

**QUARTERLY REPORT
(AUGUST - OCTOBER 1992)
INDUSTRIAL ASPHALT
PLEASANTON, CALIFORNIA**

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October 14, 1992

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October 14, 1992
File: 10-1682-03/38

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

SUBJECT: Quarterly Report (August - October 1992) Industrial Asphalt, Pleasanton, California

Dear Mr. Hunt:

Kleinfelder, Inc., is pleased to submit this quarterly report for the third quarter of 1992 (August - October 1992) 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 November 13, 1989.

INTRODUCTION

Thirteen monitoring wells and eleven extraction wells are present onsite. A previous extraction well designated monitoring well number 13 (MW-13), has now been redesignated extraction well number 11 (EW-11). Data collected from the monitoring wells have been 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 wells are shown on Plate 2. All monitoring 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 December 28, 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 BTEX (benzene, toluene, ethylbenzene and xylenes) using EPA Method 8020, and halogenated volatile organics using EPA Method 8010 in that same letter was subsequently modified by ACDHS to include only wells MW-3 (8010 and 8020) and MW-2 and MW-8 (8020 only) for a limited period of time. Pursuant to that revision, monitoring well MW-8 was sampled for BTEX using EPA Method 8020 for the final time this quarter. The other two wells were sampled for the final time during the first quarter of 1992.

Water samples were collected on August 19 and 20, 1992, from onsite wells MW-4, MW-7, MW-8, MW-10, and MW-14. Monitoring wells MW-1, MW-2, MW-3, and MW-5 were dry during this sampling round so no water samples could be recovered. Monitoring wells MW-6, MW-9, and MW-15 were not accessible on the sampling days, and therefore, not sampled. As noted above monitoring well MW-13 was not sampled as this well has been converted to a

ground water extraction well. 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.

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 fallen an average of 6.65 feet since the last measurement on May 19, 1992, and an average of 14.37 feet since March 3, 1992.

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). This flow direction is as noted in previous sampling rounds.

Water level elevations beneath the site vary between at least 273 and 298 feet (MW-5 and MW-16, 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 steeper than observed in March 1992. The gradients vary from at least 0.039 feet per foot towards the northeastern corner of the site to 0.005 feet per foot beneath the western portion of the site.

GROUND WATER CHEMISTRY MONITORING RESULTS

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

No sheen or hydrocarbon-like odors were reported for any of the wells sampled during this round.

Detectable concentrations of PCBs were found only in the ground water samples collected from monitoring well MW-1 during the May 1992 sampling round (2 ug/L). This well was dry in August 1992 so no samples could be collected. Detectable concentrations of PCBs were not found in any other tested wells during this round.

Detectable concentrations of total petroleum hydrocarbons as diesel (TPH(d)) were detected in the samples collected from MW-8 only. TPH(d) and total petroleum hydrocarbons as waste oil (TPH(wo)) were not detected in samples collected from any of the other monitoring wells. 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, March 1992, and May 1992 data.

Detectable concentrations of oil and grease and total hydrocarbons were not found in any of the water samples obtained during this sampling round (Table 2). Sample analysis for BTEX and halogenated volatile organic compounds has been discontinued for all monitoring wells at this site, except MW-8 since the March 1992 sampling round with concurrence from the ACDHS. During the May and August 1992 sampling round, only MW-8 was tested for BTEX via EPA Test Method 8020. No volatile organic compounds were detected in the sample collected from MW-8 during the August sampling round (Table 3). Benzene had previously

been detected only once (May 1992) during the previous four sampling rounds. Ethylbenzene, detected at a concentration of 0.8 ug/L in the sample collected from this well in March 1992 was not detected during this sampling round.

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 5 minutes in order to empty the purge tank. Approximately 30 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 lower than the previous sampling round and ground water flow remains generally toward the northeast. At several well locations the ground water surface is now below the bottom of the well. The ground water chemistry has remained, for the most part, consistent between sampling rounds although concentrations have decreased since May 1992. 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

Oil and grease, TPH(d), TPH(wo), total hydrocarbons, and PCBs have occasionally been found in water samples obtained from some of the onsite monitoring wells. Continuance of monitoring for these compounds is also part of the proposed waste discharge requirements which are currently in preparation for this site. Therefore, it is recommended that during the next quarterly round (November 1992) that 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

A system of ten ground water extraction wells were installed at the site in late May and early June 1992 and one existing monitoring well (MW-13) was converted to an extraction well. Design plans and specifications for construction of the proposed remediation system are in preparation. An Application for Waste Discharge has been submitted to ACDHS and the Regional Water Quality Control Board requesting discharge to a nearby infiltration pond.

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:***

cc: Dwight Beavers - Industrial Asphalt
Ravi Arulanantham - Alameda County Department of Environmental Services
John Jang - 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)	Trend
MW-1	3/03/92	88	379.41	SHEEN	76.01	303.40	
	5/19/92			SHEEN	83.54	295.87	
	8/19/92			NA	DRY		
MW-2	3/03/92	90	379.80	SHEEN	76.59	303.21	
	5/19/92			NA	Not Measured		
	8/19/92			NA	DRY		
MW-3	3/03/92	90	378.54	SHEEN	74.72	303.82	
	5/19/92			NA	DRY		
	8/19/92			NA	DRY		
MW-4	3/03/92	95	376.26	NE	73.20	303.06	
	5/19/92			NE	79.59	296.67	
	8/19/92			NE	86.12	290.14	

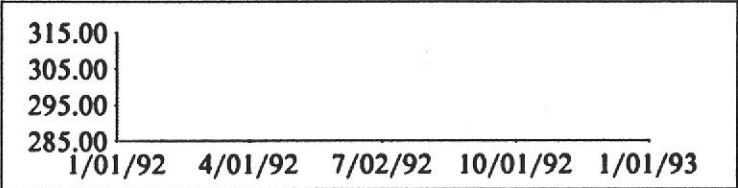
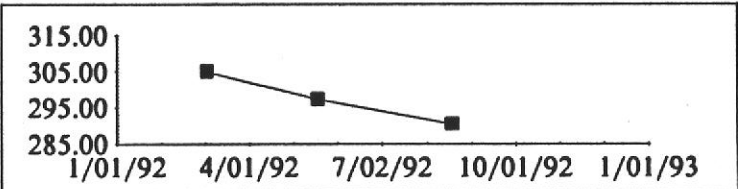
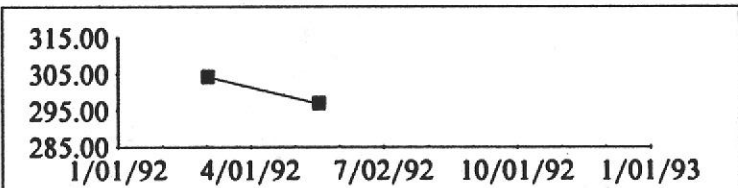
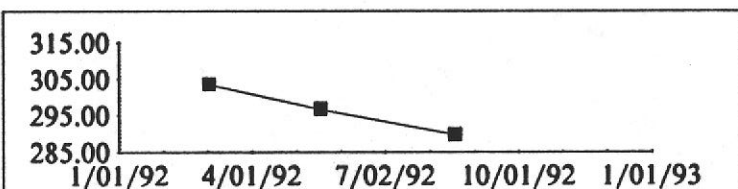


**TABLE 1
SUMMARY OF 1992 GROUND WATER ELEVATIONS
INDUSTRIAL ASPHALT**

Well Number	Date	Total Well Depth (ft)	Survey Elevation (ft, MSL)	Product Thickness (ft)	Depth to Water (ft)	Elevation (ft, MSL)	Trend
MW-5	3/03/92	110	382.55	NE	81.23	301.32	
	5/19/92			NE	93.51	289.04	
	8/19/92			NA	DRY		
MW-6	3/03/92	109	379.15	NA	Not Measured		
	5/19/92			NA	Not Measured		
	8/19/92			NA	Not Measured		
MW-7	3/03/92	109	378.94	NE	75.29	303.65	
	5/19/92			NE	83.85	295.09	
	8/19/92			NE	94.21	284.73	
MW-8	3/03/92	109	378.56	SHEEN	75.20	303.36	
	5/19/92			SHEEN	81.76	296.80	
	8/19/92			NE	88.57	289.99	

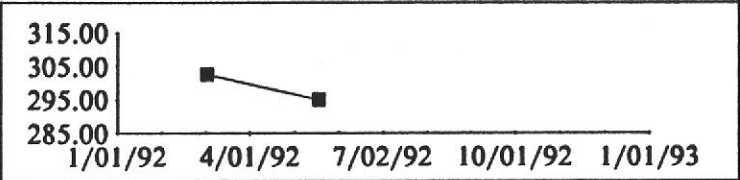
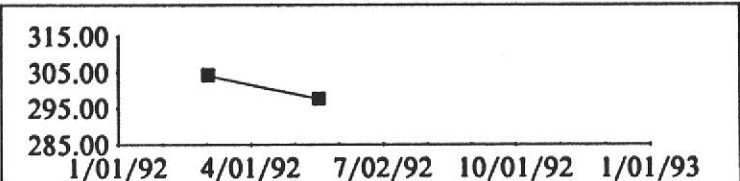
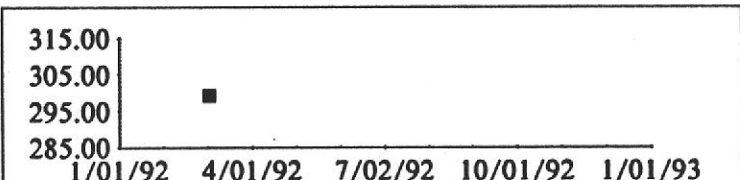


**TABLE 1
SUMMARY OF 1992 GROUND WATER ELEVATIONS
INDUSTRIAL ASPHALT**

Well Number	Date	Total Well Depth (ft)	Survey Elevation (ft, MSL)	Product Thickness (ft)	Depth to Water (ft)	Elevation (ft, MSL)	Trend
MW-9	3/03/92	108	377.40	NA	Not Measured		
	5/19/92			NA	Not Measured		
	8/19/92			NA	Not Measured		
MW-10	3/03/92	111	378.04	NE	73.10	304.94	
	5/19/92			NE	80.76	297.28	
	8/19/92			NE	87.54	290.50	
MW-13 Extraction Well	3/03/92	116	380.21	NE	76.03	304.18	
	5/19/92			NE	83.37	296.84	
	8/19/92			Converted to Well EX-11		Not Measured	
MW-14	3/03/92	114.5	380.09	NE	76.63	303.46	
	5/19/92			NE	83.46	296.63	
	8/19/92			NE	90.39	289.70	



**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)	Trend
MW-15	3/03/92	117	378.12	NE	75.54	302.58	
	5/19/92			NE	83.22	294.90	
	8/19/92			NA	Not Measured		
MW-16	3/03/92	110	379.65	NE	75.61	304.04	
	5/19/92			NE	82.14	297.51	
	8/19/92			Not Measured			
STAFF GAGE	3/03/92	NA	300.00	NE	-1	299.00	
	5/19/92			NA	Not Measured		
	8/19/92			NA	Not Measured		

NOTES:

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

Depth to Water in feet below Top of Casing

NA Not Applicable

NE Not Encountered



**TABLE 2
MONITORING PARAMETERS
INDUSTRIAL ASPHALT**

Well Number	Sample Date	TPH as Diesel ⁽¹⁾ (mg/L)	TPH as Oil ⁽¹⁾ (mg/L)	Oil & Grease ⁽²⁾ (mg/L)	Total Hydrocarbons ⁽³⁾ (mg/L)	PCBs ⁽⁴⁾ (µg/L)
MW-1	Nov. 1991	9.5	4.9	22	19	ND
	Mar. 1992	11	4.9	27	20	0.7
	May 1992	130	57	340	310	2
	Aug. 1992	DRY	DRY	DRY	DRY	DRY
MW-2	Nov. 1991	110	57	110	96	1
	Mar. 1992	4.1	1.5	10	8	ND
	May 1992	NT	NT	NT	NT	NT
	Aug. 1992	DRY	DRY	DRY	DRY	DRY
MW-3	Nov. 1991	210	120	360	330	7.4
	Mar. 1992	4.2	2.4	31	27	ND
	May 1992	NT	NT	NT	NT	NT
	Aug. 1992	DRY	DRY	DRY	DRY	DRY
MW-4	Nov. 1991	ND	ND	2	0.9	ND
	Mar. 1992	ND	ND	3	1	ND
	May 1992	ND	0.8	1	0.7	ND
	Aug. 1992	ND	ND	ND	ND	ND
MW-5	Nov. 1991	ND	ND	ND	ND	ND
	Mar. 1992	ND	ND	ND	ND	ND
	May 1992	ND	ND	ND	ND	ND
	Aug. 1992	DRY	DRY	DRY	DRY	DRY

Laboratory Detection Limit ⁽⁵⁾	0.05	0.1	0.5	0.5	0.5
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Drinking Water Standard ⁽⁶⁾	--	--	--	--	0.5
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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 Oil ⁽¹⁾ (mg/L)	Oil & Grease ⁽²⁾ (mg/L)	Total Hydrocarbons ⁽³⁾ (mg/L)	PCBs ⁽⁴⁾ (µg/L)
MW-6	Nov. 1991	NT	NT	NT	NT	NT
	Mar. 1992	NT	NT	NT	NT	NT
	May 1992	NT	NT	NT	NT	NT
	Aug. 1992	NT	NT	NT	NT	NT
MW-7	Nov. 1991	0.07	ND	ND	ND	ND
	Mar. 1992	ND	ND	ND	ND	ND
	May 1992	0.2	0.3	0.8	0.5	ND
	Aug. 1992	ND	ND	ND	ND	ND
MW-8 ⁽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
	May 1992	0.3	ND	ND	ND	ND
	Aug. 1992	0.1(0.1)	ND(ND)	ND(ND)	ND(ND)	ND(ND)
MW-9	Nov. 1991	0.1	ND	ND	ND	ND
	Mar. 1992	NT	NT	NT	NT	NT
	May 1992	NT	NT	NT	NT	NT
	Aug. 1992	NT	NT	NT	NT	NT
MW-10	Nov. 1991	ND	ND	ND	ND	ND
	Mar. 1992	ND	ND	ND	ND	ND
	May 1992	0.4	0.4	3	0.8	ND
	Aug. 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
(172)10-1682-03/38-(R92090)

TABLE 2
(Continued)
MONITORING PARAMETERS
INDUSTRIAL ASPHALT

Well Number	Sample Date	TPH as Diesel ⁽¹⁾ (mg/L)	TPH as Oil ⁽¹⁾ (mg/L)	Oil & Grease ⁽²⁾ (mg/L)	Total Hydrocarbons ⁽³⁾ (mg/L)	PCBs ⁽⁴⁾ (µg/L)
MW-13 ^(7,8)	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)
	May 1992	0.6	ND	0.5	ND	ND
	Aug. 1992	NT	Converted to Extraction Well			
MW-14 ⁽⁸⁾	Nov. 1991	ND	ND	ND	ND	ND
	Mar. 1992	ND	ND	ND	ND	ND
	May 1992	ND(ND)	ND(ND)	ND(ND)	ND(ND)	ND(ND)
	Aug. 1992	ND	ND	ND	ND	ND
MW-15 ⁽⁸⁾	Nov. 1991	0.07	ND	2	ND	ND
	Mar. 1992	0.3	ND	0.5	ND	ND
	May 1992	ND(ND)	ND(ND)	ND(ND)	ND(ND)	ND(ND)
	Aug. 1992	NT	NT	NT	NT	NT
MW-16	Nov. 1991	0.08	ND	ND	ND	ND
	Mar. 1992	1.4(1.5)	ND(ND)	1(2)	ND(ND)	ND(ND)
	May 1992	0.4	0.2	0.9	ND	ND
	Aug. 1992					
14A2 ⁽⁹⁾	Nov. 1991	ND	ND	ND	ND	ND
	Mar. 1992	ND	ND	ND	ND	ND
	May 1992	ND	ND	ND	ND	ND
	Aug. 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
(172)10-1682-03/38-(R92090)

TABLE 2
(Continued)
MONITORING PARAMETERS
INDUSTRIAL ASPHALT

NOTES:

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

TPH Total Petroleum Hydrocarbons.
ND Not Detected at or above laboratory reporting limits
NT Not Tested



TABLE 3
VOLATILE ORGANIC COMPOUNDS⁽¹⁾
INDUSTRIAL ASPHALT

Well Number	Sample Date	Benzene (lg/L)	Ethylbenzene (lg/L)	Toluene (lg/L)	Total Xylenes (lg/L)	1,1-DCA ⁽²⁾ (lg/L)	1,2-DCE ⁽³⁾ (lg/L)	TCFM ⁽⁴⁾ (lg/L)	Vinyl Chloride (lg/L)	Other 8010 Compounds (lg/L)
MW-1	Nov. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mar. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
	May 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Aug. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW-2	Nov. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mar. 1992	1	4	ND	2	NT	NT	NT	NT	NT
	May 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Aug. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW-3	Nov. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mar. 1992	ND	ND	ND	ND	ND	ND	ND	ND	ND
	May 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Aug. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW-4	Nov. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mar. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
	May 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Aug. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW-5	Nov. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mar. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
	May 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Aug. 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
(172)10-1682-03/38-(R92090)

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

Well Number	Sample Date	Benzene (lg/L)	Ethylbenzene (lg/L)	Toluene (lg/L)	Total Xylenes (lg/L)	1,1-DCA ⁽²⁾ (lg/L)	1,2-DCE ⁽³⁾ (lg/L)	TCFM ⁽⁴⁾ (lg/L)	Vinyl Chloride (lg/L)	Other 8010 Compounds (lg/L)
MW-6	Nov. 1991	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Mar. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
	May 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Aug. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW-7	Nov. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mar. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
	May 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Aug. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW-8	Nov. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mar. 1992	ND	0.8	ND	ND	NT	NT	NT	NT	NT
	May 1992	0.3	ND	ND	ND	NT	NT	NT	NT	NT
	Aug. 1992	ND(ND)	ND(ND)	ND(ND)	ND(ND)	NT	NT	NT	NT	NT
MW-9	Nov. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mar. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
	May 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Aug. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW-10	Nov. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mar. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
	May 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Aug. 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
(172)10-1682-03/38-(R92090)

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

Well Number	Sample Date	Benzene (lg/L)	Ethylbenzene (lg/L)	Toluene (lg/L)	Total Xylenes (lg/L)	1,1-DCA ⁽²⁾ (lg/L)	1,2-DCE ⁽³⁾ (lg/L)	TCFM ⁽⁴⁾ (lg/L)	Vinyl Chloride (lg/L)	Other 8010 Compounds (lg/L)
MW-13	Nov. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mar. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
	May 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Aug. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW-14	Nov. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mar. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
	May 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Aug. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW-15	Nov. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mar. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
	May 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Aug. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW-16	Nov. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mar. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
	May 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Aug. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
14A2 ⁽⁵⁾	Nov. 1991	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mar. 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
	May 1992	NT	NT	NT	NT	NT	NT	NT	NT	NT
	Aug. 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	--	

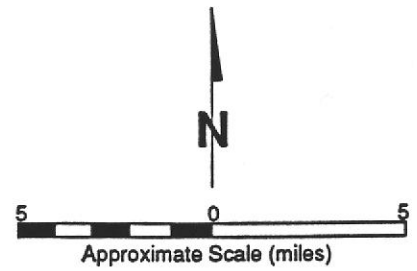
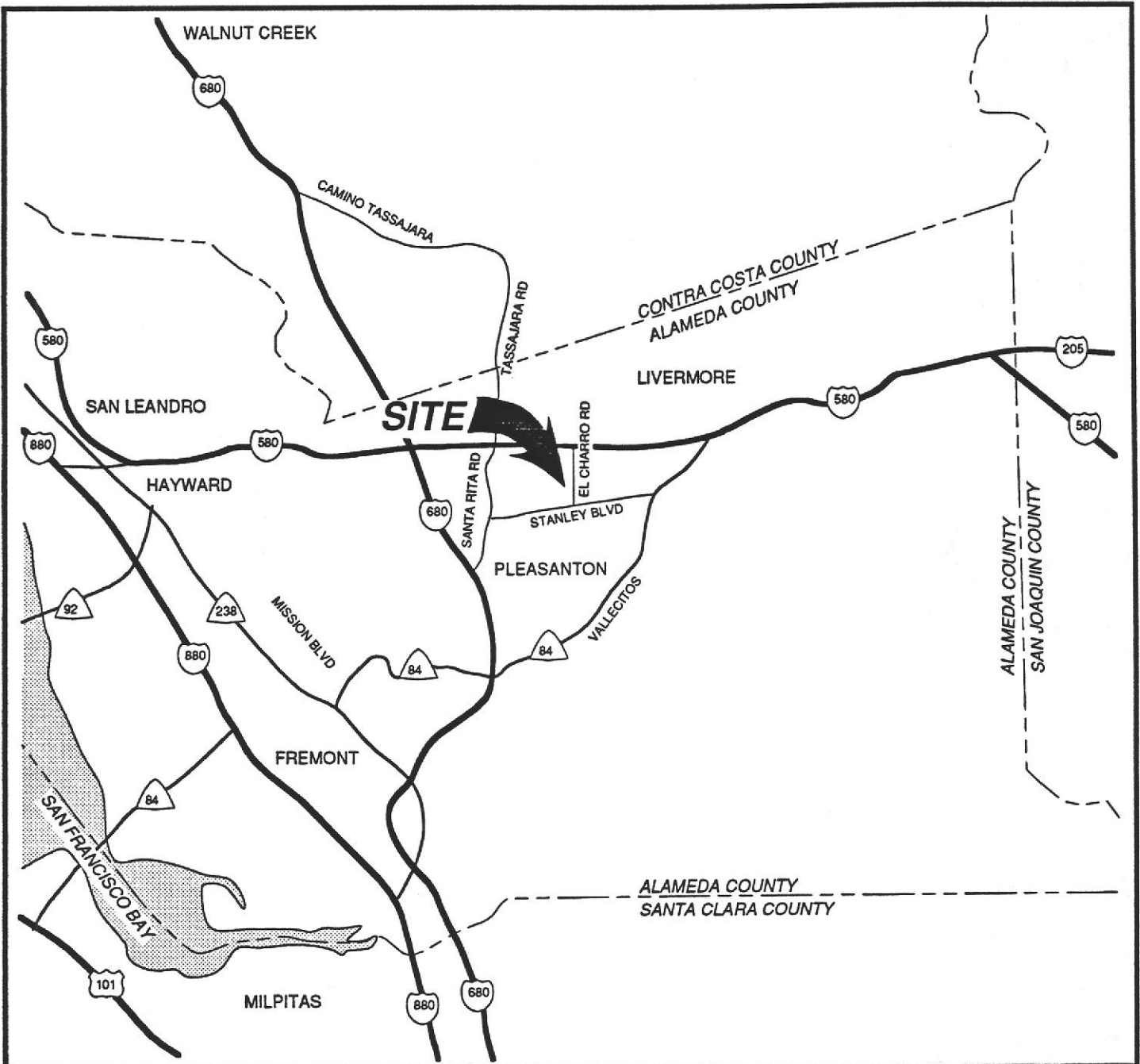
Please see notes on last page of Table
(172)10-1682-03/38-(R92090)

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





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VICINITY MAP

INDUSTRIAL ASPHALT
52 EL CHARRO ROAD
PLEASANTON, CALIFORNIA

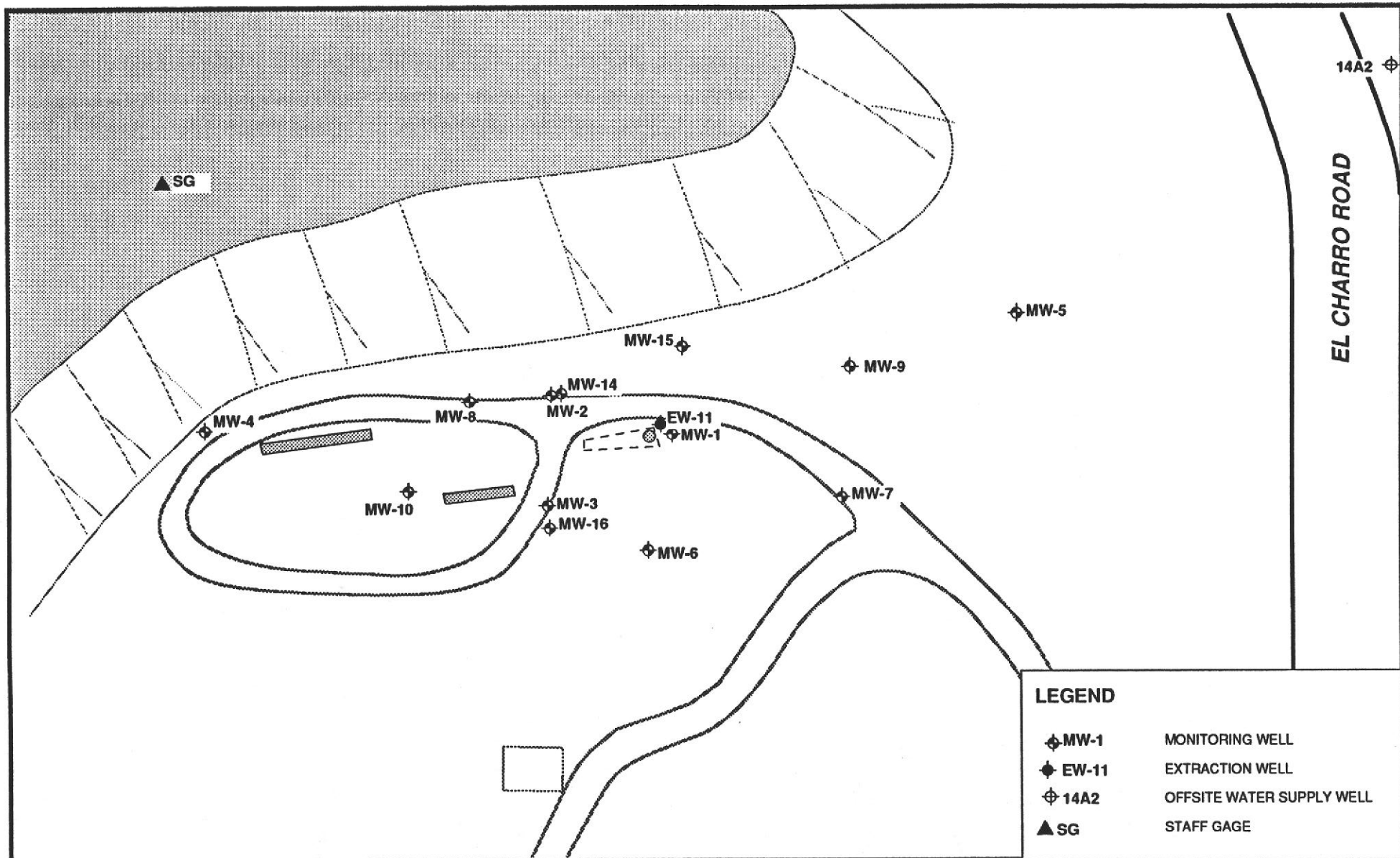
PLATE

1

DRAFTED BY: L. Sue DATE: 10-21-92

CHECKED BY: D. Behrens DATE: 10-22-92

PROJECT NUMBER 10-1682-03



LEGEND	
◆ MW-1	MONITORING WELL
◆ EW-11	EXTRACTION WELL
◆ 14A2	OFFSITE WATER SUPPLY WELL
▲ SG	STAFF GAGE



MONITORING WELL LOCATION MAP

PLATE

INDUSTRIAL ASPHALT
PLEASANTON, CALIFORNIA

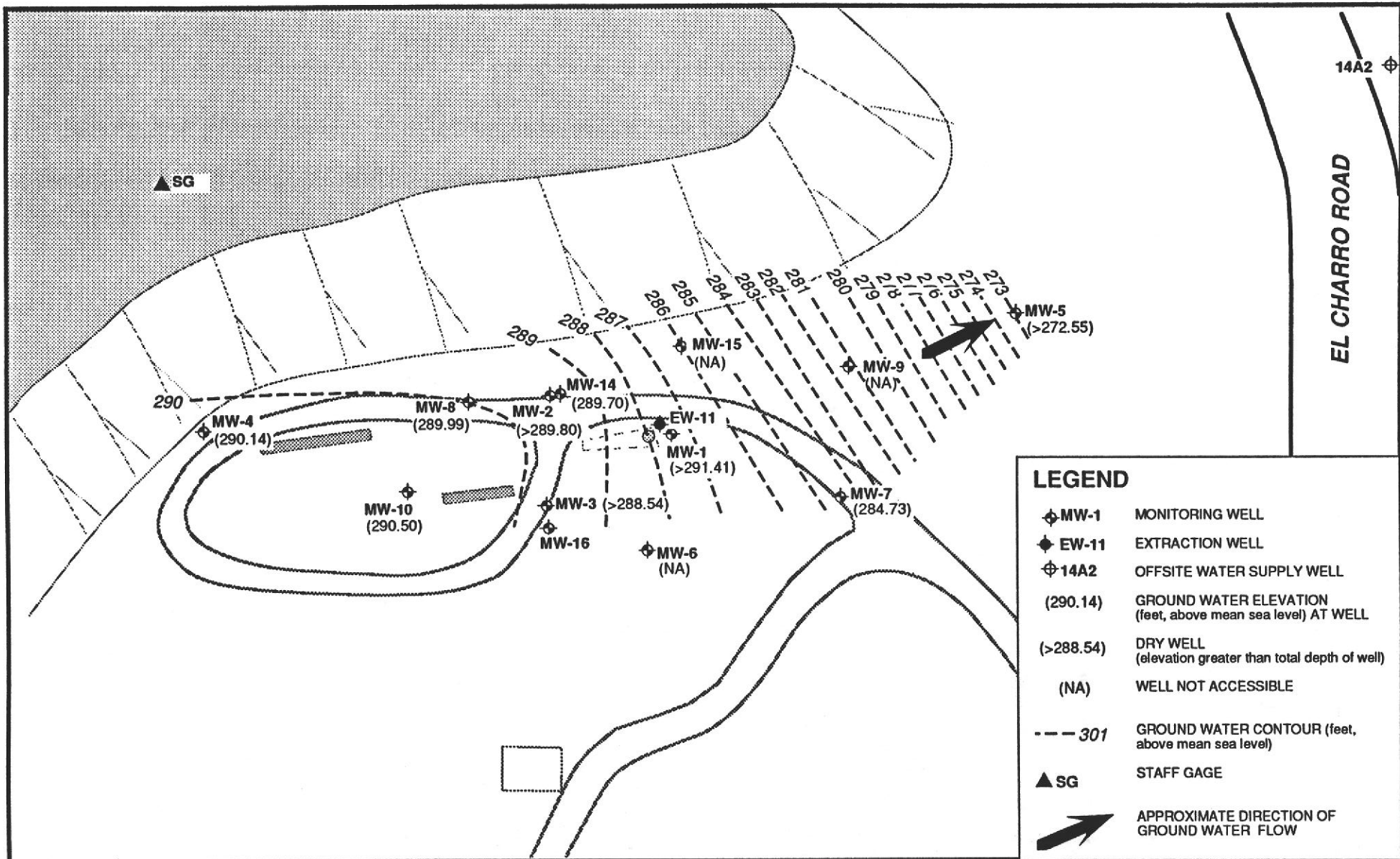
2

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

DRAFTED BY: L. Sue DATE: 10-22-92

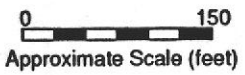
CHECKED BY: D. Behrens DATE: 10-22-92

PROJECT NO. 10-1682-03



LEGEND

- ◆ MW-1 MONITORING WELL
- ◆ EW-11 EXTRACTION WELL
- ⊕ 14A2 OFFSITE WATER SUPPLY WELL
- (290.14) GROUND WATER ELEVATION (feet, above mean sea level) AT WELL
- (>288.54) DRY WELL (elevation greater than total depth of well)
- (NA) WELL NOT ACCESSIBLE
- 301 GROUND WATER CONTOUR (feet, above mean sea level)
- ▲ SG STAFF GAGE
- ➔ APPROXIMATE DIRECTION OF GROUND WATER FLOW



**GROUND WATER SURFACE CONTOUR
MAP — AUGUST 1992**

**INDUSTRIAL ASPHALT
PLEASANTON, CALIFORNIA**

PROJECT NO. 10-1682-03

PLATE

3

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

DRAFTED BY: L. Sue DATE: 10-21-92
CHECKED BY: D. Behrens DATE: 10-21-92

Quanteq Laboratories

An Ecologies Company

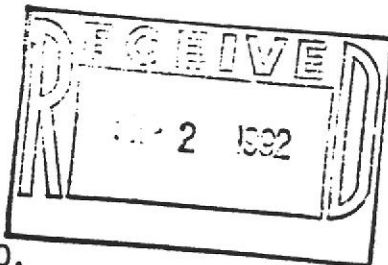
FORMERLY MED-TOX

Certificate of Analysis

PAGE 1 OF 17

DOHS CERTIFICATION NO. E772

AIHA ACCREDITATION NO. 552



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: 1721

REPORT DATE: 09/01/92


DATE SAMPLED: 08/19/92

DATE RECEIVED: 08/19/92

QUANTEQ JOB NO: 9208182

ANALYSIS OF: WATER SAMPLES

See attached for results


Andrew Bradeen, Manager
Organic Laboratory

Results FAXed 08/28/92

KLEINFELDER, INC.

DATE SAMPLED: 08/20/92
 DATE RECEIVED: 08/20/92
 CLIENT PROJ. ID: 10-1682-03

REPORT DATE: 09/01/92
 QUANTEQ JOB NO: 9208191

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)
60005	MW-4 01A	ND	ND	---	---
60005	01C	---	---	ND	ND
60013	MW-7 02A	ND	ND	---	---
60013	02C	---	---	ND	ND
60025	MW-10 03A	ND	ND	---	---
60025	03C	---	---	ND	ND
60027	MW-14 04A	ND	ND	---	---
60027	04C	---	---	ND	ND
60037	MW-8(d) 05A	0.1	ND	---	---
60037	05C	---	---	ND	ND
60046	MW-8 06A	0.1	ND	---	---
60046	06C	---	---	ND	ND
Detection Limit		0.05	0.2	0.5	0.5
Method:		3510 GCFID	3510 GCFID	5520C	5520F
Instrument:		C	C	IR	IR
Date Extracted:		08/26/92	08/26/92	08/27/92	08/27/92
Date Analyzed:		08/27/92	08/27/92	08/28/92	08/28/92

ND = Not Detected

KLEINFELDER, INC.

CLIENT ID: 60037
 CLIENT PROJ. ID: 10-1682-03
 DATE SAMPLED: 08/19/92
 DATE RECEIVED: 08/19/92
 REPORT DATE: 09/01/92

QUANTEQ LAB NO: 9208182-05G
 QUANTEQ JOB NO: 9208182
 DATE ANALYZED: 08/27/92
 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: 60046
 CLIENT PROJ. ID: 10-1682-03
 DATE SAMPLED: 08/19/92
 DATE RECEIVED: 08/19/92
 REPORT DATE: 09/01/92

QUANTEQ LAB NO: 9208182-06G
 QUANTEQ JOB NO: 9208182
 DATE ANALYZED: 08/27/92
 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: 60049
 CLIENT PROJ. ID: 10-1682-03
 DATE SAMPLED: 08/19/92
 DATE RECEIVED: 08/19/92
 REPORT DATE: 09/01/92

QUANTEQ LAB NO: 9208182-07A
 QUANTEQ JOB NO: 9208182
 DATE ANALYZED: 08/27/92
 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.

SAMPLE ID: 60005
 CLIENT PROJ. ID: 10-1682-03
 DATE SAMPLED: 08/19/92
 DATE RECEIVED: 08/19/92
 REPORT DATE: 09/01/92

QUANTEQ LAB NO: 9208182-01E
 QUANTEQ JOB NO: 9208182
 DATE EXTRACTED: 08/24/92
 DATE ANALYZED: 08/26/92
 INSTRUMENT: A

EPA METHOD 8080
 POLYCHLORINATED BIPHENYLS
 (WATER MATRIX)

COMPOUND	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.

SAMPLE ID: 60013
 CLIENT PROJ. ID: 10-1682-03
 DATE SAMPLED: 08/19/92
 DATE RECEIVED: 08/19/92
 REPORT DATE: 09/01/92

QUANTEQ LAB NO: 9208182-02E
 QUANTEQ JOB NO: 9208182
 DATE EXTRACTED: 08/24/92
 DATE ANALYZED: 08/26/92
 INSTRUMENT: A

EPA METHOD 8080
 POLYCHLORINATED BIPHENYLS
 (WATER MATRIX)

COMPOUND	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.

SAMPLE ID: 60025
 CLIENT PROJ. ID: 10-1682-03
 DATE SAMPLED: 08/19/92
 DATE RECEIVED: 08/19/92
 REPORT DATE: 09/01/92

QUANTEQ LAB NO: 9208182-03E
 QUANTEQ JOB NO: 9208182
 DATE EXTRACTED: 08/24/92
 DATE ANALYZED: 08/26/92
 INSTRUMENT: A

EPA METHOD 8080
 POLYCHLORINATED BIPHENYLS
 (WATER MATRIX)

COMPOUND	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.

SAMPLE ID: 60027
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 08/19/92
DATE RECEIVED: 08/19/92
REPORT DATE: 09/01/92

QUANTEQ LAB NO: 9208182-04E
QUANTEQ JOB NO: 9208182
DATE EXTRACTED: 08/24/92
DATE ANALYZED: 08/26/92
INSTRUMENT: A

EPA METHOD 8080 POLYCHLORINATED BIPHENYLS (WATER MATRIX)

COMPOUND	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.

SAMPLE ID: 60037
 CLIENT PROJ. ID: 10-1682-03
 DATE SAMPLED: 08/19/92
 DATE RECEIVED: 08/19/92
 REPORT DATE: 09/01/92

QUANTEQ LAB NO: 9208182-05E
 QUANTEQ JOB NO: 9208182
 DATE EXTRACTED: 08/24/92
 DATE ANALYZED: 08/26/92
 INSTRUMENT: A

EPA METHOD 8080
 POLYCHLORINATED BIPHENYLS
 (WATER MATRIX)

COMPOUND	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.

SAMPLE ID: 60046
 CLIENT PROJ. ID: 10-1682-03
 DATE SAMPLED: 08/19/92
 DATE RECEIVED: 08/19/92
 REPORT DATE: 09/01/92

QUANTEQ LAB NO: 9208182-06E
 QUANTEQ JOB NO: 9208182
 DATE EXTRACTED: 08/24/92
 DATE ANALYZED: 08/26/92
 INSTRUMENT: A

EPA METHOD 8080
 POLYCHLORINATED BIPHENYLS
 (WATER MATRIX)

COMPOUND	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: 08/04/92
 DATE ANALYZED: 08/04/92
 CLIENT PROJ. ID: 10-1682-03

QUANTEQ JOB NO: 9208182
 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	7.75	ND	7.24	7.58	95.6	4.6

CURRENT QC LIMITS (Revised 06/22/92)

<u>Analyte</u>	<u>Percent Recovery</u>	<u>RPD</u>
Oil	(88-110)	5.8

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

QUALITY CONTROL DATA

DATE EXTRACTED: 08/26/92
 DATE ANALYZED: 08/27/92
 CLIENT PROJ. ID: 10-1682-03

QUANTEQ JOB NO: 9208182
 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	2.61	ND	1.60	1.40	57.5	13.3

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

INSTRUMENT: G

QUANTEQ JOB NO: 9208182

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 Id.	Bromochloro-methane	1-Bromo-2-chloro-propane	1-Chloro-2-fluoro-benzene
08/27/92	60037	05G	95.5	93.5	103.9
08/27/92	60046	06G	96.1	95.4	104.3
08/27/92	60049	07A	90.8	86.1	98.6

CURRENT QC LIMITS (Revised 06/22/92)

<u>ANALYTE</u>	<u>PERCENT RECOVERY</u>
Bromochloromethane	(65-138)
1-Bromo-2-chloropropane	(61-141)
1-Chloro-2-fluorobenzene	(74-124)

QUALITY CONTROL DATA

DATE ANALYZED: 08/26/92
 INSTRUMENT: G
 CLIENT PROJ. ID: 10-1682-03

QUANTEQ JOB NO: 9208182
 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	41.2	39.2	80.4	5.0
Trichloroethene	50.0	ND	52.0	52.1	104.1	0.2
Benzene	50.0	ND	46.9	45.9	92.8	2.2
Toluene	50.0	ND	47.7	46.1	93.8	3.4
Chlorobenzene	50.0	ND	41.4	40.0	81.4	3.4

CURRENT QC LIMITS (Revised 06/22/92)

Analyte	Percent Recovery	RPD
1,1-Dichloroethene	(52-116)	5.6
Trichloroethene	(68-123)	5.8
Benzene	(79-112)	5.0
Toluene	(77-113)	5.0
Chlorobenzene	(62-104)	5.5

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

QUALITY CONTROL DATA

DATE EXTRACTED: 08/24/92

QUANTEQ JOB NO: 9208182

CLIENT PROJ. ID: 10-1682-03

INSTRUMENT: A

SURROGATE STANDARD RECOVERY SUMMARY

METHOD 8080
(WATER MATRIX)

SAMPLE IDENTIFICATION			SURROGATE RECOVERY (PERCENT)
Date Analyzed	Client Id.	Lab Id.	2,4,5,6-Tetrachloro-meta-xylene
08/26/92	60005	01E	84
08/26/92	60013	02E	85
08/26/92	60025	03E	85
08/26/92	60027	04E	85
08/26/92	60037	05E	81
08/26/92	60046	06E	82

CURRENT QC LIMITS (Revised 06/22/92)

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

QUALITY CONTROL DATA

DATE EXTRACTED: 08/24/92
 DATE ANALYZED: 08/26/92
 CLIENT PROJ. ID: 10-1682-03

QUANTEQ JOB NO: 9208182
 SAMPLE SPIKED: D.I. WATER
 INSTRUMENT: A

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	4.29	4.26	99.4	0.7

CURRENT QC LIMITS (Revised 06/22/92)

Analyte	Percent Recovery	RPD
A1260	(53-133)	16

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

PROJ. NO. 10-168203		PROJECT NAME				NO. OF CON- TAINERS	ANALYSIS										REMARKS				
L.P. NO. (P.O. NO.)		SAMPLERS: (Signature/Number)					TPH	DIC501	HC	Oil & Grease	Total Hydrocarbons	PCB	8020								
DATE MM/DD/YY	SAMPLE I.D. TIME HH:MM:SS	SAMPLE I.D.																			
11/9/92	1005	60005	D1A-F	MW-4	6	X	X	X	X	X										Standard Turbidity	
	1100	60013	D2A-F	MW-7	6	X	X	X	X	X										Time	
	1204	60025	D3A-F	MW-10	6	X	X	X	X	X											
	1210	60027	D4A-F	MW-14	6	X	X	X	X	X											
	1400	60037	D5A-H	MW-8A	8	X	X	X	X	X				X							
	1415	60046	D6A-H	MW-8	8	X	X	X	X	X				X							
		60049	TRIG STANK 07AB2												X						
Samples Received Cool																					

Relinquished by: (Signature) <i>[Signature]</i>	Date/Time 11/9/92	Received by: (Signature) <i>[Signature]</i>	Remarks <i>Thank You</i>
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	
Relinquished by: (Signature)	Date/Time 11/9/92	Received for Laboratory by: (Signature) <i>[Signature]</i>	

Send Results To *Guy Jett*

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

Quanteq Laboratories

An Ecologies Company

FORMERLY MED-TOX

Certificate of Analysis

PAGE 1 OF 6

DOHS CERTIFICATION NO. F772

AIHA ACCREDITATION NO. 552

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

REPORT DATE: 08/31/92

DATE SAMPLED: 08/20/92

DATE RECEIVED: 08/20/92

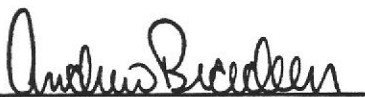
CLIENT PROJ. ID: 10-1682-03
C.O.C. NO: 1652

QUANTEQ JOB NO: 9208191

ANALYSIS OF: WATER SAMPLE

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)
60054	01A	ND	ND	---	---
60054 Tap	01C	---	---	ND	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:		08/26/92	08/26/92	08/27/92	08/27/92
Date Analyzed:		08/27/92	08/27/92	08/28/92	08/28/92

ND = Not Detected


Andrew Bradeen, Manager
Organic Laboratory

Results FAXed 08/28/92

KLEINFELDER, INC.

SAMPLE ID: 60054
CLIENT PROJ. ID: 10-1682-03
DATE SAMPLED: 08/20/92
DATE RECEIVED: 08/20/92
REPORT DATE: 08/31/92

QUANTEQ LAB NO: 9208191-01E
QUANTEQ JOB NO: 9208191
DATE EXTRACTED: 08/24/92
DATE ANALYZED: 08/26/92
INSTRUMENT: A

EPA METHOD 8080
POLYCHLORINATED BIPHENYLS
(WATER MATRIX)

COMPOUND	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: 08/04/92
 DATE ANALYZED: 08/04/92
 CLIENT PROJ. ID: 10-1682-03

QUANTEQ JOB NO: 9208191
 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	7.75	ND	7.24	7.58	95.6	4.6

CURRENT QC LIMITS (Revised 06/22/92)

Analyte	Percent Recovery	RPD
Oil	(88-110)	5.8

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

QUALITY CONTROL DATA

DATE EXTRACTED: 08/26/92
 DATE ANALYZED: 08/27/92
 CLIENT PROJ. ID: 10-1682-03

QUANTEQ JOB NO: 9208191
 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	2.61	ND	1.60	1.40	57.5	13.3

CURRENT QC LIMITS (Revised 08/15/91)

<u>Analyte</u>	<u>Percent Recovery</u>	<u>RPD</u>
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: 08/24/92

QUANTEQ JOB NO: 9208191

CLIENT PROJ. ID: 10-1682-03

INSTRUMENT: A

SURROGATE STANDARD RECOVERY SUMMARY

METHOD 8080
(WATER MATRIX)

SAMPLE IDENTIFICATION			SURROGATE RECOVERY (PERCENT)
Date Analyzed	Client Id.	Lab Id.	2,4,5,6-Tetrachloro-meta-xylene
08/26/92	60054	01E	86

CURRENT QC LIMITS (Revised 06/22/92)

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

QUALITY CONTROL DATA

DATE EXTRACTED: 08/24/92
 DATE ANALYZED: 08/26/92
 CLIENT PROJ. ID: 10-1682-03

QUANTEQ JOB NO: 9208191
 SAMPLE SPIKED: D.I. WATER
 INSTRUMENT: A

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	4.29	4.26	99.4	0.7

CURRENT QC LIMITS (Revised 06/22/92)

Analyte	Percent Recovery	RPD
A1260	(53-133)	16

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

