Bottom Committee Alexander

27.0

95 AUG 29 PH 2: 57

August 28, 1995

Alameda County Health Care Services 1131 Harbor Bay Parkway, 2nd Floor Alameda, CA 94502

Attention: Ms. Amy Leech

RE: Berkeley Land Company

23555 Saklan Road Hayward, California

Dear Ms. Leech:

Per the request of Mr. Rick Montesano of Paradiso Mechanical, Inc., enclosed please find our report dated August 24, 1995, for the above referenced site.

If you should have any questions, please feel free to call our office at (510) 602-5100.

Sincerely,

Kaprealian Engineering, Inc.

Judy A. Dewey

Executive Secretary

jad\82

Enclosure

cc: Rick Montesano, Paradiso Mechanical, Inc.

95 AUD 29 111 1157

KEI-P88-1110.QR8 August 24, 1995

Berkeley Land Company 4550 San Pablo Avenue Emeryville, CA 94608

Attention: Mr. Norm Alberts

RE: Quarterly Report

Berkeley Land Company 23555 Saklan Road Hayward, California

Dear Mr. Alberts:

This Kaprealian Engineering, Inc. (KEI) report presents the results of the most recent quarter of monitoring and sampling of the monitoring wells at the referenced property. All of the wells are currently monitored and sampled on a quarterly basis. This report covers the work performed from May through July of 1995.

## BACKGROUND

The subject property occupies the northeast corner of the intersection of Saklan Road and Middle Lane in Hayward, California, and is situated approximately two miles from the shores of the San Francisco Bay. The property is located in a mixed light industrial and residential area. A Location Map is attached to this report. A large part of the property is used by Quality Tow, an automobile towing operation, for the storage of used vehicles.

In June of 1988, one 6,000 gallon underground fuel storage tank was reportedly removed from the property. On February 27, 1990, and March 1, 1990, two exploratory borings were drilled at the property. During the drilling of the borings, a six-inch diameter water well was discovered adjacent to the former underground fuel storage tank pit. On May 30, 1990, four exploratory borings were drilled and five monitoring wells installed at the property. KEI's initial work at the property was conducted on February 25, 1993, when the five existing monitoring wells were monitored and sampled. On June 1 and 2, 1993, seven exploratory borings, in conjunction with a Hydropunch study, were drilled at the property. A total of 13 borings have been drilled and five monitoring wells have been installed at the property.

A site description, detailed background information including a summary of all of the soil and ground water subsurface investigation/remediation work conducted to date, hydrogeologic conditions,

and tables that summarize all of the soil and ground water sample analytical results are presented in KEI's report (KEI-P88-1110.R2) dated July 12, 1993.

### RECENT FIELD ACTIVITIES

The five monitoring wells (MW1 through MW5) and the water well (WW1) were monitored and sampled once during the quarter by MPDS Services, Inc. of Concord, California. During monitoring, the wells were checked for depth to water and the presence of free product. Prior to sampling, the wells were also checked for the presence of a sheen. No free product or sheen was noted in any of the wells during the recent quarter. The monitoring data collected during the recent quarter are summarized in Table 1.

Ground water samples were collected from all of the wells on July 26, 1995. Prior to sampling, the wells were each purged of between 20 and 180 gallons of water by the use of a surface pump. During purging operations, the field parameters pH, temperature, and electrical conductivity were recorded and are presented in Table 2. Once the field parameters were observed to stabilize and a minimum of approximately four casing volumes had been removed from each well, water samples were then collected by the use of a clean Teflon bailer. The samples were decanted into clean VOA vials and/or one-liter amber bottles, as appropriate, which were then sealed with Teflon-lined screw caps, labeled, and stored in a cooler, on ice, until delivery to a state-certified laboratory.

# HYDROLOGY

The measured depth to ground water at the property on July 26, 1995, ranged between 11.03 and 13.00 feet. The water levels in the wells have shown net decreases ranging from 1.17 to 1.33 feet since April 21, 1995. Based on the water level data gathered on July 26, 1995, the ground water flow direction appeared to be predominantly to the west-southwest, as shown on the attached Potentiometric Surface Map, Figure 1. The ground water flow direction has been predominantly to the southwest since the inception of the monitoring program in May of 1993 (nine consecutive quarters). The average hydraulic gradient at the property on July 26, 1995, was approximately 0.003.

#### ANALYTICAL RESULTS

The ground water samples collected during the quarter were analyzed at Sequoia Analytical Laboratory and were accompanied by properly executed Chain of Custody documentation. The samples were analyzed for total petroleum hydrocarbons (TPH) as gasoline by EPA method

5030/modified 8015, TPH as diesel by EPA method 3510/modified 8015, and benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA method 8020.

The analytical results of all of the ground water samples collected from the wells to date are summarized in Table 3. The concentrations of TPH as gasoline, benzene, and TPH as diesel detected in the ground water samples collected on July 26, 1995, are shown on the attached Figure 2. Copies of the laboratory analytical results and the Chain of Custody documentation are attached to this report.

# DISCUSSION

As previously discussed, the ground water flow direction has consistently been toward the southwest for the previous nine quarters. Due to the fact that free product has not been detected at the property since the October 1993 sampling event (over one hydrologic cycle), it appears that the interim remedial efforts have been successful in removing free product from the water well (WW1). Lastly, as seen in Table 3, all of the BTEX constituents have consistently been non-detectable in all of the ground water samples collected from the wells since the October 1993 sampling event, except for relatively low concentrations of toluene and xylenes detected in WW1 on the April 21, 1995, sampling event.

On June 27, 1995, a meeting was held between representatives of the Alameda County Health Care Services (ACHCS) Agency, Berkeley Land Company, and KEI, in order to determine the most appropriate course of action for the subject property. The subsurface investigation and remediation activities conducted at the property to date were reviewed. As a result of the meeting and follow-up telephone conversations, it was agreed that the extent of the hydrocarbon-impacted soil and ground water appears to be limited to the area of the former underground fuel storage tank. It was further agreed that KEI will collect additional soil samples adjacent to the tank pit in order to verify the analytical results of the soil samples collected during the tank removal in 1988. Lastly, it was agreed that if the concentrations of dissolved hydrocarbons in future ground water samples are consistent with previous results, site closure will be pursued.

In the interim, KEI recommends the continuation of the current ground water monitoring and sampling program. The wells are monitored and sampled on a quarterly basis. Ground water samples are analyzed for TPH as gasoline, TPH as diesel, and BTEX.

## DISTRIBUTION

A copy of this report should be sent to Ms. Amy Leech of the ACHCS, and to the Regional Water Quality Control Board, San Francisco Bay Region.

# LIMITATIONS

Environmental changes, either naturally-occurring or artificially-induced, may cause changes in ground water levels and flow paths, thereby changing the extent and concentration of any contaminants.

Our studies assume that the field and laboratory data are reasonably representative of the site as a whole, and assume that subsurface conditions are reasonably conducive to interpolation and extrapolation.

The results of this study are based on the data obtained from the field and laboratory analyses obtained from a state-certified laboratory. We have analyzed these data using what we believe to be currently applicable engineering techniques and principles in the Northern California region. We make no warranty, either expressed or implied, regarding the above, including laboratory analyses, except that our services have been performed in accordance with generally accepted professional principles and practices existing for such work.

If you have any questions regarding this report, please do not hesitate to call at (510) 602-5100.

Sincerely,

Kaprealian Engineering, Inc.

Haig (Gary) Tejirian Senior Staff Geologist

Joel G. Greger, C.E.G. Senior Engineering Geologist

License No. EG 1633 Exp. Date 8/31/96

Robert H. Kezerian Project Manager

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Attachments: Tables 1, 2 & 3

Location Map

Potentiometric Surface Map - Figure 1

Concentrations of Petroleum Hydrocarbons - Figure 2

JOEL G. GREGER No. EG 1633 CERTIFIED

ENGINEERING

GEOLOGIST

Laboratory Analyses

Chain of Custody documentation

TABLE 1
SUMMARY OF MONITORING DATA

Well #	Ground Water Elevation (feet)	Depth to Water (feet)	Thickness (feet)		Water Purged (gallons)	Product Purged (ounces)
	(Monit	cored and	Sampled on	July 26,	1995)	
MW1	21.11	12.65	0	ИО	32	0
MW2	21.53	12.80	0	No	37	0
MW3	21.08	12.55	0	ИО	20	0
MW4	20.97	11.03	0	ИО	40	0
MW5	21.34	11.30	0	No	24	0
WW1	N/A	13.00	0	No	180	0
	(Moni	tored and	Sampled on	April 21	, 1995)	
MW1	22.28	11.48	0	No	35	0
MW2	22.86	11.47	0	No	40	0
MW3	22.29	11.34	0	No	21	0
MW4	22.16	9.84	0	No	43	0
MW5	22.62	10.02	0	No	27	0
WW1	N/A	11.81	0	ИО	194	<1*
	(Monit	ored and s	Sampled on J	anuary 1	8, 1995)	
MW1	20.80	12.96	0	ИО	31	0
MW2	21.29	13.04	0	No	36	0
MW3	20.82	12.81	0	ИО	19	0
MW4	20.74	11.26	0	No	40	0
MW5	21.14	11.50	0	ИО	23	0
WW1	N/A	13.27	0	Yes	165	<1*
	(Manik	owed and (	Sampled on C	otober 1	8 1994)	
	(MOUT C	ored and a	sampled on c	occoper 1	.0, 1994)	
MW1	18.65	15.11	0	No	26	0
MW2	19.01	15.32	0	Ио	30.5	0
MW3	18.66	14.97	0	No	13.5	0
MW4	18.59	13.41	0	ИО	34.5	0
MW5	18.87	13.77	0	No	17.5	0
WW1	N/A	15.47	0	Yes	110	0

# TABLE 1 (Continued) SUMMARY OF MONITORING DATA

	Top of Casing Elevation
	in feet above
<u>Well #</u>	<u> Mean Sea Level (MSL)**</u>
	22.74
MW1	33.76
MW2	34.33
MW3	33.63
MW4	32.00
MW5	32.64
WW1	NA

N/A = Not applicable.

NA = Not available.

- -- Determination was not performed.
- \* Product collected in skimmer only.
- \*\* Based on Alameda County Benchmark located at Eden Avenue and West Street (elevation = 33.16 MSL).

TABLE 2

RECORD OF THE TEMPERATURE, CONDUCTIVITY, AND PH VALUES
IN THE MONITORING WELLS DURING PURGING AND PRIOR TO SAMPLING

(Measured on July 26, 1995)

Well #	Gallons per Casing Volume	<u>Time</u>	Gallons <u>Purged</u>	Casing Volumes <u>Purged</u>	Temper- ature (°F)	Conductivity ([µmhos/cm] x100)	<u>Нq</u>
MW1	7.88	12:10	O	0	67.5	8.85	7.86
1114.7	,,,,,,	111111	8	1.02	66.0	10.01	7.82
			16	2.03	66.7	8.26	7.26
			24	3.05	66.3	7.74	7.18
		12:25	32	4.06	66.0	7.43	7.20
MW2	9.04	10:20	0	0	62.4	8.70	7.07
			9	1.00	67.6	8.82	7.48
			18	1.99	64.4	10.75	7.44
			27	2.99	64.1	10.79	7.49
		10:35	37	4.09	64.5	10.06	7.51
MW3	4.75	14:00	0	0	80.7	13.00	7.95
			5	1.05	76.4	12.08	7.81
			10	2.11	71.9	11.52	7.35
			15	3.16	69.7	11.32	7.60
		14:10	20	4.21	69.5	11.18	7.55
MW4	9.93	13:15	0	0	70.0	11.05	7.90
			10	1.01	68.6	10.15	7.81
			20	2.01	68.6	10.10	7.73
			30	3.02	68.0	10.58	7.51
		13:30	40	4.03	67.6	10.43	7.44
MW5	5.84	11:10	0	0	66.3	11.90	7.67
			6	1.03	64.9	12.29	7.41
			12	2.05	64.7	12.19	7.44
			18	3.08	64.0	12.08	7.47
		11:20	24	4.11	64.2	11.09	7.39
WW1	42.92	15:10	0	0	78.3	11.87	7.54
			45	1.05	72.8	11.56	7.45
			90	2.10	73.4	11.79	7.74
			135	3.15	71.3	11.20	7.80
		16:10	180	4.19	70.6	11.09	7.67

TABLE 3
SUMMARY OF LABORATORY ANALYSES
WATER

<u>Date</u>	Sample Well #	TPH as <u>Diesel</u>	TPH as <u>Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	Ethyl- <u>benzene</u>	<u>Xylenes</u>
7/26/95	MW1 MW2 MW3 MW4 MW5 WW1	ND ND ND ND ND	ND ND ND ND ND 3,500*	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND
4/21/95	MW1 MW2 MW3 MW4 MW5 WW1	ND ND 75 ND ND 3,100	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND 2.9
1/18/95	MW1 MW2 MW3 MW4 MW5 WW1	ND ND 82 ND ND 30,000	ND ND ND ND ND 410*	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND
10/18/94	MW1 MW2 MW3 MW4 MW5 WW1	ND ND 120 ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND
7/13/94+- & 8/15/94	H MW1 MW2 MW3 MW4 MW5 WW1	66 + + 67 + + + + + + + + + + + + + + +	ND ND ND ND ND	ND ND ND ND ND	ир ИМ ИО ИО ИО	ND ND ND ND	ND ND ND ND ND
1/20/94	MW1 MW2 MW3 MW4 MW5 WW1	73 ND 130 ND 340 +	ND ND ND ND ND 34,000*	ND ND ND ND ND	ND ND ND ND ND	DU ND ND ND ND	ND ND ND ND ND

# TABLE 3 (Continued)

# SUMMARY OF LABORATORY ANALYSES WATER

<u>Date</u>	Sample Well #	TPH as		<u>Benzer</u>	ne <u>Toluene</u>	Ethyl- <u>benzene</u>	Xylenes
10/28/93	MW1 MW2 MW3 MW4 MW5 WW1	120 + ND 170 ND ND ND	200* ND ND ND ND ND ND SAMPLED DUE	1.8 ND ND ND TO THE	ND ND ND ND ND	ND ND ND ND ND F FREE PRO	ND ND 1.4 ND ND
7/12/93- & 8/20/93	+ MW1 MW2 MW3 MW4 MW5 WW1	200 + ND ND ND ND ND	150 ND ND ND ND SAMPLED DUE	1.1 ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	0.51 ND ND ND ND
2/25/93	MW1 MW2 MW3 MW4 MW5 WW1	5,900 ND 200 ND ND	♦ 4,600**  ND  ND  ND  ND  ND  SAMPLED DUE	45 ND ND ND ND	18 ND ND ND PRESENCE O	ND ND ND ND ND	750 ND ND ND ND DUCT

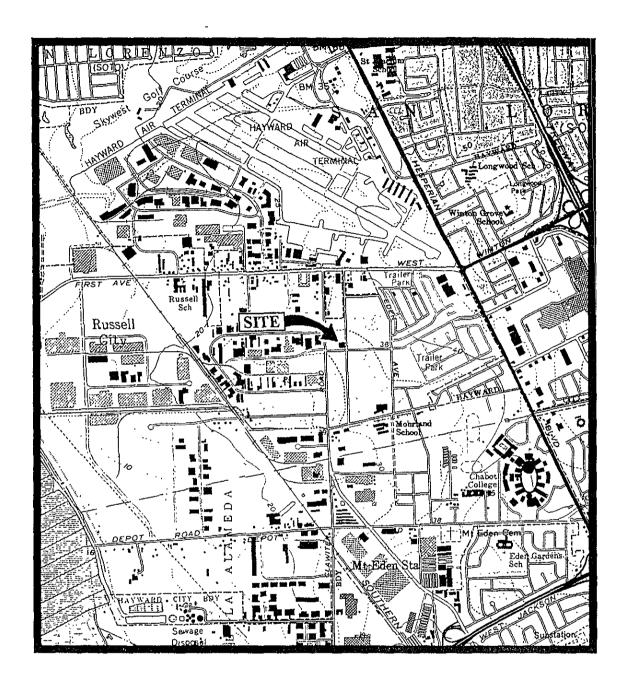
- Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be a diesel and non-diesel mixture.
- ♦♦ Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear to be diesel.
- \* Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear to be gasoline.
- \*\* Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.
- + Samples collected on July 12, 1993, were analyzed for Total Petroleum Hydrocarbons (TPH) as gasoline and benzene, toluene, ethylbenzene, and xylenes (BTEX). Samples collected on August 20, 1993, were analyzed for TPH as diesel.
- ++ Samples collected on July 13, 1994, were analyzed for TPH as gasoline and BTEX, and for TPH as diesel for well WW1. Samples collected on August 15, 1994, were analyzed for TPH as diesel for wells MW1 through MW5.

# TABLE 3 (Continued)

# SUMMARY OF LABORATORY ANALYSES WATER

ND = Non-detectable.

Results are in micrograms per liter ( $\mu g/L$ ), unless otherwise indicated.



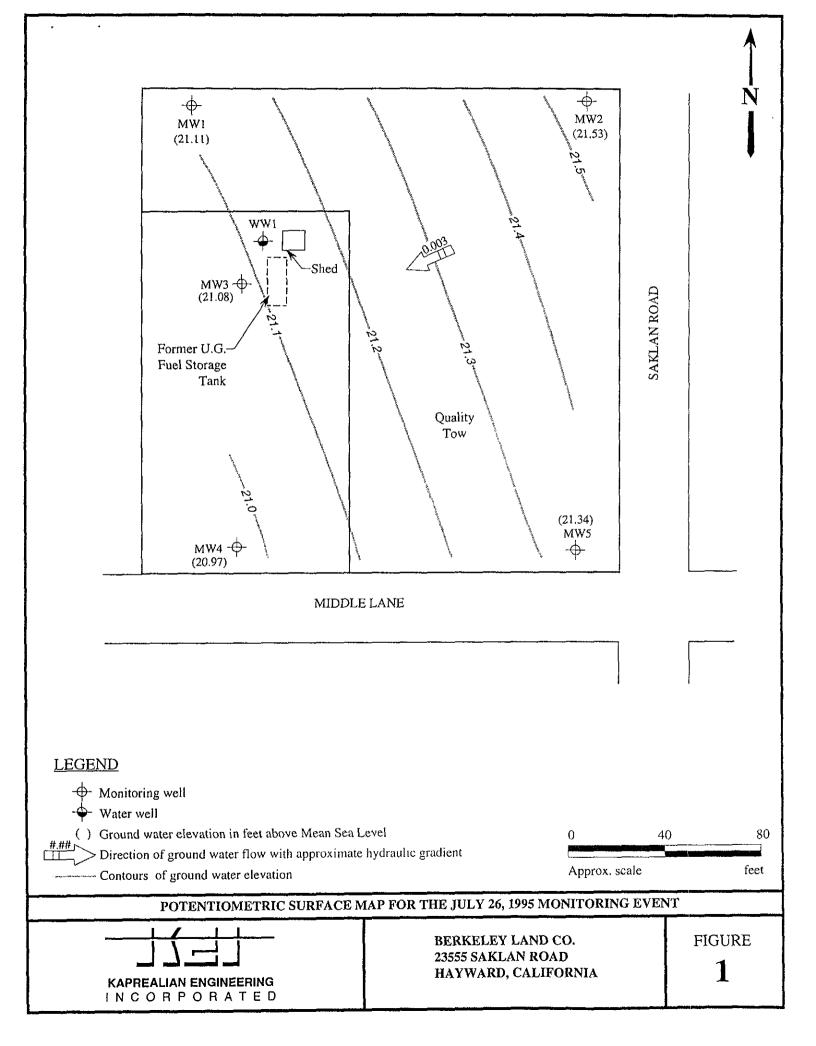
Base modified from 7.5 minute U.S.G.S. Hayward & San Leandro Quadrangles (both photorevised 1980)

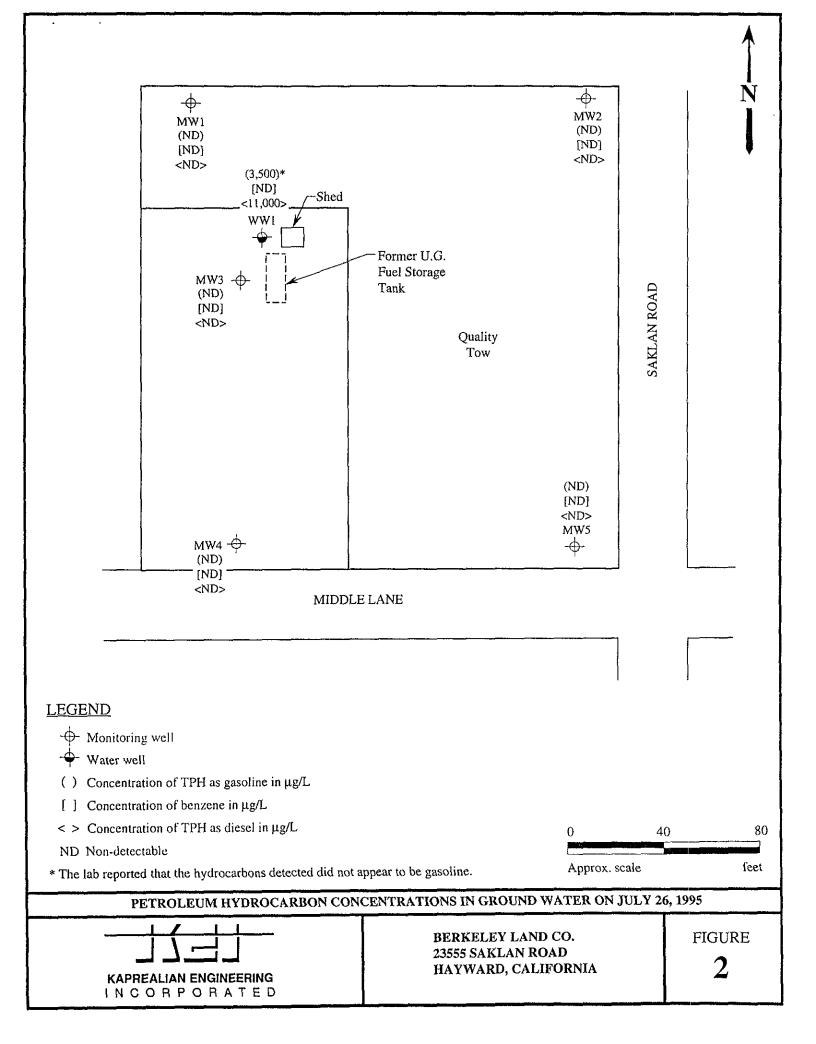
0 2000 4000
Approx. scale feet



BERKELEY LAND CO. 23555 SAKLAN ROAD HAYWARD, CALIFORNIA

LOCATION MAP







680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 Sacramento, CA 95834

Redwood City, CA 94063 Walnut Creek, CA 94598

(415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

MPDS Services 2401 Stanwell Dr., Ste. 300 Concord, CA 94520 Attention: Sarkis Karkarian

Matrix Descript:

Client Project ID: Berkeley Land Co.,23555 Saklan Rd.,Hayward Water

Sampled: Received:

Jul 26, 1995. Jul 26, 1995

Analysis Method:

EPA 5030/8015 Mod./8020

Reported:

Aug 8, 1995

First Sample #: 507-1834 geerittiingeerite var tii tiiggeerittii gelektik gaar tiiggar ee teingapii taas ettengeerite geerittii geeritt

# TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Sample Number	Sample Description	Purgeable Hydrocarbons μg/L	<b>Benzene</b> μg/L	<b>Toluene</b> μg/L	Ethyl Benzene µg/L	Total Xylenes μg/L
507-1834	MW-1	ND	ND	ND	ND	ND
507-1835	MW-2	ND	ND	ND	ND	ND
507-1836	MW-3	ND	ND	ND	ND	ND
507-1837	MW-4	ND	ND	ND	ND	ND
507-1838	MW-5	ND	ND	ND	ND	ND
507-1839	WW-1	3,500*	ND	ND	ND	ND

<sup>\*</sup>This sample does not appear to contain gasoline.

Detection Limits:	50	0.50	0.50	0.50	0.50	
Detection Ellines.	00	0.50	0.00	0.50	0.50	

Total Purgeable Petroleum Hydrocarbons are quantitated against a fresh gasoline standard. Analytes reported as ND were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL, #1271** 

Signature on File

Alan B. Kemp **Project Manager** 





680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 Sacramento, CA 95834

Redwood City, CA 94063 Walnut Creek, CA 94598 (415) 364-9600 (510) 988-9600 (916) 921-9600

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FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

CONTRACTOR OF BRAIDS MPDS Services 2401 Stanwell Dr., Ste. 300 Concord, CA 94520 Attention: Sarkis Karkarian

Matrix Descript: Analysis Method:

First Sample #:

government of the second

Client Project ID: Berkeley Land Co.,23555 Saklan Rd.,Hayward Sampled: Jul 26, 1995

Water EPA 5030/8015 Mod./8020 Received: Reported: Jul 26, 1995 ... Aug 8, 1995

Charles and a second

507-1834

# TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Sample Number	Sample Description	Chromatogram Pattern	DL Mult. Factor	Date Analyzed	Instrument ID	Surrogate Recovery, % QC Limits: 70-130
507-1834	MW-1		1.0	8/4/95	HP-2	96
507-1835	MW-2		1.0	8/4/95	HP-2	91
507-1836	MW-3		1.0	8/6/95	HP-2	106
507-1837	MW-4		1.0	8/6/95	HP-2	96
507-1838	MW-5		1.0	8/6/95	HP-2	99
507-1839	WW-1	Unidentified Hydrocarbons > C9*	40	8/6/95	HP-2	106

**SEQUOIA ANALYTICAL, #1271** 

Signature on File

Alan B. Kemp **Project Manager**  Please Note:

\*Unidentified hydrocarbons > C9 refers to unidentified peaks in the total extractable petroleum hydrocarbon range.





680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 Sacramento, CA 95834

Redwood City, CA 94063 Walnut Creek, CA 94598 (415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

MPDS Services

2401 Stanwell Dr., Ste. 300 Concord, CA 94520

Attention: Sarkis Karkarian

Sample Matrix:

Client Project ID: Berkeley Land Co.,23555 Saklan Rd.,Hayward

Water

Balana i mere i wakanase e witana muli menanda katese manakana mengakan menakarang ekanakan ke-

Analysis Method: EPA 3510/8015 Mod. First Sample #: 507-1834

Sampled: Received:

Jul 26, 1995 Jul 26, 1995

Reported: Aug 8, 1995

# TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Anaiyte	Reporting Limit μg/L	Sample I.D. 507-1834 MW-1	Sample I.D. 507-1835 MW-2	Sample I.D. 507-1836 MW-3	Sample I.D. 507-1837 MW-4	<b>Sample</b> <i>I.D.</i> 507-1838 MW-5	<b>Sample I.D.</b> 507-1839 WW-1
Extractable Hydrocarbons	50	N.D.	N.D.	N.D.	N.D.	N.D.	11,000
Chromatogram Pa	ttern:						Diesel

**Quality Control Data** 

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	10
Date Extracted:	7/28/95	7/28/95	7/28/95	7/28/95	7/28/95	7/28/95
Date Analyzed:	8/1/95	8/1/95	8/1/95	8/1/95	8/1/95	8/1/95
Instrument Identification:	HP-3A	HP-3A	HP-3A	HP-3A	НР-ЗА	НР-ЗА

Extractable Hydrocarbons are quantitated against a fresh diesel standard. Analytes reported as N.D. were not detected above the stated reporting limit.

**SEQUOIA ANALYTICAL, #1271** 

Signature on File

Alan B. Kemp Project Manager





680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 (415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

MPDS Services

2401 Stanwell Dr., Ste. 300 Concord, CA 94520 Attention: Sarkis Karkarian Client Project ID: Berkeley Land Co.,23555 Saklan Rd.,Hayward

Matrix: Liquid

QC Sample Group: 5071834-39

Reported:

Aug 8, 1995

# **QUALITY CONTROL DATA REPORT**

Barran na aming yelekang aliga lempa lempa sembangkalan nggala ankanggalan nak aliga kalanga kengalakan nggalakan ng

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel	,
Method: Analyst:	EPA 8020 K. Nill	EPA 8020 K. Niil	EPA 8020 K. Nill	EPA 8020 K. Nill	EPA 8015 J. Dinsay	
MS/MSD Batch#:	5080056	5080056	5080056	5080056	BLK072895	
Date Prepared: Date Analyzed: Instrument I.D.#: Conc. Spiked:	8/4/95 8/4/95 HP-2 20 µg/L	8/4/95 8/4/95 HP-2 20 µg/L	8/4/95 8/4/95 HP-2 20 µg/L	8/4/95 8/4/95 HP-2 60 µg/L	7/28/95 8/1/95 GCHP-3B 300 µg/L	
Matrix Spike % Recovery:	110	10	115	115	97	
Matrix Spike Duplicate % Recovery:	110	110	115	115	103	
Relative % Difference:	0.0	0.0	0.0	0.0	6.7	

LCS Batch#:	1LCS080495	1LCS080495	1LCS080495	1LCS080495	BLK072895	
Date Prepared:	8/4/95	8/4/95	8/4/95	8/4/95	7/28/95	
Date Analyzed:	8/4/95	8/4/95	8/4/95	8/4/95	8/1/95	
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2	GCHP-3B	
LCS %			,			
Recovery:	86	101	112	112	97	
% Recovery Control Limits:	71-133	72-128	72-130	71-120	38-122	 

#### The

**SEQUOIA ANALYTICAL, #1271** 

Signature on File

Alan B. Kemp Project Manager Please Note:

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.





680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 (415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

MPDS Services

2401 Stanwell Dr., Ste. 300 Concord, CA 94520 Attention: Sarkis Karkarian

Service of the Servic

Client Project ID: Berkeley Land Co., 23555 Saklan Rd., Hayward

Matrix: Liquid

QC Sample Group: 5071834-39

Reported: Aug 8, 1995

# **QUALITY CONTROL DATA REPORT**

ANALYTE	Benzene	Toluene	Ethyl	Xylenes
			Benzene	
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	J. Fontecha	J. Fontecha	J. Fontecha	J. Fontecha
MS/MSD				
Batch#:	5071838	5071838	5071838	5071838
Date Prepared:	8/6/95	8/6/95	8/6/95	8/6/95
Date Analyzed:	8/6/95	8/6/95	8/6/95	8/6/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	20 μg/L	20 μg/L	20 μg/L	60 μg/L
Matrix Spike				
% Recovery:	115	115	120	117
Matrix Spike				
Duplicate %			400	400
Recovery:	115	115	120	120
Relative %				
Difference:	0.0	0.0	0.0	2.8

LCS Batch#:	1LCS080695	1LCS080695	1LCS080695	1LCS080695	
Date Prepared:	8/6/95	8/6/95	8/6/95	8/6/95	
Date Analyzed:	8/6/95	8/6/95	8/6/95	8/6/95	
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2	
LCS %					
Recovery:	105	106	112	109	
% Recovery	<u> </u>		<del></del>		 
Control Limits:	71-133	72-128	72-130	71-120	

#### Th.

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp Project Manager Please Note:

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.



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# CHAIN OF CUSTODY

Tel: (510) 602-5100, Fax: (510) 689-1918 SAKLAN UNDON ANALYSES REQUESTED SAMPLER TURN AROUND TIME: \$7**2.00** RAY MARANGOSIAN Berketeu TPH-DIRSEL ADDRESS: WITNESSING AGENCY TPH-C BTEX TOG REMARKS SAMPLING LOCATION WATER GRAB COMP NO, OF CONT. DATE TIME SAMPLE ID NO. 5071834 AC 26.55112:35 X  $m\omega$ × X 5074835 MW2 V V U 5071836 4:20 ょ 5071837 4 5071838 5071839 6.20 × THE FOLLOWING MUST BE COMPLETED BY THE LABORATORY ACCEPTING SAMPLES FOR ANALYSES: RECEIVED BY: RELINQUISHED BY: 1930 1. HAVE ALL SAMPLES RECEIVED FOR ANALYSIS BEEN STORED ON ICE? 2. WILL SAMPLES REMAIN REFRIGERATED UNTIL ANALYZED? (SIGNATURE) SIGNATURE DID ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACE? (SIGNATURE) (SIGNATURE) 4. WERE SAMPLES IN APPROPRIATE CONTAINERS AND PROPERLY PACKAGED? (SIGNATURE) (SIGNATURE) SIGNATURE: TITLE: (SIGNATURE) (SIGNATURE)

Note: All water containers to be sampled for TPHG/BTEX, 8010 & 8240 are preserved with HCL. All water containers to be sampled for Lead or Metals are preserved with HN03. All other containers are unpreserved.