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Alameda County
Environmental Health

KEI-P89-0111.R8
August 19, 1996

Unocal Corporation
2000 Crow Canyon Place, Suite 400
P.O. Box 5155
San Ramon, California 94583

Attention: Ms. Tina R. Berry

RE: Continuing Ground Water Investigation
Unocal Service Station #5487
28250 Hesperian Boulevard
Hayward, California

FILE #	5487	SS	<input checked="" type="checkbox"/>	BP	<input type="checkbox"/>
RPT	<input checked="" type="checkbox"/>	QM	<input type="checkbox"/>	TRANSMITTAL	<input type="checkbox"/>
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Dear Ms. Berry:

This report presents the results of the recent well installation at the referenced site by Kaprealian Engineering, Inc. (KEI), per KEI's work plan/proposal (KEI-P89-0111.P4A) dated May 23, 1996. The wells are currently monitored on an annual basis. Wells MW1 through MW4 are no longer sampled, and wells MW5 and MW6 are sampled on an annual basis. The annual events occur each February.

The purpose of the additional well was to further determine the degree and extent of ground water contamination at the site. The scope of the work performed by KEI consisted of the following:

Coordination with regulatory agencies

Geologic logging of one boring for the installation of one monitoring well

Soil sampling

Ground water monitoring of all wells, and purging and sampling of the newly installed well

Laboratory analyses

Data analysis, interpretation, and report preparation

SITE DESCRIPTION AND BACKGROUND

The subject site contains a Unocal service station facility. The vicinity of the site is characterized by topography that slopes very gently to the south-southwest. The site is also located approximately 0.8 miles northwest of Alameda Creek and approximately four miles northeast of the present shoreline of San Francisco Bay. A Location Map and a Site Plan (figure 1) are attached to this report.

KEI's initial work at the site began on January 30, 1989, when KEI was retained by Unocal to collect soil samples following the removal of two 10,000 gallon underground fuel storage tanks and one 280 gallon waste oil tank. The tanks were made of steel, and no apparent holes or cracks were observed in the fuel tanks; however, the waste oil tank was corroded. Water was encountered in the fuel storage tank pit excavation at a depth of 10.5 feet below grade, thus prohibiting the collection of any soil samples from beneath these tanks.

Ten soil samples, labeled SW1 through SW6, SW2A, SW3A, SW5A, and SW6A, were collected from the sidewalls of the fuel tank pit, each approximately six inches above the water table. Three of these soil samples (SW2, SW3, and SW6) were not analyzed. Samples SW2A, SW3A, SW5A, and SW6A were collected from the sidewalls after additional excavation (see the attached Site Plan, Figure 3). One soil sample, labeled W01, was collected from beneath the waste oil tank at a depth of 9 feet below grade (see the attached Site Plan, Figure 3). After the soil sampling was completed, approximately 2,000 gallons of ground water were pumped from the fuel tank pit.

On February 1, 1989, the waste oil tank pit was excavated laterally on all sides. The side nearest the existing building was excavated approximately 1 foot laterally, while the other three sides were each excavated approximately 10 feet laterally. The pit was excavated to an area of approximately 21 feet x 29 feet. Four sidewall samples (labeled SWA, SWB, SWC, and SWD) were collected (see the attached Site Plan, Figure 4). In addition, three soil samples were collected from the pipe trenches (labeled P1, P2, and P3 on the attached Site Plan, Figure 4).

On February 14, 1989, in preparation for installation of the new fuel tanks, approximately 17,500 gallons of water were pumped from the fuel tank pit. On this date, after pumping, water samples W1A and W1B were collected.

On February 17, 1989, KEI returned to the site to observe additional excavation of the northeast sidewall of the waste oil tank pit (where sample SWC had previously been collected) for a distance of approximately 3 lateral feet. Sample SWC2 was then collected. Also on this date, water sample W0-W1 was collected from the waste oil tank pit. The water sample was collected after 4,500 gallons were pumped from the waste oil excavation. Based on the analytical results for SWC2 (680 ppm of total oil and grease [TOG]), KEI returned to the site on February 24, 1989, to observe the lateral excavation of an additional 5 feet of soil. Sample SWC3 was then collected. Soil sample point locations are shown on the attached Site Plan, Figure 4.

On March 9, 1989, KEI collected four duplicate waste oil excavation sidewall soil samples. The samples, labeled SW-AX, SW-BX, SW-C3X, and SW-DX, were collected at previously sampled point locations SWA, SWB, SWC3, and SWD, respectively. Duplicate sample point locations are as indicated on the attached Site Plan, Figure 5.

Soil and water samples were analyzed by Sequoia Analytical Laboratory in Redwood City, California, for total petroleum hydrocarbons (TPH) as gasoline, and benzene, toluene, ethylbenzene, and xylenes (BTEX). The waste oil tank pit samples were analyzed for TPH as gasoline, BTEX, TPH as diesel, and TOG (except samples SW-AX, SW-BX, SW-C3X, and SW-DX, which were analyzed for EPA method 8010 and 8270 constituents, and the metals cadmium, chromium, lead, and zinc). All pipe trench samples were analyzed for TPH as gasoline and BTEX. After additional excavation, analytical results of soil samples from the fuel tank pit showed less than 1.4 ppm of TPH as gasoline for all samples representing the final pit excavation. After additional excavation in the waste oil pit, the final soil sample analytical results showed low residual levels of hydrocarbon impaction. These final results indicated that the majority of hydrocarbon-impacted soil had been removed from the site. The results of the soil sample analyses are summarized in Tables 5 and 6, and the results of the water sample analyses are summarized in Table 4 of this report.

Based on the results of the laboratory analyses, and in order to comply with the requirements of the regulatory agencies, KEI proposed the installation of five monitoring wells. Documentation of the tank and piping removal procedures, sample collection techniques, and the analytical results of the soil and ground water samples collected in January and February of 1989, are summarized in KEI's reports (KEI-J89-0111.R2) dated March 1, 1989, and (KEI-J89-0111.R3) dated March 29, 1989.

Five two-inch diameter monitoring wells (designated as MW1 through MW5 on the attached Site Plan, Figure 1) were installed at the site on April 20 and 21, 1989. The five wells were drilled and completed to total depths ranging from 24 to 28 feet below grade. Ground water was encountered at depths ranging from 7 to 10 feet beneath the surface during drilling. The wells were developed on April 25, 1989, and were initially sampled on April 26, 1989.

Water and selected soil samples were analyzed at Sequoia Analytical Laboratory in Redwood City, California, for TPH as gasoline and BTEX. In addition, the soil samples collected from MW1 and MW2, and all the water samples, were analyzed for TPH as diesel, TOG, and EPA method 8010 compounds. Analytical results of soil samples collected from the borings for monitoring wells MW1 through MW4 showed non-detectable levels of TPH as gasoline and BTEX in all

samples, except for sample MW4(9), collected at a depth of 9 feet below grade, which showed 1.4 ppm of TPH as gasoline. The soil sample collected from MW5 at a depth of 5 feet below grade showed 900 ppm of TPH as gasoline, and 3.1 ppm of benzene. Analytical results of the water samples collected from MW1 and MW4 showed benzene levels of 2.1 ppb and 0.33 ppb, respectively. Analytical results for all other water samples indicated non-detectable levels for all constituents analyzed. The results of the soil analyses are summarized in Table 3, and the results of the water analyses are summarized in Table 2. Documentation of the well installation protocol, sample collection techniques, and the analytical results are presented in KEI's report (KEI-P89-0111.R5) dated May 18, 1989.

Subsequently, KEI proposed a monthly monitoring and quarterly sampling program for all of the wells that was initiated in June of 1989. This program was modified to quarterly monitoring and sampling as of January 1991, as recommended in KEI's quarterly report (KEI-P89-0111.QR6) dated January 4, 1991. This program was further modified by reducing the sampling frequency for wells MW1 through MW4 from quarterly to annually, as recommended in KEI's quarterly report (KEI-P89-0111.QR10) dated January 3, 1992.

A review of the Regional Water Quality Control Board (RWQCB) files was conducted in June 1991, in order to locate and gain information on nearby underground tank sites. A review of ground water elevation data from three monitoring wells at the Rotten Robbie Service Station at 27814 Hesperian Boulevard, located approximately 1,800 feet northwest of Unocal, indicated a ground water flow direction to the southwest. The analytical results of the ground water samples collected from the three wells showed elevated levels of TPH as gasoline and BTEX, and free product in one of the wells. No other underground fuel tank sites within a one-half mile radius of the subject site are known to KEI.

Because monitoring well MW5 historically had shown variable levels of hydrocarbon-impaction while wells MW1 through MW4 had shown generally non-detectable levels of hydrocarbons since April of 1989, KEI recommended the installation of two additional downgradient monitoring wells in order to determine the lateral extent of hydrocarbon-impaction in the vicinity of the site.

On June 26, 1992, one additional two-inch diameter monitoring well (designated as MW6 on the attached Site Plan, Figure 1) was installed at the site. Initially, KEI had recommended the installation of two monitoring wells. However, the City of Hayward Department of Public Works would not allow well MW7 to be installed because of the presence of underground utilities beneath the median strip.

The well was drilled and completed to a total depth of 19.5 feet below grade. Ground water was encountered at a depth of 10 feet below grade during drilling.

Well MW6 was developed on July 6, 1992, and first sampled on August 4, 1992. Water samples from all wells, and selected soil samples from the boring of MW6, were analyzed at Sequoia Analytical Laboratory in Concord, California. The results of the soil analyses are summarized in Table 3, and the results of the water analyses are summarized in Table 2. Documentation of the well installation protocol, sample collection techniques, and the analytical results are presented in KEI's report (KEI-P89-0111.R6) dated August 26, 1992.

RECENT FIELD ACTIVITIES

On June 21, 1996, one additional two-inch diameter monitoring well (designated as MW7 on the attached Figure 1) was installed at the site. The well was drilled, constructed, and completed in accordance with the guidelines of the RWQCB and the California Well Standards (per Bulletin 74-90). The subsurface materials penetrated and details of the construction of the well are described in the attached Boring Log and Well Construction Diagram, respectively.

The boring for well MW7 was sampled to 20 feet and was completed to a total depth of 19 feet below grade. Ground water was encountered at 15 feet below grade during drilling. 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, at obvious areas of contamination, and at or within the soil/ground water interface, beginning at a depth of 4.5 feet below grade and continuing until ground water was encountered. Other soil sampling conducted below the ground water table was for lithologic logging purposes only. 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 Teflon-lined plastic caps, labeled, and placed in individually sealed plastic bags, which were then stored in a cooler, on ice, until delivery to a state-certified laboratory.

The well casing was installed with a watertight cap and padlock. A round, watertight, flush-mounted well cover was cemented in place over the well casing. The surface of the well cover and casing was surveyed by Kier & Wright of Pleasanton, California, to Mean Sea Level (MSL) and to a vertical accuracy of 0.01 foot.

The new well was developed on July 9, 1996. Prior to development, the well was checked for the depth to the water table (by the use of an electronic sounder) and the presence of free product (by the use of an interface probe). No free product was noted in the well. After recording the monitoring data, the new well was purged (by the use of a surface pump) of 173 gallons of water until the evacuated water was clear and free of visible suspended sediment. Monitoring and well development data are summarized in Table 1.

The new and existing wells were monitored and well MW7 was sampled on July 30, 1996. Prior to sampling, the well was checked for depth to water, and the presence of free product and sheen. No free product or sheen was noted in any of the wells. After recording the monitoring data, well MW7 was purged of 9 gallons of water by the use of a surface pump. Once a minimum of approximately four casing volumes had been removed from the well, a water sample was collected by the use of a clean Teflon bailer. The sample was decanted into clean VOA vials, which were then sealed with Teflon-lined screw caps, labeled, and stored in a cooler on ice until delivery to a state-certified laboratory.

ANALYTICAL RESULTS

Water and selected soil samples from MW7 were analyzed at Sequoia Analytical Laboratory. All samples analyzed were accompanied by properly executed Chain of Custody documentation. The samples were analyzed for TPH as gasoline by EPA method 5030/modified 8015, and BTEX by EPA method 8020. In addition, the water sample collected from MW7 was analyzed for methyl tert butyl ether (MTBE).

The results of the soil analyses are summarized in Table 3, 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

On July 30, 1996, the measured depth to ground water in the monitoring wells ranged from 6.41 to 7.51 feet below grade. The ground water flow direction appeared to be to the southwest, as shown on the attached Figure 2. The hydraulic gradient at the site on July 30, 1996, was approximately 0.01 foot based on the water level data collected from the monitoring wells.

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 typically consists of unconsolidated, moderately sorted sand and silt materials with local gravel lenses. In addition, the site is situated closely adjacent to a mapped geologic contact with Holocene-age medium-grained alluvium (Qham), which is described as typically consisting of unconsolidated fine sand, silt, and clayey silt, with a trace of coarse sand.

The results of our previous subsurface investigation (the borings for MW1 through MW7) indicate that the site is predominantly underlain by sandy to silty clay. However, in the vicinity of MW1 and MW4, the relatively thick sequence of clay materials are underlain by a clayey sand bed at a depth of about 23 to 24 feet below grade, and extending to the maximum depth explored (28 feet below grade). Clayey sand materials were not encountered in MW2, MW3, or MW5.

DISCUSSION AND RECOMMENDATIONS

Based on the analytical results, KEI recommends the continuation of the current monitoring and sampling program of the existing wells, per KEI's letter dated July 31, 1996, with the addition of well MW7 to the annual program.

The current monitoring and sampling program was originally recommended in Pacific Environmental Group, Inc's. Non-Attainment Area Management Plan (NAA) dated September 20, 1995, for the subject site. The NAA was submitted to the Alameda County Health Care Services (ACHCS) Agency, the City of Hayward Fire Department, and the RWQCB, San Francisco Bay Region, for approval.

The compliance monitoring program of the NAA plan identified monitoring wells MW5 and MW6 as the containment monitoring locations. These wells were proposed to be monitored and sampled annually for three years for TPH as gasoline and BTEX. The other wells (MW1 through MW4) were proposed to be dropped from the monitoring and sampling program.

In summary, KEI recommends monitoring wells MW5, MW6, and MW7 be monitored and sampled annually in February for a period of two years. The results of the monitoring program will be documented and evaluated after each monitoring and sampling event, which will occur each February. Recommendations for altering or terminating the program will be made as warranted.

DISTRIBUTION

Copies of this report should be sent to the ACHCS, to the City of Hayward Fire Department, and to the RWQCB, 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.

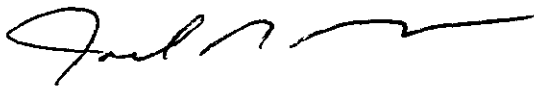
The results of this study are based on the data obtained from the field and laboratory analyses obtained from a state-certified laboratory. We have analyzed this data using what we believe to be currently applicable engineering techniques and principles in the Northern California region. We make no warranty, 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.

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

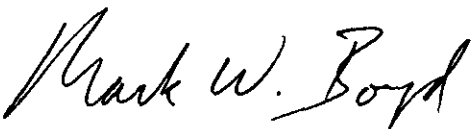
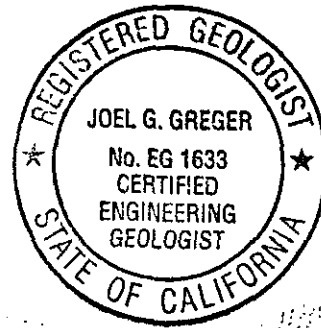
Sincerely,

Kaprealian Engineering, Inc.



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

License No. EG 1633
Exp. Date 8/31/98



Mark W. Boyd
Project Engineer

/bp:jad

Attachments: Tables 1 through 6
Location Map
Figures 1 through 5
Boring Log
Laboratory Analyses
Chain of Custody documentation

TABLE 1
 SUMMARY OF MONITORING DATA

<u>Well No.</u>	<u>Ground Water Elevation (feet)</u>	<u>Depth to Water (feet)</u>	<u>Total Well Depth (feet)</u>	<u>Product Thickness (feet)</u>	<u>Sheen</u>	<u>Water Purged (gallons)</u>
(All Wells Monitored, and Well MW7 Sampled on July 30, 1996)						
MW1	5.19	6.54	27.24	0	No	0
MW2	5.07	7.51	23.78	0	No	0
MW3	5.10	6.89	24.41	0	No	0
MW4	4.91	6.67	24.58	0	No	0
MW5	4.38	6.41	24.12	0	No	0
MW6	4.56	6.62	18.02	0	No	0
MW7	2.36	7.03	19.23	0	No	9

(Developed and Monitored on July 9, 1992)

MW7	2.31	7.08	19.60	0	--	173
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<u>Well #</u>	<u>Well Casing Elevation (feet)*</u>
MW1	11.73
MW2	12.58
MW3	11.99
MW4	11.58
MW5	10.79
MW6	11.18
MW7	9.39

-- Sheen determination was not performed.

* The elevations of the tops of the well casings have been surveyed relative to MSL, per Standard City Brass Cap in monument box at the intersection of Hesperian Blvd. and Catalpa Way (elevation = 10.97 MSL).

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TABLE 2
 SUMMARY OF LABORATORY ANALYSES
 WATER

<u>Sample Well #</u>	<u>Date</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-benzene</u>	<u>Xylenes</u>	<u>MTBE</u>
MW1	2/02/96	SAMPLED ANNUALLY					
	11/06/95	SAMPLED ANNUALLY					
	8/03/95	ND	ND	ND	ND	ND	--
	5/02/95	SAMPLED ANNUALLY					
	2/01/95	SAMPLED ANNUALLY					
	11/02/94	SAMPLED ANNUALLY					
	8/02/94	ND	ND	ND	ND	ND	--
	8/05/93	ND	ND	ND	ND	ND	--
	8/04/92	ND	ND	ND	ND	ND	--
	11/07/91	ND	ND	ND	ND	ND	--
	8/02/91	ND	ND	ND	ND	ND	--
	5/10/91	ND	ND	ND	ND	ND	--
	2/11/91*	ND	ND	ND	ND	ND	--
	11/15/90*	ND	ND	ND	ND	ND	--
	8/29/90*	ND	ND	ND	ND	0.74	--
	5/16/90*	ND	ND	ND	ND	ND	--
	2/16/90*	ND	ND	ND	ND	ND	--
	11/14/89*	ND	ND	ND	ND	ND	--
	8/16/89**	ND	ND	ND	ND	ND	--
	4/26/89*	ND	2.1	ND	ND	ND	--
MW2	2/02/96	SAMPLED ANNUALLY					
	11/06/95	SAMPLED ANNUALLY					
	8/03/95	ND	ND	ND	ND	ND	--
	5/02/95	SAMPLED ANNUALLY					
	2/01/95	SAMPLED ANNUALLY					
	11/02/94	SAMPLED ANNUALLY					
	8/02/94	ND	ND	ND	ND	ND	--
	8/05/93	ND	ND	ND	ND	ND	--
	8/04/92	ND	ND	ND	ND	ND	--
	11/07/91	ND	ND	ND	ND	ND	--
	8/02/91	ND	ND	ND	ND	ND	--
	5/10/91	ND	ND	ND	ND	ND	--
	2/11/91	ND	ND	ND	ND	ND	--
	11/15/90	ND	ND	ND	ND	ND	--
	8/29/90	ND	ND	ND	ND	ND	--
	5/16/90*	ND	ND	ND	ND	ND	--
	2/16/90	ND	ND	ND	ND	ND	--
	11/14/89*	ND	ND	ND	ND	ND	--
	8/16/89**	ND	ND	ND	ND	ND	--
	4/26/89*	ND	ND	ND	ND	ND	--

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TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES
 WATER

<u>Sample Well #</u>	<u>Date</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-benzene</u>	<u>Xylenes</u>	<u>MTBE</u>
MW3	2/02/96	SAMPLED	ANNUALLY				
	11/06/95	SAMPLED	ANNUALLY				
	8/03/95	ND	ND	ND	ND	ND	--
	5/02/95	SAMPLED	ANNUALLY				
	2/01/95	SAMPLED	ANNUALLY				
	11/02/94	SAMPLED	ANNUALLY				
	8/02/94	ND	ND	ND	ND	ND	--
	8/05/93	SAMPLED	ANNUALLY				
	8/04/92	ND	ND	ND	ND	ND	--
	11/07/91	ND	ND	ND	ND	ND	--
	8/02/91	ND	ND	ND	ND	ND	--
	5/10/91	ND	ND	ND	ND	ND	--
	2/11/91	ND	ND	ND	ND	ND	--
	11/15/90	ND	ND	ND	ND	ND	--
	8/29/90	ND	ND	0.52	ND	ND	--
	5/16/90	ND	ND	ND	ND	ND	--
	2/16/90	ND	ND	ND	ND	ND	--
	11/14/89	ND	ND	ND	ND	ND	--
	8/16/89	ND	ND	ND	ND	ND	--
	4/26/89*	ND	ND	ND	ND	ND	--
MW4	2/02/96	SAMPLED	ANNUALLY				
	11/06/95	SAMPLED	ANNUALLY				
	8/03/95	ND	ND	ND	ND	ND	--
	5/02/95	SAMPLED	ANNUALLY				
	2/01/95	SAMPLED	ANNUALLY				
	11/02/94	SAMPLED	ANNUALLY				
	8/02/94	ND	ND	ND	ND	ND	--
	8/05/93	ND	ND	ND	ND	ND	--
	8/04/92	ND	ND	ND	ND	ND	--
	11/07/91	ND	ND	ND	ND	ND	--
	8/02/91	ND	ND	ND	ND	ND	--
	5/10/91	ND	ND	ND	ND	ND	--
	2/11/91	ND	ND	ND	ND	ND	--
	11/15/90	ND	ND	ND	ND	ND	--
	8/29/90	ND	ND	ND	ND	ND	--
	5/16/90	ND	ND	ND	ND	ND	--
	2/16/90	ND	ND	ND	ND	ND	--
	11/14/89	ND	ND	ND	ND	ND	--
	8/16/89	ND	ND	ND	ND	ND	--
	4/26/89*	ND	0.33	ND	ND	ND	--

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TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

<u>Sample Well #</u>	<u>Date</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl- benzene</u>	<u>Xylenes</u>	<u>MTBE</u>
MW5	2/02/96	64	20	ND	3.9	6.1	150
	11/06/95	160	80	ND	7.4	10	120
	8/03/95	ND	12	ND	0.70	ND	--
	5/02/95	ND	7.5	0.51	1.2	1.6	--
	2/01/95	170	11	ND	2.4	3.9	--
	11/02/94	450	73	1.6	6.2	11	--
	8/02/94	59	16	ND	2.4	3.1	--
	5/02/94	170♦	38	0.73	8.5	8.4	--
	2/07/94	180	22	ND	6.4	5.9	--
	11/05/93	110	12	ND	2.3	2.3	--
	8/05/93	530	210	0.62	54	44	--
	5/03/93	260	35	ND	2.3	3.1	--
	2/02/93	77♦	5.0	ND	1.2	1.3	--
	11/05/92	120	16	ND	3.5	3.0	--
	8/04/92	80	13	ND	4.5	6.9	--
	5/05/92	170	45	0.48	9.0	6.8	--
	2/05/92	120	20	ND	4.4	4.7	--
	11/07/91	700	43	1.7	29	24	--
	8/02/91	100	43	0.33	12	5.2	--
	5/10/91	ND	ND	ND	ND	ND	--
	2/11/91	58	23	ND	2.9	1.3	--
	11/15/90	ND	ND	ND	ND	0.47	--
	8/29/90	ND	0.70	ND	0.57	1.1	--
	5/16/90	1,100	310	2.8	70	110	--
	2/16/90	ND	ND	ND	ND	ND	--
	11/14/89	73	4.7	0.97	2.9	16	--
	8/31/89	910	120	7.1	50	53	--
	8/16/89	4,400	1,400	84	200	950	--
	4/26/89*	ND	ND	ND	ND	ND	--
MW6	2/02/96	300	51	0.65	30	18	280
	11/06/95	210	17	0.66	14	37	130
	8/03/95	ND	0.76	ND	ND	ND	--
	5/02/95	ND	5.7	ND	0.81	1.1	--
	2/01/95	340	26	0.77	2.6	7.0	--
	11/02/94	840	30	2.5	26	57	--
	8/02/94	220	13	1.0	12	28	--
	5/02/94	440♦	20	4.2	11	26	--
	2/07/94	1,100	130	14	13	130	--
	11/05/93	100	1.8	ND	0.79	2.2	--
	8/05/93	230	25	1.6	12	29	--
	5/03/93	520	47	2.6	33	48	--

TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

<u>Sample Well #</u>	<u>Date</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-benzene</u>	<u>Xylenes</u>	<u>MTBE</u>
MW6	2/02/93	400♦	66	5.5	32	13	--
(Con't)	11/05/92	300	16	2.3	14	14	--
	8/04/92	540	12	7.9	35	110	--
MW7	7/30/96	ND	ND	ND	ND	ND	ND
MWD▲	5/10/91	ND	ND	ND	ND	ND	--

♦ Sequoia Analytical Laboratory reported that the hydrocarbons detected appear to be a gasoline and non-gasoline mixture.

▲ MWD was a quality assurance duplicate water sample collected from well MW5.

* TPH as Diesel, Total Oil & Grease and all EPA method 8010 constituents were non-detectable.

** TOG for the samples collected from MW1 and MW2 were 23 milligrams per liter (mg/L) and 7.4 mg/L, respectively. TPH as Diesel and all EPA method 8010 constituents were non-detectable for both samples.

ND = Non-detectable.

-- Indicates that analysis was not performed.

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

NOTE: The detection limit for results reported as ND by Sequoia Analytical Laboratory is equal to the stated detection limit times the dilution factor indicated on the laboratory analytical sheets.

Prior to August 1, 1995, the total purgeable petroleum hydrocarbon (TPH as gasoline) quantification range used by Sequoia Analytical Laboratory was C4 - C12. Since August 1, 1995, the quantification range used by Sequoia Analytical Laboratory is C6 - C12.

KEI-P89-0111.R8
August 19, 1996

TABLE 3

SUMMARY OF LABORATORY ANALYSES
SOIL

<u>Date</u>	<u>Sample Number</u>	<u>Depth (feet)</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-benzene</u>	<u>Xylenes</u>
4/20/89	MW1*	5.0	ND	ND	ND	ND	ND
	MW2*	5.0	ND	ND	ND	ND	ND
	MW3	5.0	ND	ND	ND	ND	ND
	MW3	9.0	ND	ND	ND	ND	ND
	MW4	5.0	ND	ND	ND	ND	ND
	MW4	9.0	1.4	ND	ND	ND	ND
	MW5	5.0	900	3.1	3.1	30	110
	MW5	9.0	ND	ND	ND	ND	ND
6/26/92	MW6(5)	5.0	290	1.2	1.6	7.5	41
	MW6(7.5)	7.5	410	1.9	10	15	89
	MW6(9.5)	9.5	ND	ND	0.019	0.015	0.079
6/21/96	MW7(5)	ND	ND	ND	ND	ND	ND
	MW7(10)	ND	ND	ND	ND	ND	ND
	MW7(14.5)	ND	ND	ND	ND	ND	ND

* TPH as diesel, TOG, and all EPA method 8010 constituents were non-detectable.

ND = Non-detectable.

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

KEI-P89-0111.R8
August 19, 1996

TABLE 4
SUMMARY OF LABORATORY ANALYSES
WATER

<u>Date</u>	<u>Sample Well #</u>	<u>TPH as Diesel</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethyl-benzene</u>
2/14/89	W1A	110	--	2.2	0.55	ND	12
	W1B*	--	--	--	--	--	--
2/17/89	WO-W1+	1,300	500	52	8.6	9.2	100

-- Indicates analysis was not performed.

ND = Non-detectable.

* All EPA method 601 constituents were non-detectable.

+ TOG and all EPA method 601 constituents were non-detectable.

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

KEI-P89-0111.R8
August 19, 1996

TABLE 5

SUMMARY OF LABORATORY ANALYSES
SOIL

(Collected on January 30, and February 2, 14 & 17, 1989)

<u>Sample #</u>	<u>Depth (feet)</u>	<u>TPH as Gasoline</u>	<u>TPH as Diesel</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl- benzene</u>	<u>Xylenes</u>
SW1	10.0	1.4	--	0.14	ND	ND	ND
SW2A	10.0	1.1	--	ND	ND	ND	ND
W3A	10.0	ND	--	ND	ND	ND	ND
SW4	10.0	ND	--	ND	ND	ND	ND
SW5	10.0	130	--	1.1	4.6	3.7	18
SW5A	10.0	ND	--	ND	ND	ND	ND
SW6A	10.0	ND	--	ND	ND	ND	ND
P1	3.5	7.8	--	2.0	ND	0.53	2.4
P2	3.5	12	--	1.9	0.91	3.0	0.70
P3	3.5	11	--	0.37	0.36	1.7	0.29
SWA*	10.0	ND	1.0	ND	ND	ND	ND
SWB*	10.0	1.1	2.4	ND	ND	ND	ND
SWC*	10.0	110	180	0.68	ND	1.9	5.6
SWC2*	10.0	89	57	ND	ND	0.76	0.42
SWC3*	10.0	ND	ND	ND	ND	ND	ND
SWD*	10.0	ND	ND	ND	ND	ND	ND
WO1**	9.0	60	800	3.6	9.2	2.5	9.5

* TOG for SWA was 35 ppm, SWB was 44 ppm, SWC was 500 ppm, SWC2 was 680 ppm, SWC3 was non-detectable, and SWD was 77 ppm.

** TOG for WO1 was 1,900 ppm; cadmium was 0.3 ppm; chromium was 39 ppm; lead was 10 ppm, and zinc was 42 ppm. Seventeen EPA method 8270 compounds and two EPA method 8010 compounds were detected at concentrations ranging from 100 ppb to 10,000 ppb.

-- Indicates analysis was not performed.

ND = Non-detectable.

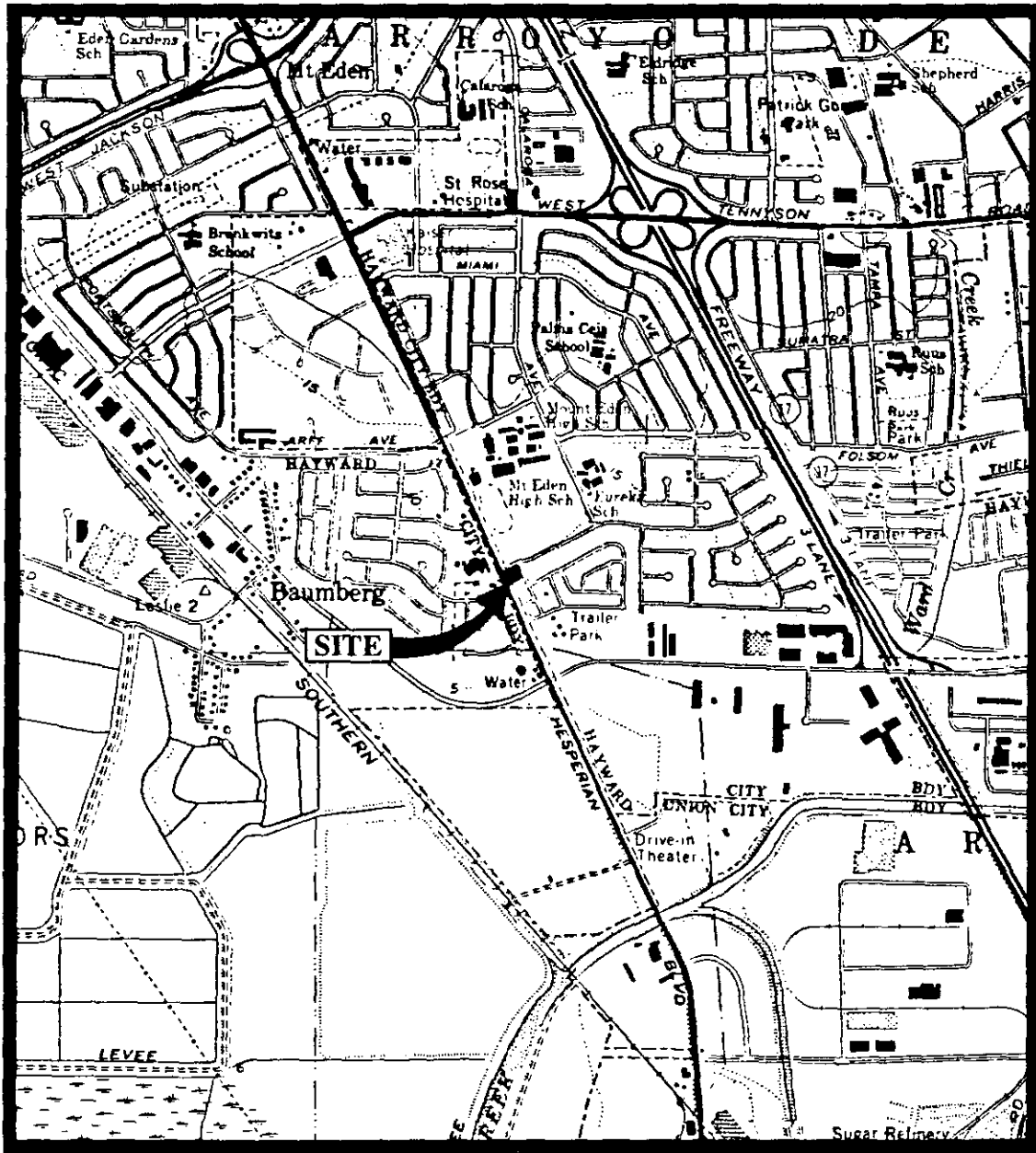
Results in parts per million (ppm), unless otherwise indicated.

KEI-P89-0111.R8
August 19, 1996

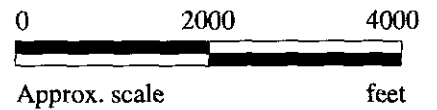
TABLE 6
SUMMARY OF LABORATORY ANALYSES
SOIL

<u>Date</u>	<u>Sample Number</u>	<u>Cadmium</u>	<u>Chromium</u>	<u>Lead</u>	<u>Zinc</u>
3/09/89	SW-AX*	0.2	96	4.7	35
	SW-BX*	0.16	91	5.1	29
	SW-C3X*	0.33	140	6.8	41
	SW-DX*	0.19	92	4.8	32

* All EPA method 8010 and 8270 constituents were non-detectable.
Results in parts per million (ppm), unless otherwise indicated.



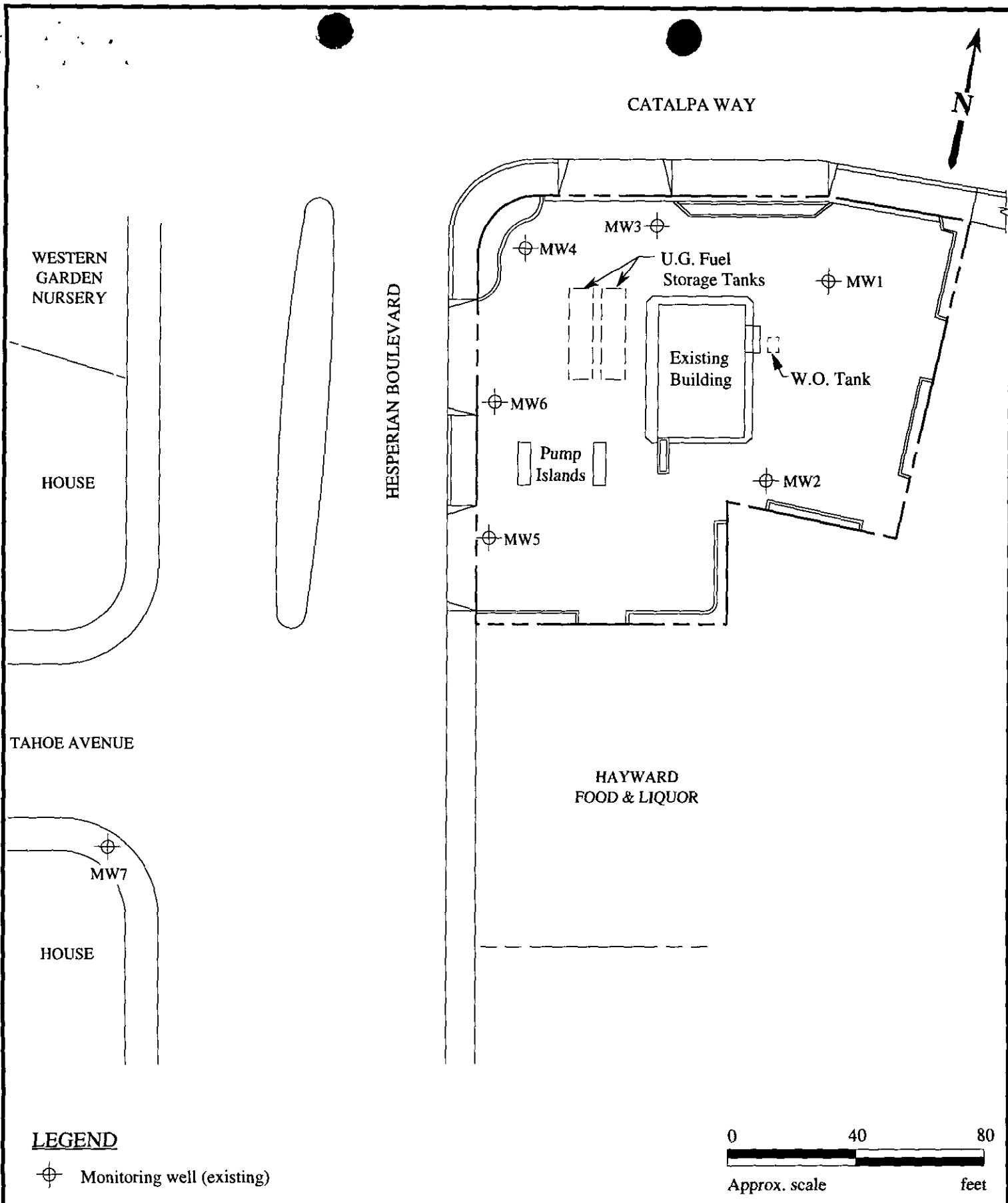
Base modified from 7.5 minute U.S.G.S.
 Hayward & Newark Quadrangles
 (both photorevised 1980)



**KAPREALIAN ENGINEERING
 INCORPORATED**

**UNOCAL SERVICE STATION #5487
 28250 HESPERIAN BOULEVARD
 HAYWARD, CALIFORNIA**

**LOCATION
 MAP**

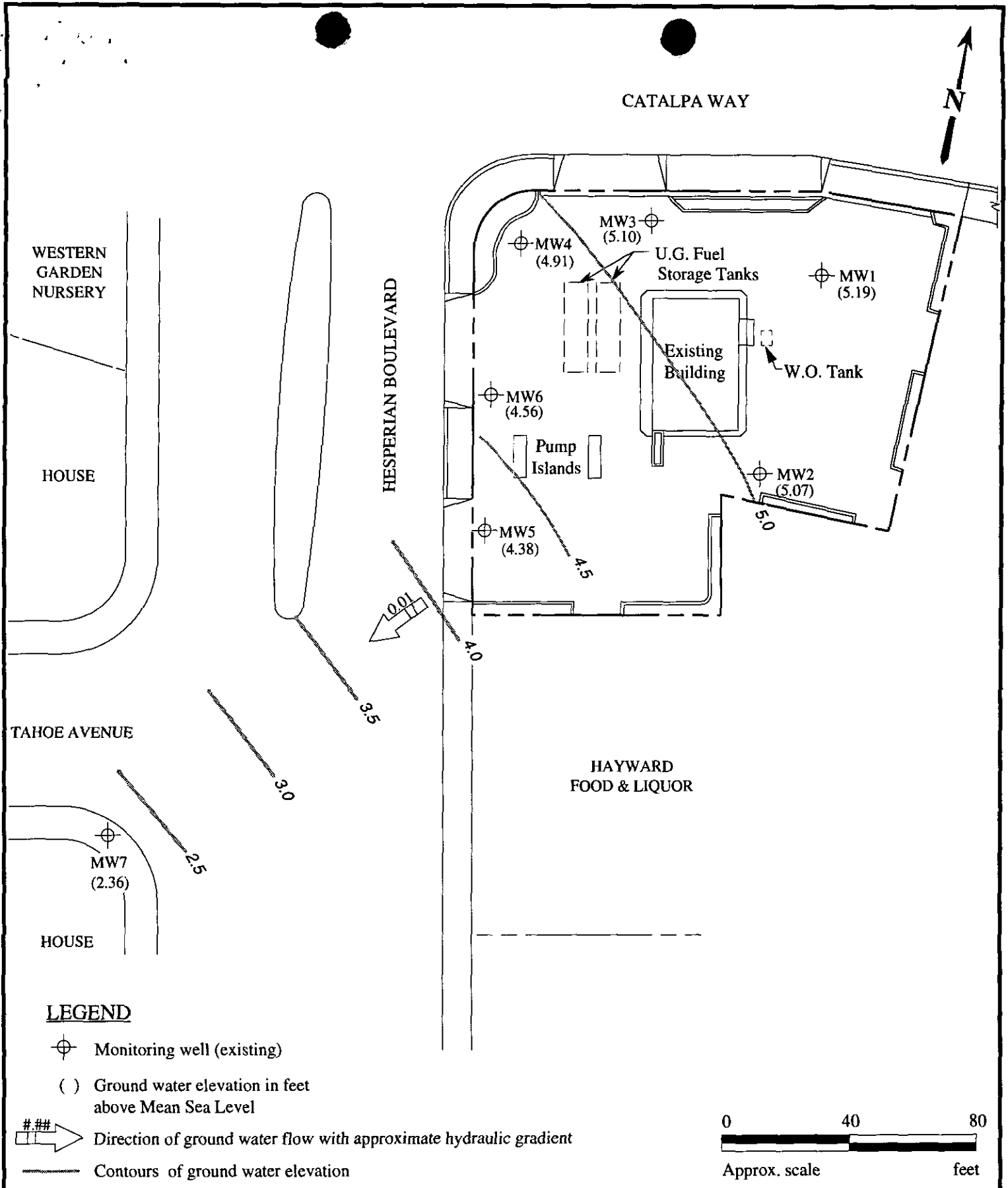


SITE PLAN

**KAPREALIAN ENGINEERING
INCORPORATED**

**UNOCAL SERVICE STATION #5487
28250 HESPERIAN BOULEVARD
HAYWARD, CALIFORNIA**

**FIGURE
1**

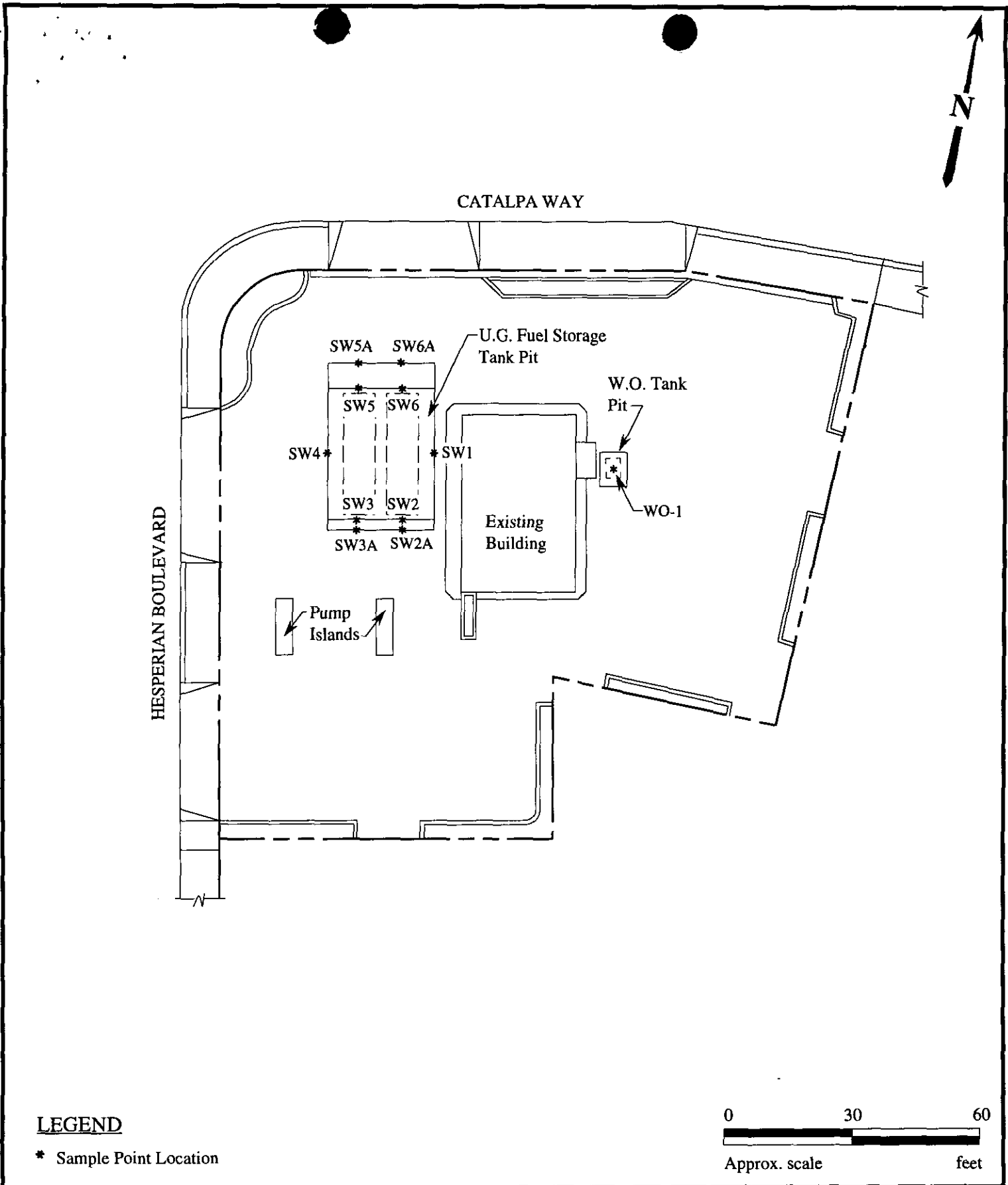


POTENTIOMETRIC SURFACE MAP FOR THE JULY 30, 1996 MONITORING EVENT

**KAPREALIAN ENGINEERING
INCORPORATED**

**UNOCAL SERVICE STATION #5487
28250 HESPERIAN BOULEVARD
HAYWARD, CALIFORNIA**

**FIGURE
2**

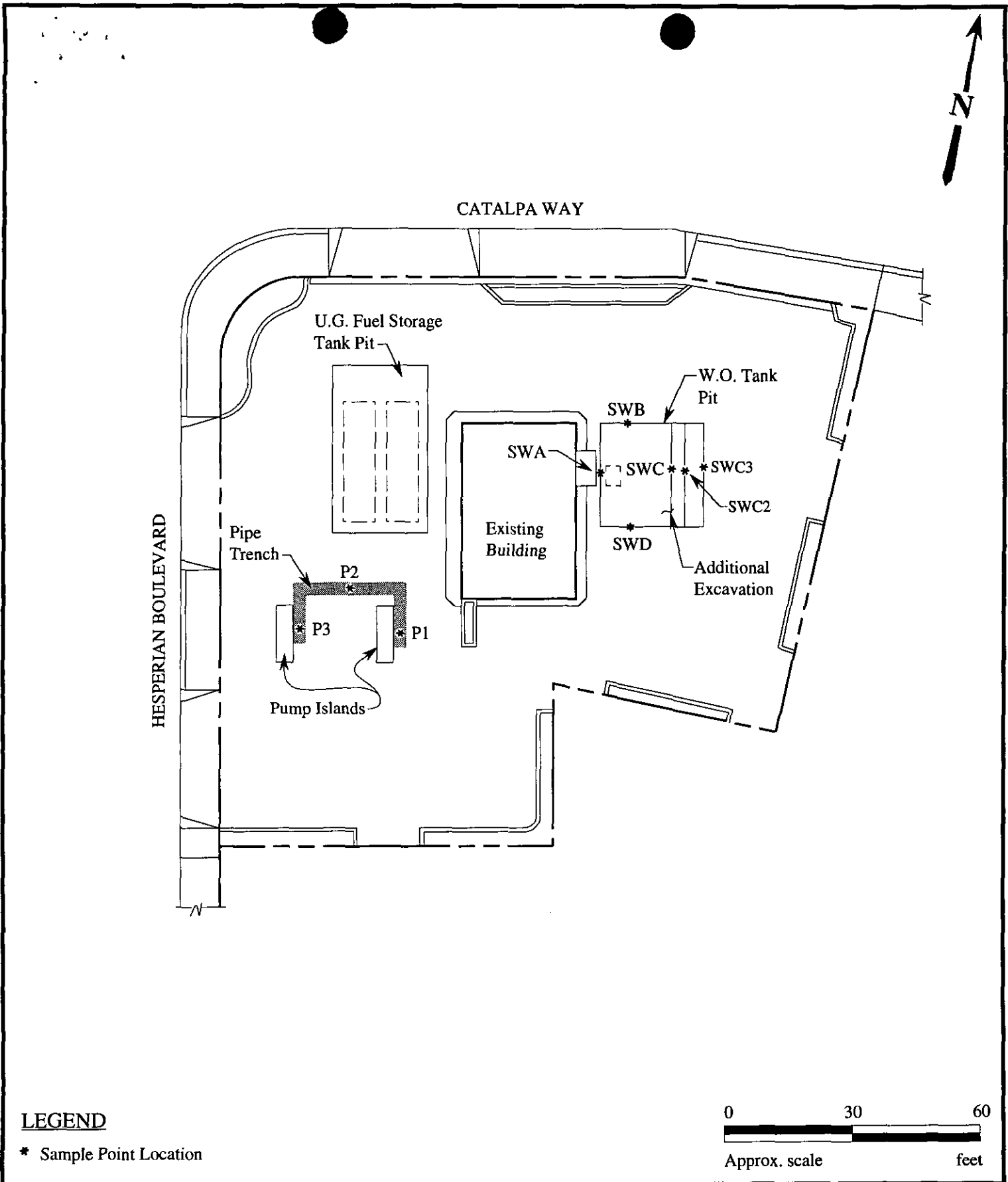


SAMPLE POINT LOCATION MAP

**KAPREALIAN ENGINEERING
INCORPORATED**

UNOCAL SERVICE STATION #5487
28250 HESPERIAN BOULEVARD
HAYWARD, CALIFORNIA

FIGURE
3

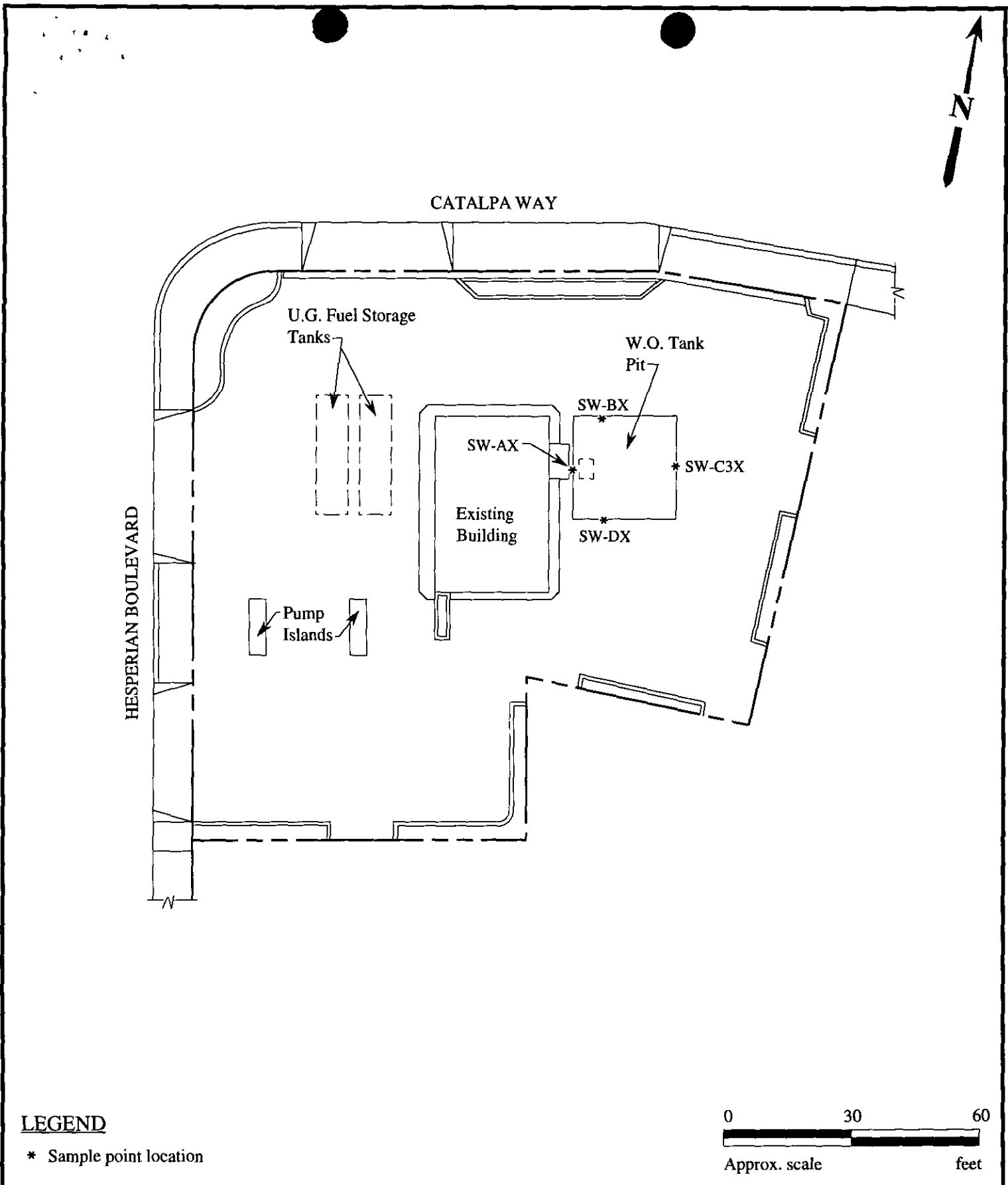


SAMPLE POINT LOCATION MAP


**KAPREALIAN ENGINEERING
 INCORPORATED**

**UNOCAL SERVICE STATION #5487
 28250 HESPERIAN BOULEVARD
 HAYWARD, CALIFORNIA**

**FIGURE
 4**



SAMPLE POINT LOCATION MAP


**KAPREALIAN ENGINEERING
 INCORPORATED**

**UNOCAL SERVICE STATION #5487
 28250 HESPERIAN BOULEVARD
 HAYWARD, CALIFORNIA**

**FIGURE
 5**

BORING LOG

Project No. KEI-P89-0111.P4A		Boring Diameter 8.75" Casing Diameter 2"		Logged By JGG T.S. CEG/633		
Project Name Unocal S/S # 5487 28250 Hesperian Blvd., Hayward		Well Cover Elevation N/A		Date Drilled 6/21/96		
Boring No. MW7		Drilling Method Hollow-stem Auger		Drilling Company Woodward Drilling		
Penetration blows/6"	G.W. level	O.V.M. (ppm)	Depth (feet) Samples	Stratigraphy USCS	Description	
			0		Concrete over base gravel.	
					Clayey silt, disturbed (fill).	
4/5/7			5	CL	Clay, estimated at 10-15% fine to coarse-grained sand and 10-15% gravel to 1/2 inch in diameter, stiff, moist, dark olive brown, roots.	
6/7/9					Clay, as above.	
5/7/11						Clay, as above.
5/8/12			10			Sandy clay, estimated at 20-30% fine to medium-grained sand, stiff to very stiff, moist, very dark gray, shells.
4/10/11						Sandy clay, as above.
5/9/16	▽		15		Clayey sand, estimated at 30-40% predominantly fine to medium-grained sand, medium dense, moist to slightly wet, olive brown.	
3/4/4				ML	Silty sand, estimated at 30-40% predominantly fine-grained sand and 30-40% silt, loose, saturated, olive.	
			20		TOTAL DEPTH: 20'	

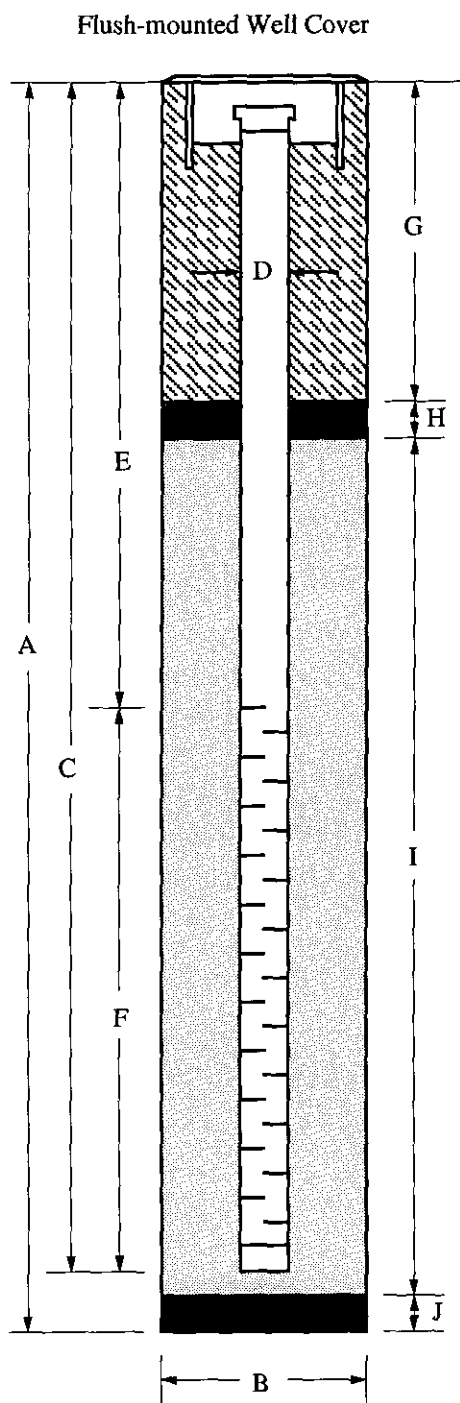
WELL CONSTRUCTION DIAGRAM

PROJECT NAME: Unocal S/S #5487, 28250 Hesperian Blvd., Hayward

WELL NO.: MW7

PROJECT NUMBER: KEI-P89-0111.P4A

WELL PERMIT NO.: Zone 7 #96431



- A. Total Depth : 20'
- B. Boring Diameter: 8.75"
Drilling Method: Hollow Stem Auger
- C. Casing Length: 19'
Material: Schedule 40 PVC
- D. Casing Diameter: OD = 2.375"
ID = 2.067"
- E. Depth to Perforations: 3.5'
- F. Perforated Length: 15.5'
Perforation Type: Machine Slotted
Perforation Size: 0.010"
- G. Surface Seal: 2'
Seal Material: Neat Cement
- H. Seal: 1'
Seal Material: Bentonite
- I. Filter Pack: 16'
Pack Material: RMC Lonestar Sand
Size: #2/12
- J. Bottom Seal: 1'
Seal Material: Bentonite



Sequoia Analytical

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Kaprealian Engineering, Inc.
2401 Stanwell Dr., Ste. 400
Concord, CA 94520
Attention: Dennis Royce

Client Project ID: Unocal #5487, 28250 Hesperian Blvd.,
Sample Matrix: Soil Hayward
Analysis Method: EPA 5030/8015 Mod./8020
First Sample #: 606-2058

Sampled: Jun 21, 1996
Received: Jun 22, 1996
Reported: Jul 9, 1996

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 606-2058 MW-7 (5)	Sample I.D. 606-2059 MW-7 (10)	Sample I.D. 606-2060 MW-7 (14.5)
Purgeable Hydrocarbons	1.0	N.D.	N.D.	N.D.
Benzene	0.0050	N.D.	N.D.	N.D.
Toluene	0.0050	N.D.	N.D.	N.D.
Ethyl Benzene	0.0050	N.D.	N.D.	N.D.
Total Xylenes	0.0050	N.D.	N.D.	N.D.
Chromatogram Pattern:		--	--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0
Date Analyzed:	7/3/96	7/3/96	7/3/96
Instrument Identification:	HP-4	HP-4	HP-4
Surrogate Recovery, %: (QC Limits = 70-130%)	104	103	101

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

SEQUOIA ANALYTICAL, #1271


Alan B. Kemp
Project Manager





Sequoia Analytical

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 404 N. Wiget Lane Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673
 819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

Kaprealian Engineering, Inc. Client Project ID: Unocal #5487, 28250 Hesperian Blvd., Hayward
 2401 Stanwell Dr., Ste. 400 Matrix: Solid
 Concord, CA 94520
 Attention: Dennis Royce QC Sample Group: 6062058-060 Reported: Jul 12, 1996

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	S. Chullakorn	S. Chullakorn	S. Chullakorn	S. Chullakorn

MS/MSD	Benzene	Toluene	Ethyl Benzene	Xylenes
Batch#:	6062098	6062098	6062098	6062098
Date Prepared:	7/3/96	7/3/96	7/3/96	7/3/96
Date Analyzed:	7/3/96	7/3/96	7/3/96	7/3/96
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
Matrix Spike % Recovery:	108	113	115	117
Matrix Spike Duplicate % Recovery:	100	103	105	108
Relative % Difference:	7.2	9.3	9.1	7.4

LCS Batch#:	Benzene	Toluene	Ethyl Benzene	Xylenes
LCS Batch#:	4LCS070396	4LCS070396	4LCS070396	4LCS070396
Date Prepared:	7/3/96	7/3/96	7/3/96	7/3/96
Date Analyzed:	7/3/96	7/3/96	7/3/96	7/3/96
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
LCS % Recovery:	95	95	95	93

% Recovery Control Limits:	Benzene	Toluene	Ethyl Benzene	Xylenes
% Recovery Control Limits:	50-150	50-150	50-150	50-150

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.

SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
 Project Manager



Consultant Company: Kaplan Engineering, Inc. Project Name: 28250 Hesperian Blvd., Hayward
 Address: 2401 Swanwell Dr., Suite 400 UNOCAL Project Manager: Tina Berry
 City: Lennox State: CA Zip Code: 94520 AFE #:
 Telephone: (510) 602-5100 FAX #: (510) 687-0602 Site #, City, State: # 5487, Hayward, CA
 Report To: Dennis Sampler: Tom Seeliger QC Data: Level D (Standard) Level C Level B Level A

Turnaround 10 Work Days 5 Work Days 3 Work Days
 Time: 2 Work Days 1 Work Day 2-8 Hours
 CODE: Misc. Detect. Eval. Remed. Demol. Closure

Drinking Water Waste Water Other
 Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Laboratory Sample #	TPH-19 BTEX				Comments
1. MW7(5)	6/21/96	soil	1	tube		x	x	6062058		
2. MW7(10)	↓	↓	↓	↓		↓	↓	6062059		
3. MW7(14.5)	↓	↓	↓	↓		↓	↓	6062060		
4.										
5.										
6.										
7.										
8.										
9.										
10.										

Relinquished By: <u>[Signature]</u>	Date: <u>6/22/96</u>	Time: <u>1:50 PM</u>	Received By: <u>[Signature]</u>	Date: <u>6-25</u>	Time: <u>1400</u>
Relinquished By: <u>[Signature]</u>	Date: <u>6-25</u>	Time:	Received By: <u>[Signature]</u>	Date: <u>6/25</u>	Time: <u>1700</u>
Relinquished By: <u>[Signature]</u>	Date: <u>6/25/96</u>	Time: <u>0850</u>	Received By Lab: <u>[Signature]</u>	Date: <u>6/27/96</u>	Time: <u>13:30</u>

Were Samples Received in Good Condition? Yes No Samples on Ice? Yes No Method of Shipment _____ Page ___ of ___

To be completed upon receipt of report:
 1) Were the analyses requested on the Chain of Custody reported? Yes No If no, what analyses are still needed? _____
 2) Was the report issued within the requested turnaround time? Yes No If no, what was the turnaround time? _____
 Approved by: _____ Signature: _____ Company: _____ Date: _____

Pink - Client
 Yellow - Laboratory
 White - Laboratory



**Sequoia
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FAX (916) 921-0100

MPDS Services 2401 Stanwell Dr., Ste. 300 Concord, CA 94520 Attention: Jarrel Crider	Client Project ID: Unocal #5487, 28250 Hesperian Blvd. Matrix Descript: Water Analysis Method: EPA 5030/8015 Mod./8020 First Sample #: 608-0075	Hayward	Sampled: Jul 30, 1996 Received: Jul 30, 1996 Reported: Aug 6, 1996
---	--	---------	--

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Sample Number	Sample Description	Purgeable Hydrocarbons µg/L	Benzene µg/L	Toluene µg/L	Ethyl Benzene µg/L	Total Xylenes µg/L	MTBE µg/L
608-0075	MW-7	ND	ND	ND	ND	ND	ND

Detection Limits:	50	0.50	0.50	0.50	0.50	5.0
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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





**Sequoia
Analytical**

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FAX (510) 988-9673
FAX (916) 921-0100

MPDS Services	Client Project ID: Unocal #5487, 28250 Hesperian Blvd.	Sampled: Jul 30, 1996
2401 Stanwell Dr., Ste. 300	Matrix Descript: Water	Received: Jul 30, 1996
Concord, CA 94520	Analysis Method: EPA 5030/8015 Mod./8020	Reported: Aug 6, 1996
Attention: Jarrel Crider	First Sample #: 608-0075	

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
608-0075	MW-7	--	1.0	8/5/96	HP-11	97

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager





Sequoia Analytical

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(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: Jarrel Crider

Client Project ID: Unocal #5487, 28250 Hesperian Blvd., Hayward
Matrix: Liquid

QC Sample Group: 608-0075

Reported: Aug 7, 1996

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	S. Chullakorn	S. Chullakorn	S. Chullakorn	S. Chullakorn

MS/MSD Batch#:	6080129	6080129	6080129	6080129
Date Prepared:	8/5/96	8/5/96	8/5/96	8/5/96
Date Analyzed:	8/5/96	8/5/96	8/5/96	8/5/96
Instrument I.D.#:	HP-11	HP-11	HP-11	HP-11
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	100	90	95	93
Matrix Spike Duplicate % Recovery:	115	100	105	103
Relative % Difference:	14	11	10	10

LCS Batch#:	11LCS080596	11LCS080596	11LCS080596	11LCS080596
Date Prepared:	8/5/96	8/5/96	8/5/96	8/5/96
Date Analyzed:	8/5/96	8/5/96	8/5/96	8/5/96
Instrument I.D.#:	HP-11	HP-11	HP-11	HP-11
LCS % Recovery:	90	80	90	85

% Recovery Control Limits:	60-140	60-140	60-140	60-140
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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.

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager



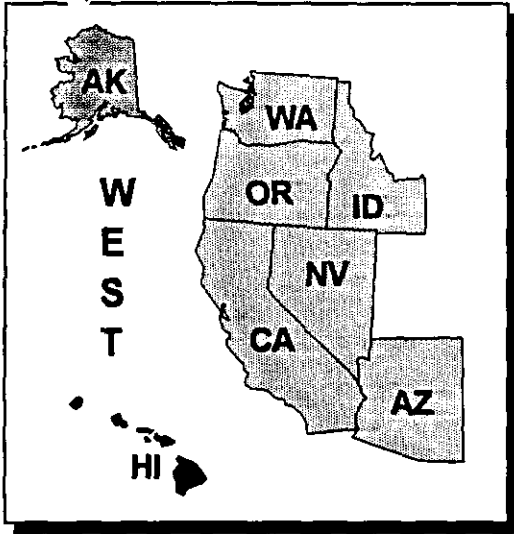
CHAIN OF CUSTODY

9608031

SAMPLER VARTKES TASHDJIAN			UNOCAL SIS # <u>5487</u> CITY: <u>Hayward</u>					ANALYSES REQUESTED						TURN AROUND TIME: <u>5-day</u>		
WITNESSING AGENCY			ADDRESS: <u>28250 Hesperian Blvd.</u>					TPH-GAS BTEX	TPH- DIESEL	TOG	8010	MTBE				REMARKS
SAMPLE ID NO.	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION									
<u>11W7</u>	<u>7/30/96</u>	<u>2:55 PM.</u>	<u>X</u>	<u>X</u>		<u>2 VOAs</u>	<u>Well</u>	<u>X</u>						<u>6080075</u>		
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:					DATE/TIME	THE FOLLOWING <u>MUST BE</u> COMPLETED BY THE LABORATORY ACCEPTING SAMPLES FOR ANALYSES:								
<u>in the Delegation</u>	<u>7/30/96</u>	<u>WMA</u>					<u>7/30/96</u>	1. HAVE ALL SAMPLES RECEIVED FOR ANALYSIS BEEN STORED ON ICE? <u>Y</u>								
(SIGNATURE)	<u>3:50pm</u>	(SIGNATURE)					<u>1550</u>	2. WILL SAMPLES REMAIN REFRIGERATED UNTIL ANALYZED? <u>Y</u>								
(SIGNATURE)		(SIGNATURE)					<u>1310</u>	3. DID ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACE? <u>N</u>								
(SIGNATURE)		(SIGNATURE)					<u>7-31</u>	4. WERE SAMPLES IN APPROPRIATE CONTAINERS AND PROPERLY PACKAGED? <u>Y</u>								
(SIGNATURE)		(SIGNATURE)						SIGNATURE: <u>WMA</u> TITLE: <u>ANALYST</u> DATE: <u>7/30/96</u>								
(SIGNATURE)		<u>Kirk B. Hull</u>					<u>1645</u>									
							<u>7/31/96</u>									

10 5 04

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 HNO3. All other containers are unpreserved.



UNOCAL 76

ERS

FAX

ERS - WEST REGION

2000 CROW CANYON PLACE, STE 400

SAN RAMON, CA 94583

FAX NO. (510) 277-2309

TO: Joel Greger / Mark Boyd
COMPANY: KEI
FAX NO.: _____
DATE: 10/3/96 PAGES SENT: 3

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FROM: Tina Berry
PHONE: _____
COMMENTS: Pls. note attached.
Finalize, distribute report.

Thanks, Tina

