

MPDS-UN5366-07 September 19, 1995

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

Attention: Mr. Edward C. Ralston

RE: Quarterly Data Report

Unocal Service Station #5366 7375 Amador Valley Boulevard Dublin, California

Dear Mr. Ralston:

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

A joint monitoring event was conducted with the consultant for the nearby former Shell, Arco and B.P. service station sites on August 25, 1995. The monitoring data collected for the former Shell, Arco and B.P. service stations are summarized in Tables 4 and 5. The ground water elevation contours at and in the vicinity of these sites during the most recent quarter are also shown on the attached Figure 1.

Ground water samples were collected from the Unocal wells on August 25, 1995. Prior to sampling, the Unocal wells were each purged of between 7 and 7.5 gallons of water. 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. Field blank and Trip blank samples (denoted as ES1 and ES2 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.

MPDS-UN5366-07 September 19, 1995 Page 2

ANALYTICAL RESULTS

The ground water samples collected from the Unocal wells 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 from the Unocal wells to date are summarized in Tables 2 and 3. The concentrations of Total Petroleum Hydrocarbons (TPH) as gasoline, TPH as diesel, and benzene detected in the ground water samples collected from the Unocal wells this guarter are shown on the attached Figure 2. Copies of the laboratory analytical results and the Chain of Custody documentation for the Unocal wells are attached to this report.

LIMITATIONS

Environmental changes, either naturally-occurring or artificiallyinduced, 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 Ms. Eva Chu of 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

CERTIFIED ENGINEERING GEOLOGIST

Sincerely,

MPDS Services, Inc.

Sarkis Karkarian Staff Engineer

Jóel G. Greger, C.E.G.

Senior Engineering Geologist

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

/bp

Attachments: Tables 1 through 5

> Location Map Figures 1 & 2

Laboratory Analyses

Chain of Custody documentation

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

TABLE 1
SUMMARY OF MONITORING DATA
UNOCAL MONITORING WELLS

-								
•	Ground Water	Depth to	Total Well	Product		Water		
Well #	Elevation (feet)	Water (feet)◆	Depth (feet)◆	Thickness (feet)	Sheen	Purged (gallons)		
METT #	Treeci	TTGGC\ •	(TEEF) .	(Teer)	Directi	(darions)		
	(Mo	nitored and	Sampled Augus	st 25, 1995	5)			
MW1	326.39	9.68	19.50	0	No	7		
MW2*	327.02	9.76	19.27	0		0		
MW3 *	326.95	10.03	18.90	0		0		
MW4 *	326.35	10.08	19.41	0		0		
MW5	326.39	9.57	20.00	0	No	7.5		
(Monitored and Sampled June 13, 1995)								
MW1	327.25	8.82	19.45	0	No	8		
MW2*	327.81	8.97	19.24	0		, O _'		
MW3*	327.80	9.18	18.90	0		0		
MW4 *	327.22	9.21	19.40	0		0		
MW5	327.31	8.65	19.68	0	No	8		
	(Mon	itored and S	ampled Februa	ary 15, 199	95)			
MW1	328.27	7.80	19.52	0	No	8		
MW2	329.20	7.58	19.30	0	No	8		
MW3	329.36	7.62	18.98	0	No	8		
MW4	328.31	8.12	19.44	0	No	8		
MW5	328.20	7.76	20.02	0	No	8.5		
	(Mon	itored and S	ampled Novem	ber 18, 19	94)			
MW1	326.38	9.69	19.49	0	No	7		
MW2*	326.83	9.95	19.26	0	· ·	0		
MW3 *	326.83	10.15	18.91	0	- -	0		
MW4 *	326.33	10.10	19.44	0		0		
MW5	325.87	10.09	19.99	0	No	7		

TABLE 1 (Continued)

SUMMARY OF MONITORING DATA UNOCAL MONITORING WELLS

Well #	Well Casing Elevation(feet)**
MW1	336.07
MW2	336.78
MW3	336,98
MW4	336,43
MW5	335.96

- 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 have been surveyed relative to Mean Sea Level (MSL), per the County of Alameda Benchmark, standard brass disk in the westerly center island of Amador Valley Boulevard at Village Parkway, 15 feet from the nose and 0.8 feet from the northerly curb, stamped "VL PK AM VY, 1977" (elevation = 337.40 feet MSL).
- -- Sheen determination was not performed.

TABLE 2
SUMMARY OF LABORATORY ANALYSES
UNOCAL MONITORING WELLS
WATER

		TPH as			Ethyl-				
<u>Date</u>	Well #	<u>Gasoli</u>	<u>ne Benzene</u>	<u>Toluene</u>	<u>benzene</u>	Xylenes			
8/25/95▼	MW1▲	530	16	ND	2.2	13			
	MW2	SAMPLED	ANNUALLY						
	MW3	SAMPLED							
	MW4		ANNUALLY						
	MW5▲	3,100		ND	590	8.4			
		• •			- • •	2			
6/13/95	MW1▲	1,300	28	ND	15	ND			
	MW2	SAMPLED	ANNUALLY						
	MW3	SAMPLED ANNUALLY							
	MW4	SAMPLED	ANNUALLY						
	MW5▲	14,00	0 2,200	ND	2,200	ND			
- / /									
2/15/95	MW1	2,400		ND	87	34			
	MW2	ND	ND	ND	ND	ND			
	EWM	ND	N D	ND	ND	ND			
	MW4	ND	ND	ND	\mathbf{N} D	ND			
	MW5	16,00	0 2,700	ND	1,700	50			
11/18/94	MW1	820	21	ND	19	6.6			
	MW2	SAMPLED	ANNUALLY						
	мwз		ANNUALLY						
	MW4		ANNUALLY						
	MW5	18,00		52	1,600	51			
		,	•		•				
8/25/94	MW1	650	10	1.6	7.7	2.1			
	MW5	9,400	3,800	ND	2,200	150			
5/17/94	MW1	1,000) 41	ND	49	32			
-, -, , -	MW2		ANNUALLY			52			
	MW3		ANNUALLY						
	MW4		ANNUALLY						
	MW5	20,00		ND	2,300	130			
		,,00	,	-	2,000	±5 ¢			

TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES UNOCAL MONITORING WELLS WATER

<u>Date</u>	Well #	TPH as <u>Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	Ethyl- benzene	Xylenes
2/11/94	MW1	970	40 ND	3.2	2.8	15
	MW2	ND	ND ND	ND ND	ND	ND
	MW3 MW4	ND ND	ND	ND	ND ND	ND ND
	MW5	18,000	2,400	140	920	3, 1 00
	LIMO	10,000	2,400	140	<i>J</i> 20	3,100
11/11/93	MW1	350	19	2.5	2.7	3.4
8/12/93	MW1	1,000	46	ND	29	6.3
5/10/93	MW1	1,600	39	0.40	25	3.3
2/10/93	MW1	3,000	230	ND	340	200
, ,	MW2	ND	ND	ND	ND	ND
	MW3	ND	ND	ND	ND	ND
	MW4	ND	ND	ND	ND	ND
11/10/92	MW1	1,100	49	ЙD	71	21
8/12/92	MW1	1,700	51	ND	93	21
r /22 /22	MTJ 1	2 500	120	ND	230	37
5/22/92	MW1 MW2	2,500 N D	ND	N D	ND	ND
	MA	ND	ND	ND	ND	ND
2/25/92	MW1	3,900	500	ND	450	400
11/13/91	MW1	860	40	ND	11	2.5
8/12/91	MW1	1,100	68	2.6	210	9.3
5/15/91	MWl	2,100	220	ND	360	27
2/14/91	MW1	1,900	150	2.9	340	43
11/14/90	MW1	2,000	110	0.52	410	16

TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES UNOCAL MONITORING WELLS WATER

<u>Date</u>	Well #	TPH as <u>Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	Ethyl- <u>benzene</u>	<u>Xylenes</u>
8/15/90	MW1	2,200	160	ND	570	45
5/18/90	MW1 MW2 MW3	2,000 ND ND	140 ND ND	1.8 ND ND	460 ND ND	19 ND ND
	MW4	ND	ND	ND	ND	ND
2/06/90	MW1 MW2 MW3 MW4	2,700 ND ND ND	170 ND ND ND	ND ND ND ND	350 ND ND ND	29 ND ND ND
10/20/89	MW1 MW2 MW3 MW4	ND ND ND ND	ND ND ND	ND ND ND ND	ND ND 0.38 ND	ND ND ND
7/27/89	MW1 MW2 MW3 MW4	1,900 ND ND ND	130 ND ND 0.34	6.3 ND ND ND	ND ND ND ND	ND ND ND
5/22/89	MW3	ND	ND	ND	ND	ND
4/28/89	MW1 MW2 MW3 MW4	1,000 ND 880 ND	97 ND 9.6 0.3	0.8 ND 9.7 ND	170 ND 19 ND	24 ND 12.7 ND
1/26/89	MW1 MW2 MW3 MW4	1,900 ND ND ND	240 ND ND 0.67	1.8 ND ND ND	81 ND ND ND	30 ND ND ND

TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES UNOCAL MONITORING WELLS WATER

<u>Date</u>	Well #	TPH as <u>Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	Ethyl- <u>benzene</u>	Xvlenes
10/28/88	MW1	5,200	150	ND	250	12
	MW2	ND	ND	ND	ND	\mathbf{N} D
	MW3		ND	ND	ND	ND
	MW4	ND	ND	ND	ND	ND
7/25/88	MW1	6,100	170	2.1	94	94
	MW2	ND	ND	ND	ND	ND
	MW3	→ ←	ND	ND	ND	ND
	MW4	ND	ND	ND	ND	ND
4/29/88	MW1	10,000	960	17	870	1,500
	MW2	170	2.7	0.6	ND	13
	EWM	ND	ND	ND	ND	ND
	MW4	ND	ND	ND	ND	ND

May 24, 1995: 2.32 mg/L in MW1, 2.80 mg/L in MW5 when did of L begin Jun 13, 1995: 2.97 mg/L in MW1, 3.03 mg/L in MW5 which welks)

Aug 25, 1995: 3.20 mg/L in MW1, 5.79 mg/L in MW5

▼ The laboratory has potentially identified the presence of MTBE at reportable levels in the ground water samples collected from monitoring wells MW1 and MW5.

ND = Non-detectable.

-- Indicates that analysis was not performed.

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

Note: Laboratory analyses data prior to February 11, 1994, were provided by Kaprealian Engineering, Inc.

TABLE 3 SUMMARY OF LABORATORY ANALYSES UNOCAL MONITORING WELLS WATER

<u>Date</u>	Well #	TPH as <u>Diesel</u>	Total Oil & Grease (mg/L)	EPA 8010 <u>Constituents</u>
8/25/95	MW5	2,300**		
6/13/95	MW5	2,400**	-	
2/15/95	MW3 MW5	ND 2,000*	ND 	
11/18/94	MW5	2,000**		
8/25/94	MW5	2,000**		
5/17/94	MW5	2,500*	<u> </u>	
2/11/94	MW3 MW5	ND 2,300*	ND 	
5/10/93	MW1	730*	- -	
2/10/93	КММЗ	200	ND	~ –
5/18/90	ММЗ	ND	ND	ND
2/06/90	ММЗ	ND	ND	ND
10/20/89	мwз	ND	2.5	ND
7/27/89	ММЗ	ND	1.6	ND
5/22/89	MW3			
4/28/89	MW3	72	ND	ND
1/26/89	MW3	ND		ND
10/28/88	ММЗ	ND		ИД

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES UNOCAL MONITORING WELLS WATER

<u>Date</u>	Well #	TPH as <u>Diesel</u>	Total Oil & Grease (mg/L)	EPA 8010 <u>Constituents</u>
7/25/88	MW3	ND		ND
4/29/88	MW3	ND		ND

- * 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 diesel.

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: Laboratory analyses data prior to February 11, 1994, were provided by Kaprealian Engineering, Inc.

SUMMARY OF MONITORING DATA WATER

	Ground Water	Depth to	Well Casing
	Elevation	Water	Elevation
Well #	<u> (feet)</u>	<u>(feet)</u>	(feet)*
	BP Service St		
	(Monitored on Au		
	Provided by Alisto	Engineering Group	
MW1	326.56	8.61	335,17
MW2	326.28	8.30	
MW3	326.29		334.58
AW4		8.84	335.13
	326.19	7.22	333.41
AW5	326.29	8.52	334.81
AW6	326.61	8.29	334.90
	al 77 a l		
	Shell Service (Monitored on Au		
	Provided by Blaine	rech Cervises Inc	
	riovided by braine i	recti pervices, inc.	•
MW1	326.72	8.11	334.83
MW2	326.72	10.24	336.96
MW3	327.57	9.36	336.93
MW4	326.92	10.22	337.14
MW5	326,62	8.34	334.96
MW6	326.92	8.50	335.42
MW7	326.77	6.46	333.23
MW8	327.20	8.60	335.80
MW9	326,67	7.90	334.57
MW11	326.50	7.70	334.20
MW12	326.90	5.63	332.53
MW13	327.32	8.32	335.64
RW1	N/A	9.37	
T/AA T	IN / A	9.31	NA.

- The depth to water level measurements were taken from the top of the well casings.
- * Relative to MSL.

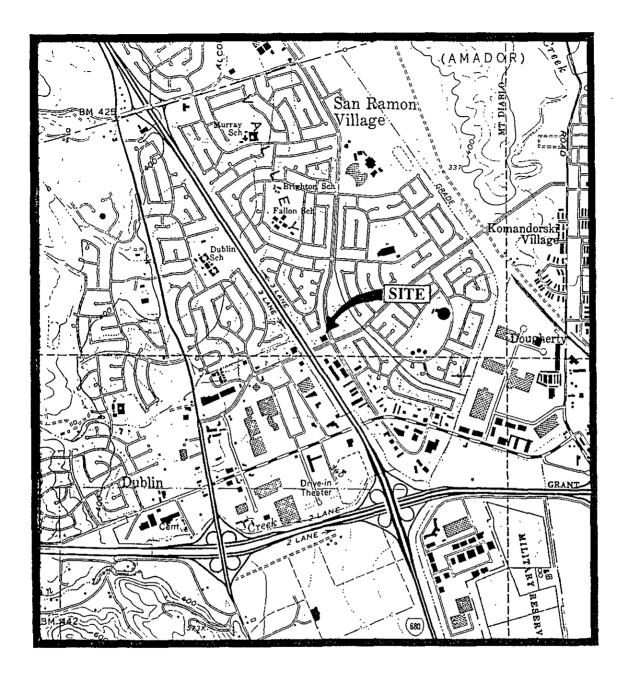
N/A = Not applicable.

NA = Not available.

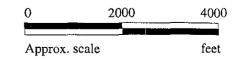
TABLE 5 SUMMARY OF MONITORING DATA WATER

Well #	Ground Water Elevation (feet)	Depth to Water (feet)◆	Well Casing Elevation (feet)*
	ARCO Service : (Monitored on A Provided	ugust 25, 1995)	
MWl	326.26	10.30	336.56
MW2	326.89	7.91	334.80
MW3	326.26	9.27	335.53
MW4	327.29	6.93	334.22
MW5	326.44	9.43	335.87
MW6	326.13	9.71	335.84

- The depth to water level measurements were taken from the top of the well casings.
- * The benchmark used for the survey is a standard Bronze Disk in the westerly center island of Amador Valley and Village Parkway, 15 feet from nose and 0.8 feet +/- from northerly curb. The disk is stamped "VL-PK-AM-VY 1977" (El. = 334.402 feet).

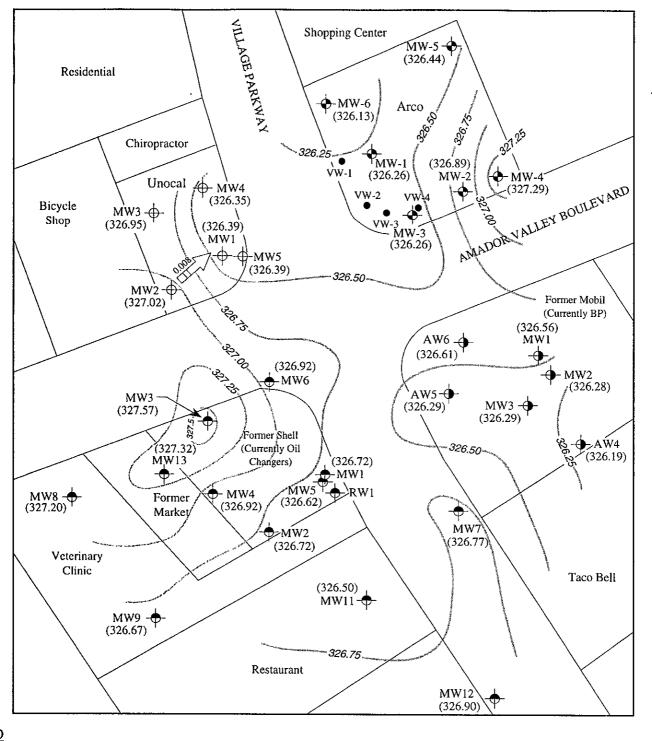


Base modified from 7.5 minute U.S.G.S. Dublin Quadrangle (photorevised 1980)





UNOCAL SERVICE STATION #5366 7375 AMADOR VALLEY BLVD. DUBLIN, CALIFORNIA LOCATION MAP



LEGEND

Monitoring well (Unocal)

- Monitoring well (BP)

→ Monitoring well (Shell)

Monitoring well (Arco)

• Vapor extraction well (Arco)

() Ground water elevation in feet above Mean Sea Level

Direction of ground water flow with approximate hydraulic gradient

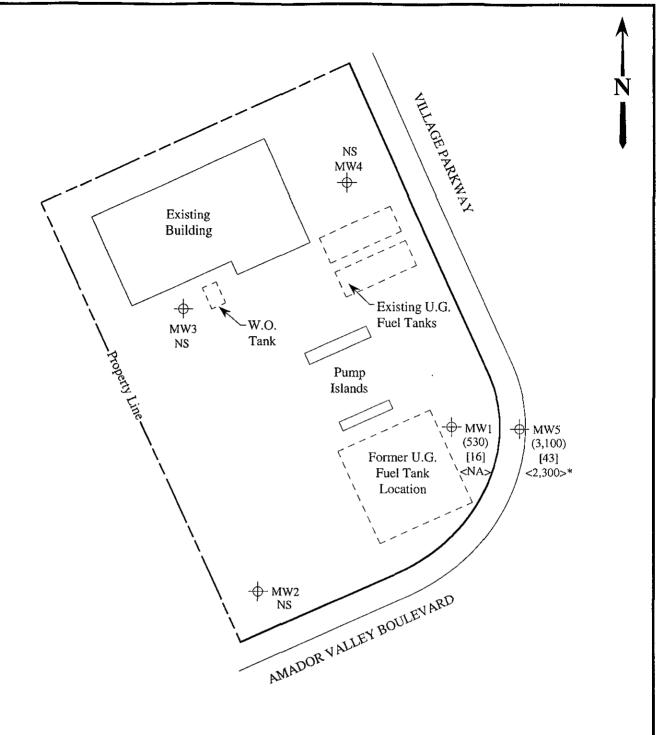
— Contours of ground water elevation

0 100 200
Approx. scale feet

POTENTIOMETRIC SURFACE MAP FOR THE AUGUST 25, 1995 JOINT MONITORING EVENT

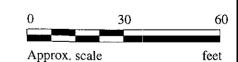


UNOCAL SERVICE STATION #5366 7375 AMADOR VALLEY BLVD. DUBLIN, CALIFORNIA FIGURE 1



LEGEND

- → Monitoring well
- () Concentration of TPH as gasoline in μ g/L
- [] Concentration of benzene in $\mu g/L$
- < > Concentration of TPH as diesel in µg/L
- NS Not sampled, NA Not analyzed
- * The lab reported that the hydrocarbons detected did not appear to be diesel.



PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON AUGUST 25, 1995



UNOCAL SERVICE STATION #5366 7375 AMADOR VALLEY BLVD. DUBLIN, CALIFORNIA FIGURE

2



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

Redwood City, CA 94063 (415) 364-9600 Walnut Creek, CA 94598 (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: Sarkis Karkarian

First Sample #:

Matrix Descript:

Client Project ID: Unocal #5366, 7375 Amador Valley Blvd.,

Water EPA 5030/8015 Mod./8020

Analysis Method: 508-2026

Sampled: Dublin

Aug 25, 1995 Aug 25, 1995

Received: Reported:

Sep 14, 1995

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Sample Number	Sample Description	Purgeable Hydrocarbons μg/L	Benzene μg/L	Toluene μg/L	Ethyl Benzene μg/L	Total Xylenes μg/L
508-2026	MW-1	530	16	ND	2.2	13
508-2027	MW-5	3,100	43	ND	590	8.4
508-2028	ES1	ND	ND	ND	ND	ND
508-2029	ES2	ND	ND	ND	ND	ND

Detection Limits:	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





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

Redwood City, CA 94063 Walnut Creek, CA 94598 (510) 988-9600

(415) 364-9600 (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: Sarkis Karkarian Client Project ID: Matrix Descript: Analysis Method:

to determinations

A STATE OF THE STA Unocal #5366, 7375 Amador Valley Blvd., Water

Dublin

Aug 25, 1995 Sampled: Received:

EPA 5030/8015 Mod./8020 First Sample #: 508-2026

Reported:

Aug 25, 1995 Sep 14, 1995

Commence of the Commence of th

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
508-2026	MW-1	Gasoline	1.0	9/5/95	HP-9	84
508-2027	MW-5	Gasoline	1.0	9/5/95	HP-9	72
508-2028	ES1		1.0	9/5/95	HP-9	101
508-2029	ES2		1.0	9/5/95	HP-9	99

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: Sarkis Karkarian

Client Project ID: Sample Matrix:

Unocal #5366, 7375 Amador Valley Blvd.,

Water EPA 3510/8015 Mod. Dublin

Sampled: Received:

Aug 25, 1995 Aug 25, 1995

Analysis Method: First Sample #: 508-2027 Reported: Sep 14, 1995...

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit μg/L	Sample I.D. 508-2027 MW-5 *	
Extractable Hydrocarbons	50	2300	
Chromatogram Pa	ttern:	Unidentified Hydrocarbons	

Quality Control Data

Report Limit Multiplication Factor:

1.0

Date Extracted:

8/30/95

Date Analyzed:

8/31/95

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

Signature on File

Alan B. Kemp Project Manager

Please Note:

* This sample does not appear to contain diesel. "Unidentified Hydrocarbons < C15" are probably gasoline.



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

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: Sarkis Karkarian Client Project ID: Unocal #5366, 7375 Amador Valley Blvd., Dublin

Matrix: Liquid

QC Sample Group: 5082026-29

Reported:

Sep 14, 1995.

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl	Xylenes	Diesel	
			Benzene	•		
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015	
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill	J.Dinsay	
MS/MSD						
Batch#:	5082093	5082093	5082093	5082093	•	
Date Prepared:	9/5/95	9/5/95	9/5/95	9/5/95	-	
Date Analyzed:	9/5/95	9/5/95	9/5/95	9/5/95	-	
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9	•	
Conc. Spiked:	20 μg/L	20 μg/L	20 μg/L	60 μg/L	-	
Matrix Spike						
% Recovery:	85	95	95	103	-	
Matrix Spike						
Duplicate %						
Recovery:	85	95	95	103	-	
Relative %						
Difference:	0.0	0.0	0.0	1.6	-	

LCS Batch#:	4LCS090595	4LCS090595	4LCS090595	4LCS090595	LCS083095	
Date Prepared:	9/5/ 95	9/5/95	9/5/95	9/5/95	8/30/95	
Date Analyzed:	9/5/95	9/5/95	9/5/95	9/5/95	8/31/95	
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9	GCHP-3B	
LCS %						
Recovery:	92	101	103	111	80	
% Recovery						
Control Limits:	71-133	72-128	72-130	71-120	38-122	

The

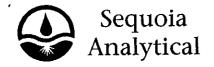
SEQUOIA ANALYTICAL, #1271

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.





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: Sarkis Karkarian

Date: 9/19/95

Sequoia Analytical has potentially identified the presence of MTBE at reportable levels for the following site(s):

Client Project I.D. - Unocal #5366, Dublin

5082028

Sequoia Work Order # - 9508500

Sample Number: Sample Description:

5082026 MW-1 MW-5 5082027 ES1

SEQUOIA ANALYTICAL, #1271

Alan B. Kemp Project Manager



CHAIN OF CUSTODY

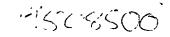
9808**5**06

ANALYSES REQUESTED UNOCAL SAMPLER TURN AROUND TIME: S/S # 5366 CITY: <u>DUBLIN</u> ADDRESS: 7375 AMADON VALLEY NULL ME ME MATER GRAB COMP NO. OF CONT. LOCATION E ME STEVE BALIAN REGULAR TPH-DIESEL WITHESSING AGENCY TOG REMARKS WATER GRAB COMP DATE TIME SAMPLE ID NO. 5082026 AB 8-25-95/0:20 WELL MW-5082027 AC Χ MW- 5 1 THE FOLLOWING MUST BE COMPLETED BY THE LABORATORY ACCEPTING SAMPLES FOR ANALYSES: DATE/TIME RECEIVED BY: RELINQUISHED BY: DATE/TIME 16:00 600 1. HAVE ALL SAMPLES RECEIVED FOR ANALYSIS BEEN STORED ON ICE? 82545 8-25-95 BALIAN STEVE 2. WILL SAMPLES REMAIN REFRIGERATED UNTIL ANALYZED? 3. DID ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACE? (SIGNATURE) (SIGNATURE) 4. WERE SAMPLES IN APPROPRIATE CONTAINERS AND PROPERLY PACKAGED? (SIGNATURE) (SIGNATURE) SIGNATURE: (SIGNATURE) (SIGNATURE)

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.



CHAIN OF CUSTODY



ANALYSES REQUESTED UNOCAL SAMPLER TURN AROUND TIME: S/S # 5366 CITY: DUBLIN ADDRESS: 7375 AMADOR VALLEY BILL ME STEVE BALIAN REGULAR TPH-DIESEL WITNESSING AGENCY TOG 8010 REMARKS DATE TIME SAMPLE ID NO. 5082028 ES 1 8-25-95 5082029 ES2 RECEIVED BY: DATE/TIME DATE/TIME THE FOLLOWING MUST BE COMPLETED BY THE LABORATORY ACCEPTING SAMPLES FOR ANALYSES: RELINQUISHED BY: 16:00 1. HAVE ALL SAMPLES RECEIVED FOR ANALYSIS BEEN STORED ON ICE? 4-2395 8-25-95 STEVE BALIAN 2. WILL SAMPLES REMAIN REFRIGERATED UNTIL ANALYZED? (SIGNATURE) 3. DID ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACE? (SIGNATURE) (SIGNATURE) (SIGNATURE) 4. WERE SAMPLES IN APPROPRIATE CONTAINERS AND PROPERLY PACKAGED? (SIGNATURE) SIGNATURE: (SIGNATURE) (SIGNATURE)