



February 1, 1996

Alameda County Health Care Services 1131 Harbor Bay Parkway Alameda, CA 94501

RE: Unocal Service Station #5484 18950 Lake Chabot Road Castro Valley, California

Per the request of the Unocal Corporation Project Manager, Ms. Tina R. Berry, enclosed please find our report (MPDS-UN5484-09) dated January 9, 1996 for the above referenced site.

Should you have any questions regarding the reporting of data, please feel free to call our office at (510) 602-5120. Any other questions may be directed to the Project Manager at (510) 277-2321.

Sincerely,

MPDS Services, Inc.

Jarrel F. Crider

/jfc

Enclosure

cc: Ms. Tina R. Berry



MPDS-UN5484-09 January 9, 1996

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

Attention: Ms. Tina R. Berry

RE: Quarterly Data Report

Unocal Service Station #5484

18950 Lake Chabot Road Castro Valley, California

Dear Ms. Berry:

This data report presents the results of the most recent quarter of monitoring and sampling of the monitoring wells at the referenced site by MPDS Services, Inc.

#### RECENT FIELD ACTIVITIES

The monitoring wells that were monitored and sampled during this quarter are indicated in Table 1. Prior to sampling, the wells were checked for depth to water and the presence of free product or sheen. The monitoring data and the ground water elevations are summarized in Table 1. The ground water flow direction during the most recent quarter is shown on the attached Figure 1.

Ground water samples were collected on December 5, 1995. Monitoring well MW7 was resampled on December 8, 1995. Prior to sampling, the wells were each purged of between 6.5 and 25 gallons of water. Samples were then collected using a clean Teflon bailer. The samples were decanted into clean VOA vials and/or one-liter amber bottles, as appropriate, which were then sealed with Teflon-lined screw caps, labeled, and stored in a cooler, on ice, until delivery to a state-certified laboratory. Equipment blank, Field blank and Trip blank samples (denoted as ES1, ES2 and ES3 respectively) were also collected for quality assurance and control. MPDS Services, Inc. transported the purged ground water to the Unocal Refinery located in Rodeo, California, for treatment and discharge to San Pablo Bay under NPDES permit.

#### ANALYTICAL RESULTS

The ground water samples were analyzed at Sequoia Analytical Laboratory and were accompanied by properly executed Chain of Custody documentation. The analytical results of the ground water samples collected to date are summarized in Tables 2 and 3. The concentrations of Total Petroleum Hydrocarbons (TPH) as gasoline, TPH as diesel, and benzene

TABLE 1
SUMMARY OF MONITORING DATA

	Ground Water	Depth to	00000000000000000000000000000000000000	Product		Water
Well #	Elevation (feet)	Water (feet)◆	Depth (feet)◆	Thickness (feet)	<u>Sheen</u>	Purged (gallons)
	3777					
	(Moni	tored and San	mpled on Dece	ember 8, 19	95)	
MW7	221.80	9.59	19.55	0	No	7.0
	(Moni	tored and Sam	mpled on Dece	ember 5, 19	95)	
MW2	222.56	6.32	9.20	0	No	9
MW4	217.85	9.92	27.30	0	No	25
MW5	215.51	9.60	23.86	0	No	24
MW6	232.29	6.75	26.96	0	No	23
MW7	221.70	9.69	19.55	0	No	6.5
	(Monit	ored and Sam	pled on Sept	ember 5, 1	995)	
MW2	223.22	5.66	19.22	0	No	9.5
MW4	218.50	9.27	27.30	0	No	47
MW5	215.54	9.57	23.92	0	No	37.5
MW6*	233.35	5.69	*	0		0
MW7	222.78	8.61	19.56	0	No	7.5
	(Mo	nitored and	Sampled on Ju	me 1, 199	5)	
MW2	224.23	4.65	19.21	0	No	10
MW4	220.12	7.65	27.31	0	No	55
MW5	216.90	8.21	23.92	0	No	42
MW6	234.28	4.76	27.05	0	No	60
MW7	223.47	7.92	19.56	0	No	9
	(Moi	nitored and S	Sampled on Ma	rch 1, 199	95)	
MW2	224.28	4.60	19.25	0	No	10
MW4	220.48	7.29	27.35	0	No	53
MW5	217.13	7.98	23.82	0	No	42
MW6*	233.87	5.17	27.06	0		0
MW7	223.36	8.03	19.60	0	No	8

#### TABLE 1 (Continued)

#### SUMMARY OF MONITORING DATA

Well #	Well Casing Elevation (feet)**
MW2	228.88
MW4	227.77
MW5	225.11
MW6	239.04
MW7	231.39

- ◆ The depth to water level and total well depth measurements were taken from the top of the well casings.
- \* Monitored only.
- \*\* The elevations of the top of the well casings are relative to Mean Sea Level (MSL), per the Alameda County Benchmark (elevation = 219.68 feet MSL).
- ★ Total well depth was not measured.
- -- Sheen determination was not performed.

TABLE 2
SUMMARY OF LABORATORY ANALYSES
WATER

200-98-900-800-8000000000000000000000000	***************************************		TPH as			Ethyl-		
<u>Date</u>	Well #	TPH as <u>Diesel</u>	Gasoline	<u>Benzene</u>	<u>Toluene</u>		Xylenes	MTBE
- 180 180 180 180 180 180 180 180 180 180					******************************		onto o contrato e de conservaciones de la conservacione	namenan en en en en en er
12/05/95	MW2		ND	ND	ND	ND	ND	390
	MW4		ND	ND	ND	ND	ND	0.68
	MW5	170♦	ND	ND	ND	ND	ND	27
	MW6		ND	ND	ND	ND	ND	1.4
	MW7	110♦	400	23	ND	34	16	1,600
9/05/95	MW2▲		ND	ND	0.80	ND	0.74	
5,05,55	MW4		ND	ND	0.70	ND	0.71	<del>-</del> -
	MW5▲	210♦	ND	ND	0.95	ND	0.87	
	MW6		EMI-ANNUAL					
	MW7▲	ND	710	32	ND	85	33	
6/01/95	MW2		420*	ND	ND	ND	ND	
	MW4		ND	ND	0.78	ND	1.7	
	MW5	57♦	ND	ND	ND	ND	ND	
	MW6		ND	ND	0.70	ND	1.7	
	MW7	1,600♦	3,900	170	ND	400	430	
3/01/95	MW2		ND	ND	ND	ND	ND	
	MW4		ND	ND	1.1	ND	0.75	
	MW5	ND	ND	ND	ND	ND	ND	
	MW6	SAMPLED SEMI-ANNUALLY						
	MW7	1,900♦♦	3,300	200	3.9	300	350	
12/01/94	MW2		200	0.70	ND	0.58	ND	
,,	MW4		ND	ND	ND	ND	ND	
	MW5	79♦	ND	ND	ND	ND	ND	
	MW6		ND	ND	ND	ND	ND	
	MW7	260♦	3,100	80	ND	250	190	
9/02/94	MW2	*	720	ND	ND	ND	4.6	
9/02/94	MW4		ND	ND	ND	ND	ND	
	MW5	130♦	ND	ND	ND	ND	ND	
	MW6		SEMI-ANNUAI		-1-0	-112	-112	
	MW7	490 <b>♦</b>	3,800	77	ND	180	42	

TABLE 2 (Continued)

# SUMMARY OF LABORATORY ANALYSES WATER

<u>Date</u>	Well #	TPH as <u>Diesel</u>	TPH as Gasoline	<u>Benzene</u>	Toluene	Ethyl- <u>benzene</u>	<u>Xvlenes</u>	MTBE
		**************************************			: <del>(11.11.11.11.11.11.11.11.11.11.11.11.11.</del>			38888 <del>8888888888888</del>
6/03/94	MW2		190*	ND	ND	ND	ND	
	MW4		ND	ND	ND	ND	ND	
	MW5	80♦♦	ND	ND	ND	ND	ND	
	MW6		ND	ND	ND	ND	ND	
	MW7	2,000♦	9,400	380	5.0	820	240	
3/03/94	MW2		240*	ND	ND	ND	ND	
	MW4		ND	ND	ND	ND	ND	
	MW5	ND	ND	ND	ND	0.71	1.7	ND
	MW6	SAMPLED S	EMI-ANNUAL	LY				
	MW7	1,400♦	9,300	290	ND	590	400	1.7
12/09/93	MW2		96*	ND	ND	ND	ND	
	MW4	WELL WAS	INACCESSIB	LE				
	MW5	87♦♦	ND	ND	ND	ND	ND	
	MW6		150	ND	ND	ND	1.7	
	MW7	250♦	980	54	4.6	71	5.6	
9/09/93	MW2		210*	ND	ND	ND	ND	
	MW4		ND	ND	ND	$\mathbf{N}$ D	ND	
	MW5	58♦♦	ND	ND	ND	ND	ND	
	MW6	SAMPLED S	EMI-ANNUAL	LY				
	MW7	550♦♦	2,600**	160	19	250	120	
6/09/93	MW2		120*	ND	ND	ND	ND	300
	MW4		ND	ND	ND	ND	ND	
	MW5	64	ND	ND	ND	ND	ND	
	MW6		ND	ND	ND	ND	ND	
	MW7	830♦◆	4,600	430	ND	510	430	
3/10/93	MW2		110*	ND	ND	ND	ND	350
	MW4		ND	ND	ND	$\mathbf{N}$ D	ND	
	MW5	69♦	ND	ND	ND	ND	ND	
	MW6		SEMI-ANNUAL					
	MW7	1,100♦	4,400	310	ND	300	330	<del>-</del> -

TABLE 2 (Continued)

# SUMMARY OF LABORATORY ANALYSES WATER

Data.	Well #	TPH as		<b>D</b>	m-1	Ethyl-	<u>Xvlenes</u>	MUDD
<u>Date</u>	METT +	<u> Diesel</u>	Gasorrie	<u>Benzene</u>	<u>Toluene</u>	Denzene	Ayrenes	MTBE
12/10/92	MW2		100*	ND	ND	ND	ND	170
,,	MW4		ND	ND	ND	ND	ND	
	MW5	83♦♦	ND	ND	ND	ND	ND	
	MW6		ND	ND	ND	ND	ND	
	MW7	200♦♦	1,200	28	ND	37	13	
		_ + + . ,	-/					
9/10/92	MW2		61*	ND	ND	ND	ND	110
	MW4	SAMPLED	SEMI-ANNUALI	·Υ				
	MW5	110♦	ND	ND	ND	ND	ND	
	MW6	SAMPLED	SEMI-ANNUALI	·Υ				
	MW7	290♦	2,100	160	1.9	140	150	
6/18/92	MW2		140*	ND	ND	ND	ND	
	MW4		ND	0.41	0.84	ND	0.55	
	MW5	ND	ND	ND	ND	ND	ND	
	MW6		ND	ND	ND	ND	ND	
	MW7	990♦	5,500	340	4.2	380	410	
3/20/92	MW2		120	ND	ND	ND	ND	
	MW4	SAMPLED	SEMI-ANNUALI	ıΥ				
	MW5	170	ND	ND	ND	ND	ND	
	MW6	SAMPLED	SEMI-ANNUALI	Ϋ́				
	MW7	3,200	11,000	980	ND	990	1,600	
12/19/91	MW2		140	0.66	ND	0.64	1.2	
	MW4		ND	ND	ND	ND	ND	
	MW5		ND	ND	ND	ND	ND	
	MW6		ND	ND	ND	ND	ND	
	MW7	770	3,900	240	2.4	280	270	
10/10/01	MATC	7						
10/10/91	MW5	ND					<del></del>	
9/20/91	MW2		ND	ND	ND	ND	ND	<del>-</del> -
-,, <b>-</b> -	MW4	SAMPLED						
	MW5	450	ND	ND	ND	ND	ND	
	MW6		SEMI-ANNUALI		<b></b>	- <del></del>	<b>-</b>	•
	MW7	580	1,400	160	0.75	89	130	
	-		,			-		

#### TABLE 2 (Continued)

# SUMMARY OF LABORATORY ANALYSES WATER

<u>Date</u>	Well #	TPH as <u>Diesel</u>	TPH as <u>Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	Ethyl- <u>benzene</u>	Xylenes	MTBE
5/23/91	MW2		ND	ND	ND	ND	ND	
	MW4		ND	ND	ND	ND	ND	
	MW5		ND	ND	ND	ND	ND	
	MW6		ND	ND	ND	ND	ND	
	MW7	540	3,000	160	1.2	25	120	<del></del>

MTBE = Methyl tert butyl ether.

- ♦ Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear to be diesel.
- ♦♦ Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be a diesel and non-diesel mixture.
- \* Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear to be gasoline.
- \*\* Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be a gasoline and non-qasoline mixture.
- ▲ Sequoia Analytical Laboratory has potentially identified the presence of MTBE at reportable levels in the ground water sample collected from this well.

ND = Non-detectable.

-- Indicates analysis was not performed.

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

Note: Laboratory analyses data prior to December 9, 1993, were provided by Kaprealian Engineering, Inc.

TABLE 3
SUMMARY OF LABORATORY ANALYSES
WATER

		Total Oil	Bis(2+	2-		1,2-
<u>Date</u>	Well #	& Grease (mg/L)	ethylhexyl)	Methyl- naphthalene	Naph- <u>thalene</u>	Dichloro-
					. All Sa	
12/08/95	MW7		ND	ND		
12/05/95	MW5			<i>Q</i>	<u></u>	ND
	MW7*					ND
9/05/95	MW5				<u> </u>	ND
	MW7		ND	ND	7.0	1.8
6/01/95	MW5			** <b>*</b> *	==	ND
, , , , , ,	MW7		ND	13	83	1.4
3/01/95	MW5					ND
-,,	MW7▲		ND	40	120	1.6
12/01/94	MW5			<u>-</u> -		ND
,, .	MW7		ND	ND	2.5	1.0
9/02/94	MW5					ND
-,,	MW7	~ =	ND	ND	ND	1.1
6/03/94	MW5					ND
,,,,,,	MW7	<u>* -</u>	ND	18	61	1.4
3/03/94	MW5			<del>-</del> -	<del></del>	ND
2, 22, 22	MW7		ND	34	130	1.7
12/09/93	MW5	<del></del>	<b></b>		<del></del>	ND
	MW7		ND	ND	15	1.5
9/09/93	MW5	·				ND
	MW7◆		ND	11	48	1.5
6/09/93	MW5			<del>-</del> -		ND
, · - ,	MW7 <b>♦</b> ♦		13	19	83	1.3

## TABLE 3 (Continued)

# SUMMARY OF LABORATORY ANALYSES WATER

<u>Date</u>	Well #	Total Oil & Grease (mg/L)	ethylhexyl)	2- Methyl- naphthalene	Naph- <u>thalene</u>	1,2- Dichloro- ethane
3/10/93	MW5		ND 13	ND	ND	ND
12/10/92	MW7 <b>♦</b> ♦♦			19 	83	2.0
9/10/92	MW7					2.3
6/18/92	MW7	ND				ND
3/20/92	MW7	ND	<del>-</del> -	<del></del>		ND
12/19/91	MW7	ND				3.1
9/20/91	MW7	ND				ND
5/23/91	MW7	ND				3.4

#### TABLE 3 (Continued)

# SUMMARY OF LABORATORY ANALYSES WATER

- \* Tetrachloroethene was detected at concentration of 56  $\mu$ g/L.
- ullet Seven "tentatively identified compounds" were detected by the EPA method 8270 open scan at concentrations ranging 11  $\mu g/L$  to 88  $\mu g/L$ . Refer to laboratory analysis sheets for the specific compounds and concentrations.
- $\bullet \bullet$  Ten "tentatively identified compounds" were detected by the EPA method 8270 open scan at concentrations ranging from 14  $\mu g/L$  to 150  $\mu g/L$ . Refer to laboratory analysis sheets for the specified compounds and concentrations.
- ♦♦♦ Nine "tentatively identified compounds" were detected by the EPA method 8270 open scan at concentrations ranging from 10  $\mu g/L$  to 59  $\mu g/L$ . Refer to laboratory analysis sheets for the specific compounds and concentrations.
- Phenol was detected at a concentration of 2.1  $\mu$ g/L.

ND = Non-detectable.

-- Indicates analysis was not performed.

mg/L = milligrams per liter.

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

- Note: All EPA methods 8010 and 8270 compounds were non-detectable, except for the compounds listed.
  - Laboratory analyses data prior to December 9, 1993, were provided by Kaprealian Engineering, Inc.

MPDS-UN5484-09 January 9, 1996 Page 2

detected in the ground water samples collected this quarter are shown on the attached Figure 2. Copies of the laboratory analytical results and the Chain of Custody documentation are attached to this report.

#### **LIMITATIONS**

Environmental changes, either naturally-occurring or artificially-induced, may cause changes in ground water levels and flow paths, thereby changing the extent and concentration of any contaminants.

#### DISTRIBUTION

A copy of this report should be sent to the Alameda County Health Care Services Agency.

If you have any questions regarding this report, please do not hesitate to call Mr. Nubar Srabian at (510) 602-5120.

JOEL G. GREGER

No. EG 1633

CERTIFIED

ENGINSERING

GEOLOGIST

Sincerely,

MPDS Services, Inc.

Haig (Gary) Tejirian Senior Staff Geologist

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

License No. EG 1633 Exp. Date 8/31/96

/bp

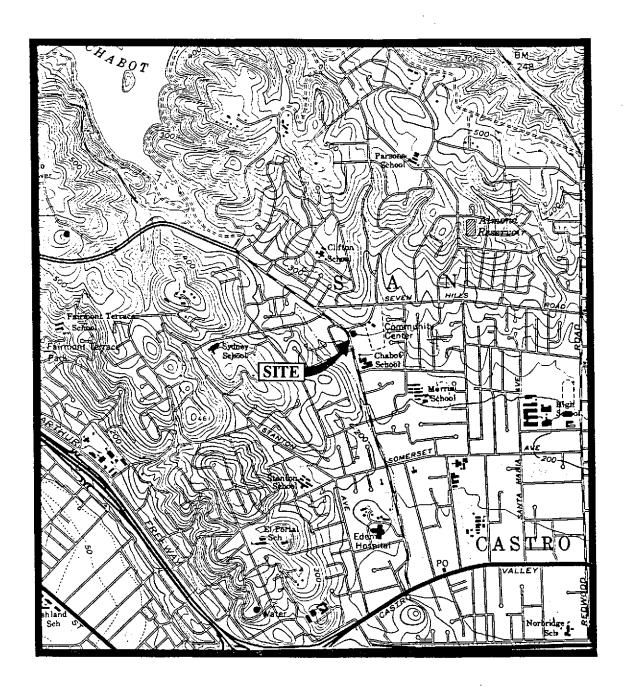
Attachments: Tables 1, 2 & 3

Location Map Figures 1 & 2

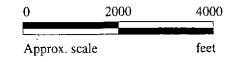
Laboratory Analyses

Chain of Custody documentation

cc: Mr. Thomas Berkins, Kaprealian Engineering, Inc.



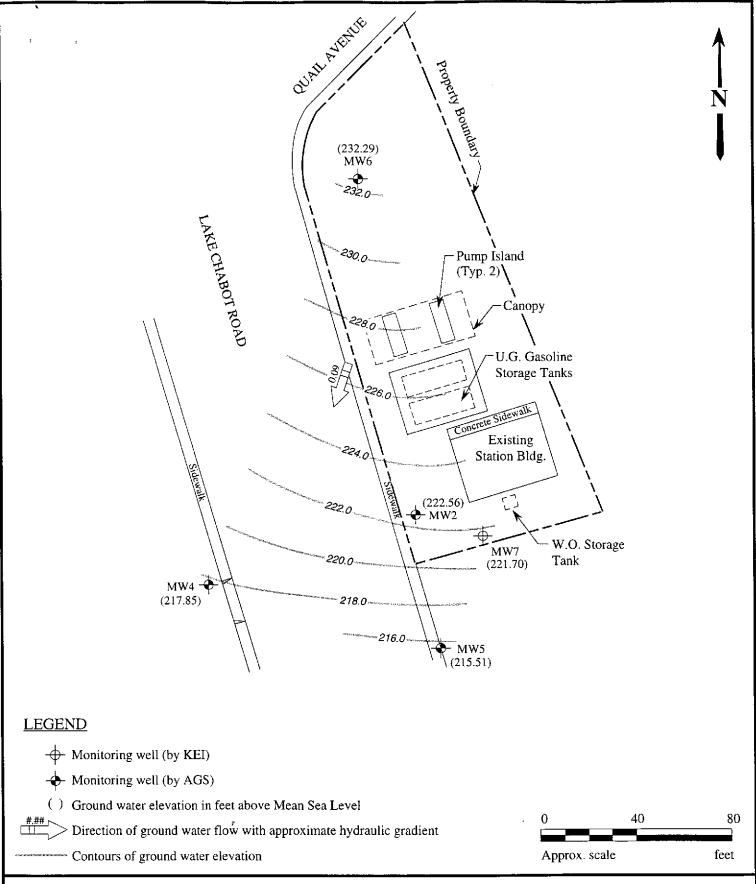
Base modified from 7.5 minute U.S.G.S. Hayward Quadrangle (photorevised 1980)





UNOCAL SERVICE STATION #5484 18950 LAKE CHABOT ROAD CASTRO VALLEY, CALIFORNIA

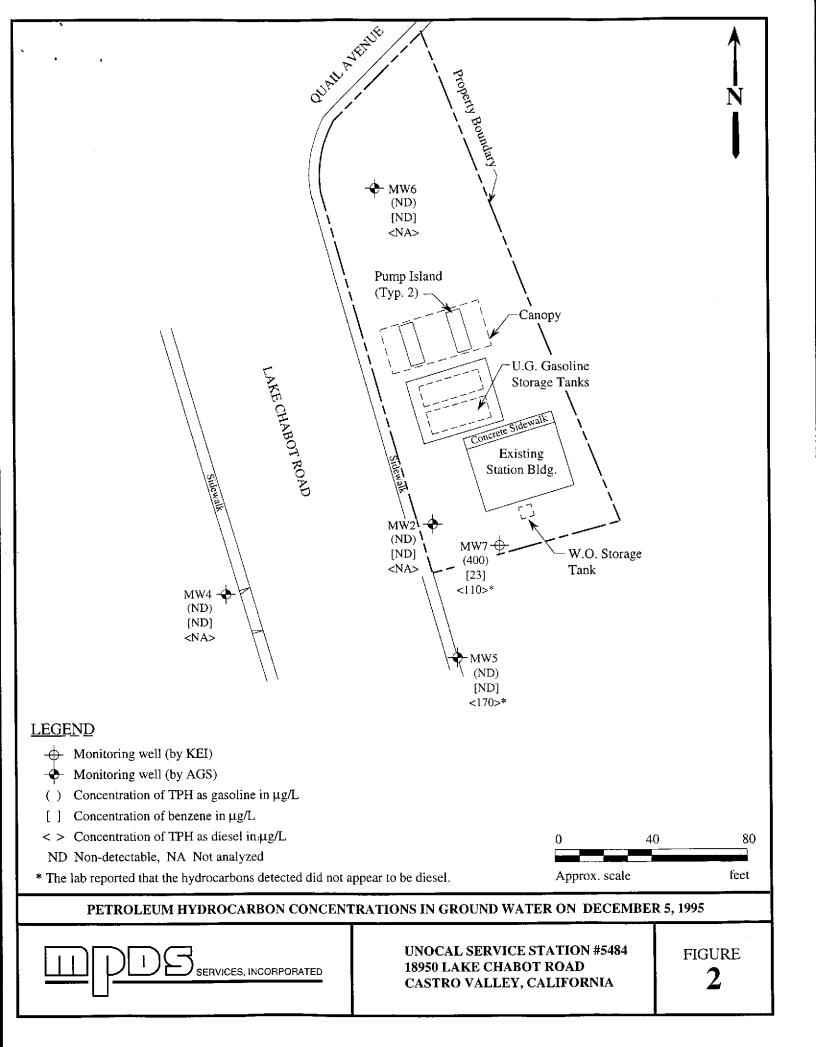
LOCATION MAP



# POTENTIOMETRIC SURFACE MAP FOR THE DECEMBER 5, 1995 MONITORING EVENT



UNOCAL SERVICE STATION #5484 18950 LAKE CHABOT ROAD CASTRO VALLEY, CALIFORNIA FIGURE 1





Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 (415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

MPDS Services

2401 Stanwell Dr., Ste. 300 Concord, CA 94520 Attention: Jarrel Crider Client Project ID: Matrix Descript:

Analysis Method:

First Sample #:

Unocal #5484, 18950 Lake Chabot Rd.,

Water Ca EPA 5030/8015 Mod./8020

Castro Valley

Sampled: Dec 5, 1995 Received: Dec 5, 1995

Reported:

Dec 28, 1995

## TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

512-0546

Sample Number	Sample Description	Purgeable Hydrocarbons µg/L	Benzene μg/L	<b>Toluene</b> μg/L	Ethyl Benzene μg/L	Totai Xylenes μg/L
512-0546	MW2	ND	ND	ND	ND	ND
512-0547	MW4	ND	ND	ND	ND	ND
512-0548	MW5	ND	ND	ND	ND	ND
512-0549	MW6	ND	ND	ND	ND	ND
512-0550	MW7	400	23	ND	34	16
512-0551	ES1	ND	ND	ND	ND	ND
512-0552	ES2	ND	ND	ND	ND	ND
512-0553	ES3	ND	ND	ND	ND	ND

Detection Limits:	50	0.50	Λ <u> </u>	<u> </u>	0 KD	
Defection cities.	50	0.50	0.50	0.50	0.50	

Total Purgeable Petroleum Hydrocarbons are quantitated against a fresh gasoline standard. Analytes reported as ND were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp Project Manager

Page 1 of 2

5120546.MPD <1>





680 Chesapeake Drive 404 N. Wiget Lane

Redwood City, CA 94063 Walnut Creek, CA 94598 819 Striker Avenue, Suite 8 Sacramento, CA 95834

(415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

MPDS Services 2401 Stanwell Dr., Ste. 300 Concord, CA 94520

Attention: Jarrel Crider

Matrix Descript: Analysis Method:

Client Project ID: Unocal #5484, 18950 Lake Chabot Rd., Sampled: Water Castro Valley

EPA 5030/8015 Mod./8020

Received: Reported:

Dec 5, 1995 Dec 5, 1995 Dec 28, 1995

First Sample #:

512-0546

## TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Sample Number	Sample Description	Chromatogram Pattern	DL Mult. Factor	Date Analyzed	Instrument ID	Surrogate Recovery, % QC Limits: 70-130
512-0546	MW2		1.0	12/19/95	HP-2	103
512-0547	MW4		1.0	12/19/95	HP-2	101
512-0548	MW5		1.0	12/19/95	HP-2	103
512-0549	MW6		1.0	12/19/95	HP-2	101
512-0550	MW7	Gasoline	4.0	12/19/95	HP-2	73
512-0551	ES1		1.0	12/19/95	HP-2	101
512-0552	ES2	_	1.0	12/19/95	HP-2	102
512-0553	ES3	_	1.0	12/19/95	HP-2	103

**SEQUOIA ANALYTICAL, #1271** 

Signature on File

Alan B. Kemp **Project Manager** 





680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 Sacramento, CA 95834

Redwood City, CA 94063 Walnut Creek, CA 94598

(415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

MPDS Services

2401 Stanwell Dr., Ste. 300 Concord, CA 94520 Attention: Jarrel Crider

Client Project ID: Sample Descript:

Unocal #5484, 18950 Lake Chabot Rd., Water

Castro Valley

Sampled: Received:

Dec 5, 1995 Dec 5, 1995

Analysis for: First Sample #: MTBE (Modified EPA 8020)

Analyzed:

Dec 19, 1995

512-0546

Reported:

Dec 28, 1995

#### LABORATORY ANALYSIS FOR:

#### MTBE (Modified EPA 8020)

Sample Number	Sample Description	Detection Limit μg/L	Sample Result μg/L
512-0546	MW2	0.60	390
512-0547	MW4	0.60	0.68
512-0548	MW5	0.60	27
512-0549	MW6	0.60	1.4
512-0550	MW7	2.4	1,600

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

**SEQUOIA ANALYTICAL, #1271** 

Signature on File

Alan B. Kemp Project Manager



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 (415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

MPDS Services

2401 Stanwell Dr., Ste. 300 Concord, CA 94520 Attention: Jarrel Crider Client Project ID: Sample Matrix:

Unocal #5484, 18950 Lake Chabot Rd.,

Water

Castro Valley

Sampled: Received:

Dec 5, 1995 Dec 5, 1995

Analysis Method: EPA 3510/8015 Mod.

First Sample #: 512-0548

Reported: Dec 28, 1995

#### TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit μg/L	Sample I.D. 512-0548 MW5*	Sample I.D. 512-0550 MW7*	
Extractable Hydrocarbons	50	170	110	
Chromatogram Pa	ttern:	Discrete Peaks	Unidentified Hydrocarbons >C16	

#### **Quality Control Data**

Report Limit Multiplication Factor:	1.0	1.0
Date Extracted:	12/11/95	12/11/95
Date Analyzed:	12/13/95	12/13/95
Instrument Identification:	НР-ЗА	HP-3A

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

Signature on File

Alan B. Kemp Project Manager

#### Please Note:

\*This sample does not appear to contain diesel. "Discrete Peaks" refers to unidentified peaks EPA 8270 range: "Unidentified Hydrocarbons > C16" refers to unidentified peaks in the total oil and grease range.



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 (415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

MPDS Services 2401 Stanwell Dr., Ste. 300 Concord, CA 94520 Attention: Jarrel Crider

Client Project ID: Sample Descript: Analysis Method: Lab Number:

: Unocal #5484, 18950 Lake Chabot Rd., : **Water, MW5** Castro Valley

EPA 5030/8010 512-0548 Sampled: Dec 5, 1995 ey Received: Dec 5, 1995

Analyzed: Dec 19, 1995 Reported: Dec 28, 1995

#### **HALOGENATED VOLATILE ORGANICS (EPA 8010)**

Analyte	<b>Detection Limit</b>		Sample Results
•	μg/L		μg/L
Bromodichloromethane	0.50		N.D.
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.
2-Chloroethylvinyl ether	1.0	.,	N.D.
Chloroform	0.50	***************************************	N.D.
Chloromethane	1.0		N.D.
Dibromochloromethane	0.50	***************************************	N.D.
1,3-Dichlorobenzene	0.50		N.D.
1,4-Dichlorobenzene	0.50		N.D.
1,2-Dichlorobenzene	0.50		N.D.
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		N.D.
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.

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

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp Project Manager





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MPDS Services 2401 Stanwell Dr., Ste. 300 Concord, CA 94520 Attention: Jarrel Crider

Client Project ID: Sample Descript: Analysis Method: Lab Number:

Unocal #5484, 18950 Lake Chabot Rd.,

Water, MW7 Castro Valley

EPA 5030/8010 512-0550 Sampled: Do Received: Do Analyzed: De Reported: De

Dec 5, 1995 Dec 5, 1995 Dec 19, 1995 Dec 28, 1995

# **HALOGENATED VOLATILE ORGANICS (EPA 8010)**

Analyte	Detection Limit µg/L		Sample Results  µg/L
	F-3/		
Bromodichloromethane	5.0	***************************************	N.D.
Bromoform	5.0		N.D.
Bromomethane	10		N.D.
Carbon tetrachloride	5.0	***************************************	N.D.
Chlorobenzene	5.0		N.D.
Chloroethane	10		N.D.
2-Chloroethylvinyl ether	10	***************************************	N.D.
Chloroform	5.0	***************************************	N.D.
Chloromethane	10		N.D.
Dibromochloromethane	5.0		N.D.
1,3-Dichlorobenzene	5.0		N.D.
1,4-Dichlorobenzene	5.0	***************************************	N.D.
1,2-Dichlorobenzene	5.0	,,,,,	N.D.
1,1-Dichloroethane	5.0	,,,,,,,,,,,	N.D.
1,2-Dichloroethane	5.0		N.D.
1,1-Dichloroethene	5.0		N.D.
cis-1,2-Dichloroethene	5.0		N.D.
trans-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	50	***************************************	N.D.
1,1,2,2-Tetrachloroethane	5.0	***************************************	N.D.
Tetrachloroethene	5.0	***************************************	
1,1,1-Trichloroethane	5.0		N.D.
1,1,2-Trichloroethane	5.0		N.D.
Trichloroethene	5.0		N.D.
Trichlorofluoromethane	5.0	***************************************	N.D.
Vinyl chloride	10	***************************************	N.D.

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** 

Signature on File

Alan B. Kemp Project Manager





Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834

(415) 364-9600 (510) 988-9600 (916) 921-9600

Sampled:

FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

Dec 8, 1995

**MPDS Services** 2401 Stanwell Dr., Ste. 300 Concord, CA 94520 Attention: Jarrel Crider

Client Project ID: Sample Descript: Analysis Method:

Lab Number:

Water, MW7 **EPA 8270** 512-0550

Unocal #5484, 18950 Lake Chabot Rd., Castro Valley

Received: Dec 8, 1995 Extracted: Dec 13, 1995 Dec 15, 1995 Analyzed: Reported: Dec 28, 1995

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

Analyte	Detection Limit μg/L		Sample Results µg/L
Acenaphthene	2.0	,-,,-	N.D.
Acenaphthylene	2.0		N.D.
Aniline	2.0		N.D.
Anthracene	2.0	***************************************	N.D.
Benzidine	50		N.D.
Benzoic Acid	10	1004004004004004004004004004004004004004	N.D.
Benzo(a)anthracene	2.0	***************************************	N.D.
Benzo(b)fluoranthene	2.0	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	N.D.
Benzo(k)fluoranthene	2.0	14544544854485485585585585585585585585585	N.D.
Benzo(g,h,i)perylene	2.0		N.D.
Benzo(a)pyrene	2.0		N.D.
Benzyl alcohol	2.0		N.D.
Bis(2-chloroethoxy)methane	2.0		N.D.
Bis(2-chloroethyl)ether	2.0		N.D.
Bis(2-chloroisopropyl)ether	2.0		N.D.
Bis(2-ethylhexyl)phthalate	10		N.D.
4-Bromophenyl phenyl ether	2.0		N.D.
Butyl benzyl phthalate	2.0		N.D.
4-Chloroaniline	2.0		N.D.
2-Chloronaphthalene	2.0		N.D.
4-Chloro-3-methylphenol	2.0		N.D.
2-Chlorophenol	2.0		N.D.
4-Chlorophenyl phenyl ether	2.0		N.D.
Chrysene	2.0		N.D.
Dibenz(a,h)anthracene	2.0		N.D.
Díbenzofuran	2.0		N.D.
Di-N-butyl phthalate	10		N.D.
1,3-Dichlorobenzene.	2.0		N.D.
1,4-Dichlorobenzene	2.0		N.D.
			N.D.
1,2-Dichlorobenzene	2.0		
3,3-Dichlorobenzidine	10		N.D. N.D.
2,4-Dichlorophenol	2.0		
Diethyl phthalate	2.0	*;*************************************	N.D.
2,4-Dimethylphenol	2.0	***************************************	N.D.
Dimethyl phthalate	2.0		N.D.
4,6-Dinitro-2-methylphenol.	10	***************************************	N.D.
2,4-Dinitrophenol	10	***************************************	N.D.
2,4-Dinitrotoluene	2.0	***************************************	N.D.
2,6-Dinitrotoluene	2.0	***************************************	N.D.
Di-N-octyl phthalate	2.0		N.D.





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MPDS Services 2401 Stanwell Dr., Ste. 300 Concord, CA 94520 Attention: Jarrel Crider

"5404 19050 Lake Chabot Rd., Sampled: Client Project ID: Sample Descript: Water, MW7 Analysis Method: Lab Number:

Unocal #5484, 18950 Lake Chabot Rd., EPA 8270 512-0550

Castro Valley

sampled: Dec 8, 1995 Received: Dec 8, 1995 Extracted: Dec 13, 1995 Dec 15, 1995 Analyzed:

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

Analyte	Detection Limit µg/L		Sample Results $\mu g/L$
Fluoranthene	2.0		N.D.
Fluorene	2.0	***************************************	N.D.
Hexachlorobenzene	2.0	***************************************	N.D.
Hexachlorobutadiene	2.0		N.D.
Hexachlorocyclopentadiene	2.0		N.D.
Hexachloroethane	2.0	******************************	N.D.
Indeno(1,2,3-cd)pyrene	2.0	***************************************	N.D.
sophorone	2.0		N.D.
2-Methylnaphthalene	2.0		N.D.
2-Methylphenol	2.0		N.D.
4-Methylphenol	2.0	,	N.D.
Naphthalene	2.0	***************************************	Street to the second
2-Nitroaniline	10		N.D.
3-Nitroaniline	10		N.D.
4-Nitroaniline	10		N.D.
Nitrobenzene	2.0		N.D.
2-Nitrophenol	2.0		N.D.
4-Nitrophenol	10		N.D.
N-Nitrosodimethylamine	2.0		N.D.
N-Nitrosodiphenylamine	2.0	***************************************	N.D.
N-Nitroso-di-N-propylamine	2.0		N.D.
Pentachlorophenol	10	***************************************	N.D.
Phenanthrene	2.0		N.D.
Phenol	2.0		N.D.
Pyrene	2.0		N.D.
1,2,4-Trichlorobenzene	2.0	***************************************	N.D.
2,4,5-Trichlorophenol	10		N.D.
2,4,6-Trichlorophenol	2.0	***************************************	N.D.

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

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp **Project Manager** 



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 (415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

MPDS Services

2401 Stanwell Dr., Ste. 300 Concord, CA 94520

Attention: Jarrel Crider

Client Project ID:

Matrix:

Unocal #5484, 18950 Lake Chabot Rd., Castro Valley

QC Sample Group: 5120546-553

Reported:

Dec 28, 1995

#### **QUALITY CONTROL DATA REPORT**

ANALYTE	Benzene	Toluene	Ethyl	Xylenes	Diesel	
			Benzene			
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015	
Analyst:	M. Creusere	M. Creusere	M. Creusere	M. Creusere	J. Dinsay	<u> </u>
MS/MSD						
Batch#:	5120547	5120547	5120547	5120547	BLK121195	
Date Prepared:	12/19/95	12/19/95	12/19/95	12/19/95	12/11/95	
Date Analyzed:	12/19/95	12/19/95	12/19/95	12/19/95	12/13/95	
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2	GCHP-3B	
Conc. Spiked:	20 μg/L	20 μg/L	20 μg/L	60 μg/L	300 μg/L	
Matrix Spike						
% Recovery:	105	100	100	105	110	
Matrix Spike						
Duplicate %						
Recovery:	125	120	120	122	103	
Relative %						
Difference:	17	18	18	15	6.3	
LCS Batch#:	2LCS121995	2LCS121995	2LC\$121995	2LC\$121995	LCS121395	
Date Prepared:	12/19/95	12/19/95	12/19/95	12/19/95	12/11/95	
Date Analyzed:	12/19/95	12/19/95	12/19/95	12/19/95	12/13/95	

LCS Batch#:	2LCS121995	2LCS121995	2LC\$121995	2LC\$121995	LCS121395	
Date Prepared:	12/19/95	12/19/95	12/19/95	12/19/95	12/11/95	
Date Analyzed:	12/19/95	12/19/95	12/19/95	12/19/95	12/13/95	
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2	GCHP-3B	
LCS %						
Recovery:	95	110	120	120	107	
% Recovery	74.400					 
Control Limits:	71-133	72-128	72-130	71-120	38-122	

#### **SEQUOIA ANALYTICAL, #1271**

Signature on File

Alan B. Kemp Project Manager 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.



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FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

MPDS Services

2401 Stanwell Dr., Ste. 300

Concord, CA 94520 Attention: Jarrel Crider Client Project ID:

Matrix:

Unocal #5484, 18950 Lake Chabot Rd., Castro Valley

QC Sample Group: 5120546-553

Reported:

Dec 28, 1995

#### **QUALITY CONTROL DATA REPORT**

ANALYTE	1,1-Dichloro-	Trichloro-	Chloro-	
	ethene	ethene	benzene	
Method:	EPA 8010	EPA 8010	EPA 8010	
Analyst:	I.Z.	I.Z.	I.Z.	
MS/MSD				
Batch#:	5120806	5120806	5120806	
Date Prepared:	12/19/95	12/19/95	12/19/95	
Date Analyzed:	12/19/95	12/19/95	12/19/95	
Instrument I.D.#:	HP-7	HP-7	HP-7	
Conc. Spiked:	10 μg/L	10 μg/L	10 μg/L	
Matrix Spike				
% Recovery:	137	97	84	
Matrix Spike Duplicate %				
Recovery:	114	88	87	•
Relative %				
Difference:	1.8	9.7	3.5	
	*************************		Magazing samal nganasangangangangangangangan	

LCS121995

#### SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp **Project Manager** 

LCS Batch#:

LCS121995

Please Note:

LCS121995

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.



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(415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

**MPDS Services** 

2401 Stanwell Dr., Ste. 300

Attention: Jarrel Crider

Concord, CA 94520

Client Project ID:

Unocal #5484, 18950 Lake Chabot Rd., Castro Valley

Matrix: Liquid

QC Sample Group: 5120546-553

Reported:

Dec 28, 1995

#### QUALITY CONTROL DATA REPORT

ANALYTE	1,1-Dichloroethene	Trichloroethene	Benzene	Toluene	Chloro-	
					benzene	
		•				
Method:	EPA 8240	EPA 8240	EPA 8240	EPA 8240	EPA 8240	
Analyst:	Ş. Le	S. Le	S. Le	S. Le	S. Le	
···				•		
MS/MSD						
Batch#:	5121387	5121387	5121387	5121387	5121387	
Date Prepared:	12/19/95	12/19/95	12/19/95	12/19/95	12/19/95	
Date Analyzed:					12/19/95	
Instrument I.D.#:	12/19/95	12/19/95	12/19/95	12/19/95		
	GC/MS 2	GC/MS 2	GC/MS 2	GC/MS 2	GC/MS 2	
Conc. Spiked:	50 μg/L	50 μg/L	$50\mu\mathrm{g/L}$	50 μg/L	50 μg/L	
Matrix Spike						
% Recovery:	77	100	92	92	86	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
Matrix Spike						
Duplicate %						
Recovery:	82	105	99	97	90	
Relative %						
Difference:	7.0	5.1	7.5	5.1	4.6	
LCS Batch#:	LCS121995	LCS121995	LCS121995	LCS121995	LCS121995	
Data Brana-ad-	10/10/05	40/40/05	40 (40 /0-	10/10/05	10 (10 /05	
Date Prepared:	12/19/95	12/19/95	12/19/95	12/19/95	12/19/95	
Date Analyzed:	12/19/95	12/19/95	12/19/95	12/19/95	12/19/95	
Instrument I.D.#:	GC/MS 2	GC/MS 2	GC/MS 2	GC/MS 2	GC/MS 2	
LCS %						
Recovery:	79	103	96	96	91	
11000 TCI y	, 3	100	30	30	V1	
% Recovery		<del></del>				
Control Limits:	DL-234	71-157	37-151	47-150	37-160	

#### SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp Project Manager 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.



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 (415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

MPDS Services

2401 Stanwell Dr., Ste. 300 Concord, CA 94520 Attention: Jarrel Crider Client Project ID:

Unocal #5484, 18950 Lake Chabot Rd., Castro Valley

Matrix: Liquid

QC Sample Group: 5120546-553

Reported: Dec 28, 1995

#### **QUALITY CONTROL DATA REPORT**

ANALYTE	Phenol	2-Chlorophenol	1,4-Dichloro-	N-Nitroso-Di-	1,2,4-Trichloro-	4-Chloro-3-	·
		·	benzene	N-propylamine	benzene	Methylphenol	
Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270	
Analyst:	S. Le	S. Le	S. Le	S. Le	S. Le	S. Le	
MS/MSD							
Batch#:	BLK121395	BLK121395	BLK121395	BLK121395	BLK121395	BLK121395	
Daton#.	DEN121090	DLK121393	DLK121393	DLN121393	DLN 12 1030	DEN 12 1393	
Date Prepared:	12/13/95	12/13/95	12/13/95	12/13/95	12/13/95	12/13/95	
Date Analyzed:	12/14/95	12/14/95	12/14/95	12/14/95	12/14/95	12/14/95	
Instrument I.D.#:	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	
Conc. Spiked:	200 μg/L	200 μg/L	100 μg/L	100 $\mu$ g/L	100 µg/L	200 μg/L	
Matrix Spike							
% Recovery:	29	48	44	50	48	52	
Matrix Spike							
Duplicate %							
Recovery:	27	45	44	50	46	52	
Relative %							
Difference:	7.1	6.5	0.0	0.0	4.3	0.0	
				000000000000000000000000000000000000000		·····	and the second s
LCS Batch#:	LCS121395	LC\$121395	LCS121395	LCS121395	LCS121395	LCS121395	
Date Prepared:	12/13/95	12/13/95	12/13/95	12/13/95	12/13/95	12/13/95	
Date Analyzed:	12/14/95	12/14/95	12/14/95	12/14/95	12/14/95	12/14/95	
Instrument l.D.#:	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	
LCS %							
Recovery:	29	48	44	52	46	52	
% Recovery					•		
Control Limits:	12-89	27-123	36-97	41-116	39-98	23-97	

#### **SEQUOIA ANALYTICAL, #1271**

Signature on File

Alan B. Kemp Project Manager 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.





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MPDS Services 2401 Stanwell Dr., Ste. 300

Client Project ID:

Unocal #5484, 18950 Lake Chabot Rd., Castro Valley

Matrix:

Liquid

Concord, CA 94520 Attention: Jarrel Crider

QC Sample Group: 5120546-553

Reported: Dec 28, 1995

#### **QUALITY CONTROL DATA REPORT**

ANALYTE	Acenaphthene	4-Nitrophenol	2,4-Dinitro- toluene	Pentachloro- phenol	Pyrene	
Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270	
Analyst:	S. Le	S. Le	S. Le	S. Le	S. Le	
MS/MSD						
Batch#:	BLK121395	BLK121395	BLK121395	BLK121395	BLK121395	
Date Prepared:	12/13/95	12/13/95	12/13/95	12/13/95	12/13/95	
Date Analyzed:	12/14/95	12/14/95	12/14/95	12/14/95	12/14/95	
Instrument I.D.#:	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	
Conc. Spiked:	100 $\mu$ g/L	200 μg/L	100 μg/L	200 $\mu$ g/L	100 μg/L	
Matrix Spike						
% Recovery:	44	25	44	38	80	
Matrix Spike Duplicate % Recovery:	52	24	42	23	48	
Relative % Difference:	16	4.1	4.7	49	50	
LCS Batch#:	LCS121395	LCS121395	LCS121395	LCS121395	LCS121395	
Date Prepared:	12/13/95	12/13/95	12/13/95	12/13/95	12/13/95	
Date Analyzed:	12/14/95	12/14/95	12/14/95	12/14/95	12/14/95	
Instrument I.D.#:	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	
LCS % Recovery:	50	21	40	34	60	

## Please Note:

46-118

10-80

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% Recovery Control Limits:

SEQUOIA ANALYTICAL, #1271

Alan B. Kemp Project Manager 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.

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5120546.MPD <14>



24-96

# SERVICES, INCORPORATED 2401 Stanwell Drive, Suite 400 Concord, California 94520 Tel: (510) 602-5100, Fax: (510) 689-1918

## CHAIN OF CUSTODY

SAMPLER HOVSIA A	 AJEMIAN		UNO(	CAL # か	484	CITY: Castro	Valley			1	TURN AROUND TIME:						
WITNESSING AGENCY			ADDRESS: 18950 Late Chalot Rd.						BTEX TPH- DIRSEL	ŋ	0					5 DAYS	
SAMPLE ID NO.	DATE	TIME	WATER	GRAB	сомр	NO. OF CONT.	SAMPLING LOCATION	TP BT	TIG	TOG	8010			<u> </u>		REMARKS	
MUZ	12-5-95	11:45 A.M	/	/		2 V 0 A	well.	×						5120	546	AF SPECIAL	
Mw4	11	9:45 A.M	/	_		2 V 0 A	v	×						512	0547	AFINOCAL	
MWS	1,	10:50 A.M	/	_		AVEA I Amber	1,	×	×		×			5120	<b>954</b> 8	ATITBE	
MW6	"	8:45 A.M	-	/		2 V v A	4	×						512	0549	AFSITE.	
MWT	11	12:28 P.M	/	/		A VOA- I Amber	"	*	×		×			5120	<b>5</b> 50	AI	
		,															
																]	
														<u> </u>			
RELINQUIS	HED BY:	DATE/1			F	RECEIVED BY:	DA	ATE/TIME THE FOLLOWING MUST BE COMPLETED BY THE LABORATORY ACCEPTING SAMPLES FOR ANALY									
Joe Derize 12-5-95 Tong word 12						-5"-5;	1. HAVE ALL SAMPLES RECEIVED FOR ANALYSIS BEEN STORED ON ICE?										
ISIGNATURE) (32) ISIGNATURE)						12	2. WILL SAMPLES REMAIN REFRIGERATED UNTIL ANALYZED?										
(SIGNATURE) (SIGNATURE)							3. DID ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACE?										
(SIGNATURE)														AND PROPE			
(SIGNATURE) (SIGNATURE)									SIGNAT	URE:	/ ~~~ r	cer.		TIT	LE:	DATE:	

Note: All water containers to be sampled for TPHG/BTEX, 8010 & 8240 are preserved with HCL. All water containers to be sampled for Lead or Metals are preserved with HN03. All other containers are unpreserved.

Concord, California 94520

Tel: (510) 602-5100, Fax: (510) 689-1918

CHAIN OF CUSTODY

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ANALYSES REQUESTED SAMPLER TURN AROUND TIME: HOVSIA AJEMIAN 111 TPH-DIESEL 118 WITNESSING AGENCY TOG 8010 REMARKS SAMPLING WATER GAAB COMP LOCATION DATE NO. OF CONT. SAMPLE ID NO. 5120546 AFATTENTION × 4 VOAs wells 12-5-95 18:15 MWZ Х MWI 11 10:50 MWS 8 45 X 1, MW6 5120550 AT 12:28 1, 11 MWY P.M THE FOLLOWING MUST BE COMPLETED BY THE LABORATORY ACCEPTING SAMPLES FOR ANALYSES: DATE/TIME RECEIVED BY: RELINQUISHED BY: DATE/TIME 1. HAVE ALL SAMPLES RECEIVED FOR ANALYSIS BEEN STORED ON ICE? 2. WILL SAMPLES REMAIN REFRIGERATED UNTIL ANALYZED? \_ 3. DID ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACE? 2-6 4. WERE SAMPLES IN APPROPRIATE CONTAINERS AND PROPERLY PACKAGED? (SIGNATURE) SIGNATURE: (SIGNATURE) (SIGNATURE)

Note: All water containers to be sampled for TPHG/BTEX, 8010 & 8240 are preserved with HCL. All water containers to be sampled for Lead or Metals are preserved with HN03. All other containers are unpreserved.

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# CHAIN OF CUSTODY

9512114.

AMPLER HOVSIA	CITY: <u>Castro</u>	Valley		ANALYSES REQUESTED							TURN AROUND TIME:					
" "JOE"  WITHESSING AGENCY			ADDR	UNOCAL S/S # 5484 CITY: Castro Valley ADDRESS: 18950 Lake Chasot					TPH- DIESEL	g	0]					REMARKS
SAMPLE ID NO.	DATE	TIME	WATER	GRAB	СОМР	NO. OF CONT.	SAMPLING LOCATION	TPH-GAS BTEX	TIG	TOG	8010					TEMATING
ESI	12-5-95					1 VOA		1		5120	0551	<del> </del>		<u> </u>		
ES2	1							1		512	0552					
253								/		512	0553					
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RELINGUISHED BY: DATE TIME Cond 12						THE FOLLOWING MUST BE COMPLETED BY THE LABORATORY ACCEPTING SAMPLES FOR ANALYSES:  1. HAVE ALL SAMPLES RECEIVED FOR ANALYSIS BEEN STORED ON ICE?										
LICIONATURE VICTORIA TURE								Z. WILL SAMPLES REMAIN THE TREE PARTY STATE OF THE								
(SUBNATURE)					Kron Ve	rla)	12/6	3. DID ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACE?  4. WERE SAMPLES IN APPROPRIATE CONTAINERS AND PROPERLY PACKAGED?								
(SIGNATURE)					ATURE						~					DATE:
(SIGNATURE)	<del>.</del>			131014	AT ON					. (	2	w			لمصلا	12-5-17



# CHAIN OF CUSTODY

SAMPLER			UNOC.	AL 54	84 c	ary: Castro	Valley		· · · · · · · · · · · · · · · · · · ·	TURN AROUND TIME:							
ALEXAND WITNESSING AGENCY	ER ARZON	ANOV	ADDRE	ss: 18	950	Lake Chal	TPH-GAS 'BTEX	TPH-DIESEL	109	2	340				5 day		
SAMPLE ID NO.	DATE	TIME	WATER	GRAB	сомР	NO. OF CONT.	SAMPLING LOCATION	TPH BTE	BTE TPH		8010	82		<u> </u>		REMARKS	
Mew 7	12-8-95		V	V		1 au bes	well					V					
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RELINQUISHED BY: DATE/TI				120 120						THE FOLLOWING MUST BE COMPLETED BY THE LABORATORY ACCEPTING SAMPLES F  1. HAVE ALL SAMPLES RECEIVED FOR ANALYSIS BEEN STORED ON ICE?							
(SIGNATURE) (SIGNATURE)								2. WILL SAMPLES REMAIN REFRIGERATED UNTIL ANALYZED?									
(SIGNATURE) (SIGNATURE)																<del></del>	
(SIGNATURE)				(SIGNA												AGED?	
(SIGNATURE)				(SIGNA	TURE)				SIGNAT	UKE:				E: _		DATE:	