KAPREALIAN ENGINEERING
INCORPORATED

KEI-P90-0606.P4
May 29, 1992

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

Attention: Ms. Penny Silzer

RE: Work Plan/Proposal
Former Unocal Service Station #5901
11976 Dublin Boulevard
Dublin, California

Dear Ms. Silzer:

BACKGROUND

On May 21, 1992, Kaprealian Engineering, Inc. (KEI) collected soil and water samples following the removal of two 12,000 gallon regular unleaded and super unleaded gasoline storage tanks and one 520 gallon waste oil tank at the referenced site. Ground water was encountered in the fuel tank pit at a depth of about 7 feet below grade, and in the waste oil tank pit at a depth of about 6.5 feet below grade. Four soil samples, labeled F-SW1 through F-SW2, were collected from the sidewalls of the fuel tank pit at depths of about 6.5 feet below grade. Four soil samples, labeled WO-1 through WO-4, were collected from the sidewalls of the waste oil tank pit at depths of about 6 feet below grade. Two soil samples, labeled H1 and H2, were collected from beneath the former hydraulic lifts at depths of about 5 and 5.5 feet, respectively. Five soil samples, labeled PT-1 through PT-5, were collected from beneath the old product pipes found during excavation activities. Soil sample point locations are shown on the attached site plan. In addition, KEI collected two water samples, labeled water-1 and water-2, from the fuel tank pit and the waste oil tank pit, respectively.

All soil and water samples were analyzed by Sequoia Analytical Laboratory in Concord, California, and were accompanied by properly executed Chain of Custody documentation. All soil and water samples were analyzed for total petroleum hydrocarbons (TPH) as gasoline and benzene, toluene, xylenes, and ethylbenzene (BTX&E). In addition, all soil samples, except samples PT-2 and H1, were also analyzed for total lead. Soil and water samples collected from the waste oil tank pit were also analyzed for TPH as diesel, total oil and grease (TOG), EPA methods 8010 and 8270 constituents, and the metals cadmium, chromium, lead, nickel, and zinc. In addition to TPH as gasoline and BTX&E, the soil sample H2, collected from beneath the former hydraulic lift, was analyzed for

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

TPH as hydraulic fluid, TOG, EPA methods 8010 and 8270 constituents, and the metals cadmium, chromium, lead, nickel, and zinc. The water sample, water-1 was analyzed also for organic lead.

Analytical results of the soil samples collected from the fuel and waste oil tank pits indicated non-detectable levels of all constituents analyzed, except for total lead, which ranged from 3.8 ppm to 7.4 ppm. Analytical results of the soil samples collected from beneath old product pipes indicated non-detectable levels of TPH as gasoline, except for samples PT-1 and PT-2, which showed 6.2 ppm and 940 ppm, respectively. Total lead ranged from 4 ppm to 6.5 ppm.

Analytical results of the soil sample H1, collected from beneath one of the former hydraulic lifts showed non-detectable levels of TPH as gasoline and BTX&E. TPH as hydraulic fluid was detected at 1.3 ppm. Sample H2, collected from beneath the other former hydraulic lift, showed levels of TPH as gasoline at 230 ppm and TPH as hydraulic fluid at 120 ppm. Analytical results of the water samples showed non-detectable levels of all constituents analyzed, except for 2.7 ppb of xylenes detected in sample water-1, and 86 ppb of TPH as diesel and 0.037 ppb of zinc detected in sample water-2. Analytical results of the soil samples are summarized in Tables 1 and 2, and water samples in Table 3.

PROPOSED FIELD WORK

1. KEI proposes to perform additional soil sampling following the additional excavation in the vicinity of sample points PT-1 and PT-2 (in the former product pipe trench) and H2 (the former hydraulic lift area), in order to attempt to define the extent of soil contamination. It is anticipated that the maximum number of soil samples to be collected will be ten samples, and the maximum amount of additional soil to be overexcavated will be approximately 300 cubic yards.

2. All additional soil samples will be analyzed for TPH as gasoline (EPA method 5030/8015), and BTX&E (EPA method 5030/8020). In addition, soil samples collected from the former hoist area will also be analyzed for TPH as hydraulic fluid and EPA method 8270.

3. All excavated soil stockpiled on-site will be sampled to determine appropriate disposition. One composite sample will be collected from each 50 cubic yards of stockpiled soil. Each composite sample will consist of four individual grab samples taken at various locations, and depths of 1 to 2 feet

into the stockpile, and will be composited by the laboratory as one sample. Composite samples will be analyzed for TPH as gasoline and BTX&E, and for any other tests required by the appropriate landfill. All excavated hazardous material (if any), as determined by composite sample laboratory results, will be sent to a Class I disposal site. All non-hazardous excavated soil will either be: 1) sent to a Class II disposal site, 2) retained on-site for treatment and re-sampling, or 3) sent to a Class II landfill. The portion of non-hazardous stockpiled soil sent to each disposition location will be based on laboratory results and volume considerations.

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 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 regarding this work plan/proposal, please feel free to call me at (510) 602-5100.

Sincerely,

Kaprealian Engineering, Inc.

Hagop Kevork
Staff Engineer

Mardo Kaprealian
President

/bp

Attachments: Tables 1, 2 & 3
Location Map
Site Plan

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TABLE 1

SUMMARY OF LABORATORY ANALYSES
SOIL

Date	Sample Number	Depth (feet)	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Xylenes	Ethyl-benzene	Total Lead
5/27/92	F-SW1	6.5	--	ND	ND	ND	ND	ND	7.4
	F-SW2	6.5	--	ND	ND	ND	ND	ND	4.1
	F-SW3	6.5	--	ND	ND	ND	ND	ND	4.9
	F-SW4	6.5	--	ND	ND	ND	ND	ND	3.8
	PT-1	11.5	--	6.2	0.0072	0.072	0.33	0.54	4.0
	PT-2	5.0	--	940	ND	0.81	100	12	--
	PT-3	1.75	--	ND	0.0078	0.061	0.14	0.026	5.1
	PT-4	1.75	--	ND	ND	ND	ND	ND	6.5
	PT-5	1.75	--	ND	ND	ND	ND	ND	4.8
	WO-1*	6.0	ND	ND	ND	ND	ND	ND	4.9
	WO-2*	6.0	ND	ND	ND	ND	ND	ND	5.2
	WO-3*	6.0	ND	ND	ND	ND	ND	ND	5.0
	WO-4*	6.0	ND	ND	ND	ND	ND	ND	5.3
	H1**	5.0	--	ND	ND	ND	ND	ND	--
	H2***	5.5	--	230	ND	ND	0.66	1.3	4.4

-- Indicates analysis was not performed.

ND = Non-detectable.

* TOG, EPA methods 8010 and 8270 constituents were all non-detectable.

** TPH as hydraulic fluid was 1.3 ppm.

*** TOG was non-detectable. TPH as hydraulic fluid was detected at a concentration of 120 ppm. EPA methods 8010 and 8270 constituents were non-detectable, except for bis(2-ethylhexyl)phthalate at 670 ppb, 2-methylnaphthalane at 5,800 ppb, naphthalene at 4,100 ppb, phenanthrene at 240 ppb, and pyrene at 120 ppb.

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

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TABLE 2

SUMMARY OF LABORATORY ANALYSES (METALS)
SOIL

Date	Sample Number	Cadmium	Chromium	Lead	Nickel	Zinc
5/21/92	WO-1	ND	29	4.9	35	44
	WO-2	ND	24	5.2	27	37
	WO-3	ND	24	5.0	26	39
	WO-4	ND	32	5.3	39	49
	H2	ND	33	4.4	43	55

ND = Non-detectable.

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

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TABLE 3

SUMMARY OF LABORATORY ANALYSES
WATER

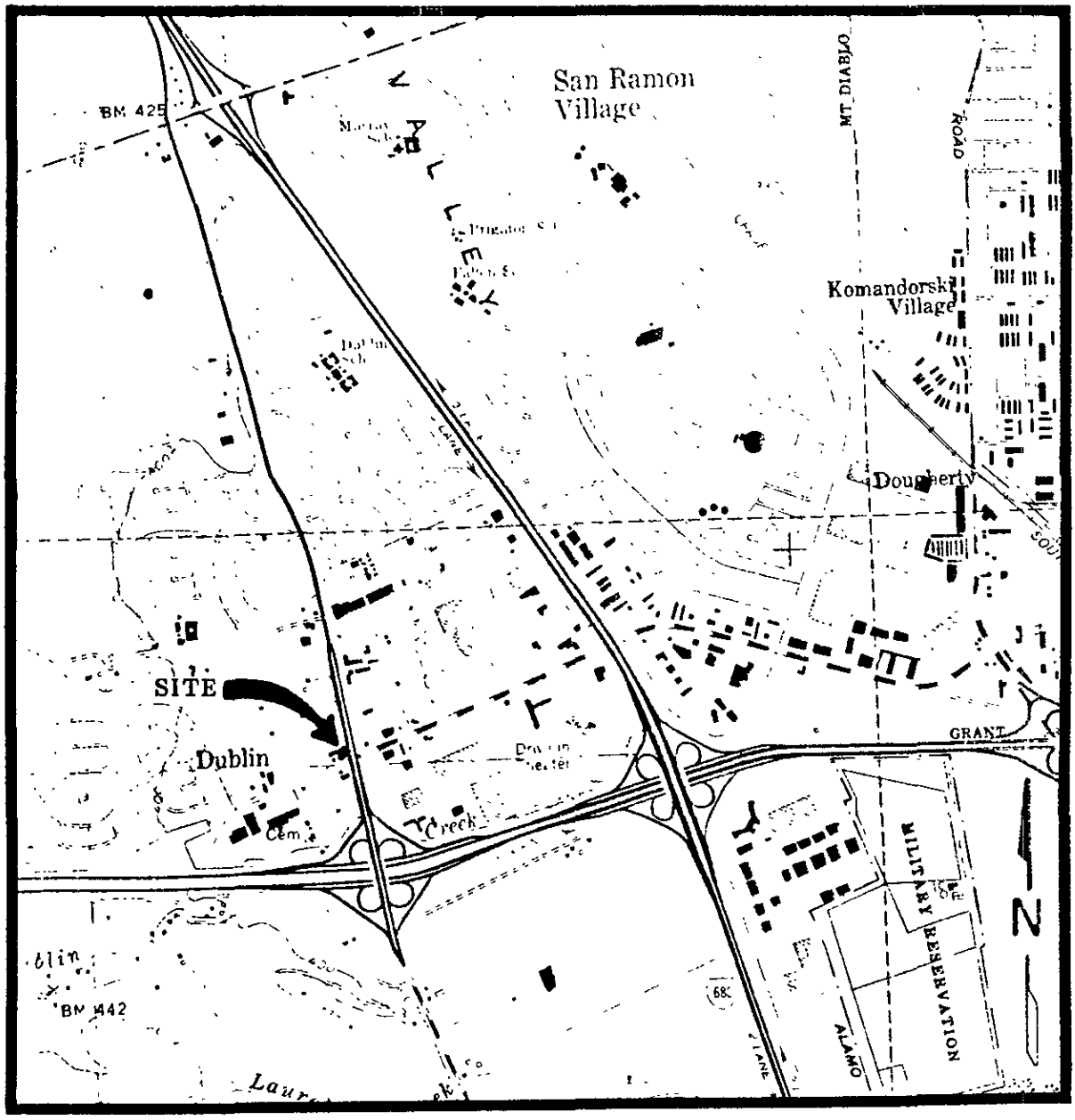
Date	Sample	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Xylenes	Ethyl-benzene	Organic Lead
5/21/92	Water-1	--	ND	ND	ND	2.7	ND	ND
	Water-2*	86	ND	ND	ND	ND	ND	ND
Detection Limits		50	30	0.30	0.30	0.30	0.30	0.050

-- Indicates analysis was not performed.

ND = Non-detectable.

* TOG, cadmium, chromium, lead, nickel, EPA methods 8010 and 8270 constituents were all non-detectable. Zinc was detected at 0.037 ppb.

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

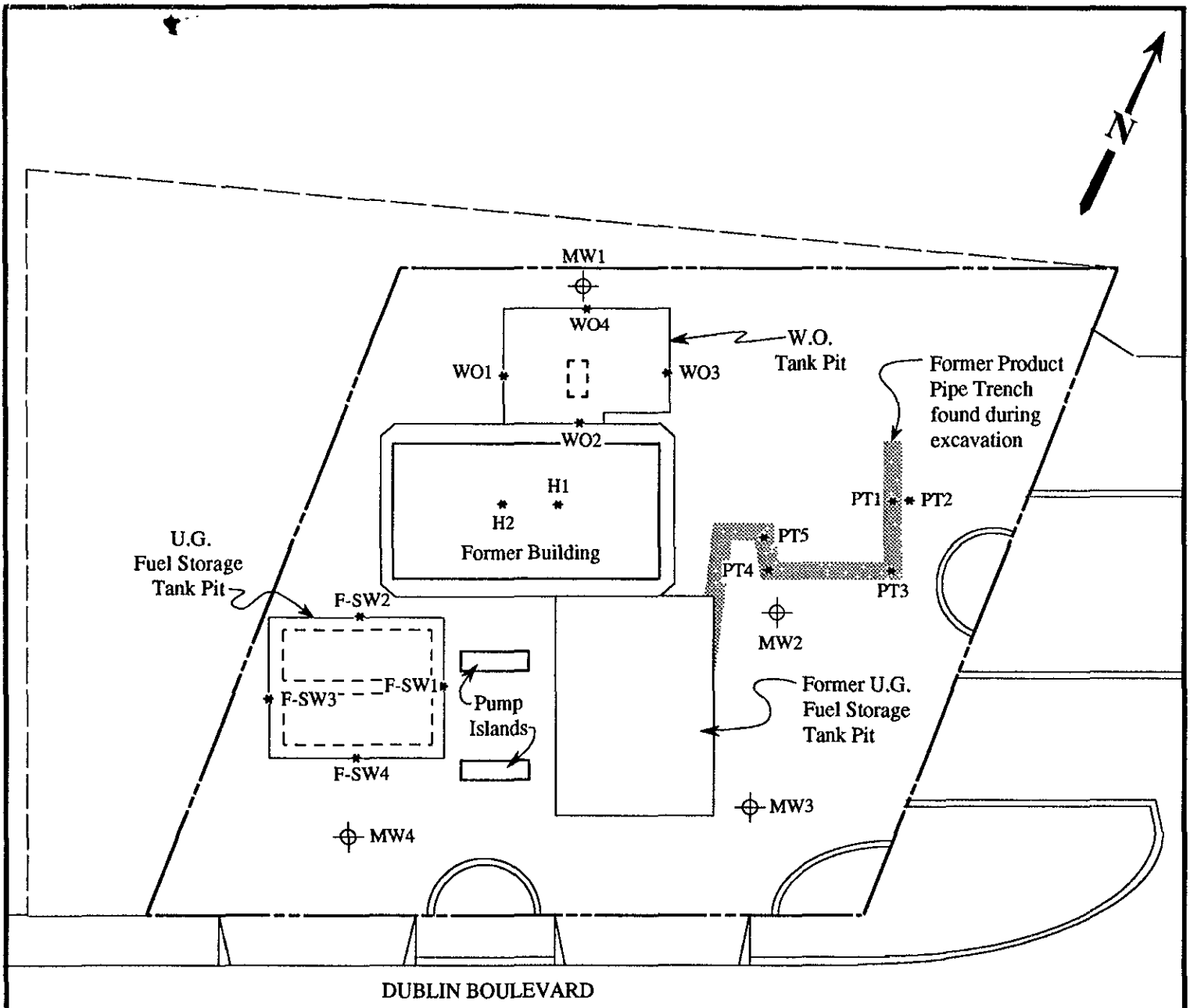


Base modified from 7.5 minute U.S.G.S. Dublin Quadrangle
(photorevised 1980)

0 2000 4000

Approx. scale feet

KAPREALIAN ENGINEERING INCORPORATED	UNOCAL SERVICE STATION #5901 11976 DUBLIN BOULEVARD DUBLIN, CA	LOCATION MAP



LEGEND

* Sample point location

0 30 60

Approx. scale feet

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FORMER UNOCAL S/S #5901
11976 DUBLIN BOULEVARD
DUBLIN, CA

SITE PLAN