PARADISO CONSTRUCTION
GENERAL & PETROLEUM CONTRACTORS

2600 WILLIAMS ST. P.O. BOX 1836
SAN LEANDRO, CA 94577
(510)614-8390 FAX (510)614-8396
CONTRACTORS LICENSE #259820

LETTER OF TRANSMITTAL

DATE 7/27/93	JOB NO. 2263
ATTENTION JULIET SHIN	
RE: BERKELEY FARMS	
23555 SAKLAN RD.	
HAYWARD	

93 JUL 28 PM 2:23

TO ALAMEDA COUNTY ENVIRONMENTAL HEALTH

80 SWAN WAY, ROOM 200

OAKLAND, CA 94621

WE ARE SENDING YOU ☑ Attached ☐ Under Separate Cover via _____ the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

☐ Copy of Letter ☐ Change Order ☐ _____

COPIES	DATE	NO.	DESCRIPTION
1	7/20/93		LETTER FROM PARADISO CONSTRUCTION TO BERKELEY FARMS, ADDRESSED TO NORMAN ALBERTS

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval

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☐ As requested ☐ Returned for corrections ☐ Return _____ corrected prints

☐ For review and comment ☐ _____

☐ FOR BIDS DUE _____, 19___ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS _____

COPY TO REGIONAL WATER QUALITY CONTROL BOARD

SIGNED: Cheri Gill

Cheri Gill

PARADISO CONSTRUCTION CO.

GENERAL & PETROLEUM CONTRACTORS

LICENSE NO. 259820
P.O. BOX 1836
2600 WILLIAMS ST.
SAN LEANDRO, CA 94577
(510) 614-8390

July 20, 1993

Berkeley Farms
4550 San Pablo Ave.
Emeryville, CA 94608

Attention: Norman Alberts

Subject: Preliminary Subsurface Investigation
Berkeley Farms, 23555 Saklan Road, Hayward
Paradiso Job 93-2263

Dear Mr. Alberts:

The enclosed report presents the results of the Kaprealian Engineering, Inc. (KEI), (KEI-P88-1110.R2), soil and ground water investigation for the referenced site, in accordance with Paradiso Construction Company's proposal, dated March 31, 1993. Based on the analytical results of the soil samples collected from the seven borings (HP1 through HP7), the vertical and lateral extent of soil contamination appears to be defined at the subject site. Recommendations for the project are not included in the report, but are as follows:

Based on the analytical results of the soil and ground water samples collected and evaluated to date, Paradiso, along with KEI, recommends the continuation of the current ground water monitoring and sampling program. The five wells are currently monitored monthly and samples on a quarterly basis. Ground water samples are analyzed for TPH as gasoline, TPH as diesel, and benzene, toluene, ethylbenzene, and xylenes.

In a meeting between representatives of Berkeley Farms, Paradiso Construction, and KEI on July 8, 1993, Berkeley Farms stated that a sample of the free product was collected from the water well in August of 1992 and submitted (by Berkeley Farms) to Chevron's lab in Richmond, California. Berkeley Farms stated that based on Chevron's analysis, the product was determined to be diesel fuel #2. The report also stated that the diesel was not "weathered" and that the diesel was fresh, less then one month old. Paradiso stated that following the collection of the sample, the well cover was secured with a lock to prevent unauthorized access. KEI recommends that an additional sample of the free product be collected and submitted to the same Chevron laboratory for analysis

of content and condition (age). This sample will be used to determine the status of product in the water well. KEI assumes that the free product sample will be collected by KEI and submitted to Chevron by Berkeley Farms.

In order to obtain the necessary information regarding the construction of the water well on-site, KEI recommends conducting a down-hole camera survey of the well. KEI anticipates that the survey will provide some of the necessary information to aid in determining the source of free product (diesel) in the well.

KEI is also recommending that a 1/2 mile well survey and a historical air photo analysis of the site and vicinity be conducted in order to identify any potential off-site sources which may be contributing to the contamination at the Berkeley Farms site. KEI will review the files of the Regional Water Quality Control Board, San Francisco Bay Region, for any sites identified in the well survey and/or the air photo analysis.

Approximately two cubic yards of drill cutting soil are currently stockpiled on-site. This soil was generated during KEI's recent Hydropunch study. Paradio recommends that this soil be properly sampled and profiled for disposal at an approved Class III landfill.

KEI recommends that purging of the free product (diesel) from the water well be done on a weekly basis for a period of one month. Paradiso and KEI may make further recommendations based upon the results of the proposed weekly purging.

All invoicing will be based upon actual time and material expended for the project. Based on this, we estimate that our charges for the aforementioned additional work would not exceed $10,200.00. This price estimate is in addition to Paradiso's previous estimate of $36,000.00 in our proposal of March 31, 1993. This price does not include special measures such as disposal of drilled soil and any additional sampling required by regulatory agencies.

If you have any questions regarding this proposal, please do not hesitate to call me.

Sincerely,

Paul Paradiso

PP:cg
enclosures

APPROVED BY:
Berkeley Farms

_____
Signature

_____
Date

KAPREALIAN ENGINEERING
INCORPORATED

KEI-P88-1110.R2
July 12, 1993

Paradiso Construction
2600 Williams Street
P.O. Box 1836
San Leandro, CA 94577

Attention: Mr. Paul Paradiso

RE: Preliminary Subsurface Investigation at
Berkeley Farms
23555 Saklan Road
Hayward, California

Dear Mr. Paradiso:

This report presents the results of Kaprealian Engineering Inc's. (KEI) subsurface investigation for the referenced site, in accordance with KEI proposal (KEI-P88-1110.P1) dated March 19, 1993. The purpose of the investigation was to determine if the subsurface soil and ground water (if encountered) has been impacted at the site. The scope of the work performed by KEI consisted of the following:

Coordination with regulatory agencies

Geologic logging of seven exploratory borings

Soil sampling

Ground water sampling

Laboratory analyses

Data analyses, interpretation, and report preparation

SITE DESCRIPTION AND BACKGROUND

The subject site 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 site is located in a mixed light industrial and residential area. A Location Map is attached to this report. A large part of the site is used by Quality Tow, an automobile towing operation, for the storage of used vehicles.

In June 1988, an underground fuel storage tank of unknown capacity was removed from the site. The analytical results of two soil samples collected from the tank pit indicated a "hydrocarbon level"

2401 Stanwell Drive, Suite 400
Concord, California 94520
Tel: 510.602.5100 Fax: 510.687.0602

of 2,076 ppm and 24,144 ppm. The underground tank was reportedly used for the storage of gasoline only.

On February 27 and March 1, 1990, Certified Environmental Consulting, Inc. (CEC) installed two exploratory borings (designated as A and B on the attached Figure 1) adjacent to the former underground storage tank pit. During this Phase I subsurface work, a six-inch diameter water well was discovered adjacent to the former underground storage tank pit, as shown on Figure 1. The analytical results of the soil samples collected from the exploratory borings indicated total petroleum hydrocarbons (TPH) as diesel concentrations ranging from 40 ppm to 550 ppm. TPH as gasoline and benzene were non-detectable. A 2.2 feet column of free product was observed in the existing water well. The free product was analyzed and was determined to be composed entirely of diesel No. 2. During May 30, 1990, four exploratory borings and five four-inch diameter monitoring wells (designated as B1 through B4, and MW1 through MW5, respectively, on the attached Figure 1) were also installed at the site.

The analytical results of the soil samples collected indicated TPH as diesel concentrations ranging from non-detectable to 250 ppm. TPH as gasoline and benzene were non-detectable, except in one soil sample, where benzene was detected at a concentration of 0.004 ppm.

The analytical results of the water samples collected from the five monitoring wells indicated non-detectable concentrations of TPH as gasoline, except for the water sample collected from well MW3, where TPH as gasoline was detected at a concentration of 100 ppb. TPH as diesel and benzene were non-detectable in all of the water samples analyzed.

KEI's work at the site began on February 25, 1993, when the five existing monitoring wells (MW1 through MW5) were monitored and sampled. The analytical results of the ground water samples collected from monitoring wells MW1 and MW3 indicated TPH as diesel concentrations of 5,900 ppb and 200 ppb, respectively. In addition, the analytical results of the water samples collected from well MW1 indicated TPH as gasoline and benzene concentrations of 4,600 ppb and 45 ppb, respectively. The analytical results of the ground water samples are summarized in Table 3.

In KEI's work plan/proposal (KEI-P88-1110.P1) dated March 19, 1993, KEI recommended the installation of seven exploratory borings in conjunction with a Hydropunch study in order to delineate the vertical and lateral extent of soil and ground water contamination. A ground water monitoring and sampling program of the five existing wells was also proposed. Lastly, a reconnaissance of the site

vicinity was also recommended to determine if off-site sources of contamination are present in the vicinity of the subject site.

RECENT FIELD ACTIVITIES - HYDROPUNCH STUDY

On June 1 and 2, 1993, seven exploratory borings (designated as HP1 through HP7 on the attached Figure 1) were drilled at the site. The subsurface materials penetrated and the depths at which soil samples were collected are shown in the attached Boring Logs.

The seven borings were each drilled to total depths ranging from 12 to 13.5 feet below grade. The borings were terminated to within a few feet of the saturated zone of the first encountered ground water. Ground water samples were then obtained by inserting a Hydropunch tool approximately 4 feet into the undisturbed and saturated soil layers beneath the borehole.

Soil samples were collected for laboratory analysis and for lithologic logging purposes at a maximum spacing of 5 foot intervals, at significant changes in lithology, and at obvious areas of contamination, beginning at a depth of approximately 5 feet below grade and continuing to the total depth drilled. The undisturbed soil samples were collected by driving a California-modified split-spoon sampler (lined with brass liners) ahead of the drilling augers. The two-inch diameter brass liners holding the samples were sealed with aluminum foil, plastic caps and tape, labeled, and stored in a cooler, on ice, until delivery to a state-certified laboratory. The water 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. After the water samples were collected, bentonite was used to seal the borings and Hydropunch hole within the saturated zone. A neat cement slurry was then placed from the bentonite plug to the surface in one continuous pour. A hardening agent was used for the upper 1 to 2 feet of the boring to reduce curing time.

ANALYTICAL RESULTS

All samples were analyzed at Sequoia Analytical Laboratory in Concord, California, and were accompanied by properly executed Chain of Custody documentation. Water and selected soil samples collected from all seven exploratory borings were analyzed for TPH as gasoline by EPA method 5030/modified 8015, benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA method 8020, and for TPH as diesel by EPA method 3550/modified 8015.

The results of the soil analyses are summarized in Table 1, and the results of the water analyses are summarized in Table 2. Copies of the laboratory analyses and the Chain of Custody documentation are attached to this report.

HYDROLOGY AND GEOLOGY

Based on review of regional geologic maps (U.S. Geological Survey Professional Paper 943 "Flatland Deposits - Their Geology and Engineering Properties and their Importance to Comprehensive Planning" by E.J. Helley and K.R. Lajoie, 1979), the subject site is underlain by Holocene-age coarse-grained alluvium (Qhac). The coarse-grained alluvium reportedly typically consists of unconsolidated, moderately sorted sand and silt materials with local lenses of gravel.

Based on the results of our subsurface studies (borings HP1 through HP7), the site is underlain by fine-grained alluvium, which consists predominantly of silty and clayey or sandy silt to the maximum depth explored (13.5 feet below grade). A silty clay layer was encountered in the uppermost portion of all of the seven borings, except HP5, extending down to a maximum depth of 5.5 feet below grade. In borings HP1 and HP5, minor amounts of gravel are present as lenses within well graded sand.

DISTRIBUTION

A copy of this report should be sent to Alameda County Health Care Services Agency, and to the Regional Water Quality Control Board, San Francisco Bay Region.

LIMITATIONS

Soil deposits and rock formations may vary in thickness, lithology, saturation, strength and other properties across any site. In addition, 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 this 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.

Should you have any questions on this report, please call us at (510) 602-5100.

Sincerely,

Kaprealian Engineering, Inc.

Thomas J. Berkins
Senior Environmental Engineer

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

License No. 1633
Exp. Date 6/30/94

Robert H. Kezerian
Project Engineer

/bp

Attachments: Tables 1, 2 & 3
Location Map
Figure 1
Boring Logs
Laboratory Analyses
Chain of Custody documentation

KEI-P88-1110.R2
July 12, 1993

TABLE 1

SUMMARY OF LABORATORY ANALYSES
SOIL

Date	Sample Number	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
6/01/93 & 6/02/93	HP1(5)	11	1.5	0.067	0.0072	ND	ND
	HP1(10)	ND	1.4	0.070	0.0064	ND	ND
	HP1(11.5)	ND	1.5	0.076	0.010	ND	ND
	HP2(5)	ND	1.6	0.077	0.014	ND	ND
	HP2(10)	ND	1.4	0.068	0.010	ND	ND
	HP2(12)	ND	1.4	0.065	0.0076	ND	ND
	HP3(5)	ND	1.4	0.070	0.0077	ND	ND
	HP3(10)	ND	1.5	0.066	ND	ND	ND
	HP3(12)	ND	1.8	0.065	0.0074	ND	ND
	HP4(5)	ND	3.1	0.075	0.011	ND	ND
	HP4(10)	ND	1.9	0.074	0.0095	ND	ND
	HP4(12)	ND	1.4	0.075	0.0096	ND	ND
	HP5(5.5)	ND	ND	0.071	ND	ND	ND
	HP5(10)	ND	1.7	0.076	0.0067	ND	ND
	HP5(12)	ND	3.1	0.065	0.0063	ND	0.0056
	HP6(5)	ND	6.8	0.058	0.052	0.034	0.13
	HP6(10)	ND	1.6	0.063	0.0061	ND	ND
	HP6(13.5)	ND	1.4	0.064	ND	ND	ND
	HP7(5)	ND	1.5	0.069	0.0052	ND	ND
	HP7(10)	ND	1.8	0.065	0.012	ND	ND
	HP7(12.5)	ND	1.5	0.065	ND	ND	ND

NOTE: The soil samples were collected at the depths below grade indicated in the ( ) of the respective sample number.

ND = Non-detectable.

Results in parts per million (ppm), unless otherwise indicated.

KEI-P88-1110.R2
July 12, 1993

TABLE 2

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Sample Number	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
6/01/93	HP1	1,500	160*	ND	ND	ND	ND
&	HP2	ND	ND	ND	ND	ND	ND
6/02/93	HP3	80	ND	ND	ND	ND	ND
	HP4	59,000	390*	ND	ND	ND	ND
	HP5	120	ND	ND	ND	ND	ND
	HP6	ND	ND	ND	ND	ND	ND
	HP7	ND	ND	ND	ND	ND	ND

ND = Non-detectable.

* Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear to be gasoline.

Results in parts per billion (ppb), unless otherwise indicated.

KEI-P88-1110.R2
July 12, 1993

TABLE 3

SUMMARY OF LABORATORY ANALYSES
WATER

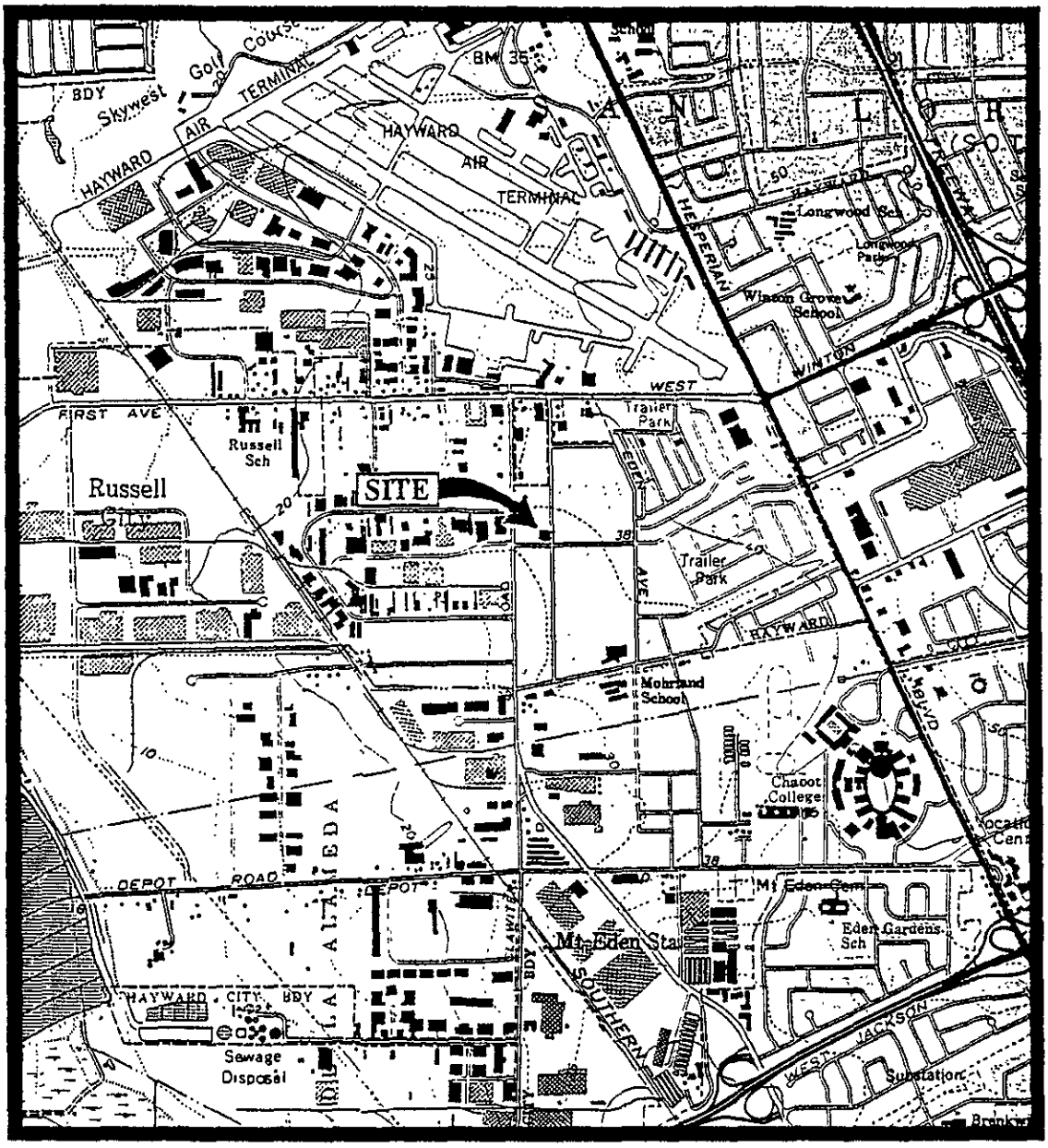
Date	Sample Well #	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
2/25/93	MW1	5,900*	4,600**	45	18	ND	750
	MW2	ND	ND	ND	ND	ND	ND
	MW3	200	ND	ND	ND	ND	ND
	MW4	ND	ND	ND	ND	ND	ND
	MW5	ND	ND	ND	ND	ND	ND

* 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 appeared to be a gasoline and non-gasoline mixture.

ND = Non-detectable.

Results in parts per billion (ppb), unless otherwise indicated.

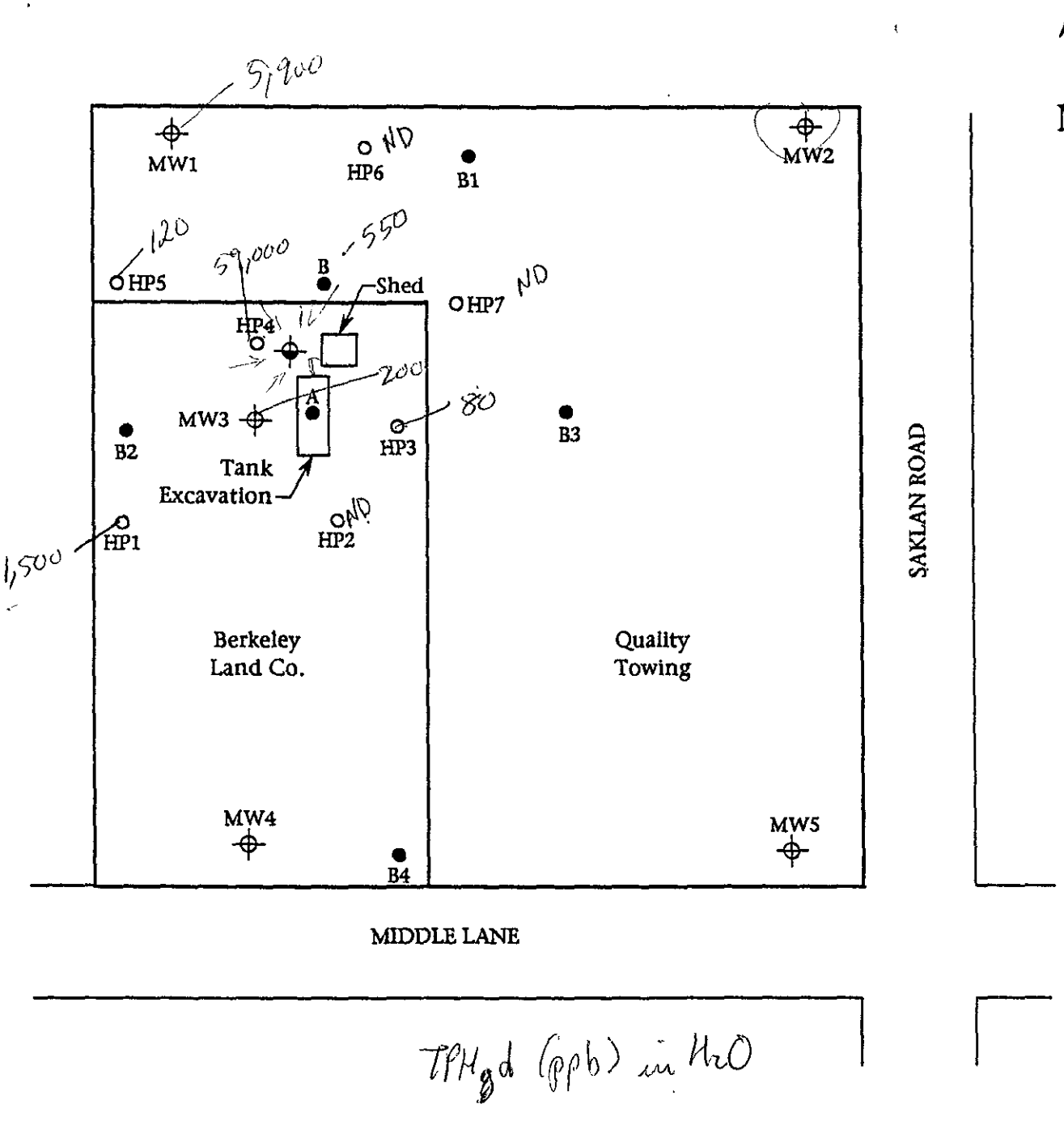


Base modified from 7.5 minute U.S.G.S.
Hayward & San Leandro Quadrangles
(both photorevised 1980)

0 2000 4000

Approx. scale feet

KAPREALIAN ENGINEERING INCORPORATED	BERKELEY FARMS 23555 SAKLAN ROAD HAYWARD, CA	LOCATION MAP



LEGEND

- Monitoring well
- Exploratory boring
- Exploratory boring in conjunction with a Hydropunch study
- Water well

0 40 80

Approx. scale feet

SITE PLAN

KAPREALIAN ENGINEERING
INCORPORATED

BERKELEY FARMS
23555 SAKLAN ROAD
HAYWARD, CA

FIGURE
1

KAPREALIAN ENGINEERING
INCORPORATED

MAJOR DIVISIONS	SYMBOLS		TYPICAL SOIL DESCRIPTIONS
GRAVELS (More than 1/2 of coarse fraction > No. 4 sieve size)	GW		Well graded gravels or gravel - sand mixtures, little or no fines
	GP		Poorly graded gravels or gravel - sand mixtures, little or no fines
	GM		Silty gravels, gravel - sand - silt mixtures
	GC		Clayey gravels, gravel - sand - clay mixtures
SANDS (More than 1/2 of coarse fraction < No. 4 sieve size)	SW		Well graded sands or gravelly sands, little or no fines
	SP		Poorly graded sands or gravelly sands, little or no fines
	SM		Silty sands, sand - silt mixtures
	SC		Clayey sands, sand - clay mixtures
SILTS & CLAYS LL < 50	ML		Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
	CL		Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
	OL		Organic silts and organic silty clays of low plasticity
SILTS & CLAYS LL > 50	MH		Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
	CH		Inorganic clays of high plasticity, fat clays
	OH		Organic clays of medium to high plasticity, organic silty clays, organic silts
HIGHLY ORGANIC SOILS	Pt		Peat and other highly organic soils
DUAL (TRANSITION) SOILS	Soil characterisitics are transitional between the soil classifications listed above		

CLASSIFICATION CHART (Unified Soil Classification System)

BORING LOG

Project No. KEI-P88-1110	**Boring Diameter** 8.5" **Casing Diameter** N/A	**Logged By** JGG D.L. CEG 1633
Project Name Berkeley Farms 23555 Saklan Rd., Hayward	**Well Cover Elevation** N/A	**Date Drilled** June 2, 1993
Boring No. HP1	**Drilling Method** Hollow-stem Auger	**Drilling Company** Woodward Drilling

Penetration blows/6"	G. W. level	Depth (feet) Samples	Stratigraphy USCS	Description
		0		Asphalt pavement over sand base.
			CL	Silty clay, estimated at 35-45% silt, stiff, moist, black.
			ML	Clayey silt, trace fine-grained sand, very stiff, slightly moist, olive brown.
7/13/18		5	SM	Silty sand, estimated at 15-20% silt, sand is predominantly medium-grained, dense, slightly moist, olive brown.
7/12/8			SW	Well graded sand with gravel, estimated at 20-40% gravel, medium dense, slightly moist, light yellowish brown.
3/4/6			ML	Sandy silt, sand is fine-grained, firm to stiff, moist to very moist, olive.
		10		
3/5/7			SM	Silty sand, sand is predominantly fine-grained, medium dense, very moist to wet, olive, olive brown and dark greenish gray, mottled.
				TOTAL DEPTH:12' (HYDROPUNCH DEPTH: 16')
		15		
		20		

BORING LOG

Project No. KEI-P88-1110	**Boring Diameter** 8.5" **Casing Diameter** N/A	**Logged By** JGG **D.L.** CEG 1633
Project Name Berkeley Farms 23555 Saklan Rd., Hayward	**Well Cover Elevation** N/A	**Date Drilled** June 2, 1993
Boring No. HP2	**Drilling Method** Hollow-stem Auger	**Drilling Company** Woodward Drilling

Penetration blows/6"	G. W. level	Depth (feet) Samples	Stratigraphy USCS	Description
		0		Two concrete slabs totaling 15 inches over sand and gravel base.
			CL	Silty clay, stiff, moist, black.
			ML	Clayey silt, stiff, moist, very dark grayish brown.
7/10/11		5		Clayey silt, estimated at 10-15% fine-grained sand, very stiff, slightly moist, olive brown.
6/5/6			SW	Well graded sand, trace fines, medium dense, slightly moist, olive brown.
			ML	Silt, trace fine-grained sand, stiff, moist, olive brown.
5/6/8		10		Sandy silt, estimated at 30-40% fine-grained sand, stiff, very moist, olive brown.
2/3/7			SM	Silty sand, loose, wet, olive brown.
			ML	Silt, stiff, wet, grayish brown and olive brown, mottled, with caliche nodules.
		15		TOTAL DEPTH:12.5' (HYDROPUNCH DEPTH: 16.5')
		20		

BORING LOG

Project No. KEI-P88-1110	**Boring Diameter** 8.5" **Casing Diameter** N/A	**Logged By** JGG D.L. CEG 1633
Project Name Berkeley Farms 23555 Saklan Rd., Hayward	**Well Cover Elevation** N/A	**Date Drilled** June 2, 1993
Boring No. HP3	**Drilling Method** Hollow-stem Auger	**Drilling Company** Woodward Drilling

Penetration blows/6"	G. W. level	Depth (feet) Samples	Stratigraphy USCS	Description
		0		Concrete slab over sand and gravel base.
			CL	Silty clay, stiff, moist, black.
			ML	Clayey silt, stiff, moist, very dark grayish brown.
7/17/20		5		Clayey silt, estimated at 10-15% sand, very stiff to hard, slightly moist, olive brown.
			SM	Silty sand, estimated at 5-10% clay, dense, slightly moist, olive brown, clay content decreasing with depth.
			ML	Silt, estimated at 10-15% fine-grained sand, stiff, moist, olive brown.
3/5/8		10		Sandy silt, stiff, very moist, olive brown, sand is fine-grained.
2/4/10			SM	Silty sand, medium dense, wet, olive brown, sand is very fine to fine-grained.
				TOTAL DEPTH:12.5' (HYDROPUNCH DEPTH: 16.5')
		15		
		20		

BORING LOG

Project No. KEI-P88-1110	**Boring Diameter** 8.5" **Casing Diameter** N/A	**Logged By** D.L. JGG CEG1633
Project Name Berkeley Farms 23555 Saklan Rd., Hayward	**Well Cover Elevation** N/A	**Date Drilled** June 2, 1993
Boring No. HP4	**Drilling Method** Hollow-stem Auger	**Drilling Company** Woodward Drilling

Penetration blows/6"	G. W. level	Depth (feet) Samples	Stratigraphy USCS	Description
		0		Concrete slab over sand and gravel base.
			CL	Silty clay, stiff, moist, black.
				Silty clay, trace sand, stiff, moist, dark brown.
6/10/13		5	SC	Clayey sand, estimated at 10-15% silt, medium dense, moist, olive brown.
5/7/11			SW-SM	Interbedded silty sand and well graded sand, lenses 3 to 6 inches thick, medium dense, slightly moist to moist, olive brown, also lensed with silt.
3/5/7		10	ML	Sandy silt, estimated at 30-45% sand, stiff, moist to very moist, olive brown, sand is very fine to fine-grained.
2/4/9			SM-SP	Silty sand, loose to medium dense, very moist to wet, olive brown, lensed with poorly graded sand, sand is fine to medium-grained.
		15		TOTAL DEPTH:12.5' (HYDROPUNCH DEPTH: 16.5')
		20		

BORING LOG

Project No. KEI-P88-1110	**Boring Diameter** 8.5" **Casing Diameter** N/A	**Logged By** D.L. JGG CEG 1633
Project Name Berkeley Farms 23555 Saklan Rd., Hayward	**Well Cover Elevation** N/A	**Date Drilled** June 1, 1993
Boring No. HP5	**Drilling Method** Hollow-stem Auger	**Drilling Company** Woodward Drilling

Penetration blows/6"	G. W. level	Depth (feet) Samples	Stratigraphy USCS	Description
		0		Silty gravel with sand, dark reddish brown (baserock).
			CL	Silty clay, stiff, moist, black (disturbed fill).
			SW	Well graded sand, loose, moist, brown, with bricks and concrete, (fill).
				Clayey silt, stiff, moist, black, with abundant organic matter.
2/11/13		5	ML	Silt with clay, trace fine-grained sand, very stiff, moist, olive brown.
5/7/9			ML-SM	Interbedded silt, sandy silt and silty sand, silt is stiff, moist to very moist, silty sand is medium dense, moist, all soils olive brown, lenses are 3 to 4 inches thick.
4/5/7		10		
			ML	Sandy silt, trace clay, firm to stiff, very moist, olive brown.
2/4/5			SM	Silty sand, loose to medium dense, very moist to wet, olive brown, with gravel above 12 feet.
		15		TOTAL DEPTH:12.5' (HYDROPUNCH DEPTH: 16.0')
		20		

BORING LOG

Project No. KEI-P88-1110	**Boring Diameter** 8.5" **Casing Diameter** N/A	**Logged By** JGG D.L. CEG 1633
Project Name Berkeley Farms 23555 Saklan Rd., Hayward	**Well Cover Elevation** N/A	**Date Drilled** June 1, 1993
Boring No. HP6	**Drilling Method** Hollow-stem Auger	**Drilling Company** Woodward Drilling

Penetration blows/6"	G. W. level	Depth (feet) Samples	Stratigraphy USCS	Description
		0		Silt, sand, and gravel, dark reddish brown, angular chert fragments in gravel (baserock).
			CL	Silty clay, stiff, moist, black.
				Clayey silt, stiff, moist, very dark grayish brown.
5/12/17		5	ML	Clayey silt, estimated at 5-10% fine-grained sand, very stiff, moist, olive brown.
				Sandy silt, stiff, moist, olive brown, sand is fine-grained.
3/5/7		10	SM	Silty sand, estimated at 20-30% silt, medium dense, very moist, olive brown, sand is predominantly fine-grained.
4/5/7				Silty sand, as above except saturated.
			ML	Sandy silt, stiff, very moist, olive brown.
		15		TOTAL DEPTH:13.5' (HYDROPUNCH DEPTH: 17.5')
		20		

BORING LOG

Project No. KEI-P88-1110	**Boring Diameter** 8.5" **Casing Diameter** N/A	**Logged By** JGG D.L. CEG 1633
Project Name Berkeley Farms 23555 Saklan Rd., Hayward	**Well Cover Elevation** N/A	**Date Drilled** June 1, 1993
Boring No. HP7	**Drilling Method** Hollow-stem Auger	**Drilling Company** Woodward Drilling

Penetration blows/6"	G. W. level	Depth (feet) Samples	Stratigraphy USCS	Description
		0		Silt, sand, and gravel (baserock).
			CL	Silty clay, stiff, moist, black, disturbed, with baserock between 2.5 and 3.5 feet.
				Clayey silt, stiff, moist, very dark grayish brown.
4/12/17		5	ML	Silt with clay, estimated at 5-10% fine-grained sand, very stiff, moist, olive brown.
				Sandy silt, firm, moist to very moist, olive brown, sand is predominantly fine-grained.
3/4/7		10	SM	Silty sand, estimated at 25-30% silt, medium dense, very moist, olive brown, sand is fine-grained.
2/3/5			ML-SM	Interbedded sandy silt and silty sand, silt is firm, wet, silty sand is loose, saturated, olive brown, lenses are 3 to 6 inches thick.
		15		TOTAL DEPTH:13' (HYDROPUNCH DEPTH: 17')
		20		

SEQUOIA ANALYTICAL

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Kapreallan Engineering, Inc.	Client Project ID:	Berkeley Farms, 23555 Saklan Rd. Hayward	Sampled:	6/1 & 2/93
2401 Stanwell Dr., Ste. 400	Sample Matrix:	Water	Received:	Jun 3, 1993
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Reported:	Jun 15, 1993
Attention: Mardo Kapreallan, P.E.	First Sample #:	306-0186		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 306-0186 HP 1	Sample I.D. 306-0187 HP 2	Sample I.D. 306-0188 HP 3	Sample I.D. 306-0189 HP 4	Sample I.D. 306-0190 HP 5	Sample I.D. 306-0191 HP 6
Purgeable Hydrocarbons	50	160	N.D.	N.D.	390	N.D.	N.D.
Benzene	0.5	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Toluene	0.5	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.5	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Total Xylenes	0.5	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Chromatogram Pattern:		Non-Gasoline Mixture (>C9)	--	--	Non-Gasoline Mixture (>C9)	--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	1.0
Date Analyzed:	6/9/93	6/8/93	6/8/93	6/9/93	6/8/93	6/8/93
Instrument Identification:	HP-4	HP-2	HP-2	HP-4	HP-2	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	97	99	99	98	100	96

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

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Kapreallan Engineering, Inc.	Client Project ID:	Berkeley Farms, 23555 Saklan Rd. Hayward	Sampled: Jun 1, 1993
2401 Stanwell Dr., Ste. 400	Sample Matrix:	Water	Received: Jun 3, 1993
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Reported: Jun 15, 1993
Attention: Mardo Kapreallan, P.E.	First Sample #:	306-0192	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 306-0192 HP 7	Sample I.D. Matrix Blank
Purgeable Hydrocarbons	50	N.D.	
Benzene	0.5	N.D.	
Toluene	0.5	N.D.	
Ethyl Benzene	0.5	N.D.	
Total Xylenes	0.5	N.D.	
Chromatogram Pattern:		--	

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0
Date Analyzed:	6/8/93	6/8/93
Instrument Identification:	HP-2	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	98	102

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

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Kapreallan Engineering, Inc.	Client Project ID:	Berkeley Farms, 23555 Saklan Rd. Hayward	Sampled:	6/1 & 2/93
2401 Stanwell Dr., Ste. 400	Sample Matrix:	Water	Received:	Jun 3, 1993
Concord, CA 94520	Analysis Method:	EPA 3510/3520/8015	Reported:	Jun 15, 1993
Attention: Mardo Kapreallan, P.E.	First Sample #:	306-0186		

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 306-0186 HP 1	Sample I.D. 306-0187 HP 2	Sample I.D. 306-0188 HP 3	Sample I.D. 306-0189 HP 4	Sample I.D. 306-0190 HP 5	Sample I.D. 306-0191 HP 6
Extractable Hydrocarbons	50	1,500	N.D.	80	59,000	120	N.D.
Chromatogram Pattern:		Diesel	--	Diesel	Diesel	Diesel	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	50	1.0	1.0
Date Extracted:	6/8/93	6/8/93	6/8/93	6/8/93	6/8/93	6/8/93
Date Analyzed:	6/11/93	6/11/93	6/11/93	6/14/93	6/12/93	6/11/93
Instrument Identification:	HP-3A	HP-3A	HP-3A	HP-3A	HP-3A	HP-3A

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

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Kaprealian Engineering, Inc.	Client Project ID:	Berkeley Farms, 23555 Saklan Rd. Hayward	Sampled:	Jun 1, 1993
2401 Stanwell Dr., Ste. 400	Sample Matrix:	Water	Received:	Jun 3, 1993
Concord, CA 94520	Analysis Method:	EPA 3510/3520/8015	Reported:	Jun 15, 1993
Attention: Mardo Kaprealian, P.E.	First Sample #:	306-0192		

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 306-0192 HP 7	Sample I.D. Matrix Blank
Extractable Hydrocarbons	50	N.D.	
Chromatogram Pattern:		--	

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0
Date Extracted:	6/8/93	6/8/93
Date Analyzed:	6/11/93	6/11/93
Instrument Identification:	HP-3A	HP-3B

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

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Kaprealian Engineering, Inc.	Client Project ID:	Berkeley Farms, 23555 Saklan Rd. Hayward
2401 Stanwell Dr., Ste. 400	Matrix:	Water
Concord, CA 94520		
Attention: Mardo Kapreallan, P.E.	QC Sample Group	3060186-192

Reported: Jun 15, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes	Diesel
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015
Analyst:	J.F.	J.F.	J.F.	J.F.	K.Wimer
Conc. Spiked:	20	20	20	60	300
Units:	µg/L	µg/L	µg/L	µg/L	µg/L
LCS Batch#:	1LCS060893	1LCS060893	1LCS060893	1LCS060893	BLK060893
Date Prepared:	6/8/93	6/8/93	6/8/93	6/8/93	6/8/93
Date Analyzed:	6/8/93	6/8/93	6/8/93	6/8/93	6/11/93
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2	HP-3B
LCS % Recovery:	98	95	97	99	96
Control Limits:	70-130	70-130	70-130	70-130	80-120
MS/MSD Batch #:	3060068	3060068	3060068	3060068	060893
Date Prepared:	6/8/93	6/8/93	6/8/93	6/8/93	6/8/93
Date Analyzed:	6/8/93	6/8/93	6/8/93	6/8/93	6/11/93
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2	HP-3B
Matrix Spike % Recovery:	100	95	100	102	96
Matrix Spike Duplicate % Recovery:	100	100	100	102	94
Relative % Difference:	0.0	5.1	0.0	0.0	2.8

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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 LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.

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Kapreallan Engineering, Inc.
2401 Stanwell Dr., Ste. 400
Concord, CA 94520
Attention: Mardo Kapreallan, P.E.

Client Project ID: Berkeley Farms, 23555 Saklan Rd. Hayward
QC Sample Group: 3060186-192
Reported: Jun 15, 1993

QUALITY CONTROL DATA REPORT

SURROGATE

Method:	EPA 8015	EPA 8015	EPA 8015	EPA 8015	EPA 8015	EPA 8015	EPA 8015
Analyst:	K. Wimer	K. Wimer	K. Wimer	K. Wimer	K. Wimer	K. Wimer	K. Wimer
Reporting Units:	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Date Analyzed:	Jun 11, 1993	Jun 11, 1993	Jun 11, 1993	Jun 14, 1993	Jun 12, 1993	Jun 11, 1993	Jun 11, 1993
Sample #:	306-0186	306-0187	306-0188	306-0189	306-0190	306-0191	306-0192
Surrogate % Recovery:	97	115	117	391*	114	114	108

*Surrogate recovery high due to matrix interference.

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Scott A. Chieffo
Project Manager

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

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Kapreallan Engineering, Inc.
2401 Stanwell Dr., Ste. 400
Concord, CA 94520
Attention: Mardo Kapreallan, P.E.

Client Project ID: Berkeley Farms, 23555 Saklan Rd. Hayward
QC Sample Group: 3060186-192
Reported: Jun 15, 1993

QUALITY CONTROL DATA REPORT

SURROGATE

Method:	EPA 8015
Analyst:	K. Wimer
Reporting Units:	µg/L
Date Analyzed:	Jun 11, 1993
Sample #:	Blank

Surrogate % Recovery:	94

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Scott A. Chieffo
Project Manager

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

KAPREALIAN ENGINEERING
INCORPORATED

CHAIN OF CUSTODY

SAMPLER: [illegible]

WITNESSING AGENCY: [illegible]

SITE NAME & ADDRESS: BERKELEY FARMS / HAYWARD
23555 SAKLAN RD.

ANALYSES REQUESTED: TPH G / TPH D / BTEX

TURN AROUND TIME: REGULAR

SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH G	TPH D	BTEX	REMARKS
HA1	6-2-93			X	X		3		X	X	X	3DE01860AC
HA2	6-2-93			X	X		3		X	X	X	187AC
HA3	6-2-93			X	X		3		X	X	X	188AC
HA4	6-2-93			X	X		3		X	X	X	189AC
HA5	6-4-93			X	X		3		X	X	X	190AC
HA6	6-4-93			X	X		3		X	X	X	191AC
HA7	6-1-93			X	X		3		X	X	X	192AC

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
[illegible] (KEI)	6/3/93 1645	Erin Vommol
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)

The following MUST BE completed by the laboratory accepting samples for analysis:

1. Have all samples received for analysis been stored in ice? Y
2. Will samples remain refrigerated until analyzed? Y
3. Did any samples received for analysis have head space? N
4. Were samples in appropriate containers and properly packaged? Y

EV — Signature; PS — Title; 6/3/93 — Date

2401 Stanwell Drive, Suite 400
Concord, California 94520
Tel: 510 602 5100 Fax: 510 687 0602

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Kaprealian Engineering, Inc.	Client Project ID:	Berkeley Farms, 23555 Saklan Rd.., Hayward	Sampled:	Jun 2, 1993
2401 Stanwell Dr., Ste. 400	Sample Matrix:	Soil	Received:	Jun 3, 1993
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Reported:	Jun 17, 1993
Attention: Mardo Kaprealian, P.E.	First Sample #:	306-0157		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 306-0157 HP1(5)	Sample I.D. 306-0158 HP1(10)	Sample I.D. 306-0159 HP1(11.5)	Sample I.D. 306-0160 HP2(5)	Sample I.D. 306-0161 HP2(10)	Sample I.D. 306-0162 HP2(12)
Purgeable Hydrocarbons	1.0	1.5	1.4	1.5	1.6	1.4	1.4
Benzene	0.005	0.067	0.070	0.076	0.077	0.068	0.065
Toluene	0.005	0.0072	0.0064	0.010	0.014	0.010	0.0076
Ethyl Benzene	0.005	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Total Xylenes	0.005	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Chromatogram Pattern:		Gasoline	Gasoline	Gasoline	Gasoline	Gasoline	Gasoline

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	1.0
Date Analyzed:	6/12/93	6/12/93	6/12/93	6/12/93	6/12/93	6/12/93
Instrument Identification:	GC/HP-1	GC/HP-1	GC/HP-1	GC/HP-1	GC/HP-1	GC/HP-1
Surrogate Recovery, %: (QC Limits = 70-130%)	108	111	107	109	105	108

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

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Project Manager

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Kaprealian Engineering, Inc.	Client Project ID:	Berkeley Farms, 23555 Saklan Rd., Hayward	Sampled: Jun 2, 1993
2401 Stanwell Dr., Ste. 400	Sample Matrix:	Soil	Received: Jun 3, 1993
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Reported: Jun 17, 1993
Attention: Mardo Kaprealian, P.E.	First Sample #:	306-0163	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 306-0163 HP3(5)	Sample I.D. 306-0164 HP3(10)	Sample I.D. 306-0165 HP3(12)	Sample I.D. 306-0166 HP4(5)	Sample I.D. 306-0167 HP4(10)	Sample I.D. 306-0168 HP4(12)
Purgeable Hydrocarbons	1.0	1.4	1.5	1.8	3.1	1.9	1.4
Benzene	0.005	0.070	0.066	0.065	0.075	0.074	0.075
Toluene	0.005	0.0077	N.D.	0.0074	0.011	0.0095	0.0096
Ethyl Benzene	0.005	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Total Xylenes	0.005	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Chromatogram Pattern:		Gasoline	Gasoline	Gasoline	Gasoline	Gasoline	Gasoline

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	1.0
Date Analyzed:	6/12/93	6/12/93	6/12/93	6/12/93	6/12/93	6/12/93
Instrument Identification:	GC/HP-1	GC/HP-1	GC/HP-1	GC/HP-1	GC/HP-1	GC/HP-1
Surrogate Recovery, %: (QC Limits = 70-130%)	113	117	116	114	113	107

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

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Kaprealian Engineering, Inc.	Client Project ID:	Berkeley Farms, 23555 Saklan Rd.., Hayward	Sampled:	Jun 1, 1993
2401 Stanwell Dr., Ste. 400	Sample Matrix:	Soil	Received:	Jun 3, 1993
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Reported:	Jun 17, 1993
Attention: Mardo Kapreallan, P.E.	First Sample #:	306-0169		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 306-0169 HP5(5.5)	Sample I.D. 306-0170 HP5(10)	Sample I.D. 306-0171 HP5(12)	Sample I.D. 306-0172 HP6(5)	Sample I.D. 306-0173 HP6(10)	Sample I.D. 306-0174 HP6(13.5)
Purgeable Hydrocarbons	1.0	N.D.	1.7	3.1	6.8	1.6	1.4
Benzene	0.005	0.071	0.076	0.065	0.058	0.063	0.064
Toluene	0.005	N.D.	0.0067	0.0063	0.052	0.0061	N.D.
Ethyl Benzene	0.005	N.D.	N.D.	N.D.	0.034	N.D.	N.D.
Total Xylenes	0.005	N.D.	N.D.	0.0056	0.13	N.D.	N.D.
Chromatogram Pattern:		--	Gasoline	Gasoline	Gasoline	Gasoline	Gasoline

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	1.0
Date Analyzed:	6/12/93	6/14/93	6/14/93	6/14/93	6/14/93	6/14/93
Instrument Identification:	GC/HP-1	GC/HP-1	GC/HP-1	GC/HP-1	GC/HP-1	GC/HP-1
Surrogate Recovery, %: (QC Limits = 70-130%)	124	112	106	103	107	115

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

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Kaprealian Engineering, Inc.	Client Project ID:	Berkeley Farms, 23555 Saklan Rd., Hayward	Sampled:	Jun 1, 1993
2401 Stanwell Dr., Ste. 400	Sample Matrix:	Soil	Received:	Jun 3, 1993
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Reported:	Jun 17, 1993
Attention: Mardo Kaprealian, P.E.	First Sample #:	306-0175		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 306-0175 HP7(5)	Sample I.D. 306-0176 HP7(10)	Sample I.D. 306-0177 HP7(12.5)	Sample I.D. Matrix Blank
Purgeable Hydrocarbons	1.0	1.5	1.8	1.5	
Benzene	0.005	0.069	0.065	0.065	
Toluene	0.005	0.0052	0.012	N.D.	
Ethyl Benzene	0.005	N.D.	N.D.	N.D.	
Total Xylenes	0.005	N.D.	N.D.	N.D.	
Chromatogram Pattern:		Gasoline	Gasoline	Gasoline	

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0
Date Analyzed:	6/14/93	6/14/93	6/14/93	6/14/93
Instrument Identification:	GC/HP-1	GC/HP-1	GC/HP-1	GC/HP-1
Surrogate Recovery, %: (QC Limits = 70-130%)	116	101	111	118

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

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Kapreallan Engineering, Inc.	Client Project ID:	Berkeley Farms, 23555 Saklan Rd., Hayward	Sampled:	Jun 2, 1993
2401 Stanwell Dr., Ste. 400	Sample Matrix:	Soil	Received:	Jun 3, 1993
Concord, CA 94520	Analysis Method:	EPA 3550/8015	Reported:	Jun 17, 1993
Attention: Mardo Kapreallan, P.E.	First Sample #:	306-0157		

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 306-0157 HP1(5)	Sample I.D. 306-0158 HP1(10)	Sample I.D. 306-0159 HP1(11.5)	Sample I.D. 306-0160 HP2(5)	Sample I.D. 306-0161 HP2(10)	Sample I.D. 306-0162 HP2(12)
Extractable Hydrocarbons	1.0	11	N.D.	N.D.	N.D.	N.D.	N.D.
Chromatogram Pattern:		Diesel	--	--	--	--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	1.0
Date Extracted:	6/12/93	6/12/93	6/12/93	6/12/93	6/12/93	6/12/93
Date Analyzed:	6/14/93	6/14/93	6/14/93	6/14/93	6/14/93	6/14/93
Instrument Identification:	GC/HP-1	GC/HP-1	GC/HP-1	GC/HP-1	GC/HP-1	GC/HP-1

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

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Project Manager

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Kaprealian Engineering, Inc.	Client Project ID:	Berkeley Farms, 23555 Saklan Rd., Hayward	Sampled:	Jun 2, 1993
2401 Stanwell Dr., Ste. 400	Sample Matrix:	Soil	Received:	Jun 3, 1993
Concord, CA 94520	Analysis Method:	EPA 3550/8015	Reported:	Jun 17, 1993
Attention: Mardo Kaprealian, P.E.	First Sample #:	306-0163		

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 306-0163 HP3(5)	Sample I.D. 306-0164 HP3(10)	Sample I.D. 306-0165 HP3(12)	Sample I.D. 306-0166 HP4(5)	Sample I.D. 306-0167 HP4(10)	Sample I.D. 306-0168 HP4(12)
Extractable Hydrocarbons	1.0	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Chromatogram Pattern:		--	--	--	--	--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	1.0
Date Extracted:	6/12/93	6/12/93	6/12/93	6/12/93	6/12/93	6/12/93
Date Analyzed:	6/15/93	6/15/93	6/15/93	6/15/93	6/16/93	6/16/93
Instrument Identification:	GC/HP-1	GC/HP-1	GC/HP-1	GC/HP-1	GC/HP-1	GC/HP-1

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

SEQUOIA ANALYTICAL

Scott A. Chieffo
Project Manager

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

Kapreallan Engineering, Inc.	Client Project ID:	Berkeley Farms, 23555 Saklan Rd.., Hayward	Sampled:	Jun 1, 1993
2401 Stanwell Dr., Ste. 400	Sample Matrix:	Soil	Received:	Jun 3, 1993
Concord, CA 94520	Analysis Method:	EPA 3550/8015	Reported:	Jun 17, 1993
Attention: Mardo Kapreallan, P.E.	First Sample #:	306-0169		

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 306-0169 HP5(5.5)	Sample I.D. 306-0170 HP5(10)	Sample I.D. 306-0171 HP5(12)	Sample I.D. 306-0172 HP6(5)	Sample I.D. 306-0173 HP6(10)	Sample I.D. 306-0174 HP6(13.5)
Extractable Hydrocarbons	1.0	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Chromatogram Pattern:		--	--	--	--	--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	1.0
Date Extracted:	6/12/93	6/12/93	6/12/93	6/12/93	6/12/93	6/12/93
Date Analyzed:	6/16/93	6/16/93	6/16/93	6/16/93	6/16/93	6/16/93
Instrument Identification:	GC/HP-1	GC/HP-1	GC/HP-1	GC/HP-1	GC/HP-1	GC/HP-1

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

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Project Manager

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Kaprealian Engineering, Inc.	Client Project ID:	Berkeley Farms, 23555 Saklan Rd., Hayward	Sampled:	Jun 1, 1993
2401 Stanwell Dr., Ste. 400	Sample Matrix:	Soil	Received:	Jun 3, 1993
Concord, CA 94520	Analysis Method:	EPA 3550/8015	Reported:	Jun 17, 1993
Attention: Mardo Kaprealian, P.E.	First Sample #:	306-0175		

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 306-0175 HP7(5)	Sample I.D. 306-0176 HP7(10)	Sample I.D. 306-0177 HP7(12.5)	Sample I.D. Matrix Blank
Extractable Hydrocarbons	1.0	N.D.	N.D.	N.D.	
Chromatogram Pattern:		--	--	--	

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0
Date Extracted:	6/12/93	6/12/93	6/12/93	6/12/93
Date Analyzed:	6/16/93	6/16/93	6/16/93	6/16/93
Instrument Identification:	GC/HP-1	GC/HP-1	GC/HP-1	GC/HP-1

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

SEQUOIA ANALYTICAL

Scott A. Chieffo
Project Manager

SEQUOIA ANALYTICAL
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(510) 686-9600 • FAX (510) 686-9689

Kaprealian Engineering, Inc.	Client Project ID:	Berkeley Farms, 23555 Saklan Rd., Hayward
2401 Stanwell Dr., Ste. 400	Matrix:	Soil
Concord, CA 94520		
Attention: Mardo Kaprealian, P.E.	QC Sample Group	3060157-177

Reported: Jun 17, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes	Diesel
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015
Analyst:	P.M.	P.M.	P.M.	P.M.	P.M.
Conc. Spiked:	0.20	0.20	0.20	0.40	3000
Units:	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
LCS Batch#:	MB061293	MB061293	MB061293	MB061293	MB061693
Date Prepared:	6/12/93	6/12/93	6/12/93	6/12/93	6/12/93
Date Analyzed:	6/12/93	6/12/93	6/12/93	6/12/93	6/16/93
Instrument I.D.#:	GC/HP-1	GC/HP-1	GC/HP-1	GC/HP-1	GC/HP-1
LCS % Recovery:	86	102	105	96	85
Control Limits:	63-139	69-144	73-149	75-142	80-120
MS/MSD Batch #:	MS3060149	MS3060149	MS3060149	MS3060149	MS061293
Date Prepared:	6/12/93	6/12/93	6/12/93	6/12/93	6/12/93
Date Analyzed:	6/12/93	6/12/93	6/12/93	6/12/93	6/16/93
Instrument I.D.#:	GC/HP-1	GC/HP-1	GC/HP-1	GC/HP-1	GC/HP-1
Matrix Spike % Recovery:	96	101	105	97	115
Matrix Spike Duplicate % Recovery:	94	108	115	101	125
Relative % Difference:	2.1	6.7	9.1	4.0	8.3

SEQUOIA ANALYTICAL

Scott A. Chieffo
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 LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.

KAPREALIAN ENGINEERING
INCORPORATED

CHAIN OF CUSTODY

SAMPLER: [illegible]

WITNESSING AGENCY: [illegible]

SITE NAME & ADDRESS: BERKELEY HILLS/NAVWARD
23555 SAKLAN RD.

ANALYSES REQUESTED: OIL & GREASE; TPH

TURN AROUND TIME: REGULAR

SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	REMARKS
HP1(5)	6-2-93		X		X		1	SEE SAMPLE ID NO.	3060157
HP1(10)	6-2-93		X		X		1		158
HP1(11.5)	6-2-93		X		X		1		159
HP2(5)	6-2-93		X		X		1		160
HP2(10)	6-2-93		X		X		1		161
HP2(12)	6-2-93		X		X		1		162
HP3(5)	6-2-93		X		X		1		163
HP3(10)	6-2-93		X		X		1		164
HP3(12)	6-2-93		X		X		1		165

Relinquished by: (Signature) [illegible] (VSE)	Date/Time 6/3/93 1650	Received by: (Signature) [illegible]
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)

The following MUST BE completed by the laboratory accepting samples for analysis:

1. Have all samples received for analysis been stored in ice? Y
2. Will samples remain refrigerated until analyzed? Y
3. Did any samples received for analysis have head space? N
4. Were samples in appropriate containers and properly packaged? Y

Signature [illegible] Title PS Date 6/3/93

2401 Stanwell Drive, Suite 400
Concord, California 94520
Tel: 510 602 5100 Fax: 510 687 0602

KAPREALIAN ENGINEERING
INCORPORATED

CHAIN OF CUSTODY

SAMPLER: [illegible]

WITNESSING AGENCY

SITE NAME & ADDRESS: BERKELEY FARMS / HAYWARD, 23555 SAKLAN RD.

ANALYSES REQUESTED: TPH-G, TPH-D, TPH-MO

TURN AROUND TIME: REGULAR

SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	REMARKS
HP4(5)	6-2-93		X		X		1	SEE SAMPLE ID NO.	30601666
HP4(10)	6-2-93		X		X		1		167
HP4(12)	6-2-93		X		X		1		168
HP5(5.5)	6-1-93		X		X		1		169
HP5(10)	6-1-93		X		X		1		170
HP5(12)	6-1-93		X		X		1		171
HP6(5)	6-1-93		X		X		1		172
HP6(10)	6-1-93		X		X		1		173
HP6(13.5)	6-1-93		X		X		1		174

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
[signature] (KRA)	6-3-93 1650	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)

The following MUST BE completed by the laboratory accepting samples for analysis:

1. Have all samples received for analysis been stored in ice? Y
2. Will samples remain refrigerated until analyzed? Y
3. Did any samples received for analysis have head space? N
4. Were samples in appropriate containers and properly packaged? Y

EV — Signature; FS — Title; 6/3/93 — Date

2401 Stanwell Drive, Suite 400
Concord, California 94520
Tel: 510 602 5100 Fax: 510 687 0602

KAPREALIAN ENGINEERING
INCORPORATED

CHAIN OF CUSTODY

SAMPLER: [signature]

WITNESSING AGENCY:

SITE NAME & ADDRESS: BERKELEY FARMS/HAYWARD
23555 SAKLAN RD.

ANALYSES REQUESTED: G+O, TPH-D, TPH-G

TURN AROUND TIME: REGULAR

SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	G+O	TPH-D	TPH-G	REMARKS
HP7(5)	6-1-93		X		X		1	SEE SAMPLE ID NO.	X	X	X	3060175
HP7(10)	6-1-93		X		X		1	"	X	X	X	176
HP7(12.5)	6-1-93		X		X		1	"	X	X	X	177

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
[signature] (KEI)	6/3/93 1650	[signature]
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)

The following MUST BE completed by the laboratory accepting samples for analysis:

1. Have all samples received for analysis been stored in ice? Y
2. Will samples remain refrigerated until analyzed? Y
3. Did any samples received for analysis have head space? N
4. Were samples in appropriate containers and properly packaged? Y

[signature] Signature — PS Title — 6/3/93 Date

2401 Stanwell Drive, Suite 400
Concord, California 94520
Tel: 510 602 5100 Fax: 510 687 0602

ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

5997 PARKSIDE DRIVE ♦ PLEASANTON, CALIFORNIA 94566 ♦ (415) 484-2600

GROUNDWATER PROTECTION ORDINANCE PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT Berkeley Farms
23555 Saklan Rd
Hayward, CA

FOR OFFICE USE

PERMIT NUMBER 93212
LOCATION NUMBER

CLIENT
Name Paradiso Construction
Address PoB 1836 Phone 510 6148396
City San Leandro Zip 94577

APPLICANT
Name Kaprealian Engineering
Address 2401 Stanwell Dr. Phone 510 6025100
City Suite 400 Zip 94521
Concord

PERMIT CONDITIONS

Circled Permit Requirements Apply

A. GENERAL
(1.) A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
(3.) Permit is void if project not begun within 90 days of approval date.

B. WATER WELLS, INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

(C.) GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

D. CATHODIC. Fill hole above anode zone with concrete placed by tremie.

E. WELL DESTRUCTION. See attached.

Well Construction
Cathodic Protection ___
Water Supply ___
Monitoring ___

Geotechnical Investigation
General
Contamination 7 borings
Well Destruction ___

PROPOSED WATER SUPPLY WELL USE
Domestic ___ Industrial ___ Other ___
Municipal ___ Irrigation ___

DRILLING METHOD:
Mud Rotary ___ Air Rotary ___ Auger X
Cable ___ Other ___

DRILLER'S LICENSE NO. C57 581639

WELL PROJECTS
Drill Hole Diameter ___ in. Maximum
Casing Diameter ___ in. Depth ___ ft.
Surface Seal Depth ___ ft. Number ___

GEOTECHNICAL PROJECTS
Number of Borings 7 Maximum
Hole Diameter 8 in. Depth 14 ft.

ESTIMATED STARTING DATE 5-27-92
ESTIMATED COMPLETION DATE 5-28-92

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE [signature] Date 4/27/93

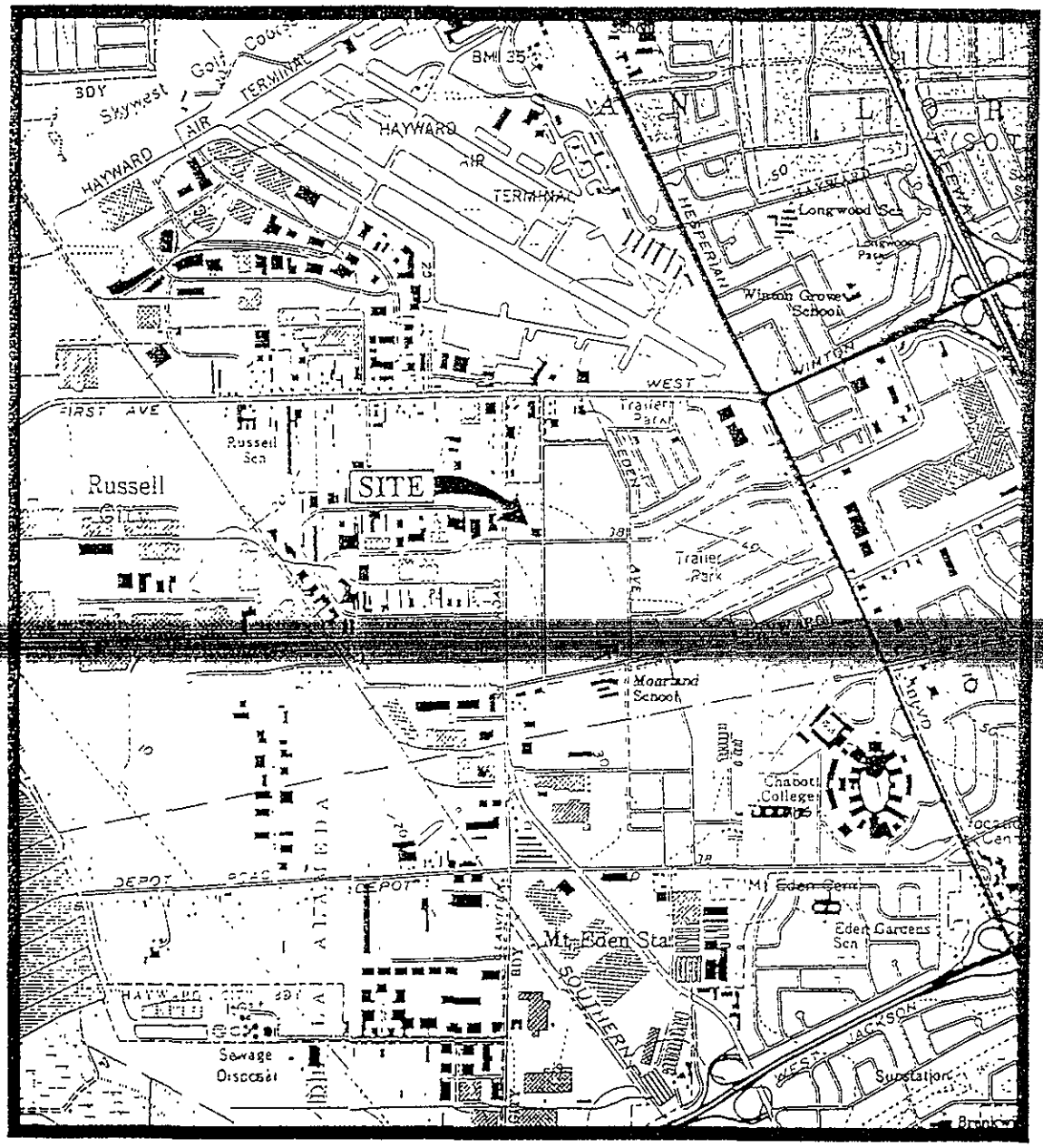
Approved Wyman Hong Date 28 Apr 93
Wyman Hong

121989

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

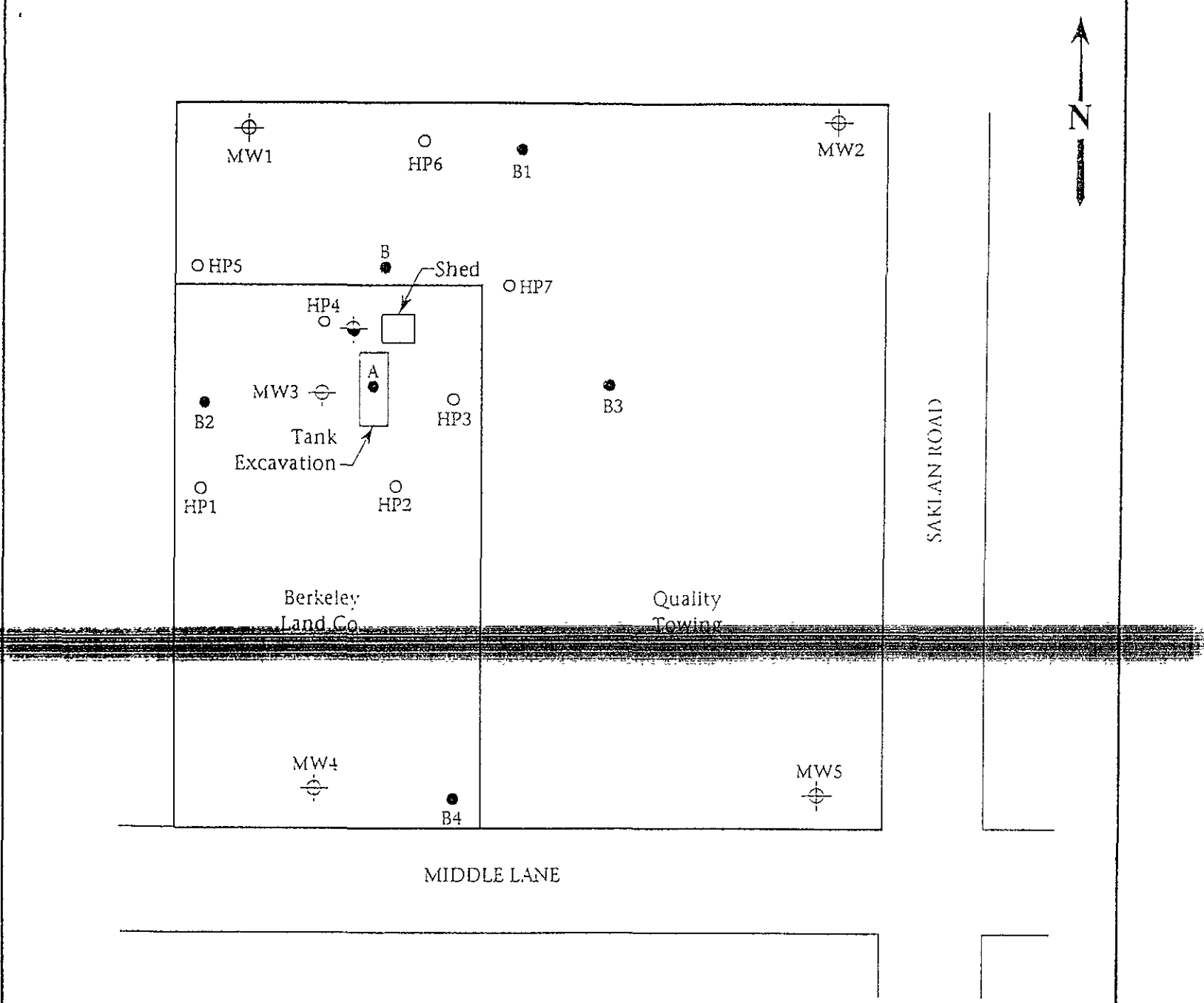


Base modified from 7.5 minute U.S.G.S.
Hayward & San Leandro Quadrangles
(both photorevised 1980)

0 2000 4000

Approx. scale feet

KAPREALIAN ENGINEERING INCORPORATED	BERKELEY FARMS 23555 SAKLAN ROAD HAYWARD, CA	LOCATION MAP



LEGEND

- Monitoring well
- Exploratory boring
- Exploratory boring in conjunction with a Hydropunch study
- Water well

0 40 80

Approx. scale feet

SITE PLAN

KAPREALIAN ENGINEERING
INCORPORATED

BERKELEY FARMS
23555 SAKLAN ROAD
HAYWARD, CA

FIGURE
1

KAPREALIAN ENGINEERING
INCORPORATED

MAJOR DIVISIONS		SYMBOLS	TYPICAL SOIL DESCRIPTIONS
GRAVELS (More than 1/2 of coarse fraction > No. 4 sieve size)		GW	Well graded gravels or gravel - sand mixtures, little or no fines
		GP	Poorly graded gravels or gravel - sand mixtures, little or no fines
		GM	Silty gravels, gravel - sand - silt mixtures
		GC	Clayey gravels, gravel - sand - clay mixtures
SANDS (More than 1/2 of coarse fraction < No. 4 sieve size)		SW	Well graded sands or gravelly sands, little or no fines
		SP	Poorly graded sands or gravelly sands, little or no fines
		SM	Silty sands, sand - silt mixtures
		SC	Clayey sands, sand - clay mixtures
SILTS & CLAYS (LL < 50)		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
		OL	Organic silts and organic silty clays of low plasticity
SILTS & CLAYS (LL > 50)		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
		CH	Inorganic clays of high plasticity, fat clays
		OH	Organic clays of medium to high plasticity, organic silty clays, organic silts
HIGHLY ORGANIC SOILS		Pt	Peat and other highly organic soils
DUAL (TRANSITION) SOILS			Soil characterisitics are transitional between the soil classifications listed above

CLASSIFICATION CHART (Unified Soil Classification System)

BORING LOG

Project No. KEI-P88-1110	Boring Diameter 8.5" / Casing Diameter N/A	Logged By JGG / D.L. LEG 1633
Project Name Berkeley Farms 23555 Saklan Rd., Hayward	Well Cover Elevation N/A	Date Drilled June 2, 1993
Boring No. HP1	Drilling Method Hollow-stem Auger	Drilling Company Woodward Drilling

Penetration blows/6"	G. W. level	Depth (feet) Samples	Stratigraphy USCS	Description
		0		Asphalt pavement over sand base.
			CL	Silty clay, estimated at 35-45% silt, stiff, moist, black.
			ML	Clayey silt, trace fine-grained sand, very stiff, slightly moist, olive brown.
7/12/13		5	SM	Silty sand, estimated at 15-20% silt, sand is predominantly medium-grained, dense, slightly moist, olive brown.
7/12/8			SW	Well graded sand with gravel, estimated at 20-40% gravel, medium dense, slightly moist, light yellowish brown.
3/4/6			ML	Sandy silt, sand is fine-grained, firm to stiff, moist to very moist, olive.
3/5/7		10	SM	Silty sand, sand is predominantly fine-grained, medium dense, very moist to wet, olive, olive brown and dark greenish gray, mottled.
				TOTAL DEPTH:12' (HYDROPUNCH DEPTH: 16')
		15		
		20		

BORING LOG

Project No. KEI-P88-1110	Boring Diameter 8.5"	Logged By JGG
	Casing Diameter N/A	D.L. CEG 1633
Project Name Berkeley Farms 23555 Saklan Rd., Hayward	Well Cover Elevation N/A	Date Drilled June 2, 1993
Boring No. HP2	Drilling Method Hollow-stem Auger	Drilling Company Woodward Drilling

Penetration blows/6"	G. W. level	Depth (feet) Samples	Stratigraphy USCS	Description
		0		Two concrete slabs totaling 15 inches over sand and gravel base.
			CL	Silty clay, stiff, moist, black.
			ML	Clayey silt, stiff, moist, very dark grayish brown.
7/10/11		5		Clayey silt, estimated at 10-15% fine-grained sand, very stiff, slightly moist, olive brown.
			SW	Well graded sand, trace fines, medium dense, slightly moist, olive brown.
6/5/6				Silt, trace fine-grained sand, stiff, moist, olive brown.
			ML	Sandy silt, estimated at 30-40% fine-grained sand, stiff, very moist, olive brown.
5/6/8		10		
			SM	Silty sand, loose, wet, olive brown.
2/3/7			ML	Silt, stiff, wet, grayish brown and olive brown, mottled, with caliche nodules.
		15		TOTAL DEPTH: 12.5' (HYDROPUNCH DEPTH: 16.5')
		20		

BORING LOG

Project No. KEI-P88-1110	Boring Diameter 8.5" Casing Diameter N/A	Logged By JGG D.L. LEG 1633
Project Name Berkeley Farms 23555 Saklan Rd., Hayward	Well Cover Elevation N/A	Date Drilled June 2, 1993
Boring No. HP3	Drilling Method Hollow-stem Auger	Drilling Company Woodward Drilling

Penetration blows/6"	G. W. level	Depth (feet) Samples	Stratigraphy USCS	Description
		0		Concrete slab over sand and gravel base.
			CL	Silty clay, stiff, moist, black.
			ML	Clayey silt, stiff, moist, very dark grayish brown.
7/17/20		5	ML	Clayey silt, estimated at 10-15% sand, very stiff to hard, slightly moist, olive brown.
			SM	Silty sand, estimated at 5-10% clay, dense, slightly moist, olive brown, clay content decreasing with depth.
			ML	Silt, estimated at 10-15% fine-grained sand, stiff, moist, olive brown.
3/5/8		10		Sandy silt, stiff, very moist, olive brown, sand is fine-grained.
2/4/10			SM	Silty sand, medium dense, wet, olive brown, sand is very fine to fine-grained.
				TOTAL DEPTH:12.5' (HYDROPUNCH DEPTH: 16.5')
		15		
		20		

BORING LOG

Project No. KEI-P88-1110	Boring Diameter 8.5" Casing Diameter N/A	Logged By D.L. JGG CEG1633
Project Name Berkeley Farms 23555 Saklan Rd., Hayward	Well Cover Elevation N/A	Date Drilled June 2, 1993
Boring No. HP4	Drilling Method Hollow-stem Auger	Drilling Company Woodward Drilling

Penetration blows/6"	G. W. level	Depth (feet) Samples	Stratigraphy USCS	Description
		0		Concrete slab over sand and gravel base.
			CL	Silty clay, stiff, moist, black.
				Silty clay, trace sand, stiff, moist, dark brown.
5/10/13		5	SC	Clayey sand, estimated at 10-15% silt, medium dense, moist, olive brown.
5/7/11			SW-SM	Interbedded silty sand and well graded sand, lenses 3 to 6 inches thick, medium dense, slightly moist to moist, olive brown, also lensed with silt.
3/5/7		10	ML	Sandy silt, estimated at 30-45% sand, stiff, moist to very moist, olive brown, sand is very fine to fine-grained.
2/4/9			SM-SP	Silty sand, loose to medium dense, very moist to wet, olive brown, lensed with poorly graded sand, sand is fine to medium-grained.
		15		TOTAL DEPTH: 12.5' (HYDROPUNCH DEPTH: 16.5')
		20		

BORING LOG

Project No. KEI-P88-1110	Boring Diameter 8.5" Casing Diameter N/A	Logged By JGG D.L. CEG1633
Project Name Berkeley Farms 23555 Saklan Rd., Hayward	Well Cover Elevation N/A	Date Drilled June 1, 1993
Boring No. HP5	Drilling Method Hollow-stem Auger	Drilling Company Woodward Drilling

Penetration blows/6"	G. W. level	Depth (feet) Samples	Stratigraphy USCS	Description
		0		Silty gravel with sand, dark reddish brown (baserock).
			CL	Silty clay, stiff, moist, black (disturbed fill).
			SW	Well graded sand, loose, moist, brown, with bricks and concrete, (fill).
2/11/13		5	ML	Clayey silt, stiff, moist, black, with abundant organic matter. Silt with clay, trace fine-grained sand, very stiff, moist, olive brown.
5/7/9			ML-SM	Interbedded silt, sandy silt and silty sand, silt is stiff, moist to very moist, silty sand is medium dense, moist, all soils olive brown, lenses are 3 to 4 inches thick.
4/5/7		10		
			ML	Sandy silt, trace clay, firm to stiff, very moist, olive brown.
2/4/5			SM	Silty sand, loose to medium dense, very moist to wet, olive brown, with gravel above 12 feet.
		15		TOTAL DEPTH: 12.5' (HYDROPUNCH DEPTH: 16.0')
		20		

BORING LOG

Project No. KEI-P88-1110	Boring Diameter 8.5" Casing Diameter N/A	Logged By JGG D.L. LEG 1633
Project Name Berkeley Farms 23555 Saklan Rd., Hayward	Well Cover Elevation N/A	Date Drilled June 1, 1993
Boring No. HP6	Drilling Method Hollow-stem Auger	Drilling Company Woodward Drilling

Penetration blows/6"	G. W. level	Depth (feet) Samples	Stratigraphy USCS	Description
		0		Silt, sand, and gravel, dark reddish brown, angular chert fragments in gravel (baserock).
			CL	Silty clay, stiff, moist, black.
				Clayey silt, stiff, moist, very dark grayish brown.
5/12/17		5	ML	Clayey silt, estimated at 5-10% fine-grained sand, very stiff, moist, olive brown.
				Sandy silt, stiff, moist, olive brown, sand is fine-grained.
3/5/7		10	SM	Silty sand, estimated at 20-30% silt, medium dense, very moist, olive brown, sand is predominantly fine-grained.
4/5/7				Silty sand, as above except saturated.
			ML	Sandy silt, stiff, very moist, olive brown.
		15		TOTAL DEPTH:13.5' (HYDROPUNCH DEPTH: 17.5')
		20		

BORING LOG

Project No. KEI-P88-1110	**Boring Diameter** 8.5" **Casing Diameter** N/A	**Logged By** D.L. JGG CEG 1633
Project Name Berkeley Farms 23555 Saklan Rd., Hayward	**Well Cover Elevation** N/A	**Date Drilled** June 1, 1993
Boring No. HP7	**Drilling Method** Hollow-stem Auger	**Drilling Company** Woodward Drilling

Penetration blows/6"	G. W. level	Depth (feet) Samples	Stratigraphy USCS	Description
		0		Silt, sand, and gravel (baserock).
			CL	Silty clay, stiff, moist, black, disturbed, with baserock between 2.5 and 3.5 feet.
				Clayey silt, stiff, moist, very dark grayish brown.
4/12/17		5	ML	Silt with clay, estimated at 5-10% fine-grained sand, very stiff, moist, olive brown.
				Sandy silt, firm, moist to very moist, olive brown, sand is predominantly fine-grained.
3/4/7		10	SM	Silty sand, estimated at 25-30% silt, medium dense, very moist, olive brown, sand is fine-grained.
2/3/5			ML-SM	Interbedded sandy silt and silty sand, silt is firm, wet, silty sand is loose, saturated, olive brown, lenses are 3 to 6 inches thick.
		15		TOTAL DEPTH:13' (HYDROPUNCH DEPTH: 17')
		20		