May 13, 1999 G-R #:180075

TO:

Mr. David B. De Witt

Tosco Marketing Company

2000 Crow Canyon Place, Suite 400

San Ramon, California 94583

FROM:

Deanna L. Harding

Project Coordinator

Gettler-Ryan Inc.

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

Mr. David Vossler

Gettler-Ryan Inc.

Novato, California

RE: Tosco (Unocal) SS #7376

4191 First Street

Pleasanton, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	May 10, 1999	Groundwater Monitoring and Sampling Report First Quarter 1999 - March Events

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 *May 24, 1999*, this report will be distributed to the following:

Enclosure

cc:

Mr. Scott Seery

Alameda County Health Care Services

1131 Harbor Bay Parkway Alameda, California 94502 99 MAY 25 PM L: So

agency/7376dbd.qmt



GETTLER-RYAN INC.

May 10, 1999 G-R Job #180075

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

RE:

First Quarter 1999 Groundwater Monitoring & Sampling Report

Tosco (Unocal) Service Station #7376

4191 First Street

Pleasanton, California

Dear Mr. De Witt:

This report documents the quarterly groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R). On March 15, 1999, field personnel monitored seven wells (MW-1, MW-2B, MW-3, MW-4, MW-5, MW-6, and MW-7) and sampled six wells (MW-1, MW-2B, MW-3, MW-4, MW-6, and MW-7) at the above referenced site. One well (MW-8) was not located. On March 23, 1999, field personnel monitored eight wells (MW-1, MW-2B and MW-3 through MW-8) and sampled one well (MW-8).

Static groundwater levels were measured and all wells were checked for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were present in one well (MW-5) during both visits. Static water level data and groundwater elevations are summarized in Table 1. Product Thickness/Removal Data is summarized in Table 2. 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 Table 1, and a Concentration Map is included as Figure 2. The chain of custody document and laboratory analytical reports are also attached.

No. 5577

Singerely,

Deanna L. Harding Project Coordinator

Stephen J. Carter

Senior Geologist, R.G. No. 5577

R.G. No. 5577

Figure 1: Figure 2:

Potentiometric Map -March 23, 1999

Table 1:

Concentration Map - March 15, 1999

rable 1:

Groundwater Monitoring Data and Analytical Results

Table 2:

Product Thickness/Removal Data

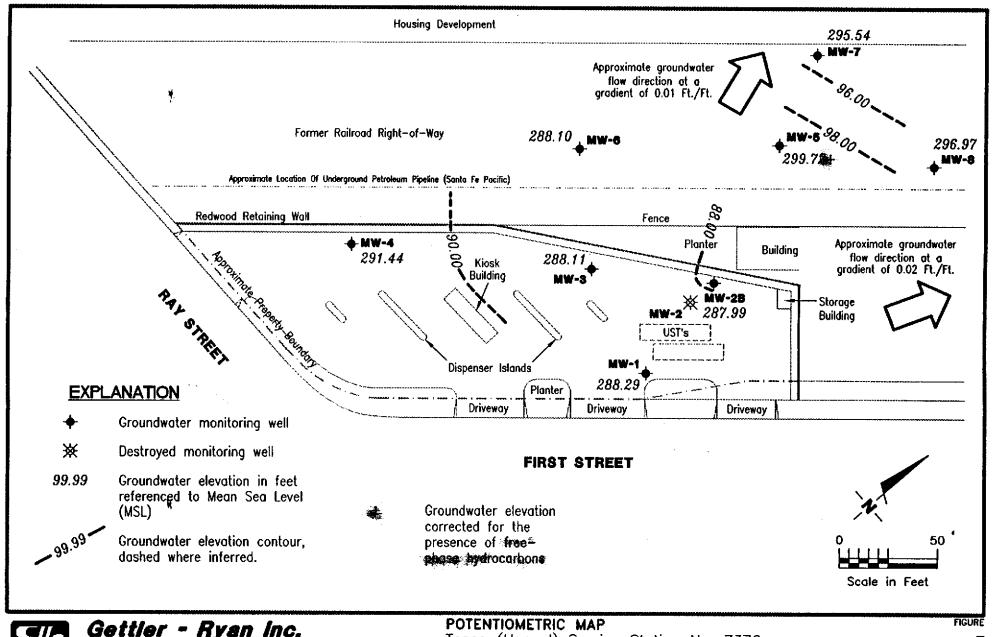
Attachments:

Standard Operating Procedure - Groundwater Sampling

Field Data Sheets

7376.qml

Chain of Custody Document and Laboratory Analytical Reports





Gettler - Ryan Inc.

6747 Sierra Ct., Suite J Dublin, CA 94568

(925) 551-7555

Tosco (Unocal) Service Station No. 7376 4191 First Street Pleasanton, California

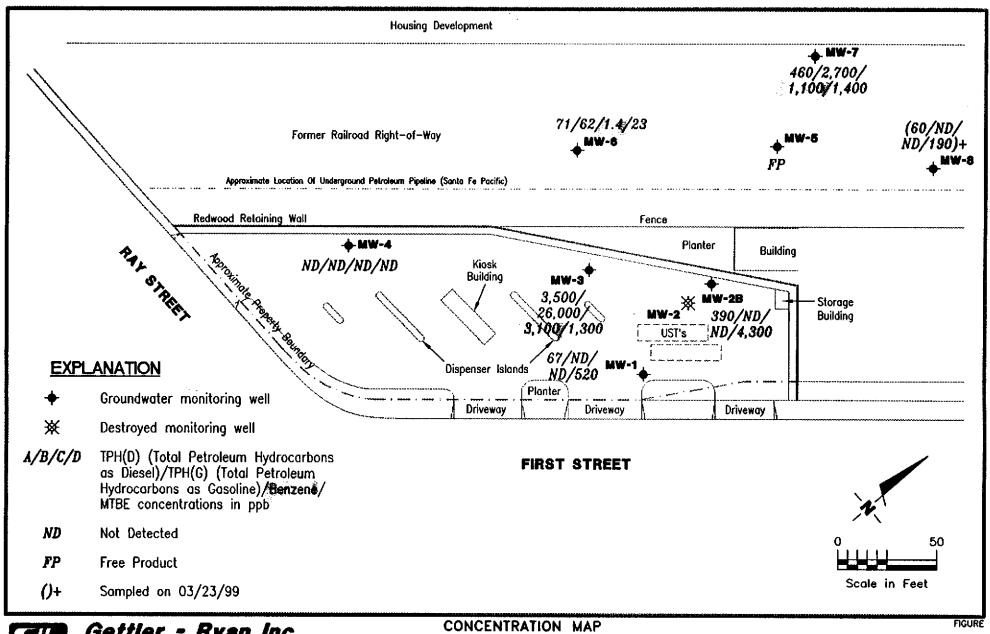
DATE

March 23, 1999

JOB NUMBER 180075

REVIEWED BY

REVISED DATE





Gettier - Ryan inc.

6747 Sierra Ct., Suite J (925) 551-7555 Dublin, CA 94568

Tosco (Unocal) Service Station No. 7376 4191 First Street Pleasanton, Catifornia

DATE

REVISED DATE

JOB NUMBER 180075

REVIEWED BY

March 15, 1999

Table 1
Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #7376

4191 First Street

			***	Product		i, California	s				
Well ID/	Date	DTW	GWE	Thickness	TPH(D)	TPH(G)	В	T	E	X	MTBE
TOC*		(ft.)	(msl)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
MW-1	12/08/871				$2,100^2$	50 ³	58	8	ND	10	
366.99	12/07/94	81.04	285.95	0.00		ND	ND	ND	ND ND		
300.77	03/01/95	80.09	286.90	0.00	120	ND	ND	1.1	ND ND	ND	
	06/01/95	77.53	289.46	0.00	54 ⁵	130	1.0	2.9		1.3	
	09/06/95	79.00	287.99	0.00	690	ND	ND		0.79	4.5	 6
	12/12/95	77.55	289.44	0.00	190⁵	ND		ND	ND	ND	
	03/01/96	77.33 75.09	291.90	0.00	56		ND	ND	ND	ND	
	05/01/90	75.0 9 75.07	291.90			ND	ND	ND	ND	ND	370
	09/18/96			0.00	ND 130⁵	ND	ND	ND	ND	ND	270
		79.90	287.09	0.00		ND	ND	ND	ND	ND	590
	12/21/96	78.96	288.03	0.00	ND	ND	ND	ND	ND	ND	150
	03/07/97	71.49	295.50	0.00	ND	ND	ND	ND	ND	ND	220
	06/27/97	80.05	286.94	0.00	ND	ND	ND	ND	ND	ND	17
	09/29/97	80.04	286.95	0.00	ND	ND	ND	ND	ND	ND	24
	12/15/97	80.07	286.92	0.00	ND	ND	ND	ND	ND	ND	25
	03/16/98	71.00	295.99	0.00	ND	ND	ND	0.52	ND	0.71	190
366.98	06/26/98	79.29	287.69	0.00	ND	59 ¹³	0.90	ND	ND	ND	570
	08/18/98	79.93	287.05	0.00			••				
	09/22/98	79.99	286.99	0.00	240 ²⁰	ND	ND	ND	ND	ND	170
	12/15/98	80.02	286.96	0.00	ND	ND	ND	ND	ND	ND	63
	12/23/98	80.02	286.96	0.00			**				
	03/15/99	78.95	288.03	0.00	67 ²⁴	ND^{11}	ND^{11}	ND ¹¹	ND^{11}	ND^{11}	520
•	03/23/99	78.69	288.29	0.00			-	-		_	
MW-2	12/08/87				620 ²	1,800 ³	010	900	262	4.000	
1V1 VV - Z		DAMACED					910	800	260	1,200	
	12/07/94	DAMAGED							**		
	02/07/95	DESTROYED									
MW-2B											
365.05	03/01/95	80.80	284.25	0.00	320	ND	ND	ND	ND	ND	
	06/01/95	75.69	289.36	0,00	280	350	19	5.8	ND	7.7	*-
	09/06/95	77.54	287.51	0.00	ND	ND	90	ND	ND	ND	_6
											7
											4,300
	12/12/95 03/01/96	75.96 73.27	289.09 291.78	0.00 0.00	850 ⁴ 870 ⁴	1,200 1,000	630 620	ND ND	15 ND	57 5.3	

Table 1
Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #7376 4191 First Street

				Product	T TOUBLING						
Well ID/	Date	DTW	GWE	Thickness	TPH(D)	TPH(G)	В	T	E	X	MTBE
TOC*		(ft.)	(msl)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
MW-2B	06/15/96	73.21	291.84	0.00	420	910	350	ND	ND	ND	3,700
(cont)	09/18/96	81.08	283.97	0.00	600	1,200	95	ND	ND	ND	5 ,200
` '	12/21/96	77.35	287.70	0.00	47 0	330 ⁸	57	ND	ND	ND	2,900
	03/07/97	69.67	295.38	Sheen	870 ⁴	190	28	0.64	ND	1.5	4,300
	06/27/97	82.40	282.65	0.00	680 ⁴	98	3.4	1.0	0.53	ND	3,100
	09/29/97	82.72	282.33	0.00	430	ND	ND	ND	ND	ND	3,000
	12/15/97	82.57	282.48	0.00	490	54 ⁹	ND	ND	ND	ND	4,100
	03/16/98	69.13	295.92	Sheen	4,00010	ND^{11}	17	ND^{11}	ND ¹¹	ND^{11}	4,400
365.05	06/26/98	77.78	287.27	0.00	790 ¹⁴	ND	ND	ND	ND	ND	4,000
	08/18/98	83.99	281.06	0.00							
	09/22/98	83.89	281.16	0.00	930 ²⁰	ND^{11}	ND^{11}	ND^{11}	ND^{11}	21	4,600
	12/15/98	82.84	282.21	0.00	600	ND	ND	ND	ND	ND	5,100
	12/23/98	82.55	282.50	0.00							
	03/15/99	77.31	287.74	0.00	390 ²⁵	ND^{11}	ND^{11}	ND^{11}	ND^{11}	ND^{11}	4,300/4,800 ²³
	03/23/99	77.06	287.99	0.00							
		٠.									
MW-3	12/08/87				$2,300^2$	$24,000^3$	2,600	1,300	160	660	
367.01	12/07/94	85.54	281.47	0.00		ND	ND	ND	ND	ND	
	03/01/95	83.20	283.81	0.00	1404	ND	ND	1.1	ND	1.1	
	06/01/95	77,60	289.41	0.00	140 ⁵	62	7.8	0.90	ND	1.6	~~
	09/06/95	79.28	287.73	0.00	880 ⁵	4,100	380	490	130	710	6
	12/12/95	77.73	289.28	0.00	$3,100^4$	19,000	600	380	2,100	5,300	7
	03/01/96	75.18	291.83	0.00	1,500 ⁵	3,400	950	3.2	1,900	290	59
	06/15/96	75.13	291.88	0.00	400 ⁴	780	190	8.8	3.8	4.0	630
	09/18/96	82.84	284.17	0.00	170	2,800	340	12	11	110	2,500
	12/21/96	79.29	287.72	0.00	64 ⁴	51	1.3	ND	ND	0.53	20
	03/07/97	71.58	295.43	0.00	570 ⁴	1,400	53	14	29	68	220
	06/27/97	83.27	283.74	0.00	ND	ND	ND	ND	ND	ND	27
	09/29/97	83.33	283.68	0.00	ND	ND	ND	ND	ND	ND	11
	12/15/97	83.35	283.66	0.00	ND	ND	ND	ND	ND	ND	19
	03/16/98	71.07	295.94	0.00	670 ¹⁰	130 ¹²	6.5	1.9	1.5	1.6	210
367.03	06/26/98	79.65	287.38	0.00	63 ¹³	400 ¹⁵	15	ND^{11}	ND^{11}	1.9	490
	08/18/98	83.29	283.74	0.00							
	09/22/98	83.33	283.70	0.00	95 ²⁰						

Table 1
Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #7376

4191 First Street

			<u></u>		Pieasamor	i, California					
				Product							
Well ID/	Date	DTW	GWE	Thickness	TPH(D)	TPH(G)	В	T	E	X	MTBE
TOC*		(ft.)	(msl)	(ft.)	(ppb)	(ppb)	(ррь)	(ppb)	(ppb)	(ppb)	(ppb)
MW-3	12/15/98	83.29	283.74	0.00	ND	ND	NID	ND	MD		4.0
(cont)	12/13/98	83.28	283.75	0.00			ND	ND	ND	ND	18
(com)	03/15/99	79.19	287.84	0.00	3,500 ²⁶	26.000					
	03/23/99	78.92	288.11		3,300	26,000	3,100	270	2,200	3,100	1,300
	03/23/99	70.74	200.11	0.00		-		-		***	
MW-4											
369.03	09/18/96	7 3.67	295.36	0.00	200	160	14	ND	ND	1.6	ND
	12/21/96	77.69	291.34	0.00	ND	ND	ND	ND	ND	ND	ND
	03/07/97	68.04	300.99	0.00	ND	ND	1.9	0.99	ND	1.5	ND
	06/27/97	79.06	289.97	0.00	ND	ND	ND	ND	ND	ND	ND
	09/29/97	85.83	283.20	0.00	ND	ND	ND	ND	ND	ND	ND
	12/15/97	87.26	281.77	0.00	ND	ND	ND	ND	ND	ND	ND
	03/16/98	75.09	293.94	0.00	ND	ND	ND	0.69	ND	0.82	ND
368.81	06/26/98	73.81	295.00	0.00	630 ¹⁶	10013	62	ND	ND	ND	ND
	08/18/98	78.75	290.06	0.00							
	09/22/98	83.95	284.86	0.00	74 ²⁰	ND	ND	ND	ND	ND	2.8
	12/15/98	85.41	283,40	0.00	ND	ND	ND	ND	ND	ND	ND
	12/23/98	84.95	283.86	0.00							
	03/15/99	78.47	290.34	0.00	ND	ND	ND	ND	ND	ND	ND
	03/23/99	77.37	291.44	0.00						-	-
MW-5											
363.23	09/18/96	64,20	299.03	0.00	4,700 ⁵	36,000	6,700	410	720	C 500	4.100
JUJ 123	12/21/96	61.77	301.46	Sheen	4,700 ⁴	25,000	3,200	410 300	730	6,500	4,100
	03/07/97	56.30	306.93	Sheen	2,100 ⁴	14,000	1,300		780	3,600	2,600
	06/27/97	68.88	295.03**	0.90	NOT SAMPLE			120	410	1,200	1,700
	09/29/97	69.47	294.02**	0.35	NOT SAMPLE						
	12/15/97	64.92	298.53**	0.30							
	03/16/98	49.63	313.67**	0.30	NOT SAMPLE						
363.21	06/26/98	64.13	299.08	Sheen	230,000 ¹⁷	490 ¹⁸					
/UJ.4.1	08/18/98	70.40	299.08	0.005	430,000	470	6.3	2.8	4.2	5.1	10
	09/22/98	69.10	294.16**	0.06	NOT CAMPIE	ר- ה הנום מה שניי	 C DDECENCE	OF EDGE BDO	 *>1 10T		
	12/15/98	68.84	294.50**	0.00	NOT SAMPLE						
	12/13/30	00.04	474.JU**	U.17	NOT SAMPLE	ווו און און און און און און	E PRESENCE	OF FREE PRO	DUCT		

Table 1
Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #7376

4191 First Street

Product												
Well ID/	Date	DTW	GWE	Thickness	TPH(D)	TPH(G)	В	T	В	X	MTBE	
TOC*		(ft.)	(msl)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	
MW-5	12/23/98	68.42	295.18**	0.50								
(cont)	03/15/99	63.81	299.59**	0.25							_	
	03/23/99	63.59	299.72**	0.13		-	<u></u>					
MW-6												
363.12	09/18/96	79.07	284.05	0.00	ND	160	5.4	ND '	ND	ND	ND	
	12/21/96	75.40	287.72	0.00	ND	300 ⁸	96	1.3	ND ND	1.7	21	
	03/07/97	67.61	295.51	0.00	1904	1,8008	920	18	ND ND	31	290	
	06/27/97	80.45	282.67	0.00	73 ⁵	ND	0.73	ND	ND	38	38	
	09/29/97	86.02	277.10	0.00	ND	62 ⁹	ND	ND	ND	ND	43	
	12/15/97	84.03	279.09	0.00	ND	78 ⁹	ND	ND	ND	ND	39	
	03/16/98	67.15	295.97	0.00	100 ¹⁰	210 ¹²	36	2.5	ND	3.0	64	
363.13	06/26/98	75.71	287.42	0.00	180 ¹⁴	530	300	8.3	2.8	8.7	81	
	08/18/98	74.86	288.27	0.00								
	09/22/98	UNABLE TO L	OCATE									
	12/15/98	UNABLE TO L	OCATE								6-4	
	12/23/98	80.80	282.33	0.00		120 ²³	1.1	ND	ND	0.78	25	
	01/23/99	80.68	282.45	0.00	ND						*-	
	03/15/99	75.29	287.84	0.00	71 ²⁴	6222	1.4	ND	ND	ND	23	
	03/23/99	75.03	288.10	0.00		-			**			
MW-7												
55.97	06/26/98											
	08/18/98	68.75	287.22	0.00	$1,400^{20}$	4,000	1,900	48	160	ND ¹¹	1,700	
	09/22/98	66.35	289.62	0.00	780 ²⁰	3,200	1,100	ND	22	ND	1,500	
	12/15/98	65.03	290.94	0.00	350 ²¹	$1,900^{22}$	180	2.7	2.9	3.8	1,400	
	12/23/98	64.82	291.15	0.00						J.0 	1,400	
	03/15/99	60.44	295.53	0.00	460 ²⁶	2,700	1,100	ND ¹¹	30	16	1,400/970 ²⁷	
	03/23/99	60.43	295.54	0.00							1,700///0	

Table 1 Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #7376 4191 First Street

				Product							
Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Thickness (ft.)	TPH(D) <i>(ppb)</i>	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-8											
362.37	06/26/98	63.00	299.37	0.00	8019	ND	6.0	ND	ND	ND	150
	08/18/98	73.38	288.99	0.00							
	09/22/98	70.89	291.48	0.00	120 ²⁰	ND	ND	ND	ND	ND	9.5
	12/15/98	70.29	292.08	0.00	ND	ND	ND	ND	ND	ND	3.0
	12/23/98	70.03	292.34	0.00							
	03/15/99	UNABLE TO LO	CATE								
61.83	03/23/99	64.86	296.97	0.00	60 ²⁴	ND	ND	0.77	ND	0.96	190
rip Blank											
B-LB	03/16/98					ND	ND	ND	ND	ND	ND
	06/26/98					ND	ND	ND	ND	ND	ND
	08/18/98	**				ND	ND	ND	ND	ND	ND
	09/22/98					ND	ND	ND	ND	ND	ND
	12/15/98	**				ND	ND	ND	ND	ND	ND
	12/23/98	 .				ND	ND	ND	ND	ND	ND
	03/15/99	-				ND	ND	ND	ND	ND	ND
	03/23/99					ND	ND	ND	ND	ND	ND

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #7376 4191 First Street Pleasanton, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to March 16, 1998, were compiled from reports prepared by MPDS Services, Inc.

TOC = Top of Casing

B = Benzene

ppb = Parts per billion

DTW = Depth to Water

T = Toluene

ND = Not Detected

(ft.) = Feet

E = Ethylbenzene

-- = Not Measured/Not Analyzed

GWE = Groundwater Elevation

X = Xylenes

msl = Relative to mean sea level

MTBE = Methyl tertiary butyl ether

TPH(G) = Total Petroleum Hydrocarbons as Gasoline

- TOC elevations have been surveyed relative to mean sea level (msl) per City of Pleasanton Benchmark V1, a brass disk on the north curb of Ray Street, approximately 200 feet northwest of the centerline of First Street (Elevation = 367.17 feet msl). On March 22, 1999, MW-8 was re-surveyed, the Benchmark was a cut "+" on a concrete transformer pad on the north side of the property to the northwest (Elevation = 353.92 feet, msl).
- ** Groundwater elevation corrected for the presence of free product; correction factor = [(TOC-DTW)+(Product Thickness x 0.75)].
- 1,2-Dichloroethene (1,2-DCE) was detected at a concentration of 18 ppb.
- Reported as Total Extractable Hydrocarbons (TEH).
- Reported as Total Petroleum Hydrocarbons (TPH).
- Laboratory report indicates the hydrocarbons detected appeared to be a diesel and non-diesel mixture.
- Laboratory report indicates the hydrocarbons detected did not appear to be diesel.
- 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.
- Laboratory report indicates the hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.
- 9 Laboratory report indicates the hydrocarbons detected did not appear to be gasoline.
- Laboratory report indicates diesel and unidentified hydrocarbons > C16.
- Detection limit raised. Refer to analytical results.
- Laboratory report indicates gasoline and unidentified hydrocarbons < C7.
- 13 Laboratory report indicates discrete peaks.
- Laboratory report indicates diesel and unidentified hydrocarbons > C20.
- 15 Laboratory report indicates discrete peaks and unidentified hydrocarbons < C7.
- Laboratory report indicates diesel and unidentified hydrocarbons < C15.
- 17 Laboratory report indicates diesel and unidentified hydrocarbons < C15 and > C20.
- 18 Laboratory report indicates gasoline and unidentified hydrocarbons > C8.
- 19 Laboratory report indicates unidentified hydrocarbons > C16.
- 20 Laboratory report indicates unidentified hydrocarbons C9-C24.
- 21 Laboratory report indicates diesel and unidentified hydrocarbons < C12.
- 22 Laboratory report indicates unidentified hydrocarbons C6-C12.
- 23 Laboratory report indicates unidentified hydrocarbons C6-C9.

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #7376 4191 First Street Pleasanton, California

Laboratory report indicates unidentified hydrocarbons > C14.

Laboratory report indicates unidentified hydrocarbons > C10.

Laboratory report indicates unidentified hydrocarbons > C9.

MTBE by EPA Method 8260.

Table 2

Product Thickness/Removal Data

Tosco (Unocal) Service Station #7376 4191 First Street

Pleasanton, California

Well ID	Date	DTW: (ft.)	Product Thickness (ft.)	Amount Bailed (Product + Water) gallons
MW-5	03/07/97	56.30	Sheen	
	06/27/97	68.88	0.90	
	09/29/97	69.47	0.35	
	12/15/97	64.92	0.30	
	03/16/98	49.63	0.09	0.25
	06/26/98	63.00	Sheen	
	08/18/98	70.40	0.005	_
	09/22/98	69.10	0.06	
	12/15/98	68.84	0.17	
	12/23/98	68.42	0.50	
	03/15/99	63.81	0.25	0.13
	03/23/99	63.59	0.13	0.00

EXPLANATIONS:

Product thickness/removal data prior to March 16, 1998, were compiled from reports prepared by MPDS Services, Inc.

DTW = Depth to water

(ft.) = Feet

-- = Not Measured/Not Available

Table 3

Groundwater Analytical Results - Oxygenate Compounds

Tosco (Unocal) Service Station #7376

4191 First Street

Pleasanton, California

			Pleasainon,	MTBE	DIPE	ETBE	TAME
Well ID	Date	Ethanol (ppb)	TBA (ppb)	(ppb)	(ppb)	(ppb)	(ppb)
MW-2B	03/15/99	ND	3,800	4,800	13	ND	ND
MW-7	03/15/99	ND	610	970	4.3	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

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 a MMC flexi-dip 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, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or polyvinyl chloride bailers. Temperature, pH and electrical conductivity are measured 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.

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TOSCO (UNOCAL) SS#7376 PLEASANTON, CA

MONITORING & SAMPLING EVENT OF MARCH 15, 1999

Client/ To Facility# 73	76			Job#: _	18007	<u></u>	<u>.</u>
	91 First st			Date: _	3/15/99	•	
City:				Sampler: _	Vartke	^	
Well ID	Mw-1	_ W	ell Condition:	<u>oh</u>			
Well Diameter	2 i		drocarbon	∕ 5	Amount B	→	
Total Depth	86.43 +		ickness: /olume	2" = 0.17		3 4'	(Gallons) ' = 0.66
Depth to Water	78.95,	<u>t.</u>	actor (VF)	6" =	1.50	12" = 5.80	
	7.48	K VF <u>0.17</u>	<u>- = 1.27</u> x	3 (case volume)	= Estimated Pu	irge Volume: 💆	8 ((qal.)
Purge Equipment:	Disposable Baile Bailer Stack Suction Grundfos Other:	·		B P	pisposable Ba ailer ressure Baile Grab Sample Other:	er	
Sampling Time: Purging Flow Ra	12:32 10:55 ate: 1 er? no	gom.	Water Cold Sediment (onditions: or: Description: _ me:	<u>n</u>	Odor:_ rc	
Time 12:34	Volume pH (gal.)	ut	nductivity nhos/cmX/00 S 67	Temperature	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u> 12:35</u> _	3 3.4		5.59	69.2			
	4 2.3	· <u>S</u>	5.58	69.5			
			·-···				
SAMPLE ID	(#) - CONTAINER	LABO REFRIG.	RATORY INF		ORATORY	ANAL	rses
MW-1	3 VOA	Y	HCI	SEQUO	Α	TPH(G)/btex/n	ntbe
	1 Auber	٠٠	NONE	~		TPHD	
COMMENTS:							
<u> </u>	<u> </u>	• •					

acility# 73	76	·	Job		30075	·	<u></u>
Address: 419	1 First st.		Date		<u> </u>		
City:	easaston		San	npler:1	Butker	·	
Well ID	MW-2B	Wel	Condition:	OK	<u>. </u>		
Well Diameter	2in.	Thic	rocarbon :kness:4	-	Amount Ba (product/wat	/1)	(Gallons)
Total Depth	85,25 ft.	1 40	lume 2* =	0.17 6" = 1.		4* 12* = 5.80	= 0.66
Depth to Water	<u>77.31 ft.</u>			· · ·			
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundfos Other:		Sampling Equipme	nt: Dis Bai Pre Gra	posable Baller essure Baile ab Sample her:	iler er	
	3:55 4:20 ete:	gpm,	Weather Condi Water Color: _ Sediment Desc If yes; Time:	ription:	·	Odor: <u>M∂</u>	<u> </u>
	Volume pH (gal.). (gal.). 7.19	μπ	ductivity Ten	nperature	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
4:02	4.5 7.11		5·76 <u>k</u>	59. 5			
	(#) - CONTAINER	LABOI REFRIG.	RATORY INFOR	LABO	RATORY	ANAL	
SAMPLE ID	3 VoA	Y	HCI	SEQUOIA	<u></u>	TPH(G)/btex/r	nibe
SAMPLE ID MW-ZB		_	NONE	4			
	1 Auber	4	1101			プラスメノベイ	787.63-70.
MW-2B		4	#Cl	4		8260(5)	X4. (9-10.

Client/ To: Facility# 73	seb 76		Job	p#: 18007)
Address: <u>419</u>	1 First st.	<u> </u>	Dat	te: <u>\$/15 /99</u>
	santon			mpler: <u>Vartke</u>
Well ID	MW-3	We	ell Condition:	oh
Well Diameter	2in		drocarbon	Amount Bailed
Total Depth	94.11 #			P (feet) (product/water):
Depth to Water	79.19 ft	=	actor (VF)	6" = 1.50 12" = 5.80
	14.92 x	VF 0:17	_ <u>= 2.54</u> x 3 (cas	ase volume) = Estimated Purge Volume: $\frac{9.61}{1000}$
Purge Equipment:	Disposable Baile Bailer Stack Suction Grundfos Other:		Sampling Equipme	
Purging Flow Ra	11:53 12:30 te: 1	gpm.	Water Color: Sediment Desc	itions: <u>clde</u> Odor: <u>rco</u>
Time \	Volume pH (gal.) 2.5	Cor µn	nductivity Tem thos/cmX/00 537 6	mperature D.O. ORP Alkalinit P.S. (mg/L) (mV) (ppm) P.S. (mg/L)
12:03	8 7.3	<u> </u>	5.32 6.	37.5
-		LABOI	RATORY INFORM	
SAMPLE ID	(#) - CONTAINER 3 VOA	REFRIG.	PRESERV. TYPE	LABORATORY ANALYSES SEQUOIA TPH(G)/btex/mtbe
	1 Auber	46	NONE	TPTD
COMMENTS: _				

Client/ To- Facility# 73					Job#:		10075	-			
Address: <u>4/9/</u>	First	st.			Date:	3	1,5-199	15-199			
City: Plea	santo	3			Sample	r:	Vartle	<u> </u>			
Well ID	Ηω	4	Wel	l Condition:		OK.					
Well Diameter		2 in.	•	irocarbon ckness:	Φ		Amount Ba (product/wat	<i></i>	(Gallons)		
Total Depth	<u>93</u>	.0/ ft.			2" = 0.17		3" = 0.38		* = 0.66		
Depth to Water	78.	47 ft.	Fa	ctor (VF)		6" = 1.		12" = 5.80			
Purge Equipment:	Disposat Bailer Stack Suction Grundfo	ole Bailer		= <u>2.4</u> 7 x : Sam Equi _l		Qis Bai Pre Gra	posable Ba iler essure Baile ab Sample her:	iiler :r			
Starting Time: Sampling Time: Purging Flow Ra Did well de-wate	 te:	40	apm.	Water Colo Sediment (or: Descriptio	<i>ლ</i> . on:		Odor: <u> </u>			
	Volume (gal.)	рн 7.52	μπ	nductivity Thos/cm/100	Tempera	ture	D.O. (mg/L)	ORP (mV)	Alkaliniry (ppm)		
11.20		7.35		1.85	<u>67.</u>						
11:23 -	}.	7.30	<u> </u>	1.73	<u>67.</u>	<u>6</u> —					
					ODMAT						
SAMPLE ID	(#) - CON	TAINER	REFRIG.	RATORY INF PRESERV.	•		RATORY	ANAL	YSES		
MW-4	3 Vo.		Υ	HCI	s	EQUOIA	\	TPH(G)/btex/	mtbe		
7	1 Amo	ber	r	NONE	≥	٦ .		TPHD			
COMMENTS:											
											

Client/ 12 Facility# 73	76	<u>.</u>	Job#: <u>/2</u>	30075	:	
	91 First st.		Date:3	2/15/99		
			Sampler:	•		
Well ID	MW-5	Well Condition:	o K			
Well Diameter	2 in.	Hydrocarbon Thickness:	0.25 (feet)	Amount Ba	iled o.s	liter
Total Depth	72.52 A.	Volume Factor (VF)	2" = 0.17	3" = 0.38 .50	4"	= 0.66
Depth to Water	63.81 ft.	12001 (71)				
	x v	F X	3 (case volume) =	Estimated Pur	ge Volume:	(gal.)
Purge	Disposable Bailer		pling			
Equipment:	Bailer Stack	Equi	•	sposable Bai iler	ler	
	Suction	r		ne. essure Bailei	•	
	Grundfos		Gr	ab Sample		
	Other:	_	Ot	her:		
Starting Time:		Weather C	onditions:			
Sampling Time:			or:		Odor:	
· -	ite:g	<u>m.</u> Sediment l	Description:		<u> </u>	
	er?		me:	Volum	e:	(gal.)
Time	Volume pH (gal.)	Conductivity µmhos/cmx/00	Temperature •F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
		LABORATORY INF	ORMATION			
SAMPLE ID			T	RATORY	ANALY	
	3 VOA	Y HCI	SECOULA		TPH(G)/btex/m	tbe
COMMENTS:	Not Sample.	d the to	the prise	na of	trac	product
				,		,

Client/ To- acility# 73	16 76				180075	·	
Address: 4/9	1 First st.		r	Date: .	3/15/99		
City: Ple	alanton			Sampler: .	Vortke		
Well ID	MW-6	Wel	Condition:	0	h		
Vell Diameter	2 in.	-	rocarbon :kness:	J	Amount Ba	(1)	(Gallons)
otal Depth	36.85 ft.		iume ctor (VF)	2" = 0.17 6"	3" = 0.38 = 1.50	4" 12" = 5.80	= 0.66
Depth to Water	75.29 _{ft.}	<u> </u>					
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundfor Other:	,	Samı	oling	Disposable Ba Bailer Pressure Baile Grab Sample Other:	iller er	.920 (qai.)
	nte:	gpm.	Water Colo	r:b Description:	rn Silt Volum	Odor:	
	Volume pH	Con μπ	ductivity	Temperatur		ORP (mV)	Alkalinit (ppm)
- ;/+ - - ;/7 -	4 7.33	<u>}</u>	63	69.4			
<u>]:2 </u>	6 4.3	<u>ک</u>	60	69.2			
				CORMATION			
SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV.	TYPE / L		ANAL	
MW-6	3 VoA	Y	HCI		UOIA	TPH(G)/btex/r	ntbe
	1 Amber	1	NONE			TPHD	
						<u> </u>	
COMMENTS:							
COMMENTS:		<u> </u>					

Client/ 7oゞ acility # 73		•	Jo	b#:/	80075	········	
Address: 419	1 First st.		Da	nte::	3/15/99	· •	
	easonton			ımpler:	Vartka	<u> </u>	
Well ID	Mw-7	. We	ell Condition:	δh			
Well Diameter	2 in		drocarbon	d Ifacti	Amount E		(Gallons)
Total Depth	76.90 m	V	olume 2" actor (VF)	= 0.17	3" = 0.3		
Depth to Water	60.44 H						
Purge Equipment:	Disposable Bailer Stack Suction Grundfos Other:		= <u>2. \$ 0</u> x 3 (d Samplir Equipm	ng eent: Di Ba Pro Gr	sposable B sposable B iller essure Bail ab Sample ther:	ailer er	(gal.)
Sampling Time:	1;55 1;20		Weather Cond Water Color: Sediment Des	ecription: _	silt	Odor: - 	
Did well de-wat	ter?		If yes; Time:	<u></u>	Volui	me:	(qal.
2:02	Volume pH (gal.) 3 7.26 9.5 7.06	β μη 7	1. 31	£8.} 68.7	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
SAMPLE ID MW-7	(#) - CONTAINER 3 VOA 1 Auber 2 VOA	LABOI REFRIG.	RATORY INFOR PRESERV. TYPE HCI NDNE		'	ANAL' TPH(G)/btex/n TPH D 8260 (5) 4	ntbe
COMMENTS:							

Client/ Tod acility# 733	16		-	3/15/99	- 	
Address: <u>4/</u> City: <i>p/</i>	91 First st eas anton		Date: Sampler: _	Vertk.		
Well ID	MW-8	Well Condition	on: <u>Ca</u>	vered ble to 1		
Well Diameter	in.	•		Amount Ba		(Gallons)
Total Depth Depth to Water	ftft	Factor (VF)	2" = 0.17	3" = 0.38 = 1.50	4"	= 0.66
	×	VF =	X 3 (case volume)	= Estimated Pu	rge Volume:	(gal.)
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundfos Other:	E	 F	Disposable Ba Bailer Pressure Baile Grab Sample Other:	r	
Starting Time:		Weathe	r Conditions:			
Sampling Time:		<u>/_</u> Water 0	Color:		Odor:	<u>. </u>
Purging Flow R	ate:		nt Description: ,			
Did well de-wa	ter?	If yes;	Time:	Volum	ne:	(gal.
Time	Volume pH (gal.)	Conductivity µmhos/cm x //	Temperature	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
	=					
0.4.4.0L.5.ID	(#) - CONTAINER		INFORMATION RV, TYPE // LA	BORATORY	ANAL	YSES
SAMPLE ID	3 VOA	#6			-TPH(G)/btex/r	ntbe
						<u> </u>
		<u> </u>				
COMMENTS:	Unable to Clyde Came	locate (N	ith metal	detector)	· span	t 1Ax.
(Clyde Came	to help	me fine	Lit-F	# afte	1/2 tr
	We gave u	p			<u> </u>	9/97-fleidat.

	1					SCO (UNOC l First S					CA		(Contact	(Home)	<u>\</u>	DAY DAY	15 D 102 B 277-	1735 735	11 · 11 ·		<u>.</u>
1	•	Con-				80075.85	rreer	<u> </u>	easar	ι <u>Εα</u> n	1.A		Laborator							ge	03:	367
TOS	60 .					-Ryan Ind	. (G-	-R In	(, ع			_ 1,	aharatan	. Dalas	a Mumi	har						
Town Markedon						Court.						A	Samples	Collecte	d by (N	lome)	Var	Hes	· I	25/1	190	
2003 Com Cargo Esta Parrera Cold	n PL, Suc. 400 torale 94563	,	Project C	ontact (M	lame) _ [eanna L.	Hardi	ng				_ ,	Collection Signature	Date _	<u> </u>	45/	99					
						0-551-755			<u> 510</u>	<u>-551-</u>	7888	_ :	Signalure		Poch	<i>f</i>	16 L	4				
ı			8										Analyss	o To B	e Perfoi	med					DO N	OT BILL
	٠,	ç	A. Chartoo	4.	1	Ę		22			ğ	ð		8.		8						ANALYSI
.	É	Containen	11	Grab Composite Discrete		Sample Preservation	ş	TPH Gar - BTEX WANTER] .	Purpeable Holocarbors (8010)	Purgeable Aromotica (5020)	Organica	Extractable Organica (8270)		भिर्व						
Que,	, ž			111	}	8	ঠ	ž.	7	P.	Ž	ર	δ	- \$	33	~3						
Sample Number	danple Numb	3	Matrix S = Soil K = Water	OUA		. •	load (Yes or No)		TPH Dissel (8015)	Off and Greams (5520)	400	46 20 20 20 20 20 20 20 20 20 20 20 20 20	Purpedble (8240)	18	2 4 6 2 6	30				1		
. E	ĝ	Number	E NE	<u>*</u>	Ě	Se .	<u> 8</u>	¥.	至多	88	[§ §	žã	[ES	₹ <u>₹</u>	CAC PEZONI (ICAP or AA)	80					Re	marka
TB-LB		1	W	Ca		401	4	V	 -									. 9	ก ว 1	564		
		4	મ	4	12150 P4	4		X	X				-							565		
HW-1		6	4		4/20	4	<u> </u>		X				 		-	X		- 3	1024 1024	500	A-F	
<u>μω-28</u>		4		 	12,70	4	4	X	 	<u> </u>			-							567		
μω -3			4	4	11:40	4		X	X					-						•		·
MW-4		4	u	4	11:40		4	<u>X</u>	<u> </u>	-				. <u></u>						5 <u>68</u>		
MW-6		4	4	4,	1,77	•	٤	χ_	X_	 -					ı					569		
ны-7		6	<u>س</u>	4	2,70	4		X	X	ļ			-		!	X		9	031	570	A-F	
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Relinquished By ((Signature)	l	Orgo	nlzotlon	0	ote/Time 7 - 7	Reo	lyed B)	(Signa	tura)		7	rganizati	on		/Ilm•			um Ar	ound Tim	e (Cirole	Choloe)
Vortes 1	shop.			R Inc					12	<u> </u>		_ _	OAC				500				Hre.	
Relinquished By ((Signature)			nollasin	1	ote/IIme	1	elved By	(Signa	ture)		- "	Örganizatlı	Ďη	Pale	/Ilme	-				Hre. koye	
Catandahad As	(Standural			3 C antxatlon		3-75 1 70. Oato/Ilmo		mad Fr	r Lahai	olan Pi	/ (Signal	ura)			Dole	/Tlm#	 			19_	Dave	_
Relinquished By	(ordunama)			Mutarion		oral linta	-1			Ma	-	ai v j				191	1430	(As Con	rooted	ン

Renalde Jensen 3/16/99 17:00



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954

(650) 364-9600 (925) 988-9600 (916) 921-9600 FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 AX (707) 792-034Z

Gettler-Ryan - Dublin 6747 Sierra Court, Suite J Dublin, CA 94568 Attention: Deanna Harding

Client Project ID: Sample Matrix: Analysis Method:

First Sample #:

Tosco SS#7376, Pleasaifton Water

EPA 5030/8015 Mod./8020

ER-RYAN INC. Apr 1, 1999

Mar 15, 1999

TOTAL PURGEABLE PETROLEUM HYDROCARBONS WITH BIEX FMT

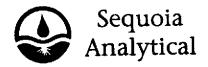
903-1564

Analyte	Reporting Limit μg/L	Sample i.D. 903-1564 TB-LB	Sample I.D. 903-1565 MW-1	Sample I.D. 903-1566 MW-2B	Sample I.D. 903-1567 MW-3	Sample I.D. 903-1568 MW-4	Sample I.D. 903-1569 MW-6
Purgeable Hydrocarbons	50	N.D.	N.D.	N.D.	26,000	N.D.	62
Benzene	0.50	N.D.	N.Ď.	N.D.	3,100	N.D.	1.4
Toluene	0.50	N.D.	N.D.	N.D.	270	N.D.	N.D.
Ethyl Benzene	0.50	N.D.	N.D.	N.D.	2,200	N.D.	N.D.
Total Xylenes	0.50	N.D.	N.D.	N.D.	3,100	N.D.	N.D.
мтве	2.5	N.D.	520	4,300	1,300	N.D.	23
Chromatogram Pa	uttern:				Gasoline	••	Unidentified Hydrocarbons C6 - C12
Quality Control D	ata						
Report Limit Multip	olication Factor:	1.0	10	20	200	1.0	1.0
Date Analyzed:		3/26/99	3/27/99	3/27/99	3/26/99	3/26/99	3/27/99
Instrument Identifi	cation:	HP-5	HP-9	HP-9	HP-5	HP-5	HP-2
Surrogate Recove (QC Limits = 70-1		91	100	96	91	102	119

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard. Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Julianne Fegley Project Manager



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954

(650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865

FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Gettler-Ryan - Dublin 6747 Sierra Court, Suite J Dublin, CA 94568

Client Project ID: Sample Matrix:

Tosco SS#7376, Pleasanton Water EPA 5030/8015 Mod./8020

Sampled: Received:

Mar 15, 1999 Mar 16, 1999

Attention: Deanna Harding

Analysis Method: First Sample #:

Apr 1, 1999 Reported:

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX / MTBE

903-1570

Analyte	Reporting Limit μg/L	Sample 1.D. 903-1570 MW-7	
Purgeable Hydrocarbons	50	2,700	
Benzene	0.50	1,100	
Toluene	0.50	N.D.	
Ethyl Benzene	0.50	30	
Total Xylenes	0.50	16	
MTBE	2.5	1,400	
Chromatogram Pa	ttern:	Gasoline	

Quality Control Data

Report Limit Multiplication Factor:

20

Date Analyzed:

3/27/99

Instrument Identification:

HP-2

Surrogate Recovery, %:

116

(QC Limits = 70-130%)

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard. Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

ฮน์lianne Fegley Project Manager

9031564.GET <2>



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954

(650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Gettler-Ryan - Dublin 6747 Sierra Court, Suite J Dublin, CA 94568

Client Project ID: Tosco SS#7376, Pleasanton Water

Mar 15, 1999

Attention: Deanna Harding

Sample Matrix: Analysis Method: First Sample #:

EPA 3510/8015 Mod. 903-1565

Received: Reported:

Sampled:

Mar 16, 1999 Apr 1, 1999

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit μg/L	Sample I.D. 903-1565 MW-1	Sample I.D. 903-1566 MW-2B	Sample I.D. 903-1567 MW-3	Sample I.D. 903-1568 MW-4	Sample I.D. 903-1569 MW-6	Sample I.D. 903-1570 MW-7
Extractable Hydrocarbons	50	67	390	3,500	N.D.	71	460
Chromatogram Pa	ttern:	Unidentified Hydrocarbons >C14	Unidentified Hydrocarbons > C10	Unidentified Hydrocarbons > C9		Unidentified Hydrocarbons >C14	Unidentified Hydrocarbons >C9

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	1.0
Date Extracted:	3/22/99	3/22/99	3/22/99	3/22/99	3/22/99	3/22/99
Date Analyzed:	3/24/99	3/24/99	3/24/99	3/24/99	3/24/99	3/24/99
Instrument Identification:	НР-3В	нр-зв	HP-3B	HP-3 8	HP-3B	HP-3B

Extractable Hydrocarbons are quantitated against a fresh diesel standard. Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Julianne Fegley Project Manager

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Redwood Ciry, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 (650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Gettler-Ryan - Dublin 6747 Sierra Court, Suite J Dublin, CA 94568

Attention: Deanna Harding

Client Project ID: Tosco SS#7376, Pleasanton

J Sample Descript: Water, MW-2B

Sample Descript: Water, MW-2B Analysis Method: EPA 8260 Lab Number: 903-1566 Sampled: Received: Analyzed:

Mar 15, 1999 Mar 16, 1999

Reported:

Mar 23, 1999 Apr 1, 1999

OXYGENATED COMPOUNDS (EPA 8260)

Analyte	Detection Limit µg/L		Sample Results µg/L
Ethanol	500		N.D.
t-Butanol	100	*******************************	. 3,800
Methyl t-Butyl Ether (MTBE)	2.0		4,800
Di-Isopropyl Ether (DIPE)	2.0	***************************************	. 13
Ethyl t-Butyl Ether (ETBE)	2.0		N.D.
t-Amyl Methyl Ether (TAME)	2.0		N.D.

Surrogates	Control Limi	it %	% Recovery
Dibromofluoromethane		150	100
1,2-Dichloroethane-d4	. 50	150	88

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

SEQUOIA ANALYTICAL, #1271

Julianne Fegley Project Manager



Redwood City. CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 (650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Gettler-Ryan - Dublin 6747 Sierra Court, Suite J Dublin, CA 94568

in Client Project ID: Suite J Sample Descript: Analysis Method:

Tosco SS#7376, Pleasanton Water, MW-7 EPA 8260 Sampled: Ma Received: Ma Analyzed: Ma

Mar 15, 1999 Mar 16, 1999 Mar 23, 1999

Attention: Deanna Harding

Lab Number: 903-1570

Reported: Apr 1, 1999

OXYGENATED COMPOUNDS (EPA 8260)

Analyte	Detection Limit µg/L		Sample Results µg/L
Ethanol	500	431337777777777777777777777777777777777	N.D.
It-Butanol	100	***************************************	610
Methyl t-Butyl Ether (MTBE)	2.0	***************************************	970
Di-Isopropyl Ether (DIPE)	2.0		4.3
Ethyl t-Butyl Ether (ETBE)	2.0	,	N.D.
t-Amyl Methyl Ether (TAME)	2.0		N.D.
•			

Surrogates	Control L	Limit %	% Recovery
Dibromofluoromethane	50	150	80
1 2-Dichloroethane-d4		150	30 *

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

SEQUOIA ANALYTICAL, #1271

Julianne Fegley Project Manager Please Note:

* Surrogate recovery below detection limit due to matrix interference.



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954

(650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Gettler-Ryan - Dublin 6747 Sierra Court, Suite J Dublin, CA 94568

Attention: Deanna Harding

Client Project ID:

Tosco SS#7376, Pleasanton Liquid

Matrix:

QC Sample Group: 9031564-570

Reported:

Apr 1, 1999

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl	Xylenes	
			Benzene		
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel	
MS/MSD					
Batch#:	9031387	9031387	9031387	9031387	
Date Prepared:	3/26/99	3/26/99	3/26/99	3/26/99	
Date Analyzed:	3/26/99	3/26/99	3/26/99	3/26/99	
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5	
Conc. Spiked:	20 μg/L	20 μg/L	20 μg/L	$60\mu\mathrm{g/L}$	
Matrix Spike					
% Recovery:	100	100	100	105	
Matrix Spike					
Duplicate %					
Recovery:	100	100	100	105	
Relative %					
Difference:	0.0	0.0	0.0	0.0	

LCS Batch#:	5LCS032699	5LCS032699	5LCS032699	5LCS032699	
Date Prepared: Date Analyzed: Instrument I.D.#:	3/26/99 3/26/99 HP-5	3/26/99 3/26/99 HP-5	3/26/99 3/26/99 HP-5	3/26/99 3/26/99 HP-5	
LCS % Recovery:	105	105	105	112	
% Recovery Control Limits:	70-130	70-130	70-130	70-130	

SEQUOIA ANALYTICAL, #1271

Julianne Fegley Project Manager

Please Note:

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.



Redwood Ciry. CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 (650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Gettler-Ryan - Dublin 6747 Sierra Court, Suite J Dublin, CA 94568

Client Project ID: Matrix:

Tosco SS#7376, Pleasanton

Liquid

Attention: Deanna Harding

QC Sample Group: 9031564-570

Reported:

Apr 1, 1999

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl	Xylenes	
			Benzene		
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel	
MS/MSD					
Batch#:	9031665	9031665	9031665	9031665	
Date Prepared:	3/27/99	3/27/99	3/27/99	3/27/99	
Date Analyzed:	3/27/99	3/27/99	3/27/99	3/27/99	
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2	
Conc. Spiked:	20 µg/L	20 μg/L	20 μg/L	60 µg/L	
Matrix Spike					
% Recovery:	105	100	105	113	
Matrix Spike Duplicate % Recovery:	115	105	110	118	
Relative % Difference:	9.1	4.9	4.7	4.3	
LCS Batch#:	2LCS032799	2LCS032799	2LCS032799	2LCS032799	
Date Prepared:	3/27/99	3/27/99	3/27/99	3/27/99	
Date Analyzed:	3/27/99	3/27/99	3/27/99	3/27/99	
instrument i.D.#:	HP-2	HP-2	HP-2	HP-2	

110

70-130

Plea

110

70-130

SEQUOIA ANALYTICAL, #1271

LCS % Recovery:

% Recovery Control Limits:

પ્રવીianne Fegley Project Manager Please Note:

105

70-130

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

118

70-130



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 (650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Gettler-Ryan - Dublin 6747 Sierra Court, Suite J Dublin, CA 94568

Client Project ID:

Tosco SS#7376, Pleasanton

Matrix: Liquid

Attention: Deanna Harding

QC Sample Group: 9031564-570

Reported:

Apr 1, 1999

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Taluene	Ethyl	Xylenes	Diesel	MTBE
			Benzene			
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M.	EPA 8260
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel	K. Grubb	N. Nelson
MS/MSD						
Batch#:	9032012	9032012	9032012	9032012	BLK0322998	9031271
Date Prepared:	3/27/99	3/27/99	3/27/99	3/27/99	3/22/99	3/22/99
Date Analyzed:	3/27/99	3/27/99	3/27/99	3/27/99	3/24/99	3/22/99
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5	HP-3A	GC/MS-2
Conc. Spiked:	20 μg/L	20 μg/L	20 µg/L	60 μg/L	500 μg/L	50 μg/L
Matrix Spike						
% Recovery:	125	90	125	129	88	•
Matrix Spike Duplicate % Recovery:	135	95	130	132	, 86	
Relative % Difference:	7,7	5.4	3.9	2.0	2.3	
LCS Batch#:	5LCS032799	5LCS032799	5LC\$032799	5LCS032799	LCS0322998	LCS032299B
Date Prepared:	3/27/99	3/27/99	3/27/99	3/27/99	3/22/99	3/22/99
Date Analyzed:	3/27/99	3/27/99	3/27/99	3/27/99	3/24/99	3/22/99
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5	HP-3A	GC/MS-2
LCS %						
Recovery:	115	115	115	, 1 20	84	108

SEQUOIA ANALYTICAL, #1271

70-130

% Recovery Control Limits:

Project Manager

Please Note:

70-130

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

70-130

70-130

60-140

70-130

TOSCO (UNOCAL) SS#7376 PLEASANTON, CA

MONITORING & SAMPLING EVENT OF MARCH 23, 1999

Client/ 7.	376		Jol	o#: _	140107	.04	
Address: 49	91 First &	: /	Da	te: _	3/23/99)	
City:		·	Sai	mpler: _	Vartha	<u> </u>	
Weil ID	MW - 1	_ w	ell Condition:	o k			
Well Diameter	2		rdrocarbon nickness:	P (feet	Amount I	271	(Gallons)
Total Depth	86.43	4 [3" = 0.3		4" = 0.66
Depth to Water	78.69	1 -	actor (VF)		1.50	12* = 5.80	
		X VF	= X 3 (ca	se volume)	= Estimated F	urge Volume:	(gal.)
Purge Equipment:	Disposable Baile Bailer Stack Suction Control Other:	·	Samplin Equipme	ent: C F	Disposable B Bailer Pressure Bail Grab Sample Other:	er	
Starting Time:			Weather Condi	tione:	W - 11		
Sampling Time:		<u>-</u> -	Water Color: _	_		Odar	
_	ate:		Sediment Desc			Ouo	
	ter?		If yes; Time:			же:	(gal.
Time	Volume pH (gal.)		nductivity Ten	iperature •F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
				·			
			RATORY INFORM				
SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	- 	DRATORY		LYSES
	3 VOA		HL	SEQUO	· · · · · · · · · · · · · · · · · · ·	TPH(G)/btex/	mto a
COMMENTS:	Monita	r and	<u>′</u>				

Client/ Tos Facility# 73			Job#	t: _	140107.	04	
Address: 49	1 First st	<u>L </u>	Date	: _	3/23/99		
City: Ple	asanton		Sam	pler: _	Varthas		
Well ID	MW-2		ondition:	oh		<u></u>	
Well Diameter	2in.	Hydrod Thickn		b (fee	Amount B		(Galfons)
Total Depth	85.25 tt	Volum	e 2° = 1	0.17	3" = 0.38 = 1.50	4	= 0.66
Depth to Water	77.06 ft.	Factor	(VF)	• • • • • • • • • • • • • • • • • • •		12 = 5.80	
	x	VF =	X 3 (case	3 volume)	= Estimated Po	irge Volume: _	(gal.)
Purge Equipment:	Disposable Bailer Bailer		Sampling Equipmer		Disposable Ba	ailer	
Edahmene	Stack		• •	1	Bailer Pressure Baile	ar	
	Suction Suction			(Grab Sample		
	Other:			I	Other:		
Starting Time:		w	eather Condit	ions:		7	
Sampling Time:		<u>w</u>	ater Color:		/	Odor:	
Purging Flow Ra	te:		ediment Descr	-			
Did well de-wate	er?	1f	yes; Time:		Volun	ne:	(gal.)
Time	Volume pH (gal.)	Conduc µmhos		perature F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
	/				.	. —	
				/			
				<u> </u>			
SAMPLE ID	(#) - CONTAINER		ORY INFORM		BORATORY	ANAL	YSES
5,441, 62.10	3 Vo.A		Hel	SEQU	eia .	TPH(G)/btex/	ntbe
			·				
	1			-		 	
	21 54	<u> </u>				<u> </u>	
COMMENTS:	Monitor o	n ly					
	,	·			· · · · · · · · · · · · · · · · · · ·		

\$/97-Heldat.frm

Client/ /03 Facility# 73	76			Job#:	_140.107	.04	
Address: <u>449</u>	1 First s	4.		Date:		?	
City: Ple		• • • • • • • • • • • • • • • • • • • •	· · · · · · · · · · · · · · · · · · ·		: Vartha		
Well ID	<u>н</u> w - 3	_ W	ell Condition	<u> </u>	h	- · ·	
Well Diameter			drocarbon	æ	Amount	1	
Total Depth	94.11		olume		$\frac{\text{(feet)} \text{(product/w}}{3"} = 0.3$		(Gallons) F = 0.66
Depth to Water	78.92		actor (VF)		6" = 1.50	12" = 5.80	0.00
		X VF	_ = X	3 (case volu	me} = Estimated F	Purge Volume: _	{gal.}
Purge Equipment:	Disposable Baile Bailer Stack Suction Tondfos Other:			npling ipment:	Disposable E Bailer Pressure Bai Grab Sample Other:	ler e	
Starting Time:		 	Weather C	onditions:		·	
Sampling Time:							
	e:	gpm.	Sediment I	Description	1;	•	
Did well de-wate	r?	_/	If yes; Ti	me:	Volu	me: <u> </u>	(qal.)
-	olume pH (gal.)		nductivity nhos/cmX/00	Temperatu •F	tre D.Ø.	ORP (mV)	Alkalinity (ppm)
	$\angle =$						
			<u> </u>			-	
							•
SAMPLE ID	(#) - CONTAINER	LABO	RATORY INF PRESERV. 1		N LABORATORY	ANAL	YSES
	3 VOA	Y	HGI		UOIA	TPH(G)/btex/n	ntbe
		<u> </u>					
LL		,		<u> </u>		<u>I</u>	
COMMENTS:	Hondar a	<u> ۲</u> ۲			<u> </u>		
			-	<u>-</u>			

Client/ 703 Facility# 73 Address: 49 City: Pl	76 1 First 57	L.	Job Date San		40107.0 23/99 utlas		
Welf 1D	MW - 4	Wel	I Condition:	OK			
Well Diameter	2in.		Irocarbon	,	Amount Ba	_	(Gallons)
Total Depth Depth to Water	93.01 tt.	Vo		0.17 6" = 1	3" = 0.38		= 0.66
Purge Equipment:	Disposable Bailer Bailer Stack Suction around tos Other:		Sampling Equipme	nt: Dis Bai Pre Gra	posable 8a	iler r	(gai.)
Starting Time: Sampling Time: Purging Flow Ra	ate:	gpm.	Weather Condi Water Color: _ Sediment Desc		<u> </u>	Odor:	
Did well de-wat	/		If yes; Time:	/	Volum D.O.	ORP	(gal.) Alkalinity
Time -	Volume pH		ductivity Ten	eF	(mg/L)	(mV)	(ppm)
SAMPLE ID	(#) - CONTAINER	LABOR	RATORY INFORM		RATORY	ANAL	rses
	3-VOA		HCL	SEQUOIA		TPH(G)/btex/n	ntbe
COMMENTS:	Monitor o	shy .	<u> </u>				
	<u> </u>	(<u></u>				

Client/ /03 Facility# 73	sco :76		Job#:	140107	.04	
Address 49	1 First s	∤.	Date:	3/23/99	7	
City: <u>\$/</u>				er: Vastka	4	
City:	<u>818810-1</u>		, Campi	J		
Well ID	MW - 5	Well Condit	tion:	OK	· · · · · · ·	
Well Diameter	<u>Zin</u>			Amount		
Total Depth	72.52 #			(feet) (product/w		(Gallons)
-	63.59 ft	Forter (VE)		7 3" = 0 6" = 1.50	38 4 12" = 5.80	·* = 0.66
Depth to Water		<u> </u>			*_ ==:	
	x	(VF =	_ X 3 (case vo	lume) = Estimated	Purge Volume: _	(qal.)
Purge	Disposable Baile		Sampling			
Equipment:	Bailer Stack		Equipment:	Disposable 8 Bailer	Bailer	
	Suction	,		Pressure Bai	iler	
	equidios			Grab Sample		
	Other:			Other:	·	
		384	0			
Starting Time:			er Conditions		Odom	
Sampling Time:					Odor:	····
	ite:		ent Description	on:Volu		(gal,
Did well de-wate	ər?	it yes;	ime:		ime:	(gai,
Time 1	Volume pH (gal.)	Conductivity		D.O. (mg/L)		Alkalinity (ppm)
				ot		
	1					
		_				
						<u> </u>
	4th CONTAINS	LABORATORY	.*		ANIAI	Vece
SAMPLE ID	(#) - CONTAINER	REFRIG. PRESE	RV. TYPE 🦯	LABORATORY	1	YSES
SAMPLE ID	(#) - CONTAINER		RV. TYPE 🦯		ANAL	
SAMPLE ID		REFRIG. PRESE	RV. TYPE 🦯	LABORATORY	1	
SAMPLE ID		REFRIG. PRESE	RV. TYPE 🦯	LABORATORY	1	
	3 VOA	REFRIG. PRESE	RV. TYPE 🦯	LABORATORY	1	
		REFRIG. PRESE	RV. TYPE 🦯	LABORATORY	1	

Client/ Tos Facility# 73			Joi	o#: _	140107.	04	
Address: 49	1 First ST	<u>L</u>	Da		3/23/99		
city: Pla	asanton	<u>-</u>	Sa	mpler: _	Varthas		
Well ID	MW - 6	We	If Condition:	O.K			
Well Diameter	<u>Zin</u> ,		drocarbon ckness:	${\cal D}$ (fee	Amount B	JE / 3	(Gallons)
Total Depth	86.85 A	v	olume 2" :	= 0.17	3" = 0.38 = 1.50	3 4"	= 0.66
Depth to Water	75.03 ft		actor (VF)			- 3.00	<u></u>
	x	VF	_ = × 3 (c	ase volume	= Estimated Pt	urge Volume: _	(gal.)
Purge Equipment:	Disposable Bailer Bailer	• •	Samplin Equipm	_	Disposable Ba	ailer	
Ednibuteur:	Stack		-4		Bailer -		
	Suction Suction	•			Pressure Baile Grab Sample		
	Other:				Other:		
Starting Time: Sampling Time: Purging Flow Ra Did well de-wate	/	gom,	Weather Cond Water Color: Sediment Des If yes; Time:	cription:		Odor:	
Time	Volume pH (gal.)		nductivity Te	mperature •F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
					-	<u> </u>	
				/ 			
SAMPLE ID	(#) - CONTAINER	LABO	RATORY INFOR		BORATORY	ANAL	YSES
SAMPLE ID	3 VOA	Y Y	H21	SEQU		TPHIGH-tex/	ntba_
	<u> </u>						
					<u> </u>		<u> </u>
		1				<u> </u>	
COMMENTS:	Mondon a	mby.		<u></u>			

Facility# 73	1 First ST	L,		Job#: Date: Sampler:	140107. 3/23/99 Vartles		
Well ID Well Diameter Total Depth Depth to Water	MW-7 2 in. 76.90 ft. 60.43 ft.	Hy Thi V	ell Conditions drocarbon ickness: folume actor (VF)	2" = 0.17	Amount E (product/water) 3" = 0.3 1.50	ater): 4 8 12" = 5.80	(<u>Gallons)</u> 4" = 0.66
Purge Equipment:	Disposable Bailer Bailer Stack Suction Suction Other:		Sam	a (case volum	Disposable B Bailer Pressure Bail Grab Sample Other:	ailer er	(gai. <u>)</u>
Starting Time: Sampling Time: Purging Flow Ra Did well de-wate		gpm.	Sediment (Volur	Odor:	
	(gal.)		nhos/cm/t/00	F /	(mg/L)	(mV)	(ppm)
SAMPLE ID	(#) - CONTAINER	LABOF	RATORY INF		ABORATORY	ANAL	YSES nthe
COMMENTS: _	Monitor only	7					

acility# 73	16	1	Job		40107.6			
ddress: <u>49</u>	1 First s	<u>+</u>		_ Date: <u>3/23/99</u>				
ity:	asanton		Sam	pler: _ <i>V</i> 2	ethes	<u></u> _		
Well ID	MW - 8	. We	I Condition:	δK				
Vell Diameter	<u>Zir</u>	-	Irocarbon ckness:		Amount Bai	~	(Gallons)	
otal Depth	84.75 +	v.	lume 2* =	0.17	3" = 0.38	4*	= 0.66	
epth to Water	64.86,	t.	ctor (VF)	6" = 1		12* = 5.80		
	19.89	v v 0./	= 3.38 x Alcas	(develop) e volume) =	Estimated Purg	ge Volume:	34 (gal.)	
Purge iquipment:	Disposable Baile Bailer Stack Suction Suction Other:		Sampling Equipmer	nt: Dis Bai Pre Gra	posable Bail ler ssure Bailer ab Sample ner:			
Starting Time:	1:40		Weather Condit	ions:	eldy			
	2:45	·	Water Color:	brn		Odor:		
	ate:	gom,	Sediment Descr	iption: <u>ع</u>	and + Sil	4 (mulo	(dy)	
	er?		If yes; Time:		Volume	e:	loal	
Time	Volume pH (gal.) 11 7.5	→ ^{μπ}	hos/cmx/00	perature 6.3	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)	
2:10	72 7. 34 7.3	12 6	·80 6 ·72 6	7.5				
2:28	<u>34 7.3</u>	<u>8</u> 6	·72 6	8.1				
					<u> </u>		··· <u>·</u> ··-	
SAMPLE ID	(#) - CONTAINER	LABOF REFRIG.	ATORY INFORM PRESERV. TYPE		RATORY	ANALY	rses	
MW-8	3 VOA	Y	HC1	SEQUOIA		TPH(G)/btex/m	ntbe	
	1 Amber	~	NONE	٦.		TPH-D		
			ter-sul		/			
COMMENTS:	Very Turk	id w	ster - sul	marsible	6 Day	<u>, , , , , , , , , , , , , , , , , , , </u>	4329-	



Tours Marketing Company 2000 Core Gorgen PL, St., 400 See Remon, Caltirals 54343

Relinquiched By (Signoture)

Focility Humber TOSCO (UNOCAL) SS#7376 Foolily Address 4191 First Street, Pleasanton, CA Consultant Project Number 1980 140107.04 Consultant Name Gettler-Ryan Inc. (G-R Inc.) Address 6747 Sierra Court, Suite J. Dublin, CA 94568 Project Contact (Name) Deanna L. Harding (Phone)510-551-7555 (Fox Number)510-551-7888

3/14/99 1210

Date/Time

Organization

W.C. Sen

Contact (Home)	- BELTY
(Phone) (916) 277-	2321
Laboratory Name Sequois Analytic	al .
Laboratory Release Number	(14 (14 14 TP) (12 F)
Samples Collected by (Nome) Valthes	Tashijian
Collection Date 3/23/99	
Signature North Obly	

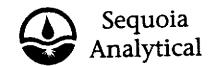
As Contracted

			8					: Analyses To Be Performed DO NOT BI				•• To B		DO NOT BILL							
Sample Number	Lab Sample Number	Number of Containers	Metre S = Sol A = Ar W = Water C = Charcool	Type G = Grab C = Composite D = Discrete	Ime	Somple Preservation	load (Yes or No.)	TPH Gas - STEX W/MTBE (8016) . (8020)	1PH Diesed (8015)	Oil and Graces (5520)	Purperble Halocarbons (8010)	Purpeoble Aromotics (8020)	Purperble Organics (8240)	Extractable Organica (8270)	Metals C4Cr3b,Zn,Ni (ICVP or Ax)						TB-LB ANALYSIS
TB-LB		1	V	Ce		401	7	X					34(,		1.		1	
MW-8		4	••		2:45 PH	પ	٠.	Х	X		9	032	341	A-D							
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Rallingulated By Matths Re	(Signoture)			nizotion R Inc.	D.	10/11moz,40 23/99 PU	Rece	Dec By	(Signal	lur•))eQQ			ganizali • • • •		11		3:40		ium Ar		ne (Cirole Cholee)
Helingulahed By	(Signature)	7	_1	nisation	<u> </u>	25/97 1 ole/Time 0 80	Rece	you by	- V	ر (والا	`		gonizolie	<u> </u>							Hre. Hre.
Joen	Wedan		G-	RI		2499		9	114	Like	<u>ل</u>		ج. ح. ح		312	/T/72 4 4/2 4					Doye Daye

Realeved For Laboratory By (Signature)

Remala C Sensen

Dote/Time 3/24-199 12-1:10



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954

(650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865

12 - THE R-RY AND INC.

FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Gettler-Ryan - Dublin 6747 Sierra Court, Suite J Dublin, CA 94568

Client Project ID:

Unocal SS#7376, Pleasanton. Water

Mar 23, 1999 Mar 24, 1999

Attention: Deanna Harding

Sample Matrix: Analysis Method: First Sample #:

EPA 5030/8015 Mod./8020 903-2340

Received: Reported:

Apr 21, 1999

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX / MTBE

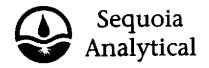
Analyte	Reporting Limit μg/L	Sample I.D. 903-2340 TB-LB	Sample I.D. 903-2341 MW-8
Purgeable Hydrocarbons	50	N.D.	N.D.
Benzene	0.50	N.D.	N.D.
Toluene	0.50	N.D.	0.77
Ethyl Benzene	0.50	N.D.	N.D.
Total Xylenes	0.50	N.D.	0.96
MTBE	2.5	N.D.	190
Chromatogram Pa	ttern:		••

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0
Date Analyzed:	4/2/99	4/3/99
Instrument Identification:	HP-5	HP-5
Surrogate Recovery, %: (QC Limits = 70-130%)	102	89

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard. Analytes reported as N.D. were not detected above the stated reporting limit.

Yulianne Fegley Project Manager



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954

(925) 988-9600 (916) 921-9600 (707) 792-1865

(650) 364-9600

FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Gettler-Ryan - Dublin 6747 Sierra Court, Suite J Dublin, CA 94568

Client Project ID:

: Unocal SS#7376, Pleasanton

Sampled:

Mar 23, 1999

Sample Matrix: Analysis Method:

Water EPA 3510/8015 Mod. Received: Reported:

Mar 24, 1999

Attention: Deanna Harding

First Sample #:

903-2341

Apr 21, 1999

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit μg/L	Sample I.D. 903-2341 MW-8
Extractable Hydrocarbons	50	60
Chromatogram Pa	ttern:	Unidentified Hydrocarbons

Quality Control Data

Report Limit Multiplication Factor:

1.0

Date Extracted:

3/30/99

Date Analyzed:

4/7/99

Instrument Identification:

HP-3A

Extractable Hydrocarbons are quantitated against a fresh diesel standard. Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Yalianne Fegley Project Manager



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 (650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Gettler-Ryan - Dublin 6747 Sierra Court, Suite J Dublin, CA 94568

Attention: Deanna Harding

Client Project ID:

Unocal SS#7376, Pleasanton

Matrix: Liquid

QC Sample Group: 9032340-341

Reported:

Apr 21, 1999

QUALITY CONTROL DATA REPORT

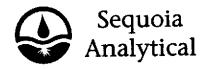
ANALYTE	Benzene	Toluene	Ethyl	Xylenes	
			Benzene		
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel	
MS/MSD					
Batch#:	9032236	9032236	9032236	9032236	
Date Prepared:	4/2/99	4/2/99	4/2/99	4/2/99	
Date Analyzed:	4/2/99	4/2/99	4/2/99	4/2/99	
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5	
Conc. Spiked:	20 µg/L	20 µg/L	20 μg/L	60 h g /r	
Matrix Spike					
% Recovery:	100	100	100	105	
M. Necovery.	100	100	100	105	
Matrix Spike					
Duplicate %					
Recovery:	95	100	100	105	
ncoorery.	75	,00	100	100	
Relative %					
Difference:	5.1	0.0	0.0	0.0	
,	- '				

LCS Batch#:	5LCS040299	5LCS040299	5LCS040299	5LCS040299		
Date Prepared:	4/2/99	4/2/99	4/2/99	4/2/99		
Date Analyzed:	4/2/99	4/2/99	4/2/99	4/2/99		
Instrument I.D.#:	HP-S	HP-5	HP-5	HP-5		
LCS %			•			
Recovery:	100	100	95	, 100		
% Recovery				•	-	
Control Limits:	70-130	70-130	70-130	70-130		

Please Note:

SEQUOIA ANALYTICAL, #1271

Julianne Fegley Project Manager The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 (650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Gettler-Ryan - Dublin 6747 Sierra Court, Suite J Dublin, CA 94568

Attention: Deanna Harding

Client Project ID: Unocal SS#7376, Pleasanton

Matrix:

Liquid

QC

QC Sample Group: 9032340-341

Reported:

Apr 21, 1999

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl	Xylenes	Diesel
			Benzene		
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M.
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel	N. VanSlambrook
MS/MSD					
Batch#:	9032525	9032525	9032525	9032525	BLK033099
Date Prepared:	4/3/99	4/3/99	4/3/99	4/3/99	3/30/99
Date Analyzed:	4/3/99	4/3/99	4/3/99	4/3/99	4/7/99
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5	HP-3A
Conc. Spiked:	20 µg/L	20 μg/L	20 μg/L	60 µg/L	500 μg/L
Matrix Spike					
% Recovery:	115	120	115	120	90
Matrix Spike					
Duplicate %					
Recovery:	100	100	100	108	96
Relative %					
Difference:	14	18	14	10	6.5
LCS Batch#:	5LC\$040399	5LCS040399	5LCS040399	5LCS040399	LCS033099
Date Prepared:	4/3/99	4/3/99	4/3/99	4/3/99	3/30/99
Date Analyzed:	4/3/99	4/3/99	4/3/99	4/3/99	4/7/99
instrument i.D.#:	HP-5	HP-5	HP-5	HP-5	HP-3A
LCS %					
Recovery:	95	95	95	100	92
% Recovery				: :	
Control Limits:	70-130	70-130	70-130	70-130	60-140

SEQUOIA ANALYTICAL, #1271

Sulianne Fegley
Project Manager

Please Note:

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery is control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

ENVIRONMENTAL PROTECTION