



KAPREALIAN ENGINEERING, INC.
Consulting Engineers

P.O. BOX 996 • BENICIA, CA 94510
(707) 746-6915 • (707) 746-6916 • FAX: (707) 746-5581

KEI-J90-0606.R5
August 24, 1990

Unocal Corporation
2000 Crow Canyon Place, Suite 400
San Ramon, CA 94583

Attention: Mr. Rick Sisk

RE: Stockpiled Soil Sampling for
Unocal Service Station #5901
11976 Dublin Blvd.
Dublin, California

Dear Mr. Sisk:

This letter report summarizes the results of the stockpiled soil sampling and laboratory analyses for the referenced site. The soil analyses were conducted to comply with the County Health Department requirements for proper disposal of contaminated soil.

On July 26, 1990, soil samples from approximately 150 cubic yards of aerated stockpiled soil (previously sampled as Comp F, Comp J and Comp K) at the referenced site were collected to determine proper disposal of the soil. Three composite soil samples (designated as Comp 1, Comp 2 and Comp 3) were taken. Each composite sample consisted of four individual grab samples taken at various locations and depths ranging from 1 to 2 feet. The samples were collected in two-inch diameter, clean brass tubes, which were then sealed with aluminum foil, plastic caps and tape, and placed in a cooled ice chest for subsequent delivery to a certified laboratory for analysis. All samples were analyzed at Sequoia Analytical in Redwood City, California, and were accompanied by properly executed Chain of Custody documentation. Sample locations are as shown on the attached Site Plan.

Soil samples were analyzed to determine concentrations of total petroleum hydrocarbons (TPH) as gasoline using EPA method 5030 in conjunction with modified 8015, benzene, toluene, xylenes and ethylbenzene (BTX&E) using EPA method 8020. Analytical results of the soil samples indicate levels of TPH as gasoline ranging from non-detectable to 38 ppm. Results of the soil analyses are summarized in Table 1. Copies of the laboratory analyses, and the Chain of Custody documentation are attached to this report.

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Based on the analytical results of the soil samples, stockpiled soil represented by samples Comp 1, Comp 2 and Comp 3 can be disposed of at an approved Class III disposal site. However, KEI recommends that during disposal, when obvious isolated high contamination is detected within the stockpiled soil, that portion of the soil be separately stockpiled for further sampling and treatment.

DISTRIBUTION

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

Should you have any questions on this report, please do not hesitate to contact me at (707) 746-6915.

Sincerely,

Kaprealian Engineering, Inc.



Christina L. Lecce

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Attachments: Table 1
Site Plan
Laboratory Results
Chain of Custody documentation

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TABLE 1

SUMMARY OF LABORATORY ANALYSES

(Samples collected on July 26, 1990)

<u>Sample</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethylbenzene</u>
Comp 1	3.5	0.0075	0.0086	0.043	0.078
Comp 2	38	0.035	0.19	0.73	0.33
Comp 3	ND	ND	0.0057	0.016	ND
Detection Limits	1.0	0.0050	0.0050	0.0050	0.0050

ND = Non-detectable.

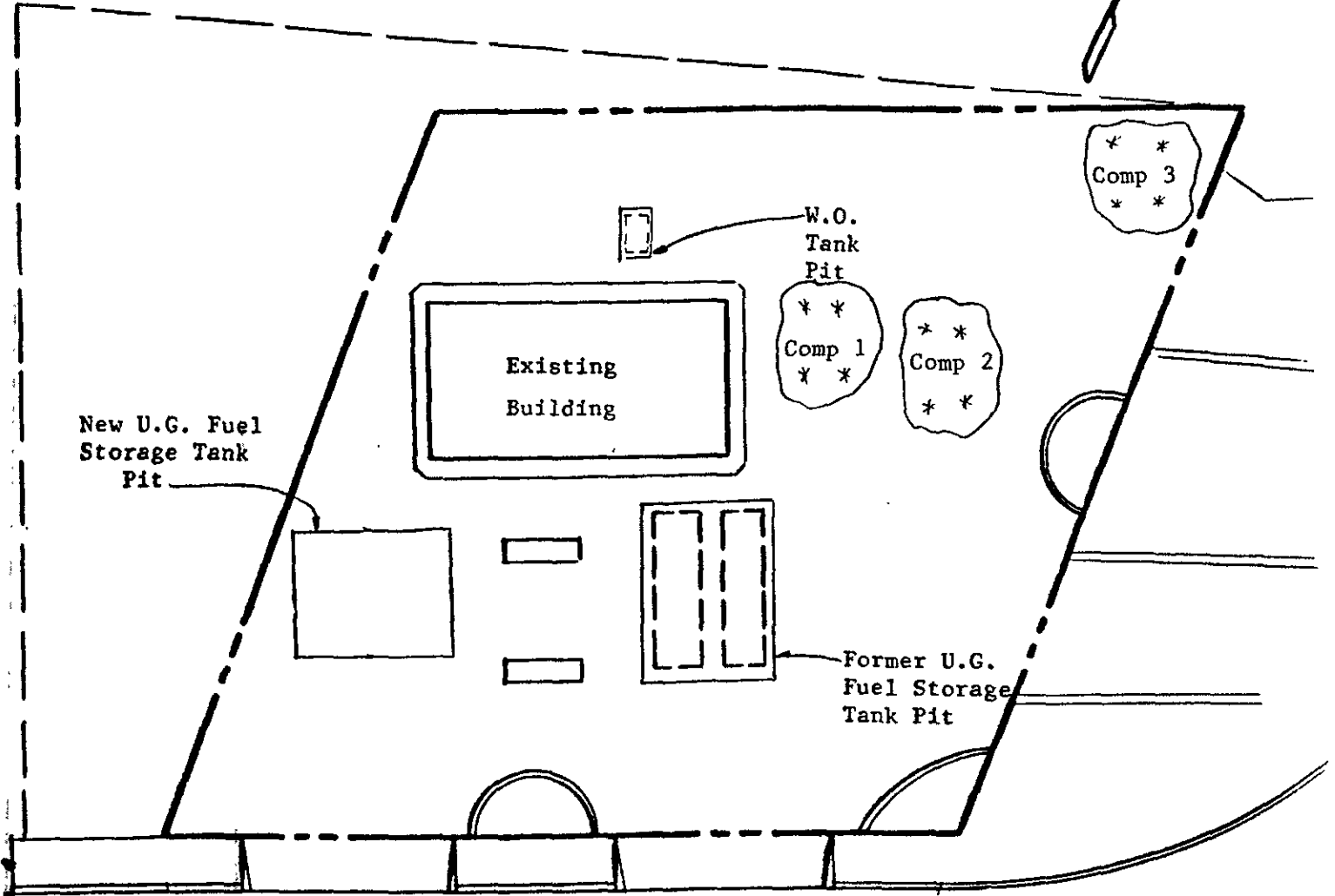
Results in parts per million (ppm), unless otherwise indicated.



KAPREALIAN ENGINEERING, INC.

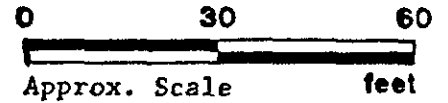
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DUBLIN BLVD.

SITE PLAN



LEGEND

* Sample Point Location

Unocal S/S #5901
11976 Dublin Blvd.
Dublin, CA



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Kapreallan Engineering, Inc.	Client Project ID:	Unocal #5901, Dublin, 11976 Dublin Blvd.	Sampled:	Jul 26, 1990
P.O. Box 996	Matrix Descript:	Soil	Received:	Jul 27, 1990
Benicia, CA 94510	Analysis Method:	EPA 5030/8015/8020	Analyzed:	Jul 27, 1990
Attention: Mardo Kapreallan, P.E.	First Sample #:	007-4646	Reported:	Jul 30, 1990

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons mg/kg (ppm)	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
007-4646	Composite 1	3.5	0.0075	0.0086	0.078	0.043
007-4647	Composite 2	38	0.035	0.19	0.33	0.73
007-4648	Composite 3	N.D.	N.D.	0.0057	N.D.	0.016

Detection Limits:	1.0	0.0050	0.0050	0.0050	0.0050
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Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

for
Belinda C. Vega
Project Manager



KAPREALIAN ENGINEERING, INC.

CHAIN OF CUSTODY

SAMPLER <i>Day Lee</i>		SITE NAME & ADDRESS INDICAL #5701 / DUBLIN 1976 DUBLIN BLVD.						ANALYSES REQUESTED				TURN AROUND TIME: 24 HR	
WITNESSING AGENCY								NO. OF CONT. 101-10 101-11				REMARKS	
SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	CONT.					SAMPLING LOCATION	
COMP. 1	7-26-90		X			X	2						0074646
COMP. 2	7-26-90		X			X	2						0074647
COMP. 3	7-26-90		X			X	2						0074648

Relinquished by: (Signature) <i>Day Lee</i> (KEI)	Date/Time 7/23/90 ⁸⁰⁰	Received by: (Signature) <i>Tom M. Lewis</i>	The following MUST BE completed by the laboratory accepting samples for analysis: 1. Have all samples received for analysis been stored in ice? 2. Will samples remain refrigerated until analyzed? 3. Did any samples received for analysis have head space? 4. Were samples in appropriate containers and properly packaged?	
Relinquished by: (Signature) <i>Tom M. Lewis</i>	Date/Time 7/27/90 ⁹⁵¹	Received by: (Signature)		
Relinquished by: (Signature)	Date/Time	Received by: (Signature)		
Relinquished by: (Signature)	Date/Time	Received by: (Signature) <i>K. Walber</i>		
		<i>KW</i> Signature	<i>SPK</i> Title	<i>7/27</i> Date