
INSTRUMENT: G
CLIENT PROJ. ID: 10-1682-03

QUANTEQ JOB NO: 9203069
SAMPLE SPIKED: D.I. WATER

METHOD SPIKE RECOVERY SUMMARY

METHOD 8010/8020
(WATER MATRIX)

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	33.3	33.5	66.8 ✓	0.6 ✓
Trichloroethene	50.0	ND	41.8	40.9	82.7 ✓	2.2 ✓
Benzene	50.0	ND	46.8	46.0	92.8 ✓	1.7 ✓
Toluene	50.0	ND	47.4	46.4	93.8 ✓	2.1 ✓
Chlorobenzene	50.0	ND	41.4	40.9	82.3 ✓	1.2 ✓

CURRENT QC LIMITS (Revised 01/06/92)

Analyte	Percent Recovery	RPD
1,1-Dichloroethene	(58-116)	8.22
Trichloroethene	(76-130)	5.0
Benzene	(84-114)	5.0
Toluene	(81-114)	5.0
Chlorobenzene	(64-116)	5.0

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

QUALITY CONTROL DATA

DATE EXTRACTED: 03/16,19/92 QUANTEQ JOB NO: 9203069

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
03/18/92	56938	01G	61 ✓
03/18/92	56942	02I	19 *
03/18/92	56956	03E	79 ✓
03/23/92	56942	02J	14 *

CURRENT QC LIMITS

ANALYTE	PERCENT RECOVERY
2,4,5,6-Tetrachloro-meta-xylene	(23-125)

* Surrogates outside Q.C. limits

QUALITY CONTROL DATA

DATE EXTRACTED: 03/16/92
DATE ANALYZED: 03/18/92
CLIENT PROJ. ID: 10-1682-03

QUANTEQ JOB NO: 9203069
SAMPLE SPIKED: D.I. WATER
INSTRUMENT: B

MATRIX SPIKE RECOVERY SUMMARY

METHOD 8080 (PCBs)
(WATER MATRIX)

COMPOUND	Spike Amount (mg/L)	Sample Result (mg/L)	MS Result (mg/L)	MSD Result (mg/L)	Average Percent Recovery	RPD
A1260	4.30	ND	4.78	4.51	108.0 ✓	5.8 ✓

CURRENT QC LIMITS

Analyte	Percent Recovery	RPD
A1260	(57-121)	20

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

KLEINFELDER R-1, S-H R-3, S-3 9203069

PROJ. NO.	PROJECT NAME
10-1682-03	
L.P. NO. (P.O. NO.)	SAMPLERS: (Signature/Number) Wilbur Mitchell #1502

DATE MM/DD/YY	SAMPLE I.D. TIME HH:MM:SS	SAMPLE I.D.	NO. OF CONTAINERS	ANALYSIS: TPHd Diesel	TPHg Waste Oil	Oil & Grease SM5520 C&F	Total Hydrocarbons	PCB's EPA 9010	EPA 8020	REMARKS
3-10-92	9:09	01A-1H 56938	8	X	X	X	X	X		X	
	10:15	02A-2J 56942	10	X	X	X	X	X	X	X	
	10:47	03A-3F 56956	6	X	X	X	X	X			
	11:27	04A,B 56958 TUC BLNK.	2						X	X	

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Wilbur Mitchell	3/10/92 11:30	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)
	3/10/92 11:30	Denise Harrington

Remarks: Attn: Guy Tett

Standard TAT

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. 1745

CHAIN OF CUSTODY

QuanteQ Laboratories

An Ecologics Company

FORMERLY MED-TOX

Certificate of Analysis

DOHS CERTIFICATION NO. E772

AIHA ACCREDITATION NO. 332

KLEINFELDER, INC.
2121 N. CALIFORNIA BLVD.
SUITE 570
WALNUT CREEK, CA 94596
ATTN: GUY JETT

CLIENT PROJ. ID: 10-1682-03
C.O.C. NO: 1746

REPORT DATE: 03/27/92

DATE SAMPLED: 03/09/92

DATE RECEIVED: 03/09/92

QUANTEQ JOB NO: 9203063

ANALYSIS OF: WATER SAMPLES

See attached for results

Andrew Bradeen

Andrew Bradeen, Manager
Organic Laboratory

Results FAXed 03/20/92

KLEINFELDER, INC.

DATE SAMPLED: 03/09/92
DATE RECEIVED: 03/09/92
CLIENT PROJ. ID: 10-1682-03

REPORT DATE: 03/27/92

QUANTEQ JOB NO: 9203063

	Client Sample Id.	Quanteq Lab Id.	Extractable Hydrocarbons as Diesel (mg/L)	Extractable Hydrocarbons as Oil (mg/L)	Oil & Grease (mg/L)	Hydrocarbons (mg/L)
MW-8	56920	01A	0.5	0.1	---	---
	56920	01C	---	---	0.6	ND
MW-16	56900	02A	ND	ND	---	---
	56900	02C	---	---	ND	ND
MW-14	56904	03A	ND	ND	---	---
	56904	03C	---	---	ND	ND
MW-13	56910	04A	0.58	ND	---	---
	56910	04C	---	---	ND	ND
MW-13(d)	56918	05A	0.61	0.1	---	---
	56918	05C	---	---	ND	ND
MW-1	56930	06A	11	4.9	---	---
	56930	06C	---	---	27	20
	Detection Limit		0.05	0.1	0.5	0.5
	Method:		3520 GCFID	3520 GCFID	5520C	5520F
	Instrument:		C	C	IR	IR
	Date Extracted:		03/17/92	03/17/92	03/16/92	03/16/92
	Date Analyzed:		03/18/92	03/18/92	03/20/92	03/20/92

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 56920 MW-8
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 03/09/92
DATE RECEIVED: 03/09/92
REPORT DATE: 03/27/92

QUANTEQ LAB NO: 9203063-01G
QUANTEQ JOB NO: 9203063
DATE ANALYZED: 03/17/92
INSTRUMENT: G

EPA METHOD 8020 (WATER MATRIX)
AROMATIC VOLATILE HYDROCARBONS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.5
Chlorobenzene	108-90-7	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
Ethylbenzene	**100-41-4**	**0.8**	**0.5**
Toluene	108-88-3	ND	0.5
Xylenes, Total	1330-20-7	ND	2

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 62812 Travel Blank
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 03/09/92
DATE RECEIVED: 03/09/92
REPORT DATE: 03/27/92

QUANTEQ LAB NO: 9203063-07A
QUANTEQ JOB NO: 9203063
DATE ANALYZED: 03/17/92
INSTRUMENT: G

EPA METHOD 8020 (WATER MATRIX)
AROMATIC VOLATILE HYDROCARBONS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.5
Chlorobenzene	108-90-7	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
Ethylbenzene	100-41-4	ND	0.5
Toluene	108-88-3	ND	0.5
Xylenes, Total	1330-20-7	ND	2

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 56920 MW-8
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 03/09/92
DATE RECEIVED: 03/09/92
REPORT DATE: 03/27/92

QUANTEQ LAB NO: 9203063-01E
QUANTEQ JOB NO: 9203063
DATE EXTRACTED: 03/10/92
DATE ANALYZED: 03/12/92
INSTRUMENT: B

EPA METHOD 8080
POLYCHLORINATED BIPHENYLS
(WATER MATRIX)

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: 56900 MW-10
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 03/09/92
DATE RECEIVED: 03/09/92
REPORT DATE: 03/27/92

QUANTEQ LAB NO: 9203063-02E
QUANTEQ JOB NO: 9203063
DATE EXTRACTED: 03/10/92
DATE ANALYZED: 03/12/92
INSTRUMENT: B

EPA METHOD 8080
POLYCHLORINATED BIPHENYLS
(WATER MATRIX)

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: 56904 MW-14
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 03/09/92
DATE RECEIVED: 03/09/92
REPORT DATE: 03/27/92

QUANTEQ LAB NO: 9203063-03E
QUANTEQ JOB NO: 9203063
DATE EXTRACTED: 03/10/92
DATE ANALYZED: 03/12/92
INSTRUMENT: B

EPA METHOD 8080
POLYCHLORINATED BIPHENYLS
(WATER MATRIX)

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: 56910 MW-13
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 03/09/92
DATE RECEIVED: 03/09/92
REPORT DATE: 03/27/92

QUANTEQ LAB NO: 9203063-04E
QUANTEQ JOB NO: 9203063
DATE EXTRACTED: 03/10/92
DATE ANALYZED: 03/12/92
INSTRUMENT: B

EPA METHOD 8080
POLYCHLORINATED BIPHENYLS
(WATER MATRIX)

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: 56918 MW-13 (a)
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 03/09/92
DATE RECEIVED: 03/09/92
REPORT DATE: 03/27/92

QUANTEQ LAB NO: 9203063-05E
QUANTEQ JOB NO: 9203063
DATE EXTRACTED: 03/10/92
DATE ANALYZED: 03/12/92
INSTRUMENT: B

EPA METHOD 8080
POLYCHLORINATED BIPHENYLS
(WATER MATRIX)

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: 56930 MW-1
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 03/09/92
DATE RECEIVED: 03/09/92
REPORT DATE: 03/27/92

QUANTEQ LAB NO: 9203063-06E
QUANTEQ JOB NO: 9203063
DATE EXTRACTED: 03/13/92
DATE ANALYZED: 03/16/92
INSTRUMENT: B

EPA METHOD 8080
POLYCHLORINATED BIPHENYLS
(WATER MATRIX)

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**	**0.7**	**0.5**

ND = Not Detected

QUALITY CONTROL DATA

DATE EXTRACTED: 03/16/92
DATE ANALYZED: 03/20/92
CLIENT PROJ. ID: 10-1682-03

QUANTEQ JOB NO: 9203063
SAMPLE SPIKED: D.I. WATER
INSTRUMENT: IR

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

ANALYTE	MS Conc. (mg/L)	Sample Result (mg/L)	MS Result (mg/L)	MSD Result (mg/L)	Average Percent Recovery	RPD
Oil	6.19	ND	6.04	5.89	96.4 ✓	2.5 ✓

CURRENT QC LIMITS (Revised 01/09/92)

Analyte	Percent Recovery	RPD
Oil	(87-112)	5.4

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

QUALITY CONTROL DATA

DATE EXTRACTED: 03/18/92
DATE ANALYZED: 03/20/92
CLIENT PROJ. ID: 10-1682-03

QUANTEQ JOB NO: 9203063
SAMPLE SPIKED: D.I. WATER
INSTRUMENT: C

METHOD 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	2.42	ND	1.32	1.45	57.2	9.4

CURRENT QC LIMITS (Revised 08/15/91)

Analyte	Percent Recovery	RPD
Diesel	(49.3-101.4)	29.0

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

QUALITY CONTROL DATA

INSTRUMEMT: G

QUANTEQ JOB NO: 9203063

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-Bromo-2-chloro-propane	1-Chloro-2-fluoro-benzene
03/17/92	56920	01G	103.1 ✓	103.8 ✓	102.8 ✓
03/17/92	62812	07A	100.5 ✓	100.0 ✓	97.1 ✓

CURRENT QC LIMITS (Revised 01/06/92)

ANALYTE	PERCENT RECOVERY
Bromochloromethane	(69.5-127.1)
1-Bromo-2-chloropropane	(70.9-128.3)
1-Chloro-2-fluorobenzene	(75.6-124.0)

QUALITY CONTROL DATA

DATE ANALYZED: 03/17/92
INSTRUMENT: G
CLIENT PROJ. ID: 10-1682-03

QUANTEQ JOB NO: 9203063
SAMPLE SPIKED: D.I. WATER

METHOD SPIKE RECOVERY SUMMARY

METHOD 8010/8020
(WATER MATRIX)

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	33.3	33.5	66.8 ✓	0.6 ✓
Trichloroethene	50.0	ND	41.8	40.9	82.7 ✓	2.2 ✓
Benzene	50.0	ND	46.8	46.0	92.8 ✓	1.7 ✓
Toluene	50.0	ND	47.4	46.4	93.8 ✓	2.1 ✓
Chlorobenzene	50.0	ND	41.4	40.9	82.3 ✓	1.2 ✓

CURRENT QC LIMITS (Revised 01/06/92)

Analyte	Percent Recovery	RPD
1,1-Dichloroethene	(58-116)	8.22
Trichloroethene	(76-130)	5.0
Benzene	(84-114)	5.0
Toluene	(81-114)	5.0
Chlorobenzene	(64-116)	5.0

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

QUALITY CONTROL DATA

DATE EXTRACTED: 03/10/92

QUANTEQ JOB NO: 9203063

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
03/12/92	56920	01E	83 ✓
03/12/92	56900	02E	89 ✓
03/12/92	56904	03E	82 ✓
03/12/92	56910	04E	92 ✓
03/12/92	56918	05E	93 ✓
03/12/92	56930	06E	36 ✓

CURRENT QC LIMITS

ANALYTE	PERCENT RECOVERY
2,4,5,6-Tetrachloro-meta-xylene	(23-125)

QUALITY CONTROL DATA

DATE EXTRACTED: 03/10/92
DATE ANALYZED: 03/12/92
CLIENT PROJ. ID: 10-1682-03

QUANTEQ JOB NO: 9203063
SAMPLE SPIKED: D.I. WATER
INSTRUMENT: B

MATRIX SPIKE RECOVERY SUMMARY

METHOD 8080 (PCBs)
(WATER MATRIX)

COMPOUND	Spike Amount (mg/L)	Sample Result (mg/L)	MS Result (mg/L)	MSD Result (mg/L)	Average Percent Recovery	RPD
A1260	4.30	ND	4.26	4.35	100.1 ✓	2.1 ✓

CURRENT QC LIMITS

Analyte	Percent Recovery	RPD
A1260	(57-121)	20

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

KLEINFELDER

R-1,S-B+
R-3,S-3

9203062

PROJ. NO.	PROJECT NAME
10-1682-03	—
L.P. NO. (P.O. NO.)	SAMPLERS: (Signature/Number) Will J. McKell #1502

DATE MM/DD/YY	SAMPLE I.D. TIME HH:MM:SS	SAMPLE I.D.	NO. OF CONTAINERS	ANALYSIS: TPHG Diesel	TPHG waste Oil	Oil & Grease SM5520 C+F	Total Hydrocarbons	PCB's EPA 8020	REMARKS
3/6/92	10.34	56920 01A-H	8	X	X	X	X	X	X						
	8.20	56900 02A-F	6	↓	↓	↓	↓	↓							
	8.52	56904 03A-F	6												
	9:58	56910 04A-F	6												
	10:06	56918 05A-F	6												
	11:15	56930 06A-F	6	X	X	X	X	X							
~~3/10/92~~	~~1259~~	~~62812 FOC Blank~~	~~2~~												Does not need to be run because no sample came in for volatile analysis.
		62812 TVL Blk 07ABZ						X							

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Will J McKell	3/6/92	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)
	3/11/92 1300	Lynn Gillespie

Remarks

Attn: Gay Jeff

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. 1746

CHAIN OF CUSTODY

Quanteq Laboratories

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FORMERLY MED-TOX

Certificate of Analysis

DOHS CERTIFICATION NO. E772

AIHA ACCREDITATION NO. 332

KLEINFELDER, INC.
2121 N. CALIFORNIA BLVD.
SUITE 570
WALNUT CREEK, CA 94596
ATTN: GUY JETT

CLIENT PROJ. ID: 10-1682-03
C.O.C. NO: 1747

REPORT DATE: 03/25/92

DATE SAMPLED: 03/04/92

DATE RECEIVED: 03/04/92

QUANTEQ JOB NO: 9203029

ANALYSIS OF: WATER SAMPLES

See attached for results

Andrew Bradeen, Manager
Organic Laboratory

Results FAXed 03/16/92

KLEINFELDER, INC.

DATE SAMPLED: 03/04/92
DATE RECEIVED: 03/04/92
CLIENT PROJ. ID: 10-1682-03

REPORT DATE: 03/25/92
QUANTEQ JOB NO: 9203029

	Client Sample Id.	Quanteq Lab Id.	Extractable Hydrocarbons as Diesel (mg/L)	Extractable Hydrocarbons as Oil (mg/L)	Oil & Grease (mg/L)	Hydrocarbons (mg/L)
MW-5	56860	01A	ND	ND	---	---
	56860	01C	---	---	ND	ND
MW-4	56866	02A	ND	ND	---	---
	56866	02C	---	---	3	1
MW-7	56870	03A	ND	ND	---	---
	56870	03C	---	---	ND	ND
MW-15	56880	04A	0.3	ND	---	---
	56880	04C	---	---	0.5	ND
MW 16	56884	05A	1.4	ND	---	---
	56884	05C	---	---	1	ND
MW-16(d)	56890	06A	1.5	ND	---	---
	56890	06C	---	---	2	ND
	Detection Limit		0.05	0.1	0.5	0.5
	Method:		3510 GCFID	3510 GCFID	5520C	5520F
	Instrument:		C	C	IR	IR
	Date Extracted:		03/10,12/92	03/10,12/92	03/13/92	03/13/92
	Date Analyzed:		03/11-14/92	03/11-14/92	03/13/92	03/13/92

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 56860 MW-5
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 03/04/92
DATE RECEIVED: 03/04/92
REPORT DATE: 03/25/92

QUANTEQ LAB NO: 9203029-01E
QUANTEQ JOB NO: 9203029
DATE EXTRACTED: 03/10/92
DATE ANALYZED: 03/12/92
INSTRUMENT: B

EPA METHOD 8080
POLYCHLORINATED BIPHENYLS
(WATER MATRIX)

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: 56866 MW-4
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 03/04/92
DATE RECEIVED: 03/04/92
REPORT DATE: 03/25/92

QUANTEQ LAB NO: 9203029-02E
QUANTEQ JOB NO: 9203029
DATE EXTRACTED: 03/10/92
DATE ANALYZED: 03/12/92
INSTRUMENT: B

EPA METHOD 8080
POLYCHLORINATED BIPHENYLS
(WATER MATRIX)

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: 56870 MW-7
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 03/04/92
DATE RECEIVED: 03/04/92
REPORT DATE: 03/25/92

QUANTEQ LAB NO: 9203029-03E
QUANTEQ JOB NO: 9203029
DATE EXTRACTED: 03/10/92
DATE ANALYZED: 03/12/92
INSTRUMENT: B

EPA METHOD 8080
POLYCHLORINATED BIPHENYLS
(WATER MATRIX)

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: 56880 MW-15
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 03/04/92
DATE RECEIVED: 03/04/92
REPORT DATE: 03/25/92

QUANTEQ LAB NO: 9203029-04E
QUANTEQ JOB NO: 9203029
DATE EXTRACTED: 03/10/92
DATE ANALYZED: 03/12/92
INSTRUMENT: B

EPA METHOD 8080
POLYCHLORINATED BIPHENYLS
(WATER MATRIX)

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: 56884 MW-16
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 03/04/92
DATE RECEIVED: 03/04/92
REPORT DATE: 03/25/92

QUANTEQ LAB NO: 9203029-05E
QUANTEQ JOB NO: 9203029
DATE EXTRACTED: 03/10/92
DATE ANALYZED: 03/12/92
INSTRUMENT: B

EPA METHOD 8080
POLYCHLORINATED BIPHENYLS
(WATER MATRIX)

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: 56890 MW-16(d)
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 03/04/92
DATE RECEIVED: 03/04/92
REPORT DATE: 03/25/92

QUANTEQ LAB NO: 9203029-06E
QUANTEQ JOB NO: 9203029
DATE EXTRACTED: 03/10/92
DATE ANALYZED: 03/12/92
INSTRUMENT: B

EPA METHOD 8080
POLYCHLORINATED BIPHENYLS
(WATER MATRIX)

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

QUALITY CONTROL DATA

DATE EXTRACTED: 03/13/92
DATE ANALYZED: 03/13/92
CLIENT PROJ. ID: 10-1682-03

QUANTEQ JOB NO: 9203029
SAMPLE SPIKED: D.I. WATER
INSTRUMENT: IR

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

ANALYTE	MS Conc. (mg/L)	Sample Result (mg/L)	MS Result (mg/L)	MSD Result (mg/L)	Average Percent Recovery	RPD
Oil	6.30	ND	6.00	6.30	97.6 ✓	4.9 ✓

CURRENT QC LIMITS (Revised 01/09/92)

Analyte	Percent Recovery	RPD
Oil	(87-112)	5.4

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

QUALITY CONTROL DATA

DATE EXTRACTED: 03/10/92
DATE ANALYZED: 03/11/92
CLIENT PROJ. ID: 10-1682-03

QUANTEQ JOB NO: 9203029
SAMPLE SPIKED: D.I. WATER
INSTRUMENT: C

METHOD SPIKE RECOVERY SUMMARY
TPH EXTRACTABLE WATERS
METHOD 3510 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	2.52	ND	2.03	2.04	80.8 ✓	0.5 ✓

CURRENT QC LIMITS (Revised 08/15/91)

Analyte	Percent Recovery	RPD
Diesel	(49.3-101.4)	29.0

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

QUALITY CONTROL DATA

DATE EXTRACTED: 03/10/92

QUANTEQ JOB NO: 9203029

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
03/12/92	56860	01E	85
03/12/92	56866	02E	27
03/12/92	56870	03E	53
03/12/92	56880	04E	77
03/12/92	56884	05E	53
03/12/92	56890	06E	51

CURRENT QC LIMITS

ANALYTE	PERCENT RECOVERY
2,4,5,6-Tetrachloro-meta-xylene	(23-125)

QUALITY CONTROL DATA

DATE EXTRACTED: 03/10/92
DATE ANALYZED: 03/12/92
CLIENT PROJ. ID: 10-1682-03

QUANTEQ JOB NO: 9203029
SAMPLE SPIKED: D.I. WATER
INSTRUMENT: B

MATRIX SPIKE RECOVERY SUMMARY

METHOD 8080 (PCBs)
(WATER MATRIX)

COMPOUND	Spike Amount (mg/L)	Sample Result (mg/L)	MS Result (mg/L)	MSD Result (mg/L)	Average Percent Recovery	RPD
A1260	4.30	ND	4.26	4.35	100.1	2.1

CURRENT QC LIMITS

Analyte	Percent Recovery	RPD
A1260	(57-121)	20

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

KLEINFELDER

9203029

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

DATE MM/DD/YY	SAMPLE I.D. TIME HH:MM:SS	SAMPLE I.D.	NO. OF CONTAINERS	ANALYSIS: TPH @ Diesel	TPH @ waste Oil	Oil & Grease SM5520 C+F	Total Hydrocarbons	PCB's	REMARKS
3/4/92	8:49	56860	6	X	X	X	X	X	
	9:30	56866							
	10:35	56870							
	11:35	56880							
	12:22	56884							
	12:28	56890							
3/4/92	8:40	56894 TVL BLNK.	2						

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Will J. Mitchell	3/4/92	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)
	3/4/92 1:40	Denise Harrington

Remarks

Attn: Guy Jett

Standard TAT

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. 1747