January 30, 2002 G-R #180075

FEB & 1 ZOUE

TO:

Mr. David B. De Witt

Phillips 66 Company

2000 Crow Canyon Place, Suite 400

San Ramon, California 94583

CC:

Mr. David Vossler

Gettler-Ryan Inc.

Petaluma, California

FROM:

Deanna L. Harding

Project Coordinator

Gettler-Ryan Inc.

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

Tosco (Unocal) Service Station

#7376

4191 First Street

Pleasanton, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	January 23, 2002	Groundwater Monitoring and Sampling Report Fourth Quarter - Event of December 17, 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 *February 14*, 2002, this report will be distributed to the following:

cc: Mr. Scott Seary, Alameda County Department of Environmental Health, 1131 Harbor Bay Parkway, Alameda, CA 94302

Ms. Carol Mahoney, Zone 7 Water District, 5997 Parkside Drive, Pleasanton, CA 94588

Enclosure

trans/7376-dbd



January 23, 2002 G-R Job #180075

Mr. David B. De Witt Phillips 66 Company 2000 Crow Canyon Place, Suite 400 San Ramon, California 94583

Pleasanton, California

RE: Fourth Quarter Event of December 17, 2001

Groundwater Monitoring & Sampling Report Tosco (Unocal) Service Station #7376 4191 First Street

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 present in one well (MW-5). 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 Tables 1 and 3, and a Concentration Map is included as Figure 2. The chain of custody document and laboratory analytical reports are also attached.

Sincerely,

Deanna L. Harding

Project Coordinator

Hagop Kevork P.E. No. C55734

Figure 1:

Potentiometric Map

Figure 2:

Concentration Map

Table I: Table 2:

Groundwater Monitoring Data and Analytical Results Product Thickness/Removal Data

Table 3:

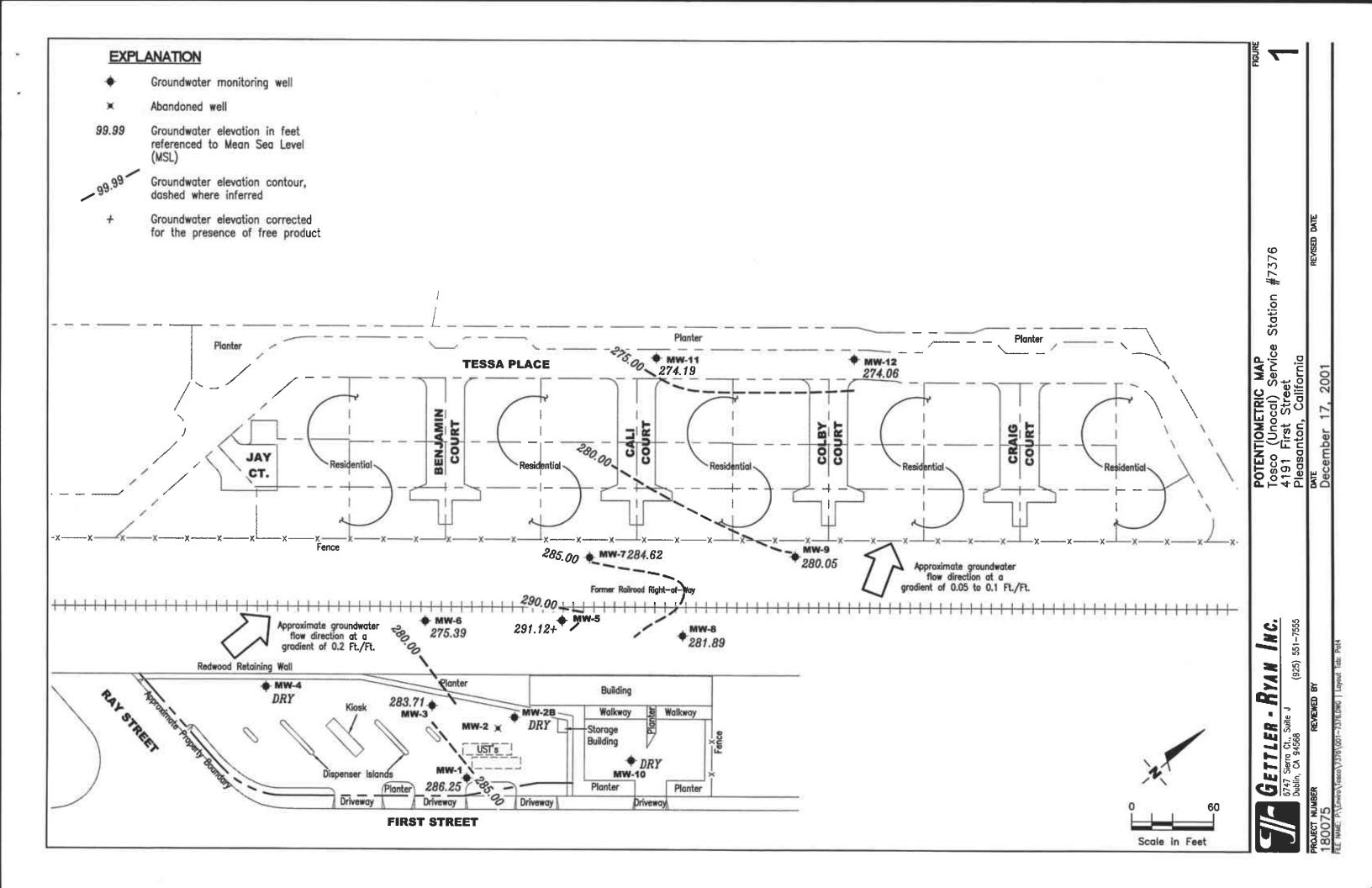
Attachments:

Groundwater Analytical Results - Oxygenate Compounds Standard Operating Procedure - Groundwater Sampling

Field Data Sheets

7376.aml

Chain of Custody Document and Laboratory Analytical Reports



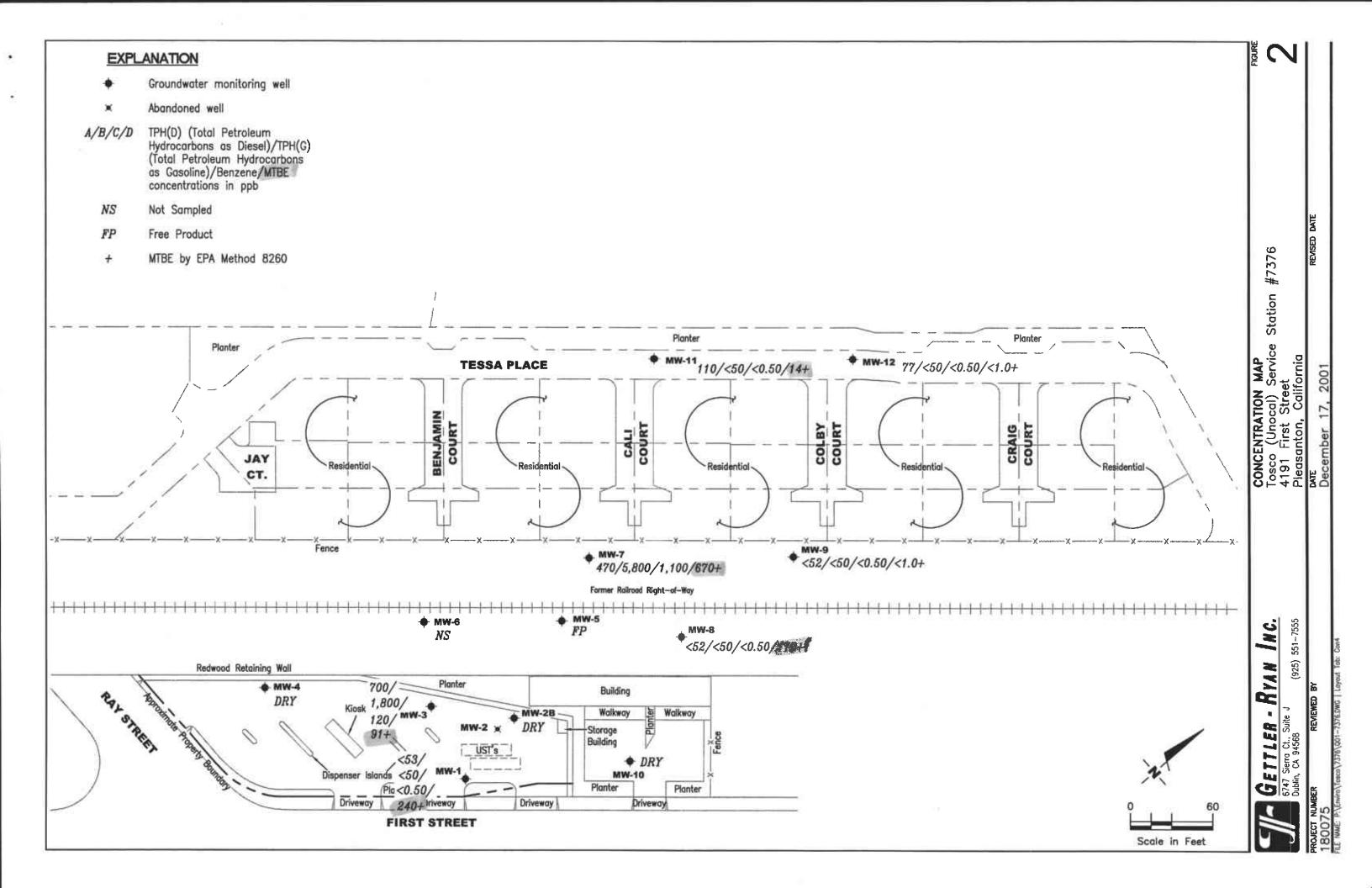


Table 1 Groundwater Monitoring Data and Analytical Results Tosco (Unocal) Service Station #7376

sco (Unocal) Service Station #73 4191 First Street Pleasanton, California

					Product						0.186.75786767787863	
WELL ID/	DATE	DTW	S.I.	GWE	Thickness	TPH-D	TPH-G	В	Т	Ė	X	MTBE
TOC*(ft.)		(ft.)	(ft.bgs)	(msl)	(ft.)	(ppb)	(pph)	(pph)	(ppb)	(pph)	(pph)	(ppb)
MW-1						2	1					
	12/08/87 ¹		65.0-95.0			$2,100^2$	50^{3}	58	8.0	ND	10	
366.99	12/07/94	81.04		285.95	0.00		ND	ND	ND	ND	ND	
	03/01/95	80.09		286.90	0.00	120	ND	ND	1.1	ND	1.3	
	06/01/95	77.53		289.46	0.00	54 ⁵	130	1.0	2.9	0.79	4.5	
	09/06/95	79.00		287.99	0.00	690	ND	ND	ND	ND	ND	6
	12/12/95	77.55		289.44	0.00	1905	ND	ND	ND	ND	ND	
	03/01/96	75.09		291.90	0.00	56	ND	ND	ND	ND	ND	370
	06/15/96	75.07		291.92	0.00	ND	ND	ND	ND	ND	ND	270
	09/18/96	79.90		287.09	0.00	1305	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			w=				-u ·
	03/15/99	78.95		288.03	0.00	67 ²⁴	ND^{11}	ND^{11}	ND ¹¹	ND ¹¹	ND11	520
	03/23/99	78.69		288.29	0.00				,			
	06/07/99	79.82		287.16	0.00	ND	ND	ND	ND	ND	ND	310
	09/03/99	79.74		287.24	0.00	76 ¹⁹	ND	ND	ND	ND	ND	67/55.2 ²⁷
	12/06/99	79.74		287.24	0.00	ND	ND	ND	ND	ND	ND	120
	03/10/00	79.66		287.32	0.00	51 ¹⁹	ND	ND	ND	ND	ND	100
	06/08/00	79.57		287.41	0.00	68.2^{20}	ND	. ND	ND	ND	ND	98.9
	09/25/00	79.48		287.50	0.00	ND	ND	ND	ND	ND	ND	145
	12/19/00	79.64		287.34	0.00	ND	ND	ND	ND	ND	ND	330
	03/05/01	80.03		286.95	0.00	505 ²⁰	ND	ND	ND	ND	ND	711

Table 1 Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #7376

4191 First Street

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.L. (ft.bgs)	GWE	Product Thickness (ft.)	TPH-D	TPH-G (ppb)	B (ppb)	T (ppb)	E (pph)	X (ppb)	MTBE
					V-2	VYYY	NPP V	(PPV)	(PPO)	(<i>PPn)</i>	(рри)	(pph)
MW-1	06/14/01	79.52	65.0-95.0	287.46	0.00	71 ²⁰	ND	ND	ND	ND	ND	680
(cont)	09/17/01	79.76		287.22	0.00	<50	<50	< 0.50	<0.50	< 0.50	< 0.50	11
	09/25/01	79.7 1		287.27	0.00					~	<0,50 	
	12/17/01	80.73		286.25	0.00	<53	<50	<0.50	<0.50	<0.50	< 0.50	210/240 ²⁷
MW-2	12/08/87					620 ²	1,800 ³	910	900	260	1.000	
	12/07/94	DAMAGED							800	260	1,200	
	DESTROYED											
MW-2B												
365.05	03/01/95	80.80	65.0-85.0	284.25	0.00	320	ND	ND	ND	ND	ND	
	06/01/95		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
	12/12/95	75.96		289.09	0.00	850 ⁴	1,200	630	ND	15	57	7
	03/01/96	73.27		291.78	0.00	870 ⁴	1,000	620	ND	ND	5.3	4,300
	06/15/96	73.21		291.84	0.00	420	910	350	ND	ND	ND	3,700
	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	470	330 ⁸	57	ND	ND	ND	2,900
	03/07/97	69.67		295.38	0.00	870⁴	190	28	0.64	ND	1.5	4,300
	06/27/97	82.40	٠	282.65	0.00	680⁴	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	NĐ	ND	4,100
	03/16/98	69.13		295.92	0.00	4,00010	ND^{11}	17	ND^{11}	ND^{11}	ND^{11}	4,400
65.05	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	NDII	ND11	ND^{11}	ND^{H}	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 ²

Table 1 Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #7376

4191 First Street

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	Product Thickness (ft.)	TPH-D (ppb)	TPH-G (pph)	B (ppb)	T (pph)	E (ppb)	X (pph)	MTBE (ppb)
MW-2B	03/23/99	77.06	65.0-85.0	287.99	0.00							
(cont)	06/07/99	82.96	05.0 05.0	282.09	0.00	770 ²⁵	ND	ND ^{II}	NDII	ND ¹¹	ND ^{II}	5,100
ζ-1,	09/03/99	84.16		280.89	0.00	870 ²⁰	NDII	ND ^{II}	ND ¹¹	ND ¹¹	ND ¹¹	6,300/4,400 ²⁷
	12/06/99	84.41		280.64	0.00	850 ³²	ND ¹¹	ND ¹¹	ND ¹¹	ND ¹¹	ND ¹¹	4,400
	03/10/00	82.42		282.63	0.00	1,500 ²⁰	ND^{11}	ND ^{t1}	ND ¹¹	ND ¹¹	ND ¹¹	6,900
	06/08/00	82.73		282.32	0.00	34	ND ¹¹	ND ¹¹	ND ¹¹	ND^{11}	ND ¹¹	7,780
	09/25/00	84.24		280.81	0.00	$2,900^{20}$	52.9 ³⁰	8.83	6.58	0.932	5.60	12,200
	12/19/00	84.39		280.66	0.00	70019	ND^{11}	ND ¹¹	ND^{11}	ND^{11}	ND^{11}	6,000
	03/05/01	84.61		280.44	0.00	36	ND	ND	ND	ND	ND	5,890
NP	06/14/01	83.53		281.52	0.00	570 ²⁰	ND	ND	ND	ND	ND	6,600
	09/17/01	84.55		280.50	0.00	³⁶	<200	<2.0	<2.0	<2.0	<2.0	5,100
	09/25/01		E - CAR PARKE		ELL							
	12/17/01	DRY	2.26									••
MW-3												
	12/08/87		76.5-96.5	'		$2,300^{2}$	$24,000^3$	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	140 ⁴	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	644	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	NĎ	27
	09/29/97	83.33		283.68	0.00	ND	ND	ND	ND	ND	ND	11

Table 1
Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #7376 4191 First Street

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	Product Thickness (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-3	12/15/97	02.25	=< = 0.5 =									
(cont)	03/16/98	83.35	76.5-96.5	283.66	0.00	ND	ND	ND	ND	ND	ND	19
367.03		71.07		295.94	0.00	670 ¹⁰	13012	6.5	1.9	1.5	1.6	210
507.03	06/26/98	79.65		287.38	0.00	63 ¹³	40015	15	ND ⁱⁱ	NDII	1.9	490
	08/18/98	83.29		283.74	0.00	20						
	09/22/98	83.33		283.70	0.00	95 ²⁰	ND	ND	ND	ND	ND	24
	12/15/98	83.29		283.74	0.00	ND	ND	ND	ND	ND	ND	18
	12/23/98	83.28		283.75	0.00	'						
	03/15/99	79.19		287.84	0.00	$3,500^{26}$	26,000	3,100	270	2,200	3,100	1,300
	03/23/99	78.92		288.11	0.00							
	06/07/99	83.22		283.81	0.00	ND	ND	ND	ND	0.63	ND	29
	09/03/99	83.31		283.72	0.00	2,900 ²⁰	23,000 ³⁰	770	ND ¹¹	980	6,400	280/82,4 ²⁷
	12/06/99	83.41		283.62	0.00	4,200 ²⁰	$41,000^{30}$	3,200	3,500	1,300	8,300	ND_{11}
	03/10/00	83.23		283.80	0.00	$2,500^{20}$	$5,100^{30}$	340	ND^{11}	97	450	200
	06/08/00	83.22		283.81	0.00	489 ²⁰	$1,200^{30}$	52.0	NDII	41.7	356	55.8
	09/25/00	83.37		283.66	0.00	$4,380^{20}$	$3,400^{30}$	305	ND^{11}	25.4	512	137
	12/19/00	83.27		283.76	0.00	$5,600^{35}$	6,800 ³⁰	260	ND^{11}	120	950	130
	03/05/01	83.34		283.69	0.00	$3,790^{20}$	16,800 ³⁰	1,100	48.6	637	4,260	224
	06/14/01	83.39		283.64	0.00	$1,300^{20}$	$1,800^{30}$	260	ND ¹¹	5.5	25	83
	09/17/01	84.10		282.93	0.00	290^{20}	<50	0.50	< 0.50	< 0.50	< 0.50	71
	09/25/01	84.23		282.80	0.00							
	12/17/01	83.32		283.71	0.00	700	1,800 ³⁰	120	<5.0	45	270	80/91 ²⁷
MW-4												
369.03	09/18/96	73.67	73.0-93.0	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

Table 1
Groundwater Monitoring Data and Analytical Results

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

WELL ID/ FOC*(ft.)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	Product Thickness (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
			**							Harris A.		WEST
MW-4	12/15/97	87.26	73.0-93.0	281.77	0.00	ND	ND	ND	ND	ND	ND	ND
cont)	03/16/98	75.09		293.94	0.00	ND	ND	ND	0.69	ND	0.82	ND
68.81	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							
	06/07/99	76.60		292.21	0.00	ND	ND	ND	ND	ND	ND	ND
	09/03/99	87.23		281.58	0.00	6619	ND	ND	ND	ND	ND	ND/ND ²
	12/06/99	92.23		276.58	0.00	95 ¹³	ND	ND	ND	ND	ND	ND
	03/10/00	88.54		280.27	0.00	ND	ND	ND	ND	ND	ND	ND
	06/08/00	86.98		281.83	0.00	72.8 ²⁰	ND	ND	ND	ND	ND	ND
	09/25/00	DRY								••		
	12/19/00	DRY										
	03/05/01	DRY										
	06/14/01	DRY										
	09/17/01	DRY										
	09/25/01	DRY										
	12/17/01	DRY										
IW-5												
63.23	09/18/96	64.20	52.0-72.0	299.03	0.00	4,700 ⁵	36,000	6,700	410	730	6,500	4,100
	12/21/96	61.77		301.46	Sheen	4,700 ⁴	25,000	3,200	300	780	3,600	2,600
	03/07/97	56.30		306.93	Sheen	2,100 ⁴	14,000	1,300	120	410	1,200	1,700
	06/27/97	68.88		295.03***	0.90	NOT SAMPLE						
	09/29/97	69.47		294.02***	0.35	NOT SAMPLE						

Table 1 Groundwater Monitoring Data and Analytical Results
Tosco (Unocal) Service Station #7376

4191 First Street

WELL ID/ TOC*(fi.)	DATE	DTW (ft.)	S.1. (ft.bgs)	GWE (msl)	Product Thickness (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (pph)
MW-5	12/15/97	64.92	52.0-72.0	298.54***	0.30	NOT SAMPLI	ED DUE TO T	THE PRESE	ENCE OF FR	EE PRODU	СТ	
(cont)	03/16/98	49.63		313.67***	0.09	NOT SAMPLI						
363.21	06/26/98	64.13		299.08	Sheen	230,000 ¹⁷	49018	6.3	2.8	4.2	5.1	10
	08/18/98	70.40		292.81**	0.005							
	09/22/98	69.10		294.16**	0.06	NOT SAMPLE	ED DUE TO T	THE PRESE	ENCE OF FR	EE PRODU	CT	
	12/15/98	68.84		294.50**	0.17	NOT SAMPLI						
	12/23/98	68.42		295.18**	0.50							
	03/15/99	63.81		299.59**	0.25							
	03/23/99	63.59		299.72**	0.13							
	06/07/99	68.25		295.59**	0.82	$4,700,000^{26}$	210,000	6,700	3,700	5,000	20,000	11,000/4,000 ²⁷
	09/03/99	69.38		294.37**	0.70	NOT SAMPLE	ED DUE TO 1	THE PRESE	NCE OF FR			
	12/06/99	70.02		293.82**	0.82	NOT SAMPLE						
	03/10/00	64.56		299.14**	0.64	NOT SAMPLE	ED DUE TO 1	HE PRESE	NCE OF FR	EE PRODU	СТ	
	06/08/00	66.47		297.13**	0.51	NOT SAMPLE	ED DUE TO 1	HE PRESE	NCE OF FR	EE PRODU	CT	
	09/25/00	69.02		294.65**	0.60	NOT SAMPLE	ED DUE TO 1	HE PRESE	NCE OF FR	EE PRODU	CT	
	12/19/00	68.31		295.01**	0.14	NOT SAMPLE	ED DUE TO T	HE PRESE	NCE OF FR	EE PRODU	CT	
	03/05/01	64.19		299.08**	0.08	NOT SAMPLE	D DUE TO T	HE PRESE	NCE OF FR	EE PRODU	CT	
	06/14/01	64.02		299.27**	0.11	NOT SAMPLE	ED DUE TO 1	HE PRESE	NCE OF FR	EE PRODU	CT	
	09/17/01	72.07		291.17**	0.04	NOT SAMPLE	ED DUE TO T	HE PRESE	NCE OF FR	EE PRODU	СТ	
	09/25/01	72.17		291.06**	0.03	NOT SAMPLE	ED DUE TO T	HE PRESE	NCE OF FRE	EE PRODU	CT	
	12/17/01	72.11		291.12**	0.03	NOT SAMPL	ED DUE TO	THE PRES	SENCE OF I	FREE PRO	DUCT	
MW-6												
363.12	09/18/96	79.07	68.0-88.0	284.05	0.00	ND	160	5.4	ND	ND	ND	ND
	12/21/96	75.40		287.72	0.00	ND	3008	96	1.3	ND	1.7	21
	03/07/97	67.61		295.51	0.00	190 ⁴	1,8008	920	18	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

Table 1 Groundwater Monitoring Data and Analytical Results

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

WELL ID/	DATE	DTW	S.I.	GWE	Product Thickness	TPH-D	TPH-G	В	Т	E	X	MTBE
FOC*(ft.)		(ft.)	(ft.bgs)	(msl)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(pph)	(pph)	(ppb)
											<u>,</u>	
MW-6	12/15/97	84.03	68.0-88.0	279.09	0.00	ND	78 ⁹	ND	ND	ND	ND	39
cont)	03/16/98	67.15		295.97	0.00	10010	21012	36	2.5	ND	3.0	64
63.13	06/26/98	75.71		287.42	0.00	18014	530	300	8.3	2.8	8.7	81
	08/18/98	74.86		288.27	0.00							
	09/22/98	UNABLE TO LO	CATE									
	12/15/98	UNABLE TO LO	CATE									
	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	62 ²²	1.4	ND	ND	ND	23
	03/23/99	75.03		288.10	0.00							
	06/07/99	82.27		280.86	0.00	160 ²⁸	ND	ND	ND	ND	ND	18
	09/03/99	87.49		275.64	0.00	NOT SAMPLE	D DUE TO IN	SUFFICIE	NT WATER			••
	12/06/99	DRY										
	03/10/00	85.61		277.52	0.00	ND	ND	.ND	ND	ND	ND	64
	06/08/00	87.36		275.77	0.00	NOT SAMPLE	D DUE TO IN	SUFFICIE	NT WATER			
	09/25/00	DRY										
•	12/19/00	87.73		275.40	0.00	NOT SAMPLE	D DUE TO IN	ISUFFICIE	NT WATER			
	03/05/01	87.82		275.31	0.00	NOT SAMPLE	D DUE TO IN	SUFFICIE	NT WATER			
	06/14/01	87.69		275.44	0.00	NOT SAMPLE	D DUE TO IN	SUFFICIE	NT WATER			
	09/17/01	87.70		275.43	0.00	NOT SAMPLE	D DUE TO IN	SUFFICIE	NT WATER			
	09/25/01	DRY										·
	12/17/01	87.74		275.39	0.00	NOT SAMPLE	D DUE TO I	NSUFFICI	ENT WAT	ER	••	
IW-7												
55.97	06/26/98		55.0-75.0									
	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							
	03/15/99	60.44		295.53	0.00	460 ²⁶	2,700	1,100	ND^{11}	30	16	1,400/970 ²⁷

Table 1
Groundwater Monitoring Data and Analytical Results
Tosco (Unocal) Service Station #7376

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

/* * ***					Product							
WELL ID/ TOC*(ft.)	DATE	DTW	S.1.	GWE	Thickness	TPH-D	TPH-G	В	Т	E	X	MTBE
100 (1:)		(ft.)	(ft.bgs)	(msl)	(ft.)	(ppb)	(pph)	(pph)	(ppb)	(ppb)	(pph)	(ppb)
MW-7	03/23/99	60.43	55.0-75.0	295.54	0.00							
(cont)	06/07/99	64.48	2210 73.0	291.49	0.00	550 ²⁵	2,600 ²⁹	180	 21	 ND	13	1 200
	09/03/99	69.98		285.99	0.00	550 ²⁰	870 ³⁰	69	ND ¹¹	ND ¹¹	ND ¹¹	1,200 1,100/872 ²⁷
	12/06/99	70.18		285.79	0.00	220 ²⁰	1,900 ³¹	350	ND ¹¹	ND ¹¹	ND ¹¹	1,100/8/2
	03/10/00	67.36		288.61	0.00	930 ²⁰	2,900 ³¹	1,600	ND ¹¹	40	54	1,100
	06/08/00	69.81		286.16	0.00	463 ²⁰	625 ³⁰	30.8	ND	0.761	0.940	1,100
	09/25/00	70.15		285.82	0.00	1,810 ²⁰	2,180 ²²	.423	ND ¹¹	ND ¹¹	ND ¹¹	1,510
	12/19/00	70.11		285.86	0.00	930 ³²	5,900 ³¹	1,000	ND ¹¹	ND ¹¹	ND ¹¹	1,300
	03/05/01	68.72		287.25	0.00	801 ²⁰	13,200 ³⁰	5,070	195	306	385	1,530
	06/14/01	70.00		285.97	0.00	710^{20}	$6,400^{30}$	3,300	85	96	170	1,000
	09/17/01	70.28	•	285.69	0.00	860 ²⁰	11,000 ³⁷	3,000	<50	<50	<50	750
	09/25/01	70.49		285.48	0.00							
	12/17/01	71.35		284.62	0.00	470	5,800 ³⁰	1,100	<10	<10	<10	760/670 ²⁷
MW-8						10						
362.37	06/26/98	63.00	66.0-86.0	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	OCATE									
361.83	03/23/99	64.86		296.97	0.00	60 ²⁴	ND	ND	0.77	ND	0.96	190
	06/07/99	68.30		293.53	0.00	ND	ND	ND	ND	ND	ND	ND
	09/03/99	73.92		287.91	0.00	13019	ND	ND	0.57	ND	ND	170/146 ²⁷
	12/06/99	74.98		286.85	0.00	16019	ND	ND	ND	ND	ND	150
	03/10/00	71.54		290.29	0.00	61 ¹⁹	ND	ND	ND	· ND	ND	150
	06/08/00	72.60		289.23	0.00	135 ²⁰	ND	ND	ND	ND	ND	42.8
	09/25/00	75.31		286.52	0.00	518 ²⁰	ND	ND	ND	ND	ND	227
	12/19/00	75.54		286.29	0.00	100 ¹⁹	ND	ND	ND	ND	ND	160
	03/05/01	75.9 1		285.92	0.00	161 ²⁰	ND	ND	ND	ND	ND	125

Table 1
Groundwater Monitoring Data and Analytical Results
Tosco (Unocal) Service Station #7376

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

WELL ID/ TOC*(fk)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	Product Thickness (ft.)	TPH-D (pph)	TPH-G (ppb)	B (ppb)	T (ppb)	E (pph)	X (pph)	MTBE (ppb)
MW-8	06/14/01	75.51	66.0-86.0	286.32	0.00	94 ²⁰	ND	ND	ND	ND	ND	140
(cont)	09/17/01	77.19		284.64	0.00	60 ²⁰	<50	<0.50	<0.50	<0.50	<0.50	110
	09/25/01	77.17		284.66	0.00							
	12/17/01	79.94		281.89	0.00	<52	<50	<0.50	< 0.50	<0.50	<0.50	140/170 ²⁷
MW-9												
354.85	11/29/99	74.50		280.35	0.00		••					
	12/06/99	74.35		280.50	0.00	ND	ND	ND	ND	ND	ND	3.0/2.7 ²⁷
	03/10/00	65.94		288.91	0.00	150 ¹⁹	ND	ND	ND	ND	ND	2.5
	06/08/00	70.77		284.08	0.00	67.8 ²⁰	ND	ND	ND	ND	ND	ND
	09/25/00	74.75		280.10	0.00	90320	ND	ND	0.516	ND	ND	10.5
	12/19/00	74.43		280.42	0.00	ND	ND	ND	ND	ND	ND	ND
	03/05/01	74.63		280.22	0.00	96.5 ²⁰	ND	ND	ND	ND	ND	ND
	06/14/01	74.75		280.10	0.00	ND	ND	ND	ND	ND	ND	ND
	09/17/01	74.78		280.07	0.00	<50	<50	< 0.50	< 0.50	< 0.50	< 0.50	<2.5
	09/25/01	74.83		280.02	0.00					••		
	12/17/01	74.80		280.05	0.00	<52	<50	<0.50	<0.50	<0.50	<0.50	<5.0/<1.0 ²⁷
MW-10												
362.62	11/29/99	DRY										
	12/06/99	DRY										
	03/10/00 ³³	85.04		277.58	0.00	78 ²⁰	ND	ND	ND	ND	ND	130/150 ²⁷
	06/08/00	DRY										- -
	09/25/00	DRY				***						
	12/19/00	DRY										
	03/05/01	DRY			<u></u>							
	06/14/01	DRY										

Table 1 Groundwater Monitoring Data and Analytical Results
Tosco (Unocal) Service Station #7376

4191 First Street Pleasanton, California

WELL ID/ TOC*(ft.)	DATE	DTW	S.I.	GWE	Product Thickness	TPH-D	TPH-G	В	Ť	E	x	MTBE
2.50.015/		(ft.)	(fl.bgs)	(msl)	(ft.)	(ppb)	(pph)	(pph)	(ppb)	(ppb)	(ppb)	(pph)
MW-10	09/17/01	DRY										
(cont)	09/25/01	DRY										
` ,	12/17/01	DRY		 								
	24.27.02	2111			••					••		
MW-11												
354.66	09/25/01	81.24		273.42	0.00	<50	<50	<0.50	<0.50	<0.50	-0.50	0.0
	12/17/01	80.47		274.19	0.00	110	<50	<0.50			< 0.50	9.0 10/14²⁷
	12/1///	00.47		2/4.19	0.00	110	<20	<0.50	< 0.50	<0.50	<0.50	10/14
MW-12												
354.08	09/25/01	80.78		273.30	0.00	<50	<50	< 0.50	<0.50	<0.50	<0.50	<2.5
	12/17/01 12/17/01	80.02		274.06	0.00	77	<50	<0.50	<0.50	<0.50	<0.50	<5.0/<1.0 ²⁷
Trip Blank												
TB-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
	06/07/99						ND	ND	ND	ND	ND	ND
	09/03/99						ND	ND	ND	ND	ND	ND ND
	12/06/99						ND	ND	ND	ND	ND	ND
	03/10/00						ND	ND	ND	ND	ND	ND
	06/08/00						ND	ND	ND	ND	ND	ND
	09/25/00			**			ND	ND	ND	ND	ND	ND
	12/19/00			**			ND	ND	ND	ND	ND	ND

Table 1 Groundwater Monitoring Data and Analytical Results Tosco (Unocal) Service Station #7376

4191 First Street

VELL ID/ FOC*(ft.)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	Product Thickness (ft.)	TPH-D (ppb)	TPH-G (pph)	B (ppb)	T (ppb)	E (pph)	X (ppb)	MTBE (ppb)
B-LB	03/05/01					- -	ND	ND	ND	ND	ND	ND
cont)	06/14/01				·		ND	ND	ND	ND	ND	ND
	09/17/01						<50	< 0.50	< 0.50	< 0.50	<0.50	<2.5
	09/25/01						<50	< 0.50	< 0.50	< 0.50	< 0.50	<2.5
	12/17/01						<50	< 0.50	< 0.50	< 0.50	< 0.50	<5.0

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

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

NP = No Purge

(ft.bgs) = Feet Below Ground Surface

E = Ethylbenzene

GWE = Groundwater Elevation

X = Xylenes

(msl) = Mean sea level

MTBE = Methyl tertiary butyl ether

- * TOC elevations were re-surveyed September 22, 2001, using the previous measurement references, (Benchmark Elevation = 353.92 feet, NGVD 29).

 On March 22, 1999, MW-8 was re-surveyed and on November 26, 1999, MW-9 and MW-10 were 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).

 TOC elevations have been surveyed relative to 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),

 GWE corrected for the presence of free product; correction factor: [(TOC DTW) + (Product Thickness x 0.77)].
- *** GWE 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.
- ⁵ Laboratory report indicates the hydrocarbons detected did not appear to be diesel.
- 6 Laboratory has potentially identified the presence of MTBE at reportable levels in the groundwater sample collected from this well.
- Laboratory has identified the presence of MTBE at a level above or equal to the taste and odor threshold of 40 ppb in the sample collected from this well.
- Laboratory report indicates the hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.
- 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 reports.
- Laboratory report indicates gasoline and unidentified hydrocarbons < C7.
- Laboratory report indicates discrete peaks.
- Laboratory report indicates diesel and unidentified hydrocarbons >C20.
- Laboratory report indicates discrete peaks and unidentified hydrocarbons < C7.
- Laboratory report indicates diesel and unidentified hydrocarbons <C15.</p>

Table 1

Groundwater Monitoring Data and Analytical Results

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

EXPLANATIONS: (cont)

- Laboratory report indicates diesel and unidentified hydrocarbons <C15 and >C20.
- Laboratory report indicates gasoline and unidentified hydrocarbons >C8.
- Laboratory report indicates unidentified hydrocarbons >C16.
- Laboratory report indicates unidentified hydrocarbons C9-C24.
- Laboratory report indicates diesel and unidentified hydrocarbons <C12.
- Laboratory report indicates unidentified hydrocarbons C6-C12.
- Laboratory report indicates unidentified hydrocarbons C6-C9.
- Laboratory report indicates unidentified hydrocarbons >C14.
- Laboratory report indicates unidentified hydrocarbons >C10.
- Laboratory report indicates unidentified hydrocarbons >C9.
- MTBE by EPA Method 8260.
- Laboratory report indicates unidentified hydrocarbons >C15.
- ²⁹ Laboratory report indicates gasoline and unidentified hydrocarbons >C6.
- Laboratory report indicates gasoline C6-C12.
- Laboratory report indicates gasoline C6-C12 + unidentified hydrocarbons < C6.
- 32 Laboratory report indicates unidentified hydrocarbons C9-C40.
- 33 Well re-developed.
- The diesel container for MW-2 was broken at lab, therefore; unable to report diesel result.
- Laboratory report indicates unidentified hydrocarbons <C16.
- 36 Laboratory was unable to report diesel result due to insufficient amount of sample.
- Laboratory report indicates unidentified hydrocarbons C6-C10.

Table 2 Product Thickness/Removal Data

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

WELL ID	DATE	DTW	Product Thickness	Amount Bailed (Product + Water)
		(fi.)	(ft.)	(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
	06/07/99	68.25	0.82	0.94
	09/03/99	69.38	0.70	0.078
	12/06/99	70.02	0.82	0.00
	03/10/00	64.56	0.64	0.00
	06/08/00	66.47	0.51	0.00
	09/25/00	69.02	0.60	0.00
	12/19/00	68.31	0.14	0.00
	03/05/01	64.19	0.08	0.00
	06/14/01	64.02	0.11	0.00
	09/17/01	72.07	0.04	0.00
	09/25/01	72.17	0.03	0.00
	12/17/01	72.11	0.03	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

WELL ID	DATE	ETHANOL	TBA	MTRE	DIPE	ETBE	TAME		
		(ppb)	(ppb)	(ppb)	(ppb)	erbe (ppb)	(ppb)	1,2-DCA (ppb)	EDB (ppb)
			A transfer out to the first of the first of the first out		VE €	MALE SECTION AND ADDRESS OF THE PARTY OF THE	/KKW/	(PPO)	Ψρυ
MW-1	09/03/99	ND	ND	55.2	ND	ND	ND		
	12/17/01	<1,000	<40	240	<2.0	<2.0	<2.0	<2.0	<2.0
			•						
MW-2B	03/15/99	ND	3,800	4,800	13	ND	ND		
	09/03/99	ND ²	3,480	4,400	ND^2	ND^2	ND^2		
	12/17/01	DRY							
MW-3	09/03/99	ND	ND	82.4	ND	ND	ND		
	12/17/01	<500	26	91	<1.0	<1.0	<1.0	<1.0	<1.0
MW-4	09/03/99	ND	ND	ND	ND	ND	ND		
	12/17/01	DRY						 	
MW-5	06/07/99	ND^2	ND²	4,0001	ND²	ND^2	ND^2		
	09/03/99	NOT SAMPLED D	UE TO THE PRE	SENCE OF FREE F	RODUCT				
	12/17/01	NOT SAMPLED I	OUE TO THE PR	RESENCE OF FRE	E PRODUCT		••	••	
MW-6	12/14/01	NOT SAMPLED D	UE TO INSUFF	ICIENT WATER					
MW-7	03/15/99	ND	610	970	4.3	ND	ND	<u></u>	
•	09/03/99	ND^2	460	872	4.36	ND^2	ND^2		
,	12/17/01	<5,000	<200	670	<10	<10	<10	<10	<10
							22		
MW-8	09/03/99	ND	ND	146	12.4	ND	ND	 4 -	
	12/17/01	<500	77	170	9.8	<1.0	<1.0	<1.0	<1.0

Table 3 Groundwater Analytical Results - Oxygenate Compounds

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

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)
MW-9	12/06/99 12/17/01	 <500	ND <20	2.7 <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
MW-10	03/10/00 1 2/17/01	 DRY	ND 	150 	ND	ND 	ND 	22 	ND
MW-11	12/17/01	<500	<20	14	<1.0	<1.0	<1.0	<1.0	<1.0
MW-12	12/17/01	<500	<20	<1.0	<1.0	<1.0	<1.0	<1.θ	<1.0

Table 3

Groundwater Analytical Results - Oxygenate Compounds

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

EXPLANATIONS:

TBA = Tertiary butyl alcohol

MTBE = Methyl tertiary butyl ether

DIPE = Di-isopropyl ether

ETBE = Ethyl tertiary butyl ether

TAME = Tertiary amyl methyl ether

1,2-DCA = Dichloroethane

EDB = 1,2-Dibromoethane

(ppb) = Parts per billion

ND = Not Detected

-- = Not Analyzed

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

Laboratory results indicate sample contains high concentration of Hexane.

Detection limit raised. Refer to analytical reports.

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.

		·			
ent/ Tosco	-1 #727	6	Job#:	18007	5
ility# UNO	cal #737		•	12/17/01	
dress. 4191	First ST	PEE	Date:		
OLEACA	HUTON, C	4	Sample	: Varther	
y: PLETSP	throw C		·		
<u></u>					
Well ID	4W-1_	Well Conditi	on:	ow	
YVON ID				Amount Bai	led
ell Diameter .	2 in.	Hydrocarbot Thickness:	n <i>O (<u>0</u>2</i> 2	2(feet) (product/water	
Ant Domah	86.45 1	Volume	2" = 0.17	3" = 0.38	4" = 0.66
tal Depth		Factor (VF)		<i>6</i> = 1.50	12" = 5.80
pth to Water	80.73 n				
	<u>5.72</u> x vi	0.17 = 0.9	₹x 3 (case vo	lume) = Estimated Pur	ge Volume: 3 igal.)
20000	Disposable Bailer		Samp ling	The Boi	let)
Purge C quipment:	Bailer	. 1	Equipment:	Disposable Bai	•
•	Stack			Pressure Bailer	•
	Suction			Grab Sample	•
	Grundfos Other:	_	• •	Other:	
		· · · · · · · · · · · · · · · · · · ·			
	1525	Weath	er Condition	is: ddy	
tarting Time: 🕟			Color:		Odor:
-		\Meter			
ampling Time:	1550	 Cadim			
ampling Time: urging Flow Rate	e:q	Sedim	ent Descrip	tion:	ne:igal.l
ampling Time: Purging Flow Rate	e:q	Sedim	ent Descrip	ion:	•
ampling Time: orging Flow Rate	e:e r?0	Sedim	ent Descrip	volun	ORP Alkalinity
ampling Time: urging Flow Rate id well de-water	e:e f?pH	Conductivity	ent Descrip ; Time: y Tempe	volun	•
ampling Time: urging Flow Rate id well de-water Time V	e:e r?0	Conductivity µmhos/cm	rent Descrip	rature D.O. (mg/L)	ORP Alkalinity
ampling Time: urging Flow Rate id well de-water Time V	e:e f?pH	Conductivity µmhos/cm 804 796	rent Descrip	rature D.O. (mg/L)	ORP Alkalinity
ampling Time: Purging Flow Rate Did well de-water Time V	e:e f?pH	Conductivity µmhos/cm	rent Descrip	rature D.O. (mg/L)	ORP Alkalinity
ampling Time: urging Flow Rate id well de-water Time V	e:e f?pH	Conductivity µmhos/cm 804 796	rent Descrip	rature D.O. (mg/L)	ORP Alkalinity
ampling Time: urging Flow Rate id well de-water Time V	e:e f?pH	Conductivity µmhos/cm 804 796	rent Descrip	rature D.O. (mg/L)	ORP Alkalinity
ampling Time: Purging Flow Rate Did well de-water Time V	e:e f?pH	Conductivity µmhos/cm 804 796	rent Descrip	rature D.O. (mg/L)	ORP Alkalinity
ampling Time: urging Flow Rate id well de-water Time V	e:e f?pH	Conductivity ### ### ############################	Time:	rature D.O. (mg/L)	ORP Alkalinity (mV) (ppm)
ampling Time: urging Flow Rate id well de-water Time 1532 1578	6:	Conductivity with the sediment of the sedimen	Time:	TION LABORATORY	ORP Alkalinity (mV) (ppm)
ampling Time: urging Flow Rate Did well de-water Time V 1532 1546 SAMPLE ID	6:	Conductivity with the second	Temper Series Se	rature D.O. (mg/L)	ANALYSES TPH(G)/btex/mtbe+8cvy3
ampling Time: urging Flow Rate id well de-water Time V 1532 1576 SAMPLE ID MW- 1	(a) - CONTAINER VOAVIAL	Conductivity LABORATOF REFRIG. PRES	Temper Control of the	TION LABORATORY	ORP Alkalinity (mV) (ppm)
ampling Time: Furging Flow Rate Did well de-water Time V 1532 1546 SAMPLE ID	6:	Conductivity LABORATOF REFRIG. PRES	Temper Composition of the compos	TION LABORATORY SEQUOIA	ANALYSES TPH(G)/btex/mtbe+8cvy3
ampling Time: Furging Flow Rate Did well de-water Time 1532 1576 SAMPLE ID MW- 1	(a) - CONTAINER VOAVIAL	Conductivity LABORATOF REFRIG. PRES	Temper Composition of the compos	TION LABORATORY SEQUOIA	ANALYSES TPH(G)/btex/mtbe+8cvy3
sampling Time: Purging Flow Rate Did well de-water Time V 1532 1576 SAMPLE ID	(a) - CONTAINER VOAVIAL	Conductivity LABORATOF REFRIG. PRES	Temper Composition of the compos	TION LABORATORY SEQUOIA	ANALYSES TPH(G)/btex/mtbe+8cvy3
ampling Time: urging Flow Rate Urging Flow Rate Time V 1532 1538 1546 SAMPLE ID MW-1	(a) - CONTAINER VOAVIAL	Conductivity LABORATOF REFRIG. PRES	Temper Composition of the compos	TION LABORATORY SEQUOIA	ANALYSES TPH(G)/btex/mtbe+8cvy3
ampling Time: urging Flow Rate id well de-water Time V 1532 1576 SAMPLE ID	(a) - CONTAINER VOAVIAL	Conductivity LABORATOF REFRIG. PRES	Temper Composition of the compos	TION LABORATORY SEQUOIA	ANALYSES TPH(G)/btex/mtbe+8cvy3

Address: 419 FIRST STREET Date: 121707 Date	lient/	sco # 737	<u>د</u>	_ Job#:	18007		
Well ID Well Diameter Well Diameter Total Depth DRU XVF Sampler: XVF Sampler: XVF Sampler: XVF Sampling Factor (VF) Sampling Equipment: Baller Stack Suction Grundfos Other: Starting Time: Starting Time:	Adress 419	I FIRST STE	REET_	Date:			
Well ID Well Diameter Nell Diameter Total Depth Depth to Water X VF	Address.	000120N	CA	- Samnl	er: Wartker		
Well Diameter Note Depth State Depth Stack Suction Gundos Other: Starting Time: Startin	ity:	H3/HN 1017	<u> </u>				···-
Well Diameter Note Diameter State Sta		MW-7-B	Well C	endition: 2	N.		
Total Depth State Depth	Well ID					ه اموا	,
Total Depth Depth 10 Water Depth to Water X VF = X3 (case volume) = Eatimated Purge Volume: X VF = X3 (case volume) = Eatimated Purge Volume: Equipment: Bailer Stack Suction Grundfos Other: Starting Time: Starting Time: Weather Conditions: Water Color: Sediment Description: If yes; Time: Volume Yolume PH Conductivity Temperature (gal.) LABORATORY INFORMATION SAMPLE ID Equipment: SEQUICIA THIS SECURIA PHE SECURIA THIS SEQUICIA THIS SECURIA	Well Diameter	in_					(gal.)
Purge Disposable Bailer Sampling Equipment: Disposable Bailer Equipment: Disposable Bailer Stack Bailer Pressure Bailer Grab Sample Other: Other: Other: Other: Did well de-water? Time Volume pH Conductivity Temperature (gal.) SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE LABORATORY INFORMATION SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE LABORATORY ANALYSES	Total Depth	85.25 th				-	0.66
Purge Disposable Bailer Sampling Equipment: Bailer Stack Suction Grundfos Other: Odor: Sampling Time: Weather Conditions: Water Color: Odor: Sediment Description: If yes; Time: Volume (gal.) Time Volume pH Conductivity Temperature D.O. ORP Alkalinit (ppm) SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE LABORATORY ANALYSES LABORATORY INFORMATION SEQUECIA TPHS IS FEET. MITGE	Denth to Water	DRY 1	Factor	r (VF)	6" = 1.50	12 = 3.80	
Purge Disposable Bailer Equipment: Bailer Stack Suction Grundfos Other: Other: Odor: Starting Time: Water Conditions: Water Color: Sediment Description: If yes; Time: Volume: Joan ORP Alkalindi (my) (ppm) Time Volume (gal.) PH Conductivity Temperature D.O. ORP Alkalindi (my) (ppm) LABORATORY INFORMATION SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE LABORATORY ANALYSES **V29*********************************	Depth to Wetter	(
Equipment: Bailer Stack Suction Grundfos Other: Other: Other: Odor: Sample Other: Odor: Other: Odor: Odor: Sediment Description: If yes: Time: Volume (gal.) PH Conductivity Temperature (mg/L) (mV) (ppm) LABORATORY INFORMATION SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE LABORATORY ANALYSES LABORATORY TYPE LABORATORY ANALYSES		x	/F •	X 3 (case)	rolume) = Estimated Pu	rge Volume:	(gal.)
Equipment: Bailer Stack Suction Grundfos Other: Other: Odor:	Purae	Disposable Bailer	•	•	Disasahla Ba	llas	
Suction Grundfos Other: Starting Time: Starting Time: Weather Conditions: Water Color: Sediment Description: If yes; Time: Volume: Time Volume pH Conductivity ph Co	-		•	Equipment:	Bailer		
Starting Time: Starting Time: Sampling Time: Purging Flow Rate: Did well de-water? Time Volume (gal.) LABORATORY INFORMATION SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE: LABORATORY SEQUELA This is a sequence of the sequ		•				r	
Starting Time: Sampling Time: Purging Flow Rate: Did well de-water? Time Volume (gal.) LABORATORY INFORMATION SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE LABORATORY ANALYSES Tents LABORATORY LABORATORY SEQUICIA Tents later fritoe						_	
Sampling Time: Purging Flow Rate: Did well de-water? Time Volume pH Conductivity Temperature D.O. ORP Alkalinit (gal.) LABORATORY INFORMATION SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE LABORATORY ANALYSES **EQUICIA TPHG STEEL / MITTER **EQUICIA TPHG		Other:					
Sampling Time: Purging Flow Rate: Did well de-water? Time Volume (gal.) PH Conductivity Temperature D.O. ORP (myl.) (myl.) (ppm) (myl.) LABORATORY INFORMATION SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE: LABORATORY ANALYSES **YOR YEAR YOR YEAR OF SEQUICIA TPHC SEC. / MITCE	Starting Time:		_				
Did well de-water? Time Volume pH Conductivity Temperature D.O. ORP Alkalinit (mg/L) (mV) (ppm) LABORATORY INFORMATION SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE LABORATORY ANALYSES **VOA MARK Y HEE SEQUICIA TPHE 87EX / MYGE	Sampling Time:					Odor	
Time Volume pH Conductivity Temperature D.O. ORP Alkalinit (ppm) LABORATORY INFORMATION SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE LABORATORY ANALYSES **VOA YIAK** **VOA YIAK*	Purging Flow Rat	te:					loal.)
Time Volume (gal.) LABORATORY INFORMATION SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE LABORATORY ANALYSES **VOA VIATE Y LICE SEQUELA TPHE REFER / MTOE	Did well de-wate	or?	I	f yes: Time:	Volun	1e:	
LABORATORY INFORMATION SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE: LABORATORY ANALYSES **VOR VIAC. Y HES SEQUELA TENGLISHER //FITTE	Time 7	Volume pH	Cond	activity Temp	erature D.O.		Alkalinity
SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE LABORATORY ANALYSES * VOA VIATE Y HEE SEQUELA TPHE SECUELA	I Muc	(gal.)	μ mh		(mg/L)	(117.4.)	(ppm)
SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE LABORATORY ANALYSES **VOA VIAL: Y SEQUELA TPHG SFEK MTOE					/_ 		 _
SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE LABORATORY ANALYSES **VOA VIATE Y HEE SEQUELA TPHE SECUELA **TPHE SECUELA *		/	_		/		
SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE LABORATORY ANALYSES **VOA VIAL: Y SEQUELA TPHG SFEK MTOE		<u>/</u>	-/				
SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE LABORATORY ANALYSES **VOA VIAL: Y SEQUELA TPHG SFEK MTOE			∠				
SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE LABORATORY ANALYSES **VOA VIAL: Y SEQUELA TPHG SFEK MTOE				-			
SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE: LABORATORY ANALYSES * VOA VIAL: Y HOE SEQUELA TPHE SEET MITTER ** TO SECUE A TPHE SEET MITTER ** TO SECUE				ATORY NEORAL	4		
X-VOA VIATE Y HOS SEQUEIA TPHG SEEK /MTOE	C 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(#) - CONTAINER		PRESERV. TYPE	LABORATORY	ANAL	rses
	SAMPLE ID				SEQUOIA	TPHEIRE	THITOE
COMMENTS: Well is dry		The same of				· · · ·	
COMMENTS: Well is dry							
COMMENTS: Well is dry					<u> </u>		<u> </u>
COMMENTS: BULLY 15 Over 7		11.10 =	dres				
	COMMENTS: _	WELV 1.S.	7				

		FIELD DATA	SHEET		•
ent/ Tosca	cal #737	16	Job#:	18007	
cility # UNC	Fig. T. ST	OFFT	Date:	12/17/0/	
Idress: <u>419</u>	1 FIRST ST	A PLEE		1 12	
ty: PLEAS!	ANTON, C	<u>H</u>	Sampler	_vaceres	
	·				
Well ID	MW-3	Well Condition	n: <u> </u>	<i>k</i>	
ell Dismeter		Hydrocarbon	0.00	Amount Bai	ied rj: <u>P (Gellons)</u>
otal Depth	94.10 n	Volume	2" = 0.17	3" = 0.38	4" = 0.66 12" = 5.80
	83.32 n.	Factor (VF)		6 = 1.50	12" = 5.80
epth to Water					
	10.78 x v	F <u>0.17 = 1.83</u>	X 3 (case volu	ume) = Estimated Pur	ge Volume:(oal.)
Duran	Disposable Bailer		amp ling	Diseashle Pe	ller
Purge quipment:	Bailer	E	quipment:	Disposable Bai Bailer	•
•	Stack Suction	% -		Pressure Baile	•
	Grundtos			Grab Sample Other:	
	Other:	<u> </u>	· ·		
	. 0		r Conditions	: eldy	
Sterting Time:	1608		Color:	/ - 1	Odon mild
Sampling Time:	1630			on:	
ourging Flow Rat		10.00	Time:		ne:(osl.)
Did well de-wate	er?	11 Yes,			OND 411 -11-1-
Time \	Volume pH	Conductivity	Tempera •F		ORP Alkalinity (mV) (ppm)
1610	(gal.) 7.56	μmho s/cm	<u>68.</u>	<u>8 </u>	
1612	4 7.40	1040	69,		
1614	5.5 7.36	1035	69.		
			<u>·</u> _		
		LABORATOR	/ INFORMAT	ION LABORATORY	ANALYSES
SAMPLE ID	(#) - CONTAINER	REFRIG. PRES	ERV. TYPE	SEQUOIA	TPHIGI/btex/mtbe + 80x4
MW- 3	5 VOAVIAL	Y HC	<u> </u>	3500014	TPH-D
~·	1 Acuber	~ ~	ONG		
			<u></u>		
COMMENTS.				·	
COMMENTS:		•			
				•	·

lient/ TOSC	0~ , 4L73-	7/	1.	ob#:	180	075	·
acility# Un	ocal #73	rose T		ate:		51	
ddress: 419	11 FIRST ST	LCL.			- -		
ity: PLEAS	ANTON, C	<u>H</u>	s	amplei	: Vant	<i>1015</i>	
	· · · · · · · · · · · · · · · · · · ·						
Well ID	MW-4	Well (Condition:		ok		
Nell Diameter	2in.	•	carbon ness:	- -		int Bailed ct/water):	(Gallons)
Total Depth	92.85 m	Volu		2" = 0.17	6° = 1.50	= 0.38 12" = 3	4" = 0.66 5.80
Depth to Water	DRY n.	<u> </u>					
	x v	/F	*X \$	desse vo	lume) = Estima	eted Purge Volu	me: <u>ioali</u>
Purge	Disposable Bailer		Samı Equij	p ling p ment:		ble Bail er	•
Equipment:	Bailer Stack		•	· 	Bailer • Pressure	."Bailer	
	Suction ·	•			Grab Sa		,
	Grundfos Other:	·	/		Other: _		-
Starting Time:			Westher C			Ödər	:
Sampling Time:			Water Cold				·
Purging Flow Re	ate:	om.	Sediment !		jøn:	Volume:	(cal.
Did well de-wat	er?		If yes; Ti	me:/		V0.01.110.	
Time	Volume pH	Cond µmi	luctivity hos/cm	Temper •F	sture		ORP Alkalinity mV) (ppm)
					/ _		
		\overline{Z}					
		_/					;
			<u></u>				
	·						
			ATORY IN	FORMA	TION LABORATO	ORY	ANALYSES
SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV.	TYPE	SEQUOIA		S)/btex/mtbe
MW-	VOAVIAL		HCL				
			 				
		 					
L	<u> </u>						
COMMENTS:	well is	dry	<u> </u>				
			<u> </u>	 -		•	·
•							

*		FIELD DATA	SHEET	•	•
lient/ Toso	10- 10cal #737	16	J00#	80075	 :
acility # WI	91 First ST	PEET	Date:	12/17/01	
ladress: -11	11 11201	^	Sampler://	· He s	
City: PLEAS	SANTON, C	<u>H</u>	Sampler:	arm —	
					•
Well ID	MW-5	Well Condition	n: <u>SN</u>		
Well Diameter	7 in.	Hydrocarbon Thickness:	Owo / licet	Amount Bailed Iproduct/water):	· ·
otal Depth	72.50 m	Volume Factor (VF)	2° = 0.17 6° = 1	3" = 0.38 1.50 12" =	4" = 0.66 = 5.80
Depth to Water	7211 1	·			
	x v	F *	X 3 (case volume)	= Estimated Purge Vo	olume:(asl.)
Purge Equipment:	Disposable Bailer Bailer		Q	isposable Bailer	
Edobuseur	Stack		. B	ailer ressure Bailer	
	Suction ·	•		irab Sample	
	Grundfos Other:		C)ther:	
Starting Time:			r Conditions: _		or:
Sampling Time		Water (Color:		
• -	iete:s	Sedime	nt Description:		
Did well de-wa		If yes;	Time:	Volume: _	loal,
Time	Volume pH (gal.)	Conductivity µmhos/cm	Temperature oF	D.O. (mg/L)	ORP Alkalinity (mV) (ppm)
	/-			- /	
		_/		_ +	:
		<u> </u>		<u> </u>	
	· .				
		LABORATORY	INFORMATION	BORATORY	ANALYSES
SAMPLE ID	(#) - CONTAINER	REFRIG. PRESI	RV. TYPE LA		H(G)/btex/mtbe
MW-	VOAVTAL	- Y HC	SEGO	OIA	
					·
	Not Sample	1 1. 5 3	La Prisenci	e of free	product
COMMENTS:	Not Sample	y are to a			
	Inc. Placent			·	·
ale.~	Inc. Flining	ω_{07}			A A B A 1444

lient/ ToSC	10- 10cal #737	6	Job#:	18007	5
acility # UT	91 First ST	REET	Date:	12/17/01	
.ddress: <u>71</u>	1 11231	0	Sample	r: Vartkes	
ity: PLEAS	SANTON, C		Sample		
				i an Sa	
Well ID	MW-6	Well Conditio	n:	02	
Vell Diameter		Hydrocarbon Thickness:	0. d	Amount Bail	1: Gallonsi
iotal Depth	88.00m	Volume Factor (VF)	2* = 0.17	$3^{\circ} = 0.38$ $6^{\circ} = 1.50$	4" = 0.66 12" = 5.80
Depth to Water	87.74 n	Pactor (VI)			
	x vi	· *	X 3 (case vo	olume) = Estimated Purg	ge Volume:(oal.)
Pur ge	Disposable Bailer		ampli ng quipment:	Disposable Bai	ler
Equipment:	Beiler	. Е	darburance	Bailer	
	Stack Suction	-		Pressure Bailer	
	Grundios			Grab Sample Other:	
	Other:	·	· ·	Other:	
		Weathe	r Condition	ns:	
Starting Time:				<u></u>	Odor:
Sampling Time:		 Cadime		tion:	
		مست	Time:		e:
Did well de-wa	ter?				
Time	Volume pH	Conductivity umhos/cm	Tempe •F	rature D.O.	ORP Alkalinity (mV) (ppm)
				_/	
		./	-/		
			- /		
			<u> </u>		
			LINEODIAA	TION	
	(#) - CONTAINER	LABORATORY	FINFURMA ERV, TYPE	LABORATORY	ANALYSES
SAMPLE ID		Y HC		SEOUOIA	TPH(G)/btex/mtbe
MW	VOAVIAL			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
					
				<u></u>	
<u> </u>		4	To 8	ample	
COMMENTS:	Insufficient	12/0/01	<u> </u>		·

			FIELD DATA	A SHEET				•
ent/ ToSC cility# Un	ocal 7	+ 737	6	Job#:		0075	5	·
dress: 410	71 Fir	ST ST	REET	Date:		117/0)		
ty: PLEAS	NATTON	\. CI	7	Sample	er: <u>1/a</u>	rthes		· · · · · · · · · · · · · · · · · · ·
ty: PLETTS	HOION	<u> </u>		·				
							•	•
Well ID	MW-7		Well Conditi	ion:	<u> </u>	nount Baile		
ell Dismeter		<u>in</u> .	Hydrocarbo Thickness:			oduct/water)		(Gallons)
otal Depth		30 ti	Volume Factor (VF)	2" = 0.1"	7 6° = 1.50	3" = 0.38 1:	4° 2° = 5.80	= 0.66
epth to Water	<u>71.</u>	35 m						
	5.4	<u> </u>	0.17 = 0.97	X 3 (case v	olume) = Es	timated Purge	Volume: _	<u> </u>
Purge '	Disposab	le Bailer		Samp ling Equip ment:	Piene	sable Baile	er .	-
quipment:	Bailer	 =		Ednibuang	Baile	r	r.	•
	Stack Suction		•			sure Bailer Sample	•	
	Grundfos	;		, .		r:		
	Other: _		-		<u> </u>			
	.14	46-0	—	ner Conditio	ns:	ddy		,
Starting Time:				Color:	,	<u>. (</u>)	Odor:	
Sampling Time:			_	ent Descrip	کــــ :tion	14		
Purging Flow Ri			if ves	; Time: _		Volume	:	Lisol .
Oid well de-wat	ter?			•				A 11 1112-1
Time	Volume	pН	Conductivit	•	rature	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
	(gal.)	7.50	µmhos/cm 1172	6ž	ζζ <u>_</u>			
1446	_ ` _	7.33	1157	68	? <u>9</u>			
1501	- 3	7,28	1153	69	• 1			.
1001							·	
			LABORATOR	V INFORMA	NOITA			
	·	A INICE	REFRIG. PRE	SERV. TYPE	LABOR	ATORY		YSES
SAMPLE ID	(#) - COI			ICL	SEQUOIA		TPH(G)/btex/	mtbe + & dis
MW- 7		DAVIAL		TONE			TPH-D	
u	1 Aunel	721						
					 			
								~,
			•===		<u> </u>			
COMMENTS:	<u> </u>							1

ent/ Tosca	>-			18007	5	
sility# UNC	cal # 151	6	Job#:	100010		
dress: 419	First ST	PEET	Date:	12/17/01		
PLEASI	ANTON, C	Α	Sample	r: Varteus		
y: \ <u></u>						
	MW-8	Well Conditi	ion: O	n		
Well ID	. ——			Amount Bail	ed _	
ell Diameter		Hydrocarbo Thickness:		(feet) (product/water		
tal Depth	84.50 n	Volume	2° = 0.17	3" = 0.38	4° = 0.66	
	79.94 tu	Factor (VF)		6 = 1.50		
pth to Water					- Volume 2.5 (nal)	
	4,56 x VI	0.17 =0.7	3 (case vo	lume) = Estimated Pur	ge Volume: 25 toal.)	
Pu rge (Disposable Bailer		Sampling	Disposable Bai	ler	
quipment:	Bailer	•	Equipment:	Bailer		
	Stack Suction	-		Pressure Bailer	•	
	Grundfos			Grab Sample Other:		
	Other:	 ;	• •	· · · · · · · · · · · · · · · · · · ·		•
tarting Time: ampling Time:	1355	 Water	her Condition	tion: $\frac{ddy}{srp}$	Odor: 5 no	- -
urging Flow Ra		pm. Sedin	nent Describ	Volum	ne:	ì
oid well de-wate	er?	п үез);			
Time	Volume pH (gal.) 1 7-67	Conductivit umhos/cm		7.4 (mg/L)	ORP Alkalinity (mV) (ppm)	<u>.</u>
1409	2. 7.48	871	<u> </u>	$\frac{D}{Z}$ ——		-
1416 _	2.5 7.45	8 b/c	<u> </u>	· <u>'</u>		_
					· · · · · · · · · · · · · · · · · · ·	_
						-
		 _				- .
			RY INFORMA	ATION LABORATORY	ANALYSES	
SAMPLE ID	(#) - CONTAINER			SEQUOIA	TPH(G)/btex/mtbe+8089	40
MW- 8	5 VOAVIAL		rone	ч	TPH-D	ļ
- ~	1 Aucher	- L D				1
	-		 _			}
		<u>L</u>			<u> </u>	
				·		_
COMMENTS:				<u>,</u>		-
				<u> </u>		<u> </u>
					9/37-heldel.f	

) ~		10	>~~7 <i>6</i>	=	
lient/ Tosco	cal #73	76	000"	30075	<u> </u>	
ddress: 419	1 First S	TREET	Date:	117/01		
PLEAS!	ANTON, C	A'	Sampler:	enthes		,
ity: \						-
	MW-9	Well Condition:	ow_			_
Well ID				mount Baile	d A	
Vell Diameter		Hydrocarbon Thickness:	D-Offeet) IF	product/water)	P (Gallons	1
otal Depth	78.05 th	Volume	2" = 0.17 6" = 1.50	3* = 0.38) 1:	4" = 0.66 2" = 5.80	
epth to Water	74.80 tu	Factor (VF)	9- = 1.30	y 1.	. – 5.00	j
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			_		Volume: Z (gal.)	
	3,25 x v	r 0.17 = 0.55 x	3 (case volume) = E	stimated Purge	Volume:	ı
Purge (Disposable Bailer		np ling	osable Baile	9	
quipment:	Bailer Stack	. Equ	Baile	er		
	Suction .	•		sure Bailer b Sample	•	
	Grundtos			er:		
	Other:					-
	1315	Weather (Conditions:	eldy	•	- .
Starting Time:	1340	Water Co	lor: <u>67P</u> -	·/_	Odor:	<u> </u>
Sampling Time: Pursing Flow Bat		oom. Sediment	Description: 🗹	<u> 17</u>		_
		If yes; T	Time:	Volume	:	M
Did well de-water				D.O.	ORP Alkalinit	y .
Did well de-wate		<u>.</u>	Tampersitte			•
Time V	olume pH	Conductivity µmhos/cm	Temperature •F	(mg/L)	(mV) (ppm)	•
Time V	olume pH (gal.) 7.70	μmhos/cm 724	67.3		(mV) (ppm)	_
Time V	olume pH (gal.) 7.70 / 7.55	μmhos/cm 724	67.3 67.8		(mV) (ppm)	
Time V	olume pH (gal.) 7.70	μmhos/cm 724	67.3		(mV) (ppm)	
Time V	olume pH (gal.) 7.70 / 7.55	μmhos/cm 724	67.3 67.8		(mV) (ppm)	
Time V	olume pH (gal.) 7.70 / 7.55	μmhos/cm 724	67.3 67.8		(mV) (ppm)	
Time V	olume pH (gal.) 7.70 / 7.55	#mhodem 724 738 736	67.3 67.8 68.0		(mV) (ppm)	
Time V	Colume pH (gal.). 7.70 / 7.51 2 7.51	LABORATORY II	67.3 67.8 68.0		(mV) (ppm)	- - - - -
Time V 1320 1328 1328	olume pH (gal.). 7.70 / 7.55 2 7.51	LABORATORY II	67.3 67.8 68.0	(mg/L)	ANALYSES TPH(G)/btex/mtbeナポッス	 - - - -
1320 1328 1328 1336	(#) - CONTAINER VOAVIAL	LABORATORY IN REFRIG. PRESERV	NFORMATION V. TYPE LABOR	(mg/L)	ANALYSES	 - - - -
Time V 1320 1328 1328	olume pH (gal.). 7.70 / 7.55 2 7.51	LABORATORY II	NFORMATION V. TYPE LABOR	(mg/L)	ANALYSES TPH(G)/btex/mtbeナポッス	 - - - -
1320 1328 1328 1336	(#) - CONTAINER VOAVIAL	LABORATORY IN REFRIG. PRESERV	NFORMATION V. TYPE LABOR	(mg/L)	ANALYSES TPH(G)/btex/mtbeナポッス	 - - - -
1326 1326 1336 SAMPLE ID	(#) - CONTAINER VOAVIAL	LABORATORY IN REFRIG. PRESERV	NFORMATION V. TYPE LABOR	(mg/L)	ANALYSES TPH(G)/btex/mtbeナポッス	 - - - -
1320 1328 1328 1336	(#) - CONTAINER VOAVIAL	LABORATORY IN REFRIG. PRESERV	NFORMATION V. TYPE LABOR	(mg/L)	ANALYSES TPH(G)/btex/mtbeナポッス	 - - - -

lient/ Toso acility# Ur	nocal	#737	6		Job#: 180075 Date: 12/17/07									
Address: 41	91 Fis	ST ST	REET	· 1										
City: PLEAS	OTCAAZ	N, C	A		Sample	r: <u><i>Va</i></u>	rtkes		-					
ity; <u>Labori</u>	1110			•				<u> </u>						
Well ID	MW-		Well C	ondition:		d_		<u>.</u>						
Well Diameter		Z <u>in</u> .		carbon ness:			mount Bai product/water	<u>):</u>	(Gellons)					
Total Depth Depth to Water	N	.40 n.	Volut Facto	ne f (VF)	2° = 0.17	6° = 1.50	3* = 0.38	12" = 5.80	- 0.66					
	<u></u>	/ x vi	· ·	x	3 (case V	olume) = E	stimated Pur	ge Volume: _	(gal.)					
Purge Equipment:	Bailer Stack Suction Grundfo				npli ng ipme nt:	Baild Pres Gral	osable Bai er sure Bailer b Sample er:							
Starting Time: Sampling Time Purging Flow f	:		DOM:	Sediment	lor: Descrip	jieh:		Odor:	(nal.)					
Did well de-wa	Volume (gal.)	рН	Cond	If yes;		rature	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)					
		<u> </u>	I ABOR	ATORY I	NFORM	ATION								
SAMPLE ID	(#) - C	ONTAINER	REFRIG.	PRESER1	V, TYPE	LABO	RATORY	TPH(G)/btex	LYSES					
MW-		VOAVIAL	Υ	HCL		SEQUOIA								
COMMENTS	: Well	is	lry											
							·		9/97-Relder &					

•		FIELD DATA	SHEET			
lient/ TOSC	ocal 7 15	76	Job#:	18007	5	
ddress: 419	11 First S	TREET	Date:	12/17/0)		
ity: PLEAS	MOTON, (A.	Sample	er: <u>Vartico</u>		
ity: \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	11/01-01-1					
Well ID	MW-11	Well Condition	on:	ok		-
Vell Diameter	2 in.	Hydrocarbon Thickness: _	0,0	Amount Ba	iled en: <u>FIGallons</u>	.
otal Depth	86.33 tr.	Volume	2° = 0.1	7 3* = 0.38	4" = 0.66	
	8047 n	Factor (VF)		6" = 1.50	12" = 5.80	J
epth to Water		<u> </u>			2	
	5.86 x	vf <u>0.17</u> - <u>0.99</u>	X 3 (case v	volume) = Estimated Pu	rge Volume: 3 ical.	1
Purge	Disposable Bailer		ampling	Disposable Ba	ilet	
Equipment:	Bailer	. E	quipment:	Bailer		
	Stack Suction			Pressure Baile	PF	
	Grund ios			Grab Sample Other:		•
	Other:					.
	1225	Weaths	er Conditio	ons: day		
Starting Time:	1252		Color:	bro.	Odor: Sewer	(H ² S)
Sampling Time:		opm. Sedime	nt Descrip	otion: <u>STAT</u>		<u> </u>
Purging Flow he Did well de-wat			Time: _	Volur	ne:(ga	IJ
Did Mell de-Msr	617				ORP Alkalinit	N
Time	Volume pH	Conductivity µmhos/cm	Temp •		(mV) (ppm)	
1232	(gal.) 7.61	665	<u> </u>	6+2 (mg/L)		- ·
1240	2 7.50			5.4		
1747	3 7.46	639	6-	7.2		-
						
			_ `			
	·					
		LABORATOR	INFORM.	ATION	ANALYSES	
SAMPLE ID	(#) - CONTAINER	REFRIG. PRES	ERV. TYPE	LABORATURT	TPH(G)/btex/mtbe+ 8 &	J->18266
MW- //	5 VOAVIAL	Y HC	<u> </u>	SEQUOIA	TP#-D	رو دی - (ا
72	1Awhir	~ N	DNE		1/54-13	1 .
				 		1
				1		
		•				·
COMMENTS:						<u> </u>
					. •	

	· <u>-</u> · -	LIEFO DVIV	011661			•				
lient/ Toso	10cal #73	76	Job#:	1800	15	· · · · · · · · · · · · · · · · · · ·				
acility # UI	91 First S	TREET	Date:	12/17/	0/					
ddress: 41	41 FIRST S	10								
ity: PLEAS	SANTON, C	<u>H</u>	Sample	r: Varthe	<u></u>		•			
Well ID	MW-12	Well Conditio	n:	3h						
Vell Diameter	2 in.	Hydrocarbon Thickness: _	8.00	Amoun (feet) (product)	t Bailed (water):	[Gallons)				
Cotal Depth	Factor (VF) $6^{\circ} = 1.50$ 12 = 3.80									
Depth to Water	80.02 n	·		 						
	<u>9.3/</u> x v	1.58	, X 3 (case vo	ilume) = Estimate	d Purpe Volum	e: <u>5.0 (0al.)</u>				
Purge	Disposable Bailer		ampli ng quip ment:	Disposable	Bailer	•				
Equipment:	Bailer Canala		daibinaire.	Baller			•			
	Stack Suction			Pressure E						
	Grundfos			Grab Sam Other:						
	Other:	 /.					•			
		Weethe	r Condition	is: d	de	·				
Sterting Time:			Color:	,	Odor:_	no	•			
Sampling Time		Yvalei C	nt Descript	ion: <i>Silt</i> .			<u>.</u>			
Purging Flow R		oom. Secime If ves:	Time:		olume:		L			
Did well de-wa	nter?	. , ,			- ON	0 All-Males				
Time	Volume pH	Conductivity	Temper	nature D.(m)						
1148	(8al.) 7.77	μmhos/cm - 70 3	67	<u> </u>	<u> </u>					
1154	3 7.57	690	67.	7			-			
1155	3 7.53	683	67.	<u> </u>			-			
						:	• .			
							- •			
										
		LABORATORY	INFORMA	TION						
SAMPLE ID	(#) - CONTAINER	REFRIG. PRESE	RV, TYPE	LABORATOR		ANALYSES	10/2000			
MW- 12	5 VOAVIAL	Y HC		SEQUOIA		btex/mtbe + 2 5%	73 (860-			
- 11 m	1 Auber	H NO	NE	<u> </u>	TP#IT	· · · · · · · · · · · · · · · · · · ·				
	· · · · · · · · · · · · · · · · · · ·									
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COMMENTS:	<u></u>	<u> </u>				· ·	_			
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As Contracted

Date/filme



Troca Wartering Company 2003 Con Earyon FL, Sta. 400 San Rumph, California (458)

Relinquished By (Signature)

Organization

Date/Time

Facility Number TOSCO (UNOCAL) SS# 7376 Facility Address 4191 First Street, Pleasauton, CA	Conlact (Nome) MR. Dave DeWitt . (Phone) 925-277-2384
Consultant Project Number 180075.85	Loboratory Horne Sequoia Analytical .
Consultent Home Gattler-Ryan Inc. (G-R Inc.)	Laboratory Release Number
Address 6747 SIERRA COURT, SUITE J. DUBLIN. CA 94568	
Project Contact (Rame) Deanna L. Harding	Collection Date 12/17/0/
(Phone) (925) 551 ±7555 (Fex Number, 925=551-7899	Signature Welty Valily
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		<u> </u>		(6	² попе)(<u>9</u> 2	5 <u>1551±</u> 75	55 (Fox	Numbe	, <u>925-</u>	551-	7899	s	ignatura	1/20	14	18 E		-			
Analyses To the Performed									pmed	-				DO NOT BILL							
	1	Contobera	\\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Sab Companies Hearte		8	_	# <u> </u>			ğ	1 1 1 1	8	· §.							TB-LB ANALYSIS
Ē	Lob Sample Number	3	# 1 * U	383	[عود بط	S No.	BIEX WANTE	1	į	Stock	Aromatica	Organica	Organica ,	ኔ _ጉ		-				
Sumple Number	Z E Z) E	28 g	000		ž.			36	8	\$ a	8 G	10 10 10 10 10 10 10 10 10 10 10 10 10 1	\$ C	1 5 3	3-6			;		8 Oxy's - MTBE, TBA, DIPE, ETBE
\$ 	Ŝ	Kumbar	A to	*	4 11714	Samps) pag	TO MET	12H Ober 1	62823) P	Purgeoble Holocurbon (8010)	Purpedbie (8020)	Pung-obj- (82-0)	Extractoble (3270)	₹2 §	80×45					TAME, 1,2DCA EUB, Bihanol
TB-LB		l	W	<u>C_</u>		Hel	7	Х				,						,		1	
nw-1		6	ب	4-4_	1550	•••	ય	Х	X				,			X		^,,			•
MU-3		6	M	u	1630	L	ь	X	X							X					
MW-7		6	44.	42.	1505	فعر	4_	X	Х		-			·		X	•				
MW-8		6	4.	44	1421	n	ير	X	X							X					-
MW-9		6	u.	ساس	13.40	ţ.	¥	X	X							Х		<u> </u>			
MW-11		6	4.	Ŀ	1252	•	٠,	Χ	X							X		<u>-</u>		ļ	
44-12		6	-4	u	215	. u	هـ	X	X							×		<u> </u> -	<u> </u>	<u> </u>	
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		I -	Organization Date/Time 175		-	ST Rec	Received by (Signature)				O.	Organization Date/Time , 175				((3)	, ,	Turn Ar		ue (Circle Cholos)	
Relinquished By (Signorture) Organization				Dote/firme Received By (Signature)				Or	Organization Dole/Time			· •	24 ffre. 48 Hre.								
					•						2			ا -	& Days						

Recleved For Loboratory By (Signature)



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

7 January, 2002

Deanna Harding

Dublin, CA 94568

RECEIVED

JAN 0 p 2002

GETTLEK-KYAN INC.

RE: Tosco(1)

Sequoia Report: L112107

Gettler-Ryan/Geostrategies(1)

6747 Sierra Court, Suite J

Enclosed are the results of analyses for samples received by the laboratory on 12/17/01 17:55. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Latonya Pelt Project Manager

CA ELAP Certificate #2360

Splonya K. Palt



Gettler-Ryan/Geostrategies(1)

6747 Sierra Court, Suite J Dublin CA, 94568 Project: Tosco(1)

Project Number: Tosco (Unocal) SS#7376, Pleasanton, CA

Project Manager: Deanna Harding

Reported: 01/07/02 14:26

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-LB	L112107-01	Water	12/17/01 00:00	12/17/01 17:55
MW-1	L112107-02	Water	12/17/01 15:50	12/17/01 17:55
MW-3	L112107-03	Water	12/17/01 16:30	12/17/01 17:55
MW-7	L112107-04	Water	12/17/01 15:05	12/17/01 17:55
MW-8	L112107-05	Water	12/17/01 14:21	12/17/01 17:55
MW-9	L112107-06	Water	12/17/01 13:40	12/17/01 17:55
MW-11	L112107-07	Water	12/17/01 12:52	12/17/01 17:55
MW-12	L112107-08	Water	12/17/01 12:15	12/17/01 17:55



Gettler-Ryan/Geostrategies(1)

6747 Sierra Court, Suite J Dublin CA, 94568 Project: Tosco(1)

Project Number: Tosco (Unocal) SS#7376, Pleasanton, CA

Project Manager: Deanna Harding

Reported: 01/07/02 14:26

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TB-LB (L112107-01) Water Sampled:	12/17/01 00:00	Received: 1	2/17/01 1	7:55					
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	1120096	12/26/01	12/27/01	EPA 8021B	
Benzene	ND	0.50	Ħ	P	III	n	'n	II	
Toluene	ND	0.50	Tř	"	Ħ	ш	II	H	
Ethylbenzene	ND	0.50	71	"		ш	н	19	
Xylenes (total)	ND	0.50	**	**	11	н	н	**	
Methyl tert-butyl ether	ND	5.0	17	71	77			11	
Surrogate: a,a,a-Trifluorotoluene		95.4 %	70-	130	,,	,,	,,	"	
MW-1 (L112107-02) Water Sampled: 1	2/17/01 15:50	Received: 1	<u>2/17/01 1</u>	7:55					
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	1120100	12/27/01	12/27/01	EPA 8021B	
Benzene .	ND	0.50	Ħ	11	U	11	II	11	
Toluene	ND	0.50	ţı	II	n	Ħ	н	н	
Ethylbenzene	ND	0.50	n	н		н	Ħ	ri .	
Xylenes (total)	ND	0.50	tı	н	**	"	*	#	
Methyl tert-butyl ether	210	5.0	1)	**	**	41	#	*	
Surrogate: a,a,a-Trifluorotoluene		80.3 %	70-	130	"	"	"	"	-
MW-3 (L112107-03) Water Sampled: 1	2/17/01 16:30	Received: 1	<u>2/17/01 1</u>	7:55			· · · · · · · · · · · · · · · · · · ·		
Purgeable Hydrocarbons as	1800	500	ug/l	10	1120100	12/27/01	12/27/01	EPA 8021B	P-01
Gasoline									
Benzene	120	5.0	lı	Ħ	п	ш	п	11	
Toluene	ND	5.0	II .	77	н	11	п	, N	
Ethylbenzene	45	5.0	II .	**	H	11	н	Ħ	
Xylenes (total)	270	5.0	ш	"	n	Ψ	"	Ħ	
Methyl tert-butyl ether	80	50	h	•1	0	Ħ	n	"	
Surrogate: a,a,a-Trifluorotoluene		77.7 %	70-	130	"	n	n	"	

Gettler-Ryan/Geostrategies(1)

6747 Sierra Court, Suite J Dublin CA, 94568 Project: Tosco(1)

Project Number: Tosco (Unocal) SS#7376, Pleasanton, CA

Project Manager: Deanna Harding

Reported: 01/07/02 14:26

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-7 (L112107-04) Water Sampled: 1	2/17/01 15:05	Received: 12	2/17/ <u>01 1</u>	7:55					
Purgeable Hydrocarbons as	5800	1000	ug/l	20	1120100	12/27/01	12/27/01	EPA 8021B	P-01
Gasoline			-						
Benzene	1190	10	ш	н	Ħ	П		"	
Toluene	ND	10	II	*	TP .		"	11	
Ethylbenzene	ND	10	н	P	"	*1	II	п	
Xylenes (total)	ND	10	н	*1	11	11	н	u .	
Methyl tert-butyl ether	760	100	rŧ	**	п	п	n	п	
Surrogate: a.a.a-Trifluorotoluene		81.3 %	70-	130	"	"	,,	"	,
MW-8 (L112107-05) Water Sampled: 1	2/17/01 14:21	Received: 12	<u>2/17/01 1</u>	7:55				<u>-</u> -	
Purgeable Hydrocarbons as Gasoline	ND	50	п6/ј	1	1120100	12/27/01	12/27/01	EPA 8021B	
Benzene	ND	0.50	•	II .		11	, 0	н	
Toluene	ND	0.50	11	н	**	11	n	11	
Ethylbenzene	ND	0.50	•1	н	н	Ħ		11	
Xylenes (total)	ND	0.50	Ħ	Ħ	u	n	n	77	
Methyl tert-butyl ether	140	5.0	H	,,	**	Ħ	•	11	
Surrogate: a,a,a-Trifluorotoluene		78.9 %	70-	130	*	"	n	"	
MW-9 (L112107-06) Water Sampled: 1	2/17/01 13:40	Received: 1	<u>2/17/01 1</u>	7:55					
Purgeable Hydrocarbons as Gasoline	ND	50	ug/i	1	1120096	12/26/01	12/27/01	EPA 8021B	
Benzene	ND	0.50	"	**	11	11	n	*1	
Toluene	ND	0.50	11	11	ш	n	Ħ	10	
Ethylbenzene	ND	0.50	n	11	tt		•	n	
Xylenes (total)	ND	0.50	п	u	**	11	11	п	
Methyl tert-butyl ether	ND	5.0	н	н	я	н	и	п	
Surrogate: a,a,a-Trifluorotoluene		86.1 %	70-	130	"	"	n	#	



Gettler-Ryan/Geostrategies(1)

6747 Sierra Court, Suite J Dublin CA, 94568 Project: Tosco(1)

Project Number: Tosco (Unocal) SS#7376, Pleasanton, CA

Project Manager: Deanna Harding

Reported: 01/07/02 14:26

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-11 (L112107-07) Water Sampled:	12/17/01 12:52	Received:	12/17/01	17:55					
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	1120099	12/27/01	12/27/01	EPA 8021B	
Benzene	ND	0.50	11	n	ŧŧ	**	11	11	
Toluene	ND	0.50	***	n	**	##	11	11	
Ethylbenzene	ND	0.50	**	II		**	11	11	
Xylenes (total)	ND	0.50	n	ìı	**	**	п	II	
Methyl tert-butyl ether	10	5.0	11	Ŋ		**	п		
Surrogate: a,a,a-Trifluorotoluene	-	80.3 %	70-	130	u	n n	**	п	
MW-12 (L112107-08) Water Sampled:	12/17/01 12:15	Received:	12/17/01	17:55				·	
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	1120099	12/27/01	12/27/01	EPA 8021B	
Benzene	ND	0.50	*	II .	11	Ħ	91	*	
Toluene	ND	0.50	n	II	II	w	**	n	
Ethylbenzene	ND	0.50	Ħ	II	н	**	n	"	
Xylenes (total)	ND	0.50	н	11	fi	11	,,,	#	
Methyl tert-butyl ether	ND	5.0		11	N	**		H	
Surrogate: a.a.a-Trifluorotoluene	. — —	79.7 %	70-	130	#	Ħ	п	n	



Gettler-Ryan/Geostrategies(1)

6747 Sierra Court, Suite J Dublin CA, 94568 Project: Tosco(1)

Project Number: Tosco (Unocal) SS#7376, Pleasanton, CA

Project Manager: Deanna Harding

Reported: 01/07/02 14:26

Volatile Organic 8 Oxygenated Compounds by EPA Method 8260B

Sequoia Analytical - San Carlos

Notes			equota An	ary trea.	- San C	41103				
Ethanol ND 1000 ug/l 2 1120095 12/26/01 12/26/01 EPA \$260B 1,2-Dibromoethane ND 2.0 " " " " " " " " "	Analyte	Result		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,2-Dichloroethane 1,2-Dichloro	MW-1 (L112107-02) Water	Sampled: 12/17/01 15:50	Received: 12	<u>2/17/01_1</u>	7:55					· · · · · · · · · · · · · · · · · · ·
1,2-Dichloroethane	Ethanol	ND	1000	ug/l	2	1120095	12/26/01	12/26/01	EPA 8260B	
Di-isopropyl ether ND 2.0 " " " " " " " " " " " " " "	1,2-Dibromoethane	ND	2.0	11	11	#	h	ц	24	
Ethyl tert-butyl ether	1,2-Dichloroethane	ND	2.0	11	II .	"	n	Ħ	**	
Methyl tert-butyl ether 240 2.0 "	Di-isopropyl ether	ND	2.0	**	11	11	#	H	11	
Tert-amyl methyl ether	Ethyl tert-butyl ether	ND	2.0	11	Ji	н	**	**	11	
Tert-butyl alcohol ND 40 " " " " " " " " " " " " " " " "	Methyl tert-butyl ether	240	2.0	11	u	II .	**	n	п	
Surrogate: 1,2-Dichloroethane-d8	Tert-amyl methyl ether	ND	2.0	11	н	h	**	**	n	
Surrogate: Toluene-d8	Tert-butyl alcohol	ND	40	11	R	н	11	11	· · ·	
MW-3 (L112107-03) Water Sampled: 32/17/01 16:30 Received: 12/17/01 17:55 Ethanol ND 500 ug/l 1 1120095 12/27/01 EPA 8260B 1,2-Dichloroethane ND 1,0 " " " " " 1,2-Dichloroethane ND 1,0 " " " " " Ethyl tert-butyl ether ND 1,0 " " " " " Methyl tert-butyl ether 91 1,0 " " " " " " Tert-amyl methyl ether 91 1,0 " <td>Surrogate: 1,2-Dichloroethane</td> <td>:-d4</td> <td>89.6 %</td> <td>70-</td> <td>130</td> <td>п</td> <td>H</td> <td>"</td> <td>"</td> <td></td>	Surrogate: 1,2-Dichloroethane	:-d4	89.6 %	70-	130	п	H	"	"	
Ethanol ND 500 ug/l 1 1120095 12/27/01 12/27/01 EPA 8260B 1,2-Dibromoethane ND 1,0 " " " " " " " " " " " " " " " " " " "	Surrogate: Toluene-d8		104 %	70-	130	"	tr	п	H	
1,2-Dibromoethane ND 1.0 " " " " " " " " "	MW-3 (L112107-03) Water	Sampled: 12/17/01 16:30	Received: 12	2/17/01 1	7:55					
1,2-Dichloroethane	Ethanol	ND	500	ug/l	1	1120095	12/27/01	12/27/01	EPA 8260B	
Di-isopropyl ether ND 1.0 " " " " " " " " " " " " " " " " " " "	1,2-Dibromoethane	ND	1.0	11	н	44	**	**	H	
Ethyl tert-butyl ether ND 1.0 " " " " " " " " " " " " " " " " " " "	1,2-Dichloroethane	ND	1.0	"	"	II	11	**		
Methyl tert-butyl ether	Di-isopropyl ether	ND	1.0	D	**	u	II	**	**	
Tert-amyl methyl ether ND 1.0 " " " " " " " " " " " " " " " " " " "	Ethyl tert-butyl ether	ND	1.0	11	н	fi	H	**	**	
Tert-butyl alcohol 26 20 " " " " " " " " "	Methyl tert-butyl ether	91	1.0	11	**	Ħ	"	II	41	
Surrogate: 1,2-Dichloroethane-d4	Tert-amyl methyl ether	ND	1.0	**	#	n	п	Ħ	11	
Surrogate: Toluene-d8 102 % 70-130 " " " " " MW-7 (1.112107-04) Water Sampled: 12/17/01 15:05 Received: 12/17/01 17:55 Ethanol ND 5000 ug/l 10 1120095 12/27/01 12/27/01 EPA 8260B 1,2-Dibromoethane ND 10 " " " " " " " " " " " " " " " " 1,2-Dichloroethane ND 10 " " " " " " " " " " " " " " " Di-isopropyl ether ND 10 " " " " " " " " " " " " " " " " " Ethyl tert-butyl ether ND 10 " " " " " " " " " " " " " " " " " " Methyl tert-butyl ether 670 10 " " " " " " " " " " " " " " " " " " " " Tert-amyl methyl ether ND 200 " " " " " " " " " " " " " " " " " " " " " " " Surrogate: 1,2-Dichloroethane-d4 83.8 % 70-130 " " " " " " " " " " " " " " " " " " " " " " " " " "	Tert-butyl alcohol	26	20	11	"	**	#	н	11	
MW-7 (L112107-04) Water Sampled: 12/17/01 15:05 Received: 12/17/01 17:55 Ethanol ND 5000 ug/l 10 1120095 12/27/01 12/27/01 EPA 8260B 1,2-Dibromoethane ND 10 "	Surrogate: 1,2-Dichloroethane	:-d4	86.0 %	70-	130	"	n	#	ft .	
Ethanol ND 5000 ug/l 10 1120095 12/27/01 EPA 8260B 1,2-Dibromoethane ND 10 "	Surrogate: Toluene-d8		102 %	70-	-130	,,	"	"	"	
1,2-Dibromoethane ND 10 " " " " " " " " " " " " " " " " " " "	MW-7 (L112107-04) Water	Sampled: 12/17/01 15:05	Received: 12	<u>2/17/01 1</u>	7:55					
1,2-Dibromoethane ND 10 " " " " " " " " " " " " " " " " " " "	Ethanol	ND	5000	ug/l	10	1120095	12/27/01	12/27/01	EPA 8260B	
1,2-Dichloroethane ND 10 "	1,2-Dibromoethane	ND	10	-		н	•1	U	41	
Di-isopropyl ether ND 10 "	•	ND	10	11	**	н	77	ıı .	11	
Ethyl tert-butyl ether ND 10 " </td <td>="</td> <td>ND</td> <td>10</td> <td>11</td> <td>n</td> <td>h</td> <td>Ħ</td> <td>п</td> <td>u</td> <td></td>	="	ND	10	11	n	h	Ħ	п	u	
Methyl tert-butyl ether 670 10 " </td <td>•</td> <td>ND</td> <td>10</td> <td>**</td> <td>н</td> <td>п</td> <td>*</td> <td>н</td> <td>11</td> <td></td>	•	ND	10	**	н	п	*	н	11	
Tert-amyl methyl ether ND 10 " " " " " Tert-butyl alcohol ND 200 " " " " " Surrogate: 1,2-Dichloroethane-d4 83.8 % 70-130 " " " "		670	10	**	**	н	**	н	u .	
Tert-butyl alcohol ND 200 " " " " " " Surrogate: 1,2-Dichloroethane-d4 83.8 % 70-130 " " " "	•	ND	10	**	н	u	11	н	11	
Surrogate: 1,2-Dichloroethane-d4 83.8 % 70-130 " " " "	•	ND	200	* *	**	"	h	"	n	
		-d4	83.8 %	70-	-130	"	ħ	11	W	
	* *			70-	130	"	*	n	"	

Gettler-Ryan/Geostrategies(1)

6747 Sierra Court, Suite J Dublin CA, 94568 Project: Tosco(1)

Project Number: Tosco (Unocal) SS#7376, Pleasanton, CA

Project Manager: Deanna Harding

Reported: 01/07/02 14:26

Volatile Organic 8 Oxygenated Compounds by EPA Method 8260B Sequoia Analytical - San Carlos

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-8 (L112107-05) Water	Sampled: 12/17/01 14:21	Received: 12	<u>2/17/01 1</u>	7:55			***		
Ethanol	ND	500	սջ/l	1	1120095	12/26/01	12/26/01	EPA 8260B	
1,2-Dibromoethane	ND	1.0	11	**	u	н	"	**	
1,2-Dichloroethane	ND	1.0	11	n	Ħ	H	n	11	
Di-isopropyl ether	9.8	1.0	11	"	*	**	II	п	
Ethyl tert-butyl ether	ND	1.0	**	#	n	ŧŧ	н	н	
Methyl tert-butyl ether	170	1.0	11	11	n	**	ıı	"	
Tert-amyl methyl ether	ND	1.0	n	li	**	91	**	v	
Tert-butyl alcohol	<i>7</i> 7	20	11	lı	**	11	п		
Surrogate: 1,2-Dichloroethane	e-d4	95.4 %	70-	130	#	н	n	n	
Surrogate: Toluene-d8		102 %	70-	130	p	"	n	μ	
MW-9 (L112107-06) Water	Sampled: 12/17/01 13:40	Received: 12	2/17/01 1	7:55				- 	
Ethanol	ND	500	ug/l	1	1120090	12/21/01	12/26/01	EPA 8260B	
1,2-Dibromoethane	ND	1.0	n	Ħ	n	W	Ħ	Ħ	
1,2-Dichloroethane	ND	1.0	п	н		**	"	•	
Di-isopropyl ether	ND	1.0	ш	**	**	11	**	Ħ	
Ethyl tert-butyl ether	ND	1.0	П	"	н	п	Ħ	•	
Methyl tert-butyl ether	ND	1.0	11	n	Ħ	H	77	**	
Tert-amyl methyl ether	ND	1.0	Ш	Ħ	**	· • • • • • • • • • • • • • • • • • • •	•	91	
Tert-butyl alcohol	ND ND	20	ш	ŧπ	11	"	**	п	_
Surrogate: 1,2-Dichloroethane	:-d4	89.6%	70-	130	μ	"	#	u	
Surrogate: Toluene-d8		102 %	70-	130	n	"	"	"	
MW-11 (L112107-07) Water	Sampled: 12/17/01 12:52	Received:	12/17/01	17:55					
Ethanol	ND	500	ug/l	1	1120095	12/26/01	12/26/01	EPA 8260B	
1,2-Dibromoethane	ND	1.0	ш	**	н	H	"	Ħ	
1,2-Dichloroethane	ND	1.0	11		п	μ	*1	**	
Di-isopropyl ether	ND	1.0	**	71	11	11	,,	uę.	
Ethyl tert-butyl ether	ND	1.0	**	Ħ	II	11	#	10	
Methyl tert-butyl ether	14	1.0	"	π	п	ш	**	11	
Tert-amyl methyl ether	ND	1.0	**	Ħ	н	μ	н	41	
Tert-butyl alcohol	ND	20	**	n	н	н	11	11	
Surrogate: 1,2-Dichloroethane	-d4	95.6%	70-	130	п	"	,,	п	
Surrogate: Toluene-d8		104 %	70-	130	*	"	n	**	



Gettler-Ryan/Geostrategies(1)

6747 Sierra Court, Suite J Dublin CA, 94568 Project: Tosco(1)

Project Number: Tosco (Unocal) SS#7376, Pleasanton, CA

Project Manager: Deanna Harding

Reported: 01/07/02 14:26

Volatile Organic 8 Oxygenated Compounds by EPA Method 8260B

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-12 (L112107-08) Water	Sampled: 12/17/01 12:15	Received:	12/17/01	17;55					
Ethanol	ND	500	ug/l	1	1120095	12/26/01	12/26/01	EPA 8260B	
1,2-Dibromoethane	ND	1.0	11	u	**	•	41	11	
1,2-Dichloroethane	ND	1.0	tr	ti.	**	**	ш	II	
Di-isopropyl ether	ND	1.0	*	H	11	II	ŧı	н	
Ethyl tert-butyl ether	ND	1.0	Ħ	**	11	II	tt	**	
Methyl tert-butyl ether	ND	1.0	*	**	11	н	Ħ	**	
Tert-amyl methyl ether	ND	1.0	"	Ħ	п	"	**	Ħ	
Tert-butyl alcohol	ND	20	"	*	11	71	"		
Surrogate: 1,2-Dichloroethane-	-d4	97.6 %	70-	-130	n	"	n	"	
Surrogate: Toluene-d8		106 %	70-	-130	"	н	n	<i>n</i> .	

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

Dublin CA, 94568

Project: Tosco(1)

Project Number: Tosco (Unocal) SS#7376, Pleasanton, CA

Reported: 01/07/02 14:26

Project Manager: Deanna Harding

Diesel Hydrocarbons (C10-C28) by 8015B modified Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (L112107-02) Water Sampled: 12	2/17/01 15:50	Received: 12	2/17/01 17	:55					
Diesel Range Organics (C10-C28)	ND	53	ug/l	1	1L31029	12/31/01	01/03/02	8015Bm	I-04
Surrogate: n-Octacosane		35.4 %	50-1	50	'n	n	n	#	I-04,S-LIM
MW-3 (L112107-03) Water Sampled: 12	2/17/01 16:30	Received: 12	2/17/01 17	:55					
Diesel Range Organics (C10-C28)	700	52	սջ/l	1	1L31029	12/31/01	01/02/02	8015Bm	1-04
Surrogate: n-Octacosane		96.0 %	50-1	50	0	н	n	"	I-04
MW-7 (L112107-04) Water Sampled: 12	2/17/01 15:05	Received: 12	2/17/01_17	:55					
Diesel Range Organics (C10-C28)	470	52	ug/l	1	1L31029	12/31/01	01/02/02	8015Bm	I-04
Surrogate: n-Octacosane		56.9 %	50-1	50	"	11	tr	tr	1-04
MW-8 (L112107-05) Water Sampled: 12	2/17/01 14:21	Received: 12	2/17/01 17	:55					
Diesel Range Organics (C10-C28)	ND	52	ug/l	1	1L31029	12/31/01	01/02/02	8015Bm	1-04
Surrogate: n-Octacosane	•	15.1 %	50-1	50	n	"	"	,,	I-04,S-LIM
MW-9 (L112107-06) Water Sampled: 12	2/17/01 13:40	Received: 1	2/17/01 17	:55				_	
Diesel Range Organics (C10-C28)	ND	52	ug/l	1	1L31029	12/31/01	01/02/02	8015Bm	1-04
Surrogate: n-Octacosane		37.3 %	50-7	50	"	"	"	n	I-04,S-LIM
MW-11 (L112107-07) Water Sampled: 1	12/17/01 12:52	Received:	12/17/01 1	7:55					
Diesel Range Organics (C10-C28)	110	52	ug/l	1	1L31029	12/31/01	01/02/02	8015Bm	1-04
Surrogate: n-Octacosane		67.6 %	50-1	150	TF.	п	"	"	<i>I-04</i>
MW-12 (L112107-08) Water Sampled: 1	12/17/01 12:15	Received:	12/17/01 1	7:55					
Diesel Range Organics (C10-C28)	77	52	ug/l	1	1L31029	12/31/01	01/02/02	8015Bm	I-04
Surrogate: n-Octacosane		74.2 %	50-1	150	"	"	"	"	1-04

Gettler-Ryan/Geostrategies(1)

Project: Tosco(1)

6747 Sierra Court, Suite J Dublin CA, 94568 Project Number: Tosco (Unocal) SS#7376, Pleasanton, CA

Reported:

Project Manager: Deanna Harding

01/07/02 14:26

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B - Quality Control Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1120096 - EPA 5030B (P/T)										
Blank (1120096-BLK1)				Prepared	& Analyze	ed: 12/26/0	01			
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	·						
Веплепе	ND	0.50	и,							
Toluene	ND	0.50	*1							
Ethylbenzene	ND	0.50	н							
Xylenes (total)	ND	0.50	H							
Methyl tert-butyl ether	ND	5.0	H			_				
Surrogate: a,a,a-Trifluorotoluene	10.3		II	10.0		103	70-130			
LCS (1120096-BS1)				Prepared	& Analyz	ed: 12/26/	01			
Benzene	11.0	0.50	ug/l	10.0		110	70-130		-	
l'oluene	10.7	0.50	II	10.0		107	70-130			
Ethylbenzene	10.6	0.50	Ħ	10.0		106	70-130			
Xylenes (total)	31.6	0.50	II .	30.0		105	70-130			
Surrogate: a,a,a-Trifluorotoluene	9.60	,	п	10.0		96.0	70-130			
LCS (1120096-BS2)				Prepared	& Analyz	ed: 12/26/	01			
Purgeable Hydrocarbons as Gasoline	261	50	ug/l	250		104	70-130		_	
Surrogate: a,a,a-Trifluorotoluene	10.0		п	10.0		100	70-130			
Matrix Spike (1120096-MS1)	So	urce: L11209	99-05	Prepared	& Analyz	ed: 12/26/	01			
Benzene	10.9	0.50	ug/l	10.0	ND	109	60-140			•
Toluene	10.7	0.50	- II	10.0	ND	107	60-140			
Ethylbenzene	10.6	0.50	п	10.0	ND	106	60-140			
Xylenes (total)	31.4	0.50	tı	30.0	ND	105	60-140			
Surrogate: a,a,a-Trifluorotoluene	9.75		"	10.0		97.5	70-130			
Matrix Spike Dup (1120096-MSD1)	So	urce: L11209	99-05	Prepared	& Analyz	ed: 12/26/	01			
Benzene	11.0	0.50	ug/l	10.0	ND	110	60-140	0.913	25	
Foluene	10.6	0.50	Ħ	10.0	ND	106	60-140	0.939	25	
Ethylbenzene	10.5	0.50	**	10.0	ND	105	60-140	0.948	25	
Xylenes (total)	31.5	0.50	71	30.0	ND	105	60-140	0.318	25	
Surrogate: a,a,a-Trifluorotoluene	10.4		"	10.0		104	70-130			

Gettler-Ryan/Geostrategies(1)

6747 Sierra Court, Suite J Dublin CA, 94568 Project: Tosco(1)

Project Number: Tosco (Unocal) SS#7376, Pleasanton, CA

Project Manager: Deanna Harding

Reported: 01/07/02 14:26

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B - Quality Control Sequoia Analytical - San Carlos

	Dec 19	Reporting	11	Spike	Source	0/ BEC	%REC	DDD	RPD	N1-+-
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1120099 - EPA 5030B (P/T)										<u></u>
Blank (1120099-BLK1)				Prepared	& Analyze	ed: 12/27/0	01			
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l							
Benzene	ND	0.50	н							
Toluene	NĐ	0.50	**							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	*1							
Methyl tert-butyl ether	ND	5.0	†1							
Surrogate: a,a,a-Trifluorotoluene	8.32		"	10.0		83.2	70-130			
LCS (1120099-BS1)				Prepared	& Analyz	ed: 12/27/	01			
Benzene	11.2	0.50	ug/l	10.0		112	70-130			
Toluene	11.0	0.50	11	10.0		110	70-130			
Ethylbenzene	10.3	0.50	11	10.0		103	70-130			
Xylenes (total)	33.5	0.50	п	30.0	-	112	70-130			
Surrogate: a,a,a-Trifluorotoluene	9.13		п	10.0		91.3	70-130			
LCS (1120099-BS2)				Prepared	& Analyz	ed: 12/27/	01			.
Purgeable Hydrocarbons as Gasoline	270	50	ug/l	250		108	70-130			
Surrogate: a,a,a-Trifluorotoluene	10.1		"	10.0		101	70-130			
Matrix Spike (1120099-MS1)	So	urce: L11210	07-08	Prepared	& Analyz	ed: 12/27/	01			
Purgeable Hydrocarbons as Gasoline	245	50	ug/l	250	ND	98.0	60-140			
Surrogate: a,a,a-Trifluorotoluene	9.46		"	10.0		94.6	70-130			
Matrix Spike Dup (1120099-MSD1)	So	urce: L11210	07-08	Prepared	& Analyz	ed: 12/27/	' 01			
Purgeable Hydrocarbons as Gasoline	250	50	ug/l	250	ND	100	60-140	2.02	25	
Surrogate: a,a,a-Trifluorotoluene	10.7		"	10.0		107	70-130	-		



Gettler-Ryan/Geostrategies(1)

6747 Sierra Court, Suite J Dublin CA, 94568 Project: Tosco(1)

Project Number: Tosco (Unocal) SS#7376, Pleasanton, CA

Project Manager: Deanna Harding

Reported: 01/07/02 14:26

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B - Quality Control Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1120100 - EPA 5030B (P/T)					· · ·					
Blank (1120100-BLK1)				Prepared	& Analyze	ed: 12/27/0)]			
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	•						
Benzene	ND	0.50	†1							
l'oluene	ND	0.50	*1							
Ethylbenzene	ND	0.50	41							
Xylenes (total)	ND	0.50	11							
Methyl tert-butyl ether	ND	5.0	11							
Surrogate: a,a,a-Trifluorotoluene	9,29		"	10.0		92.9	70-130			-
LCS (1120100-BS1)				Prepared	& Analyze	ed: 12/27/0	<u>01</u>			
Benzene	12.0	0.50	ug/l	10.0		120	70-130			· -
Toluene	10.9	0.50	н	10.0		109	70-130			
Ethylbenzene	10.6	0.50	••	10.0		106	70-130			
Xylenes (total)	31.4	0.50	Ħ	30.0		105	70-130			
Surrogate: a,a,a-Trifluorotoluene	8.95		"	10.0		89.5	70-130		_	
LCS (1120100-BS2)				Prepared	& Analyz	ed: 12/27/	01			
Purgeable Hydrocarbons as Gasoline	284	50	ug/l	250		114	70-130		-	
Surrogate: a,a,a-Trifluorotoluene	9.54		"	10.0		95.4	70-130	ï		
Matrix Spike (1120100-MS1)	So	urce: L11210	7-02	Prepared	& Analyz	ed: 12/27/	01			
Purgeable Hydrocarbons as Gasoline	235	50	ug/l	250	ND	94.0	60-140			
Surrogate: a,a,a-Trifluorotoluene	10.1		"	10.0		101	70-130			
Matrix Spike Dup (1120100-MSD1)	So	urce: L11210	7-02	Prepared	& Analyz	ed: 12/27/	01			
Purgeable Hydrocarbons as Gasoline	253	50	ug/l	250	ND	101	60-140	7.38	25	
Surrogate: a,a,a-Trifluorotoluene	9.62	- · · · · · · · · · · · · · · · · · · ·	n	10.0		96.2	70-130			

Gettler-Ryan/Geostrategies(1)

6747 Sierra Court, Suite J Dublin CA, 94568 Project: Tosco(1)

Project Number: Tosco (Unocal) SS#7376, Pleasanton, CA

Project Manager: Deanna Harding

Reported: 01/07/02 14:26

Volatile Organic 8 Oxygenated Compounds by EPA Method 8260B - Quality Control Sequoia Analytical - San Carlos

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1120090 - EPA 5030B [P/T]										
Blank (1120090-BLK1)				Prepared o	& Analyze	ed: 12/21/0)]			· ·
Ethanol	ND	500	ug/l							
1,2-Dibromoethane	ND	1.0	Ħ							
1,2-Dichloroethane	ND	1.0								
Di-isopropyl ether	ND	1.0								
Ethyl tert-butyl ether	ND	1.0	**							
Methyl tert-butyl ether	ND	1.0	н							
Tert-amyl methyl ether	ND	1.0	н							
Tert-butyl alcohol	ND	20	ш							
Surrogate: 1,2-Dichloroethane-d4	45.7		п	50.0		91.4	70-130			
Surrogate: Toluene-d8	51.2		n	50.0		102	70-130			
Blank (1120090-BLK2)				Prepared a	& Analyzo	ed: 12/26/0	D 1			
Ethanol	ND	500	ug/l	<u>.</u>						
1,2-Dibromoethane	ND	1.0	•							
1,2-Dichloroethane	ND	1.0	**							
Di-isopropyl ether	ND	1.0	93							
Ethyl tert-butyl ether	ND	1.0	•							
Methyl tert-butyl ether	ND	1.0	tt							
Tert-amyl methyl ether	ND	1.0	u							
Tert-butyl alcohol	ND	20	n							
Surrogate: 1,2-Dichloroethane-d4	44.8		,,	50.0		89.6	70-130			
Surrogate: Toluene-d8	51.7		н	50.0		103	70-130			
Blank (1120090-BLK3)				Prepared a	& Analyzo	ed: 12/26/0	01			
Ethanol	ND	500	ug/l		<u> </u>	-			·· ·· ·	
1,2-Dibromoethane	ND	1.0	**							
1,2-Dichloroethane	ND	1.0	tt							
Di-isopropyl ether	ND	1.0	II .							
Ethyl tert-butyl ether	ND	1.0	11							
Methyl tert-butyl ether	ND	1.0	"							
Tert-amyl methyl ether	ND	1.0	**							
Tert-butyl alcohol	ND	20	Ħ							
Surrogate: 1,2-Dichloroethane-d4	44.8		"	50.0		89.6	70-130			
Surrogate: Toluene-d8	51.7		"	50.0		103	70-130			

Gettler-Ryan/Geostrategies(1)

6747 Sierra Court, Suite J Dublin CA, 94568 Project: Tosco(1)

Project Number: Tosco (Unocal) SS#7376, Pleasanton, CA

Project Manager: Deanna Harding

Reported: 01/07/02 14:26

Volatile Organic 8 Oxygenated Compounds by EPA Method 8260B - Quality Control Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
	Nesur	Lillin	Onits	Leves	Result	70KEC	Lillins	KPD	Limit	Notes
Batch 1120090 - EPA 5030B [P/T]		<u> </u>								
LCS (1120090-BS1)				Prepared	& Analyze	ed: 12/21/0	01			
Methyl tert-butyl ether	57.9	1.0	ug/l	50.0		116	70-130			_
Surrogate: 1,2-Dichloroethane-d4	46.4		#	50.0		92.8	70-130			
Surrogate: Toluene-d8	55.4		"	50.0		111	70-130			
LCS (1120090-BS2)				Prepared	& Analyz	ed: 12/26/0	D1			
Methyl tert-butyl ether	51.2	1.0	ug/l	50.0		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	46.7		"	50.0		93,4	70-130		•	
Surrogate: Toluene-d8	55.8		*	50.0		112	70-130			
LCS (1120090-BS3)				Prepared	& Analyz	ed: 12/26/	01			
Methyl tert-butyl ether	51.2	1.0	ug/l	50.0		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	46.7		#	50.0		93.4	70-130		-	
Surrogate: Toluene-d8	55.8		"	50.0		112	7 0 -130		•	
Matrix Spike (1120090-MS1)	Sou	rce: L11210	7-06	Prepared	& Analyz	ed: 12/26/	01			
Methyl tert-butyl ether	51.9	1.0	ug/l	50.0	ND	104	60-140		··········	
Surrogate: 1,2-Dichloroethane-d4	45.3		"	50.0		90.6	70-130			
Surrogate: Toluene-d8	56.1		μ	50.0		112	70-130			
Matrix Spike Dup (1120090-MSD1)	Sou	rce: L11210	7-06	Prenared	& Analyz	ed: 12/26/	01			
Methyl tert-butyl ether	51.7	1.0	ug/l	50.0	ND	103	60-140	0.966	25	
Surrogate: 1,2-Dichloroethane-d4	45.2	······································	п	50.0		90.4	7 0- 130			
Surrogate: Toluene-d8	55.7		n	50.0		111	70-130			
Batch 1120095 - EPA 5030B [P/T]										
Blank (1120095-BLK1)				Prepared	& Analyz	ed: 12/26/	'n1			
Ethanol	ND	500	ug/l	Тторитос	<u> </u>	12,20	<u>~</u> .			
1,2-Dibromoethane	ND	1.0	, <u>, , , , , , , , , , , , , , , , , , </u>							
1,2-Dichloroethane	ND	1.0	u u				•			
Di-isopropyl ether	ND	1.0	31							
Ethyl tert-butyl ether	ND	1.0	**							
Methyl tert-butyl ether	ND	1.0	**							
Tert-amyl methyl ether	ND	1.0	11							
Tert-butyl alcohol	ND	20	II .							
Surrogate: 1,2-Dichloroethane-d4	44.8		11	50.0		89.6	70-130			
Surrogate: Toluene-d8	51.7		n	50.0		103	70-130			



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

Dublin CA, 94568

Project: Tosco(1)

Project Number: Tosco (Unocal) SS#7376, Pleasanton, CA

Reported: 01/07/02 14:26

Project Manager: Deanna Harding

Volatile Organic 8 Oxygenated Compounds by EPA Method 8260B - Quality Control Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1120095 - EPA 5030B [P/T]				•			•	_		
Blank (1120095-BLK2)		<u>-</u>		Prepared	& Analyze	ed: 12/27/	01			
Ethanol	ND	500	ug/l	<u> </u>						
1,2-Dibromoethane	ND	1.0	"							
1,2-Dichloroethane	ND	1.0	**							
Di-isopropyl ether	ND	1.0	#1							
Ethyl tert-butyl ether	ND	1.0	n							
Methyl tert-butyl ether	ND	1.0	**							
Tert-amyl methyl ether	ND	1.0	"							
Tert-butyl alcohol	ND	20	tt							٠
Surrogate: 1,2-Dichloroethane-d4	43.0		"	50.0		86.0	70-130			
Surrogate: Toluene-d8	51.6		n	50.0		103	70-130			
Blank (1120095-BLK3)				Prepared	& Analyz	ed: 12/28/	01			
Ethanol	ND	500	ug/l							
1,2-Dibromoethane	ND	1.0	ц							
1,2-Dichloroethane	ND	1.0	11							
Di-isopropyl ether	ND	1.0	11							
Ethyl tert-butyl ether	ND	1.0	**		-					
Methyl tert-butyl ether	ND	1.0	н							
Tert-amyl methyl ether	ND	1.0	**							
Tert-butyl alcohol	ND	20	**							
Surrogate: 1,2-Dichloroethane-d4	52.2		"	50.0		104	70-130			
Surrogate: Toluene-d8	54.3		"	50.0		109	70-130			
LCS (1120095-BS1)				Prepared	& Analyz	ed: 12/26/	01			
Methyl tert-butyl ether	51.2	1.0	ug/l	50.0		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	46.7		n	50.0		93.4	70-130			
Surrogate: Toluene-d8	55.8		n	50.0		112	70-130			

Gettler-Ryan/Geostrategies(1)

6747 Sierra Court, Suite J Dublin CA, 94568 Project: Tosco(1)

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Project Manager: Deanna Harding

Reported: 01/07/02 14:26

Volatile Organic 8 Oxygenated Compounds by EPA Method 8260B - Quality Control Sequoia Analytical - San Carlos

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1120095 - EPA 5030B [P/T]										<u></u>
LCS (1120095-BS2)				Prepared	& Analyz	ed: 12/27/0	01			
Methyl tert-butyl ether	52.5	1.0	ug/l	50.0		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	45.0		11	50.0		90.0	70-130	-		
Surrogate: Toluene-d8	56.4		11	50.0		113	70-130			
LCS (1120095-BS3)				Prepared	& Analyz	ed: 12/28/	01			
Methyl tert-butyl ether	58.7	1.0	ug/l	50.0		117	70-130			
Surrogate: 1,2-Dichloroethane-d4	48.8		"	50.0		97.6	70-130		<u>-</u>	
Surrogate: Toluene-d8	55.2		"	50.0		110	70-130			
Matrix Spike (1120095-MS1)	Sou	rce: L11212	0-02	Prepared:	12/26/01	Analyzed	: 12/28/01			
Methyl tert-butyl ether	60.5	1.0	ug/l	50.0	ND	121	60-140		_	
Surrogate: 1,2-Dichloroethane-d4	50.0		n	50.0		100	70-130			-
Surrogate: Toluene-d8	59.0		"	50.0		118	70-130			
Matrix Spike Dup (1120095-MSD1)	Sou	rce: L11212	0-02	Prepared:	12/26/01	Analyzeo	l: 12/28/01			
Methyl tert-butyl ether	59.7	1.0	u g/i	50.0	ND	119	60-140	1.67	25	
Surrogate: 1,2-Dichloroethane-d4	48.1		"	50.0		96.2	70-130			
Surrogate: Toluene-d8	55.9		,,	50.0		112	70-130			



Gettler-Ryan/Geostrategies(1)

6747 Sierra Court, Suite J Dublin CA, 94568 Project: Tosco(1)

Project Number: Tosco (Unocal) SS#7376, Pleasanton, CA

Project Manager: Deanna Harding

Reported: 01/07/02 14:26

Diesel Hydrocarbons (C10-C28) by 8015B modified - Quality Control Sequoia Analytical - Morgan Hill

		D	,							
Analyte	Result	Reporting Limit	Units	Spike Laust	Source	%REC	%REC Limits	מחמ	RPD	31
Analyte	Result	Liiiii	Onits	Level	Result	76KEC	Limits	RPD	Limit	Notes
Batch 1L31029 - EPA 3510B						·				
Blank (1L31029-BLK1)				Ртерагед:	12/31/01	Analyzed	: 01/02/02			
Diesel Range Organics (C10-C28)	ND	50	ug/l							
Surrogate: n-Octacosane	39.6		"	50.0		79.2	50-150			
LCS (1L31029-BS1)				Ртератеd:	12/31/01	Analyzed	: 01/02/02			
Diesel Range Organics (C10-C28)	459	50	ug/l	500		91.8	60-140	·		
Surrogate: n-Octacosane	7.80		"	50.0		15.6	50-150	-		1-04
LCS Dup (1L31029-BSD1)				Prepared:	12/31/01	Analyzed	: 01/02/02			
Diesel Range Organics (C10-C28)	359	50	ug/l	500		71.8	60-140	24.4	50	· · · · · · · · · · · · · · · · · · ·
Surrogate: n-Octacosone	6.33	-	n	50.0		12.7	50-150	٠		1-04



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

Dublin CA, 94568

Project: Tosco(1)

Project Number: Tosco (Unocal) SS#7376, Pleasanton, CA

Reported:

Project Manager: Deanna Harding

01/07/02 14:26

Notes and Definitions

J-04 The LCS recovery was below the control limit by 38% for the surrogate. This should be considered in evaluating the results

associated with this batch for their intended purpose.

P-01 Chromatogram Pattern: Gasoline C6-C12

The surrogate recovery was outside control limits. The result may still be useful for its intended purpose. S-LIM

DET Analyte DETECTED

NĐ Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

Sample results reported on a dry weight basis dry

RPD Relative Percent Difference