November 13, 2000 G-R #:180107

TO:

Mr. David B. De Witt

Tosco Marketing Company

2000 Crow Canyon Place, Suite 400

San Ramon, California 94583

CC:

Mr. Tim Ripp

IT Corporation

1921 Ringwood Avenue

San Jose, California 95131

FROM:

Deanna L. Harding

Project Coordinator

Gettler-Ryan Inc.

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

Tosco (Unocal) SS #5430

1935 Washington Avenue

San Leandro, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	November 9, 2000	Groundwater Monitoring and Sampling Report Second Semi-Annual 2000 - Event of September 11, 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 *November 22, 2000*, this report will be distributed to the following:

Enclosure

cc: Mr. Scott Seery, Alameda County Health Care Services, 1131 Harbor Bay Parkway, Alameda, CA 94501 Mr. Michael Bakaldin, City of San Leandro Fire Dept., 835 East 14th Street, San Leandro, CA 94577



ENVIRONMENTAL PROTECTION

Sample V.

00 OCT 24 AMID: 09

IT Corporation

1921 Ringwood Avenue San Jose, CA 95131-1721 Tel. 408.453.7300 Fax. 408.437.9526

A Member of The IT Group 565

5TW 1747

October 20, 2000 Project 311-038.1A

Mr. Chuck Headlee Regional Water Quality Control Board San Francisco Bay Region 1515 Clay Street, Suite 1400 Oakland, California 94612

Re: 76 Service Station 5430

Quarterly Summary Report

Third Quarter 2000

Dear Mr. Headlee:

As directed by Mr. David DeWitt of Tosco Marketing Company, IT Corporation (IT) is forwarding the quarterly summary report for the following location:

Service Station

Location

5430

1935 Washington Avenue, San Leandro

If you have questions or comments, please do not hesitate to contact our office at (408) 453-7300.

Sincerely,

IT Corporation

Timothy L. Ripp Project Geologist

Enclosure

Mr. David DeWitt, Tosco Marketing Company

Mr. Tom Peacock, Alameda County Environmental Health Care Services

Quarterly Summary Report Third Quarter 2000

76 Service Station 5430 1935 Washington Avenue at Castro Street San Leandro, California

County STID #: 1747 County: Alameda

BACKGROUND

. . . .

Unocal files suggest that a product line leak occurred in June 1976, and that one of the original underground gasoline storage tanks failed a precision test in October 1981. In December 1981, the two original steel gasoline storage tanks were replaced with two fiberglass gasoline storage tanks. There are currently six on-site groundwater monitoring wells and one off-site groundwater monitoring well in use at the site. In July 1997, three off-site exploratory borings were drilled on the property to the south of the 76 station. Based on the findings of that investigation, the lateral extent of hydrocarbon impact to groundwater is considered delineated. The product dispensers and associated underground product piping were replaced in July and August 1998. The underground waste oil storage tank was also removed and replaced with an aboveground waste oil storage tank.

RECENT QUARTER ACTIVITIES

Semi-annual groundwater monitoring and sampling activities were performed in September 2000.

NEXT QUARTER ACTIVITIES

Semi-annual groundwater monitoring and sampling activities performed in September 2000 will be reported in November 2000.

CHARACTERIZATION/REMEDIAL STATUS

Soil contamination delineated? Yes.

Dissolved groundwater delineated? Yes.

Free product delineated? Not applicable.

Amount of groundwater contaminant recovered this quarter? None.

Soil remediation in progress? Not applicable.

Anticipated start date? Not applicable.

Anticipated completion date? Not applicable.

Dissolved/free product remediation in progress? No.

Anticipated start? Unknown.

Anticipated completion? Unknown.

CONSULTANT: IT Corporation



IT Corporation

1921 Ringwood Avenue San Jose, CA 95131-1721 Tel. 408.453.7300 Fax. 408.437.9526

A Member of The IT Group

July 17, 2000

Project 311-038.1A

Mr. Chuck Headlee Regional Water Quality Control Board San Francisco Bay Region 1515 Clay Street, Suite 1400 Oakland, California 94612

Re: 76 Service Station 5430 Quarterly Summary Report

Second Quarter 2000

Dear Mr. Headlee:

As directed by Mr. David DeWitt of Tosco Marketing Company, IT Corporation (IT) is forwarding the quarterly summary report for the following location:

Service Station

Location

5430

1935 Washington Avenue, San Leandro

If you have questions or comments, please do not hesitate to contact our office at (408) 453-7300.

Sincerely,

IT Corporation

Timothy L. Ripp Project Geologist

Enclosure

cc: Mr. David DeWitt, Tosco Marketing Company

Mr. Tom Peacock, Alameda County Environmental Health Care Services

Quarterly Summary Report Second Quarter 2000

76 Service Station 5430 1935 Washington Avenue at Castro Street San Leandro, California

County STID #: 1747 County: Alameda

BACKGROUND

Unocal files suggest that a product line leak occurred in June 1976, and that one of the original underground gasoline storage tanks failed a precision test in October 1981. In December 1981, the two original steel gasoline storage tanks were replaced with two fiberglass gasoline storage tanks. There are currently six on-site groundwater monitoring wells and one off-site groundwater monitoring well in use at the site. In July 1997, three off-site exploratory borings were drilled on the property to the south of the 76 station. Based on the findings of that investigation, the lateral extent of hydrocarbon impact to groundwater is considered delineated. The product dispensers and associated underground product piping were replaced in July and August 1998. The underground waste oil storage tank was also removed and replaced with an aboveground waste oil storage tank.

RECENT QUARTER ACTIVITIES

Semi-annual groundwater monitoring and sampling activities performed March 2000 were reported in April 2000.

NEXT QUARTER ACTIVITIES

Semi-annual groundwater monitoring and sampling activities will be performed in September 2000.

CHARACTERIZATION/REMEDIAL STATUS

Soil contamination delineated? Yes.

Dissolved groundwater delineated? Yes.

Free product delineated? Not applicable.

Amount of groundwater contaminant recovered this quarter? None.

Soil remediation in progress? Not applicable.

Anticipated start date? Not applicable.

Anticipated completion date? Not applicable.

Dissolved/free product remediation in progress? No.

Anticipated start? Unknown.

Anticipated completion? Unknown.

CONSULTANT: IT Corporation

November 9, 2000 G-R Job #180107

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

RE:

Second Semi-Annual 2000 Groundwater Monitoring & Sampling Report

Tosco (Unocal) Service Station #5430

1935 Washington Avenue San Leandro, California

Dear Mr. De Witt:

This report documents the semi-annual groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R). On September 11, 2000, field personnel monitored and sampled seven wells (U-1 through U-7) at 7 the above referenced site. In addition, on October 13, 2000, field personnel monitored and sampled one well-(U-6) at the above referenced site.

Static groundwater levels were measured and all wells were checked for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were not present in the wells. Static water level data and groundwater elevations are summarized in Table 1. 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**

Stephen J. Carter

Senior Geologist, R.G. No. 5577

Figure 1:

Potentiometric Map

Figure 2:

Concentration Map

Table 1:

Groundwater Monitoring Data and Analytical Results

Table 2: Attachments: Groundwater Analytical Results - Oxygenate Compounds Standard Operating Procedure - Groundwater Sampling

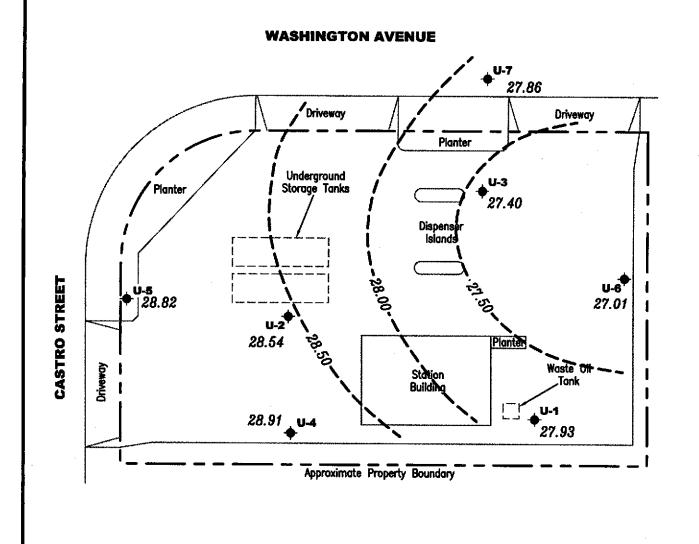
Field Data Sheets

Chain of Custody Document and Laboratory Analytical Reports

No. 5577

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5430.qml



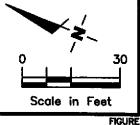
EXPLANATION

Groundwater monitoring well

99.99 Groundwater elevation in feet referenced to Mean Sea Level (MSL)

99.99 Groundwater elevation contour, dashed where inferred.

Approximate groundwater flow direction at a gradient of 0.013 Ft./Ft.



Source: Figure modified from drawing provided by MPDS Services, Inc.



Gettler - Ryan Inc.

6747 Sierra Ct., Suite J Dublin, CA 94568

(925) 551-7555

POTENTIOMETRIC MAP

Tosco (Unocal) Service Station #5430 1935 Washington Avenue San Leandro, California

PROJECT NUMBER
180107

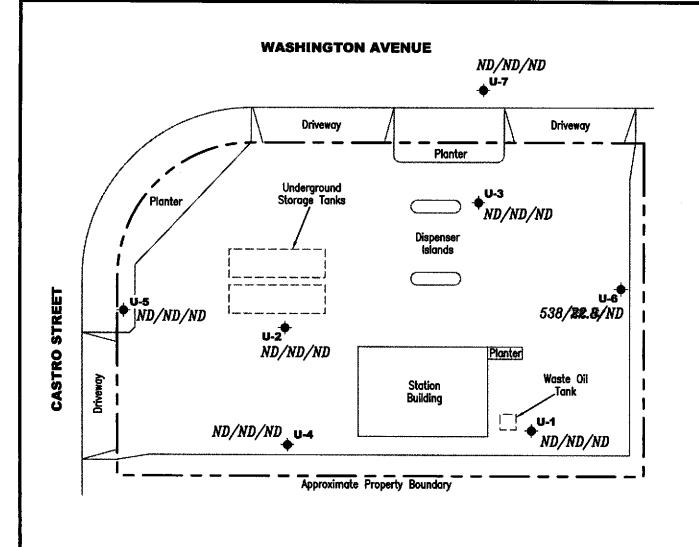
REVIEWED BY

DATE September 11, 2000

REVISED DATE

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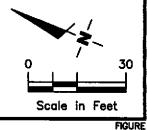
EXPLANATION

Groundwater monitoring well.

A/B/C TPH(G) (Total Petroleum Hydrocarbons as Gasoline)/ Benzene/MTBE concentrations

in ppb

ND Not Detected



Source: Figure modified from drawing provided by MPDS Services, Inc.



PROJECT NUMBER

180107

Gettler - Ryan Inc.

REVIEWED BY

6747 Sierra Ct., Sulte J Dublin, CA 94568

(925) 551-7555

CONCENTRATION MAP

Tosco (Unocal) Service Station #5430 1935 Washington Avenue San Leandro, California

DATE

September 11, 2000

REVISED DATE

2

FILE NAME: P:\ENMRO\TOSCO\5430\Q00~5430.DWG | Layout Tab: Con3

Table 1
Groundwater Monitoring Data and Analytical Results
Tosco (Unocal) Service Station #5430

Well ID/	Date	DTW	GWE	TPH(D)	TPH(G)	В	T	E	x	MTBE	1,2-DCB	1,2-DCA
TOC*		(ft.)	(fi.)	(ppb)	(ppb)	(ppb)	· (ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
			· ·									***************************************
U-1												
56.58	08/13/93 ¹	31.60	24.98	50 ²	310	0.84	ND	2.6	1.0			
	09/07/93	31.60	24.98						•-			
56.10	12/16/93 ¹	33.19	22.91	130^{3}	ND .	ND	ND	ND	ND			
	01/13/94	33.06	23.04	•-								
	02/09/94	32.70	23.40									
	03/25/94 ¹	31.07	25.03	57 ³	58	0.63	0.79	ND	0.65			
	05/18/94	31.76	24.34									·
	06/19/94 ¹	32.26	23.84	61 ³	51	ND	1.4	ND	2.7		ND	7.4
	07/27/94	33.07	23.03	••								
	08/18/94	33.50	22.60									
	09/15/94 ¹	33.93	22.17	83 ³	ND	0.50	0.85	ND	0.77		ND	9.5
	10/11/94	33.25	22.85									
	11/08/94	34.05	22.05									
	12/06/94 ¹	32.37	23.73	ND	ND	ND	ND	ND	ND		ND	5.8
	01/10/95	31.29	24.81									
56.09	03/14/95	27.86	28.23	71 ³	380	20	ND	ND	10			
	06/20/95	28.20	27.89	170 ³	500	50	ND	ND	4.4			
	09/18/95	30.65	25.44	72.00	57	1.2	0.75	0.57	2.2	6		
	12/14/95	32.20	23.89	ND	ND	0.72	1.4	1.2	3.6		ND	3.8
	03/06/96	26.53	29.56	ND	96	4.5	ND	ND	3.7	ND		
	06/04/96	27.43	28.66	1 70 ³	410	48	ND	3.4	7.9	ND		
	09/06/96	30.25	25.84	ND	ND	ND	ND	ND	ND	ND	••	
	03/08/97	26.03	30.06		ND	ND	ND	ND	ND	ND	ND	43
	09/04/97	31.56	24.53	_	ND	ND	ND	ND	ND	ND	ND	4.5
	03/09/98	20.63	35.46		ND	ND	ND	ND	ND	ND	ND	ND
	09/01/98	27.82	28.27	_	ND	0.59	ND	ND	ND	3.1	ND	8.9
									_			

Table 1
Groundwater Monitoring Data and Analytical Results

Well ID/	Date	DTW	GWE	TPH(D)	TPH(G)	В	T	E	X	MTBE	1,2-DCB	1,2-DCA
TOC*		(ft.)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
								•				
U-1	03/02/99	26.83	29.26		ND	ND	ND	ND	ND	ND	ND	4.5
(cont)	09/07/99	28.03	28.06		ND	ND	ND	ND	ND	ND	ND	ND
	03/09/00	25.50	30.59		ND	ND	ND	ND	ND	ND	ND	1.32
	09/11/00 ¹⁶	28.16	27.93		ND	ND	0.592	ND	ND	ND	ND ⁹	ND°
U-2												
55.77	08/13/93	30.87	24.90		1,400	ND	ND	ND	ND			
	09/07/93	30.87	24.90	••	, 	••						
55.27	12/16/93	32.19	23.08		330	1.7	ND	11	8.5		<u></u>	
	01/13/94	32.13	23.14									
	02/09/94	33.50	21.77									
	03/25/94	30.09	25.18		130	0.70	0.78	0.65	0.64		ND	11
(D)	03/25/94										ND	ND
	05/18/94	30.73	24.54									••
	06/19/94	31.31	23.96		180 ⁴	ND	ND	ND	0.86		ND	0.54
	07/27/94	32.12	23.15				••					, 0.54
	08/18/94	32.50	22.77	••								
	09/15/94	33.00	22.27		1,000 ⁵	44	ND	ND	ND		ND	0.66
	10/11/94	32.35	22.92									
	11/08/94	33.09	22.18									
	12/06/94	31.44	23.83		250	19	ND	ND	ND		ND	ND
	01/10/95	30.25	25.02									
55.29	03/14/95	26.36	28.93		89	ND	ND	ND	1.2	. 		
	06/20/95	26.74	28.55		ND	ND	0.58	ND	1.7			
	09/18/95	29.65	25.64		ND	ND	ND	ND	0.85	6		
	12/14/95	31.10	24.19		ND	ND	0.89	ND	2.0	7	ND	ND
	03/06/96	25.17	30.12		ND	ND	ND	ND	ND	80		
	06/04/96	26.03	29.26		ND	ND	ND	ND	ND	110		
	09/06/96	29.18	26.11		ND	ND	ND	ND	ND	ND		
	03/08/97	24.64	30.65		ND	ND	ND	ND	ND	42		

Table 1
Groundwater Monitoring Data and Analytical Results

Well ID/	Date	DTW	GWE	TPH(D)	TPH(G)	В	T	E	X	MTBE	1,2-DCB	1,2-DCA
TOC*		(fi.)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
										, -		
U-2	09/04/97	30.59	24.70		ND	ND	ND	ND	ND	46		
(cont)	03/09/98	19.22	36.07		ND	ND	ND	ND	ND	4.4		
	09/01/98	26.40	28.89		ND	ND	ND	ND	ND	25		
	03/02/99	25.48	29.81		ND .	ND	ND	ND	ND	16		
	09/07/99	26.51	28.78		ND	ND	ND	ND	ND	20		
	03/09/00	23.95	31.34		ND	ND	ND	ND	ND	ND		
	09/11/00	26.75	28.54		ND	ND	0.635	ND	ND	ND		·
U-3												
55.66	08/13/93	30.70	24.96		23,000	1,000	ND	1,700	1,600			
55.00	09/07/93	30.70	24.96					••				
55.24	12/16/93	32.08	23.16		15,000	570	ND	940	670			
33.24	01/13/94	31.98	23.26							- <i>-</i> -		
	02/09/94	33.82	21.42							<u></u>		
	03/25/94	30.03	25.21		18,000	560	40	1,000	770		ND	480
	05/18/94	30.66	24.58	••								·
	06/19/94	31.19	24.05		17,000	580	ND	1,300	90		ND	410
	07/27/94	31.98	23.26									
	08/18/94	32.39	22.85		••							
	09/15/94	32.84	22.40		12,000	370	ND	970	610		ND	420
	10/11/94	32.20	23.04		*							
	11/08/94	33.01	22.23									
	12/06/94	31.34	23.90		17,000	390	ND	990	560		ND	430
	01/10/95	30.23	25.01									
55.23	03/14/95	25.44	29.79		13,000	860	120	1,300	1,700			
22.22	06/20/95	26.70	28.53		9,800	590	ND	800	1,000			
	09/18/95	29.55	25.68		9,800	600	ND	1,000	760	6		
	12/14/95	31.02	24.21		10,000	520	ND	920	630	7	ND	240
	03/06/96	25.25	29.98		19,000	1,400	ND	1,800	3,000	73		
	06/04/96	26.00	29.23		8,800	510	ND	600	830	ND		

Table 1
Groundwater Monitoring Data and Analytical Results

Well ID/	Date	DTW	GWE	TPH(D)	TPH(G)	В	т	E	X	МТВЕ	1,2-DCB	1,2-DCA
TOC*		(ft.)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
		***************************************	*									
U-3	09/06/96	29.06	26.17		15,000	360	20	540	450	ND		
(cont)	03/08/97	24.65	30.58	4.	3,500	310	ND	230	630	ND	ND	100
(2011)	09/04/97	30.44	24.79		700	27	ND	48	34	ND	ND	160
	03/09/98	19.20	36.03		410	22	1.2	ND ⁹	6.1	24	ND	4.4
	09/01/98	26.33	28.90		ND	ND	ND	ND	ND	6.1	ND	ND
	03/02/99	25.50	29.73		2,100	110	2.6	ND^9	240	39	ND	6.7
	09/07/9913	27.63	27.60		$2,400^{12}$	67	ND^9	150	150	ND ⁹	ND	1.1
	03/09/00	24.05	31.18		3,250 ¹²	143	ND^9	59.0	326	ND^9	ND ⁹	ND ⁹
	09/11/00 ¹⁷	27.83	27.40		ND	ND	ND	ND	ND	ND	ND	1.17
					·							
U-4						2.0		0.70	1.0		ND	ND
55.39	03/14/95	26.52	28.87		490	3.2	2.1	0.79	1.2 1.5			
	06/20/95	26.90	28.49		ND	ND	ND	ND	ND	 6		
	09/18/95	29.79	25.60		ND	ND	ND	ND		⁷	 ND	ND
	12/14/95	31.23	24.16		ND	ND	0.59	ND	0.79			
	03/06/96	25.30	30.09		ND	ND	ND	ND	0.62	50		
	06/04/96	26.19	29.20		ND	ND	ND	ND	ND	290		
	09/06/96	29.32	26.07		ND	ND	ND	ND	ND	ND		-
	03/08/97	24.79	30.60		ND	ND	ND	ND	ND	ND		
	09/04/97	30.71	24.68		ND	ND	ND	ND	ND	18		
	03/09/98	19.37	36.02		ND	ND.	ND	ND	ND	ND		
	09/01/98	26.56	28.83		ND	ND	ND	ND	ND	ND		
	03/02/99	25.62	29.77		110	0.89	0.53	ND	0.79	4.9		
	09/07/99	26.82	28.57		ND	ND	ND	ND	ND	3.0		••
	03/09/00	24.07	31.32		ND	ND	0.615	ND	1.05	ND		
	09/11/00	26.48	28.91	**	ND	ND	0.686	ND	ND	ND	**	

Table 1
Groundwater Monitoring Data and Analytical Results
Tosco (Unocal) Service Station #5430

Well ID/	Date	DTW	GWE	TPH(D)	TPH(G)	В	T	E	X	MTBE	1,2-DCB	1,2-DCA
TOC*		(ft.)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
U-5												
54.18	03/14/95	25.20	28.98	••	ND	ND	ND	ND	1.2		ND	ND
	06/20/95	25.60	28.58		ND	ND	ND	ND	1.6			
	09/18/95	28.55	25.63		ND	ND	ND	ND	0.66	••		
	12/14/95	29.94	24.24		ND	ND	ND	ND	ND		ND	ND
	03/06/96	24.03	30.15		ND	ND	ND	ND	ND	ND		
	06/04/96	24.91	29.27		ND	ND	ND	ND	ND	ND		
	09/06/96	28.06	26.12		ND	ND	ND	ND	ND	ND		
	03/08/97	23.49	30.69		ND	ND	ND	ND	ND	ND		
	09/04/97	29.46	24.72		ND	ND	ND	ND	ND	ND		
	03/09/98	18.10	36.08		ND	ND	ND	ND	ND	ND		
	09/01/98	25.27	28.91		ND	ND	ND	ND	ND	ND		
	03/02/99	24.35	29.83		ND	ND	ND	ND	ND	ND		
	09/07/99	26.39	27.79	_	ND	ND	ND	ND	ND	ND		
	03/09/00	22.81	31.37	••	ND	ND	ND	ND	ND	ND		
	09/11/00	25.36	28.82	••	ND	ND	0.640	ND	ND	ND		•=
U-6												
55.36	03/14/95	26.94	28.42		14,000	170	36	790	1,500		ND	210
	06/20/95	27.15	28.21		8,500	170	11	950	1,300			
	09/18/95	29.95	25.41		9,500	260	ND	1,400	1,800	6		
	12/14/95	31.32	24.04		15,000	240	ND	1,400	1,700	7	ND	370
	03/06/96	25.71	29.65		2,400	54	ND	170	250	ND		
	06/04/96	26.52	28.84		4,600	83	ND	400	520	46		
	09/06/96	29.41	25.95	••	12,000	180	6.4	690	600	95		
	03/08/97	25.25	30.11		2,000	180	ND	96	290	ND		
	09/04/97	30.75	24.61		680	17	ND	52	39	ND		
	03/09/98	19.84	35.52		690	41	8.5	3.2	140	16	••	
	09/01/98		LE (PAVED OV									
	03/02/99	25.95	29.41		3,900	240	ND ⁹	650	430	45		
		•										

Table 1
Groundwater Monitoring Data and Analytical Results

Well ID/	Date	DTW	GWE	TPH(D)	TPH(G)	В	T	E	X	MTBE	1,2-DCB	1,2-DCA
TOC*		(fl.)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(pph)	(ppb)	(ppb)	(ppb)	(ppb)
					12		9		0			
U-6	09/07/99	28.19	27.17		32012	14	ND ⁹	5.2	ND ⁹	10		
(cont)	03/09/00	24.64	30.72		4,980 ¹²	193	ND ⁹	520	365	ND ⁹		
	09/11/00	28.35	27.01		538 ¹⁵	22.8	ND	13.8	3.11	ND		
	10/13/00	29.67	25.69							/ND ¹⁸		
U-7												
55.05	03/14/95	26.13	28.92		ND	ND	ND	ND	ND		ND	ND
	06/20/95	26.38	28.67		ND	ND	ND	ND	ND			
	09/18/95	29.21	25.84		ND	ND	ND	ND	ND			
	12/14/95	30.75	24.30		ND	ND	ND	ND	0.88		ND	ND
	03/06/96	25.10	29.95		ND	ND	ND	ND ·	ND	ND		••
	06/04/96	25.67	29.38		ND	ND	ND	ND	ND	ND		
	09/06/96	28.75	26.30		ND	ND	ND	ND	ND	ND		
	03/08/97	24.33	30.72		ND	ND	ND	ND	ND	ND	ND	ND
	09/04/97 ⁸	30.16	24.89		ND	ND	ND	ND	ND	ND	ND	. ND
	03/09/98	18.91	36.14		ND	ND	ND	ND	ND	ND	ND	ND
	09/01/98 ¹⁰	26.04	29.01		88	ND	ND	ND	ND	2.9	ND	ND
	03/02/9911	25.30	29.75		ND	ND	ND	ND	ND	ND	ND	ND
	09/07/99	27.27	27.78	••	ND	ND	ND	ND	ND	ND	ND	ND
	03/09/0014	23.76	31.29		ND	ND	ND	ND	1.09	ND	ND	ND
	09/11/00 ¹⁷	27.19	27.86		ND	ND	NĎ	ND	ND	ND	ND	ND

Table 1 Groundwater Monitoring Data and Analytical Results Tosco (Unocal) Service Station #5430

Well ID/	Date	DTW	GWE	TPH(D)	TPH(G)	В	T	E	X	MTBE	1,2-DCB	1,2-DCA
TOC*		(ft.)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
Trip Blank												
TB-LB	03/09/98			-	ND	ND	0.53	ND	ND	ND		
	09/01/98				ND	ND	ND	ND	ND	5.0		
	03/02/99				ND	ND	ND	ND	ND	ND		
	09/07/99				ND	ND	ND	ND	ND	ND		
	03/09/00				ND	ND	ND	ND	ND	ND		
	09/11/00				ND	ND	ND	ND	ND	ND		••
	10/13/00				ND	ND	ND	ND	ND	ND		

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5430 1935 Washington Avenue San Leandro, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to March 9, 1998, were compiled from reports prepared by MPDS Services, Inc.

TOC = Top of Casing

B = Benzene

1,2-DCA = 1,2-Dichloroethane

DTW = Depth to Water

T = Toluene

ppb = Parts per billion

(ft.) = Feet

E = Ethylbenzene

ND = Not Detected

GWE = Groundwater Elevation

X = Xylenes

-- = Not Measured/Not Analyzed

TPH(D) = Total Petroleum Hydrocarbons as Diesel

MTBE = Methyl tertiary butyl ether

(D) = Duplicate

TPH(G) = Total Petroleum Hydrocarbons as Gasoline

1,2-DCB = 1,2-Dichlorobenzene

- * TOC elevations were surveyed March 1995, based on Benchmark provided by City of San Leandro, City Engineers Office, Datum 1929, USGS adjusted. Prior to December 16, 1993, the DTW measurements were taken from the top of well covers.
- 1 Total Oil and Grease (TOG) was ND.
- Not a typical diesel pattern; lower boiling hydrocarbons in the boiling range of stoddard calculated as diesel.
- Laboratory report indicates the hydrocarbons detected did not appear to be diesel.
- Laboratory report indicates the hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.
- 5 Laboratory report indicates the hydrocarbons detected did not appear to be gasoline.
- 6 Laboratory has potentially identified the presence of MTBE at reportable levels in the groundwater sample collected from this well.
- Laboratory has identified the presence of MTBE at a level above or equal to the taste and odor threshold of 40 ppb in the sample collected from this well.
- 8 Carbon tetrachloride was detected at a concentration of 1.3 ppb.
- 9 Detection limit raised. Refer to analytical reports.
- Carbon tetrachloride was detected at a concentration of 2.0 ppb, and Chloroform was detected at a concentration of 0.60 ppb.
- 11 Carbon tetrachloride was detected at a concentration of 1.2 ppb.
- Laboratory report indicates gasoline C6-C12.
- Bromodichloromethane was detected at 1.4 ppb and Chloroform was detected at 31 ppb. All EPA Method 8010 reanalyzed by an alternate column or method to confirm the identification and/or concentration of these results.
- Laboratory report indicates Carbon tetrachloride was detected at 0.801 ppb.
- Laboratory report indicates weathered gasoline C6-C12.
- All other Volatile Organic Compounds (VOCs) by EPA Method 8010 were ND with a raised detection limit, except for Bromadichloromethane was detected at 3.58 ppb and Chloroform was detected at 75.2 ppb.
- ¹⁷ All other VOCs by EPA Method 8010 were ND.
- 18 MTBE by EPA Method 8260.

Note: All EPA Method 8010 constituents were ND, except as indicated above.

Table 2

Groundwater Analytical Results - Oxygenate Compounds

Tosco (Unocal) Service Station #5430 1935 Washington Avenue San Leandro, California

	DATE	TBA	MTBE	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	contract the second contra	EDB (ppb)
U-6	10/13/00	ND	ND	ND	ND	ND	ND	ND

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 = 1,2-Dichloroethane

EDB = Ethylene Dibromide/1,2-Dibromoethane

(ppb) = Parts per billion

-- = Not Analyzed

ND = Not Detected

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

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#5430 San Leandro, CA

MONITORING & SAMPLING EVENT September 11, 2000

Client/ Facility #_543	s <i>o</i>		Job#	: 180107	·	
Address: 193	5 Washingto	M Ave	Date	9-11-0	0	
City: <u>Sav</u>	Leandro	,	Samp	oler: <u>Joe</u>		
Well ID	UL	We	Il Condition:	0. K.		•
Well Diameter	2 in.	-	drocarbon	Amount	A delay	(oal.)
Total Depth	39.60 #		olume 2" = 0			" = 0.66
Depth to Water	28.16 tr	I -	actor (VF)	6" = 1.50	12" = 5.80	
	11.44 x	vF 0.17	_1.94 x 3 (case	volume) = Estimated	Purge Volume: _	6 toni
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundfos		Sampling Equipment	Bailer Pressure Ba Grab Sampl	iler	×
	Other:			Other:	_	
Starting Time: Sampling Time: Purging Flow Bat		Dd an	Weather Condition Water Color: Sediment Descrip	clear	Odor: 4	012
Did well de-water	•		•	Volu	ıme:	/gal.
	olume pH (gal.)	Cor µm	iductivity 10 Temp	erature D.O.		Alkalinity (ppm)
11:21 -	2 7.96	<u> </u>	74	/		· · · · · · · · · · · · · · · · · · ·
11:22 _	$\frac{4}{6}$ $\frac{7.18}{7.2}$		7.27	4.6		
					-	
						. <u> </u>
		ĻABO	RATORY INFORMA	ATION		
SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANAL	
WORD U -1	3 V 0 A	Y	HCL	seq.	TENG, BTEN	MTEE
	2 V O A	11	//		8010	
-						
COMMENTS: _					. <u>-</u>	

Client/ Facility #_54	30		Job#	: 180107	
Address: 193	35 Washina	ton Ave.	Date:	9-11-0	0
City: Saw	Leandro		Samp	oler: <u>Joe</u>	
Well ID	U-2	We	Il Condition:	0. k.	
Well Diameter	2	•	irocarbon e	Amount	
Total Depth	29.27	*	ckness:	in. {product/v	-
Depth to Water	26.75	fi. F.	actor (VF)	6° = 1.50	12" = 5.80
	2.52	x vf <u>0.17</u>		volume) = Estimated	Purge Volume: 1.5 (gal.)
Purge Equipment:	Disposable Ba Bailer Stack Grundfos Other:		Sampling Equipment	: Disposable I Bailer Pressure Bai Grab Sample Other:	iler e
	er?	€ _{opm}	<u>.</u> -	tion: Mone	Odor: A O U C
Time	Volume pH (gal.)	Con	eductivity 1 Temperature 1	erature D.O. 5 (mg/L)	•
10:51	0.5 7.9		67.1		
10.55	$\frac{1}{1}$		0.46 66		
SAMPLE ID	(#) - CONTAINE		RATORY INFORMA	TION LABORATORY	ANALYSES
1000 U-2	3 V 0 A	Y	HCL	seq.	TPHG, BTEY, YMTBE
			<u> </u>		
COMMENTS	<u> </u>	· · · · · · · · · · · · · · · · · · ·	- 	•	
COMMENTS: .					
		•			

			_		
Address: <u>193</u>	5 Washingto	on Ave.			<u>o</u>
City: <u>Sav</u>	Leandro		Samp	oler: <u>Joe</u>	
Well ID	<u>U-3</u>	Well	Condition:	0. K.	
Well Diameter	2 in.		rocarbon kness:	Amount i	all the second s
Total Depth	38.53 #		ume 2" = 0		•
Depth to Water	27.83 +	Fac	tor (VF)	6" = 1.50	12" = 5.80
	<u>10.7</u> ×	VF 0.17	- 18 2x 3 (case	volume) = Estimated	Purge Volume: 6 (gal.)
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundfos		Sampling Equipment	Bailer Pressure Bai Grab Sample	ler
	Other:			Other:	_
Starting Time:	11:42	_	Weather Conditio	ne Foady	
Sampling Time: Purging Flow Rat		A.m	Water Color:		Odor: mild
		A.m	Water Color: Sediment Descrip	clear'	
Purging Flow Rate Did well de-wate		cond	Water Color: Sediment Descrip	crature D.O. (mg/L)	me:
Purging Flow Rate Did well de-wate	// 'S (etc:	Conduction of the conduction o	Water Color: Sediment Descrip If yes; Time: Incrivity 1 Temp nos/cm 7 2 Gra 2	crature D.O. (mg/L)	me:
Purging Flow Rate Did well de-wate Time	Volume pH (gal.) 2 7.41 4 7.31	Cond (4)	Water Color: Sediment Descrip if yes; Time: incrivity	clear volu erature D.O. (mg/L) 3.6	me:
Purging Flow Rate Did well de-wate Time	Volume pH (gal.) 2 7.41 4 7.31	Cond (4)	Water Color: Sediment Descrip If yes; Time: Incrivity 1 Temp nos/cm 7 2 Gra 2	clear volu erature D.O. (mg/L) 3.6	me:
Purging Flow Rate Did well de-wate Time 11:46 11:47 11:49	71.50 te:	Conc	Water Color: Sediment Descrip If yes; Time: Inctivity 1 Temp nos/cm 7 2 (cc	Clear Volumerature D.O. (mg/L) 3.6	ORP Alkalinity (mV) (ppm) ANALYSES TING, & TEX, WATEE
Purging Flow Rate Did well de-wate Time 11:46 11:47 11:49	// Solution 11.5 (determined the ser? 10.5 (determined the ser? 10.5 (determined the ser? 10.5 (determined the ser? 10.5 (determined the ser) 10.5 (determined	Conduction	Water Color: Sediment Descrip if yes; Time: incrivity	Clear Clear Volu erature D.O. (mg/L) 3.6	ORP Alkalinity (mV) (ppm)
Purging Flow Rate Did well de-wate Time 11:46 11:47 11:49	// Solution 11.5 (months) Volume pH (gal.) 2 7.4/ 4 7.3/ 7.22 (#) - CONTAINER 3 V 0 4	Concumum. 4. 4. 4. LABOF	Water Color: Sediment Descrip If yes; Time: Inctivity 1 Temp hos/cm 72 72 72 73 74 75 75 75 75 75 75 75 75	Clear Volumenture D.O. (mg/L) 3.6 ATION LABORATORY Seq.	ORP Alkalinity (mV) (ppm) ANALYSES TING, & TEX, WATEE
Purging Flow Rate Did well de-wate Time 11:46 11:47 11:49	// Solution 11.5 (months) Volume pH (gal.) 2 7.4/ 4 7.3/ 7.22 (#) - CONTAINER 3 V 0 4	Concumum. 4. 4. 4. LABOF	Water Color: Sediment Descrip If yes; Time: Inctivity 1 Temp hos/cm 72 72 72 73 74 75 75 75 75 75 75 75 75	Clear Volumenture D.O. (mg/L) 3.6 ATION LABORATORY Seq.	ORP Alkalinity (mV) (ppm) ANALYSES TING, & TEX, WATEE

Client/ Facility #_54	30		Job i	#: <u>L</u>	80107		
Address: 193	s Washingto	u Ave	Date	ı:	9-11-00	9	
City: Sav	Leandro		Sam	pler: _	Joe		
Well ID	<u>U-4</u>	We	ll Condition: _	_0.	k.		-
Weil Diameter	2 in.	-	irocarbon	ا	Amount B	al de la company	(nel.)
Total Depth	39.03 #		-	0.17	3" = 0.3		t" == 0.66
Depth to Water	<u> 26.48</u> n	Fa	ctor (VF)	6" = .	L <i>-</i> 50	12" = 5.80	
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundfos Other:	•	Sampling Equipment	t: Di Ba Pr G	sposable Baller essure Baller rab Sample	<u>ailer</u> er	6.5 (gal.)
Starting Time: Sampling Time: Purging Flow Rate Did well de-wate		A.W.	Weather Condition Water Color: Sediment Description If yes; Time:	<u>clea</u> ption: _	love	Odor: <u> </u>	
Time 10'22 10'23 10'24	Volume pH (gal.) 2	- g	7.48 7	9 2.5 2.8	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
SAMPLE ID	(#) - CONTAINER	LABOF	RATORY INFORMA	LABO	RATORY	ANAL	YSES
1000 U - 4	3 VOA	Y	HCL	۶	eq.	TPHG, BTEX	MTGE
				<u>l</u>	•	L	
COMMENTS: _	· · · · · · · · · · · · · · · · · · ·						

acility # <u>543</u>	3.0		Job#:	180107		
Address: 193	5 Washingto	M Ave.	Date:	9-11-00	2	
City: <u>Sav</u>	Leandro		Sampler:	Joe	<u></u>	
Well ID	<u>U-5</u>	Well Cond	lition:(0. K.		
Well Diameter	2 in	Hydrocart	Dr. Land	Amount B	A Laboratoria	(cal.)
Total Depth	38.51 #	Thickness Volume	2" = 0.17	a (product/wa 3" = 0.34		= 0.66
Depth to Water	25.36 +	Factor (VI	F) 6	* = 1.50	12" = 5.80	
·	13.15 x	VF 0.17 -24	24 x 3 (case volum	ne) = Estimated P	urge Volume:	7 (001)
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundfos Other:	· -	Sampling Equipment: (Disposable Ba Bailer Pressure Baile Grab Sample	er ·	
Canadana Timan	9.4	- \Man	her Conditions:	Foggy		
Sampling Time: Purging Flow Rat	9:4 10:0 e:lo	Mate pm. Sedir	her Conditions: r Color:C nent Description: s; Time:	More		
Sampling Time: Purging Flow Rat Did well de-wate	e:l	Water Water Sedir	r Color:C ment Description: s; Time:	weve Volum		; (gal
Sampling Time: Purging Flow Rat Did well de-wate Time	e:loso	Wate pm. Sedir if yes Conductivi	r Color:C ment Description: s; Time: ty O Temperatur	Volume D.O.	ne:	
Sampling Time: Purging Flow Rat Did well de-wate Time		Conductiviumbos/cm 8.19	r Color:C ment Description: s; Time: tyle Temperatur F	Volume D.O. (mg/L)	ne:	; (gal
Sampling Time: Purging Flow Rat Did well de-wate Time		Conductivi	r Color:C ment Description: s; Time: ty O Temperatur	Volume D.O. (mg/L)	ne:	; (gal
Sampling Time: Purging Flow Rat Did well de-wate Time 9150 9151		Conductiviumbos/cm 8.19	r Color:C ment Description: s; Time: tyle Temperatur F	Volume D.O. (mg/L)	ne:	; (gal
Sampling Time: Purging Flow Rat Did well de-wate Time 9150 9151		Conductivi umbos/cm 8.19 9.07	r Color: Conent Description: s; Time: Temperatur 73.1 73.6 73.8	Volume D.O. (mg/L)	ne:	; (gal
Sampling Time: Purging Flow Rat Did well de-wate Time 9150 9151		Conductivi umbos/cm 8.19 9.07 9.10	r Color:C ment Description: s; Time: Temperatur 73.1 73.6 73.8	Volume D.O. (mg/L)	ne:	Alkalinity (ppm)
Sampling Time: Purging Flow Rat Did well de-wate Time 9150 9151 9153	e:	Conductivi umbos/cm 8.19 9.07 9.10	Temperatury Temperatury Tage 73.6 73.8	Volume D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
Sampling Time: Purging Flow Rat Did well de-wate Time V 9:50 9:51 9:53	e:	Conductivi umbos/cm 8.19 V.17 LABORATOI REFRIG. PRE	Temperature 73.6 73.8 TY INFORMATION SERV. TYPE	Volume D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
Did well de-wate Time V 9!50 9!51 9!53	e:	Conductivi umbos/cm 8.19 V.17 LABORATOI REFRIG. PRE	Temperature 73.6 73.8 TY INFORMATION SERV. TYPE	Volume D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
Sampling Time: Purging Flow Rat Did well de-wate Time V 9:50 9:51 9:53	e:	Conductivi umbos/cm 8.19 V.17 LABORATOI REFRIG. PRE	Temperature 73.6 73.8 TY INFORMATION SERV. TYPE	Volume D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

Client/ Facility #_54	30		Job#	180107		
Address: 193	5 Washingto	n Ave.	Date	9-11-0	0	The second se
City: Sax	,		• •	pler: <u>Joe</u>	· · · · · · · · · · · · · · · · · · ·	
Well ID	<u>U-6</u>	We	l Condition: _	o.k.		
Well Diameter	2 in		Irocarbon	Amount	a distance of the second	*
Total Depth	40.00 "		ckness:	<u>in.</u> (product/v	•	= 0.66
Depth to Water	28.35	Fa	ctor (VF)	6" = 1.50	12" = 5.80	
	11.65 x	vF <u>0.17</u>	1.98 x 3 (case	volume) = Estimated	Purge Volume:	6 (001)
Purge Equipment:	Disposable Bailer Bailer	•	Sampling Equipment	: Disposable B	Bailes	
adorbino.ici	Stack			Bailer Pressure Bai		
•	Suction Grundfos	•		Grab Sample	:	
	Other:			Other:		
Starting Time: Sampling Time: Purging Flow Rat	12:1 12:0 1:0	35 R.m		clear	Odor: VOX	
Did well de-wate	r?	 .	If yes; Time:	Volu	me:	(gal)
Time \	olume pH (gal.)	Con µm	ductivity 1 Temp	erature D.O.		Alkalinity (ppm)
12:22	2 710		97 74	1.0		·.
12:23	4 7.14 7.17	4	$\frac{15}{4.21} - \frac{7}{7}$	40		
						
					<u> </u>	
		LABOI	RATORY INFORMA	ATION		
SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALY	
100 U-6	3 V O A	<u> </u>	HCL	seq.	TPHG, BTEX,	MTEE
			l			
COMMENTS: _			<u> </u>			.
-				<u></u>		<u>.</u>

	30		Job#:	180107		
ddress: 193	5 Washington	Ave.	Date:	9-11-00	<u> </u>	
ity: <u>Sav</u>	Leandro		Sample	r: <u>Joe</u>	<u> </u>	· · · · · · · · · · · ·
Well ID	<u>U-7</u>	Well Con	dition:	o.k.		
/eli Diameter	2 in.	Hydroca: Thicknes		Amount B	Albania de la compansa del la compansa de la compan	(oel.)
otal Depth	37-78 +	Volume	2" = 0.17			0.66
epth to Water	27.19 +	Factor (· · · · · · · · · · · · · · · · · · ·	0 - 150		
	10.59 ×	vf <u>0.17</u> - 4	1,80 _X 3 (case voi	ume) = Estimated P	urge Volume: <u></u>	ر اهو <u>)</u>
Purge Equipment:	Disposable Bailer Bailer		Sampling Equipment:	Disposable Baller	معلق	,
·	Stack	·.		Pressure Baile	er	
	Grundfos			Grab Sample ther:		-
	Other:					
Sampling Time: Purging Flow Rat Did well de-wate	te:	p <u>ra.</u> Sed	ter Color: liment Descriptio es: Time:		Odor: <u> </u>	
	Volume pH		vity 🙌 Tempera		ORP (mV)	Alkalinit
Time '				(14137 42)	/202.)	
,	(gal.)					(bbw)
9:18		_12.18	74.4			(Abur)
,	(gal.)		74.4			(bbm)
9'.18	(gal.)	12.18	<u> 74.4</u> - <u>74.1</u>			(bbm)
9'.18	(gal.)	12.18	<u> 74.4</u> - <u>74.1</u>			(Ppm)
9'.18	(gal.)	12.18 12.13 12.1	74.4			(Ppm)
9'.18	(gal.)		<u> 74.4</u> - <u>74.1</u>		ANALYS	
9:18	(gal.) 1 7.66 2 7.70 7.59		74.4 74.1 73.8	7 	TING, STEX,	SES .
9'18 9'20 9'21	(gal.) 1 7.66 2 7.70 7.59 (#) - CONTAINER		74.4 74.1 73.8 ORY INFORMATI	ON		SES .
9'18 9'20 9'21	(gal.) 1 7.66 2 7.70 7.59 (#) - CONTAINER 3 V O A	12.18 12.12 12.1 LABORATI	74.4 74.1 73.8 ORY INFORMATI	ON LABORATORY Seq.	TING, STEX,	SES .

2/37-Holdet.hm



Facility Number UNOCAL SS#5430	
Facility Address 1935 WASHINGTON AVE. SAN LEANDRO, C.	A
Protect Number 180107.85	
consultant Nome Gettler-Ryan Inc. (G-R Inc.)	
Address 6747 Sierra Court, Suite J. Dublin, CA 9450	64
Project Contact (Name) Deanna L. Harding	
Liples contract fragues — — — — — — — — — — — — — — — — — — —	

Contact (Nome) . Mr. DAVIO DEUSITT Laboratory Name Sequoia Analytical Loboratory Release Number Samples Collected by (Home) JOE ASEMIAN Collection Date:

San Remon, Callion	nie 94963	Pi	rojeat Co	ntoot (Na	me) <u></u> \510	-551-755	5_(Fox	Number	510-	-551-	7888	81	gnoture	<u>3, </u>		سم	<u> </u>				
			=	\(\frac{\(\pi \)}{\(\pi \)}	110,22							•	Anoly#4	е То В	Perfor	ned					DO NOT BILL TB-LB ANALYSIS
Sample Number	Lob Sample Number	Number of Containers	Matrix S = Sol A = Air W = Water C = Charceol	Type G = Grab C = Composite D = Discrete	Three	Sample Preservation	kad (Yee or No)	1794 Gas+ 512X WANTEE \$00151	IPH Dissel (8015)	Off and Gream (\$520)	Purgeable Halocarbons (8010)	Purpeable Aromotics (8020)	Purpedble Organics (8240)	Extractable Organics (8270)	Metals Cd.Cr.Pb.Zn.Ni (ICAP or AA)		-				LOO9071
TB-LB	Ol	VOA	W	G-		HCL	Y	14		<u> </u>	 		<u> </u>	 	 			 	-	 	
U-1	02	VOK	1	1	11:30	. /	1		<u> </u>		<u> </u>		<u> </u>	 	 				 ``	 	
U-2	03	yot.		/	11:05		1		<u> </u>	ļ	 	<u> </u>	<u> </u>		├	 -		 	_	 	
U-3	OH	VOA	/	1	11:56	. ^		/		 	~	-	├	-	┤─		<u> </u>		1	1	
U-4	05	13A		1.	10:35	7		1	-			 		-	┼╌				 	1	
U-5	060	WA		1	10:05	<u></u>		1-	-	-		-	-	┼	 			 		1	
U-6	OF	VOA		<u> </u>	12:35		<u> </u>	+>			1	-	-	-					1	1	
U-7	80	VOA	1		9:30		1-	 			 		-	-	1	1	 				
			 		 		 	-		-				-	-	╁~~					
		<u> </u>	<u> </u>		 	<u> </u>	 		-	-	_	 	+			•	1				
		<u> </u>	<u> </u>		 	<u> </u>							 	-	1	1					
		-	 		-	<u> </u>	┪			_	-	 	_	1						_	·
	 				-		+-	-			1	1									
Relinquished B	سحتيان			rgonization G—R In		Date/Time 27		Ne			Hul	len	Organiz	AL	9/	ite/Time	1430		Turn .	•	Time (Circle Choles) 24 Hrs. 48 Hrs.
aquieted B	(Signature)		rganizatio		Dote/Time		Received			. D. /M		Organiz	rauon		ote/Ilme				1	6 Days 10 Days Contracted
vd B	y (Signoture)	\ c	rgenizatio	n	Date/Time	[Reoleved	rer Lo	poratory	ny (Si	Augraia)	,	•] "	,	•	İ		1	Anili agrag



September 26, 2000

Deanna Harding Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin, CA 94568

RE: Tosco(4)/L009071

Dear Deanna Harding

Enclosed are the results of analyses for sample(s) received by the laboratory on September 11, 2000. If you have any questions concerning this report, please feel free to contact me.

Sincerely, Satonya K. Put

Latonya Pelt Project Manager

CA ELAP Certificate Number I2360





Project: Tosco(4)

Sampled: 9/11/00

Project Number: Unocal SS# 5430/ 1935 Washington Ave., San Likendreed: 9/11/00

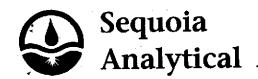
Project Manager: Deanna Harding

Reported: 9/26/00

ANALYTICAL REPORT FOR L009071

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
TB-LB	L009071-01	Water	9/11/00
U-1	L009071-02	Water	9/11/00
U-2	L009071-03	Water	9/11/00
U-3	L009071-04	Water	9/11/00
U-4	L009071-05	Water	9/11/00
U-5	L009071-06	Water	9/11/00
U-6	L009071-07	Water	9/11/00
U-7	L009071-08	Water	9/11/00





Gettler-Ryan/Geostrategies(1)

6747 Sierra Court, Suite J

Project Number: Unocal SS# 5430/ 1935 Washington Ave., San Literatived: 9/11/00

Dublin, CA 94568

Project Manager: Deanna Harding

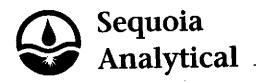
Reported: 9/26/00

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

	Batch	Date	Date	Surrogate	Reporting			- ·· ·· · · · · · · · · · · · · · · · ·
Analyte	Number	Prepared	Analyzed	Limits	Limit	Result	Units	Notes*
<u>rb-lb</u>			L00901	<u>71-01</u>			Water	
Purgeable Hydrocarbons as Gasoline	0090101	9/21/00	9/22/00		50.0	ND	ug/l	
Benzene	Ħ	W .	Ħ		0.500	ND	n	
Foluene	₽ .	н -	17		0.500	ND	H	
Ethylbenzene	•	н	H		0.500	ND		
Xylenes (total)	n	H	n		0.500	ND		
Methyl tert-butyl ether	н .	n	н		5.00	ND	#	
Surrogate: a,a,a-Trifluorotoluene	n .	"	N	70.0-130		88.3	%	
<u>U-1</u>			L0090	71 <u>-02</u>			Water	
Purgeable Hydrocarbons as Gasoline	0090101	9/21/00	9/21/00		50.0	ND	ug/l	
Benzene	П	H	. "		0.500	ND	.	
roluene	#	W	н		0.500	0.592	n	
Ethylbenzene	a	er ·	Ħ		0.500	ND	H	
Xylenes (total)	н	#	я		0.500	ND	H	
Methyl tert-butyl ether	н	н	n .		5.00	ND	11	
Surrogate: a,a,a-Trifluorotoluene	n	Ħ	. #	70.0-130		90.4	%	,
J -2			<u>L.0090</u>	71-03			Water	
Purgeable Hydrocarbons as Gasoline	0090101	9/21/00	9/22/00		50.0	ND	ug/l	
Benzene	H	"	71		0.500	ND	и	*
Coluene	H	**	17		0.500	0.635		
Ethylbenzene	• н	H	р		0.500	ND	и	
Xylenes (total)	H	H		•	0.500	ND	#	
Methyl tert-butyl ether					5.00	ND	#	
Surrogate: a,a,a-Trifluorotoluene		"		70.0-130		87.0	%	
<u>U-3</u>			<u> 1.0090</u>	71_04 ·			Water	
	0090101	9/21/00	9/22/00	<u> </u>	50.0	ND	ug/l	
Purgeable Hydrocarbons as Gasoline	0030101	9/21/UV	<i>31221</i> 00		0.500	ND	n	
Benzene Balansa a		Ħ	lt.		0.500	ND	n ,	
Toluene				4	0.500	ND		
Ethylbenzene		 #	H.		0.500	ND	н	
Xylenes (total)		" #	19		5.00	ND.	Ħ	
Methyl text-butyl ether		<u>"</u>		70.0-130	3.00	86.9	%	
Surrogate: a,a,a-Trifluorotoluene	. "	"	"	/0.0-130	•	ðu.y	70	
<u>U-4</u>			<u>L0090</u>	71-05	50.0	NITS.	Water	
Purgeable Hydrocarbons as Gasoline	0090104	9/22/00	9/22/00		50.0	ND	ug/l	
Benzene	*	П	H		0.500	ND	 #	
Toluene				•	0.500	0.686	" "	
Ethylbenzene	н .	H	•		0.500	ND	**	
Xylenes (total)	ч	n	н	1	0.500	. ND	**	

Sequoia Analytical - San Carlos

*Refer to end of report for text of notes and definitions.



		Tosco(4) Sampled:	9/11/00
Gettler-Ryan/Geostrategies(1)		10360(4)	
T * * * * * * * * * * * * * * * * * * *	75 1 (37)	Unocal SS# 5430/1935 Washington Ave., San I Randived:	9/11/00
6747 Sierra Court, Suite J	Project Number:	OHOOM 22% 1430/ 1333 At assimilation 1114% print 1	0.006/00
D.11: CA 04569	Project Manager:	Deanna Harding Reported:	9/26/00
Dublin, CA 94568	1 Toject Milliager.	1744444	

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

	Batch	Date	Date	Surrogate	Reporting			
Analyte	Number	Prepared	Analyzed	Limits	<u>Limit</u>	Result	Units	Notes*
							TT1. 4	
U-4 (continued)	e e		<u>L0090</u>	<u>71-05</u>			Water	
Methyl tert-butyl ether	0090104	9/22/00	9/22/00		5.00	ND	ug/l	
Surrogate: a,a,a-Trifluorotoluene	п	н	**	70.0-130		88.5	%	•
						,	Water	
<u>U-5</u>			L0090	<u>71-06</u>		NES		•
Purgeable Hydrocarbons as Gasoline	0090104	9/22/00	9/22/00		50.0	ND	ug/l "	
Benzene	**	Ħ	**		0.500	ND	11	
Toluene	n	н	н		0.500	0.640	н	*
Ethylbenzene	. #	19	7		0.500	ND		
Xylenes (total)	Ħ.	11	**		0.500	ND	ff .	
Methyl tert-butyl ether	H	н	. #		5.00	ND	**	<u> </u>
Surrogate: a,a,a-Trifluorotoluene	n	n	· n	70.0-130		87.5	%	•
		•						
<u>U-6</u>			L0090	<u>71-07</u>	*		Water	
Purgeable Hydrocarbons as Gasoline	0090105	9/22/00	9/22/00		50.0	538	ug/l	ı
Benzene	d .	н	Ħ		0.500	22.8	И	
Toluene	n ·	н .	11		0.500	ND	#	•
Ethylbenzene	11	#	•		0.500	13.8	Ħ	·
Xylenes (total)	н	n	et		0.500	3.11	. **	
Methyl tert-butyl ether	п	n	Ħ		5.00	ND		
Surrogate: a,a,a-Trifluorotoluene	n		n	70.0-130		128	%	
			1.000)71-08	,		Water	· ·
<u>U-7</u>	0000104	9/22/00	9/22/00	771-70	50.0	ND	ug/l	
Purgeable Hydrocarbons as Gasoline	0090104	9/22/00 #	9/22/00		0.500	ND	7	•
Benzene			 #		0.500	ND	11	
Toluene					0.500	ND	н .	
Ethylbenzene	π	••			0.500	ND		•
Xylenes (total)	n		_			ND	н	•
Methyl tert-butyl ether	#	#	- 		5.00	78.5	%	
Surrogate: a,a,a-Trifluorotoluene	"	#	"	70.0-130		/6.3	70	



Project: Tosco(4)

Sampled:

9/11/00

Project Number: Unocal SS# 5430/ 1935 Washington Ave., San I Randroed:

Project Manager: Deanna Harding

Reported:

9/11/00 9/26/00

Volatile Organic Compounds by EPA Method 8010B Sequoia Analytical - San Carlos

	Batch	Date	Date	Surrogate	Reporting		4	
Analyte	Number	Prepared	Analyzed	Limits	Limit	Result	Units	Notes*
	•		, 				Tila Anu	•
<u>U-1</u>	•		<u>L0090'</u>	<u>71-02</u>			<u>Water</u>	-
Freon 113	0090069	9/14/00	9/14/00		2.50	ND	ug/l	
Bromodichloromethane	■.	H	H .		1.25	3.58	" H	•
Bromoform	et .	. 4	n		1.25	ND		
Bromomethane	Ħ .	11	n		2.50	ND	**	
Carbon tetrachloride	Ħ	н	H		1.25	ND		
Chlorobenzene	H	11	Ħ		1.25	ND	**	•
Chloroethane	M	n	#1		2.50	ND .	10	
2-Chloroethylvinyl ether	. #	н	Ħ		12.5	ND		
Chloroform	ft	11	11.		1.25	75.2	M	
Chloromethane	Ħ	**	n		2.50	ND	· m	
Dibromochloromethane	Ħ	**			1.25	ND	n	
1,3-Dichlorobenzene	н	. n	**		1,25	ND	**	
1,4-Dichlorobenzene	· m ·	H	π		1.25	ND	*	
1,2-Dichlorobenzene	п	Ħ	#	•	1.25	ND	* 90	
1,1-Dichloroethane	#	н `	**		1.25	ND	11	
1,2-Dichloroethane		17			1.25	ND	W	
1,1-Dichloroethene		11	и		1.25	ND	П	
cis-1,2-Dichloroethene			Ħ		1.25	ND	Ħ	
trans-1,2-Dichloroethene	11	m	n		1.25	ND	#	•
-	e e	π	Ħ		1.25	ND	₩	
1,2-Dichloropropane	*	ni	н		1.25	ND	#	
cis-1,3-Dichloropropene	. н	11	•		1.25	ND	н	
trans-1,3-Dichloropropene		н	**		12.5	ND	, m	
Methylene chloride	11		#		1.25	ND	11	
1,1,2,2-Tetrachloroethane		н	. #		1.25	ND	*	
Tetrachloroethene	,,				1.25	ND	Ħ	•
1,1,1-Trichloroethane		 M			1,25	ND	m	
1,1,2-Trichloroethane	-	" "	 #.		1.25	ND		
Trichloroethene	π	==			1.25	ND	· #	
Trichlorofluoromethane	rt 	11	"		1.25	· ND	#	
Vinyl chloride Surrogate: 1-Chloro-2-fluorobenz	n 	**	#	70.0-130	1.23	82.0	%	



Tosco(4) Project:

Sampled:

Project Number: Unocal SS# 5430/ 1935 Washington Ave., San LRandived: Project Manager: Deanna Harding

Reported:

9/11/00 9/26/00

Volatile Organic Compounds by EPA Method 8010B Sequoia Analytical - San Carlos

<u> </u>	Batch	Date	Date	Surrogate	Reporting		77.14	37.4\$
Analyte	Number	Prepared	Analyzed	Limits	Limit	Result	Units	Notes*
			<u> L0090</u> '	71.04			Water	
<u>U-3</u>	000000	0/14/00	9/14/00	<u>/1~0~</u>	1.00	ND	ug/l	
Freon 113	0090069	9/14/00	9/14/00		0.500	ND	11	
Bromodichloromethane						ND	11	
Bromoform	Ħ	17	41		0.500	ND	**	
Bromomethane	*1				1.00		tt	
Carbon tetrachloride	H		Ħ		0.500	ND	. #	
Chlorobenzene	n	Ħ	*		0.500	ND	" 17	
Chloroethane	n .	11	11		1.00	ND		4
2-Chloroethylvinyl ether	N	44-	n		5.00	ND	n	
Chloroform	en en	11	н	•	0.500	ND		
Chloromethane	17	п	M		1.00	ND	. "	
Dibromochloromethane	n		Ħ		0.500	ND	47	
1,3-Dichlorobenzene	#	91	П		0.500	ND	19	
1,4-Dichlorobenzene	**	#	#		0.500	ND	n	
1,2-Dichlorobenzene	н	tt .	11		0.500	ND	#	
-	н	**	H		0.500	ND	0	
1,1-Dichloroethane	*		п		0.500	1.17	11	
1,2-Dichloroethane			*		0.500	ND	H	
1,1-Dichloroethene	**		**		0.500	ND	Ħ	
cis-1,2-Dichloroethene	-				0.500	ND	#	
trans-1,2-Dichloroethene			"		0.500	ND	н `	
1,2-Dichloropropane	•	**	" #		0.500	ND		
cis-1,3-Dichloropropene	. 11		"			ND	**	·
trans-1,3-Dichloropropene		n	-	•	0.500		**	
Methylene chloride	Ħ		R .		5.00	ND	11	
1,1,2,2-Tetrachloroethane	Ħ	u	· #1	•	0.500	ND ND	 H	
Tetrachloroethene	. •	п	,m		0.500	ND	-	
1,1,1-Trichloroethane	Ħ	Ħ	lT .		0.500	ND	-	
1,1,2-Trichloroethane	Ħ	**	n		0.500	· ND		
Trichloroethene	Ħ	11	Ħ		0.500	ND	Ħ	
Trichlorofluoromethane	n	11	11		0.500	ND	ú	
Vinyl chloride	Ħ	' н	н .		0.500	· ND	17	
Surrogate: I-Chloro-2-fluorobenz	7070 #	н	#	70.0-130		78.2	%	



Project:

Tosco(4)

Sampled: 9/11/00

Project Number: Unocal SS# 5430/ 1935 Washington Ave., San IRandived: 9/11/00 Project Manager: Deanna Harding

9/26/00 Reported:

Volatile Organic Compounds by EPA Method 8010B Sequoia Analytical - San Carlos

	Batch	Date	Date	Surrogate	Reporting	- 1	**	Materia
Analyte	Number	Prepared	Analyzed	Limits	Limit	Result	Units	Notes*
							Water	
<u>U-7</u>			L0090	<u>71-08</u>	1.00	. ND	ug/l	•
Freon 113	0090069	9/14/00	9/14/00	•	1.00	ND ND	ng.	
Bromodichloromethane	н .	п	tT .		0.500	•	*	
Bromoform	41	Ħ	tt .		0.500	ND ND	**	
Bromomethane	#	n	H		1.00		н	-
Carbon tetrachloride	. п	11	**		0.500	ND	11	
Chlorobenzene		н	n		0.500	ND		
Chloroethane	#	Ħ	11	•	1.00	ND	17	
2-Chloroethylvinyl ether	, n	Ħ	. #		5.00	ND	**	
Chloroform	n	17	н		0.500	ND		
Chloromethane		n	Ħ		1.00	ND	 M	
Dibromochloromethane	· #		н		0.500	ND	"	
1,3-Dichlorobenzene	11	**	77	•	0.500	ND		
1.4-Dichlorobenzene	н		Ħ		0.500	ND	-	
1,2-Dichlorobenzene	н		· n		0.500	ND	#	
1,1-Dichloroethane	**	tt ,	**		0.500	ND		
1,2-Dichloroethane	H	17	N		0.500	ND	**	
1,1-Dichloroethene	M	н -	# "		0.500	ND	n	•
	11	11	*1		0.500	ND	H	•
cis-1,2-Dichloroethene	11	11			0.500	ND	и	•
trans-1,2-Dichloroethene		H	н		0.500	ND	π	
1,2-Dichloropropane	n .	**	н		0.500	ND	#	
cis-1,3-Dichloropropene	#	. 17	n		0.500	ND	**	
trans-1,3-Dichloropropene	н	n	н		5.00	ND	Ħ	
Methylene chloride	•	*	Ħ		0.500	ND	* .	
1,1,2,2-Tetrachloroethane		#	n		0.500	ND	Ħ	
Tetrachloroethene	" —		.		0.500	ND	H .	
1,1,1-Trichloroethane			н .		0.500	ND	**	
1,1,2-Trichloroethane	. П	,,			0.500	ND	79	
Trichloroethene		. " n			0.500	ND	W	
Trichlorofluoromethane	н	R M			0.500	ND	#	
Vinyl chloride			"	70.0-130	0,500	81.6	%	





Gettler-Ryan/Geostrategies(1)

6747 Sierra Court, Suite J

Project Number: Unocal SS# 5430/ 1935 Washington Ave., San I Rendired: 9/11/00

Project Manager: Deanna Harding Reported: 9/26/00

						D	Decem	ov. RPD RPD			
	Date	Spike	Sample	QC	TTtan	Reporting Limit	Kecov.	RPD Limit		Notes	
nalyte	Analyzed	Level	Result	Result	Units	Recov. Limits	70	Lillit	/0	110103	
atch: 0090101	Date Prepa	red: 9/21/(<u>10</u>		Extraction Method: EPA 5030B [P/T]						
lank	0090101-Bl	<u>LK1</u>				••					
urgeable Hydrocarbons as Gasoline	9/21/00			ND	ug/l	50.0					
enzene	π.			ND	**	0.500					
oluene	स			ND	M .	0.500				•	
thylbenzene	**			ND	n	0.500					
(ylenes (total)	n			ND	n	0.500					
lethyl tert-butyl ether	n			ND	19	5.00					
urrogate: a,a,a-Trifluorotoluene	н	10.0	-	8.90	Ħ	70.0-130	89.0				
<u>cs</u>	0090101 <u>-B</u> 3	S1		•							
Benzene	9/21/00	10.0		10.4	ug/l	70.0-130	104				
Coluene	Ħ	10.0	•	9.60	. #	70.0-130	96.0				
Ethylbenzene	11	10.0		9.66	. #	70.0-130	96.6				
(ylenes (total)	**	30.0		29.4	. #	70.0-130	98.0				
urrogate: a,a,a-Trifluorotoluene	п	10.0		10.2	"	70.0-130	102			-	
.CS	0090101-B	S2.	٠.				•				
urgeable Hydrocarbons as Gasoline	9/21/00	250	¥	215	ug/l	70.0-130	86.0				
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.4	n	70.0-130	104				
Matrix Spike	0090101 <u>-M</u>	isi <u>L</u>	009070 <u>-</u> 02								
Benzene	9/21/00	10.0	ND	11.2	ug/l	60.0-140					
oluene	Ħ	10.0	ND	10.4	#	60.0-140	104				
ithylbenzene	#	10.0	ND	10.2	Ħ	60.0-140	102				
Kylenes (total)	n	30.0	ND	31.0	Ħ	60.0-140	103				
Surrogate: a,a,a-Trifluorotoluene	n	10.0		9.35	H	70.0-130	93.5		•		
Matrix Spike Dup	0090101-M	ISD1 L	00 <u>9070-02</u>								
Benzene	9/21/00	10.0	ND	10.8	ug/l	60.0-140	108	25.0	3.64	,	
Coluene	11	10.0	ND	10.5	H	60.0-140	105	25.0	0.957		
Ethylbenzene	tt .	10.0	ND	10.3	н	60.0-140	103	25.0	0.976		
Kylenes (total)	#	30.0	ND	31.5	н	60.0-140	105	25.0	1.92		
Surrogate: a,a,a-Trifluorotoluene	<i>n</i> ·	10.0		9.51	п	70.0-130	95.1			-	
Batch: 0090104	Date Prepared: 9/22/00				Extraction Method: EPA 5030B [P/T]						
Blank	0090104-B		•								
Purgeable Hydrocarbons as Gasoline	9/22/00			ND	ug/l	50.0					
Benzene	N	•	•	ND	n	0.500					
Toluene	н			ND	n	0.500					
Ethylbenzene	п			ND	**	0.500					
Xylenes (total)				ND	**	0.500					



Sampled:

Reported:

9/11/00

9/11/00

9/26/00



Project: Tosco(4) Gettler-Ryan/Geostrategies(1) Project Number: Unocal SS# 5430/ 1935 Washington Ave., San LRandreed: 6747 Sierra Court, Suite J Project Manager: Deanna Harding Dublin, CA 94568

	Committee Committee Committee		a.Amalytica							
	Date	Spike	Sample	QC		Reporting Limit	Recov.	RPD	RPD	·
nalyte	Analyzed	Level	Result	Result	Units	Recov. Limits	%_	Limit	<u>%</u>	Notes
lank (continued)	0090104-BI	<u>.K1</u>		ND	ug/l	5.00				
fethyl tert-butyl ether	9/22/00	10.0		10.0	<u> </u>	70.0-130	100			
urrogate: a,a,a-Trifluorotoluene	,,	10.0		10.0		, 200				
<u>.cs</u>	0090104-BS				_	20.0.120	105			
enzene	9/22/00	10.0		10.5	ug/l	70.0-130	96.8			
oluene	P	10.0		9.68	**	70.0-130	97.1			
thylbenzene	#	10.0		9.71	M 	70.0-130		•		
(ylenes (total)	n	30.0		29.5		70.0-130	98.3			
urrogate: a,a,a-Trifluorotoluene	n	10.0		9.81	"	70.0-130	98.1			
<u>.cs</u>	0090104-B	§2			٠					
Purgeable Hydrocarbons as Gasoline	9/22/00	250		234	ug/i	70.0-130	93.6			
Surrogate: a,a,a-Trifluorotoluene	n	10.0		9.88	#	70.0-130	98.8			•
	0000104 B4	'eı T	.0 09 071 -08		•					
Matrix Spike	0090104-M		ND	241	ug/l	60.0-140	96.4			
Purgeable Hydrocarbons as Gasoline	9/23/00	250 10.0	ND	9.56	# #	70.0-130	95.6		•	
Surrogate: a,a,a-Trifluorotoluene	"	10.0	•	9.50		7000				
Matrix Spike Dup	<u>0090104-M</u>		.009071-08			60,0-140	92.0	25.0	4.67	
Purgeable Hydrocarbons as Gasoline	9/23/00	250	ND	230	ug/l		105	43.0	7,01	
Surrogate: a,a,a-Trifluorotoluene	n	10.0	•	10.5	H	70.0-130	203		•	
Batch: 0090105	Date Prepa	red: 9/22	/00		Extra	action Method: EP	A 5030B	[P/T]		•
Blank	0090105-B						•			
Purgeable Hydrocarbons as Gasoline	9/22/00			ND	ug/l	50.0			•	
Benzene	п .		•	ND	- #1	0.500				
Toluene	n			ND	n	0.500				
Ethylbenzene	п			ND	H	0.500				
Xylenes (total)	H .			ND	**	0.500				
Methyl tert-butyl ether	**			ND	**	5.00		· .		
Surrogate: a,a,a-Trifluorotoluene	Ħ	10.0	, , , , , , , , , , , , , , , , , , , 	10.2	*	70.0-130	102			
-	0000405	.01					•			
<u>LCS</u>	0090105-E			10.4	ug/l	70.0-130	104			
Benzene	9/22/00	10.0	•	9.78	H H	70.0-130				
Toluene		10.0		9.76	n	70.0-130				
Ethylbenzene	"	10.0		9.32 28.4	Ħ	70.0-130				
Xylenes (total)	**	30.0	<u> </u>	10.0	н	70.0-130				
Surrogate: a,a,a-Trifluorotoluene	· 🙀	10.0		10.0		, 0.0-150				
LCS	0090105-I	3S2			-	70.0-130) 86.8			
				217	ug/l					

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*Refer to end of report for text of notes and definitions.





Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin, CA 94568

Project: Tosco(4) Sampled:

9/11/00

Project Number:

Unocal SS# 5430/ 1935 Washington Ave., San I Randived:

9/11/00

Project Manager: Deanna Harding Reported:

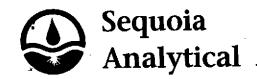
Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov.	RPD Limit	RPD %	Notes*
LCS (continued)	0090105-BS	S2	,		·					
Surrogate: a,a,a-Trifluorotoluene	9/22/00	10.0		9.81	ug/l	70.0-130	<i>98.1</i>			-
Matrix Spike	0090105-M	<u> S1 L</u>	009153-02							
Purgeable Hydrocarbons as Gasoline	9/22/00	250	ND	220_	ug/l	60.0-140	88.0			
Surrogate: a,a,a-Trifluorotoluene	n	10.0	-	. 11.7	11	70.0-130	117			
Matrix Spike Dup	0090105 <u>M</u>	SD1 L	009153-02							
Purgeable Hydrocarbons as Gasoline	9/22/00	250	ND	229	ug/l	60.0-140	91.6	25.0	4.01	
							109			



9/11/00

9/11/00

9/26/00



Gettler-Ryan/Geostrategies(1)

6747 Sierra Court, Suite J

Dublin, CA 94568

Project Manager:

Project: Tosco(4)

Unocal SS# 5430/ 1935 Washington Ave., San LRandired:
Deanna Harding

Reported:

	Date	Spike	Sample	QC		Reporting Limit Recov.	RPD	RPD	
Analyte	Analyzed	Level	Result	Result	Units	Recov. Limits %	Limit	%	Notes'
Satch: 0090069	Date Prepa		<u>)0</u>		Extra	ction Method: EPA 5030F	<u> [P/1]</u>		
<u>Blank</u>	<u>0090069-Bl</u>	<u>LK1</u>				1.00			
Preon 113	9/13/00			ND	ug/l "	0.500			
Bromodichloromethane	M			ND	**				
3romoform				ND	**	0.500		•	
3romomethane	H .			ND	." H	1.00			
Carbon tetrachloride	Ħ			ND		0.500			
Chlorobenzene	17			ND	H	0.500			
Chloroethane	H			ND	a .	1.00			
2-Chloroethylvinyl ether	н			ND	#	5.00			
Chloroform	π			ND	#	0.500		•	
Chloromethane	#		-	ND	**	1.00			
Dibromochloromethane				ND		0.500			
,3-Dichlorobenzene	n			ND	H	0.500			
,4-Dichlorobenzene	n			ND	H	0.500			
,2-Dichlorobenzene				ND	41	0.500		÷	
,1-Dichloroethane	**			ND	17	0.500			
,2-Dichloroethane	Ħ			ND.	ŧ	0.500			
,1-Dichloroethene	#1		•	ND	н	0.500			
ris-1,2-Dichloroethene	n			ND	•	0.500			
rans-1,2-Dichloroethene	H			ND	11 ·	0.500			
2-Dichloropropane	н			ND	M	0.500			
::s-1,3-Dichloropropene	rt			ND	Ħ	9.500			
rans-1,3-Dichloropropene	**			ND	H	0.500			
Methylene chloride	11			ND		5.00			
	n			ND	п	0.590			
1,1,2,2-Tetrachloroethane	н			ND	# .	0.500			
Tetrachloroethene				ND		0.500			
1,1,1-Trichloroethane				ND	**	0.500			
1,1,2-Trichloroethane	"			ND	п	0.500			
Trichloroethene						0.500			
Trichlorofluoromethane	•			ND	11	0.500			
Vinyl chloride	#1			ND	- "	70,0-130 88.4			
Surrogate: 1-Chloro-2-fluorobenzene	н	10.0		8.84		70,0-130 06.1			
Blank	0090069-E	sLK2							
Freon 113	9/14/00			ND	ug/l	1.00			
Bromodichloromethane	#		•	, ND	Ħ	0.500		*	
Bromoform	π			ND	Ħ	0.500			
Bromomethane	#			ND	#	1.00			
Carbon tetrachloride	17			ND	H	0.500			
Chlorobenzene				ND	H	0.500			
Chloroethane				ND	**	1.00			

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*Refer to end of report for text of notes and definitions.



Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin, CA 94568

Project:

Tosco(4)

Sampled: 9/11/00

Project Number: Project Manager:

Unocal SS# 5430/ 1935 Washington Ave., San Likandired: 9/11/00 Deanna Harding

Reported: 9/26/00

	Date	Spike	Sample	QC		Reporting Limit	Recov.	RPD	RPD	
Analyte	Analyzed	Level	Result	Result	Units	Recov. Limits	%	Limit	% N	otes*
Allalyte	Analyzad	LATO	. 100000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
Blank (continued)	0090069-BI	LK2							•	
2-Chloroethylvinyl ether	9/14/00	 .	•	ND.	ug/l	5.00				
Chloroform	Ħ			ND	11	0.500				
Chloromethane	H			ND	и .	1.00				
Dibromochloromethane				ND	M	0.500			٠,	
1,3-Dichlorobenzene	Ħ		•	ND		0.500				
1,4-Dichlorobenzene	#			ND	**	0.500				
1,2-Dichlorobenzene	. #			ND	# .	0.500				
1,1-Dichloroethane	н			ND	n	0.500				
1,2-Dichloroethane	Ħ			ND	. 17	0.500	•		-	
1,1-Dichloroethene	n			ND	H	0.500				
cis-1,2-Dichloroethene	н .			ND	16	0.500				
trans-1,2-Dichloroethene	17			ND	e	0.500				
1,2-Dichloropropane	11		•	ND	n	0.500				
cis-1,3-Dichloropropene	#			ND	**	0.500				
trans-1,3-Dichloropropene	n			ND	11	0.500				
Methylene chloride	н			ND	#	5.00				
1,1,2,2-Tetrachloroethane	w			ND	. 11	0.500				
Tetrachloroethene	#			ND		0.500				
_:	**			ND		0.500				
1,1,1-Trichloroethane			•	NĐ		0.500				•
1,1,2-Trichloroethane Trichloroethene				ND	*	0.500				
	н	•		ND	**	0.500	,			
Trichlorofluoromethane	er			ND	Ħ	0.500				
Vinyl chloride	н	10.0	· ·	8.24	- #	70.0-130	82.4			
Surrogate: I-Chloro-2-fluorobenzene	-	10,0	•	0.27		, 0,0 200				
LCS	0090069-B	S1								
Chlorobenzene	9/13/00	10.0		9.27	ug/l	70.0-130	92.7			
1,1-Dichloroethene	D/ 15/00	10.0		9.42	н о .	65.0-135	94.2			
Trichloroethene	п	10.0		9.45	#	70.0-130	94.5		•	
Surrogate: 1-Chloro-2-fluorobenzene	#	10.0		8.06	7	70.0-130	80.6			
Sarrogale. 1-Chioro-2-jiuorobenzene		10.0								
LCS	0090069- B	S2								
Chlorobenzene	9/14/00	10.0	•	8.73	ug/l	70.0-130	87.3			
1,1-Dichloroethene	#	10.0	•	8.98		65.0-135	89.8			
Trichloroethene	н	10.0		9.08	и	70.0-130	90.8			
Surrogate: 1-Chloro-2-fluorobenzene		10.0		8.59	- #	70.0-130				
Dair Oguso. I Cinor o a jimor docinecite							•			
Matrix Spike	0090069-N	<u>181 I</u>	.00 <u>9066-11</u>			·				
Chlorobenzene	9/13/00	10.0	ND	10.2	ug/l	60.0-140				
1,1-Dichloroethene	n	10.0	ND	8.46	H	60.0-140				
Trichloroethene	н .	10.0	ND	9.10	Ħ	60.0-140	91.0			
* * ******** CANTAGEA		• • • •								

Sequoia Analytical - San Carlos

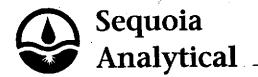
*Refer to end of report for text of notes and definitions.





Gettler-Ryan/Geostrategies(1)
Project: Tosco(4)
Sampled: 9/11/00
6747 Sierra Court, Suite J
Project Number: Unocal SS# 5430/ 1935 Washington Ave., San LRandived: 9/11/00
Dublin, CA 94568
Project Manager: Deanna Harding Reported: 9/26/00

			inds.by E.P. pr.Amtyrie			mare en co				
	Date	Spike	Sample	QC	-	Reporting Limit		RPD	RPD	
Analyte	Analyzed	Level	Result	Result	Units	Recov. Limits	%	Limit	<u>%</u>	Notes*
Matrix Spike (continued)	0090069-M	<u>S1 L</u>	.009066-11		•			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	
Surrogate: 1-Chloro-2-fluorobenzene	9/13/00	10.0		9.00	ug/l	70.0-130	90.0			
Matrix Spike Dup	0090069-M	<u>SD1 L</u>	.009066-11					,		
Chlorobenzene	9/13/00	10.0	ND	9.59	ug/l	60.0-140	95.9	25.0	6.16	
1,1-Dichloroethene	n	10.0	ND	8.78	11	60.0-140	87.8	25.0	3.71	
Trichloroethene	, н	10.0	ND	9.07	# .	60.0-140	90.7	25.0	0.330	
Surrogate: 1-Chloro-2-fluorobenzene	*	10.0		8.39	. "	70.0-130	83.9			· · · · · · · · · · · · · · · · · · ·



1551 Industrial Road San Carlos, CA 94070-4111 (650) 232-9600 FAX (650) 232-9612 www.sequoialabs.com

Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin, CA 94568

Project: Tosco(4) Sampled: 9/11/00

Project Number: Unocal SS# 5430/ 1935 Washington Ave., San Litandreed: 9/11/00

Project Manager: Deanna Harding

Reported: 9/26/00

Notes and Definitions

#	Note
1 .	Chromatogram Pattern: Weathered Gasoline C6-C12
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
Recov.	Recovery
RPD	Relative Percent Difference

TOSCO (UNOCAL) SS#5430 San Leandro, CA

MONITORING & SAMPLING EVENT October 13, 2000

WELL MONITORING/SAMPLING FIELD DATA SHEET

Thickness: Item (product/water) Thickness: Item (product/water) Volume 2" = 0.17 3" = 0.38 Factor (VF) 6" = 1.50 1 Sampling Equipment: Bailer Stack Suction Grundfos Other: Water Conditions: Crab Sample Other: Water Color: Wo Craft Color Water Color: Wo Craft Color Water Color: Wo Craft Color Water Color: Wo Conductivity Temperature D.O. (mg/L) Time Volume pit Conductivity Temperature D.O. (mg/L) Time Volume pit Conductivity Temperature D.O. (mg/L) Time Volume pit Conductivity Temperature D.O. (mg/L)	(Gailons) 4" = 0.66 2" = 5.80 Volume: 5 27 (gal.)
Thickness:	(Gallons) 4" = 0.66 2" = 5.80 Volume: 5 27 (gal.)
Purge Disposable Bailen Sampling Equipment: Stack Suction Grundfos Other: Starting Time: Starting Time: Purging Flow Rate: Disposable Bailen Starting Time: Starting Time: Disposable Bailen Starting Time: Starting Time: Purging Flow Rate: Sediment Description: If yes; Time: Conductivity Temperature D.O. (gal.) 7.02 Conductivity Temperature D.O. (mg/L) Conductivity Temperature D.O. (mg/L) Conductivity Temperature D.O. (mg/L)	4" = 0.66 2" = 5.80 Volume: 5 27 (cal.)
Purge Purge Disposable Bailen Equipment: Bailer Stack Suction Grundfos Other: Starting Time: Purging Flow Rate: Disposable Bailen Sampling Equipment: Weather Conditions: Water Color: Sediment Description: If yes; Time: Volume Time Volume Pit Conductivity January Temperature D.O. (mgL) A 13	Volume: 5 · 27 _(gal.)
Purge Disposable Bailen Sampling Equipment: Bailer Stack Suction Grundfos Other: Other: Starting Time: 12:24 Weather Conditions: Sampling Time: Water Color: Not CEAP Color Sediment Description: Purging Flow Rate: com. Sediment Description: Did well de-water? No If yes; Time: Volume: Time Volume pH Conductivity Temperature D.O. (mg/L) 12:29 7.02 7.02 7.02 7.03 7.03 7.03 7.03 7.03 7.03 7.03 7.03	DAVACY Odor:(gal.)
Equipment: Bailer Equipment: Disposable Bailer Stack Suction Grundfos Grab Sample Other: Other: Other: Other: Starting Time: 12:24 Weather Conditions: Sampling Time: 12:50 Water Color: NOT CLEAR Color: Not Clea	D/U/Uγ dor:(gsl.)
Stack Suction Grundfos Other: Starting Time: Starting Time: Sampling Time: Sampling Time: Purging Flow Rate: Did well de-water? Time Volume PH Conductivity Temperature (mg/L) 2:27 7:02	D/U/Uγ dor:(gsl.)
Suction Grundfos Other: Starting Time: Starting Time: Sampling Time: Sampling Time: Sampling Time: Sediment Description: Did well de-water? Time Volume (gal.) 7.02 Conductivity Temperature (mg/L) 7.02 7.02 7.03	(gsl.)
Grundfos Other: Starting Time: Sampling Time	D/U/Uγ dor:(gal.)
Other:	D/U/Uγ dor:(gal.)
Starting Time: 12:26 Weather Conditions: Starting Time: 12:50 Water Color: NOT CURAL COLOR:	odor:(gal.)
Sampling Time: Sampling Time: Sampling Time: Sampling Time: Sediment Description: Sediment Description: Sediment Description: Volume: Volume: Volume: Volume: Volume: Sampling Time: Volume: odor:(gal.)	
Purging Flow Rate: Sediment Description: Volume: Did well de-water? If yes; Time: Volume: Time	(gai.)
Time Volume pH Conductivity Temperature D.O. (mg/L)	
Time Volume pH Conductivity Temperature D.O. (mg/L)	
Time Volume pH Conductivity Temperature D.O. (mg/L)	
2:29 (gal.) 7.02 μmhos/cm 2(χ) (mg/L)	OPP Alkalinies
12:29 (gal.) 7.02 µmhos/cm 21.8 (mg/L)	
12:33 4 6:79 582 21.1	(mV) (ppm)
	· · · · · · · · · · · · · · · · · · ·
12:3x 5.5 6.76 579 2-1.0	
LABORATORY INFORMATION	
SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE / LABORATORY	ANALYSES
U-6 SIBILYS Y HIL SEQUOIA	PHICHTONIANA.
3	= 027 1 1, 2D1A
COMMENTS:	• •



Teace Marketing Company 2000 Cree Conyon PL, St., 400 Son Remon, California 94563

Foolity NumberUNOCAL_SS#5430
Facility Address 1935 WASHINGTON AVE. SAN LEANDRO, CA.
Consultant Project Number 180107_85
Consultant Nome Gettler-Ryan Inc. (G-R Inc.)
Address 6747 Sierra Court, Suite J. Dublin, CA 94568
Project Contact (Name) Deanna L. Harding

mber_UNOCAL SS#5430	Contact (Name) Mr. DAVID DEWITT
dress 1935 WASHINGTON AVE. SAN LEANDRO, CA.	(Phone) (925)-277-2384
Number 180107_85	Laborotory Name Sequoia Analytical WOI0335
Gettler-Ryan Inc. (G-R Inc.)	Loboratory Release Number
Sierra Court, Suite J. Dublin, CA 94568	Samples Collected by (Name) STEVE BALIAN
(Name) Deanna L. Harding	Collection Date 10-13-00
	Signoture STEVE BALLAN (SA)

				U	,voue) <u>7 T</u>	0-331-73:	XD-1/LOX	NUMBe	<u>, 617 (</u>	771	7000	L	ignoture	3,77							
			B					<u>; </u>				•	Analys	ee To B	• Perfo	med				,	DO NOT BILL
Sample Number	Lab Sample Number	Number of Containers	Moths S = Soll A = Air W = Water C = Charcool	Type G = Grab C = Composite D = Discrete	•m=	Sample Preservation	load (Yes or No)	TPH Gas + STEX WANTEE	TPH Dieses (8015)	Oil and Gream (5520)	Purgeable Malocarbons (8010)	Purgeable Aromadas (8020)	Purpeoble Organice (8240)	Extractable Organics (8270)	Metals C&Cr.Pb.Zn.Ni (ICAP or A)	5 0 kyj w,					TB-LB ANALYSIS 5 DAY TAT Remorks
TB-LB	DIA	(W	G		Hul	У	X													
	DZA E	5	v	"	12:50	11	Y						<u> </u>			X		•••			
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Relinquished By	(Signature)		Org	onlastion		ete/Time	Rec	loved Fo	or Labor	alory B	y (Signa	ture)	we	4	Date 10	/Time /13/	20	4	(10	Doya ntrooted



20 October, 2000

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

RE: Unocal Sequoia Report: W010335

Enclosed are the results of analyses for samples received by the laboratory on 13-Oct-00 17:55. 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 Wainut Creek, CA 94598 (925) 988-9600 FAX (925) 988-9673 www.sequolalabs.com

Gettler Ryan, Inc. - Dublin

6747 Sierra Court Suite J

Dublin CA, 94568

Project: Unocal

Project Number: Unocal # 5430 Project Manager: Deanna L. Harding Reported: 20-Oct-00 15:33

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-LB	W010335-01	Water	13-Oct-00 00:00	13-Oct-00 17:55
U-6	W010335-02	Water	13-Oct-00 12:50	13-Oct-00 17:55

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

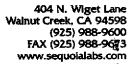
Project: Unocal

Project Number: Unocal # 5430 Project Manager: Deanna L. Harding

Reported: 20-Oct-00 15:33

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
TB-LB (W010335-01) Water	Sampled: 13-Oct-00 00:00	Receive	d: 13-Oct-	00 17:55					
Purgeable Hydrocarbons	ND	50	ug/l	1	0Ј18003	18-Oct-00	18-Oct-00	EPA 8015M/8020	
Benzene	ND	0.50	IF	11		" "	11	T	
Toluene	ND	0.50	н	11		••	41		
Ethylbenzene	ND	0.50	77	77	11	*1		. "	
Xylenes (total)	ND	0.50	н	Ħ	**	Ħ	41	n	
Methyl tert-butyl ether	ND	2.5	**		"	w	41	14	
Surrogate: a,a,a-Trifluorotoluer	ne	97.7%	70-1.	30	п	"	,,	п	





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

Project Number: Unocal # 5430 Project Manager: Deanna L. Harding Reported: 20-Oct-00 15:33

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
U-6 (W010335-02) Water	Sampled: 13-Oct-00 12:50	Received: 1	13-Oct-00	17:55					.,,
tert-Butyl alcohol	ND	50	ug/l	1	0J19027	19-Oct-00	19-Oct-00	EPA 8260B	
Methyl tert-butyl ether	ND	2.0	H	H	π	и.,	n	W	
Di-isopropyl ether	ND	2.0		**	"	"	n	n	
Ethyl tert-butyl ether	ND	2.0	# "	#	н	. 11	**		
tert-Amyl methyl ether	ND	2.0		Ħ	**	19	m	*	
1,2-Dichloroethane	ND	2.0	11	11	-	n	Ħ	-	
Ethylene dibromide	ND	2.0	#	н	**	"	**	•	
Surrogate: Dibromofluoron	nethane	98.0 %	50-1	50	"	"	"	и	
Surrogate: 1,2-Dichloroeth		96.0 %	50-1	50	"	*	n	"	•

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

Project Number: Unocal # 5430 Project Manager: Deanna L. Harding Reported: 20-Oct-00 15:33

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 0J18003 - EPA 5030B [P/T]										
Blank (0J18003-BLK1)				Prepared & Analyzed: 18-Oct-00						
Purgeable Hydrocarbons	ND	50	ug/l	-				`		
Benzene	ND	0.50	**							
Toluene	ND	0.50	н							
Ethylbenzene	ND	0.50	*							
Xylenes (total)	ND	0.50	н							
Methyl tert-butyl ether	ND	2.5	"				•	-		
Surrogate: a, a, a-Trifluorotoluene	30.2		#	30.0	•	101	70-130			
LCS (0J18003-BS1)		Prepared & Analyzed: 18-Oct-00								
Benzene	18.3	0,50	ug/l	20.0		91.5	70-130			
Toluene .	18.7	0.50	Ħ	20.0		93.5	70-130			
Ethylbenzene	19.0	0.50	11	20.0		95.0	70-130			
Xylenes (total)	54.8	0.50	-	60.0		91.3	70-130			
Surrogate: a, a, a-Trifluorotoluene	27.3		*	30.0		91.0	70-130			-
Matrix Spike (0J18003-MS1)	Source: W010128-02			Prepared & Analyzed: 18-Oct-00				•		
Benzene	18.7	0.50	ug/l	20.0	ND	93.5	70-130			
Foluene	19.0	0.50	**	20.0	ND	95.0	70-130			
Ethylbenzene	19.4	0.50	**	20.0	ND	97.0	70-130			
Kylenes (total)	56.1	0.50	н	60.0	ND	93.5	70-130			
Surrogate: a, a, a-Trifluorotoluene	27.3		n	30.0		91.0	70-130			_
Matrix Spike Dup (0J18003-MSD1)	Source: W010128-02			Prepared & Analyzed: 18-Oct-00						
Benzene	19.4	0.50	ug/l	20.0	ND	97.0	70-130	3.67	20	
Toluene	19.9	0.50	P	20.0	ND	99.5	70-130	4.63	20	
Ethylbenzene	19.8	0.50	н	20.0	ND	99.0	70-130	2.04	20	
Kylenes (total)	56.0	0.50	Ħ	60.0	ND	93.3	70-130	0.178	20	
Surrogate: a, a, a-Trifluorotoluene	28.0		"	30.0		93.3	70-130			



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

Project Number: Unocal # 5430 Project Manager: Deanna L. Harding Reported: 20-Oct-00 15:33

Volatile Organic Compounds by EPA Method 8260B - Quality Control Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J19027 - EPA 5030B [P/T]										
Blank (0J19027-BLK1)	Prepared & Analyzed: 19-Oct-00									
Ethanol	ND	500	ug/l							
tert-Butyl alcohol	ND	50	n . •					•		
Methyl tert-butyl ether	ND	2.0	n							
Di-isopropyl ether	ND	2.0	"							
Ethyl tert-butyl ether	ND	2.0	n							
tert-Amyl methyl ether	ND	2.0								
1,2-Dichloroethane	ND	2.0	m							
Ethylene dibromide	ND	2.0								
Surrogate: Dibromofluoromethane	51.0			50.0		102	50-150			
Surrogate: 1,2-Dichloroethane-d4	50.0		H	50.0		100	50-150			
LCS (0J19027-BS1)	Prepared & Analyzed: 19-Oct-00									
Methyl tert-butyl ether	43.9	2.0	ug/l	50.0		87.8	70-130	-		
Surrogate: Dibromofluoromethane	49.0	· · ·	"	50.0		98.0	50-150			
Surrogate: 1,2-Dichloroethane-d4	48.0		"	50.0		96.0	50-150			
Matrix Spike (0J19027-MS1)	Source: W010225-02			Prepared & Analyzed: 19-Oct-00						
Methyl tert-butyl ether	45.9	2.0	ug/l	50.0	ND	91.8	60-150			
Surrogate: Dibromofluoromethane	49:0		"	50.0	<u> </u>	98.0	50-150		•	-
Surrogate: 1,2-Dichloroethane-d4	48.0		"	50.0		96.0	50-150			
Matrix Spike Dup (0J19027-MSD1)	Source: W010225-92		Prepared & Analyzed: 19-Oct-00							
Methyl tert-butyl ether	51.4	2.0	ug/l	50.0	ND	103	60-150	11.3	25	
Surrogate: Dibromofluoromethane	49.0		rr rr	50.0		98.0	50-150	· · · · · · · · · · · · · · · · · · ·		
Surrogate: 1,2-Dichloroethane-d4	48.0		*	50.0		96.0	50-150			



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

Gettler Ryan, Inc. - Dublin

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

Project Number: Unocal # 5430 Project Manager: Deanna L. Harding Reported: 20-Oct-00 15:33

Notes and Definitions

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference