



AGENCY
DAVID J. KEARS, Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415) 271-4320

1/4/90

FACSIMILE TRANSMITTAL

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Name: RICK SISK Title/Section _____

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SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
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Kaprealian Engineering, Inc.	Client Project ID: Unocal #5781, Oakland, 3535 Pierson	Sampled: Dec 14, 1989
P.O. Box 996	Sample Descript: Soil, WO1	Received: Dec 15, 1989
Benicia, CA 94510	Analysis Method: EPA 5030/8010	Analyzed: Dec 18, 1989
Attention: Mardo Kaprealian, P.E.	Lab Number: 912-2063	Reported: Dec 19, 1989

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane.....	5.0	N.D.
Bromoform.....	5.0	N.D.
Bromomethane.....	5.0	N.D.
Carbon tetrachloride.....	5.0	N.D.
Chlorobenzene.....	5.0	N.D.
Chloroethane.....	25.0	N.D.
2-Chloroethylvinyl ether.....	5.0	N.D.
Chloroform.....	5.0	N.D.
Chloromethane.....	5.0	N.D.
Dibromochloromethane.....	5.0	N.D.
1,2-Dichlorobenzene.....	10.0	10
1,3-Dichlorobenzene.....	10.0	N.D.
1,4-Dichlorobenzene.....	10.0	N.D.
1,1-Dichloroethane.....	5.0	N.D.
1,2-Dichloroethane.....	5.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.
Total 1,2-Dichloroethene.....	5.0	N.D.
1,2-Dichloropropane.....	5.0	N.D.
cis-1,3-Dichloropropene.....	5.0	N.D.
trans-1,3-Dichloropropene.....	5.0	N.D.
Methylene chloride.....	10.0	N.D.
1,1,2,2-Tetrachloroethane.....	5.0	N.D.
Tetrachloroethene.....	5.0	77
1,1,1-Trichloroethane.....	5.0	15
1,1,2-Trichloroethane.....	5.0	N.D.
Trichloroethene.....	5.0	N.D.
Trichlorofluoromethane.....	5.0	N.D.
Vinyl chloride.....	10.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Belinda C. Vega
Belinda C. Vega
Project Manager



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Kaprealian Engineering, Inc.	Client Project ID: Unocal #5781, Oakland, 3535 Pierson	Sampled: Dec 14, 1989
P.O. Box 996	Matrix Descript: Soil	Received: Dec 15, 1989
Benicia, CA 94510	Analysis Method: EPA 5030/8015/8020	Analyzed: Dec 18, 1989
Attention: Mardo Kaprealian, P.E.	First Sample #: 912-2064	Reported: Dec 19, 1989

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)
912-2064	A1	3.5	N.D.	N.D.	N.D.	N.D.
912-2065	B1	N.D.	N.D.	N.D.	N.D.	N.D.
912-2066	A2/B2	5.8	0.10	N.D.	N.D.	N.D.
912-2067	SW1	15	N.D.	N.D.	N.D.	N.D.
912-2068	SW2	46	0.65	N.D.	N.D.	N.D.

Detection Limits:	1.0	0.05	0.1	0.1	0.1
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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.

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P.O. Box 996	Sample Descript: Soil, WO1	Received: Dec 15, 1989
Benicia, CA 94510	Lab Number: 912-2063	Extracted: Dec 18, 1989
Attention: Mardo Kaprealian, P.E.		Analyzed: Dec 18, 1989
		Reported: Dec 19, 1989

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Cadmium.....	0.5	N.D.
Chromium.....	0.5	8.3
Lead.....	2.5	340
Zinc.....	0.5	70

Analytes reported as N.D. were not present above the stated limit of detection.

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Benicia, CA 94510	Analysis Method: EPA 5030/8015/8020	Analyzed: Dec 18, 1989
Attention: Mardo Kaprealian, P.E.	Lab Number: 912-2063	Reported: Dec 19, 1989

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

Analyte	Detection Limit mg/kg (ppm)	Sample Results mg/kg (ppm)
Low to Medium Boiling Point Hydrocarbons	1.0	670
Benzene	0.05	5.4
Toluene	0.1	15
Ethyl Benzene	0.1	2.3
Xylenes	0.1	17

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
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P.O. Box 996	Matrix Descript: Soil	Received: Dec 15, 1989
Benicia, CA 94510	Analysis Method: EPA 3550/8015	Extracted: Dec 15, 1989
Attention: Mardo Kaprealian, P.E.	First Sample #: 912-2063	Analyzed: Dec 15, 1989
		Reported: Dec 19, 1989

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons mg/kg (ppm)
912-2063	WO1	8,300

Detection Limits:

1.0

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

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P.O. Box 996	Matrix Descript: Soil	Received: Dec 15, 1989
Benicia, CA 94510	Analysis Method: EPA 418.1 (I.R. with clean-up)	Extracted: Dec 18, 1989
Attention: Mardo Kaprealian, P.E.	First Sample #: 912-2063	Analyzed: Dec 18, 1989
		Reported: Dec 19, 1989

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Sample Number	Sample Description	Petroleum Oil mg/kg (ppm)
912-2063	WO1	48,000

Detection Limits:	1.0
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Bromoform.....	5.0	N.D.
Bromomethane.....	5.0	N.D.
Carbon tetrachloride.....	5.0	N.D.
Chlorobenzene.....	5.0	N.D.
Chloroethane.....	25.0	N.D.
2-Chloroethylvinyl ether.....	5.0	N.D.
Chloroform.....	5.0	N.D.
Chloromethane.....	5.0	N.D.
Dibromochloromethane.....	5.0	N.D.
1,2-Dichlorobenzene.....	10.0	10
1,3-Dichlorobenzene.....	10.0	N.D.
1,4-Dichlorobenzene.....	10.0	N.D.
1,1-Dichloroethane.....	5.0	N.D.
1,2-Dichloroethane.....	5.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.
Total 1,2-Dichloroethene.....	5.0	N.D.
1,2-Dichloropropane.....	5.0	N.D.
cis-1,3-Dichloropropene.....	5.0	N.D.
trans-1,3-Dichloropropene.....	5.0	N.D.
Methylene chloride.....	10.0	N.D.
1,1,2,2-Tetrachloroethane.....	5.0	N.D.
Tetrachloroethene.....	5.0	77
1,1,1-Trichloroethane.....	5.0	15
1,1,2-Trichloroethane.....	5.0	N.D.
Trichloroethene.....	5.0	N.D.
Trichlorofluoromethane.....	5.0	N.D.
Vinyl chloride.....	10.0	N.D.

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