October 4, 2001 G-R #180021

TO:

Mr. David B. De Witt

Tosco Marketing Company

2000 Crow Canyon Place, Suite 400

San Ramon, California 94583

CC: Mr. Doug Lee

Gettler-Ryan Inc.

Dublin, California

FROM:

Deanna L. Harding

Project Coordinator Gettler-Ryan Inc.

6747 Sierra Court, Suite J Dublin, California 94568 **RE:** Tosco (Unocal) Service Station

#6419 6401 Dublin Boulevard

Dublin, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	October 2, 2001	Groundwater Monitoring and Sampling Report Second Semi-Annual - Event of August 24, 2001

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 *October 18, 2001*, this report will be distributed to the following:

cc: Ms. Eva Chu, Alameda County Health Care Services, 1131 Harbor Bay Pkwy., Alameda, CA 94502

Enclosure



October 2, 2001 G-R Job #180021

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

RE: Second Semi-Annual Event of August 24, 2001

Groundwater Monitoring & Sampling Report

Tosco (Unocal) Service Station #6419

6401 Dublin Boulevard Dublin, California

Dear Mr. De Witt:

This report documents the most recent groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R) at the referenced site. All field work was conducted in accordance with G-R Standard Operating Procedure - Groundwater Sampling (attached).

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. Dissolved Oxygen Concentrations are 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, 2 and 4. A Concentration Map is included as Figure 2. The chain of custody document and laboratory analytical reports are also attached.

No. 6882

Sincerely,

Deanna L. Harding

Project Coordinator

Douglas J. Mee

Senior Geologist, R.G. No. 6882

Anamarie Nercau

Figure 1: Figure 2: Potentiometric Map Concentration Map

Table 1:

Groundwater Monitoring Data and Analytical Results
Groundwater Analytical Results - Oxygenate Compounds

Table 2: Table 3:

Dissolved Oxygen Concentrations

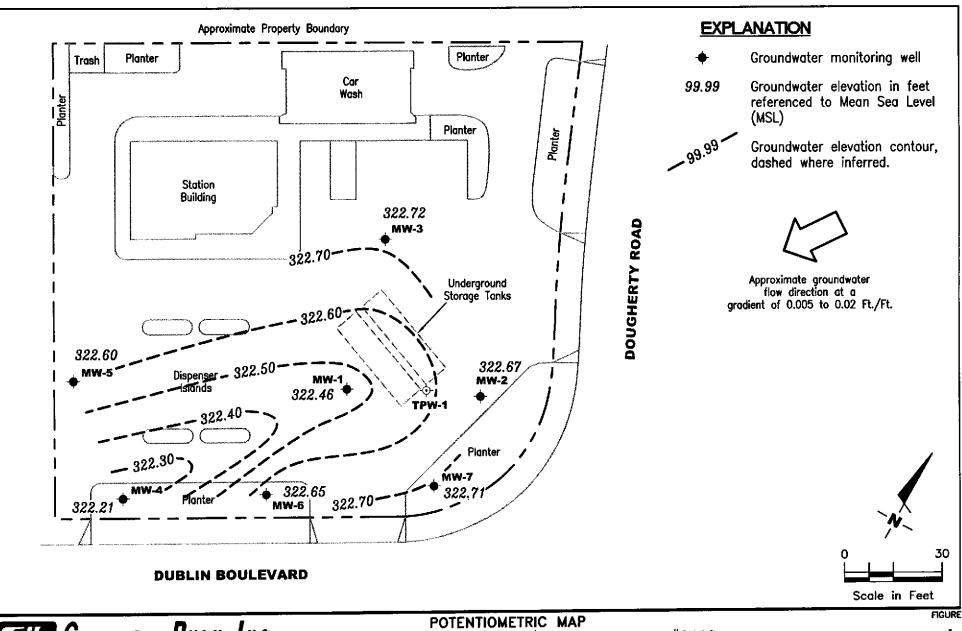
Table 4:
Attachments:

Groundwater Analytical Results - Metals
Standard Operating Procedure - Groundwater Sampling

Field Data Sheets

6419.gml

Chain of Custody Document and Laboratory Analytical Reports





REVIEWED BY

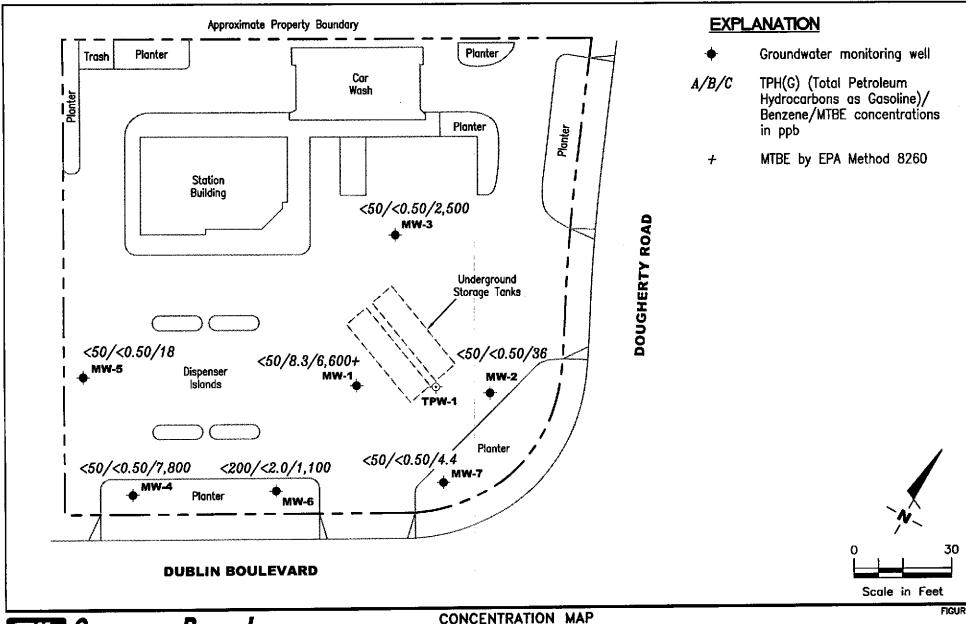
Tosco (Unocal) Service Station #6419 6401 Dublin Boulevard Dublin, California

DATE

REVISED DATE

PROJECT NUMBER 180021

August 24, 2001



GETTLER - RYAN INC. 6747 Sierro Ct., Suite J (925) 551-7555

Tosco (Unocal) Service Station #6419 6401 Dublin Boulevard Dublin, California

REVISED DATE

PROJECT NUMBER REVIEWED BY 180021

FILE NAME: P:\Envira\Tasco\6419\Q01-6419.DWG | Layout Tab: Con3

August 24, 2001

DATE

FIGURE

Table 1
Groundwater Monitoring Data and Analytical Results

DATE	DTW	S.I.	GWE	TPH-D	TPH-G	В	T	E	X	MTBE
	(fi.)	(ft.bgs)	(msl)	(pph)	(pph)	(pph)	(pph)	(pph)	(pph)	(ppb)
					-					
03/14/94	7.27	4.0-19.0								
08/25/94	8.57		321.88	910.	9,2002	48	ND	540	ND	
09/30/94	8.78		321.67							
10/20/94	8.98		321.47							
11/18/94	7.69		322.76	910 ³	5,100	33	ND	560	38	
12/20/94	7.58		322.87							
01/17/95	6.03		324.42							
02/15/95	6.29		324.16	660 ¹	3,300	13	ND	180	5.2	
03/13/95	5.64		324.81							
04/06/95	5.62		324.83	**						•
05/17/95	6.26		324.19	200 ³	130	0.75	ND	1.5	ND	
06/15/95	6.75		323.70							
	7.91		322.54		490	9.1	ND	21		5
	9.03		321.42		1,400	18	3.0	98		5
			324.68		560	9.3	ND	22		1,300
					ND	ND	ND	ND		640
					120 ⁴	1.0	0.95	ND		280
					ND	ND	ND	ND		100
					ND ⁷	130				32,000
					ND ⁷	ND^7				26,000/24,000 ⁸
					ND^7	ND^7				84,000/100,000 ⁸
					ND ⁷	ND ⁷	ND ⁷	ND ⁷	ND ⁷	140,000/120,000 ⁸
					••					
					ND ⁷	ND ⁷	ND^7	ND ⁷		91,000/140,000 ¹⁰
					ND ⁷	ND ⁷	ND^7	ND ⁷	ND ⁷	38,000/39,0008
					14612	ND	ND	ND	ND	30,900/42,800 ¹⁰
						ND ⁷	ND ⁷	ND^7	ND^7	5,380/6,4308
						8.3	< 0.50	< 0.50	<0.50	10,000/6,600 ⁸
	03/14/94 08/25/94 09/30/94 10/20/94 11/18/94 12/20/94 01/17/95 02/15/95 03/13/95	03/14/94 7.27 08/25/94 8.57 09/30/94 8.78 10/20/94 8.98 11/18/94 7.69 12/20/94 7.58 01/17/95 6.03 02/15/95 6.29 03/13/95 5.64 04/06/95 5.62 05/17/95 6.26 06/15/95 6.75 08/25/95 7.91 11/28/95 9.03 02/26/96 5.77 08/23/96 7.78 02/17/97 5.73 08/18/97 7.38 02/02/98 ⁶ 5.10 08/24/98 6.73 02/10/99 5.46 04/12/99 6.38 05/21/99 5.95 08/02/99 6.75 02/11/00 6.44 07/26/00 ¹³ 7.08	03/14/94 7.27 4.0-19.0 08/25/94 8.57 09/30/94 8.78 10/20/94 8.98 11/18/94 7.69 12/20/94 7.58 01/17/95 6.03 02/15/95 6.29 03/13/95 5.64 04/06/95 5.62 05/17/95 6.26 06/15/95 6.75 08/25/95 7.91 11/28/95 9.03 02/26/96 5.77 08/23/96 7.78 02/17/97 5.73 08/18/97 7.38 02/17/97 5.73 08/18/97 7.38 02/02/98 ⁶ 5.10 08/24/98 6.73 02/10/99 5.46 04/12/99 6.38 05/21/99 5.95 08/02/99 6.75 02/11/00 6.44 07/26/00 ¹³ 7.08 02/02/01 6.99	03/14/94 7.27 4.0-19.0 323.18 08/25/94 8.57 321.88 09/30/94 8.78 321.67 10/20/94 8.98 321.47 11/18/94 7.69 322.76 12/20/94 7.58 322.87 01/17/95 6.03 324.42 02/15/95 6.29 324.16 03/13/95 5.64 324.81 04/06/95 5.62 324.83 05/17/95 6.26 324.19 06/15/95 6.75 323.70 08/25/95 7.91 322.54 11/28/95 9.03 321.42 02/26/96 5.77 324.68 08/23/96 7.78 322.67 02/17/97 5.73 324.50 08/18/97 7.38 322.85 02/02/98 ⁶ 5.10 325.13 08/24/98 6.73 323.50 02/10/99 5.46 324.77 04/12/99 6.38 323.85	(fi.) (ft.bgs) (msl) (ppb) 03/14/94 7.27 4.0-19.0 323.18 810¹ 08/25/94 8.57 321.88 910³ 09/30/94 8.78 321.67 10/20/94 8.98 321.47 11/18/94 7.69 322.76 910³ 12/20/94 7.58 322.87 01/17/95 6.03 324.42 02/15/95 6.29 324.16 660¹ 03/13/95 5.64 324.81 04/06/95 5.62 324.83 05/17/95 6.26 324.19 200³ 06/15/95 6.75 323.70 08/25/95 7.91 322.54 11/28/95 9.03 321.42 08/23/96 5.77 324.68 08/23/96 7.78 322.67 02/17/97 5.73 324.50 <tr< td=""><td>O3/14/94 7.27 4.0-19.0 323.18 810¹ 1,800² 08/25/94 8.57 321.88 910³ 9,200² 09/30/94 8.78 321.67 10/20/94 8.98 321.47 11/18/94 7.69 322.76 910³ 5,100 12/20/94 7.58 322.87 01/17/95 6.03 324.42 02/15/95 6.29 324.16 660¹ 3,300 03/13/95 5.64 324.81 04/06/95 5.62 324.83 05/17/95 6.26 324.19 200³ 130 06/15/95 6.75 323.70 08/25/95 7.91 322.54 490 11/28/95 9.03 321.42 1,400 02/26/96 5.77 324.68 560 08</td><td>O3/14/94 7.27 4.0-19.0 323.18 810¹ 1.800² 17 08/25/94 8.57 321.88 910³ 9,200² 48 09/30/94 8.78 321.67 10/20/94 8.98 321.47 11/18/94 7.69 322.76 910³ 5,100 33 12/20/94 7.58 322.87 01/17/95 6.03 324.42 02/15/95 6.29 324.16 660¹ 3,300 13 03/13/95 5.64 324.81 05/17/95 6.29 324.19 200³ 130 0.75 06/15/95 5.62 324.83 05/17/95 6.26 324.19 200³ 130 0.75 06/15/95 7.91 322.54 490 9.1</td><td> O3/14/94</td><td> O3/14/94</td><td> 03/14/94</td></tr<>	O3/14/94 7.27 4.0-19.0 323.18 810¹ 1,800² 08/25/94 8.57 321.88 910³ 9,200² 09/30/94 8.78 321.67 10/20/94 8.98 321.47 11/18/94 7.69 322.76 910³ 5,100 12/20/94 7.58 322.87 01/17/95 6.03 324.42 02/15/95 6.29 324.16 660¹ 3,300 03/13/95 5.64 324.81 04/06/95 5.62 324.83 05/17/95 6.26 324.19 200³ 130 06/15/95 6.75 323.70 08/25/95 7.91 322.54 490 11/28/95 9.03 321.42 1,400 02/26/96 5.77 324.68 560 08	O3/14/94 7.27 4.0-19.0 323.18 810¹ 1.800² 17 08/25/94 8.57 321.88 910³ 9,200² 48 09/30/94 8.78 321.67 10/20/94 8.98 321.47 11/18/94 7.69 322.76 910³ 5,100 33 12/20/94 7.58 322.87 01/17/95 6.03 324.42 02/15/95 6.29 324.16 660¹ 3,300 13 03/13/95 5.64 324.81 05/17/95 6.29 324.19 200³ 130 0.75 06/15/95 5.62 324.83 05/17/95 6.26 324.19 200³ 130 0.75 06/15/95 7.91 322.54 490 9.1	O3/14/94	O3/14/94	03/14/94

Table 1
Groundwater Monitoring Data and Analytical Results

WELL ID/	DATE	DTW	S.I.	GWÉ	TPH-D	TPH-G	В	T	E	X	MTBE
TOC*		(ft.)	(ft.bgs)	(msl)	(pph)	(ppb)	(pph)	(ppb)	(pph)	(pph)	(pph)
MW-2											
330.40	03/14/94	7.23	4.0-20.0	222.17		M	ND	5 B		• •	
330.40			4.0-20.0	323.17		ND	ND	2.8	1.1	8.0	
	08/25/94	8.41		321,99		ND	ND	ND	ND	ND	
	09/30/94	8.73		321.67							
	10/20/94	8.92		321.48							
	11/18/94	7.67		322.73		ND	ND	ND	ND	ND	
	12/20/94	7.48		322.92							
	01/17/95	6.00		324.40							
	02/15/95	6.16		324.24		ND	ND	ND	ND	ND	
	03/13/95	5.59		324,81	- -						
	04/06/95	5.51		324.89							
	05/17/95	6.15		324.25		ND	ND	ND	ND	ND	
	06/15/95	6.61		323.79							
	08/25/95	7.45		322.95		ND	ND	ND	ND	ND	
	11/28/95	8.85		321.55		ND	ND	ND	ND	ND	
	02/26/96	5.49		324.91		ND	ND	ND	ND	ND	
	08/23/96	7.44		322.96	SAMPLED AN	NUALLY				**	
330.27	02/17/97	5.64		324.63		ND	ND	ND	ND	ND	ND
	08/18/97	7.40		322.87							
	02/02/98	5.09		325.18		ND	ND	ND	ND	ND	62
	08/24/98	6.70		323.57							
	02/10/99	5.56		324.71		ND	ND	ND	ND	ND	130
330.30	05/21/99	5.98		324.32							
5.10.30	03/21/99	6.72		323.58		ND	ND	ND	ND	ND	120
						ND	ND	ND	ND	ND	39
222.24	02/11/00 07/26/00 ¹³	6.43		323.87		ND ND	ND	ND	ND	ND	89.9
330.24		7.03		323.21			ND ND	ND ND	ND	ND	20.1
	02/02/01	6.81		323.43		ND -50				<0.50	36
	08/24/01	7.57		322.67		<50	<0.50	<0.50	<0.50	<0.50	270

Table 1
Groundwater Monitoring Data and Analytical Results

WELL ID/	DATE	DTW	S.I.	GWE	TPH-D	TPH-G	В	т	E	X	MTBE
TOC*		(ft.)	(ft.bgs)	(msl)	(pph)	(ppb)	(pph)	(ppb)	(pph)	(ppb)	(pph)
MW-3											
331.11	03/14/94	7.93	4.0-20.0	323.18		150 ⁴	ND	ND	ND	ND	
	08/25/94	9.20		321.91		130 ⁴	ND	ND	ND ND	ND ND	
	09/30/94	9.43		321.68					ND 	ND 	
	10/20/94	9.64		321.47							
	11/18/94	8.39		322.72		130 ⁴	ND	ND	ND	ND	
	12/20/94	8.20		322,91	Eu.						
	01/17/95	6.72		324.39							
	02/15/95	6.93		324.18		130 ⁴	ND	ND	ND	ND	
	03/13/95	6.30		324.81							
	04/06/95	8.20		322.91							
	05/17/95	6.88		324.23		99⁴	ND	ND	ND	ND	
	06/15/95	7.35		323.76	~ -		*-				
	08/25/95	8.20		322.91		ND	ND	ND	ND	ND	5
	11/28/95	9.52		321.59		ND	ND	ND	ND	ND	
	02/26/96	6.25		324.86		ND	ND	ND	ND	ND	5
	08/23/96	7.98		323.13	SAMPLED AN	NUALLY					
330.68	02/17/97	6.07		324.61		ND	ND	ND	ND	ND	68
	08/18/97	7.82		322.86							
	02/02/98	5.50		325.18		ND	ND	ND	ND	ND	100
	08/24/98	7.12		323.56							
	02/10/99	5.80		324.88		ND	ND	ND	NĐ	ND	92
330.49	05/21/99	6.16		324.33							
	08/02/99	6.95		323.54		ND	ND	ND	ND	ND	140
	02/11/00	6.71		[1]		ND	ND	ND	ND	ND	46
330.60	07/26/00 ¹³	7.35		323.25		ND	ND	ND	ND	ND	927
	02/02/01	7.17		323.43		ND ⁷	ND ⁷	ND^7	ND ⁷	ND ⁷	2,240
	08/24/01	7.88		322.72	••	<50	<0.50	<0.50	<0.50	< 0.50	2,500

Table 1
Groundwater Monitoring Data and Analytical Results

WELL ID/	DATE	DTW	S.I.	GWE	TPH-D	TPH-G	В	T	E	X	MTBE
TOC*		(ft.)	(ft.bgs)	(msl)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
24577.4											
MW-4	05/01/009		10.100	222.52		NE	NID	ND	ND	ND	960/910 ⁸
330.36	05/21/999	6.43	4.0-19.0	323.93		ND	ND			11	ND
	08/02/99	7.34		323.02		ND	10	ND	13		
	02/11/00	6.92		323.44		ND	ND	ND	ND	ND	2,700
330.35	07/26/00 ¹³	7.68		322.67		ND	ND	ND	ND.	ND	3,710
	02/02/01	7.40		322.95		ND ⁷	ND ⁷	ND ⁷	ND ⁷	ND^7	5,340
	08/24/01	8.14		322.21	**	<50	<0.50	<0,50	<0.50	<0.50	7,800
MW-5											•
330.20	05/21/99 ⁹	5.99	4.0-19.0	324.21		ND	ND	ND	ND	ND	32/33 ⁸
20	08/02/99	6.83		323.37		ND	ND	ND	ND	ND	230
	02/11/00	6.34		323.86		ND	ND	ND	ND	ND	98
	07/26/00 ¹³	7.06		323.14		ND	ND	ND	ND	ND	25.9
	02/02/01	6.81		323.39		ND	ND	ND	ND	ND	18.0
	08/24/01	7.60		322.60		<50	<0.50	<0.50	<0.50	<0.50	18
MW-6	0					ND	ND	ND	ND	ND	2,200/2,300 ⁸
330.49	05/21/99 ⁹	6.24	4.0-19.0	324.25			ND	ND	ND	ND	ND
	08/02/99	7.10		323.39		ND		ND	ND	ND	2,500
	02/11/00	6.60		323.89		ND	ND	ND	ND	ND	4,280
	07/26/00 ¹³	7.31		323.18		ND	ND		ND ⁷	ND ⁷	1,990
	02/02/01	7.02		323.47		ND ⁷	ND ⁷	ND ⁷		· <2.0	1,100
	08/24/01	7.84		322.65		<200	<2.0	<2.0	<2.0	< 2.17	1,1100

 $\label{eq:Table 1} Table \ 1$ Groundwater Monitoring Data and Analytical Results

WELL ID/	DATE	DTW	S.I.	GWE	TPH-D	TPH-G	В	T	E	X.	MTBE
roc*		(ft.)	(ft.bgs)	(msl)	(ppb)	(ppb)	(ppb)	(ppb)	(pph)	(ppb)	(pph)
MW-7									•		
330.43	05/21/99 ⁹	6.13	4.0-19.0	324.30		ND	ND	ND	ИD	ND	22/22 ⁸
	08/02/99	6.92		323.51		ND	ND	ND	ND	ND	31
	02/11/00	6.50		323.93		ND	ND	ND	ND	ND	20
	07/26/00 ^{t3}	7.18		323.25		ND	ND	ND	ND	ND	17.9
	02/02/01	6.95		323.48		ND	ND	ND	ND	ND	ND
	08/24/01	7,72		322.71		<50	< 0,50	< 0.50	< 0.50	< 0.50	4.4
Trip Blank											
TB-LB	02/02/98					ND	ND	ND	ND	ND	ND
	08/24/98					ND	ND	ND	ND	ND	ND
	02/10/99	•-				ND	ND	ND	ND	ND	ND
	04/12/99					ND	ND	ND	ND	ND	ND
	05/21/99					ND	ND	ND	'ND	ND	ND
	08/02/99				**	ND	ND	ND	ND	ND	ND
	02/11/00					ND	ND	ND	ND	ND	ND
	02/11/00 07/26/00 ¹³					ND	ND	ND	ND	ND	ND
	02/02/01					ND	ND	ND	ND	ND	ND
	02/02/01 08/24/01					<50	<0.50	< 0.50	< 0.50	< 0.50	<2.5

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #6419 6401 Dublin Boulevard Dublin, California

EXPLANATIONS:

Groundwater monitoring data and laboratory results prior to February 2, 1998, were compiled from reports prepared by MPDS Services, Inc.

TOC = Top of Casing

TPH-D = Total Petroleum Hydrocarbons as Diesel

(ppb) = Parts per billion

DTW = Depth to Water

TPH-G = Total Petroleum Hydrocarbons as Gasoline

ND = Not Detected

(ft.) = Feet

B = Benzene

-- = Not Measured/Not Analyzed

S.I. = Screen Interval

T = Toluene

(ft.bgs) = Feet Below Ground Surface

E = Ethylbenzene

GWE = Groundwater Elevation

X = Xylenes

(msl) = Mean sea level

MTBE = Methyl tertiary butyl ether

- * TOC elevations have been surveyed relative to msl, per the benchmark on the northwest corner of Dougherty Road and Sierra Way, (Elevation = 331.728 feet, msl). These TOC elevations have been used prior to the February 17, 1997 monitoring event. TOC elevations have been resurveyed (after station rebuilding) relative to msl, per the Benchmark on the northwest corner of Dougherty Road and Sierra Way, (Elevation = 331.728 feet, msl). TOC elevations were surveyed on August 18, 2000. The benchmark for the survey was a chiseled square on top center of the concrete curb at the north curb return at the northwest corner of the intersection of Dougherty Road and Dublin Boulevard, (Benchmark Elevation = 330.60 ft., NGVD 1929).
- Laboratory report indicates the hydrocarbons detected appeared to be a diesel and non-diesel mixture.
- ² Laboratory report indicates the hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.
- 3 Laboratory report indicates the hydrocarbons detected did not appear to be diesel.
- ⁴ Laboratory report indicates the hydrocarbons detected did not appear to be gasoline.
- 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.
- Well appears to be obstructed at approximately 9 feet.
- Detection limit raised. Refer to analytical reports.
- ⁸ MTBE by EPA Method 8260.
- ⁹ Ethanol, t-butanol (TBA), di-isopropyl ether (DIPE), ethyl t-butyl ether (ETBE), and t-amyl methyl ether (TAME) by EPA Method 8260 were all ND.
- MTBE by EPA Method 8260, was analyzed past EPA recommended hold time.
- TOC has been damaged. Cannot accurately calculate GWE.
- Laboratory report indicates unidentified hydrocarbons C6-C12.
- Laboratory report indicates insufficient preservative to reduce ample pH to less than 2. Sample was analyzed within 14 days, but beyond the seventh day recommended for Benzene, Toluene, Xylene and Ethylbenzene.

Groundwater Analytical Results - Oxygenate Compounds

Tosco (Unocal) Service Station #6419 6401 Dublin Boulevard Dublin, California

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	МТВЕ (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (pph)	1,2-DCA (ppb)	EDB (ppb)
MW-1	07/26/00		ND^1	42,800	ND¹	ND ¹	ND ¹	ND ¹	ND¹
	02/02/01 08/24/01	 <25,000	 <1,000	6,430 6,600	 <100	 <100	 <100	 <100	 <100

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 = 1,2-Dibromoethane/Ethylene dibromide

(ppb) = Parts per billion

-- = Not Analyzed

ND = Not Detected

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

¹ Detection limit raised. Refer to analytical reports.

Dissolved Oxygen Concentrations Tosco (Unocal) Service Station #6419 6401 Dublin Boulevard Dublin, California

WELL ID	DATE	Before Purging	After Purging
		(mg/L)	(mg/L)
<u> </u>			
MW-1	02/15/95	••	4.30
	05/17/95		1.20
	08/25/95		2.71
	11/28/95		3.25
	02/26/96	5.23	1.41
	08/23/96	3.83	N/A
	02/17/97	0.82	0.78
	08/18/97	1.28	2.35
	05/16/01	1.54	
	08/24/01	••	3.10
MW-2	02/15/95		1.90
	02/26/96	0.62	0.43
	08/23/96	2.04	N/A
	02/17/97	0.90	0.82
	08/18/97	1.16	
	05/16/01	1.47	
	08/24/01	••	2.60
MW-3	02/15/95	**	2.60
14144-2	05/17/95		1.13
	08/25/95		1.86
	11/28/95	••	6.81
	02/26/96	16.83	1.11
	08/23/96		N/A
	02/17/97	0.80	0.80
	08/18/97	1.43	••
	05/16/01	1.65	••
	08/24/01	••	2.60
MW-4	08/24/01		2.30
MW-5	08/24/01		2.10
MW-6	08/24/01		2.70

Dissolved Oxygen Concentrations

Tosco (Unocal) Service Station #6419 6401 Dublin Boulevard Dublin, California

WELL ID	DATE	Before Purging (mg/L)	After Purging (mg/L)
MW-7	08/24/01		2.70

EXPLANATIONS:

Dissolved oxygen concentrations were compiled from reports prepared by MPDS Services, Inc.

(mg/L) = Milligrams per liter

-- = Not Measured

N/A = Not Applicable

Groundwater Analytical Data - Metals

Tosco (Unocal) Service Station #6419

6401 Dublin Boulevard Dublin, California

WELL ID	DATE	Cadmium	Сһғотінт	Lead	INICKE	Zinc
		(ppm)	(ppm)	(ррт)	(ppm)	(ppm)
MW-1	03/14/94	ND	0.012	ND	0.030	0.039
	08/25/94	ND	ND	0.024	ND	ND
	11/18/94	ND	0.076	ND	0.067	ND
	02/15/95	ND	ND	ND	ND	ND
	05/17/95	ND	ND	ND	0.021	ND

EXPLANATIONS:

Groundwater laboratory analytical results were compiled from reports prepared by MPDS Services, Inc.

(ppm) = Parts per million

ND = Not Detected

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.

acility # UNDICAL SS # 64/9 (TOSIO) Address: 640/ DUBLIN B/Vol. Date: \$-24.0/ Sampler: \$TEVE BALLAN Well ID MW-/ Well Condition: Well Diameter 2" in. Hydrocarbon Amount Bailed (product/water): (product/wat			FIELD DA	(IM CIDE)		
Address: 64 of DUBLIN BIVE . Date: \$24.90 Well ID MUM	lient/ acility # <u>ਪਨਾਕ</u>	AL 55 # 6419	(70510)	Job#:		<u> </u>
Well ID Well Dameter Well Condition: Well Condition: Well Dameter Well Dameter O. K Well Dameter Purge Disposable Bailer Bailer Sampling Equipment: Bailer Stack Suction Grandfos Other: Starting Time: Sampling Time: Sampling Time: Sampling Time: Sampling Time: Sampling Time: Weather Conditions: Weather Conditions: Water Color: Weather Conditions: Water Color: Water Color: Water Color: Water Color: Water Color: Time Volume Purging Flow Rate: Did well de-water? Time Volume PH Candidarity Time: Volume: (mgL) ORP Albalinity (mgL) (mgL) AFTER PURG MUL S x Vpq Vial Y Lieu S & Q TPHG STEEN MTOE MUL S x Vpq Vial Y Lieu S & Q TPHG STEEN MTOE MUL S x Vpq Vial Y Lieu S & Q TPHG STEEN MTOE MUL S x Vpq Vial Y Lieu S & Q TPHG STEEN MTOE MUL S x Vpq Vial Y Lieu S & Q TPHG STEEN MTOE MUL S x Vpq Vial Y Lieu S & Q TPHG STEEN MTOE MUL S x Vpq Vial Y Lieu S & Q TPHG STEEN MTOE MUL S x Vpq Vial Y Lieu S & Q TPHG STEEN MTOE Mul S x Vpq Vial Y Lieu S & Q TPHG STEEN MTOE Mul S x Vpq Vial Y Lieu S & Q TPHG STEEN MTOE Mul S x Vpq Vial Y Lieu S & Q TPHG STEEN MTOE Mul S x Vpq Vial Y Lieu S & Q TPHG STEEN MTOE Mul S x Vpq Vial Y Lieu S & Q TPHG STEEN MTOE Mul S x Vpq Vial Y Lieu S & Q TPHG STEEN MTOE Mul S x Vpq Vial Y Lieu S & Q TPHG STEEN MTOE Mul S x Vpq Vial Y Lieu S & Q TPHG STEEN MTOE Mul S x Vpq Vial Y Lieu S & Q TPHG STEEN MTOE Mul S x Vpq Vial Y Lieu S & Q TPHG STEEN MTOE Mul S x Vpq Vial Y Lieu S & Q TPHG STEEN MTOE Mul S x Vpq Vial Y Lieu S & Q TPHG STEEN MTOE Mul S x Vpq Vial Y Lieu S & Q TPHG STEEN MTOE Mul S x Vpq Vial Y Lieu S & Q TPHG STEEN MTOE Mul S x Vpq Vial Y Lieu S & Q TPHG TPHG TPHG TPHG	Address: <u>640</u>	1 DUBLIN	BIVOL.	Date:	8-24-01	0
Well Diameter Neil Diameter Neil Diameter Neil Diameter Total Depth 7.23 fr. Volume 1.5				Sample	r: STEVE	BALIAA
Nell Diameter 10 10 10 10 10 10 10 1	Well ID	MW-1	Well Cond	lition:	0 · K	
Total Depth to Water Comparison Compari	Vell Diameter	2" in				
Purge Disposable Bailer Stack Suction Grundfos Other: Starting Time: 3 - 5 Weather Conditions: Water Color:		~				
Equipment: Bailer Stack Suction Grundfos Other: Starting Time: Sampling Time: Sampling Time: Purging Flow Rate: Did well de-water? Time Volume PH Conductivity If yes; Time: Volume PH Conductivity If yes; Time: Conductivity If yes; Time: Did well de-water? Time Volume PH Conductivity If yes; Time: Volume: If yes; Time: If ye	Depth to Water		F 0.17 0.6) 6 X 3 (case vo	olume) = Estimated Pur	ge Volume: © . 77 (gal.)
Starting Time: 3	Equipment:	Bailer Stack Suction Grundfos	-	Equipment:	Bailer Pressure Bailer Grab Sample	
Time Volume pH Conductivity Temperature (mg/L) (mV) (ppm) 2 44	Sampling Time:		Wat	er Color: 🚜o iment Descript	CLEAR	Odor:
LABORATORY INFORMATION SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE: LABORATORY ANALYSES MW-(\$ x vdq vial \$ y Hele \$ 5 \overline{\sigma} \si	Did well de-water	70 No pH	If ye	oo oo Tempe m %	rature D.O. (mg/L)	ORP Alkalinity
SAMPLE ID (F) - CONTAINER REFRIG. PRESERV. TYPE: LABORATORY ANALYSES MW - (3 x VDA VIAL Y HCL SER. TPHG BTEX MIDE	(2:47 (2:57)	6.86	1.6/	72	.5	
SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE: LABORATORY ANALYSES MW - (3 x VDA VIAL Y HCL SER. TPHG/BTEX/MTOE	6.13				3.1	(AFTER PURG
SAMPLE ID (1) - CONTAINER REPRIG. FREDERING. MW-(3 x VDA VIAL Y HCL SER. TPHG BTEX MTOE				ORY INFORMA	TION	ANALYSES
						TPHG BTEX /MTOE
COMMENTS:	<u> Mu - (</u>	3 X VDA VIAL				
COMMENTS:						
COMMENTS:	<u> </u>					
COMMENTS:	<u> </u>	<u> </u>				
	COMMENTS: _					

ddress: 640	1 DUBLIN	BIVOL.	Date:	8-24-5 r: <u>STEV</u> E		<u> </u>
ity:	in CA		Sample			· · · · · · · · · · · · · · · · · · ·
Well ID	MW-2	Well Condi	ition:	O.K		
Vell Diameter	2" in	Hydrocarb Thickness:		Amount Ba		(08)
Total Depth Depth to Water	7.57.	Volume Factor (VF	2" = 0.17	3" = 0.38 6" = 1.50	12" = 5.80	- 0.66
Jepan to vision	10.03 xv	F 0.17 -1.	7.1 x 3 icase vo	lume) = Estimated Pr	urge Volume: 🗲	. 12 (cal)
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundfos Other:	· · · · · · · · · · · · · · · · · · ·	Sampling Equipment:	Disposable Bailer Pressure Baile Grab Sample other:		
Starting Time: Sampling Time: Purging Flow Rate Did well de-water		_ Wate _ Sedin _ If ye	ment Descripti s; Time:	CELAN		
	olume pH (gal.)	Conductive punhos/cm 2.89	ity Temper		ORP (mV)	Alkalinity (ppm)
	AT CONTAINED	LABORATO	RY INFORMA		ANAL	YSES
MW-2	3 × VDA VIAL		Неь	5 EQ.	TPHG STE	MIDE
COMMENTS: _						

ddress: 640	1 DUBLIN	B/Vol.	Date:	8-24-0 STEVE	BALIAA	<u>.</u>
ity:	BUN CA					
Well ID	MW-3	Well Condi	tion:	0·K		
Vell Diameter	2 " in.	Hydrocarbo		Amount B		(pal.)
otal Depth	18.50 +	Thickness: Volume Factor (VF)	2" = 0.17	3" = 0.3 6" = 1.50		0.66
epth to Water	7.88 m			ume) = Estimated F	Purge Volume:	12-(0=1.)
Purge :quipment:	Disposable Bailer Bailer Stack Suction Grundfos Other:		Sampling Equipment:	Disposable B Bailer Pressure Bail Grab Sample	er	
Starting Time: Sampling Time: Purging Flow Ra Did well de-wate	11:48 (2 o 5 er7 Mo	Wate	r Color:	on:	Odor:	
Time	Volume pH (gal.) 9 6 86	Conductivi umhos/cm	· <u>-</u> 91	(mg/L)	ORP (mV)	Alkalinity (ppm)
11:63 -	5.5 6.84	<u>2.31</u> 		<u> </u>	AFTER	pu RG
			RY INFORMAT	ON LABORATORY	ANALY	s es
MW-3	3 × VDA VIAL		HCL	SEQ.	TPHG BTEX	MIDE
———						

		LIELD DATE			
Client/ Facility # <u>UNDC</u>	AL 55# 6419	(10500)	Job#:	180021	· · · · · · · · · · · · · · · · · · ·
Address: 640	1 DUBLING	BIVOL.	Date:	8-24-0	
audiess. —	RUW CA		Sampler:	STEVE	BALIAA
City: — Dog	1				
Well ID	didress: 69 of DUBLIN BIVO Date: \$-24.0 Well ID				
Well Diameter	2 " in	•	d ,		
	19.15 #		2" = 0.17	3" = 0.38	4" = 0.66
	8.14	1		5" = 1.50	2" = 5.80
Depth to Water		F 0.17 1.8	7 X 3 (case volui	me) = Estimated Purge	Volume: 5 . 6 2 (cal.)
Purge Equipment:	Bailer Stack Suction Grundfos		quipment: <	Bailer Pressure Bailer Grab Sample	
	230 te:	Water (Color:	CLEA-4_	Odor:
	Volume pH	义(るや Conductivity µmhos/cm	0	nure D.O.	ORP Alkalinity
(215 1217 1219	2 6.82 6.86 6.89		= 69.	至	
				2.3	AFTER PURCE
		LABORATOR	Y INFORMATI	ION	ANALYSES
					
Mu - 4	3 x VDA VIAL	- 	<u> </u>		
	REPLAIR W	IFU CAP	, ~ 1	ock	
COMMENTS: .	VEY CAPER				<u> </u>
				<u></u>	

		FIELD DA	IA SHEET		
lient/ acility # <u>ಆಬಳ</u> ಿ	ac 55 # 6419	(TOS10)	Job#:	18002	
.ddress: <u>690</u>	1 DUBLIN	B/Vol.	Date:	5 = 516	BALLAR
ity: DUF	Rin CA		Sampler	STEVE	PAUM
				- 1/	
Well ID	MW-5	Well Condit	tion:	0./	
Vell Diameter	2" in	Hydrocarbo Thickness:		Amount Bail	
otal Depth	19.40 #	Volume Factor (VF)	2" = 0.17	3° = 0.38 6° = 1.50	4" = 0.66 12" = 5.80
epth to Water	7.60	<u> </u>			6:02
	11.80 xv	F 0.17 - 2.	X 3 Icasa vol	ume) = Estimated Pur	ge Volume: Loal.
Purge	Disposable Bailer Bailer		Sampling Equipment:	Disposable Bai	ler
Equipment:	Stack	•		Bailer Pressure Bailer	•
*.	Grundfos			Grab Sample	•
	Other:	-		ulei.	
	1026	Weat	her Conditions		wwy
Starting Time: Sampling Time:	10 45	Wate	r Color:	LLEAR	Odor:
Purging Flow Rat		Sadir	nent Description	on:	e: (csl.)
Did well de-wate	n No			Volum	e:(osl.)
Time	Volume pH	X (c Conductivi umhos/cm	ty Temper	ature D.O. (mg/L)	ORP Alkalinity (mV) (ppm)
Λ	(gal.) 2.5 (.8 <u>9</u>	•	,		
(5 3 c)	6.86	2.17		6	·
14.72	5 6.86	2.L	6 71	6	. <u></u>
				3.1	(AFTER PUR
			TA NICODIÁN		
	(#) - CONTAINER	REFRIG. PRE	RY INFORMAT	LABORATORY	ANALYSES
MW-5	3x VDA VIAL		Her	SEQ.	TPHG BTEX MTOE
	11				<u></u>
COMMENTS: _					

Wea Wat gpm. Sed	dition: rbon ss: 2° = 0.17 VF) X 3 lcase volui Sampling Equipment:	Disposable Bailer Bailer Pressure Bailer Grab Sample her:	(gal.) 2" = 5.80 Volume: 87 (gal.)
in. Hydrocart Thickness tr. Volume Factor (V. X VF 0.17 () Bailer Wea Wat gom. Sed	2" = 0.17 VF) 2" = 0.17 VF) X 3 lcase volui Sampling Equipment: Other cather Conditions: atter Color: diment Description	Amount Bailer in. (product/water): 3° = 0.38 6° = 1.50 12 me) = Estimated Purge Disposable Bailer Bailer Pressure Bailer Grab Sample her: 5 U/	(gel.) 2" = 5.80 Volume: 87 (gel.)
Thickness Volume Factor (Vinter of the content of t	2° = 0.17 VF) X 3 lcase volui Sampling Equipment: Other conditions: ather Conditions: diment Description	in. (product/water): 3° = 0.38 6° = 1.50 12 me) = Estimated Purge Disposable Bailer Bailer Pressure Bailer Grab Sample her:	(gel.) 2" = 5.80 Volume: 87 (gel.)
Volume Factor (Vi X VF 0.17 () Bailer Wea Wat gpm. Sed If yea	2* = 0.17 X 3 lcase volu Sampling Equipment: Other ather Conditions: iter Color: diment Description	me) = Estimated Purge Disposable Bailer Bailer Pressure Bailer Grab Sample her: SUI	Volume: 87 (gal.)
Wea Wat gpm. Sed	Sampling Equipment: Other ather Conditions: ter Color: diment Description	Disposable Bailer Bailer Pressure Bailer Grab Sample her: SUI	Volume:
Wea Wat Sed If ye	Equipment: Otherster Conditions:	Bailer Pressure Bailer Grab Sample her: SVI	<i>V /v.y</i>
Wat Sed If yo	iter Color: diment Description	n:	Odor:
X 100	5 O		ORP Alkalinity
pH Conductive productive producti	ivity Temperature $\frac{1}{6}$ $\frac{7}{6}$ $\frac{3}{6}$	(mg/L)	(mV) (ppm)
LABORAT	TORY INFORMATI	ION	ANALYSES
TAINER REFRIG. PE	HCL		TPHG BTEX /MTOE
	AINER REFRIG. F	LABORATORY INFORMAT	LABORATORY INFORMATION AINER REFRIG. PRESERV. TYPE LABORATORY

Client/ Facility # <u>৩৮০</u> ৫	1 55#6419	(705(0)	Job#:	18000		
	1 DUBLIN		Date:		BAU'AA	,
City:	quin CA		Sample	l: -> / E / E		
	7	101 H C - 114		0.K		
Well ID	<u>MW-7</u>	Well Conditi	on:		a stand	
Well Diameter	2 <u>"In</u>	Hydrocarbot Thickness:	1 <u> </u>	Amount E		<u>Lbal.)</u>
Total Depth	19.35 #	Volume	2" = 0.17	3" = 0.3 6" = 1.50	38 4" = 1 12" = 5.80	0.66
Depth to Water	7.72 4	Factor (VF)		0- = 130		
	11.63 × vi	0.17 1:9	X 3 (case vo	ilume) = Estimated (Purge Volume:	J 3
Purge Equipment:	Disposable Bailer Bailer		Sampli ng Equipm ent:	Disposable E	Bailer	
	Stack Suction			Pressure Bai		
•	Grundfos Other:	·	Ć	Grab Sample other:		
	9:54	Weath	er Conditions	s:	SUNNY	
Starting Time: Sampling Time:	10/5		Color:		Odor:	
Purging Flow Rat		sedim	ent Descripti	ion:		(cal.)
Did well de-wate	17 <u>~~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ </u>	_		Volu	Jme:	
Time	/olume pH (gal.)	Conductivity µmhos/cm	Temper	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
09:56	<u> 7.11</u>	$-\frac{2.16}{2.16}$	<u> </u>	<u> </u>		
0 4 : <u>58</u> _	$\frac{9}{6}$ $\frac{1.06}{7.06}$	2.05	$-\frac{66}{67}$	Ž =		
				2.7		PURGE
					AFIER	- P O R O F
						 -
SAMPLE ID	(#) - CONTAINER	LABORATOR REFRIG. PRES	Y INFURMA ERV. TYPE	LABORATORY	ANALYS	SES
MW - 7	3x VDA VIAL		<i>د</i> د	SEQ.	TPHG BTEX	MTOE
		<u> </u>				
COMMENTS: _						= -



Youan Harlandog Campany 2000 Cater Caryon PL, Ste. 408 San Ramon, California 94563

Foolity Number_UI	NOCAL SS#	6419	
Facility Address 641	01 Dublin	Blvd.	Dublin, CA
neultant Protect Number_			

Consultant Hame Gettler-Ryan Inc. (G-R Inc.)

Address 6747 Sierra Court, Suite J. Dublin, CA 94568

Project Conloct (Nome) Deanna L. Harding

(Phone) (975) 277-2384

Laboratory Name Sequota Analytical

Laboratory Release Number Number Number STEVE BALIAN

Collection Date 8-24-01

Signature 57313 BALIAN

Contact (Home) Mr. DAVID DEWITT

				(PI	ione) <u>51(</u>) <u>-551-755</u>	5_(Fox	Number) <u>510</u> -	-221-	7888	<u> </u>	ionature		1-1	<u> </u>						
			poo					1	·	,			Analyee	o To Be	Perfor	med				1	DO NOT	ILL LYSIS
Sample Number	Lab Sample Number	Number of Containers	Metrix S = Soil A = Ar W = Water C = Charcool	Type G = Grab C = Composite D = Discrete	Tkne	Sample Preservation	load (Yes or No.)	TPH Gas + BTEX WANTEE	TPH Disease (8015)	Oil and Grease (5520)	Purgeable Halocarbons (3010)	Purgeable Aromatica (8020)	Purpedble_Organics (82.40)	Extradable Organics (\$270)	Metals CACTPS.ZAM (ICVF or AA)						Remorks	
TB-LB		1	w	G-		Hel	Y	X					<u> </u>				 			 	RUN 6- +1,213C	0 x y · A «
Mw-1		3 +	211	1/	(305	//	Y	X			<u></u> -		<u> </u>			:					EDB b	4
nw-2		3	. //	11	1110	11	Υ	X									 				EDB 6	∕30 A
Mw-2 Mw-3 Mw-4 Mw-5 Mw-6 Mw-7		3	U	y	(ع٥) ً	(/	7	X		ļ			-	ļ. <u> </u>				-		-	HIT ON	MW-
Mw-4		3_	11 \	"	1230	"	1.7	X	ļ		ļ						<u> </u>	<u> </u>		-		Ny
Mw-5		3	1	11.	(07)	11	X	X		ļ	<u> </u>				 		 		 	 		
MW-6		3	"	"	1140	<i>''</i>	Y	X		 	 -			-	-							
MW-7		3	11	//	1015	//	1.7	×				├	-	-			-					<u>, , , , , , , , , , , , , , , , , , , </u>
			ļ	ļ	ļ					-	-			 								٠,
			ļ	<u> </u>	<u> </u>		 		├─	-	 	 	1			·					<u> </u>	
			<u> </u>		ļ			-			-	-			1							
		 	 	 	-		 	_	-		-	-								<u> </u>		·
				 					-		-	1						<u></u>	<u> </u>	<u> </u>		
Relinquished By		<u></u> _	· [anization -R Inc		Date/Time / 3 7-24 - 0	40 Re	Man	y (Sign	alur•)	<u> </u>	•	Organiza		8.2	•/11m• ·/-2//	/ 520		Turn A	2	ime (Cirole Chole	·•)
STIEVE By	(Signoture)	*	Org	netezine	. 8	Date/Time	Re	oelved I	y (Slgr	nature)			Organiza	llon	Del	•/Tim•				6	6 Hre. 5 Days 5 Days	:
Relinquished By	(Signoture)			yanization	.	Date/Time	Re	Wich (For Lab	orotory MM	Dy (Sign	ature)			8-0	•/11m• 40[160D				Contracted	



RECEIVED

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

SEP 1 1 ton

GETTLEK-KYAN INC.

10 September, 2001

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

RE: Unocal

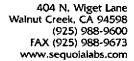
Sequoia Report: W108457

Enclosed are the results of analyses for samples received by the laboratory on 24-Aug-01 16:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Charlie Westwater Project Manager

CA ELAP Certificate #1271





6747 Sierra Court Suite J

Dublin CA, 94568

Project: Unocal

Project Number: Unocal # 6419

Project Manager: Deanna L. Harding

Reported:

10-Sep-01 07:33

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-LB	W108457-01	Water	24-Aug-01 00:00	24-Aug-01 16:00
MW-1	W108457-02	Water	24-Aug-01 13:05	24-Aug-01 16:00
MW-2	W108457-03	Water	24-Aug-01 11:10	24-Aug-01 16:00
MW-3	W108457-04	Water	24-Aug-01 12:05	24-Aug-01 16:00
MW-4	W108457-05	Water	24-Aug-01 12:30	24-Aug-01 16:00
MW-5	W108457-06	Water	24-Aug-01 10:45	24-Aug-01 16:00
MW-6	W108457-07	Water	24-Aug-01 11:40	24-Aug-01 16:00
MW-7	W108457-08	Water	24-Aug-01 10:15	24-Aug-01 16:00





Project: Unocal

6747 Sierra Court Suite J Dublin CA, 94568 Project Number: Unocal # 6419
Project Manager: Deanna L. Harding

Reported: 10-Sep-01 07:33

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

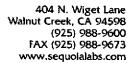
Analyte	Result	porting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TB-LB (W108457-01) Water Sampled	: 24-Aug-01 00:00	Receive	d: 24-Au	g-01 16:00					
Purgeable Hydrocarbons (C6-C12)	ND	50	ug/l	1	1H30001	30-Aug-01	30-Aug-01	EPA 8015M/8020	· · · · · · · · · · · · · · · · · · ·
Benzene	ND	0.50	n	11	ŧ	ч	ч	11	
Toluene	ND	0.50		ш	**	#	"	ti .	
Ethylbenzene	ND	0.50	41	n	17	**	*	h	
Xylenes (total)	ND	0.50	**	**	H	н	и	ti-	
Methyl tert-butyl ether (MTBE)	ND	2.5	н	*	n	Н	n	Ħ	
Surrogate: a,a,a-Trifluorotoluene		123 %	70-	130	"	If	11	"	
MW-1 (W108457-02) Water Sampled:	24-Aug-01 13:05	Receive	d: 24-Au	g-01 16:00					
Purgeable Hydrocarbons (C6-C12)	ND	50	ug/l	1	1H30001	30-Aug-01	30-Aug-01	EPA 8015M/8020	
Benzene	8.3	0.50	*1	41	н	II.	H	11	QR-0
Toluene	ND	0.50	10		**	н	H	•	
Ethylbenzene	ND	0.50	*	11	#	В		Н	
Xylenes (total)	ND	0.50	#	17	Ħ	41	Ħ	Ħ	
Surrogate: a,a,a-Trifluorotoluene		97.7 %	70-	-130	"	н	,,	re	
MW-1 (W108457-02RE1) Water Sam	oled: 24-Aug-01 13	3:05 Rec	eived: 2	4-Aug-01 1	6:00				
Methyl tert-butyl ether (MTBE)	10000	1200	ug/l	500	1H30001	04-Sep-01	04-Sep-01	EPA 8015M/8020	Q-2
Surrogate: a,a,a-Trifluorotoluene		105 %	70	-130	"	"	e	rr .	
MW-2 (W108457-03) Water Sampled:	24-Aug-01 11:10	Receive	d: 24-Au	g-01 16:00)				
Purgeable Hydrocarbons (C6-C12)	ND	50	ug/l	1	1H30001	30-Aug-01	30-Aug-01	EPA 8015M/8020	
Benzene	ND	0.50	н	**		19		u	
Toluene	ND	0.50	п	**	n.	11	**	н	
Ethylbenzene	ND	0.50	ls	**	R	n	fi.	н	
Xylenes (total)	ND	0.50	n	n	**	17	**	4	
Methyl tert-butyl ether (MTBE)	36	2.5	н	† ř	•	п	"	*	Q-28
		88.7 %				tr	n		

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

Project Number: Unocal # 6419 Project Manager: Deanna L. Harding Reported: 10-Sep-01 07:33

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

Name			eporting							
Purgeable Hydrocarbons (C6-C12)	Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
September ND 0.50	MW-3 (W108457-04) Water Samj	pled: 24-Aug-01 12:05	Receive	d: 24-Au	g-01 16:00					
ND	Purgeable Hydrocarbons (C6-C12)	ND	50	ug/l	1	1H30001	30-Aug-01	30-Aug-01		
Marco ND ND ND ND ND ND ND N	Benzene	ND	0.50		n		**	¥	**	
ND 0.50	Toluene	ND	0.50	10	•	"	n	*	n	
No. No.	Ethylbenzene	ND	0.50	n	19	U	IJ	11	н	
MW-3 (W108457-04RE1) Water Sampled: 24-Aug-01 12:05 Received: 24-Aug-01 16:00 EPA 8015M/8020	Xylenes (total)	ND	0.50	н	n	***	н	H		
Methyl tert-butyl ether (MTBE) 2500 1000 ug/l 400 1H3000 06-Sep-01 06-Sep-01 EPA 8015M/8020	Surrogate: a,a,a-Trifluorotoluene		96.7 %	70-	-130	п	н	"	"	
Surrogate: a,a,a-Trifluorotoluene Sampled: 24-Aug-01 12:30 Surrogate: a,a,a-Trifluorotoluene Sampled: 24-Aug-01 12:30 Surgious Surg	MW-3 (W108457-04RE1) Water	Sampled: 24-Aug-01 12	2:05 Rec	ceived: 24	4-Aug-01 1	6:00				
MW-4 (W108457-05) Water Sampled: 24-Aug-01 12:30 Received: 24-Aug-01 16:00	Methyl tert-butyl ether (MTBE)	2500	1000	ug/l	400	1H30001	06-Sep-01	06-Sep-01		
Purgeable Hydrocarbons (C6-C12) ND 50 ug/l 1 1H30001 30-Aug-01 30-Aug-01 EPA 8015M/8020	Surrogate: a,a,a-Trifluorotoluene		97.0 %	70-	-130	"	п	11	77	
Benzene ND 0.50 " " " " " " " " " " " " "	MW-4 (W108457-05) Water Sam	pled: 24-Aug-01 12:30	Receive	d: 24-Au	g-01 16:00	1				
Toluene	Purgeable Hydrocarbons (C6-C12)	ND	50	ug/l	1	1H30001	30-Aug-01	30-Aug-01		
Ethylbenzene ND 0.50 "	Benzene	ND	0.50	Ħ	*	**	11	11	п	
ND 0.50 " " " " " " " " "	Toluene	ND	0.50	Ħ	m	**	И	н	•	
No. Surrogate: a,a,a-Trifluorotoluene 116 % 70-130 " " " " " "	Ethylbenzene	ND	0.50	R	**	π	n	H	n	
MW-4 (W108457-05RE1) Water Sampled: 24-Aug-01 12:30 Received: 24-Aug-01 16:00 Methyl tert-butyl ether (MTBE) 7800 1200 ug/l 500 1H30001 31-Aug-01 31-Aug-01 EPA 8015M/8020 Surrogate: a,a,a-Trifluorotoluene 95.3 % 70-130 " " " " " MW-5 (W108457-06) Water Sampled: 24-Aug-01 10:45 Received: 24-Aug-01 16:00 Sampled: 24-Aug-01 10:45 Received: 24-Aug-01 16:00 Sampled: 24-Aug-01 10:45 EPA 8015M/8020 Benzene ND 0.50 " " " " 8015M/8020 Benzene ND 0.50 "	Xylenes (total)	ND	0.50		11	*	N	•	4	
Methyl tert-butyl ether (MTBE) 7800 1200 ug/l 500 1H30001 31-Aug-01 31-Aug-01 EPA 8015M/8020 Surrogate: a,a,a-Trifluorotoluene 95.3 % 70-130 " " " " " " " " MW-5 (W108457-06) Water Sampled: 24-Aug-01 10:45 Received: 24-Aug-01 16:00 EPA 8015M/8020 Purgeable Hydrocarbons (C6-C12) ND 50 ug/l 1 1H30001 31-Aug-01 31-Aug-01 EPA 8015M/8020 Benzene ND 0.50 " " " " " " " " " " " " " " " " " " " " " " " " " " " " " "	Surrogate: a,a,a-Trifluorotoluene		116%	70	-130	n '	"	**	p	
Surrogate: a,a,a-Trifluorotoluene 95.3 % 70-130 " " " " " "	MW-4 (W108457-05RE1) Water	Sampled: 24-Aug-01 1	2:30 Re	ceived: 2	4-Aug-01 1	6:00				
MW-5 (W108457-06) Water Sampled: 24-Aug-01 10:45 Received: 24-Aug-01 16:00 Purgeable Hydrocarbons (C6-C12) ND 50 ug/l 1 1H30001 31-Aug-01 31-Aug-01 EPA 8015M/8020 Benzene ND 0.50 " " " " " " Toluene ND 0.50 " " " " " " Ethylbenzene ND 0.50 " " " " " " " Xylenes (total) ND 0.50 "	Methyl tert-butyl ether (MTBE)	7800	1200	ug/i	500	1H30001	31-Aug-01	31-Aug-01		
Purgeable Hydrocarbons (C6-C12) ND 50 ug/l 1 1H30001 31-Aug-01 31-Aug-01 EPA 8015M/8020 Benzene ND 0.50 " <td>Surrogate: a,a,a-Trifluorotoluene</td> <td></td> <td>95.3 %</td> <td>70</td> <td>-130</td> <td>"</td> <td>tr</td> <td>11</td> <td>"</td> <td></td>	Surrogate: a,a,a-Trifluorotoluene		95.3 %	70	-130	"	tr	11	"	
Benzene ND 0.50	MW-5 (W108457-06) Water Samp	pled: 24-Aug-01 10:45	Receive	d: 24-Au	ıg-01 16:00	ı				
Toluene ND 0.50 " " " " " " " " " " " " " " " " " " "	Purgeable Hydrocarbons (C6-C12)	ND	50	ug/l	1	1H30001	31-Aug-01	31-Aug-01		
Ethylbenzene ND 0.50 "	Benzene ·	ND	0.50	н		**	W		н	
Ethyloenzene	Toluene	ND	0.50	н	96	11	Ü	Ü	н	
Methyl tert-butyl ether (MTBE) 18 2.5 " " " " " "	Ethylbenzene	ND	0.50	n	**	19	**	**	н	
	Xylenes (total)	ND	0.50	п	11	п	Įi	11	**	
Surrogate: a,a,a-Trifluorotoluene 116 % 70-130 " " " " "	Methyl tert-butyl ether (MTBE)	18	2.5	н	н	н	ii	h	н	
	Surrogate: a,a,a-Trifluorotoluene		116%	70	-130	11	11	"	"	-





6747 Sierra Court Suite J

Dublin CA, 94568

Project: Unocal

Project Number: Unocal # 6419

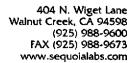
Project Manager: Deanna L. Harding

Reported:

10-Sep-01 07:33

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

Analyte	Result	eporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-6 (W108457-07) Water Sam	pled: 24-Aug-01 11:40	Receive	d: 24-Au	g-01 16:00					
Purgeable Hydrocarbons (C6-C12)	ND	200	ug/l	4	1H30001	31-Aug-01	31-Aug-01	EPA 8015M/8020	
Benzene	ND	2.0	n	**	l9	11			
Toluene	ND	2.0	•	n	n	Ŋ	N	u	
Ethylbenzene	ND	2.0	•	Ħ	н	н	*	11	
Xylenes (total)	ND	2.0	11	"	н	N	•	н	
Methyl tert-butyl ether (MTBE)	1100	10	19	"		91	"	H	
Surrogate: a,a,a-Trifluorotoluene		108 %	70	-130	77	"	n	"	
MW-7 (W108457-08) Water Sam	pled: 24-Aug-01 10:15	Receive	d: 24-Au	g-01 16:00					
Purgeable Hydrocarbons (C6-C12)	ND	50	ug/l	1	1H30001	31-Aug-01	31-Aug-01	EPA 8015M/8020	
Benzene	ND	0.50	**	u	n	н	π	Ħ	
Toluene	ND	0.50	*	*	н	u		**	
Ethylbenzene	ND	0.50	*	n	u	*	11	п	
Xylenes (total)	ND	0.50		0	0	н	н	4 P	
Methyl tert-butyl ether (MTBE)	4.4	2.5	n	**	•	tr	n	w	
Surrogate: a,a,a-Trifluorotoluene		105 %	70	-130	"	n n)r	H	





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

Project Number: Unocal # 6419
Project Manager: Deanna L. Harding

Reported: 10-Sep-01 07:33

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

Analyte	Result	leporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (W108457-02) Water S	Sampled: 24-Aug-01 13:05	Receive	d: 24-Au	g-01 16:00					
Ethanol	. ND	25000	ug/l	50	1106001	07-Sep-01	07-Sep-01	EPA 8260B	
tert-Butyl alcohol	ND	1000	11	*	11	"	n	**	
Methyl tert-butyl ether (MTBE) 6600	100		11	**	19	u	n .	
Di-isopropyl ether	ND	100	n	11	•	Ħ	11	**	
Ethyl tert-butyl ether	ND	100	H	н	11	н	Ħ	n	
tert-Amyl methyl ether	ND	100		н	n	v	Ħ	н	
1,2-Dichloroethane	ND	100		**	þ i	4	**	n	
Ethylene dibromide	ND	100	11	**	P	11	u	H	
Surrogate: Dibromofluoromethan	ne	104 %	50	-150		<u>-</u> -	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	#	
Surrogate: 1,2-Dichloroethane-d	4	100 %	50	-150	"	"	"	,,	



Project: Unocal

6747 Sierra Court Suite J Dublin CA, 94568 Project Number: Unocal # 6419 Project Manager: Deanna L. Harding Reported: 10-Sep-01 07:33

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 1H30001 - EPA 5030B P/T										
Blank (1H30001-BLK1)	·	·		Prepared	& Analyze	d: 30-Au	g-01			
Purgeable Hydrocarbons (C6-C12)	ND	50	ug/l							
Benzene	ND	0.50	11							
Toluene	· ND	0.50	11							
Ethylbenzene	ND	0.50	11							
Xylenes (total)	ND	0.50	n							
Methyl tert-butyl ether (MTBE)	ND	2.5	U							
Surrogate: a,a,a-Trifluorotoluene	37.7		н	30.0		126	70-130	· · · · · · · · · · · · · · · · · · ·		
Blank (1H30001-BLK2)				Prepared	& Analyz	ed: 31-Au	g-01			
Purgeable Hydrocarbons (C6-C12)	ND	50	ug/l							
Benzene	· ND	0.50	11							
Toluene	ND	0.50								
Ethylbenzene	ND	0.50								
Xylenes (total)	ND	0.50	**							
Methyl tert-butyl ether (MTBE)	- ND	2,5	•							
Surrogate: a,a,a-Trifluorotoluene	30.1		"	30.0		100	70-130		·	 .
LCS (1H30001-BS1)				Prepared	& Analyz	ed: 30-Au	g-01			
Benzene	20.1	0.50	ug/l	20.0		100	70-130			
Toluene	20.3	0.50	•	20.0		102	70-130			
Ethylbenzene	20.4	0.50	**	20.0		102	70-130			
Xylenes (total)	56.1	0.50	**	60.0		93.5	70-130			
Surrogate: a,a,a-Trifluorotoluene	27.5		,,	30.0		91.7	70-130			
LCS (1H30001-BS2)				Prepared	& Analyz	ed: 31-Au	g-01			
Велгеле	18.8	0.50	ug/l	20.0		94.0	70-130			
Toluene	18.5	0.50	n	20.0		92.5	70-130			
Ethylbenzene	18.9	0.50	și și	20.0		94.5	70-130			
Xylenes (total)	52.6	0.50	Ħ	60.0		87.7	70-130			
Surrogate: a,a,a-Trifluorotoluene	26.6		#	30.0		88.7	70-130			



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

Project Number: Unocal # 6419 Project Manager: Deanna L. Harding Reported: 10-Sep-01 07:33

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 1H30001 - EPA 5030B P/T		-								
Matrix Spike (1H30001-MS1)	Soi	rce: W1084	30-02	Prepared	& Analyz	ed: 30-Au	g-01			
Benzene	22.8	0.50	ug/l	20.0	ND	114	70-130	······································		
Toluene	23.3	0.50	Ħ	20.0	ND	116	70-130			
Ethylbenzene	23.4	0.50		20.0	ND	117	70-130			
Xylenes (total)	63.1	0.50		60.0	ND	105	70-130			
Surrogate: a,a,a-Trifluorotoluene	33.9	 	"	30.0		113	70-130			
Matrix Spike Dup (1H30001-MSD1)	Soi	arce: W1084	30-02	Prepared	& Analyz	ed: 30-Au	g-01			
Benzene	22.2	0.50	ug/l	20.0	ND	111	70-130	2.67	20	· ·· ··
Toluene	22.1	0.50	'n	20.0	ND	110	70-130	5.29	20	
Ethylbenzene	22.8	0.50	H	20.0	ND	114	70-130	2.60	20	
Xylenes (total)	61.4	0.50	H	. 60.0	ND	102	70-130	2.73	20	
Surrogate: a,a,a-Trifluorotoluene	33.2	· · · · ·	"	30.0		111	70-130			



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

Project Number: Unocal # 6419 Project Manager: Deanna L. Harding Reported: 10-Sep-01 07:33

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 1106001 - EPA 5030B (P/T)										·
Blank (1106001-BLK1)				Prepared	& Analyz	ed: 05-Sep	-01			
Ethanol	ND	500	ug/l	-						
tert-Butyl alcohol	ND	20	n							
Methyl tert-butyl ether (MTBE)	ND	2.0								
Di-isopropyl ether	ND	2.0	" ;							
Ethyl tert-butyl ether	ND	2.0	n							
tert-Amyl methyl ether	ND	2.0	n							
1,2-Dichloroethane	ND	2.0	, n							
Ethylene dibromide	ND	2.0	**							•
Surrogate: Dibromofluoromethane	49.6		"	50.0		99.2	50-150			
Surrogate: 1,2-Dichloroethane-d4	44.]		•	50.0		88.2	50-150			
Blank (1106001-BLK2)				Prepared	& Analyz	ed: 06-Sep	o-01			
Ethanol	ND	500	ug/i					·····		
tert-Butyl alcohol	ND	20	n							
Methyl tert-butyl ether (MTBE)	ND	2.0	н							
Di-isopropyl ether	ND	2.0	н							
Ethyl tert-butyl ether	ND	2.0								
tert-Amyl methyl ether	ND	2.0	#							
1,2-Dichloroethane	ND	2.0	17							
Ethylene dibromide	ND	2.0								
Surrogate: Dibromofluoromethane	51.6		p	50.0		103	50-150			
Surrogate: 1,2-Dichloroethane-d4	44.8		**	50.0		89.6	50-150			
Blank (1106001-BLK3)				Prepared	& Analyz	ed: 07-Se	p-01			
Ethanol	ND	500	ug/l							
tert-Butyl alcohol	ND	20	Ħ				-			
Methyl tert-butyl ether (MTBE)	ND	2.0	h							
Di-isopropyl ether	ND	2.0	N							
Ethyl tert-butyl ether	ND	2.0	**							
tert-Amyl methyl ether	ND	2.0	,,							
1,2-Dichloroethane	ND	2.0	*							
Ethylene dibromide	ND	2.0	**							
Surrogate: Dibromofluoromethane	25.7		"	25.0		103	50-150			
Surrogate: 1,2-Dichloroethane-d4	25.4		**	25.0		102	50-150			

Sequoia Analytical - Walnut Creek

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.







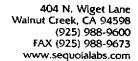
Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Dublin CA, 94568 Project: Unocal

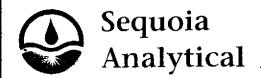
Project Number: Unocal # 6419 Project Manager: Deanna L. Harding Reported:

10-Sep-01 07:33

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 1106001 - EPA 5030B (P/T)	***			•••						
LCS (1106001-BS1)				Prepared	& Analyzo	d: 05-Sep	- 01			
Methyl tert-butyl ether (MTBE)	54.1	2.0	ug/l	50.0		108	70-130			
Surrogate: Dibromosluoromethane	49.9		,,	50.0	**	99.8	50-150			
Surrogate: 1,2-Dichloroethane-d4	44.9		"	50.0		89.8	50-150			
LCS (1106001-BS2)				Prepared	& Analyz	ed: 06-Sep	-01			
Methyl tert-butyl ether (MTBE)	50.9	2.0	ug/l	50.0		102	70-130			
Surrogate: Dibromofluoromethane	50.4		#	50.0		101	50-150			
Surrogate: 1,2-Dichloroethane-d4	43.6		н	50.0		87.2	50-150			
LCS (1106001-BS3)				Prepared	& Analyz	ed: 07-Sep	o-01			
Methyl tert-butyl ether (MTBE)	21.8	2.0	ug/l	25.0	•	87.2	70-130			· · · · · · · · · · · · · · · · · · ·
Surrogate: Dibromofluoromethane	25,2		77	25.0		101	50-150			
Surrogate: 1,2-Dichloroethane-d4	24.1			25.0		96. 4	50-150			
Matrix Spike (1106001-MS1)	Source: W108507-02			Prepared: 05-Sep-01 Analyzed: 06-Sep-01						
Methyl tert-butyl ether (MTBE)	50.6	2.0	ug/l	50.0	ND	101	60-150			
Surrogate: Dibromofluoromethane	49.4		,,	50.0	,	98.8	50-150			
Surrogate: 1,2-Dichloroethane-d4	45.0		,,	50.0		90.0	50-150			
Matrix Spike Dup (1106001-MSD1)	Soc	urce: W1085	07-02	Prepared	: 05-Sep-0	1 Analyze	:d: 06-Sep-	01		
Methyl tert-butyl ether (MTBE)	53.8	2.0	ug/l	50.0	ND	108	60-150	6.13	25	
Surrogate: Dibromofluoromethane	47.8		п	50.0		95.6	50-150			
Surrogate: 1,2-Dichloroethane-d4	43.0		n	50.0		86.0	50-150			





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

Project Number: Unocal # 6419 Project Manager: Deanna L. Harding

Reported: 10-Sep-01 07:33

Notes and Definitions

Q-28 The opening calibration verification standard was outside acceptance criteria by 15%. Although the Laboratory Control Sample verified the accuracy of the batch, this should be considered in evaluating the data for its intended purpose.

Q-28a The opening calibration verification standard was outside acceptance criteria by 6%. Although the Laboratory Control Sample verified the accuracy of the batch, this should be considered in evaluating the data for its intended purpose.

QR-04 Primary and confirmation results varied by greater than 40% RPD. The results may still be useful for their intended purpose.

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