



Sequoia Analytical

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Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Matrix: Soil
Analysis Method: EPA 5030/8015 Mod./8020
First Sample #: 805-1004

Sampled: May 11, 1998
Received: May 12, 1998
Reported: Jun 1, 1998

RECEIVED

JUN 03 1998

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX / MTBE

GETTLER-RYAN INC.

GENERAL CONTRACTORS

RECEIVED

12:52 pm, Apr 13, 2009

Alameda County
Environmental Health

Analyte	Reporting Limit µg/L	Sample I.D. 805-1004 SW1	Sample I.D. 805-1005 SW2	Sample I.D. 805-1006 SW3	Sample I.D. 805-1007 SW4	Sample I.D. 805-1008 P1	Sample I.D. 805-1009 P2
Purgeable Hydrocarbons	1.0	N.D.	N.D.	2,000	1,800	N.D.	15
Benzene	0.010	N.D.	0.031	9.7	5.5	N.D.	N.D.
Toluene	0.010	N.D.	N.D.	29	82	N.D.	0.056
Ethyl Benzene	0.010	N.D.	N.D.	38	49	N.D.	0.10
Total Xylenes	0.010	N.D.	0.015	150	290	N.D.	0.19
MTBE	0.050	1.9	3.8	16	15	0.74	N.D.
Chromatogram Pattern:		--	--	Gasoline	Gasoline	--	Gasoline & Unidentified Hydrocarbons >C8

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	100	100	1.0	5.0
Date Analyzed:	5/15/98	5/15/98	5/15/98	5/15/98	5/15/98	5/15/98
Instrument Identification:	HP-4	HP-4	HP-4	HP-4	HP-4	HP-4
Surrogate Recovery, %: (QC Limits = 40-140%)	102	109	*	*	104	113

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

1871 ✓

SEQUOIA ANALYTICAL, #1271

Please Note:

* Surrogate below reporting limit due to dilution.

Alan B. Kemp
Laboratory Director



Gettler-Ryan - Dublin 6747 Sierra Court, Suite J Dublin, CA 94568 Attention: Haig Kevork	Client Project ID: Unocal #1871, Oakland Sample Matrix: Soil Analysis Method: EPA 5030/8015 Mod./8020 First Sample #: 805-1010	Sampled: May 11, 1998 Received: May 12, 1998 Reported: Jun 1, 1998
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TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX / MTBE

Analyte	Reporting Limit µg/L	Sample I.D. 805-1010 WO1
Purgeable Hydrocarbons	1.0	N.D.
Benzene	0.010	N.D.
Toluene	0.010	N.D.
Ethyl Benzene	0.010	N.D.
Total Xylenes	0.010	N.D.
MTBE	0.050	N.D.

Chromatogram Pattern: -

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Analyzed:	5/18/98
Instrument Identification:	HP-4
Surrogate Recovery, %: (QC Limits = 40-140%)	100

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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Gettler-Ryan
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Matrix: Soil
Analysis Method: EPA 3510/8015 Mod.
First Sample #: 805-1010

Sampled: May 11, 1998
Received: May 12, 1998
Reported: Jun 1, 1998

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 805-1010 WO1
Extractable Hydrocarbons	1.0	N.D.

Chromatogram Pattern: -

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Extracted:	5/14/98
Date Analyzed:	5/14/98
Instrument Identification:	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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Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix Descript: Soil
Analysis Method: SM 5520 E&F (Gravimetric)
First Sample #: 805-1010

Sampled: May 11, 1998
Received: May 12, 1998
Extracted: May 15, 1998
Analyzed: May 18, 1998
Reported: Jun 1, 1998

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/kg (ppm)	Detection Limit Multiplication Factor
805-1010	WO1	140	1.0

Detection Limits: 5.0

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

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Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Descript: Solid, WO1
Lab Number: 805-1010

Sampled: May 11, 1998
Received: May 12, 1998
Analyzed: May 27, 1998
Reported: Jun 1, 1998

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/L
Cadmium.....	0.50	N.D.
Chromium.....	0.50	18
Nickel.....	1.0	21
Lead.....	1.0	1.0
Zinc.....	1.0	61

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

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Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Descript: Water, WO1
Analysis Method: EPA 5030/8010
Lab Number: 805-1010


Sampled: May 11, 1998
Received: May 12, 1998
Analyzed: May 15, 1998
Reported: Jun 1, 1998

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane.....	10	N.D.
Bromoform.....	10	N.D.
Bromomethane.....	20	N.D.
Carbon tetrachloride.....	10	N.D.
Chlorobenzene.....	10	N.D.
Chloroethane.....	20	N.D.
Chloroform.....	10	N.D.
Chloromethane.....	20	N.D.
Dibromochloromethane.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.
1,2-Dichlorobenzene.....	10	N.D.
1,1-Dichloroethane.....	10	N.D.
1,2-Dichloroethane.....	10	N.D.
1,1-Dichloroethene.....	10	N.D.
cis-1,2-Dichloroethene.....	10	N.D.
trans-1,2-Dichloroethene.....	10	N.D.
1,2-Dichloropropane.....	10	N.D.
cis-1,3-Dichloropropene.....	10	N.D.
trans-1,3-Dichloropropene.....	10	N.D.
Methylene chloride.....	100	N.D.
1,1,2,2-Tetrachloroethane.....	10	N.D.
Tetrachloroethene.....	10	N.D.
1,1,1-Trichloroethane.....	10	N.D.
1,1,2-Trichloroethane.....	10	N.D.
Trichloroethene.....	10	N.D.
Trichlorofluoromethane.....	10	N.D.
Vinyl chloride.....	20	N.D.
Surrogates	Control Limit %	% Recovery
Dibromodifluoromethane.....	50 150.....	99
4-Bromofluorobenzene.....	50 150.....	90

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

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Laboratory Director





Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Descript: Water, WO1
Analysis Method: EPA 8270
Lab Number: 805-1010

Sampled: May 11, 1998
Received: May 12, 1998
Extracted: May 18, 1998
Analyzed: May 19, 1998
Reported: Jun 1, 1998

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene.....	100	N.D.
Acenaphthylene.....	100	N.D.
Anthracene.....	100	N.D.
Benzidine.....	2,500	N.D.
Benzoic Acid.....	100	N.D.
Benzo(a)anthracene.....	100	N.D.
Benzo(b)fluoranthene.....	100	N.D.
Benzo(k)fluoranthene.....	100	N.D.
Benzo(g,h,i)perylene.....	100	N.D.
Benzo(a)pyrene.....	100	N.D.
Benzyl alcohol.....	100	N.D.
Bis(2-chloroethoxy)methane.....	100	N.D.
Bis(2-chloroethyl)ether.....	100	N.D.
Bis(2-chloroisopropyl)ether.....	100	N.D.
Bis(2-ethylhexyl)phthalate.....	500	N.D.
4-Bromophenyl phenyl ether.....	100	N.D.
Butyl benzyl phthalate.....	100	N.D.
4-Chloroaniline.....	100	N.D.
2-Chloronaphthalene.....	100	N.D.
4-Chloro-3-methylphenol.....	100	N.D.
2-Chlorophenol.....	100	N.D.
4-Chlorophenyl phenyl ether.....	100	N.D.
Chrysene.....	100	N.D.
Dibenz(a,h)anthracene.....	100	N.D.
Dibenzofuran.....	100	N.D.
Di-N-butyl phthalate.....	500	N.D.
1,3-Dichlorobenzene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.
3,3-Dichlorobenzidine.....	500	N.D.
2,4-Dichlorophenol.....	100	N.D.
Diethyl phthalate.....	100	N.D.
2,4-Dimethylphenol.....	100	N.D.
Dimethyl phthalate.....	100	N.D.
4,6-Dinitro-2-methylphenol.....	500	N.D.
2,4-Dinitrophenol.....	500	N.D.
2,4-Dinitrotoluene.....	100	N.D.
2,6-Dinitrotoluene.....	100	N.D.
Di-N-octyl phthalate.....	100	N.D.
Fluoranthene.....	100	N.D.
Fluorene.....	100	N.D.



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Client Project ID: Unocal #1871, Oakland
Sample Descript: Water, WO1
Analysis Method: EPA 8270
Lab Number: 805-1010

Sampled: May 11, 1998
Received: May 12, 1998
Extracted: May 18, 1998
Analyzed: May 19, 1998
Reported: Jun 1, 1998

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Hexachlorobenzene.....	100	N.D.
Hexachlorobutadiene.....	100	N.D.
Hexachlorocyclopentadiene.....	100	N.D.
Hexachloroethane.....	100	N.D.
Indeno(1,2,3-cd)pyrene.....	100	N.D.
Isophorone.....	100	N.D.
2-Methylnaphthalene.....	100	N.D.
2-Methylphenol.....	100	N.D.
4-Methylphenol.....	100	N.D.
Naphthalene.....	100	N.D.
2-Nitroaniline.....	500	N.D.
3-Nitroaniline.....	500	N.D.
4-Nitroaniline.....	500	N.D.
Nitrobenzene.....	100	N.D.
2-Nitrophenol.....	100	N.D.
4-Nitrophenol.....	500	N.D.
N-Nitrosodiphenylamine.....	100	N.D.
N-Nitroso-di-N-propylamine.....	100	N.D.
Pentachlorophenol.....	500	N.D.
Phenanthrene.....	100	N.D.
Phenol.....	100	N.D.
Pyrene.....	100	N.D.
1,2,4-Trichlorobenzene.....	100	N.D.
2,4,5-Trichlorophenol.....	500	N.D.
2,4,6-Trichlorophenol.....	100	N.D.

Surrogates	Control Limit %	% Recovery	
2-Fluorophenol.....	25	121.....	65
Phenol-d6.....	24	113.....	64
Nitrobenzene-d5.....	23	120.....	65
2-Fluorobiphenyl.....	30	115.....	75
2,4,6-Tribromophenol.....	19	122.....	79
4-Terphenyl-d14.....	18	137.....	85

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL, #1271


Alan B. Kemp
Laboratory Director



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
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Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Solid

QC Sample Group: 8051004-010

Reported: Jun 1, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP051898	SP051898	SP051898	SP051898
	8020EXA	8020EXA	8020EXA	8020EXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill
MS/MSD #:	8051010	8051010	8051010	8051010
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/18/98	5/18/98	5/18/98	5/18/98
Analyzed Date:	5/18/98	5/18/98	5/18/98	5/18/98
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	0.80 mg/Kg	0.80 mg/Kg	0.80 mg/Kg	2.4 mg/Kg
Result:	0.71	0.73	0.69	2.1
MS % Recovery:	89	91	86	88
Dup. Result:	0.73	0.76	0.71	2.2
MSD % Recov.:	91	95	89	92
RPD:	2.8	4.1	2.9	5.0
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	4LCS051898	4LCS051898	4LCS051898	4LCS051898
Prepared Date:	5/18/98	5/18/98	5/18/98	5/18/98
Analyzed Date:	5/18/98	5/18/98	5/18/98	5/18/98
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	17	18	17	52
LCS % Recov.:	85	90	85	87

MS/MSD LCS Control Limits	50-150	50-150	50-150	50-150
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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.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

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Laboratory Director



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Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Solid

QC Sample Group: 8051004-010

Reported: Jun 1, 1998

QUALITY CONTROL DATA REPORT

ANALYTE	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene	Diesel
Method:	EPA 8010	EPA 8010	EPA 8010	EPA 8015M
Analyst:	N. Nelson	N. Nelson	N. Nelson	K. Grubb

MS/MSD

Batch#: 8051010 8051010 8051010 8051010

Date Prepared: 5/15/98 5/15/98 5/15/98 5/14/98

Date Analyzed: 5/15/98 5/15/98 5/15/98 5/14/98

Instrument I.D.#: HP-7 HP-7 HP-7 HP-3B

Conc. Spiked: 200 µg/L 200 µg/L 200 µg/L 15 mg/kg

Matrix Spike

% Recovery: 90 85 60 87

Matrix Spike

Duplicate % Recovery: 85 85 65 93

Relative %

Difference: 5.7 0.0 8.0 7.4

RPD Limit: 0-25 0-25 0-25 0-50

LCS Batch#: LCS051598 LCS051598 LCS051598 LCS051498B

Date Prepared: 5/15/98 5/15/98 5/15/98 5/15/98

Date Analyzed: 5/15/98 5/15/98 5/15/98 5/18/98

Instrument I.D.#: HP-7 HP-7 HP-7 HP-3B

LCS %

Recovery: 95 95 75 87

% Recovery

Control Limits: 60-140 60-140 60-140 60-140

Please Note:

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Laboratory Director



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Client Project ID: Unocal #1871, Oakland
Matrix: Solid

QC Sample Group: 8051004-010

Reported: Jun 1, 1998

QUALITY CONTROL DATA REPORT

ANALYTE	Phenol	2-Chlorophenol	1,4-Dichloro-benzene	N-Nitroso-Di-N-propylamine	1,2,4-Trichloro-benzene	4-Chloro-3-Methylphenol
Prep. Method:	EPA 3510	EPA 3510	EPA 3510	EPA 3510	EPA 3510	EPA 3510
Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Analyst:	L. Diaz	L. Diaz	L. Diaz	L. Diaz	L. Diaz	L. Diaz

MS/MSD Batch#:	8050648	8050648	8050648	8050648	8050648	8050648
Date Prepared:	5/11/98	5/11/98	5/11/98	5/11/98	5/11/98	5/11/98
Date Analyzed:	5/11/98	5/11/98	5/11/98	5/11/98	5/11/98	5/11/98
Instrument I.D.#:	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1
Conc. Spiked:	5000 µg/L	5000 µg/L	3300 µg/L	3300 µg/L	3300 µg/L	5000 µg/L
Matrix Spike % Recovery:	58	68	58	76	64	66
Matrix Spike Duplicate % Recovery:	56	68	55	76	64	72
Relative % Difference:	3.5	0.0	5.4	0.0	0.0	8.7
RPD Limit:	0-40	0-40	0-40	0-40	0-40	0-40

LCS Batch#:	BLK051898B	BLK051898B	BLK051898B	BLK051898B	BLK051898B	BLK051898B
Date Prepared:	3/18/98	3/18/98	3/18/98	3/18/98	3/18/98	3/18/98
Date Analyzed:	3/19/98	3/19/98	3/19/98	3/19/98	3/19/98	3/19/98
Instrument I.D.#:	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1
LCS % Recovery:	62	80	73	88	79	78

% Recovery Control Limits:	26-90	25-102	28-104	41-126	38-108	26-103
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Laboratory Director

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Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Solid

QC Sample Group: 8051004-010

Reported: Jun 1, 1998

QUALITY CONTROL DATA REPORT

ANALYTE	Acenaphthene	4-Nitrophenol	2,4-Dinitro-toluene	Pentachloro-phenol	Pyrene
Prep. Method:	EPA 3510	EPA 3510	EPA 3510	EPA 3510	EPA 3510
Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Analyst:	L. Diaz	L. Diaz	L. Diaz	L. Diaz	L. Diaz

MS/MSD	Acenaphthene	4-Nitrophenol	2,4-Dinitro-toluene	Pentachloro-phenol	Pyrene
Batch#:	8050648	8050648	8050648	8050648	8050648
Date Prepared:	5/11/98	5/11/98	5/11/98	5/11/98	5/11/98
Date Analyzed:	5/11/98	5/11/98	5/11/98	5/11/98	5/11/98
Instrument I.D.#:	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1
Conc. Spiked:	3300 µg/L	5000 µg/L	3300 µg/L	5000 µg/L	3300 µg/L
Matrix Spike % Recovery:	64	80	73	86	85
Matrix Spike Duplicate % Recovery:	70	84	73	86	94
Relative % Difference:	9.0	4.8	0.0	0.0	10
RPD Limit:	0-40	0-40	0-40	0-40	0-40

LCS Batch#:	BLK051898B	BLK051898B	BLK051898B	BLK051898B	BLK051898B
Date Prepared:	3/18/98	3/18/98	3/18/98	3/18/98	3/18/98
Date Analyzed:	3/19/98	3/19/98	3/19/98	3/19/98	3/19/98
Instrument I.D.#:	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1
LCS % Recovery:	79	88	90	88	82

% Recovery Control Limits:	Acenaphthene	4-Nitrophenol	2,4-Dinitro-toluene	Pentachloro-phenol	Pyrene
	31-137	11-114	28-89	17-109	35-142

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Alan B. Kemp
Laboratory Director





Gettier-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Solid

QC Sample Group: 8051004-010

Reported: Jun 1, 1998

QUALITY CONTROL DATA REPORT

ANALYTE	Cadmium	Chromium	Lead	Nickel	Zinc
Method:	EPA 8010	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Analyst:	J. Kelly	J. Kelly	J. Kelly	J. Kelly	J. Kelly

MS/MSD					
Batch#:	8051608	8051608	8051608	8051608	8051608
Date Prepared:	5/21/98	5/21/98	5/21/98	5/21/98	5/21/98
Date Analyzed:	5/22/98	5/22/98	5/22/98	5/22/98	5/22/98
Instrument I.D.#:	MV-4	MV-4	MV-4	MV-4	MV-4
Conc. Spiked:	50 mg/L	50 mg/L	50 mg/L	50 mg/L	50 mg/L
Matrix Spike					
% Recovery:	95	72	116	76	60
Matrix Spike Duplicate %					
Recovery:	93	72	100	78	-
Relative %					
Difference:	2.1	0.0	11	1.9	17
RPD Limit:	0-20	0-20	0-20	0-20	0-20

LCS Batch#:	LCS052198A	LCS052198A	LCS052198A	LCS052198A	LCS052198A
Date Prepared:	5/21/98	5/21/98	5/21/98	5/21/98	5/21/98
Date Analyzed:	5/27/98	5/27/98	5/27/98	5/27/98	5/27/98
Instrument I.D.#:	MV-4	MV-4	MV-4	MV-4	MV-4
LCS %					
Recovery:	106	102	100	104	104

% Recovery					
Control Limits:	80-120	80-120	80-120	80-120	80-120

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
Laboratory Director





Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Soil

QC Sample Group: 8051004-010

Reported: Jun 1, 1998

QUALITY CONTROL DATA REPORT

ANALYTE Oil & Grease

Method: SM 5520
Analyst: L. Diaz

MS/MSD

Batch#: BLK051598B

Date Prepared: 5/15/98
Date Analyzed: 5/18/98
Instrument I.D.#: Manual
Conc. Spiked: 5000 mg/kg

Matrix Spike

% Recovery: 112

Matrix Spike

Duplicate % Recovery: 102

Relative %

Difference: 9.3
RPD Limit: 0-30

LCS Batch#: -

Date Prepared: -
Date Analyzed: -
Instrument I.D.#: -

LCS % Recovery: -

% Recovery Control Limits: 60-140

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
Laboratory Director



Consultant Company: **GETTLER-RYAN INC. J#140165** Project Name: **FORMER UNOCAL#1871-OAKLAND**
 Address: **6747 Sierra Court, Suite J** UNOCAL Project Manager: **TINA BERRY**
 City: **DUBLIN** State: **CA** Zip Code: **94568** AFE #: **1815293**
 Telephone: **(510) 551-7555** FAX #: **551-7888** Site #, City, State: **96 MACARTHUR BLVD.**
 Report To: **HAIG KEVORK** Sampler: **HAIG KEVORK** 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 #	Analyses Requested										Comments	
						TPH-G	BTEX	MTBE	TPH-D	TOG	8010	8210	Ca/C5P6	Zn/Li			
1. SW1	5/11/98	SOIL	1	BRASS TUBE		✓	✓	✓									8051004
2. SW2	↓	↓	1	↓		✓	✓	✓									8051005
3. SW3	↓	↓	1	↓		✓	✓	✓									8051006
4. SW4	↓	↓	1	↓		✓	✓	✓									8051007
5. P1	↓	↓	1	↓		✓	✓	✓									8051008
6. P2	↓	↓	1	↓		✓	✓	✓									8051009
7. W01	↓	↓	1	↓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	8051010
8.																	
10.																	

Relinquished By: *[Signature]* Date: **5/12/98** Time: **7:00** Received By: _____ Date: _____ Time: _____
 Relinquished By: _____ Date: _____ Time: _____ Received By: _____ Date: _____ Time: _____
 Relinquished By: _____ Date: _____ Time: _____ Received By Lab: **KNUFF** Date: **5/12** Time: **1900**

Were Samples Received in Good Condition? Yes No Samples on Ice? Yes No Method of Shipment _____ Page **1** of **1**

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



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871-Oakland
Sample Matrix: Water
Analysis Method: EPA 5030/8015 Mod./8020
First Sample #: 805-0998

Sampled: May 12, 1998
Received: May 12, 1998
Reported: May 22, 1998

RECEIVED
JUN 15 1998

QC Batch Number: SP051598 SP051598

8020EXA 8020EXA

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTX & MTBE

GETTLER-RYAN INC.
GENERAL LABORATORY

Analyte	Reporting Limit mg/Kg	Sample I.D. 805-0998 SW3-5	Sample I.D. 805-0999 SW4-5
Purgeable Hydrocarbons	1.0	5.0	N.D.
Benzene	0.010	0.049	0.080
Toluene	0.010	0.051	N.D.
Ethyl Benzene	0.010	0.050	N.D.
Total Xylenes	0.010	0.20	0.039
MTBE	0.050	6.6	12

Chromatogram Pattern: Gasoline & Discrete Peaks --

Quality Control Data

Report Limit Multiplication Factor:	2.5	5.0
Date Analyzed:	5/18/98	5/18/98
Instrument Identification:	HP-4	HP-4
Surrogate Recovery, %: (QC Limits = 70-130%)	102	120

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

Julianne Fegley
Julianne Fegley
Project Manager





Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871-Oakland
Matrix: Solid

QC Sample Group: 8050998-999

Reported: May 22, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP051898	SP051898	SP051898	SP051898
	8020EXA	8020EXA	8020EXA	8020EXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	K. Nili	K. Nili	K. Nili	K. Nili
MS/MSD #:	8051010	8051010	8051010	8051010
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/18/98	5/18/98	5/18/98	5/18/98
Analyzed Date:	5/18/98	5/18/98	5/18/98	5/18/98
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	0.80 mg/kg	0.80 mg/kg	0.80 mg/kg	2.4 mg/kg
Result:	0.71	0.73	0.69	2.1
MS % Recovery:	89	91	86	88
Dup. Result:	0.73	0.76	0.71	2.2
MSD % Recov.:	91	95	89	92
RPD:	2.8	4.1	2.9	5.0
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	4LCS051898	4LCS051898	4LCS051898	4LCS051898
Prepared Date:	5/18/98	5/18/98	5/18/98	5/18/98
Analyzed Date:	5/18/98	5/18/98	5/18/98	5/18/98
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	17	18	17	52
LCS % Recov.:	85	90	85	87

MS/MSD LCS 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.

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

SEQUOIA ANALYTICAL, #1271

Julianne Fegley
Julianne Fegley
Project Manager



Consultant Company: **GETTLER-RYAN INC. J#140165** Project Name: **FORMER UNOCAL #1871-OAKLAND**
 Address: **6747 Sierra Court, Suite J** UNOCAL Project Manager: **TINA BERRY**
 City: **DUBLIN** State: **CA** Zip Code: **94568** AFE #: **7507-99**
 Telephone: **(510) 551-7555** FAX #: **551-7888** Site #, City, State: **96 MACARTHUR BLVD.**
 Report To: **HAIG KEVORK** Sampler: **HAIG KEVORK** 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 #	Analyses Requested										Comments		
						TPH-G	BTEX	MTBE										
1. SW3-5	5/12/98	SOIL	1	BRASS		✓	✓	✓									8050988	
2. SW4-5	5/12/98	SOIL	1	TUBE		✓	✓	✓									8050989	
3.																		
4.																		
5.																		
6.																		
7.																		
8.																		
10.																		

Relinquished By: *[Signature]* Date: **5/12/98** Time: **7:00** Received By: _____ Date: _____ Time: _____
 Relinquished By: _____ Date: _____ Time: _____ Received By: _____ Date: _____ Time: _____
 Relinquished By: _____ Date: _____ Time: _____ Received By Lab: **K. Will** Date: **5/12/98** Time: **1900**

Were Samples Received in Good Condition? Yes No Samples on Ice? Yes No Method of Shipment _____ Page **1** of **1**

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 Analytical

580 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8

Redwood City, CA 94063 (650) 364-9600
Walnut Creek, CA 94598 (510) 988-9600
Sacramento, CA 95834 (916) 921-9600

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

RECEIVED

Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871-Oakland
Sample Matrix: Soil
Analysis Method: EPA 3550/8015 Mod. JUN 03 1998
First Sample #: 805-1000

Sampled: May 12, 1998
Received: May 12, 1998
Reported: Jun 1, 1998

GETTLER-RYAN INC.

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS AS HYDRAULIC FLUID

Analyte	Reporting Limit mg/kg	Sample I.D. 805-1000 H-1	Sample I.D. 805-1001 H-2
Extractable Hydrocarbons	10	N.D.	N.D.
Chromatogram Pattern:		--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0
Date Extracted:	5/14/98	5/14/98
Date Analyzed:	5/18/98	5/14/98
Instrument Identification:	HP-3B	HP-3B

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

SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Laboratory Director





Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871-Oakland
Matrix: Solid

QC Sample Group: 8051000-001

Reported: Jun 1, 1998

QUALITY CONTROL DATA REPORT

Analyte: Diesel

QC Batch#: SP051498
8015EXB

Analy. Method: EPA 8015 Mod.

Prep. Method: EPA 3550

Analyst: K. Grubb

MS/MSD #: 8051010

Sample Conc.: N.D.

Prepared Date: 5/14/98

Analyzed Date: 5/14/98

Instrument I.D.#: HP-3B

Conc. Spiked: 15 mg/kg

Result: 13

MS % Recovery: 87

Dup. Result: 14

MSD % Recov.: 93

RPD: 7.4

RPD Limit: 0-50

LCS #: LCS051498B

Prepared Date: 5/14/98

Analyzed Date: 5/14/98

Instrument I.D.#: HP-3B

Conc. Spiked: 15 mg/kg

LCS Result: 13

LCS % Recov.: 87

MS/MSD

LCS 60-140

Control Limits

Please Note:

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** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Laboratory Director



UNOCAL 76

680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600
 819 Striker Ave., Suite B • Sacramento, CA 95834 • (916) 921-9600
 404 N. Wiget Lane • Walnut Creek, CA 94598 • (510) 988-9600

18939 120th Ave., N.E., Suite 101 • Bothell, WA 98011 • (206) 481-9200
 East 11115 Montgomery, Suite B • Spokane, WA 99206 • (509) 924-9200
 15055 S.W. Sequoia Pkwy, Suite 110 • Portland, OR 97222 • (503) 624-9800

Consultant Company: **GETTLER-RYAN INC. J#140165** Project Name: **FORMER UNOCAL #1871-OAKLAND**
 Address: **6747 Sierra Court, Suite J** UNOCAL Project Manager: **TINA BERRY**
 City: **DUBLIN** State: **CA** Zip Code: **94568** AFE #: **9505201**
 Telephone: **(510) 551-7555** FAX #: **551-7888** Site #, City, State: **96 MACARTHUR BLVD.**
 Report To: **HAIG KEVORK** Sampler: **HAIG KEVORK** 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 as	Hydraulic	Fluid	Comments
1. H-1	5/12/98	SOIL	1	BRASS					8051000
2. H-2	5/12/98	SOIL	1	TUBE					8051001
3.									
4.									
5.									
6.									
7.									
8.									
10.									

Relinquished By: *[Signature]* Date: **5/12/98** Time: **7:00** Received By: _____ Date: _____ Time: _____
 Relinquished By: _____ Date: _____ Time: _____ Received By: _____ Date: _____ Time: _____
 Relinquished By: _____ Date: _____ Time: _____ Received By Lab: **K. Kelly** Date: **5/12/98** Time: **1:00**

Were Samples Received in Good Condition? Yes No Samples on Ice? Yes No Method of Shipment _____ Page **1** of **1**

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? _____
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 Approved by: _____ Signature: _____ Company: _____ Date: _____

Pink - Client
 Yellow - Laboratory
 White - Laboratory



**Sequoia
Analytical**

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(916) 921-9600

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Matrix: Water
Analysis Method: EPA 5030/8015 Mod. 1/8020
First Sample #: 805-1002

Sampled: May 11, 1998
Received: May 12, 1998
Reported: Jun 1, 1998

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JUN 03 1998

**TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX / MTBE
GETTLER-RYAN INC.
GENERAL CONTRACTORS**


Analyte	Reporting Limit µg/L	Sample I.D. 805-1002 Water-FT	Sample I.D. 805-1003 Water-WO
Purgeable Hydrocarbons	50	620,000	90
Benzene	0.50	N.D.	N.D.
Toluene	0.50	18,000	N.D.
Ethyl Benzene	0.50	13,000	N.D.
Total Xylenes	0.50	83,000	N.D.
MTBE	2.5	N.D.	N.D.
Chromatogram Pattern:		Gasoline	Gasoline & Discrete Peaks

Quality Control Data

Report Limit Multiplication Factor:	10,000	1.0
Date Analyzed:	5/19/98	5/19/98
Instrument Identification:	HP-2	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	108	113

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
Laboratory Director



Gettler-Ryan
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Matrix: Water
Analysis Method: EPA 3510/8015 Mod.
First Sample #: 805-1003

Sampled: May 11, 1998
Received: May 12, 1998
Reported: Jun 1, 1998

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 805-1003 Water-WO
---------	-------------------------	-------------------------------------

Extractable Hydrocarbons	50	890
--------------------------	----	-----

Chromatogram Pattern: Unidentified Hydrocarbons <C14

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Extracted:	5/15/98
Date Analyzed:	5/19/98
Instrument Identification:	HP-3B

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

SEQUOIA ANALYTICAL, #1271


Alan B. Kemp
Laboratory Director



**Sequoia
Analytical**

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8

Redwood City, CA 94063
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FAX (916) 921-0100

Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix Descript: Water
Analysis Method: SM 5520 B&F (Gravimetric)
First Sample #: 805-1003

Sampled: May 11, 1998
Received: May 12, 1998
Extracted: May 19, 1998
Analyzed: May 19, 1998
Reported: Jun 1, 1998

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/L (ppm)	Detection Limit Multiplication Factor
805-1003	Water-WO	N.D.	1.0

Detection Limits:

5.0

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

SEQUOIA ANALYTICAL, #1271


Alan B. Kemp
Laboratory Director



**Sequoia
Analytical**

680 Chesapeake Drive
404 N. Wiget Lane
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FAX (510) 988-9673
FAX (916) 921-0100

Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Halg Kevork

Client Project ID: Unocal #1871, Oakland
Sample Descript: Water, Water-WO
Lab Number: 805-1003

Sampled: May 11, 1998
Received: May 12, 1998
Analyzed: May 27, 1998
Reported: Jun 1, 1998

LABORATORY ANALYSIS

Analyte	Detection Limit mg/L	Sample Results mg/L
Cadmium.....	0.010	N.D.
Chromium.....	0.010	0.053
Nickel.....	0.010	0.055
Lead.....	0.020	N.D.
Zinc.....	0.020	0.065

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

SEQUOIA ANALYTICAL, #1271


Alan B. Kemp
Laboratory Director



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Descript: Water, Water-WO
Analysis Method: EPA 5030/8010
Lab Number: 805-1003


Sampled: May 11, 1998
Received: May 12, 1998
Analyzed: May 13, 1998
Reported: Jun 1, 1998

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane	0.50	5.8
Bromoform.....	0.50	N.D.
Bromomethane.....	1.0	N.D.
Carbon tetrachloride.....	0.50	N.D.
Chlorobenzene.....	0.50	N.D.
Chloroethane.....	1.0	N.D.
Chloroform	0.50	14
Chloromethane.....	1.0	N.D.
Dibromochloromethane	0.50	1.9
1,3-Dichlorobenzene.....	0.50	N.D.
1,4-Dichlorobenzene	0.50	0.89
1,2-Dichlorobenzene	0.50	2.8
1,1-Dichloroethane.....	0.50	N.D.
1,2-Dichloroethane.....	0.50	N.D.
1,1-Dichloroethene.....	0.50	N.D.
cis-1,2-Dichloroethene.....	0.50	N.D.
trans-1,2-Dichloroethene.....	0.50	N.D.
1,2-Dichloropropane.....	0.50	N.D.
cis-1,3-Dichloropropene.....	0.50	N.D.
trans-1,3-Dichloropropene.....	0.50	N.D.
Methylene chloride.....	5.0	N.D.
1,1,2,2-Tetrachloroethane.....	0.50	N.D.
Tetrachloroethene	0.50	1.7
1,1,1-Trichloroethane.....	0.50	N.D.
1,1,2-Trichloroethane.....	0.50	N.D.
Trichloroethene.....	0.50	N.D.
Trichlorofluoromethane.....	0.50	N.D.
Vinyl chloride.....	1.0	N.D.
Surrogates	Control Limit %	% Recovery
Dibromodifluoromethane.....	50	150
4-Bromofluorobenzene.....	50	150

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

SEQUOIA ANALYTICAL, #1271


Alan B. Kemp
Laboratory Director



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Descript: Water, Water-WO
Analysis Method: EPA 8270
Lab Number: 805-1003

Sampled: May 11, 1998
Received: May 12, 1998
Extracted: May 18, 1998
Analyzed: May 20, 1998
Reported: Jun 1, 1998

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/L	Sample Results µg/L
Acenaphthene.....	5.0	N.D.
Acenaphthylene.....	5.0	N.D.
Anthracene.....	5.0	N.D.
Benzoic Acid.....	10	N.D.
Benzo(a)anthracene.....	5.0	N.D.
Benzo(b)fluoranthene.....	5.0	N.D.
Benzo(k)fluoranthene.....	5.0	N.D.
Benzo(g,h,i)perylene.....	5.0	N.D.
Benzo(a)pyrene.....	5.0	N.D.
Benzyl alcohol.....	5.0	N.D.
Bis(2-chloroethoxy)methane.....	5.0	N.D.
Bis(2-chloroethyl)ether.....	5.0	N.D.
Bis(2-chloroisopropyl)ether.....	5.0	N.D.
Bis(2-ethylhexyl)phthalate.....	10	N.D.
4-Bromophenyl phenyl ether.....	5.0	N.D.
Butyl benzyl phthalate.....	5.0	N.D.
4-Chloroaniline.....	10	N.D.
2-Chloronaphthalene.....	5.0	N.D.
4-Chloro-3-methylphenol.....	5.0	N.D.
2-Chlorophenol.....	5.0	N.D.
4-Chlorophenyl phenyl ether.....	5.0	N.D.
Chrysene.....	5.0	N.D.
Dibenz(a,h)anthracene.....	5.0	N.D.
Dibenzofuran.....	5.0	N.D.
Di-N-butyl phthalate.....	10	N.D.
1,3-Dichlorobenzene.....	5.0	N.D.
1,4-Dichlorobenzene.....	5.0	N.D.
1,2-Dichlorobenzene.....	5.0	N.D.
3,3-Dichlorobenzidine.....	10	N.D.
2,4-Dichlorophenol.....	5.0	N.D.
Diethyl phthalate.....	5.0	N.D.
2,4-Dimethylphenol.....	5.0	N.D.
Dimethyl phthalate.....	5.0	N.D.
4,6-Dinitro-2-methylphenol.....	10	N.D.
2,4-Dinitrophenol.....	10	N.D.
2,4-Dinitrotoluene.....	5.0	N.D.
2,6-Dinitrotoluene.....	5.0	N.D.
Di-N-octyl phthalate.....	5.0	N.D.
Fluoranthene.....	5.0	N.D.
Fluorene.....	5.0	N.D.



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Descript: Water, Water-WO
Analysis Method: EPA 8270
Lab Number: 805-1003


Sampled: May 11, 1998
Received: May 12, 1998
Extracted: May 18, 1998
Analyzed: May 20, 1998
Reported: Jun 1, 1998

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/L	Sample Results µg/L	
Hexachlorobenzene.....	5.0	N.D.	
Hexachlorobutadiene.....	5.0	N.D.	
Hexachlorocyclopentadiene.....	10	N.D.	
Hexachloroethane.....	5.0	N.D.	
Indeno(1,2,3-cd)pyrene.....	5.0	N.D.	
Isophorone.....	5.0	N.D.	
2-Methylnaphthalene.....	5.0	N.D.	
2-Methylphenol.....	5.0	N.D.	
4-Methylphenol.....	5.0	N.D.	
Naphthalene.....	5.0	N.D.	
2-Nitroaniline.....	10	N.D.	
3-Nitroaniline.....	10	N.D.	
4-Nitroaniline.....	10	N.D.	
Nitrobenzene.....	5.0	N.D.	
2-Nitrophenol.....	5.0	N.D.	
4-Nitrophenol.....	10	N.D.	
N-Nitrosodiphenylamine.....	5.0	N.D.	
N-Nitroso-di-N-propylamine.....	5.0	N.D.	
Pentachlorophenol.....	10	N.D.	
Phenanthrene.....	5.0	N.D.	
Phenol.....	5.0	N.D.	
Pyrene.....	5.0	N.D.	
1,2,4-Trichlorobenzene.....	5.0	N.D.	
2,4,5-Trichlorophenol.....	10	N.D.	
2,4,6-Trichlorophenol.....	5.0	N.D.	
Surrogates	Control Limit %	% Recovery	
2-Fluorophenol.....	21	100	47
Phenol-d6.....	10	100	30
Nitrobenzene-d5.....	35	114	75
2-Fluorobiphenyl.....	43	116	81
2,4,6-Tribromophenol.....	10	123	91
4-Terphenyl-d14.....	33	141	95

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL, #1271


Alan B. Kemp
Laboratory Director



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Liquid

QC Sample Group: 8051002-003

Reported: Jun 1, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC051998 802002A	GC051998 802002A	GC051998 802002A	GC051998 802002A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb
MS/MSD #:	8050910	8050910	8050910	8050910
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/19/98	5/19/98	5/19/98	5/19/98
Analyzed Date:	5/19/98	5/19/98	5/19/98	5/19/98
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Result:	19	19	20	58
MS % Recovery:	95	95	100	97
Dup. Result:	16	16	16	49
MSD % Recov.:	80	80	80	82
RPD:	17	17	22	17
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	2LCS051998	2LCS051998	2LCS051998	2LCS051998
Prepared Date:	5/19/98	5/19/98	5/19/98	5/19/98
Analyzed Date:	5/19/98	5/19/98	5/19/98	5/19/98
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	17	17	17	53
LCS % Recov.:	85	85	85	88

MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130

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.

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Laboratory Director



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Liquid

QC Sample Group: 8051002-003

Reported: Jun 1, 1998

QUALITY CONTROL DATA REPORT

ANALYTE	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene	Diesel
Method:	EPA 8010	EPA 8010	EPA 8010	EPA 8015M
Analyst:	N. Nelson	N. Nelson	N. Nelson	K. Grubb

MS/MSD				
Batch#:	8050960	8050960	8050960	BLK051598A
Date Prepared:	5/13/98	5/13/98	5/13/98	5/15/98
Date Analyzed:	5/13/98	5/13/98	5/13/98	5/18/98
Instrument I.D.#:	HP-7	HP-7	HP-7	HP-3B
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	500 µg/L
Matrix Spike % Recovery:	95	95	80	72
Matrix Spike Duplicate % Recovery:	95	90	65	82
Relative % Difference:	0.0	5.4	21	13
RPD Limit:	0-25	0-25	0-25	0-50

LCS Batch#:	LCS051398A	LCS051398A	LCS051398A	LCS051598A
Date Prepared:	5/13/98	5/13/98	5/13/98	5/15/98
Date Analyzed:	5/13/98	5/13/98	5/13/98	5/18/98
Instrument I.D.#:	HP-7	HP-7	HP-7	HP-3B
LCS % Recovery:	95	95	75	62

% Recovery Control Limits:	60-140	60-140	60-140	60-140
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SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Laboratory Director



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Liquid

QC Sample Group: 8051002-003

Reported: Jun 1, 1998

QUALITY CONTROL DATA REPORT

ANALYTE	Phenol	2-Chlorophenol	1,4-Dichloro-benzene	N-Nitroso-Di-N-propylamine	1,2,4-Trichloro-benzene	4-Chloro-3-Methylphenol
Prep. Method:	EPA 3510	EPA 3510	EPA 3510	EPA 3510	EPA 3510	EPA 3510
Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Analyst:	L. Diaz	L. Diaz	L. Diaz	L. Diaz	L. Diaz	L. Diaz

MS/MSD	Phenol	2-Chlorophenol	1,4-Dichloro-benzene	N-Nitroso-Di-N-propylamine	1,2,4-Trichloro-benzene	4-Chloro-3-Methylphenol
Batch#:	BLK051898A	BLK051898A	BLK051898A	BLK051898A	BLK051898A	BLK051898A
Date Prepared:	5/18/98	5/18/98	5/18/98	5/18/98	5/18/98	5/18/98
Date Analyzed:	5/20/98	5/20/98	5/20/98	5/20/98	5/20/98	5/20/98
Instrument I.D.#:	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1
Conc. Spiked:	150 µg/L	150 µg/L	100 µg/L	100 µg/L	100 µg/L	150 µg/L
Matrix Spike % Recovery:	32	73	67	79	75	80
Matrix Spike Duplicate % Recovery:	29	73	63	80	70	73
Relative % Difference:	11	0.0	6.2	1.3	6.9	8.7
RPD Limit:	0-30	0-30	0-30	0-30	0-30	0-30

LCS Batch#:	-	-	-	-	-	-
Date Prepared:	-	-	-	-	-	-
Date Analyzed:	-	-	-	-	-	-
Instrument I.D.#:	-	-	-	-	-	-
LCS % Recovery:	-	-	-	-	-	-

% Recovery Control Limits:	Phenol	2-Chlorophenol	1,4-Dichloro-benzene	N-Nitroso-Di-N-propylamine	1,2,4-Trichloro-benzene	4-Chloro-3-Methylphenol
	12-110	27-123	36-97	41-116	39-98	23-97

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SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Laboratory Director



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Halg Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Liquid

QC Sample Group: 8051002-003

Reported: Jun 1, 1998

QUALITY CONTROL DATA REPORT

ANALYTE	Acenaphthene	4-Nitrophenol	2,4-Dinitro-toluene	Pentachloro-phenol	Pyrene
Prep. Method:	EPA 3510	EPA 3510	EPA 3510	EPA 3510	EPA 3510
Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Analyst:	L. Diaz	L. Diaz	L. Diaz	L. Diaz	L. Diaz

MS/MSD					
Batch#:	BLK051898A	BLK051898A	BLK051898A	BLK051898A	BLK051898A
Date Prepared:	5/18/98	5/18/98	5/18/98	5/18/98	5/18/98
Date Analyzed:	5/20/98	5/20/98	5/20/98	5/20/98	5/20/98
Instrument I.D.#:	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1
Conc. Spiked:	100 µg/L	150 µg/L	100 µg/L	150 µg/L	100 µg/L
Matrix Spike % Recovery:	77	37	80	87	87
Matrix Spike Duplicate % Recovery:	73	31	75	87	93
Relative % Difference:	5.3	20	6.5	0.0	6.7
RPD Limit:	0-30	0-30	0-30	0-30	0-30

LCS Batch#:	-	-	-	-	-
Date Prepared:	-	-	-	-	-
Date Analyzed:	-	-	-	-	-
Instrument I.D.#:	-	-	-	-	-
LCS % Recovery:	-	-	-	-	-

% Recovery Control Limits:	12-110	27-123	36-97	41-116	39-98
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Please Note:
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SEQUOIA ANALYTICAL, #1271

[Signature]
Alan B. Kemp
Laboratory Director



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Liquid

QC Sample Group: 8051002-003

Reported: Jun 1, 1998

QUALITY CONTROL DATA REPORT

ANALYTE	Nickel	Cadmium	Chromium	Lead	Zinc
Method:	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7
Analyst:	J. Kelly	J. Kelly	J. Kelly	J. Kelly	J. Kelly
MS/MSD					
Batch#:	8051353	8051353	8051353	8051353	8051353
Date Prepared:	5/26/98	5/26/98	5/26/98	5/26/98	5/26/98
Date Analyzed:	5/27/98	5/27/98	5/27/98	5/27/98	5/27/98
Instrument I.D.#:	MV-4	MV-4	MV-4	MV-4	MV-4
Conc. Spiked:	1.0 mg/L	1.0 mg/L	1.0 mg/L	1.0 mg/L	1.0 mg/L
Matrix Spike					
% Recovery:	82	84	80	80	83
Matrix Spike Duplicate %					
Recovery:	82	83	80	77	82
Relative %					
Difference:	0.0	1.2	0.0	3.8	1.2
RPD Limit:	0-20	0-20	0-20	0-20	0-20

LCS Batch#:	LCS052698A	LCS052698A	LCS052698A	LCS052698A	LCS052698A
Date Prepared:	5/26/98	5/26/98	5/26/98	5/26/98	5/26/98
Date Analyzed:	5/27/98	5/27/98	5/27/98	5/27/98	5/27/98
Instrument I.D.#:	MV-4	MV-4	MV-4	MV-4	MV-4
LCS %					
Recovery:	83	84	80	80	82

% Recovery Control Limits:	80-120	80-120	80-120	80-120	80-120
----------------------------	--------	--------	--------	--------	--------

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
Laboratory Director



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Water

QC Sample Group: 8051002-003

Reported: Jun 1, 1998

QUALITY CONTROL DATA REPORT

ANALYTE Oil & Grease

Method: SM 5520
Analyst: N. Van Slambroek

MS/MSD
Batch#: BLK051998B

Date Prepared: 5/19/98
Date Analyzed: 5/19/98
Instrument I.D.#: Manual
Conc. Spiked: 100 mg/L

Matrix Spike
% Recovery: 130

Matrix Spike
Duplicate %
Recovery: 120

Relative %
Difference: 8.0
RPD Limit: 0-30

LCS Batch#: LCS051998B

Date Prepared: 5/19/98
Date Analyzed: 5/19/98
Instrument I.D.#: Manual

LCS %
Recovery: 110

% Recovery
Control Limits: 60-140

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
Laboratory Director

UNOCAL 76

680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600
 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600
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 East 11115 Montgomery, Suite B • Spokane, WA 99206 • (509) 924-9200
 15055 S.W. Sequoia Pkwy, Suite 110 • Portland, OR 97222 • (503) 624-9800

Consultant Company: GETTLER-RYAN INC. J#140165			Project Name: FORMER UNOCAL #1871 - OAKLAND		
Address: 6747 Sierra Court, Suite J			UNOCAL Project Manager: TINA BERRY		
City: DUBLIN	State: CA	Zip Code: 94568	AFE #: 15415992		
Telephone: (510) 551-7555 FAX #: 551-7888			Site #, City, State: 96 MACARTHUR BLVD,		
Report To: HAIG KEVORK		Sampler: HAIG KEVORK		QC Data: <input checked="" type="checkbox"/> Level D (Standard) <input type="checkbox"/> Level C <input type="checkbox"/> Level B <input type="checkbox"/> 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
 TPH-G BTEX MTBE TPH-D TOG 8010 8270 Cd/Cr/Pb Zn/Ni

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Laboratory Sample #	TPH-G	BTEX	MTBE	TPH-D	TOG	8010	8270	Cd/Cr/Pb	Zn/Ni	Comments
1. WATER-FT	5/11/98	H2O	3	VOA		✓	✓	✓							8051002
2. WATER-WO	5/11/98	H2O	6	VOA AMBER		✓	✓	✓	✓	✓	✓	✓	✓	✓	8052003
3.															
4.															
5.															
6.															
7.															
8.															
9.															
10.															

Relinquished By: <i>[Signature]</i>	Date: 5/12/98	Time: 7:00	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By Lab: K. W. W. J.	Date: 5/12/98	Time: 1900

Were Samples Received in Good Condition? Yes No
 Samples on Ice? Yes No
 Method of Shipment _____
 Page 1 of 1

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 Analytical

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

Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Matrix: Soil
Analysis Method: EPA 5030/8015 Mod./8020
First Sample #: 805-0988

Sampled: May 12, 1998
Received: May 12, 1998
Reported: May 21, 1998

QC Batch Number:

SP051598 8020EXA SP051598 8020EXA SP051598 8020EXA SP051598 8020EXA SP051598 8020EXA SP051598 8020EXA

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX

Analyte	Reporting Limit mg/Kg	Sample I.D. 805-0988 SP1 (A-D)	Sample I.D. 805-0989 SP1 (E-H)	Sample I.D. 805-0990 SP1 (I-L)	Sample I.D. 805-0991 SP1 (M-P)	Sample I.D. 805-0992 SP1 (Q-T)	Sample I.D. 805-0993 SP1 (U-X)
Purgeable Hydrocarbons	1.0	N.D.	170	60	380	50	1,200
Benzene	0.0050	N.D.	2.9	1.5	1.6	0.32	9.0
Toluene	0.0050	N.D.	0.74	5.5	5.6	0.90	26
Ethyl Benzene	0.0050	N.D.	0.78	6.6	7.5	0.81	28
Total Xylenes	0.0050	0.015	3.2	27	34	3.5	100

Chromatogram Pattern:

-- Gasoline & Unidentified Hydrocarbons >C8 Gasoline Gasoline Gasoline Gasoline

Quality Control Data

Report Limit Multiplication Factor:	1.0	10	20	50	50	100
Date Analyzed:	5/15/98	5/15/98	5/15/98	5/15/98	5/15/98	5/15/98
Instrument Identification:	HP-4	HP-4	HP-4	HP-4	HP-4	HP-4
Surrogate Recovery, %: (QC Limits = 40-140%)	107	147^	*	*	*	*

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

Please Note:

- ^Surrogate outside of upper control limit due to peak coelution.
- *Surrogate recovery below lower control limit due to dilution.

Alan B. Kemp
Laboratory Director



**Sequoia
Analytical**

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(916) 921-9600

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

Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Matrix: Soil
Analysis Method: EPA 5030/8015 Mod./8020
First Sample #: 805-0994

Sampled: May 12, 1998
Received: May 12, 1998
Reported: May 21, 1998

QC Batch Number: SP051598 SP051598

8020EXA 8020EXA

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX

Analyte	Reporting Limit mg/Kg	Sample I.D. 805-0994 SP1 (Y,Z,1,2)	Sample I.D. 805-0995 SP1 (3,4,5,6)
Purgeable Hydrocarbons	1.0	130	13
Benzene	0.0050	0.94	0.36
Toluene	0.0050	2.8	0.57
Ethyl Benzene	0.0050	2.3	0.22
Total Xylenes	0.0050	12	0.92

Chromatogram Pattern: Gasoline Gasoline & Discrete Peaks

Quality Control Data

Report Limit Multiplication Factor:	20	5.0
Date Analyzed:	5/15/98	5/18/98
Instrument Identification:	HP-4	HP-4
Surrogate Recovery, %: (QC Limits = 40-140%)	*	119

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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Alan B. Kemp
Laboratory Director

Please Note:

*Surrogate recovery below lower control limit due to dilution.



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Matrix: Soil
Analysis Method: EPA 5030/8015 Mod./8020
First Sample #: 805-0996

Sampled: May 12, 1998
Received: May 12, 1998
Reported: May 21, 1998

QC Batch Number: SP051598

8020EXA

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX

Analyte	Reporting Limit mg/Kg	Sample I.D. 805-0996 WO SP1
Purgeable Hydrocarbons	2.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Total Xylenes	0.0050	0.014

Chromatogram Pattern: --

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Analyzed:	5/18/98
Instrument Identification:	HP-4
Surrogate Recovery, %: (QC Limits = 40-140%)	102

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
Laboratory Director





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6747 Sierra Court, Sulte J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Matrix: Soil
Analysis Method: EPA 3550/8015 Mod.
First Sample #: 805-0996

Sampled: May 12, 1998
Received: May 12, 1998
Reported: May 21, 1998

QC Batch Number:

SP051998

8015EXA

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 805-0996 WO SP1
Extractable Hydrocarbons	1.0	6.8

Chromatogram Pattern:

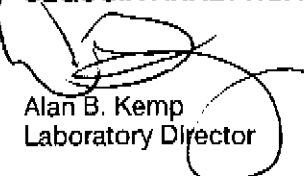
Unidentified
Hydrocarbons
> C16

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Extracted:	5/19/98
Date Analyzed:	5/19/98
Instrument Identification:	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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Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix Descript: Soil
Analysis Method: SM 5520 E&F (Gravimetric)
First Sample #: 805-0996

Sampled: May 12, 1998
Received: May 12, 1998
Extracted: May 15, 1998
Analyzed: May 18, 1998
Reported: May 21, 1998

TOTAL RECOVERABLE PETROLEUM OIL

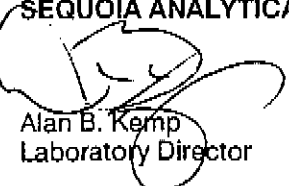
Sample Number	Sample Description	Oil & Grease mg/kg (ppm)	Detection Limit Multiplication Factor	QC Batch Number
805-0996	WO SP1	110	1.0	SP0515985520EXA

Detection Limits:

50

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

SEQUOIA ANALYTICAL, #1271


Alan B. Kemp
Laboratory Director

8050988.GET <5>





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Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Descript: Soil, WO SP1
Analysis Method: EPA 5030/8010
Lab Number: 805-0996

Sampled: May 12, 1998
Received: May 12, 1998
Analyzed: May 18, 1998
Reported: May 21, 1998

QC Batch Number: SP0515988010EXA

Instrument ID: HP-7

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane.....	10	N.D.
Bromoform.....	10	N.D.
Bromomethane.....	20	N.D.
Carbon tetrachloride.....	10	N.D.
Chlorobenzene.....	10	N.D.
Chloroethane.....	20	N.D.
Chloroform.....	10	N.D.
Chloromethane.....	20	N.D.
Dibromochloromethane.....	10	N.D.
1,2-Dichlorobenzene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.
1,1-Dichloroethane.....	10	N.D.
1,2-Dichloroethane.....	10	N.D.
1,1-Dichloroethene.....	10	N.D.
cis-1,2-Dichloroethene.....	10	N.D.
trans-1,2-Dichloroethene.....	10	N.D.
1,2-Dichloropropane.....	10	N.D.
cis-1,3-Dichloropropene.....	10	N.D.
trans-1,3-Dichloropropene.....	10	N.D.
Methylene chloride.....	100	N.D.
1,1,2,2-Tetrachloroethane.....	10	N.D.
Tetrachloroethene.....	10	N.D.
1,1,1-Trichloroethane.....	10	N.D.
1,1,2-Trichloroethane.....	10	N.D.
Trichloroethene.....	10	N.D.
Trichlorofluoromethane.....	10	N.D.
Vinyl chloride.....	20	N.D.

Surrogates	Control Limit %	% Recovery
Dibromodifluoromethane.....	50	150
4-Bromofluorobenzene.....	50	150

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

SEQUOIA ANALYTICAL, #1271

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Gettler-Ryan - Dublin
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Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Descript: Soil, WO SP1
Analysis Method: EPA 8270
Lab Number: 805-0996

Sampled: May 12, 1998
Received: May 12, 1998
Extracted: May 18, 1998
Analyzed: May 19, 1998
Reported: May 21, 1998

QC Batch Number: SP0518988270EXB
Instrument ID: MS-1

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg	
Hexachlorobenzene.....	100	N.D.	
Hexachlorobutadiene.....	100	N.D.	
Hexachlorocyclopentadiene.....	100	N.D.	
Hexachloroethane.....	100	N.D.	
Indeno(1,2,3-cd)pyrene.....	100	N.D.	
Isophorone.....	100	N.D.	
2-Methylnaphthalene.....	100	N.D.	
2-Methylphenol.....	100	N.D.	
4-Methylphenol.....	100	N.D.	
Naphthalene.....	100	N.D.	
2-Nitroaniline.....	500	N.D.	
3-Nitroaniline.....	500	N.D.	
4-Nitroaniline.....	500	N.D.	
Nitrobenzene.....	100	N.D.	
2-Nitrophenol.....	100	N.D.	
4-Nitrophenol.....	500	N.D.	
N-Nitrosodimethylamine.....	100	N.D.	
N-Nitrosodiphenylamine.....	100	N.D.	
N-Nitroso-di-N-propylamine.....	100	N.D.	
Pentachlorophenol.....	500	N.D.	
Phenanthrene.....	100	350	
Phenol.....	100	N.D.	
Pyrene.....	100	380	
1,2,4-Trichlorobenzene.....	100	N.D.	
2,4,5-Trichlorophenol.....	500	N.D.	
2,4,6-Trichlorophenol.....	100	N.D.	
Surrogates	Control Limit %	% Recovery	
2-Fluorophenol.....	25	121	70
Phenol-d6.....	24	113	69
Nitrobenzene-d5.....	23	120	71
2-Fluorobiphenyl.....	30	115	80
2,4,6-Tribromophenol.....	19	122	84
4-Terphenyl-d14.....	18	137	87

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

SEQUOIA ANALYTICAL, #1271


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Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Descript: Soil, WO SP-1
Lab Number: 805-0996

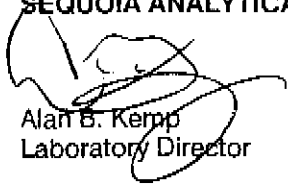
Sampled: May 12, 1998
Received: May 12, 1998
Extracted: May 18, 1998
Analyzed: May 18, 1998
Reported: May 21, 1998

LUFT METALS

Analyte	Detection Limit mg/kg	Sample Results mg/kg	QC Batch Number	Instrument ID
Cadmium.....	0.50	N.D.	ME0518986010MDA	MV-4
Chromium.....	0.50	30	ME0518986010MDA	MV-4
Lead.....	1.0	3.0	ME0518986010MDA	MV-4
Nickel.....	1.0	56	ME0518986010MDA	MV-4
Zinc.....	1.0	57	ME0518986010MDA	MV-4

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

SEQUOIA ANALYTICAL, #1271


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Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Descript: Soil
Analysis for: Lead
First Sample #: 805-0988

Sampled: May 12, 1998
Received: May 12, 1998
Digested: May 18, 1998
Analyzed: May 18, 1998
Reported: May 21, 1998

LABORATORY ANALYSIS FOR: Lead

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg	QC Batch Number	Instrument ID
805-0988	SP1 (A-D)	1.0	19	ME0518986010MDA	MV-4
805-0989	SP1 (E-H)	1.0	2.2	ME0518986010MDA	MV-4
805-0990	SP1 (I-L)	1.0	5.9	ME0518986010MDA	MV-4
805-0991	SP1 (M-P)	1.0	4.6	ME0518986010MDA	MV-4
805-0992	SP1 (Q-T)	1.0	4.9	ME0518986010MDA	MV-4
805-0993	SP1 (U-X)	1.0	2.1	ME0518986010MDA	MV-4
805-0994	SP1 (Y,Z,1,2)	1.0	3.5	ME0518986010MDA	MV-4
805-0995	SP1 (3,4,5,6)	1.0	1.9	ME0518986010MDA	MV-4

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

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Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Descript: Soil, WO SP1
Analysis Method: EPA 8270
Lab Number: 805-0996

Sampled: May 12, 1998
Received: May 12, 1998
Extracted: May 18, 1998
Analyzed: May 19, 1998
Reported: May 21, 1998

QC Batch Number: SP0518988270EXB

Instrument ID: MS-1

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene.....	100	N.D.
Acenaphthylene.....	100	N.D.
Aniline.....	100	N.D.
Anthracene.....	100	N.D.
Benzidine.....	2,500	N.D.
Benzoic Acid.....	500	N.D.
Benzo(a)anthracene.....	100	N.D.
Benzo(b)fluoranthene.....	100	N.D.
Benzo(k)fluoranthene.....	100	N.D.
Benzo(g,h,i)perylene.....	100	N.D.
Benzo(a)pyrene.....	100	N.D.
Benzyl alcohol.....	100	N.D.
Bis(2-chloroethoxy)methane.....	100	N.D.
Bis(2-chloroethyl)ether.....	100	N.D.
Bis(2-chloroisopropyl)ether.....	100	N.D.
Bis(2-ethylhexyl)phthalate.....	500	N.D.
4-Bromophenyl phenyl ether.....	100	N.D.
Butyl benzyl phthalate.....	100	N.D.
4-Chloroaniline.....	100	N.D.
2-Chloronaphthalene.....	100	N.D.
4-Chloro-3-methylphenol.....	100	N.D.
2-Chlorophenol.....	100	N.D.
4-Chlorophenyl phenyl ether.....	100	N.D.
Chrysene.....	100	N.D.
Dibenz(a,h)anthracene.....	100	N.D.
Dibenzofuran.....	100	N.D.
Di-N-butyl phthalate.....	500	N.D.
1,3-Dichlorobenzene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.
3,3-Dichlorobenzidine.....	500	N.D.
2,4-Dichlorophenol.....	100	N.D.
Diethyl phthalate.....	100	N.D.
2,4-Dimethylphenol.....	100	N.D.
Dimethyl phthalate.....	100	N.D.
4,6-Dinitro-2-methylphenol.....	500	N.D.
2,4-Dinitrophenol.....	500	N.D.
2,4-Dinitrotoluene.....	100	N.D.
2,6-Dinitrotoluene.....	100	N.D.
Di-N-octyl phthalate.....	100	N.D.
Fluoranthene.....	100	380
Fluorene.....	100	N.D.





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Attention: Halg Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Solid

QC Sample Group: 8050988-996

Reported: May 21, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel	Oil & Grease
QC Batch#:	SP051598 8020EXA	SP051598 8020EXA	SP051598 8020EXA	SP051598 8020EXA	SP051498 8015EXB	SP051598 5520EXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015	SM 5520
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 3550	SM 5520
Analyst:	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb	K. Grubbs	L. Diaz
MS/MSD #:	8050476	8050476	8050476	8050476	8051010	BLK051598B
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/15/98	5/15/98	5/15/98	5/15/98	5/14/98	5/15/98
Analyzed Date:	5/15/98	5/15/98	5/15/98	5/15/98	5/14/98	5/18/98
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4	HP-3B	Manual
Conc. Spiked:	0.80 mg/kg	0.80 mg/kg	0.80 mg/kg	2.4 mg/kg	15 mg/kg	500 mg/kg
Result:	0.88	0.89	0.84	2.7	13	5600
MS % Recovery:	110	111	105	113	87	112
Dup. Result:	0.89	0.91	0.86	2.7	14	5100
MSD % Recov.:	111	114	108	113	93	102
RPD:	1.1	2.2	2.4	0.0	7.4	9.3
RPD Limit:	0-25	0-25	0-25	0-25	0-50	0-30

LCS #:	4LCS051598	4LCS051598	4LCS051598	4LCS051598	LCS051998	-
Prepared Date:	5/15/98	5/15/98	5/15/98	5/15/98	5/19/98	-
Analyzed Date:	5/15/98	5/15/98	5/15/98	5/15/98	5/19/98	-
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4	HP-3B	-
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	15 mg/kg	-
LCS Result:	19	19	18	58	14	-
LCS % Recov.:	95	95	90	97	93	-

MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130	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.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Laboratory Director





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6747 Sierra Court, Suite J
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Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Solid

QC Sample Group: 8050988-996

Reported: May 21, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP051598 8020EXA	SP051598 8020EXA	SP051598 8020EXA	SP051598 8020EXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb
MS/MSD #:	8050476	8050476	8050476	8050476
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/15/98	5/15/98	5/15/98	5/15/98
Analyzed Date:	5/15/98	5/15/98	5/15/98	5/15/98
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	0.80 mg/kg	0.80 mg/kg	0.80 mg/kg	2.4 mg/kg
Result:	0.88	0.89	0.84	2.7
MS % Recovery:	110	111	105	113
Dup. Result:	0.89	0.91	0.86	2.7
MSD % Recov.:	111	114	108	113
RPD:	1.1	2.2	2.4	0.0
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	4LCS051898	4LCS051898	4LCS051898	4LCS051898
Prepared Date:	5/18/98	5/18/98	5/18/98	5/18/98
Analyzed Date:	5/18/98	5/18/98	5/18/98	5/18/98
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	17	18	17	52
LCS % Recov.:	85	90	85	87

MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130

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.

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

SEQUOIA ANALYTICAL, #1271

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Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Solid

QC Sample Group: 8050988-996

Reported: May 21, 1998

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
QC Batch#:	SP051598 8010EXA	SP051598 8010EXA	SP051598 8010EXA
Analy. Method:	EPA 8010	EPA 8010	EPA 8010
Prep. Method:	EPA 5030	EPA 5030	EPA 5030
Analyst:	N. Nelson	N. Nelson	N. Nelson
MS/MSD #:	8051010	8051010	8051010
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	5/15/98	5/15/98	5/15/98
Analyzed Date:	5/15/98	5/15/98	5/15/98
Instrument I.D.#:	HP-7	HP-7	HP-7
Conc. Spiked:	200 µg/Kg	200 µg/Kg	200 µg/Kg
Result:	180	170	12
MS % Recovery:	90	85	60
Dup. Result:	170	170	130
MSD % Recov.:	85	85	65
RPD:	5.7	0.0	8.0
RPD Limit:	0-25	0-25	0-25

LCS #:	LCS051898	LCS051898	LCS051898
Prepared Date:	5/18/98	5/18/98	5/18/98
Analyzed Date:	5/18/98	5/18/98	5/18/98
Instrument I.D.#:	HP-7	HP-7	HP-7
Conc. Spiked:	200 µg/Kg	200 µg/Kg	200 µg/Kg
LCS Result:	180	170	140
LCS % Recov.:	90	85	70

MS/MSD LCS Control Limits	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.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Laboratory Director

8050988.GET <13>





Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Solid

QC Sample Group: 8050988-996

Reported: May 21, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Phenol	2-Chlorophenol	1,4-Dichloro benzene	N-Nitroso-Di-N-propylamine	1,2,4-Trichloro benzene	4-Chloro-3 Methylphenol
QC Batch#:	SP051898 8270EXB	SP051898 8270EXB	SP051898 8270EXB	SP051898 8270EXB	SP051898 8270EXB	SP051898 8270EXB
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3550	EPA 3550	EPA 3550	EPA 3550	EPA 3550	EPA 3550
Analyst:	L. Diaz	L. Diaz	L. Diaz	L. Diaz	L. Diaz	L. Diaz
MS/MSD #:	8050648	8050648	8050648	8050648	8050648	8050648
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/11/98	5/11/98	5/11/98	5/11/98	5/11/98	5/11/98
Analyzed Date:	5/11/98	5/11/98	5/11/98	5/11/98	5/11/98	5/11/98
Instrument I.D.#:	GC/MS-1	GC/MS-1	GC/MS-1	GC/MS-1	GC/MS-1	GC/MS-1
Conc. Spiked:	5000 µg/kg	5000 µg/kg	3300 µg/kg	3300 µg/kg	3300 µg/kg	5000 µg/kg
Result:	2900	3400	1900	2500	2100	3300
MS % Recovery:	58	68	58	76	64	66
Dup. Result:	2800	3400	1800	2500	2100	3600
MSD % Recov.:	56	68	55	76	64	72
RPD:	3.5	0.0	5.4	0.0	0.0	8.7
RPD Limit:	0-40	0-40	0-40	0-40	0-40	0-40

LCS #:	BLK051898B	BLK051898B	BLK051898B	BLK051898B	BLK051898B	BLK051898B
Prepared Date:	3/18/98	3/18/98	3/18/98	3/18/98	3/18/98	3/18/98
Analyzed Date:	3/19/98	3/19/98	3/19/98	3/19/98	3/19/98	3/19/98
Instrument I.D.#:	GC/MS-1	GC/MS-1	GC/MS-1	GC/MS-1	GC/MS-1	GC/MS-1
Conc. Spiked:	5000 µg/kg	5000 µg/kg	3300 µg/kg	3300 µg/kg	3300 µg/kg	5000 µg/kg
LCS Result:	3100	4000	2400	2900	2600	3900
LCS % Recov.:	62	80	73	88	79	78

MS/MSD LCS Control Limits	47-107	59-97	54-93	55-114	60-95	54-100
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** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Laboratory Director



Sequoia Analytical

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Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Solid

QC Sample Group: 8050988-996

Reported: May 21, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Acenaphthene	4-Nitrophenol	2,4-Dinitro-toluene	Pentachloro-phenol	Pyrene
QC Batch#:	SP051898 8270EXB	SP051898 8270EXB	SP051898 8270EXB	SP051898 8270EXB	SP051898 8270EXB
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3550	EPA 3550	EPA 3550	EPA 3550	EPA 3550
Analyst:	L. Diaz	L. Diaz	L. Diaz	L. Diaz	L. Diaz
MS/MSD #:	8050648	8050648	8050648	8050648	8050648
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/11/98	5/11/98	5/11/98	5/11/98	5/11/98
Analyzed Date:	5/11/98	5/11/98	5/11/98	5/11/98	5/11/98
Instrument I.D.#:	GC/MS-1	GC/MS-1	GC/MS-1	GC/MS-1	GC/MS-1
Conc. Spiked:	3300 µg/kg	5000 µg/kg	3300 µg/kg	5000 µg/kg	3300 µg/kg
Result:	2100	4000	2400	430	2800
MS % Recovery:	64	80	73	86	85
Dup. Result:	2300	4200	2400	4300	3100
MSD % Recov.:	70	84	73	86	94
RPD:	9.1	4.9	0.0	0.0	10
RPD Limit:	0-40	0-40	0-40	0-40	0-40

LCS #:	BLK051898B	BLK051898B	BLK051898B	BLK051898B	BLK051898B
Prepared Date:	3/18/98	3/18/98	3/18/98	3/18/98	3/18/98
Analyzed Date:	3/19/98	3/19/98	3/19/98	3/19/98	3/19/98
Instrument I.D.#:	GC/MS-1	GC/MS-1	GC/MS-1	GC/MS-1	GC/MS-1
Conc. Spiked:	3300 µg/kg	5000 µg/kg	3300 µg/kg	5000 µg/kg	3300 µg/kg
LCS Result:	2600	4400	2700	4400	2700
LCS % Recov.:	78	88	90	88	82

MS/MSD LCS Control Limits	51-96	21-114	45-100	22-117	50-114
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** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Laboratory Director





Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Solid

QC Sample Group: 8050988-996

Reported: May 21, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Cadmium	Chromium	Nickel	Lead	Zinc	Mercury
QC Batch#:	ME051898 6010MDA	ME051898 6010MDA	ME051898 6010MDA	ME051898 6010MDA	ME051898 6010MDA	ME051598 7471MDA
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010	EPA 6010	EPA 7471
Prep. Method:	EPA 3050	EPA 3050	EPA 3050	EPA 3050	EPA 3050	EPA 7471
Analyst:	J. Kelly	J. Kelly	J. Kelly	J. Kelly	J. Kelly	T. Le
MS/MSD #:	8050657	8050657	8050657	8050657	8050657	8051010
Sample Conc.:	N.D.	14 mg/kg	12 mg/kg	1.8 mg/kg	19 mg/kg	0.040 mg/kg
Prepared Date:	5/18/98	5/18/98	5/18/98	5/18/98	5/18/98	5/15/98
Analyzed Date:	5/18/98	5/18/98	5/18/98	5/18/98	5/18/98	5/15/98
Instrument I.D.#:	MV-4	MV-4	MV-4	MV-4	MV-4	MV-1
Conc. Spiked:	50 mg/kg	50 mg/kg	50 mg/kg	50 mg/kg	50 mg/kg	0.10 mg/kg
Result:	50	62	62	49	68	0.12
MS % Recovery:	100	96	100	94	98	80
Dup. Result:	51	69	64	54	67	0.13
MSD % Recov.:	102	110	104	104	96	90
RPD:	2.0	11	3.2	9.7	1.5	8.0
RPD Limit:	0-20	0-20	0-20	0-20	0-20	0-20

LCS #:	LCS051898	LCS051898	LCS051898	LCS051898	LCS051898	LCS051598
Prepared Date:	5/18/98	5/18/98	5/18/98	5/18/98	5/18/98	5/15/98
Analyzed Date:	5/18/98	5/18/98	5/18/98	5/18/98	5/18/98	5/15/98
Instrument I.D.#:	MV-4	MV-4	MV-4	MV-4	MV-4	MV-1
Conc. Spiked:	50 mg/kg	50 mg/kg	50 mg/kg	50 mg/kg	50 mg/kg	0.10 mg/kg
LCS Result:	52	53	50	51	51	0.097
LCS % Recov.:	104	106	100	102	102	97

MS/MSD LCS Control Limits	80-120	80-120	80-120	80-120	80-120	75-125
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SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Laboratory Director



Consultant Company: **GETTLER-RYAN INC. J#140165** Project Name: **FORMER UNOCAL #1871-OAKLAND**
 Address: **6147 Sierra Court, Suite J** UNOCAL Project Manager: **TINA BERRY**
 City: **DUBLIN** State: **CA** Zip Code: **94568** AFE #: **9505258**
 Telephone: **(510) 551-7555** FAX #: **551-7888** Site #, City, State: **96 MACARTHUR BLVD.**
 Report To: **HAIG KEVORK** Sampler: **HAIG KEVORK** 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
TPH-G
BTEX
TOTAL Pb
TOG 520
8240
8270
CAM/17 Metals

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Laboratory Sample #	TPH-G	BTEX	TOTAL Pb	TOG 520	8240	8270	CAM/17 Metals	Comments
1. SPI(A-D)	5/12/98	SOIL	4	BRASS TUBES		✓	✓	✓					8050988
2. SPI(E-H)			4			✓	✓	✓					8050989
3. SPI(I-L)			4			✓	✓	✓					8050990
4. SPI(M-P)			4			✓	✓	✓					8050991
5. SPI(Q-T)			4			✓	✓	✓					8050992
6. SPI(U-X)			4			✓	✓	✓					8050993
7. SPI(Y,Z,12)			4			✓	✓	✓					8050994
8. SPI(3,4,5)			4			✓	✓	✓					8050995
9. WOSPI			4						✓	✓	✓	✓	8050996
10.													

Relinquished By: *[Signature]* Date: **5/12/98** Time: **7:00** Received By: _____ Date: _____ Time: _____
 Relinquished By: _____ Date: _____ Time: _____ Received By: _____ Date: _____ Time: _____
 Relinquished By: _____ Date: _____ Time: _____ Received By Lab: *[Signature]* Date: **5/12/98** Time: **1900**

Were Samples Received in Good Condition? Yes No Samples on Ice? Yes No Method of Shipment _____ Page **1** of **1**

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