January 30, 2001 G-R #180065

TO:

Mr. David B. De Witt

Tosco Marketing Company

2000 Crow Canyon Place, Suite 400

San Ramon, California

CC: Mr. Douglas Lee

Gettler-Ryan Inc.

6747 Sierra Court, Suite J Dublin, California 94568

FROM:

Deanna L. Harding

Project Coordinator Gettler-Ryan Inc.

6747 Sierra Court, Suite J Dublin, California 94568 RE:

Tosco (Unocal) SS#5043

449 Hegenberger Road Oakland, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	December 14, 2000	Groundwater Monitoring and Sampling Report
		Fourth Quarter - Events of August 24,
		September 27, and October 26, 2000

COMMENTS:

This report is being sent to you for your review/comment, prior to being distributed on your behalf. If no comments are received by *February 8*, 2001, this report will be distributed to the following:

cc: Mr. Barney M. Chan, Alameda County Health Care Services, 1131 Harbor Bay Parkway, Suite 250, Alameda, California 94502

Beretta Investment Group, 39560 Stevenson Place, Suite 118, Fremont, CA 94539

Enclosure

trans/5043.dbd



December 14, 2000 G-R Job #180065

Mr. David B. De Witt Tosco Marketing Company 2000 Crow Canyon Place, Suite 400 San Ramon, California 94583

RE:

Fourth Quarter 2000 Groundwater Monitoring & Sampling Report

Tosco (Unocal) Service Station #5043

449 Hegenberger Road Oakland, California

Dear Mr. De Witt:

This report documents the monthly site visits and the quarterly groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R). On August 24, and September 27, 2000, field personnel monitored one well (MW-6). On October 26, 2000, field personnel monitored and sampled four wells (MW-3, MW-6, MW-9, and MW-10).

Static groundwater levels were measured and all wells were checked for the presence of separate-phase hydrocarbons. Static water level data and groundwater elevations are summarized in Table 1. Product Thickness/Removal Data is summarized in Table 3. A Potentiometric Map is included as Figure 1.

Groundwater samples were collected from the monitoring wells as specified by G-R Standard Operating Procedure - Groundwater Sampling (attached). The field data sheets are also attached. The samples were analyzed by Sequoia Analytical. Analytical results are summarized in Tables 1 and 2. A Concentration Map is included as Figure 2. The chain of custody document and laboratory analytical reports are also attached.

Sincerely,

Deanna L. Harding

Project Coordinator

Douglas J. Lee

Senior Geologist, R.G. No. 6882

Figure 1: Potentiometric Map

Figure 2: Concentration Map
Table 1: Concentration Map
Groundwater Monitoring Data and Analytical Results

Table 2: Groundwater Analytical Results - Oxygenate Compounds

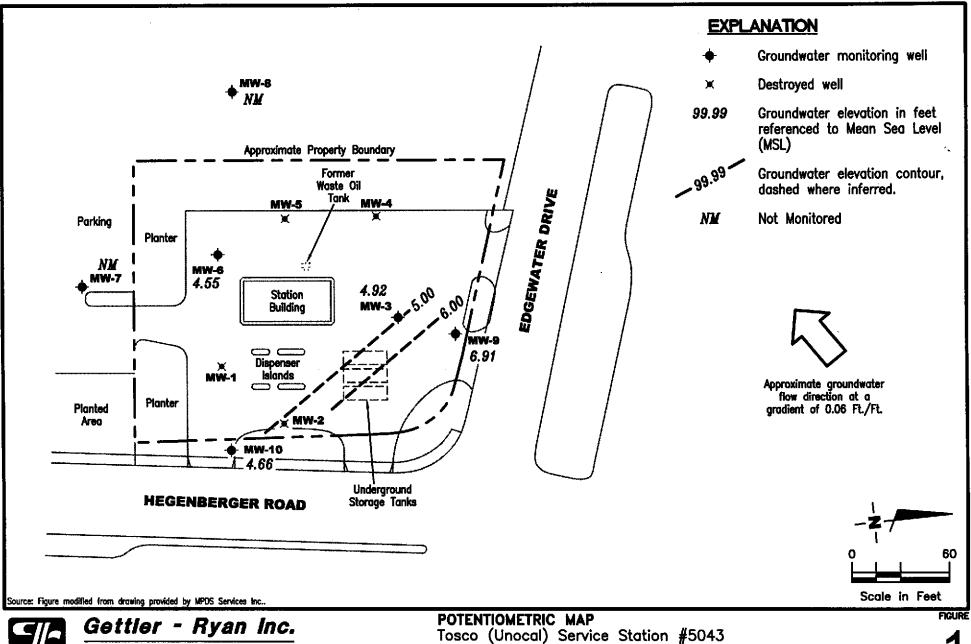
Table 3: Product Thickness/Removal Data

Attachments: Standard Operating Procedure - Groundwater Sampling

Field Data Sheets

Chain of Custody Document and Laboratory Analytical Reports

5043.qml





PROJECT NUMBER

180065

6747 Sierra Ct., Suite J Dublin, CA 94568

REVIEWED BY

(925) 551-7555

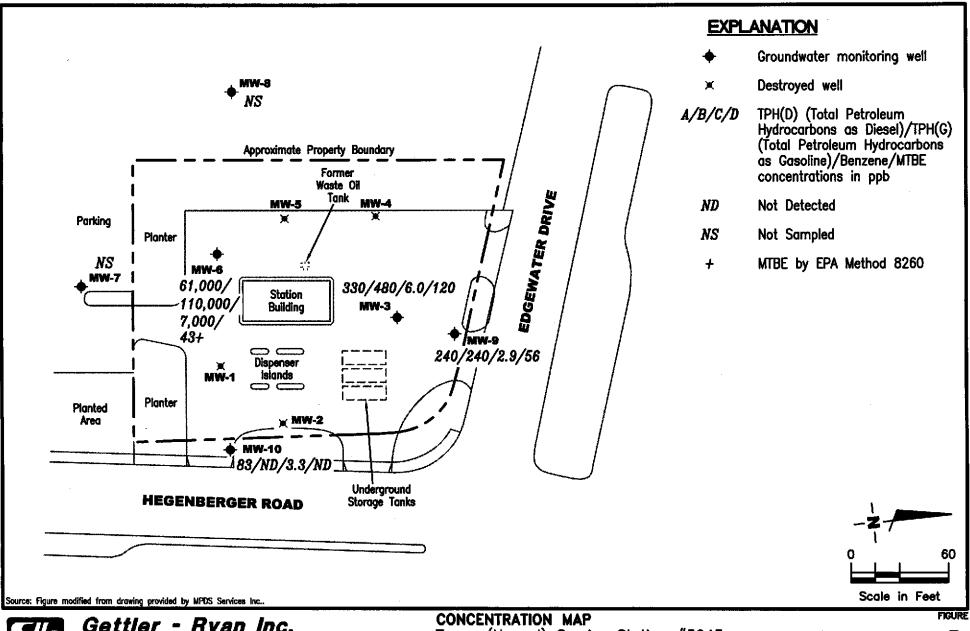
REVISED DATE

449 Hegenberger Road Oakland, California

DATE

October 26, 2000

FILE NAME: P:\ENVIRO\TOSCO\5043\Q00-5043,DWG | Loyout Teb: Pot4





Gettler - Ryan Inc.

6747 Sierra Ct., Suite j Dublin, CA 94568

(925) 551-7555

Tosco (Unocal) Service Station #5043 449 Hegenberger Road Oakland, California

PROJECT NUMBER 180065

REVIEWED BY

DATE October 26, 2000

REVISED DATE

Table 1 Groundwater Monitoring Data and Analytical Results

					Product							
WELL ID/	DATE	DTW	S.L	GWE	Thickness	TPH(D)	TPH(G)	В	T	E	X	MTBE
roc*		(ft.)	(ft. bgs.)	(msl)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ррв)	(ppb)
MW-1	02/18/92					13,000	150,000	17,000	26,000	5,200	26,000	
	05/20/92	<u></u>										
	08/31/92					8,900¹	64,000	13,000	12,000	2,500	22,000	
	11/30/92	••										
	02/04/93								••			
.96•	05/04/93	2.13		5.73**	0.10	NOT SAMPLE	ED DUE TO T	HE PRESENC	E OF FREE	PRODUCT		
	08/04/93	2.92		4.88**	0.03	NOT SAMPLE	ED DUE TO TH	HE PRESENC	E OF FREE	PRODUCT		
.38	11/03/93	3.04		4.74	< 0.01	NOT SAMPLE	ED DUE TO TH	IE PRESENC	E OF FREE	PRODUCT		
	02/07/94	2.55		4.85**	0.03	NOT SAMPLE	ED DUE TO TH	IE PRESENC	E OF FREE	PRODUCT		
	05/19/94	2.23		5.16**	0.01	NOT SAMPLE	ED DUE TO TH	E PRESENC	E OF FREE	PRODUCT		
	06/25/94	2.49		4.90**	0.01	NOT SAMPLE	ED DUE TO TH	IE PRESENC	E OF FREE	PRODUCT		
	07/27/94	3.10		4.28	0.00							
	08/15/94	2.85		4.61**	0.11	NOT SAMPLE	ED DUE TO TH	IE PRESENC	E OF FREE	PRODUCT		
	11/14/94	2.97		4.50**	0.12	NOT SAMPLE	ED DUE TO TH	HE PRESENC	E OF FREE	PRODUCT		
	02/21/95	1.53		5.87**	0.02	NOT SAMPLE	ED DUE TO TH	HE PRESENC	E OF FREE	PRODUCT		
	05/18/95	DESTROYED (3/95)			••							
иW-2	02/18/92			 -		4,300	29,000	1,000	5,300	260	7,900	
	05/20/92	••				4,300 ¹	24,000	2,200	7,600	630	11,000	
	08/31/92					1,600 ¹	9,000	1,800	640	140	2,000	••
	11/30/92					5,700 ¹	29,000	2,000	3,400	1,200	6,900	
	02/04/93					6,100 ¹	18,000	1,600	3,000	ND	6,900	
.96+	05/04/93	. 2.48		6.48	0.00	7,100 ¹	63,000	3,200	17,000	470	17,000	
	08/04/93	3.20		5.76	0.00	1,800 ²	45,000	2,100	6,600	1,400	12,000	·
.58	11/03/93	3.37		5.21	0.00	$2,600^2$	72,000	3,700	16,000	3,700	20,000	
	02/07/94	2.40		6.18	< 0.01	NOT SAMPLE	ED DUE TO TI	HE PRESENC	E OF FREE	PRODUCT		
	05/19/94	2.13		6.45	0.00	$3,000^2$	42,000	2,500	1,300	2,300	13,000	
	06/25/94	2.65		5.93	0.00							
	07/27/94	3.44		5.14	0.00							

Table 1
Groundwater Monitoring Data and Analytical Results
Tosco (Unocal) Service Station #5043

WELL ID/	DATE	DTW (ft.)	S.I. (fl. bgs.)	GWE (msl)	Product Thickness (ft.)	TPH(D)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
	00115104	3.35		£ 22	0.00	2,800 ²	35,000	2,400	850	1,700	15,000	
MW-2	08/15/94	3.25		5.33 6.45	0.00	10,000 ¹	43,000	2,200	6,500	1,800	14,000	
(cont)	11/14/94	2.13		6.93	0.00	$2,000^2$	44,000	2,200	3,200	1,300	1,500	
	02/21/95 05/18/95	1.65 DESTROYED (3/95)		0.93		2,000						
	00110100		25140			ND	230	4.8	22	1.8	33	·
MW-3	02/18/92	IN A COTTOGUE E	2.5-14.0					4.0				
	05/20/92	INACCESSIBLE				92 ²	210 ⁴	1	ND	ND	ND	
	08/31/92					94	790⁴	ND	ND	ND	ND	
	11/30/92					550 ²	3,300	320	ND	96	6.1	
7.84+	02/04/93	 4.32		3.52	0.00	250^{2}	1,800 ³	95	ND	ND	ND	
7.04*	05/04/93 08/04/93	4.94		2.90	0.00	100	210 ⁴	ND	ND	ND	ND	
7.42	11/03/93	4.53		2.89	0.00	160	640 ⁴	NĎ	ND	ND	ND	
1.42	02/07/94	2.40		5.02	0.00	620^{2}	2,700	110	ND	17	NĎ	
	05/19/94	3.60		3.82	0.00	480 ²	1,800	83	ND	6.2	9.1	
	06/25/94	4.58		2.84	0.00							
	07/27/94	4.58		2.84	0.00	••						
	08/15/94	4.65		2.77	0.00	110^2	130	1.1	0.54	ND	0.97	
	11/14/94	3.18		4.24	0.00	150 ²	1,600 ⁴	ND	ND	ND	ND	
	02/21/95	1.81		5.61	0.00	850 ²	3,800	350	ND	130	22	
	05/18/95	4.56		2.86	0.00	150¹	$1,300^3$	42	ND	ND	ND	
	08/17/95	INACCESSIBLE						-				
	07/26/96	INACCESSIBLE		· , 								
	10/28/96 ⁶	INACCESSIBLE										
	01/29/97	INACCESSIBLE		· <u></u>				 ,				
	04/15/97	INACCESSIBLE									•	
	05/27/97	3.45		4.59	0.00		670	6.5	ND	ND	ND	250
	06/01/97	3.50		4.54	0.00	610^{2}						
8.04	07/15/97	3.71		4.33	0.00	240^{2}	240	ND	ND	ND	ND	490
	10/09/97	3.70		4.34	0.00	500^{2}	270	1.1	ND	2.4	1.4	910
	01/14/98	2.16		5.88	0.00	340 ⁷	310	ND	ND	0.62	0.65	140

Table 1
Groundwater Monitoring Data and Analytical Results

					Product							
WELL ID/	DATE	DTW	S.I.	GWE	Thickness	TPH(D)	TPH(G)	В	T	E	X	MTBE
TOC*		(ft.)	(ft. bgs.)	(msl)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
MW-3	04/01/98	2.20	2.5-14.0	5.84	0.00	320 ⁷	370	5.7	ND ⁹	ND ⁹	ND ⁹	93
(cont)	07/15/98	3.38		4.66	0.00	510 ¹⁰	460 ¹¹	ND^9	ND^9	ND^9	ND^9	230
` ,	10/16/98	2.30		5.74	0.00	67 ¹³	330 ¹⁴	4.7	ND ⁹	ND^9	ND^9	60
	01/25/99	2.42		5.62	0.00	1207	420 ¹⁴	1.5	ND ⁹	ND ⁹	ND^9	180
	04/15/99	2.16		5.88	0.00	1 70 ¹⁷	290	0.54	ND	ND	ND	160
	07/14/99	2.35		5.69	0.00	420 ¹⁹	290	3.2	ND	ND	ND	160
	10/21/99	2.49		5.55	0.00	350 ⁷	360 ²³	0.77	ND	ND	ND	82
	01/20/00	2.38		5.66	0.00	2,060 ¹	ND	0.81	ND	ND	ND	54
	04/13/00	2.76		5.28	0.00	200 ²¹	250 ²³	0.69	ND	ND	ND	91/150 ²⁶
	07/14/00	3.26		4.78	0.00	423 ⁷	345 ²⁷	ND	ND	ND	ND	94.7
	10/26/00	3.12		4.92	0.00	330 ²⁹	480 ²³	6.0	ND ⁹	ND ⁹	ND ⁹	120
	00.10.1.40.0					90 ²	0.404	. In	ND.	ND.	0.54	
MW-4	08/31/92	**					240 ⁴	ND	ND	ND	0.54	
	11/30/92					61	420 ⁴	ND	ND	ND	ND	
0.00	02/04/93					ND	ND	ND	ND	ND	ND	
9.00+	05/04/93	4.09		4.91	0.00	ND	110 ³	0.95	ND	ND	ND	
	08/04/93	5.01		3.99	0.00	81	250 ⁴	ND	3.5	ND	4.1	
8.41	11/03/93	4.23		4.18	0.00	68	130 ⁴	ND	ND	ND	ND	
	02/07/94	3.35		5.06	0.00	ND	56 ⁴	ND	ND	ND	ND	
	05/19/94	3.92		4.49	0.00	90 ²	140 ⁴	ND	ND	ND	NĎ	
	06/25/94	4.35		4.06	0.00				••			
•	07/27/94	4.28		4.13	0.00	 3	 4					
	08/15/94	4.27		4.14	0.00	72 ²	59 ⁴	ND	0.6	ND	ND	••
	11/14/94	4.05		4.36	0.00	ND	130 ⁴	ND	ND	ND	ND	
	02/21/95	DESTROYED (1/95)										

Table 1
Groundwater Monitoring Data and Analytical Results

					Product							
WELL ID/	DATE	DTW	S.L	GWE	Thickness	TPH(D)	TPH(G)	В	T	E	X	MTBE
TOC*		(ft.)	(ft. bgs.)	(msl)	(fi.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
MW-5	08/31/92	48				690¹	78	0.89	ND	ND	13	
141 44 - 2	11/30/925					470 ²	930	70	290	0.79	14	
	02/04/935					5,500 ²	5,700	38	ND	620	170	
	05/04/935	4.37		4.90	0.00	4,600¹	7,400	41	ND	1,000	35	
	08/04/935	5.81		3.46	0.00	970²	1,500	130	1	460	11	
8.95	11/03/93	5.68		3.27	0.00	$2,100^2$	13,000	350	ND	3,500	530	
6.75	02/07/94	5.11		3.84	0.00	830 ²	2,000	87	ND	370	110	·
	05/19/94	5.09		3.86	0.00	600 ²	260	44	ND	32	4.1	
	06/25/94	4.55		4.40	0.00							
	07/27/94	5.72		3.23	0.00							
	08/15/94	5.68		3.27	0.00	860 ²	1,600	110	ND	340	72	
	11/14/94	5.63		3.32	0.00	290¹	250	40	ND	ND	5	••
	02/21/95	DESTROYED (1/95)										
						•						
MW-6	08/31/92		2.5-13.5			750 ²	ND	ND	ND	ND	ND	
	11/30/92					1,400 ¹	9,200	550	ND	740	1,600	
	02/04/93					890²	3,600	340	ND	290	550	
9.12+	05/04/93	3.72		5.40	0.00	1,800¹	4,900	360	18	450	430	
	08/04/93	5.15		3.97	0.00	1,100 ²	3,400	390	ND	440	190	
8.87	11/03/93	5.25		3.62	0.00	390 ²	1,400	320	ND	200	7.7	
	02/07/94	4.55		4.32	0.00	9 70 ²	4,900	650	ND	250	35	
	05/19/94	4.62		4.25	0.00	1,400 ²	3,600	300	1.7	210	41	
	08/15/94	5.08		3.79	0.00	790 ²	1,300	130	6.7	54	57	
	11/14/94	5.30		3.57	0.00	800 ²	730	50	ND	ND	39	44
	02/21/95	5.37		3.50	0.00	730 ²	2,000	250	4.6	25	30	
	05/18/95	INACCESSIBLE							••			••
	08/17/95	INACCESSIBLE										
	07/26/96	6.40		5.03**	3.33	NOT SAMPL	ED DUE TO T	HE PRESENC	CE OF FREE	PRODUCT		••
	10/28/96	4.10		4.93**	0.21	NOT SAMPLE	ED DUE TO T	HE PRESENC	CE OF FREE	PRODUCT		
	11/13/96	4.02		5.04**	0.25		••					
	11/25/96	4.01		5.44**	0.75		_					
	12/04/96	3.65		5.61**	0.50	••						

Table 1 Groundwater Monitoring Data and Analytical Results

					Product							
WELL ID/	DATE	DTW	S.I.	GWE	Thickness	TPH(D)	TPH(G)	В	T	E	X	MTBE
TOC*		(ft.)	(ft. bgs.)	(msl)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
	4.644.015.5			بديد جورت م	A 40							
MW-6	12/19/96	4.80	2.5-13.5	5.76**	2.20							
(cont)	01/08/97	4.84		5.38**	1.75							
	01/14/97	4.51		5.25**	1.15			••				
	01/27/97	4.00		6.22**	1.75							
	01/29/97	3.24		5.87**	0.31	NOT SAMPLE	D DUE TO TH	E PRESENC	E OF FREE P	RODUCT		
	02/11/97	4.65		5.14**	1.20			••				
	02/24/97	4.81		4.91**	1.10							
	03/10/97	4.60		5.00**	0.95							
	03/17/97	4.50		5.06**	0.89		••					
	03/31/97	4.65		4.99**	1.00							
	04/15/97	4.90		4.76**	1.03	NOT SAMPLE	D DUE TO TH	E PRESENC	E OF FREE P	RODUCT		
	04/28/97	4.78		4.11**	0.03							
	05/15/97	4.60		4.46**	0.25						••	
	05/27/97	4.50		4.56**	0.25							
	06/09/97	4.60		4.42**	0.20							
	06/24/97	4.50		4.56**	0.25							
	07/09/97	4.80		4.53**	0.60							
	07/15/97	4.63		4.56**	0.42	NOT SAMPLE	ED DUE TO TH	E PRESENC	CE OF FREE P	RODUCT		
	07/21/97	4.75		4.31**	0.25							
	08/06/97	4.50		4.45**	0.10				••	-		
	08/20/97	4.55		4.40**	0.10							
	09/02/97	4.75		4.16**	0.05					••		
	10/09/97	4.84		4.06**	0.04	NOT SAMPLE	ED DUE TO TH	E PRESENC	CE OF FREE P	RODUCT		
	01/14/98	3.90		5.69**	0.94		ED DUE TO TH					
	02/12/98	3.35		6.01**	0.64							
	03/03/98	4.51		4.38**	0.02							
	04/01/98	3.67		6.43**	1.60	NOT SAMPLE	ED DUE TO TH	E PRESENC	CE OF FREE F	RODUCT		
	05/26/98	4.11		5.15**	0.50				· · · · · ·			
	06/15/98	5.03		4.07**	0.30							
	07/15/98	4.56	-	4.35**	0.05	NOT SAMDI I	ED DUE TO TH	IR DRESEM	TE OF FREE C	PADITICT		
		4.36 4.77		4.33***	0.03	HOI SAMELI	DOB 10 1N	e i krodik	ا تاظاما ۱۰ باری سر 	KODOCI		
	08/21/98				0.02			••				-
	09/30/98	5.08		3.81**		NOT GARANT	 	er Do poper	יים חם מחם מר יים חם מחם מר			••
	10/16/98	4.31		6.41**	2.40	NOT SAMPLI	ED DUE TO TH	IE LKE2EN	le of free i	KUDUCI		

Table 1 Groundwater Monitoring Data and Analytical Results Tosco (Unocal) Service Station #5043

					Product							
WELL ID/	DATE	DTW	SJ.	GWE	Thickness	TPH(D)	TPH(G)	В	T	E	X	MTBE
TOC*		(ft.)	(ft. bgs.)	(msl)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
MW-6	11/06/98	3.98	2.5-13.5	5.02**	0.17							
(cont)	11/25/98	3.92		5.03**	0.10							
	12/28/98	3.90		5.12**	0.20							
	01/25/99	4.18	·	5.15**	0.60	NOT SAMPLE	ED DUE TO TH	E PRESENC	E OF FREE P	RODUCT	••	
	02/22/99	4.07		4.97**	0.22	••		_		••		
	03/22/99	4.32		4.67**	0.15							
	04/15/99	4.23		5.37**	0.95	NOT SAMPLE	ED DUE TO TH	E PRESENC	E OF FREE P	RODUCT		
	05/28/99	4.38		4.79**	0.39							
	06/29/99	4.12		4.77**	0.02							
	07/14/99	4.20		4.69**	0.03	NOT SAMPLE	ED DUE TO TH	E PRESENC	E OF FREE P	RODUCT		
	08/23/99	4.51		4.54**	0.24	==						
	09/30/99	4.17		4.83**	0.17							
	10/21/99	4.27		4.69**	0.12	NOT SAMPLE	ED DUE TO TH	E PRESENC	E OF FREE P	RODUCT		••
	11/29/99	4.18		4.69	<0.01							
	12/20/99	4.26		4.62**	0.01							
	01/20/00	4.31		4.56	< 0.01	67,600¹	$130,000^{23}$	2,900	8,600	2,000	16,000	ND^9
	02/26/00	3.98		4.89	0.00		<u></u>		4.5			
	03/31/00	4.14		4.73	0.00	·						
	04/13/00	4.04		4.83	0.00	8,700 ⁷	140,000 ²³	5,000	14,000	3,600	27,000	7,700
	05/26/00	4.41		4.46	0.00					·		
	06/17/00	4.35		4.52	0.00							•-
	07/14/00	4.47		4.40	< 0.01	133,0007	$259,000^{23}$	7,670	13,700	6,860	40,700	9ND/ND ^{9,26}
	08/24/00	3.71		5.16	0.00				••	••	,	
	09/27/00	4.33		4.54	0.00							-
	10/26/00	4.32		4.55	0.00	$61,000^{28}$	110,000 ²³	7,000	6,200	3,700	12,000	670/43 ³⁰

Table 1
Groundwater Monitoring Data and Analytical Results
Tosco (Unocal) Service Station #5043

		_			Product							
WELL ID/	DATE	DTW	S.L.	GWE	Thickness	TPH(D)	TPH(G)	В	T	E	X	MTBE
TOC*		(ft.)	(ft. bgs.)	(msl)	(ft.)	(ppb)	(грь)	(ppb)	(ppb)	(ppb)	(ppb)	(ррв)
MW-7	05/27/97	4.50	3.0-13.0	4.33	0.00		68	ND	ND	ND	ND	ND
8.83	06/01/97	4.54		4.29	0.00	69 ²	_					
	07/15/97	4.70		4.13	0.00	ND	ND	ND	ND	ND	ND	ND
	10/09/97	4.30		4.53	0.00	190¹	ND	ND	ND	ND	ND	ND
	01/14/98	2.88		5.95	0.00	65 ⁷	ND	ND	ND	ND	ND	36
	04/01/98	3.13		5.70	0.00	ND	ND	ND	ND	ND	ND	ND
	07/15/98	4.45		4.38	0.00	74 ¹²	ND	ND	ND	ND	ND	ND
	10/16/98	3.45		5.38	0.00	ND	ND	ND	ND	ND	ND	ND
	01/25/99	3.22		5.61	0.00	ND	ND	ND	ND	ND	ND	ND
	04/15/99	3.11		5.72	0.00	ND	ND	ND	ND	ND	ND	ND
	07/14/99	3.34		5.49	0.00	69 ²⁰	ND	ND	ND	ND	ND	ND
	10/21/99	3.43		5.40	0.00	ND	ND	ND	ND	ND	ND	ND
	01/20/00	3.29		5.54	0.00	ND	ND	ND	ND	ND	ND	4.2
	04/13/00	3.39		5.44	0.00	ND^9	ND	ND	ND	ND	ND	ND
	07/14/00	4.42		4.41	0.00	68.0 ⁷	ND	ND	ND	ND	ND	7.83
I	NOT MONITORE	D/SAMPLED										
MW-8	05/27/97	3.42	3.0-15.0	5.10	0.00		310	0.88	0.67	15	70	ND
8.52	06/01/97	3.46	3.0 13.0	5.06	0.00	320 ²						
0.52	07/15/97	3.49		5.03	0.00	ND	ND	ND	ND	2.7	3.8	ND
	10/09/97	3.73		4.79	0.00	390 ¹	590	1.4	ND	32	4.1	ND
	01/14/98	1.92		6.60	0.00	230 ⁷	ND	ND	ND	ND	ND	ND
	04/01/98	2.38		6.14	0.00	510 ⁷	ND	ND	ND	ND	ND	4.7
	07/15/98	3.53		4.99	0.00	140 ¹²	ND	ND	ND	0.56	1.1	ND
	10/16/98	3.04		5.48	0.00	170 ¹⁵	ND	ND	ND	ND	ND	ND
	01/25/99	2.92		5.60	0.00	ND ⁹	ND	ND	ND	ND	ND	ND

Table 1
Groundwater Monitoring Data and Analytical Results
Tosco (Unocal) Service Station #5043

WELL ID/	DATE	DTW (ft.)	S.L. (ft. bgs.)	GWE (msl)	Product Thickness (ft.)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
		er een een maar oor oo o					•					and the second s
MW-8	04/15/99	2.40	3.0-15.1	6.12	0.00	91 ¹²	ND	ND	ND	ND	ND	ND
(cont)	07/14/99	3.03		5.49	0.00	120^{21}	ND	ND	ND	ND	ND	ND
	10/21/99	3.11		5.41	0.00	110 ²⁴	ND	ND	ND	ND	ND	ND
	01/20/00	3.06		5.46	0.00	583¹	ND	ND	ND	ND	ND	ND
	04/13/00	2.84		5.68	0.00	80 ²⁴	ND	ND	ND	ND	ND	ND
	07/14/00	3.39		5.13	0.00	113 ⁷	ND	ND	ND	ND	ND	ND
	NOT MONITORE	D/SAMPLED							•			
MW-9	02/21/95	1.98	3.0-13.0	6.31	0.00	71 ²	70 ⁴	ND	ND	ND	ND	
8.29	05/18/95	3.47	2.0 10.0	4.82	0.00	ND	52	ND	1.1	ND	1.9	
0.27	08/17/95	1.49		6.80	0.00	ND	ND	ND	ND	ND	ND	
	07/26/96	0.28		8.01	0.00	98	ND	ND	ND	ND	ND	ND
	10/28/96	1.15		7.14	0.00	99 ¹	ND	ND	ND	ND	ND	7.6
	01/29/97	1.05		7.24	0.00	54	ND	ND	ND	ND	ND	5.4
	04/15/97	1.88		6.41	0.00	94 ^t	ND	ND	ND	ND	ND	5.4
	05/27/97	1.05		7.24	0.00							**
	07/15/97	1.90		6.39	0.00	ND	ND	ND	ND	ND	ND	ND
	10/09/97	1.76		6.53	0.00	160 ¹	ND	ND	ND	ND	ND	ND
	01/14/98	1.26		7.03	0.00	110 ⁷	ND	ND	ND	ND	ND	3.0
	04/01/98	0.85		7.44	0.00	1107	ND	ND	ND	ND	ND	ND
	07/15/98	1.52		6.77	0.00	200 ¹²	ND	ND	ND	ND	ND	ND
	10/16/98	0.81		7.48	0.00	ND	ND	ND	ND	ND	ND	ND
	01/25/99	0.92		7.37	0.00	ND	ND	ND	ND	ND	ND	ND
	04/15/99	0.92		7.39	0.00	ND	75 ¹⁸	21	ND	ND	1.1	680
	07/14/99	1.04		7.25	0.00	140 ²¹	ND	1.9	ND	ND	ND	260
	10/21/99	1.23		7.06	0.00	210 ²⁴	ND	ND	ND	ND	ND	170
	01/20/00	1.18		7.11	0.00	519 ¹	ND	1.1	ND ND	ND	ND	35
	04/13/00	1.18		7.11 7.21	0.00	81 ²⁵	160 ²³	0.64	ND	ND	ND	53
	04/13/00 07/14/00	1.08		6.86	0.00	107 ⁷	ND	ND	ND ND	ND ND	ND	20.2
	10/26/00	1.43 1.38		6.91	0.00 0.00	240 ⁷	240 ²³	2.9	ND ND	ND ND	ND ND	20.2 56

Table 1
Groundwater Monitoring Data and Analytical Results
Tosco (Unocal) Service Station #5043

449 Hegenberger Road
Oakland, California

					Product							
WELL ID/	DATE	DTW	S.I.	GWE	Thickness	TPH(D)	TPH(G)	В	T	E	X	MTBE
TOC*		(ft.)	(fl. bgs.)	(msl)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
MW-10	02/21/95	4.69	3.0-13.0	3.93	0.00	270 ²	1,500	250	26	9.1	160	
8.62	05/18/95	4.92		3.70	0.00	75¹	810	520	ND	18	23	
	08/17/95	4.05		4.57	0.00	ND	67	25	ND	2.4	ND	
	07/26/96	4.08		4.54	0.00	ND	ND	3.7	ND	ND	ND	ND
	10/28/96	4.09		4.53	0.00	ND	ND	1.3	ND	ND	ND	ND
	01/29/97	2.94		5.68	0.00	ND	210	41	0.67	7.2	4.8	11
	04/15/97	4.07		4.55	0.00	ND	110	12	ND	0.77	ND	9.7
	05/27/97	4.40		4.22	0.00							
	07/15/97	4.19		4.43	0.00	ND	ND	2.1	ND	0.67	0.73	ND
	10/09/97	4.75		3.87	0.00	ND	190	38	0.92	6.6	7.6	ND
	01/14/98	2.66		5.96	0.00	8	59	9.5	0.85	1.2	1.7	4.5
	04/01/98	3.45		5.17	0.00	62 ⁷	230	66	1.7	12	17	6.4
	07/15/98	4.21		4.41	0.00	78 ¹²	290	98	45	21	38	21
	10/16/98	4.11		4.51	0.00	ND	160 ¹⁶	44	0.96	2.5	10	17
	01/25/99	3.26		5.36	0.00	ND	140	27	ND	2.8	6.8	23
	04/15/99	3.63		4.99	0.00	ND	120	18	ND	1.8	5.1	14
	07/14/99	3.89		4.73	0.00	180 ²²	280	55	3.2	11	31	6.1
	10/21/99	4.09		4.53	0.00	96 ⁷	140 ²³	22	0.59	1.7	7.7	5.3
	01/20/00	3.92		4.70	0.00	252 ¹	ND	0.73	0.86	ND	ND	5.2
	04/13/00	3.85		4.77	0.00	69 ²⁴	67 ²³	54	ND	2.6	ND	3.8
	07/14/00	4.18		4.44	0.00	149 ⁷	ND	0.547	ND	ND	ND	ND
	10/26/00	3.96		4.66	0.00	83 ²⁴	ND	3.3	ND	0.83	1.5	ND

Groundwater Monitoring Data and Analytical Results Tosco (Unocal) Service Station #5043

449 Hegenberger Road Oakland, California

WELL ID/	DATE	DTW	S.L.	GWE	Product Thickness	TPH(D)	TPH(G)	В	Т	E	X	МТВЕ
TOC*		(ft.)	(ft. bgs.)	(msl)	(fl.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
Trip Blank												
TB-LB	01/14/98						ND	ND	ND	ND	ND	ND
	04/01/98						ND	ND	ND	ND	ND	ND
	07/15/98						ND	ND	ND	ND	ND	ND
	10/16/98						ND	ND	ND	ND	ND	ND
	01/25/99						ND	ND	ND	ND	ND	ND
	04/15/99						ND	ND	ND	ND	ND	ND
	07/14/99				**		ND	ND	ND	ND	ND	ND
	10/21/99			_			ND	ND	ND	ND	ND	ND
	01/20/00				· ·		ND	ND	ND	ND	ND	ND
	04/13/00						ND	ND	ND	ND	ND	ND
	07/14/00						ND	ND	ND	ND	ND	ND
	10/26/00						ND	ND	ND	ND	ND	ND

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5043 449 Hegenberger Road Oakland, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to January 14, 1998, were compiled from reports prepared by MPDS Services, Inc.

TOC = Top of Casing

B = Benzene

(ppb) = Parts per billion

DTW = Depth to Water

T = Toluene

ND = Not Detected

(ft.) = Feet

E = Ethylbenzene

-- = Not Measured/Not Analyzed

S. I. = Screen Interval

X = Xylenes

TOG = Total Oil and Grease

(ft. bgs.) = Feet Below Ground Surface

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MTBE = Methyl tertiary butyl ether

GWE = Groundwater Elevation

(msl) = mean sea level

TPH(G) = Total Petroleum Hydrocarbons as Gasoline

- * TOC elevations are relative to msl, per the City of Oakland Benchmark #3880 (Elevation = 20.37 feet msl).
- ** Groundwater elevation corrected for the presence of free product [(TOC-DTW)+(Product Thickness x 0.77)].
- Elevations were based on the top of the well covers, and were surveyed relative to msl, per the City of Oakland Benchmark #3880 (Elevation = 20.37 feet).
- Laboratory report indicates the hydrocarbons detected did not appear to be diesel.
- Laboratory report indicates the hydrocarbons detected appeared to be a diesel and non-diesel mixture.
- Laboratory report indicates the hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.
- ⁴ Laboratory report indicates the hydrocarbons detected did not appear to be gasoline.
- 5 TOG was ND.
- The well was obstructed with debris at 0.55 feet. A water sample was collected but was not analyzed as it was considered not representative of groundwater in this well.
- Laboratory report indicates unidentified hydrocarbons C9-C24
- 8 Sample bottle broken at Laboratory.
- Detection limit raised. Refer to analytical reports.
- Laboratory report indicates unidentified hydrocarbons >C14 and <C12.
- Laboratory report indicates gasoline and unidentified hydrocarbons >C8.
- Laboratory report indicates unidentified hydrocarbons >C14.
- Laboratory report indicates non diesel mix >C14.
- Laboratory report indicates gasoline and unidentified hydrocarbons C6-C12.
- Laboratory report indicates non diesel mix C9-C27.
- Laboratory report indicates unidentified hydrocarbons < C7.
- Laboratory report indicates unidentified hydrocarbons >C10.
- Laboratory report indicates unidentified hydrocarbons C6-C12.
- Laboratory report indicates unidentified hydrocarbons >C9.
- ²⁰ Laboratory report indicates discrete peaks and unidentified hydrocarbons >C20.
- Laboratory report indicates discrete peaks and unidentified hydrocarbons >C16.

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5043 449 Hegenberger Road Oakland, California

EXPLANATIONS:

- Laboratory report indicates unidentified hydrocarbons <C14 and >C16.
- ²³ Laboratory report indicates gasoline C6-C12.
- Laboratory report indicates unidentified hydrocarbons >C16.
- Laboratory report indicates discrete peaks.
- MTBE by EPA Method 8260.
- ²⁷ Laboratory report indicates weathered gasoline C6-C12.
- Laboratory report indicates unidentified hydrocarbons < C16
- ²⁹ Laboratory report indicates unidentified hydrocarbons C9-C40.
- MTBE by EPA Method 8260 was originally analyzed within holding time.

Re-analysis for confirmation or dilution was performed past the recommended holding time.

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Groundwater Analytical Results - Oxygenate Compounds

Tosco (Unocal) Service Station #5043 449 Hegenberger Road

Oakland, California

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)
MW-3	04/13/00	ND	ND	150	ND	ND	ND	ND	ND
MW-6	07/14/00 10/26/00			ND ¹ 43 ²	 		**	 	 ••

EXPLANATIONS:

TBA = Tertiary butyl alcohol

MTBE = Methyl tertiary butyl ether

DIPE = Di-isopropyl ether

ETBE = Ethyl tertiary butyl ether

TAME = Tertiary amyl methyl ether

1,2-DCA = Dichloroethane

EDB = Ethylene dibromide

(ppb) = Parts per billion

ND = Not Detected

-- = Not Analyzed

EPA Method 8260 for Oxygenate Compounds

ANALYTICAL METHOD:

Detection limit raised. Refer to analytical reports.

Laboratory report indicates sample was originally analyzed within holding time.
Re-analysis for confirmation or dilution was preformed past the recommended holding time.

Table 3 Product Thickness/Removal Data

Tosco (Unocal) Service Station #5043 449 Hegenberger Road

Oakland, California

WELL ID	DATE	DTW (fl.)	Product Thickness (fL)	Amount Bailed (Product + Water) (gallons)
		UH/	U-Z) <u>c</u>
4W-6	07/26/96	6.40	3.33	2.10
	10/28/96	4.10	0.21	0.14
	11/13/96	4.02	0.25	0.09
	11/25/96	4.01	0.75	0.47
	12/04/96	3.65	0.50	0.43
	12/19/96	4.80	2.20	1.02
	01/08/97	4.84	1.75	0.59
	01/14/97	4.51	1.15	0.66
	01/27/97	4.00	1.75	0.78
	01/29/97	3.24	0.31	0.25
	02/11/97	4.65	1.20	0.62
	02/24/97	4.81	1.10	0.50
	03/10/97	4.60	0.95	0.47
	03/17/97	4.50	0.89	0.35
	03/31/97	4.65	1.00	0.50
	04/15/97	4.90	1.03	0.51
	04/28/97	4.78	0.03	0.20
	05/15/97	4.60	0.25	0.20
	05/27/97	4.50	0.25	0.00
	06/09/97	4.60	0.20	0.23
	06/24/97	4.50	0.25	0.25
	07/09/97	4.80	0.60	0.25
	07/15/97	4.63	0.42	0.20
	07/21/97	4.75	0.25	0.27
	08/06/97	4.50	0.10	0.16
	08/20/97	4.55	0.10	0.20
	09/02/97	4.75	0.05	0.12
	10/09/97	4.84	0.04	0.12
	01/14/98 ¹	3.90	0.94	1.50
	02/12/981	3.35	0.64	0.32
	03/03/98 ¹	4.51	0.02	2.00
	04/01/98 ¹	3.67	1.60	0.50
	05/26/98 ¹	4.11	0.50	0.08
	06/15/98 ¹	5.03	0.30	0.060
	07/15/98 ¹	4.56	0.05	0.10
	08/21/98 ^t	4.77	0.02	0.040
	09/30/98 ¹	5.08	0.03	0.027
	10/16/98 ¹	4.32	2.40	0.98
	11/06/981	3.98	0.17	0.16
	11/25/98 ¹	3.92	0.10	0.12
	12/28/98 ¹	3.90	0.20	0.14
	01/25/99 ¹	4.18	0.60	0.27
	02/22/99 ¹	4.07	0.22	0.078 product/3.0 water
	03/22/99 ¹	4.32	0.15	0.039 product/5.0 water
	UJI 441 77	7.34	0.15	Order Promotorio dinos

Table 3
Product Thickness/Removal Data

Tosco (Unocal) Service Station #5043 449 Hegenberger Road Oakland, California

WELL ID	DATE	DTW	Product Thickness	Amount Bailed (Product + Water)
		(fi.)	(ft.)	(gallons)
MW-6	05/28/99 ¹	4.38	0.39	0.141 product/1.0 water
(cont)	06/29/99 ¹	4.12	0.02	0.054 product/8.0 water
	07/14/99 ¹	4.20	0.03	0.039 product/2.0 water
	08/23/99 ¹	4.51	0.24	0.094 product/1.0 water
	09/30/99 ¹	4.17	0.17	0.141 product/1.0 water
	10/21/99 ¹	4.27	0.12	0.070 product/1.0 water
	11/29/99 ²	4.18	< 0.01	0.0078 product/1.0 water
	12/20/99 ²	4.26	0.01	0.0156 product/1.0 water
	01/20/00 ²	4.31	<0.01	0.00
	02/26/00	3.98	0.00	0.00
	03/31/00	4.14	0.00	0.00
	04/13/00	4.04	0.00	0.00
	05/26/00	4.41	0.00	0.00
	06/17/00	4.35	0.00	0.00
	07/14/00	4.47	<0.01	<1 ounce
	08/24/00	3.71	0.00	0.00
	09/27/00	4.33	0.00	0.00
	10/26/00	4.32	0.00	0.00

EXPLANATIONS:

Product Thickness/Removal Data prior to January 14, 1998, were compiled from reports prepared by MPDS Services, Inc.

DTW = Depth to Water

(ft.) = Feet

Skimmer present in well.

No skimmer found in well.

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan Inc. field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. Prior to sample collection, the type of analysis to be performed is determined. Loss prevention of volatile compounds is controlled and sample preservation for subsequent analysis is maintained.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, static water level measurements are collected with the interface probe and are also recorded in the field notes.

After water levels are collected and prior to sampling, temperature, pH and electrical conductivity are measured. If purging is to occur, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or polyvinyl chloride bailers. The measurements are taken a minimum of three times during the purging. Purging continues until these parameters stabilize.

Groundwater samples are collected using disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used when possible. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. For sampling sets greater than 20 samples, 5% trip blanks are included. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

As requested by Tosco Marketing Company, the purge water and decontamination water generated during sampling activities is transported to Tosco - San Francisco Area Refinery, located in Rodeo, California.

TOSCO (UNOCAL) SS#5043 OAKLAND, CA

MONTHLY MONITORING EVENT OF AUGUST 24, 2000

-	Sco # 5		Job#		065
Address:	49 HEGI	enberg	ER Relidate	: <u>8/0</u>	14/00
City: OAK	LAND	, CA	_ Sam	pler: H. K	KEVORK
Well ID	MW-6	Well C	ondition: _	oK	
Well Diameter	in	•	carbon Z	Amount	(/)
Total Depth	12,75.	Thickr		<u>in</u> (product/v	
Depth to Water	3.11.		(VF)	6° = 1.50	
	×	VF =	X 3 (case	volume) = Estimated	Purge Volume:(gal.)
Purge Equipment:	Disposable Bailer Bailer Stack Suction	•	Sampling Equipment	: Disposable Bailer Pressure Ba	
NIT	Grundfos Other:	<u> </u>	(P/17	Grab Sampl Other:	e
Starting Time: Sampling Time: Purging Flow Rate	N/A	w			
Did well de-water	7	If	yes; Time: _	Volu	me:(gal.)
	olume pH (gal.)	Conduc µmhos		erature D.O. (mg/L)	ORP Alkalinity (mV) (ppm)
					- /
/_	— <i>—</i>		— /		<i>-</i>
		.			
		LABORAT	ORY INFORMA	TION	
SAMPLE ID	(#) - CONTAINER	···· · · · · · · · · · · · · · · · · ·	RESERV. TYPE	LABORATORY	ANALYSES
	X VOG VIAL	4	ماعلا		TPHG BTEX MTOE
COMMENTS:	MONITO	RED	ONU	<i>)</i>	
NC	PROD	UCT	Fow	ID IN	WELL

TOSCO (UNOCAL) SS#5043 OAKLAND, CA

MONTHLY MONITORING EVENT OF SEPTEMBER 27, 2000

Client/ Facility # 50	43		Job#:	18006		
	19 Hegenler	ael	Date:	9-27	. ~	
City:C	Ost (and		Sample	r: Joe		
Well ID	ww.G	Well Cond	lition:	0.14	<u> </u>	
Well Diameter	$\frac{oldsymbol{ u}_{i_0}}{oldsymbol{ u}_{i_0}}$	Hydrocart Thickness		Amount Bail	a comment	<u>lc=l.</u>
Total Depth	12.75 ±	Volume Factor (VI		3" = 0.38 6" = 1.50	년" = 0. 12" = 5.50	.66 ·
Depth to Water			X 3 (case voi	ume) = Estimated Purp	ge Volume:	lcal.
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundfos Other:	· ·	•	Disposable Bailer Pressure Bailer Grab Sample		
Starting Time:		_	ther Conditions			
Sampling Time:					Odor	
Purging Flow Rate Did well de-wate	te:			Volume		(cal.)
Time	Volume pH (gal.)	Conductiv		ature D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
	$\neq =$		Z =			
/=						<u> </u>
	/		DRY INFORMAT	TION LABORATORY	ANALYS	.Es
SAMPLE 1D	(#) - CONTAINER	Υ .	HCL	Sequoia	TPHG, BTEX,	MTBC
 	1				<u> </u>	
					 	
				<u> </u>		
COMMENTS:	No product	found	in well	However,	well mal	-ec sturk
				· ·		

TOSCO (UNOCAL) SS#5043 OAKLAND, CA

MONITORING & SAMPLING EVENT OF OCTOBER 26, 2000

Client/ Facility #_504	4 3		Job#	18006		
		ar Rd	. Date:	10-26-	90	
	9 Hegenberg	<u>er - o</u>	Date.	•		
City:	kland_		Samp	oler: <u>Jo e</u>		·
	2 11) 004	14/ (1	Constitution	0.K		
Well 1D	<u>ww-3</u>	Aveil	Condition:			
Well Diameter	2:0	Hydr	rocarbon	Amount B		
	14.05 +	Thic	kness:	in (product/w	sterl:	Inal 1
Total Depth	14.03 +	1		.17 3" = 0.3 $6" = 1.50$	8 4" = 1 12" = 5.50	0.66
Depth to Water	3.12 +	rac .	tor (VF)	9 = 120	17 = 720	
						
	10.93 x	VF 0.17	= 1,86x 3 (case	volume) = Estimated P	urge Volume:\$	للمولك
		*				
Purge	Disposable Bailer	•	Sampling	: Disposable B	aile.	
Equipment:	Bailer Stack		Equipment	Bailer	dire	
	Stack Suction	•		Pressure Bail	er .	
	Grundfos			Grab Sample		
•	Other:			Other:		
						
Starting Time: Sampling Time:	3:07		Water Color:	ons: Henry Ce Clear prion: neve	Odor-ligh	<u>+</u>
	te:)SD		Volu		(cal.)
Did well de-wate	er/		if yes; Tutie	· · · · · · · · · · · · · · · · · · ·	;	
Time	Volume pH (gal.)	Cone µm	ductivity (,) Temp bos/cm 'p	C (mg/L)	ORP (mV)	Alkalinity (ppm)
2:50	1.5 7.04	7	.20 6	<u>5.2</u>	<u> </u>	
9'53	3 695			5.1		
2167	5.5. 6.96			5.3		
						
					 .	•
						
		LABO	RATORY INFORM			
SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY '	ANALYS	
MW-3	3464	Y	HCL	Seguoia	TPHG, BTEX,	MTBE
	1Amb.	10		11	TPHD	
				\		
-						
<u> </u>		<u>. </u>				
COMMENTS: .						
			· · · · · · · · · · · · · · · · · · ·			
		•		· · · · · · · · · · · · · · · · · · ·		

Client/ Facility # 50	43		Job#	: <u>18006</u>	5	
	9 Hegenber	uer R	Date	: 10-26-	00	
•	. '	- 1				
City:	Fland		Sam	pler: <u>So e</u>		-
		·				,
Well ID	_mw-6	Wei	Condition:	0.K		
Well Diameter		•	lrocarbon	Amount B		
Total Depth	12.75			in (product/we		<u>न</u> न्य
Depth to Water	4.32	îa.	cor (VF)	6" = 1.50	12" = 5.50	
	<u>8.43</u> x	vr <u>0.17</u>	= <u>[143</u> x3 (case	volume) = Estimated P	unge Volume: 45 (c)	47
Purge (Disposable Bailer	> .	Sampling	the second section is a second section of the second	•	
Equipment:	Bailer	•	Equipment		ailer ,	•
	Stack Suction	•		Bailer Pressure Baile	a.c	
	Grundfos	•		Grab Sample		
•	Other:			Other:		
			-,5-			
Starting Time:	3:4	<u></u>	Weather Condition	ns: Heavy r	a i n	
Sampling Time:	4:05	B. w	Water Color:	clear '	Odor Strong	
Purging Flow Rate	e:		Sediment Descrip	nion: <u>Nave</u>		<u></u>
Did well de-water	7	_	•	Volum	ne:	<u> </u>
			رم	•	;	
	(gal.)	Con-	ductivity (Temp hos/cm 4	erature D.O. [mg/L]	ORP Alkalin (mV) (ppm	
3:52	1.5 6.75	0	.90 64	1.6		
3155	3 6.78	0	92 64	1.7	•	
3:58	4.5 6.88			1.8		
					•	
				·		
			· · · · · · · · · · · · · · · · · · ·	· .	· · ·	
						7*
			RATORY INFORMA			
SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY '	ANALYSES	
mw-6	3 YeA	Υ .	HCL_	Sequoia	TPHG, BTEX, MTBG	54826
	I Amb.	10		11	TPHD	1
<u> </u>						
		<u> </u>].
	ged of 1		, -			
COMMENTS: _	sampled :-	<u></u>				
		· · · · · ·				
		•				

_	: ~				م احمد		
Facility # <u>\$0</u>			•	b#:	18006	<u> </u>	
Address: <u>44</u>	19 Hegrabe	rger F	2 <u>d.</u> Da	te: _	0-26-	00	
City:Oa	Fland	· ·		mpler:	50 C		
		-					
Well ID	_mw-9	. w	ell Condition:	0.	K		
Vell Diameter	2.	. Hiy	ydrocarbon		Amount E	Bailed	
otal Depth	_11.95 +			<u>O_n</u>	[product/w		
epth to Water	1.38	4 .	Volume 2" = Factor (VF)		3" = 0.3 1.50		£" = 0.66
	10.57	C VF <u>Ø.1</u>	7 - 1.80 x 3 (ca	se volume) :	= Estimated f	urge Volume:	Cas scot
Purge iquipment:	Disposable Bailer Bailer Stack Suction Grundfos	7	Sampling Equipme	g nt: Öi Bi Pr	sposable B aller essure Bail rab Sample	ailer er	,
•	Other:	<u> </u>			au Sample		
Sampling Time:		en 2		- 6			6 1
Purging Flow Rate	2.3 e: 0.5		Water Color: Sediment Desc	soisqin	Not -		
Purging Flow Rate	e: <u> </u>			soisqin	Not -		
Purging Flow Rate Did well de-water Time V	e: 0.5	Cor µn	Sediment Describer of Ten	ription: _	Not -		
Purging Flow Rate Did well de-water Time Vi	e: 0.5	Cor µm	Sediment Describer of Tennahos/cm y	ription: ription:	Volum D.O.	ne:	(cal
Furging Flow Rate Did well de-water Time Vi 2:10 [e: 0.5 folume pH (gal.) 7.57 3 7.50	Con Long	Sediment Describer of Tennahos/cm y	ription: riperature	Volum D.O.	ne:	(cal
Time V	e: 0.5	Con Long	Sediment Describer of Tennahos/cm y	ription: ription:	Volum D.O.	ne:	(cal
Purging Flow Rate Did well de-water Time Vi 2:10	e: 0.5 folume pH (gal.) 7.57 3 7.50	Con Long	Sediment Describer of Tennahos/cm y	ription: riperature	Volum D.O.	ne:	(cal
Furging Flow Rate Did well de-water Time Vi 2:10 [e: 0.5 folume pH (gal.) 7.57 3 7.50	Con µm	Sediment Descritives; Time: aductivity 72 Ten ahos/cm y 5.35 6 5.32 6	aperature F 49 5.0	Volum D.O.	ne:	(cal
urging Flow Rate Time Vi 2:10 2:17 SAMPLE ID	e: 0.5 folume pH (gal.) 7.57 3 7.50 7.47	Con µm	Sediment Describer of Tennahos/cm y G. 3 2 6 G. 3 2 6 GRATORY INFORM PRESERV. TYPE	ription: ripti	D.O. (mg/L)	ORP (mV)	(cal
turging flow Rate Time V 2 10 2 17	e: 0.5 folume pH (gal) 3 7.57 7.47 (4) - CONTAINER 3 VeA	Cor µm S LABO	Sediment Descritives: Time: If yes; Time: Inductivity 12 Temples 12 Temples	ription: ripti	D.O. (mg/L)	ORP (mV) ANAI	Alkalinity (ppm)
Purging Flow Rate Did well de-water Time Vi 2:10 2:17 7:17	e: 0.5 folume pH (gal.) 7.57 3 7.50 7.47	Cor µm S LABO	Sediment Describer of Tennahos/cm y G. 3 2 6 G. 3 2 6 GRATORY INFORM PRESERV. TYPE	niprion:	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
Purging Flow Rate Did well de-water Time Vi 2:10 2:17 7:17	e: 0.5 folume pH (gal) 3 7.57 7.47 (4) - CONTAINER 3 VeA	LABO REFRIG.	Sediment Describer of Tennahos/cm y G. 3 2 6 G. 3 2 6 GRATORY INFORM PRESERV. TYPE	niprion:	D.O. (mg/L)	ORP (mV) ANAI	Alkalinity (ppm)
Purging Flow Rate Did well de-water Time Vi 2 1/0 / 2 1/f 2 1/7	e: 0.5 folume pH (gal) 3 7.57 7.47 (4) - CONTAINER 3 VeA	LABO REFRIG.	Sediment Describer of Tennahos/cm y G. 3 2 6 G. 3 2 6 GRATORY INFORM PRESERV. TYPE	niprion:	D.O. (mg/L)	ORP (mV) ANAI	Alkalinity (ppm)
Purging Flow Rate Did well de-water Time Vi 2 10 1 2 14 7 17	e: 0.5 folume pH (gal) 3 7.57 7.47 (4) - CONTAINER 3 VeA	LABO REFRIG.	Sediment Describer of Tennahos/cm y G. 3 2 6 G. 3 2 6 GRATORY INFORM PRESERV. TYPE	niprion:	D.O. (mg/L)	ORP (mV) ANAI	Alkalinity (ppm)

Facility # 504			احا	#: _180	06	
		~1				
Address: 44	7 Hegenber	gec Kd.	Dat	e: <u>10-2</u>	6-00	
City:	Fland		San	npler:	۷	
Well ID	mw-10	Well C	Condition: .	0.K		
Well Diameter			carbon		int Bailed	
Total Depth	12.80	Thickn			ct/weter):C	10:41 2" = 0.66
Depth to Water	3.96	1	r (Vf)	6 = 1.50		z = U.56
·	<u>8.84</u> ×	vf <u>0.17</u> =	1.50 x 3 (cas	e volume) = Estime	ted Purge Volume: .	4.5 (001)
Purge (Equipment:	Disposable Bailer Bailer Stack	• •	Sampling Equipmen	t: Disposab Bailer	le Bailer	,
	Suction	•		Pressure	Bailer	
	Grundfos			Grab San	•	
	Other:			Other:		•
Starting Time: Sampling Time: Purging Flow Rate:	3:16	P.m W	ater Color:	ons: Heavy clear ption: none	_ Odor <u></u>	705
Did well de-water?		•	. •	•	· -	
				= -	olume:	, (cal.)
		Conduc	tivity / Tem	perature D.	O. ORP	
	gol) Mume pH	μmhos.	/cm. ¹	F (mg		Alkalinity (ppm)
. (4	4				/L) (mV)	•
3,14 /	g= <u>l</u> .)		12 6	F (mg 5./ 5.2	/L) (mV)	•
3:17 (9)	g-1.) 1.5 7.06		12 6	<u> </u>	/L) (mV)	•
3:17 (9)	gal) 1.5 7.06 3.5 7.15		12 6	5.1 5.2	/L) (mV)	•
3:17 (9)	gal) 1.5 7.06 3.5 7.15		12 6	5.1 5.2	/L) (mV)	•
3:17 (9)	gal) 1.5 7.06 3.5 7.15		12 6	5.1 5.2	/L) (mV)	•
3:14 3:17 3:30 4	7.06 7.15 7.18	3.4 4.	12 6 15 6 12 0	5./ 5.2 55.3	/L) (mV)	(ppm)
3.17 3.30 4 SAMPLE ID	(7) - CONTAINER	3.4 4.	TORY INFORM	S./ S. 2 S. 3 ATION LABORATOR	(ANAL	(ppm)
3:14 3:17 3:30 4	(7) - CONTAINER 3 VeA	LABORAT REFRIG. 1	12 6 15 6 12 0	ATION LABORATOR Sequoia	ANAL TPHG, BTE	(ppm)
3.17 3.30 4 SAMPLE ID	(7) - CONTAINER	3.4 4.	TORY INFORM	S./ S. 2 S. 3 ATION LABORATOR	(ANAL	(ppm)
3:17 3:30 4 SAMPLE ID	(7) - CONTAINER 3 VeA	LABORAT REFRIG. 1	TORY INFORM	ATION LABORATOR Sequoia	ANAL TPHG, BTE	(ppm)
3:14 3:17 3:30 4 SAMPLE ID MW-6	(7) - CONTAINER 3 VeA	LABORAT REFRIG. 1	TORY INFORM	ATION LABORATOR Sequoia	ANAL TPHG, BTE	(ppm)
3:17 3:30 4 SAMPLE ID	(7) - CONTAINER 3 VeA	LABORAT REFRIG. 1	TORY INFORM	ATION LABORATOR Sequoia	ANAL TPHG, BTE	(ppm)



Foelity Number UNOCAL SS# 5043
Foolity Address 449 Hegenberger Road, Oakland, CA Concultont Project Number 180065.85
Consultant Home Gettler-Ryan Inc. (G-R Inc.)
Address 6747 Sierra Court, Suite J. Dublin, CA 94568
Project Contact (Name) Deanna L. Harding
(Phone)510-551-7555 (Fox Number)510-551-7888

MR. DAVID DEWITT Contact (Nome) _ 925-277-2384 Laboratory Name Sequoia Analytical WO10691 Laboratory Release Humber_ Samples Collected by (Name) TOE A TEMIAN Coffeetion Date 10-26-00

•			-	(PI	hone) <u>51</u>	<u>0-551-755</u>	5_(Fox	Number	<u> 510-</u>	551-	<u> 7888</u>	_ s	lgnotur•		2- CA	يرو_	<u> </u>					=-
			ত						-			•	Analy••	в То Ве	Perform	ned					DO NOT BIL	
Sample Number	Lab Sampie Number	Number of Contohers	Metrs S = Sol A = Air W = Weter C = Charcool	Type G = Grab C = Composite D = Discrete	-EE	Sample Preservation	load (Yes or No.)	TPH Gat \$TEX WANTEE (\$015) (\$020)	TPH Dissel (8015)	Oil and Graces (5520)	Purpeable Holocarbors (3010)	Purgeable Aramatics (8020)	Purpedble Organics (8240)	Extractable Organics (8270)	CACP-DANI (TCV or AA)						TB-LB ANALY	
TB-LB	01 <i>A</i>	vol	3	C	-	HCL	Y	~					<u> </u>					<u>. </u>	 		MW-6 MTB	
	CARD	3A	1	/	3:07	1	,	/	✓				<u> </u>						<u> </u>	<u> </u>	hit by 826	<u> </u>
	02A-D		1	1	4:05	/	1	~	/	<u> </u>			<u> </u>						 	<u> </u>		[
	04A-P	ŧ I	1	1	2 !30	1	1		<u> </u>	ļ									 	-		<u></u> [
	05A-P		1	1	3:40	/	1	<u> </u>	/	<u> </u>	<u> </u>		ļ	 					├	-		[
				7,4				<u> </u>	<u> </u>		<u> </u>		<u> </u>	<u> </u>					1—	 		
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Relinquiched 5			1 *	enization -R Inc		Date/Time G	Po	oe wood o	r (Sign	 	2	<u> </u>	Orgeniza	ilon	Date	/Tim/	Ba	<u> </u>	Turn A	24	me (Cirole Chelee)	
Relinguished B	Cignoture)	· · · (Org	onization >(_ (Date/Time	Re	celyed	y (sign	we		Ł	Organiza 9017-0	tion 84	Date	/Im•	124	15		6 10	Hre. Daye Daye	
Relinquished B	(Signature)			enization		Date/Time	1				By (Sign		wo		10	/Time /27/6	10	,		As C	ontrooted	

himmald commen



Deanna L. Harding Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Dublin, CA 94568

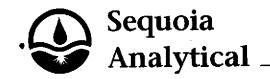
RE: Unocal Sequoia Report W010691

Enclosed are the results of analyses for samples received by the laboratory on 26-Oct-00 18:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Charlie Westwater Project Manager

CA ELAP Certificate #1271



404 N. Wiget Lane Walnut Creek, CA 94598 (925) 988-9600 FAX (925) 988-9673 www.sequoialabs.com

Gettler Ryan, Inc. - Dublin

6747 Sierra Court Suite J

Dublin CA, 94568

Project: Unocal

Project Number: Unocal # 5043

Project Manager: Deanna L. Harding

Reported: 17-Nov-00 08:07

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TBLB	W010691-01	Water	26-Oct-00 00:00	26-Oct-00 18:00
MW-3	W010691-02	Water	26-Oct-00 15:07	26-Oct-00 18:00
MW-6	W010691-03	Water	26-Oct-00 16:05	26-Oct-00 18:00
MW-9	W 010691-04	Water	26-Oct-00 14:30	26-Oct-00 18:00
MW-10	W 010691-05	Water	26-Oct-00 15:40	26-Oct-00 18:00

Sequoia Analytical - Walnut Creek

Charlie Westwater, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



6747 Sierra Court Suite J Dublin CA, 94568 Project: Unocal

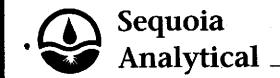
Project Number: Unocal # 5043 Project Manager: Deanna L. Harding Reported:

17-Nov-00 08:07

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT Sequoia Analytical - Walnut Creek

	R	eporting					_		
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TBLB (W010691-01) Water	Sampled: 26-Oct-00 00:00	Received	d: 26-Oc	t-00 18:00	٠				
Purgeable Hydrocarbons	ND	50	ug/l	1	0K08002	08-Nov-00	08-Nov-00	EPA 8015M/8020	
Benzene	ND	0.50	**		"	#	**	•	
Toluene	ND	0.50	Ħ		"	Ħ	n	*	
Ethylbenzene	ND	0.50	**	*	н	"	Ħ	91	
Xylenes (total)	ND	0.50	11	•	n	11	"	#	
Methyl tert-butyl ether	ND	2.5		**			11	"	
Surrogate: a,a,a-Trifluorotolu	ene	99.0 %	70-	-130	"	"	#	"	
MW-3 (W010691-02) Water	Sampled: 26-Oct-00 15:07	Receive	d: 26-Oc	t-00 18:00					P-01
Purgeable Hydrocarbons	480	130	ug/l	2.5	0K08002	08-Nov-00	08-Nov-00	EPA 8015M/8020	
Benzene	6.0	1.3	99	#	Ħ	#	11	n	
Toluene	ND	1.3	**	π		11	11	n	
Ethylbenzene	ND	1.3	n	11	17	11	11	n `	
Xylenes (total)	ND	1.3	**	**	н	#	n	H	
Methyl tert-butyl ether	120	6.3		n	Ħ	n	п	H	
Surrogate: a,a,a-Trifluorotolu	ene	76.7 %	70	-130	п	п	н	n	
MW-6 (W010691-03) Water	Sampled: 26-Oct-00 16:05	Receive	d: 26-Oc	t-00 18:00					P-01
Purgeable Hydrocarbons	110000	10000	ug/l	200	0K08002	08-Nov-00	08-Nov-00	EPA 8015M/8020	
Benzene	7000	100	n	*		H .	"		
Toluene	6200	100		*	*	P	17	n	
Ethylbenzene	3700	100		**	-	H		41	
Xylenes (total)	12000	100		**	-	-		**	
Methyl tert-butyl ether	670	500	**	н	n	**	#		,
Surrogate: a,a,a-Trifluorotolu	ene	99.3 %	70	-130	"	"	"	"	

Page 2 of 10



Project: Unocal

6747 Sierra Court Suite J Dublin CA, 94568 Project Number: Unocal # 5043 Project Manager: Deanna L. Harding **Reported:** 17-Nov-00 08:07

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT Sequoia Analytical - Walnut Creek

Analyte	R Result	eporting Limit	Units :	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-9 (W010691-04) Water	Sampled: 26-Oct-00 14:30	Receive	d: 26-Oct-0	0 18:00					P-01
Purgeable Hydrocarbons	240	50	ug/l	1	0K08002	08-Nov-00	08-Nov-00	EPA 8015M/8020	
Benzene	2.9	0.50	m	n	Ħ	n	" .	n	
Toluene	ND	0.50	•	н	11	n .	#		
Ethylbenzene	ND	0.50	**	"	*	n	91		
Xylenes (total)	ND	0.50	•	11	•	n	Ħ	Ħ	
Methyl tert-butyl ether	56	2.5	•	"	H	•	ń	m	
Surrogate: a,a,a-Trifluorotoluen	16	72.0 %	70-13	0	Ħ	п	n	"	
MW-10 (W010691-05) Water	Sampled: 26-Oct-00 15:40	Receive	ed: 26-Oct-	00 18:00)				
Purgeable Hydrocarbons	ND	50	ug/l	1	0K09002	09-Nov-00	09-Nov-00	EPA 8015M/8020	
Benzene	3.3	0.50	#	77	**		"	n	
Toluene	ND	0.50	n	н	u	n	**.	n	
Ethylbenzene	0.83	0.50	**	#	*	н	n	n	
Xylenes (total)	1.5	0.50	•	**	#	**	#	#	
Methyl tert-butyl ether	ND	2.5	•	Ħ	n	H	#	п	
Surrogate: a,a,a-Trifluorotoluen	ne'	101 %	70-13	0	"	"	n	"	





6747 Sierra Court Suite J Dublin CA, 94568 Project: Unocal

Project Number: Unocal # 5043 Project Manager: Deanna L. Harding Report Revised: 16-Jan-01 11:24

Diesel Hydrocarbons (C9-C24) by DHS LUFT

Sequoia Analytical - Walnut Creek

Analyte	R Result	Leporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (W010691-02) Water	Sampled: 26-Oct-00 15:07	Receive	1: 26-Oct-(00 18:00					
Diesel Range Hydrocarbons	330	67	ug/l	1	0K09009	09-Nov-00	15-Nov-00	EPA 8015M	D-02
Surrogate: n-Pentacosane		94.1 %	50-1.	50	"	"	"	rr rr	
MW-6 (W010691-03) Water	Sampled: 26-Oct-00 16:05	Received	d: 26-Oct-(00 18:00		•			
Diesel Range Hydrocarbons	61000	1300	ug/l	20	0K09009	09-Nov-00	15-Nov-00	EPA 8015M	D- 11
Surrogate: n-Pentacosane	······································	20.0 %	50-1.	50	"	tt	"	"	S-04
MW-9 (W010691-04) Water	Sampled: 26-Oct-00 14:30	Received	d: 26-Oct-(00 18:00					
Diesel Range Hydrocarbons	240	63	ug/l	1	0 K0900 9	09-Nov-00	13-Nov-00	EPA 8015M	D-14
Surrogate: n-Pentacosane	· · · · · · · · · · · · · · · · · · ·	79.1 %	50-1.	50	н	n	"	"	
MW-10 (W010691-05) Water	Sampled: 26-Oct-00 15:4	0 Receive	ed: 26-Oct	-00 18:00)				
Diesel Range Hydrocarbons	83	67	ug/l	1	0K09009	09-Nov-00	13-Nov-00	EPA 8015M	D-12
Surrogate: n-Pentacosane		96.2 %	50-1:	50	m	"	"	"	

Sequoia Analytical - Walnut Creek

Charlie Westwater, Project Manager

This report represents a revision of the original document. The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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404 N. Wiget Lane Walnut Creek, CA 94598 (925) 988-9600 FAX (925) 988-9673 www.sequoialabs.com

Gettler Ryan, Inc. - Dublin

6747 Sierra Court Suite J Dublin CA, 94568 Project: Unocal

Project Number: Unocal # 5043 Project Manager: Deanna L. Harding Reported:

17-Nov-00 08:07

MTBE Confirmation by EPA Method 8260A

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-6 (W010691-03) Water Sampled	: 26-Oct-00 16:0	5 Received	d: 26-Oc	t-00 18:00					A-03
Methyl tert-butyl ether	43	10	ug/l	- 5	0K11007	10-Nov-00	10-Nov-00	EPA 8260B	
Surrogate: Dibromofluoromethane		108 %	50-	-150	"	n	"	"	
Surrogate: 1,2-Dichloroethane-d4		12.0 %	50-	-150	"	Ħ	n	n	S-04



6747 Sierra Court Suite J Dublin CA, 94568 Project: Unocal

Project Number: Unocal # 5043 Project Manager: Deanna L. Harding **Reported:** 17-Nov-00 08:07

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0K08002 - EPA 5030B [P/T]										
Blank (0K08002-BLK1)		.		Prepared	& Analyz	ed: 08-No	v-00			
Purgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50	Ħ							
Toluene	ND	0.50	#							
Ethylbenzene	ND	0.50	н							
Xylenes (total)	ND	0.50	11							
Methyl tert-butyl ether	ND	2.5								
Surrogate: a,a,a-Trifluorotoluene	29.4		"	30.0		98.0	70-130			
LCS (0K08002-BS1)				Prepared	& Analy2	ed: 08-No	v-0 0			
Benzene	18.3	0.50	ug/l	20.0		91.5	70-130	•		
Toluene	19.2	0.50		20.0		96.0	70-130			
Ethylbenzene	20.2	0.50		20.0		101	70-130			
Xylenes (total)	61.0	0.50	-	60.0		102	70-130			
Surrogate: a,a,a-Trifluorotoluene	28.9		"	30.0		96.3	70-130			
Matrix Spike (0K08002-MS1)	So	urce: W0111	67-02	Prepared	& Analyz	ed: 08-No	٠			
Benzene	18.8	0.50	ug/l	20.0	ND	94.0	70-130	_		
Toluene	19.7	0.50	17	20.0	ND	98.5	70-130			
Ethylbenzene	20.6	0.50		20.0	ND	103	70-130	•		
Xylenes (total)	62.5	0.50	#	60.0	ND	104	70-130			
Surrogate: a,a,a-Trifluorotoluene	28.9		. "	30.0	<u></u>	96.3	70-130			
Matrix Spike Dup (0K08002-MSD1)	Se	ource: W0111	167-02	Prepared	& Analyz	ed: 08-No	o v- 00			
Benzene	18.3	0.50	ug/l	20.0	ND	91.5	70-130	2.70	20	
Toluene	19.0	0.50		20.0	ND	95.0	70-130	3.62	20	
Ethylbenzene	19.9	0.50		20.0	ND	99.5	70-130	3.46	20	
Xylenes (total)	59.9	0.50	11	60.0	ND	99.8	70-130	4.25	20	
Surrogate: a, a, a-Trifluorotoluene	29.6			30.0		98.7	70-130			

Project: Unocal

6747 Sierra Court Suite J Dublin CA, 94568 Project Number: Unocal # 5043
Project Manager: Deanna L. Harding

Reported: 17-Nov-00 08:07

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0K09002 - EPA 5030B [P/T]						**				
Blank (0K09002-BLK1)				Prepared	& Analyz	d: 09-No	v - 00		-	
Purgeable Hydrocarbons	ND	50	ug/l				_			
Benzene	ND	0.50	n							
Toluene	ND	0.50	н							
Ethylbenzene	ND	0.50	#							
Xylenes (total)	ND	0.50								
Methyl tert-butyl ether	ND	2.5	7							
Surrogate: a, a, a-Trifluorotoluene	29.3	M	*	30.0		97.7	70-130			
LCS (0K09002-BS1)				Prepared	& Analyz	ed: 09-No	v- 00			
Benzene	18.6	0.50	ug/l	20.0		93.0	70-130			
Toluene	19.2	0.50	и,	20.0		96.0	70-130			
Ethylbenzene	20.2	0.50	"	20.0		101	70-130			
Xylenes (total)	59.3	0.50	**	60.0		98.8	70-130			
Surrogate: a,a,a-Trifluorotoluene	29.1		*	30.0		97.0	70-130			
Matrix Spike (0K09002-MS1)	S	ource: W0107	00-11	Prepared & Analyzed: 09-Nov-00						
Benzene	21.1	0.50	ug/l	20.0	ND	106	70-130			
Toluene	21.7	0.50	Ħ	20.0	ND	109	70-130			
Ethylbenzene	22.7	0.50	Ħ	20.0	ND	114	70-130			
Xylenes (total)	68.2	0.50	H	60.0	ND	114	70-130			
Surrogate: a, a, a-Trifluorotoluene	30.0		н	30.0		100	70-130			
Matrix Spike Dup (0K09002-MSD1)	S	ource: W0107	00-11	Prepared	& Analyz	ed: 09-No	v- 00			
Benzene	19.8	0.50	ug/l	20.0	ND	99.0	70-130	6.36	20	
Toluene	20.5	0.50	*	20.0	ND	103	70-130	5.69	20	
Ethylbenzene	21.7	0.50	•	20.0	ND	109	70-130	4.50	20	
Xylenes (total)	64.8	0.50		60.0	ND	108	70-130	5.11	20	
Surrogate: a,a,a-Trifluoratoluene	28.8			30.0		96.0	70-130			

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Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J

Dublin CA, 94568

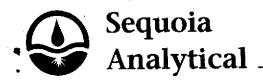
Project: Unocal

Project Number: Unocal # 5043 Project Manager: Deanna L. Harding **Reported:** 17-Nov-00 08:07

Diesel Hydrocarbons (C9-C24) by DHS LUFT - Quality Control

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0K09009 - EPA 3510B										
Blank (0K09009-BLK1)	<u></u>			Prepared	: 09-Nov-(0 Analyz	ed: 10-Nov	7 - 00		
Diesel Range Hydrocarbons	ND	50	ug/l							
Surrogate: n-Pentacosane	32.3		#	33.3		97.0	50-150			
LCS (0K09009-BS1)				Prepared	: 09-Nov-(00 Analyz	ed: 14-Nov	v-00		
Diesel Range Hydrocarbons	354	50	ug/l	500		70.8	60-140		_	
Surrogate: n-Pentacosane	34.7		fi	33.3		104	50-150			
LCS Dup (0K09009-BSD1)				Prepared	: 09-Nov-	00 Analyz	ed: 10-Nov	v-00		
Diesel Range Hydrocarbons	307	50	ug/l	500		61.4	60-140	14.2	50	
Surrogate: n-Pentacosane	30.7		n	33.3		92.2	50-150			



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Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Dublin CA, 94568 Project: Unocal

Project Number: Unocal # 5043 Project Manager: Deanna L. Harding **Reported:** 17-Nov-00 08:07

MTBE Confirmation by EPA Method 8260A - Quality Control Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0K11007 - EPA 5030B [P/T]						,				··
Blank (0K11007-BLK1)				Prepared	& Analyz	ed: 10-No	v-00			
Methyl tert-butyl ether	ND	2.0	ug/l			-		•		•
Surrogate: Dibromofluoromethane	51.0		"	50.0	-	102	50-150			
Surrogate: 1,2-Dichloroethane-d4	51.0		"	50.0		102	50-150			
LCS (0K11007-BS1)				Prepared	& Analyz	ed: 10-No	v-00			
Methyl tert-butyl ether	50.0	2.0	ug/l	50.0		100	70-130			
Surrogate: Dibromofluoromethane	51.0			50.0		102	50-150			
Surrogate: 1,2-Dichloroethane-d4	47.0		н	50.0		94.0	50-150			
LCS Dup (0K11007-BSD1)		Prepared & Analyzed: 10-Nov-00								
Methyl tert-butyl ether	47.9	2.0	ug/l	50.0		95.8	70-130	4.29	25	
Surrogate: Dibromofluoromethane	51.0		п	50.0		102	50-150			
Surrogate: 1,2-Dichloroethane-d4	49.0		7	50.0		98.0	<i>50-150</i>			

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Dublin CA, 94568

Project: Unocal

Project Number: Unocal # 5043 Project Manager: Deanna L. Harding Reported:

17-Nov-00 08:07

Notes and Definitions

A-03	This sample was originally analyzed within holding time.	Re-analysis for confirmation or dilution was performed past the
	recommended holding time.	

D-02 C	Chromatogram Pattem:	Unidentified	Hydrocarbons C9-C40.
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DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

Sequoia Analytical - Walnut Creek