GETTLER-RYAN INC.

TRANSMITTAL

May 11, 2001
G-R #: 180022

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

CC: Mr. Keith Romstad
ERI, Inc.
73 Digital Drive, Suite 100
Novato, California 94949

FROM: Deanna L. Harding
Project Coordinator
Gettler-Ryan Inc.
6747 Sierra Court, Suite J
Dublin, California 94568

RE: Tosco(Unocal) SS #7176
7850 Amador Valley Blvd.
Dublin, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	May 7, 2001	Groundwater Monitoring and Sampling Report Second Quarter - Event of April 3, 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 ***May 24, 2001***, this report will be distributed to the following:

cc: **Mr. Amir K. Gholami, REHS, Alameda County Health Care Services, 1131 Harbor Bay Pkwy., Alameda, CA 94502**

Enclosure

trans/7176-DBD

GETTLER-RYAN INC.

May 7, 2001
G-R Job #180022

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

RE: Second Quarter Event of April 3, 2001
Groundwater Monitoring & Sampling Report
Tosco (Unocal) Service Station #7176
7850 Amador Valley Boulevard
Dublin, California

Dear Mr. De Witt:

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

Static groundwater levels were measured and all wells were checked for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were not present in the wells. Static water level data and groundwater elevations are summarized in Table 1. Dissolved Oxygen Concentrations are summarized in Table 3. A Potentiometric Map is included as Figure 1.

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

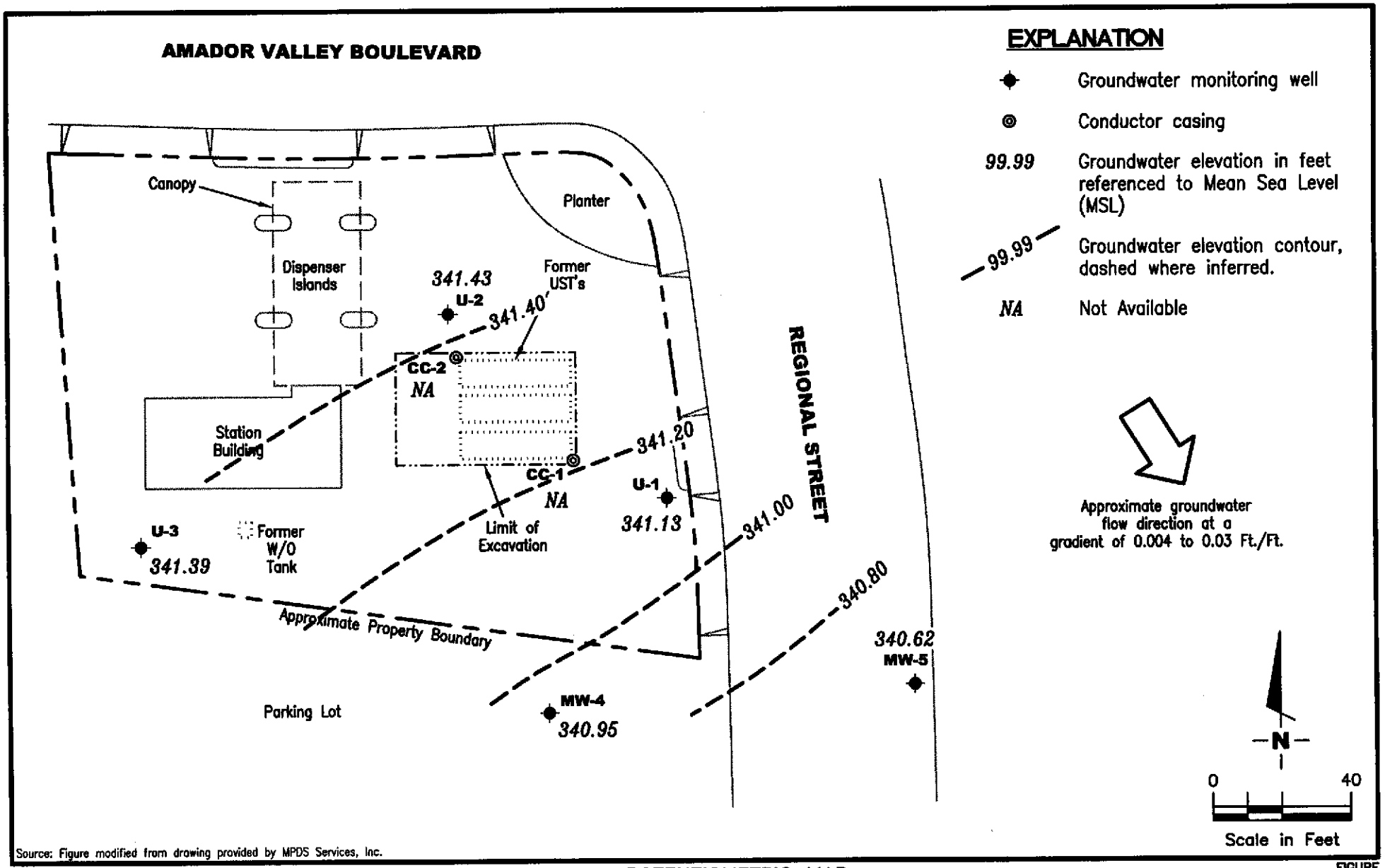
Sincerely,

Deanna L. Harding
Project Coordinator

REGISTERED GEOLOGIST
STEPHEN J. CARTER
No. 5577
STATE OF CALIFORNIA

Stephen J. Carter
Senior Geologist, R.G. No. 5577

Figure 1:	Potentiometric Map
Figure 2:	Concentration Map
Table 1:	Groundwater Monitoring Data and Analytical Results
Table 2:	Groundwater Analytical Results - Oxygenate Compounds
Table 3:	Dissolved Oxygen Concentrations
Attachments:	Standard Operating Procedure - Groundwater Sampling
	Field Data Sheets
7176.qml	Chain of Custody Document and Laboratory Analytical Reports



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

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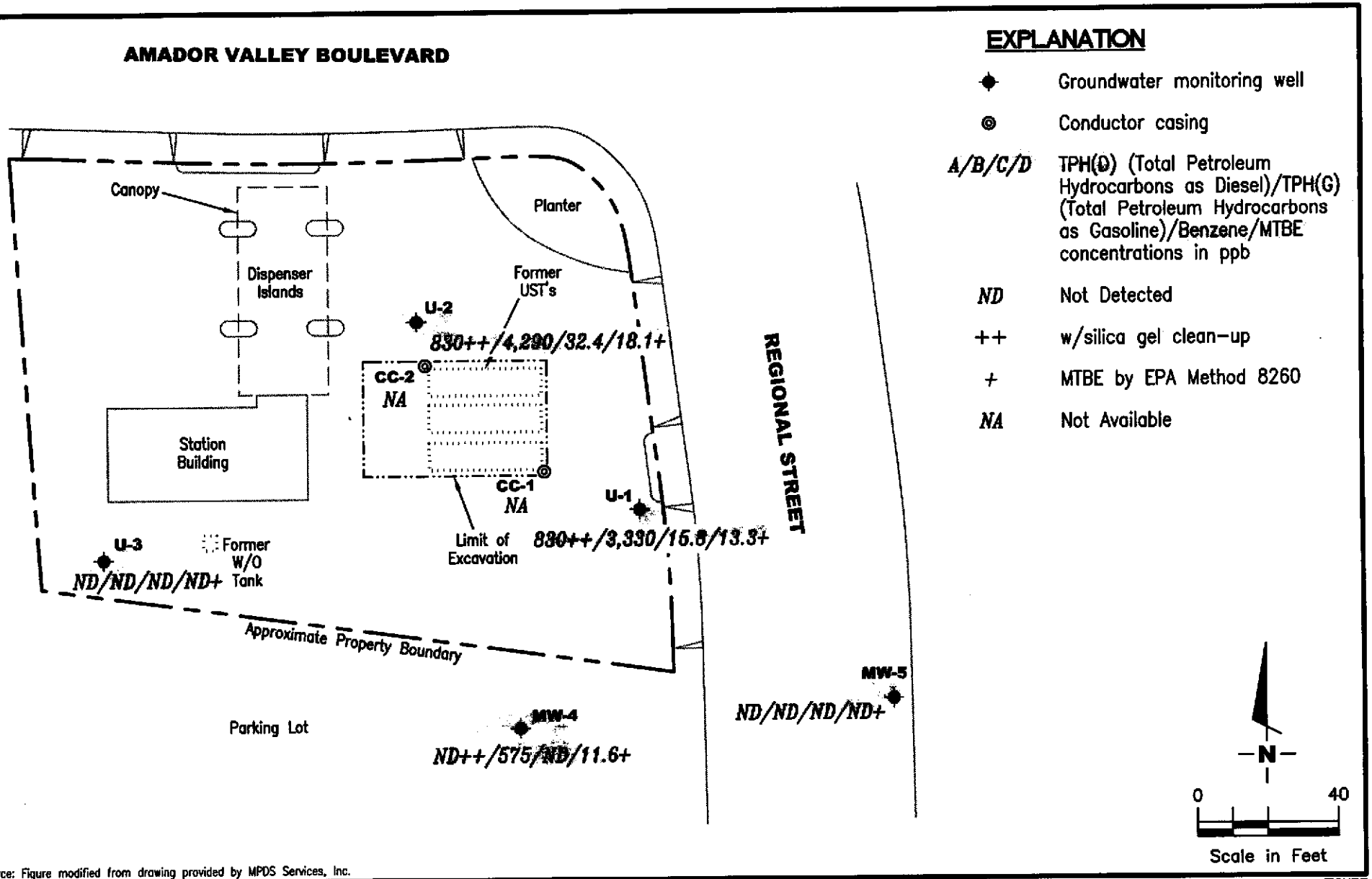
Dublin, CA 94568 (925) 551-7555

POTENTIOMETRIC MAP
Tosco (Unocal) Service Station #7176
7850 Amador Valley Boulevard
Dublin, California

FIGURE
1

PROJECT NUMBER	REVIEWED BY	DATE	REVISED DATE
180022		April 3, 2001	

FILE NAME: P:\ENVIRO\TOSCO\7176\Q01-7176.DWG | Layout Tab: Pot2



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

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CONCENTRATION MAP
Tosco (Unocal) Service Station #7176
7850 Amador Valley Boulevard
Dublin, California

FIGURE
2

PROJECT NUMBER	REVIEWED BY	DATE	REVISED DATE
180022		April 3, 2001	

FILE NAME: P:\ENVIRO\TOSCO\7176\Q01-7176.DWG | Layout Tab: Con2

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #7176
7850 Amador Valley Boulevard
Dublin, California

WELL ID/ TOC*		DATE	DTW (ft.)	S.I. (ft. bgs)	GWE (msl)	TPH-D♦ (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
U-1												
355.62		07/08/95	12.59	10.0-30.0	343.03	[3]9,400/--	39,000	1,500	19	1,600	5,200	--
		10/12/95	15.38		340.24	[5]4,200/--	33,000	1,400	ND	1,400	3,100	--[7]
		01/11/96[1]	16.33		339.29	[5]8,200/--	8,300	690	11	680	1,500	--[8]
		04/11/96[2]	12.20		343.42	[5]630/--	3,200	110	ND	180	290	790
		07/10/96	13.84		341.78	[5]2,200/--	2,600	81	4.4	210	230	510
		10/30/96	15.85		339.77	[5]560/--	2,200	67	19	140	150	360
		01/27/97	12.20		343.42	[5]2,300/--	4,600	98	ND	360	290	150
		04/08/97	13.46		342.16	[5]1,300/--	2,800	50	ND	220	140	ND
		07/17/97	15.30		340.32	[6]460/--	2,300	30	4.5	140	94	190
		10/17/97	16.33		339.29	[6]510/--	1,500	31	6.7	110	88	220
		01/19/98	14.34		341.28	[10]1,900/1,300[10]	3,100	46	3.4	310	200	170
355.59	NP	04/23/98	11.16		344.43	--/1,700[11]	3,400	72	3.8	470	350	280
	NP	07/08/98	12.67		342.92	[14]2,000/--	4,500	51	ND[12]	590	430	190
		10/05/98	14.57		341.02	--/2,500[10]	7,500[16]	53	ND[12]	680	350	190/180[17]
		01/04/99	15.35		340.24	[11]2,700/2,500[11]	10,000[19]	ND[12]	ND[12]	1,200	540	ND[12]
		04/05/99	13.64		341.95	[10]920/570[10]	4,900	34	ND[12]	350	150	150/55[17]
		07/01/99	14.39		341.20	[10]2,700/3,600[26]	10,000	45	ND[12]	850	420	260/110[17]
		09/30/99	15.32		340.27	[10]2,360/1,680[10]	7,150[27]	ND[12]	ND[12]	415	84.4	[12]ND/195[17]
		01/03/00	16.51		339.08	[26]2,000/1,700[26]	5,400[27]	28	8.4	180	33	160/120[17]
		04/04/00	12.89		342.70	[26]990/1,400[26]	4,800[27]	30	ND[12]	210	93	170/160[17]
		07/14/00	14.56		341.03	[26]2,800/1,200[26]	6,200[27]	41	16	170	32	170/120[17]
		10/27/00	15.96		339.63	[26]1,400/1,300[26]	3,830[16]	16.8	ND[12]	68.6	7.99	55.2/38[17]
		01/08/01	15.72		339.87	--/873[29]	2,410[16]	14.7	4.30	30.5	5.04	34.5/9.33[17]
		04/03/01	**14.46**		**341.13**	**[26]1,500/830[26]**	**3,330[16]**	**15.8**	**5.96**	**74.8**	**7.06**	**[12]ND/13.3[17]**
U-2												
356.59		07/08/95	12.68	10.0-30.0	343.91	[3]4,700/--	17,000	430	ND	2,200	590	--
		10/12/95	16.01		340.58	[5]3,600/--	24,000	310	60	1,900	190	--[7]
		01/11/96[1]	17.06		339.53	[5]8,600/--	10,000	210	55	1,400	240	--[8]
		04/11/96[2]	12.75		343.84	[5]1,900/--	7,700	130	27	1,100	110	340

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #7176
7850 Amador Valley Boulevard
Dublin, California

WELL ID/ TOC*		DATE	DTW (ft.)	S.I. (ft. bgs)	GWE (msl)	TPH-D♦ (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
U-2		07/10/96	14.42	10.0-30.0	342.17	[5]2,300/--	5,600	59	15	610	42	250
(cont)		10/30/96	16.82		339.77	[5]1,800/--	7,700	67	35	1,000	54	260
		01/27/97	12.91		343.68	[5]660/--	1,600	14	ND	130	7.0	100
		04/08/97	14.07		342.52	[5]2,000/--	4,300	35	ND	400	16	ND
		07/17/97	15.96		340.63	[6]1,300/--	6,200	17	22	410	ND	130
		10/17/97	17.03		339.56	[6]1,400/--	7,100	71	26	520	50	ND
		01/19/98	15.10		341.49	[10]2,100/1,500[10]	5,300	46	11	350	16	110
356.55	NP	04/23/98	11.74		344.81	--/1,200[11]	3,200	23	11	210	38	160
	NP	07/08/98	13.27		343.28	[14]1,100/--	1,600	34	8.5	100	7.4	190
		10/05/98	14.90		341.65	--/1,300[10]	2,900[18]	37	8.4	110	7.3	78
		01/04/99	15.94		340.61	[11]670/250[20]	2,200[21]	35	ND[12]	17	ND[12]	86
		04/05/99	14.19		342.36	[10]660/490[10]	4,900	21	77	130	310	100/6.9[17]
		07/01/99	14.98		341.57	[24]210/440[26]	1,500[25]	7.6	ND[12]	ND[12]	ND[12]	[12]ND/35[17]
		09/30/99	16.00		340.55	[10]483/340[10]	256[27]	1.85	ND[12]	2.42	ND[12]	26.3/29.8[17]
		01/03/00	17.20		339.35	[26]2,400/1,900[26]	3,400[27]	23	13	ND[12]	44	46/14[17]
		04/04/00	13.50		343.05	[26]1,000/1,000[26]	3,600[27]	34	17	56	ND[12]	59/25[17]
		07/14/00	15.23		341.32	[26]1,000/350[26]	3,100[27]	16	13	15	10	100/19[17]
		10/27/00	16.74		339.81	[26]2,000/1,900[26]	4,180[16]	30.4	10.2	14.6	ND[12]	55.5/15[17]
		01/08/01	16.68		339.87	--/624[29]	3,300[16]	33.5	7.32	3.49	ND[12]	66.7/7.49[17]
		04/03/01	**15.12**		**341.43**	**[26]1,500/830[26]**	**4,290[16]**	**32.4**	**9.91**	**20.1**	**ND[12]**	**66.6/18.1[17]**
U-3												
358.13		07/08/95	14.58	10.0-30.0	343.55	[3]710/--	1,100[4]	0.57	2.1	1.7	2.4	--
		10/12/95	17.60		340.53	[6]470/--	560	ND	0.87	0.7	1.1	--
		01/11/96[1]	18.65		339.48	[6]260/--	230	0.62	0.91	0.97	1.9	--
		04/11/96	13.20		344.93	ND/--	68[9]	ND	ND	ND	ND	ND
		07/10/96	15.98		342.15	ND/--	ND	ND	ND	ND	ND	ND
		10/30/96	18.24		339.89	ND/--	70	ND	ND	ND	ND	ND
		01/27/97	14.41		343.72	ND/--	ND	ND	ND	ND	ND	ND
		04/08/97	15.73		342.40	ND/--	ND	ND	ND	ND	ND	ND
		07/17/97	17.54		340.59	ND/--	ND	ND	ND	ND	ND	ND

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #7176
7850 Amador Valley Boulevard
Dublin, California

WELL ID/ TOC*		DATE	DTW (ft.)	S.I. (ft. bgs)	GWE (msl)	TPH-D♦ (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
U-3		10/17/97	18.64	10.0-30.0	339.49	[6]63/--	ND	ND	ND	ND	ND	ND
(cont)		01/19/98	16.67		341.46	[10]68/ND	ND	ND	ND	ND	ND	ND
358.09	NP	04/23/98	13.28		344.81	--/ND	ND	ND	ND	ND	ND	ND
	NP	07/08/98	14.90		343.19	[15]80/--	ND	ND	ND	ND	ND	ND
		10/05/98	16.50		341.59	--/ND	ND	ND	ND	ND	ND	ND
		01/04/99	17.70		340.39	ND/--	ND	ND	ND	ND	ND	ND
		04/05/99	15.67		342.42	ND/--	ND	ND	ND	ND	ND	ND/ND[17]
		07/01/99	16.79		341.30	ND/--	ND	ND	ND	ND	ND	ND/ND[17]
		09/30/99	17.60		340.49	ND/--	ND	ND	ND	ND	ND	ND/ND[17]
		01/03/00	18.86		339.23	ND/--	ND	ND	ND	ND	ND	ND/ND[17]
		04/04/00	15.10		342.99	ND/--	ND	ND	ND	ND	ND	ND/ND[17]
		07/14/00	16.85		341.24	ND/--	ND	ND	ND	ND	ND	ND/ND[17]
		10/27/00	18.35		339.74	ND/--	ND	ND	ND	ND	ND	ND/ND[17]
		01/08/01	18.31		339.78	--/ND	ND	ND	ND	ND	ND	ND/ND[17]
		04/03/01	**16.70**		**341.39**	**ND/--**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND/ND[17]**
MW-4												
356.41		04/23/98	12.11	10.0-25.0	344.30	--/1,400[11]	2,500	5.9	6.4	16	31	ND[12]
		07/08/98	13.70		342.71	[11]1,400/--	1,000[13]	ND[12]	ND[12]	ND[12]	ND[12]	ND[12]
		10/05/98	15.18		341.23	--/230[10]	890[16]	ND[12]	ND[12]	ND[12]	14	ND[12]
		01/04/99	16.39		340.02	[10]71/71[10]	230[22]	0.56	1.3	1.4	1.8	10
		04/05/99	14.61		341.80	[10]340/210[10]	620[23]	ND[12]	1.8	2.1	ND[12]	6.0/9.3[17]
		07/01/99	15.43		340.98	[24]260/310[26]	700[19]	2.1	ND[12]	1.9	2.4	[12]ND/21[17]
		09/30/99	16.27		340.14	[10]420/220[10]	582[27]	2.60	1.30	1.98	ND[12]	23.1/22.5[17]
		01/03/00	17.50		338.91	[26]250/260[26]	800[27]	4.2	4.6	3.3	11	31/17[17]
		04/04/00	13.91		342.50	[10,15]460/340[26]	710[27]	2.0	1.3	4.4	2.0	21/22[17]
		07/14/00	15.58		340.83	[26]220/76[26]	490[28]	0.89	1.3	0.85	1.8	21/12[17]
		10/27/00	16.96		339.45	[26]160/120[26]	598[21]	ND	1.56	4.65	ND	15.4/14[17]
		01/08/01	16.64		339.77	--/202[29]	522[27]	4.09	1.69	2.53	1.26	17.2/14.3[17]
		04/03/01	**15.46**		**340.95**	**[26]180/ND**	**575[21]**	**ND[12]**	**ND[12]**	**ND[12]**	**ND[12]**	**14.0/11.6[17]**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #7176

7850 Amador Valley Boulevard

Dublin, California

WELL ID/ TOC*	DATE	DTW (ft.)	S.I. (ft. bgs)	GWE (msl)	TPH-D♦ (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-5											
355.03	04/23/98	11.15	10.0-25.0	343.88	--/100[11]	120	0.53	0.90	1.0	3.8	13
	07/08/98	12.63		342.40	[10]170/--	ND	ND	ND	ND	ND	12
	10/05/98	14.00		341.03	--/100[10]	ND	ND	ND	ND	ND	12
	01/04/99	15.21		339.82	ND/--	ND	ND	ND	ND	ND	ND
	04/05/99	13.76		341.27	ND/--	ND	ND	ND	ND	ND	ND/ND[17]
	07/01/99	14.48		340.55	ND/--	ND	ND	ND	ND	ND	[12]ND/2.3[17]
	09/30/99	15.15		339.88	[10]60.4/ND	50.8[27]	ND	ND	ND	ND	ND/ND[17]
	01/03/00	16.34		338.69	ND/--	ND	ND	ND	ND	ND	ND/ND[17]
	04/04/00	12.90		342.13	[15]69/ND	ND	ND	ND	ND	ND	ND/ND[17]
	07/14/00	14.48		340.55	ND/--	ND	ND	ND	ND	ND	ND/ND[17]
	10/27/00	15.75		339.28	ND/--	ND	ND	ND	ND	ND	ND/ND[17]
	01/08/01	15.25		339.78	--/ND	ND	ND	ND	ND	ND	ND/ND[17]
	04/03/01	**14.41**		**340.62**	**ND/--**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND/ND[17]**
Trip Blank											
TB-LB	01/19/98	--	--	--	--	ND	ND	ND	ND	ND	ND
	04/23/98	--		--	--	ND	ND	ND	ND	ND	ND
	07/08/98	--		--	--	ND	ND	ND	ND	ND	ND
	10/05/98	--		--	--	ND	ND	0.70	ND	0.71	ND
	01/04/99	--		--	--	ND	ND	0.74	ND	0.92	ND
	04/05/99	--		--	--	ND	ND	ND	ND	ND	ND
	07/01/99	--		--	--	ND	ND	ND	ND	ND	ND
	09/30/99	--		--	--	ND	ND	ND	ND	ND	ND
	01/03/00	--		--	--	ND	ND	ND	ND	ND	ND
	04/04/00	--		--	--	ND	ND	ND	ND	ND	ND
	07/14/00	--		--	--	ND	ND	ND	ND	ND	ND
	10/27/00	--		--	--	ND	ND	ND	ND	ND	ND
	01/08/01	--		--	--	ND	ND	ND	ND	ND	ND
	04/03/01	**--**		**--**	**--**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #7176
7850 Amador Valley Boulevard
Dublin, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to January 19, 1998, were compiled from reports prepared by MPDS Services, Inc.

TOC = Top of Casing
DTW = Depth to Water
(ft.) = Feet
S.I. = Screen Interval
(ft. bgs) = Feet Below Ground Surface
GWE = Groundwater Elevation
(msl) = Mean sea level
TPH-D = Total Petroleum Hydrocarbons as Diesel
TPH-G = Total Petroleum Hydrocarbons as Gasoline

B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
MTBE = Methyl tertiary butyl ether

(ppb) = Parts per billion
ND = Not Detected
-- = Not Measured/Not Analyzed
NP = No purge

* TOC elevations were surveyed relative to msl, per the Benchmark AM-STW1977 located at the easterly return at the most easterly corner of intersection at Amador Valley Boulevard and Starward Street, (Elevation = 344.17 feet, msl).

♦ Analytical results reported as follows: TPH-D/TPH-D with silica gel cleanup.

1 Polynuclear Aromatic Hydrocarbons (PNAs) compound naphthalene was detected in well U-1 at a concentration of 320 ppb and at a concentration of 310 ppb in well U-2. All other PNAs compounds were ND in both wells.

2 PNAs compounds were ND.

3 Laboratory report indicates unidentified hydrocarbons C9-C26.

4 Laboratory report indicates gasoline and unidentified hydrocarbons >C12.

5 Laboratory report indicates the hydrocarbons detected appeared to be a diesel and non-diesel mixture.

6 Laboratory report indicates the hydrocarbons detected did not appear to be diesel.

7 Laboratory has potentially identified the presence of MTBE at reportable levels in the groundwater sample collected from this well.

8 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.

9 Laboratory report indicates the hydrocarbons detected did not appear to be gasoline.

10 Laboratory report indicates unidentified hydrocarbons C9-C24.

11 Laboratory report indicates diesel and unidentified hydrocarbons <C14.

12 Detection limit raised. Refer to analytical reports.

13 Laboratory report indicates unidentified hydrocarbons >C8.

14 Laboratory report indicates unidentified hydrocarbons <C14.

15 Laboratory report indicates discrete peaks.

16 Laboratory report indicates weathered gasoline C6-C12.

17 MTBE by EPA Method 8260.

18 Laboratory report indicates unidentified hydrocarbons <C8.

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #7176
7850 Amador Valley Boulevard
Dublin, California

EXPLANATIONS: (cont)

19 Laboratory report indicates gasoline and unidentified hydrocarbons C6-C12.
20 Laboratory report indicates diesel and unidentified hydrocarbons <C16.
21 Laboratory report indicates unidentified hydrocarbons C6-C12.
22 Laboratory report indicates gasoline and unidentified hydrocarbons >C10.
23 Laboratory report indicates gasoline and unidentified hydrocarbons <C7.
24 Laboratory report indicates unidentified hydrocarbons C10-C24.
25 Laboratory report indicates gasoline and unidentified hydrocarbons <C6.
26 Laboratory report indicates unidentified hydrocarbons <C16.
27 Laboratory report indicates gasoline C6-C12.
28 Laboratory report indicates gasoline C6-C12 + unidentified hydrocarbons C6-C12.
29 Laboratory report indicates hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.

Table 2

Groundwater Analytical Results - Oxygenate Compounds

Tosco (Unocal) Service Station #7176

7850 Amador Valley Boulevard

Dublin, California

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	EDB (ppb)	1,2-DCA (ppb)
U-1	04/05/99	ND[1]	ND[1]	55	ND[1]	ND[1]	ND[1]	ND[1]	ND[1]
	07/01/99	ND	ND	110	ND	ND	ND	ND	ND
	09/30/99	ND[1]	ND[1]	195	ND[1]	ND[1]	ND[1]	ND[1]	ND[1]
	01/03/00	ND	ND	120	ND	ND	ND	ND	ND
	04/04/00	ND[1]	ND[1]	160	ND[1]	ND[1]	ND[1]	ND[1]	ND[1]
	07/14/00	ND[1]	ND[1]	120	ND[1]	ND[1]	ND[1]	ND[1]	ND[1]
	10/27/00	ND	ND	38	ND	ND	ND	ND	ND
	01/08/01	ND[1]	ND[1]	9.33	ND[1]	ND[1]	ND[1]	ND[1]	ND[1]
	04/03/01	**ND[1]**	**ND[1]**	**13.3**	**ND[1]**	**ND[1]**	**ND[1]**	**ND[1]**	**ND[1]**
U-2	04/05/99	ND[1]	ND[1]	6.9	ND[1]	ND[1]	ND[1]	ND[1]	ND[1]
	07/01/99	ND	ND	35	ND	ND	ND	ND	ND
	09/30/99	ND	ND	29.8	ND	ND	ND	ND	ND
	01/03/00	ND	ND	14	ND	ND	ND	ND	ND
	04/04/00	ND[1]	ND[1]	25	ND[1]	ND[1]	ND[1]	ND[1]	ND[1]
	07/14/00	ND	ND	19	ND	ND	ND	ND	ND
	10/27/00	ND	ND	15	ND	ND	ND	ND	ND
	01/08/01	ND[1]	ND[1]	7.49	ND[1]	ND[1]	ND[1]	ND[1]	ND[1]
	04/03/01	**ND**	**ND**	**18.1**	**ND**	**ND**	**ND**	**ND**	**ND**
U-3	04/05/99	ND	ND	ND	ND	ND	ND	ND	ND
	07/01/99	ND	ND	ND	ND	ND	ND	ND	ND
	09/30/99	ND	ND	ND	ND	ND	ND	ND	ND
	01/03/00	ND	ND	ND	ND	ND	ND	ND	ND
	04/04/00	ND	ND	ND	ND	ND	ND	ND	ND
	07/14/00	ND	ND	ND	ND	ND	ND	ND	ND
	10/27/00	ND	ND	ND	ND	ND	ND	ND	ND
	01/08/01	ND	ND	ND	ND	ND	ND	ND	ND
	04/03/01	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Table 2

Groundwater Analytical Results - Oxygenate Compounds

Tosco (Unocal) Service Station #7176

7850 Amador Valley Boulevard

Dublin, California

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	EDB (ppb)	1,2-DCA (ppb)
MW-4	04/05/99	ND	ND	9.3	ND	ND	ND	ND	ND
	07/01/99	ND	ND	21	ND	ND	ND	ND	ND
	09/30/99	ND	ND	22.5	ND	ND	ND	ND	ND
	01/03/00	ND	ND	17	ND	ND	ND	ND	ND
	04/04/00	ND	ND	22	ND	ND	ND	ND	ND
	07/14/00	ND	ND	12	ND	ND	ND	ND	ND
	10/27/00	ND	ND	14	ND	ND	ND	ND	ND
	01/08/01	ND	ND	14.3	ND	ND	ND	ND	ND
	04/03/01	**ND**	**ND**	**11.6**	**ND**	**ND**	**ND**	**ND**	**ND**
MW-5	04/05/99	ND	ND	ND	ND	ND	ND	ND	ND
	07/01/99	ND	ND	2.3	ND	ND	ND	ND	ND
	09/30/99	ND	ND	ND	ND	ND	ND	ND	ND
	01/03/00	ND	ND	ND	ND	ND	ND	ND	ND
	04/04/00	ND	ND	ND	ND	ND	ND	ND	ND
	07/14/00	ND	ND	ND	ND	ND	ND	ND	ND
	10/27/00	ND	ND	ND	ND	ND	ND	ND	ND
	01/08/01	ND	ND	ND	ND	ND	ND	ND	ND
	04/03/01	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Table 2

Groundwater Analytical Results - Oxygenate Compounds

Tosco (Unocal) Service Station #7176

7850 Amador Valley Boulevard

Dublin, 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

EDB = 1,2-Dibromomethane

1,2-DCA = 1,2-Dichloroethane

(ppb) = Parts per billion

ND = Not Detected

[1] Detection limit raised. Refer to analytical reports.

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

Table 3

Dissolved Oxygen Concentrations

Tosco (Unocal) Service Station #7176

7850 Amador Valley Boulevard

Dublin, California

WELL ID	DATE	Before Purging (mg/L)	After Purging (mg/L)
U-1	01/11/96	--	3.41
	04/11/96	3.77	3.78
	07/10/96[1]	1.22	--
	10/30/96[1]	1.41	--
	01/27/97[1]	1.34	--
	04/08/97[1]	2.09	--
	07/17/97[1]	2.00	--
	10/17/97[1]	1.86	--
	01/19/98[1]	2.91	--
	04/23/98[1]	0.59	--
	07/08/98[1]	1.10	--
U-2	01/11/96	--	3.99
	04/11/96	3.32	3.41
	07/10/96[1]	1.01	--
	10/30/96[1]	1.42	--
	01/27/97[1]	1.29	--
	04/08/97[1]	1.69	--
	07/17/97[1]	2.08	--
	10/17/97[1]	1.80	--
	01/19/98[1]	2.95	--
	04/23/98[1]	0.55	--
	07/08/98[1]	1.36	--
U-3	01/11/96	--	5.05
	04/11/96	5.16	4.96
	07/10/96[1]	3.44	--
	10/30/96[1]	2.18	--
	01/27/97[1]	2.61	--
	04/08/97[1]	3.73	--
	07/17/97[1]	2.65	--
	10/17/97[1]	2.44	--
	01/19/98[1]	6.51	--
	04/23/98[1]	4.72	--
	07/08/98[1]	4.35	--
CC-1	10/02/95	2.83	--

EXPLANATIONS:

Dissolved oxygen concentrations prior to January 19, 1998, were compiled from reports prepared by MPDS Services, Inc.

(mg/L) = Milligrams per liter -- = Not Measured

CC-1 = Conductor casing in the underground storage tank backfill

[1] The wells were not purged on this date.

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.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/ Facility # Tosco # 7176 Job#: 180022

Address: 7850 Amador Valley Rd. Date: 4/3/01

City: Dublin, Ca. Sampler: Vartkes

Well ID U-1 Well Condition: OK

Well Diameter 2 in. Hydrocarbon Thickness: 0.00 in. Amount Bailed (product/water): 0 (gal.)

Total Depth 27.80 ft.

Depth to Water 14.46 ft.

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66	6" = 1.50	12" = 5.80

13.34 x VF 0.17 = 2.26 X 3 (case volume) = Estimated Purge Volume: 7.0 (gal.)

Purge Equipment: Disposable Bailer; Bailer; Stack; (Suction); Grundfos; Other:

Sampling Equipment: (Disposable Bailer); Bailer; Pressure Bailer; Grab Sample; Other:

Starting Time: 5:17 Weather Conditions: clear

Sampling Time: 5:35 Water Color: graying Odor: y

Purging Flow Rate: 1 gpm. Sediment Description: silt

Did well de-water? no If yes; Time: Volume: (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
5:19	2	7.44	797	70.0			
5:22	4.5	7.33	808	69.3			
5:24	7	7.30	817	69.0			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
U-1	5 x VOA VIAL	Y	HCL	SEQUOIA	TPHG / BTEX / MTBE + (6) OXYS + 1,2 DCA + EDB (8260).
"	1 Amber	"	NONE	"	TPH-D

COMMENTS:

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # Tosco # 7176 Job#: 180022

Address: 7850 Amador Valley Rd. Date: 4/3/01

City: Dublin, Ca. Sampler: Vartkes

Well ID U-2 Well Condition: OK

Well Diameter 2 in. Hydrocarbon Thickness: 0.00 in. Amount Bailed (product/water): 4 (gal.)

Total Depth 24.46 ft.

Depth to Water 15.12 ft.

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66	6" = 1.50	12" = 5.80

9.34 x VF 0.17 = 1.58 X 3 (case volume) = Estimated Purge Volume: 5.0 (gal.)

Purge Equipment: Disposable Bailer, Bailer, Stack, (Suction), Grundfos, Other:

Sampling Equipment: (Disposable Bailer), Bailer, Pressure Bailer, Grab Sample, Other:

Starting Time: 4:45 Weather Conditions: clear

Sampling Time: 5:00 Water Color: Grayish Odor: Y

Purging Flow Rate: 1 gpm. Sediment Description: SLT

Did well de-water? NO If yes; Time: Volume: (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
4:47	1.5	7.50	985	69.7			
4:48	3	7.40	1005	68.8			
4:50	5	7.34	1016	69.9			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
U-2	5 x VOA VIAL	Y	HCL	SEQUOIA	TPHG/BTEX/MTBE + (6) OXYS + 1,2 DCA + EDB (8260).
"	1 Amber	"	NONE	"	TPH-D

COMMENTS:

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/ Facility # Tosco # 7176

Job#: 180022

Address: 7850 Amador Valley Rd.

Date: 4/3/01

City: Dublin, Ca.

Sampler: Vartkes

Well ID: U-3

Well Condition: OK (1 Lock)

Well Diameter: 2 in.

Hydrocarbon Thickness: 0.00 in.

Amount Bailed (product/water): Ø (gal.)

Total Depth: 28.41 ft.

Depth to Water: 16.70 ft.

Volume Factor (VF): 2" = 0.17; 3" = 0.38; 4" = 0.66; 6" = 1.50; 12" = 5.80

11.71 x VF 0.17 = 1.99 X 3 (case volume) = Estimated Purge Volume: 6.0 (gal.)

Purge Equipment: Disposable Bailer / Bailer / Stack / **Suction** (circled) / Grundfos / Other: ______

Sampling Equipment: **Disposable Bailer** (circled) / Bailer / Pressure Bailer / Grab Sample / Other: ______

Starting Time: 2:45

Weather Conditions: clear

Sampling Time: 3:00

Water Color: Grn.

Odor: no

Purging Flow Rate: 1 gpm.

Sediment Description: Silt

Did well de-water? no

If yes; Time: ______ Volume: ______ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
2:47	2	8.03	1041	69.9			
2:49	4	7.94	1044	69.6			
2:51	6	7.80	1050	69.6			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
U-3	5 x VOA VIAL	Y	HCL	SEQUOIA	TPHG/BTEX/MTBE + (6)OXYS+1,2DCA+EDB (8260).
"	1 Amber	"	NONE	"	TPH-D

COMMENTS: ______

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # Tosco # 7176 Job#: 180022

Address: 7850 Amador Valley Rd Date: 4/3/01

City: Dublin, Ca. Sampler: Vertex

Well ID MW-4 Well Condition: OK

Well Diameter 2 in. Hydrocarbon Thickness: 0.00 in. Amount Bailed (product/water): 0 (gal.)

Total Depth 25.40 ft.

Depth to Water 15.46 ft.

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66	6" = 1.50	12" = 5.80

9.94 x VF 0.17 = 1.68 X 3 (case volume) = Estimated Purge Volume: 5.5 (gal.)

Purge Equipment: Disposable Bailer; Bailer; Stack; (Suction); Grundfos; Other:

Sampling Equipment: (Disposable Bailer); Bailer; Pressure Bailer; Grab Sample; Other:

Starting Time: 4:05 Weather Conditions: clear

Sampling Time: 4:23 Water Color: brn. Odor: Y

Purging Flow Rate: 1 gpm. Sediment Description: Silt

Did well de-water? no If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
4:07	2	7.47	983	69.8			
4:09	4	7.41	1003	69.2			
4:11	5.5	7.39	1011	69.1			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-4	5 x VOA VIAL	Y	HCl	SEQUOIA	(TPHG/BTEX/MTBE + (6) oxys+1,2DCA+EDB (8260)
"	1 Amber	~	NONE	~	TPH-D

COMMENTS:

8/97-fields.fm

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # Tosco # 7176 Job#: 180022

Address: 7850 Amador Valley Rd Date: 4/3/01

City: Dublin, Ca. Sampler: Matthews

Well ID MW-5 Well Condition: OK

Well Diameter 2 in. Hydrocarbon Thickness: 0.00 in. Amount Bailed (product/water): 0 (gal.)

Total Depth 24.88 ft.

Depth to Water 14.41 ft.

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66	6" = 1.50	12" = 5.80

10.47 x VF 0.17 = 1.77 X 3 (case volume) = Estimated Purge Volume: 5.5 (gal.)

Purge Equipment: Disposable Bailer, Bailer, Stack, (Suction), Grundfos, Other:

Sampling Equipment: (Disposable Bailer), Bailer, Pressure Bailer, Grab Sample, Other:

Starting Time: 3:28 Weather Conditions: clear

Sampling Time: 3:45 Water Color: Grey Odor: no

Purging Flow Rate: 1 gpm. Sediment Description: Silt

Did well de-water? no If yes; Time: Volume: (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
3:30	2	7.65	951	70.6			
3:32	4	7.57	963	69.5			
3:34	5.5	7.53	970	69.0			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-5	5 x VOA VIAL	Y	HCL	SEQUOIA	(TPH-G/BTEX/MTBE + (6) OXYS+1,2DCA+EDB (8260)
					TPH-D
"	1 Amber	~	NONE	~	

COMMENTS:

TOSCO

Tosco Marketing Company
2000 Crow Canyon Pl., Ste. 400
San Ramon, California 94583

Facility Number: UNOCAL SS# 7176
Facility Address: 7850 Amador Valley Blvd. Dublin, CA
Consultant Project Number: 180022.85
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 (Fax Number): 510-551-7888

Contact (Name): MR. DAVE DEWITT
(Phone): (925) 277-2384
Laboratory Name: Sequoia Analytical
Laboratory Release Number:
Samples Collected by (Name): Vaetkes Tashjian
Collection Date: 4/3/01
Signature:

104026

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed: TPH Gas + BTEX w/MTBE (8020)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (TCLP or AA)	(6) OXYS (8260) 1,2 DCA+EDB					DO NOT BILL TB-LB ANALYSIS Remarks
TB-LB	01	1	W	G		HCl	Y	X													Run Silica Gel
U-1	02	6	"	"	5:33 PM	"	"	X	X							X					cleanup on any
U-2	03	6	"	"	5:00 PM	"	"	X	X							X					Diesel hits.
U-3	04	6	"	"	3:00 PM	"	"	X	X							X					
MW-4	05	6	"	"	4:23 PM	"	"	X	X							X					
MW-5	06	6	"	"	3:45 PM	"	"	X	X							X					

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	G-R Inc.	4/3/01 7:25 PM		SAC	19:25 4/3/01
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time

Turn Around Time (Circle Choice)

24 Hrs.
48 Hrs.
5 Days
10 Days
As Contracted

Sequoia Analytical

1551 Industrial Road
San Carlos, CA 94070-4111
(650) 232-9600
FAX (650) 232-9612
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April 18 , 2001

Deanna Harding
Gettler-Ryan/Geostrategies(1)
6747 Sierra Court, Suite J
Dublin, CA 94568
RE: Tosco(1) / L104026

Enclosed are the results of analyses for samples received by the laboratory on 04/03/01. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Latonya K. Pelt

Latonya Pelt
Project Manager

CA ELAP Certificate Number 2360

Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: Unocal SS#7176	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	04/18/01 15:21

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-LB	L104026-01	Water	04/03/01 00:00	04/03/01 19:25
U-1	L104026-02	Water	04/03/01 17:35	04/03/01 19:25
U-2	L104026-03	Water	04/03/01 17:00	04/03/01 19:25
U-3	L104026-04	Water	04/03/01 15:00	04/03/01 19:25
MW-4	L104026-05	Water	04/03/01 16:23	04/03/01 19:25
MW-5	L104026-06	Water	04/03/01 15:45	04/03/01 19:25

Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: Unocal SS#7176	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	04/18/01 15:21

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TB-LB (L104026-01) Water Sampled: 04/03/01 00:00 Received: 04/03/01 19:25									
Purgeable Hydrocarbons as Gasoline	ND	50.0	ug/l	1	1040049	04/13/01	04/13/01	DHS LUFT	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	0.500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*99.4 %*		*70-130*		"	"	"	
U-1 (L104026-02) Water Sampled: 04/03/01 17:35 Received: 04/03/01 19:25									
Purgeable Hydrocarbons as Gasoline	**3330**	500	ug/l	10	1040049	04/13/01	04/13/01	DHS LUFT	P-02
Benzene	**15.8**	5.00	"	"	"	"	"	"	
Toluene	**5.96**	5.00	"	"	"	"	"	"	
Ethylbenzene	**74.8**	5.00	"	"	"	"	"	"	
Xylenes (total)	**7.06**	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	50.0	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*90.2 %*		*70-130*		"	"	"	
U-2 (L104026-03) Water Sampled: 04/03/01 17:00 Received: 04/03/01 19:25									
Purgeable Hydrocarbons as Gasoline	**4290**	500	ug/l	10	1040049	04/13/01	04/13/01	DHS LUFT	P-02
Benzene	**32.4**	5.00	"	"	"	"	"	"	
Toluene	**9.91**	5.00	"	"	"	"	"	"	
Ethylbenzene	**20.1**	5.00	"	"	"	"	"	"	
Xylenes (total)	ND	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	**66.6**	50.0	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*108 %*		*70-130*		"	"	"	

Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: Unocal SS#7176	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	04/18/01 15:21

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
U-3 (L104026-04) Water Sampled: 04/03/01 15:00 Received: 04/03/01 19:25									
Purgeable Hydrocarbons as Gasoline	ND	50.0	ug/l	1	1040048	04/13/01	04/13/01	DHS LUFT	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	0.500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*74.3 %*	*70-130*		"	"	"	"	
MW-4 (L104026-05) Water Sampled: 04/03/01 16:23 Received: 04/03/01 19:25									
Purgeable Hydrocarbons as Gasoline	**575**	100	ug/l	2	1040048	04/13/01	04/13/01	DHS LUFT	P-03
Benzene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	**14.0**	10.0	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*84.7 %*	*70-130*		"	"	"	"	
MW-5 (L104026-06) Water Sampled: 04/03/01 15:45 Received: 04/03/01 19:25									
Purgeable Hydrocarbons as Gasoline	ND	50.0	ug/l	1	1040049	04/13/01	04/13/01	DHS LUFT	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	0.500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*88.9 %*	*70-130*		"	"	"	"	

Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: Unocal SS#7176	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	04/18/01 15:21

Volatile Organic 8 Oxyganated Compounds by EPA Method 8260B

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
U-1 (L104026-02) Water Sampled: 04/03/01 17:35 Received: 04/03/01 19:25									
Ethanol	ND	2000	ug/l	2	1040012	04/04/01	04/04/01	EPA 8260B	
1,2-Dibromoethane	ND	4.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.00	"	"	"	"	"	"	
Di-isopropyl ether	ND	4.00	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	4.00	"	"	"	"	"	"	
Methyl tert-butyl ether	**13.3**	4.00	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	4.00	"	"	"	"	"	"	
Tert-butyl alcohol	ND	200	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*91.0 %*	*76-114*		"	"	"	"	
Surrogate: Toluene-d8		*103 %*	*88-110*		"	"	"	"	
U-2 (L104026-03) Water Sampled: 04/03/01 17:00 Received: 04/03/01 19:25									
Ethanol	ND	1000	ug/l	1	1040012	04/04/01	04/05/01	EPA 8260B	
1,2-Dibromoethane	ND	2.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.00	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.00	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	
Methyl tert-butyl ether	**18.1**	2.00	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.00	"	"	"	"	"	"	
Tert-butyl alcohol	ND	100	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*95.4 %*	*76-114*		"	"	"	"	
Surrogate: Toluene-d8		*100 %*	*88-110*		"	"	"	"	
U-3 (L104026-04) Water Sampled: 04/03/01 15:00 Received: 04/03/01 19:25									
Ethanol	ND	1000	ug/l	1	1040012	04/04/01	04/05/01	EPA 8260B	
1,2-Dibromoethane	ND	2.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.00	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.00	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.00	"	"	"	"	"	"	
Tert-butyl alcohol	ND	100	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*93.8 %*	*76-114*		"	"	"	"	
Surrogate: Toluene-d8		*97.2 %*	*88-110*		"	"	"	"	

Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: Unocal SS#7176	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	04/18/01 15:21

Volatile Organic 8 Oxyganated Compounds by EPA Method 8260B

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4 (L104026-05) Water Sampled: 04/03/01 16:23 Received: 04/03/01 19:25									
Ethanol	ND	1000	ug/l	1	1040012	04/04/01	04/05/01	EPA 8260B	
1,2-Dibromoethane	ND	2.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.00	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.00	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	
Methyl tert-butyl ether	**11.6**	2.00	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.00	"	"	"	"	"	"	
Tert-butyl alcohol	ND	100	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*92.8 %*	*76-114*		"	"	"	"	
Surrogate: Toluene-d8		*101 %*	*88-110*		"	"	"	"	
MW-5 (L104026-06) Water Sampled: 04/03/01 15:45 Received: 04/03/01 19:25									
Ethanol	ND	1000	ug/l	1	1040012	04/04/01	04/05/01	EPA 8260B	
1,2-Dibromoethane	ND	2.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.00	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.00	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.00	"	"	"	"	"	"	
Tert-butyl alcohol	ND	100	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*99.6 %*	*76-114*		"	"	"	"	
Surrogate: Toluene-d8		*99.8 %*	*88-110*		"	"	"	"	

Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: Unocal SS#7176	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	04/18/01 15:21

Diesel Hydrocarbons (C9-C24) by DHS LUFT

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
U-1 (L104026-02) Water Sampled: 04/03/01 17:35 Received: 04/03/01 19:25									
Diesel Range Hydrocarbons	**1500**	50	ug/l	1	1D12014	04/12/01	04/12/01	EPA 8015M	D-11
Surrogate: n-Pentacosane		*74.2 %*	*50-150*		"	"	"	"	
U-2 (L104026-03) Water Sampled: 04/03/01 17:00 Received: 04/03/01 19:25									
Diesel Range Hydrocarbons	**1500**	50	ug/l	1	1D12014	04/12/01	04/12/01	EPA 8015M	D-11
Surrogate: n-Pentacosane		*72.1 %*	*50-150*		"	"	"	"	
U-3 (L104026-04) Water Sampled: 04/03/01 15:00 Received: 04/03/01 19:25									
Diesel Range Hydrocarbons	ND	50	ug/l	1	1D12014	04/12/01	04/12/01	EPA 8015M	
Surrogate: n-Pentacosane		*62.2 %*	*50-150*		"	"	"	"	
MW-4 (L104026-05) Water Sampled: 04/03/01 16:23 Received: 04/03/01 19:25									
Diesel Range Hydrocarbons	**180**	50	ug/l	1	1D12014	04/12/01	04/13/01	EPA 8015M	D-11
Surrogate: n-Pentacosane		*51.1 %*	*50-150*		"	"	"	"	
MW-5 (L104026-06) Water Sampled: 04/03/01 15:45 Received: 04/03/01 19:25									
Diesel Range Hydrocarbons	ND	50	ug/l	1	1D12014	04/12/01	04/13/01	EPA 8015M	
Surrogate: n-Pentacosane		*63.1 %*	*50-150*		"	"	"	"	

Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: Unocal SS#7176	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	04/18/01 15:21

Diesel Hydrocarbons (C9-C24) with Silica Gel Cleanup by DHS LUFT

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
U-1 (L104026-02) Water Sampled: 04/03/01 17:35 Received: 04/03/01 19:25									
Diesel Range Hydrocarbons	**830**	50	ug/l	1	1D12014	04/12/01	04/17/01	EPA 8015M	D-11
Surrogate: n-Pentacosane		*54.1 %*	*50-150*		"	"	"	"	
U-2 (L104026-03) Water Sampled: 04/03/01 17:00 Received: 04/03/01 19:25									
Diesel Range Hydrocarbons	**830**	50	ug/l	1	1D12014	04/12/01	04/17/01	EPA 8015M	D-11
Surrogate: n-Pentacosane		*51.1 %*	*50-150*		"	"	"	"	
MW-4 (L104026-05) Water Sampled: 04/03/01 16:23 Received: 04/03/01 19:25									
Diesel Range Hydrocarbons	ND	50	ug/l	1	1D12014	04/12/01	04/17/01	EPA 8015M	
Surrogate: n-Pentacosane		*20.0 %*	*50-150*		"	"	"	"	*S-03*

Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: Unocal SS#7176	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	04/18/01 15:21

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1040048 - EPA 5030B (P/T)										
Blank (1040048-BLK1)				Prepared & Analyzed: 04/13/01						
Purgeable Hydrocarbons as Gasoline	ND	50.0	ug/l							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	0.500	"							
Methyl tert-butyl ether	ND	5.00	"							
Surrogate: a,a,a-Trifluorotoluene	*7.96*		"	*10.0*		*79.6*	*70-130*			
LCS (1040048-BS1)				Prepared & Analyzed: 04/13/01						
Benzene	8.49	0.500	ug/l	10.0		84.9	70-130			
Toluene	8.65	0.500	"	10.0		86.5	70-130			
Ethylbenzene	8.49	0.500	"	10.0		84.9	70-130			
Xylenes (total)	25.8	0.500	"	30.0		86.0	70-130			
Surrogate: a,a,a-Trifluorotoluene	*8.26*		"	*10.0*		*82.6*	*70-130*			
LCS (1040048-BS2)				Prepared & Analyzed: 04/13/01						
Purgeable Hydrocarbons as Gasoline	263	50.0	ug/l	250		105	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.63*		"	*10.0*		*96.3*	*70-130*			
Matrix Spike (1040048-MS1)		**Source: L104025-05**		Prepared & Analyzed: 04/13/01						
Purgeable Hydrocarbons as Gasoline	229	50.0	ug/l	250	ND	91.6	60-140			
Surrogate: a,a,a-Trifluorotoluene	*7.92*		"	*10.0*		*79.2*	*70-130*			
Matrix Spike Dup (1040048-MSD1)		**Source: L104025-05**		Prepared & Analyzed: 04/13/01						
Purgeable Hydrocarbons as Gasoline	267	50.0	ug/l	250	ND	107	60-140	15.3	25	
Surrogate: a,a,a-Trifluorotoluene	*9.18*		"	*10.0*		*91.8*	*70-130*			

Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: Unocal SS#7176	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	04/18/01 15:21

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

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1040049 - EPA 5030B (P/T)										
Blank (1040049-BLK1)				Prepared & Analyzed: 04/13/01						
Purgeable Hydrocarbons as Gasoline	ND	50.0	ug/l							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	0.500	"							
Methyl tert-butyl ether	ND	5.00	"							
Surrogate: a,a,a-Trifluorotoluene	*10.3*		"	*10.0*		*103*	*70-130*			
LCS (1040049-BS1)				Prepared & Analyzed: 04/13/01						
Benzene	10.0	0.500	ug/l	10.0		100	70-130			
Toluene	9.91	0.500	"	10.0		99.1	70-130			
Ethylbenzene	10.1	0.500	"	10.0		101	70-130			
Xylenes (total)	30.4	0.500	"	30.0		101	70-130			
Surrogate: a,a,a-Trifluorotoluene	*10.4*		"	*10.0*		*104*	*70-130*			
LCS (1040049-BS2)				Prepared & Analyzed: 04/13/01						
Purgeable Hydrocarbons as Gasoline	226	50.0	ug/l	250		90.4	70-130			
Surrogate: a,a,a-Trifluorotoluene	*11.4*		"	*10.0*		*114*	*70-130*			
Matrix Spike (1040049-MS1)		**Source: L104038-04**		Prepared & Analyzed: 04/13/01						
Purgeable Hydrocarbons as Gasoline	255	50.0	ug/l	250	ND	102	60-140			
Surrogate: a,a,a-Trifluorotoluene	*11.4*		"	*10.0*		*114*	*70-130*			
Matrix Spike Dup (1040049-MSD1)		**Source: L104038-04**		Prepared & Analyzed: 04/13/01						
Purgeable Hydrocarbons as Gasoline	240	50.0	ug/l	250	ND	96.0	60-140	6.06	25	
Surrogate: a,a,a-Trifluorotoluene	*11.3*		"	*10.0*		*113*	*70-130*			

Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568	Project: Tosco(1) Project Number: Unocal SS#7176 Project Manager: Deanna Harding	**Reported:** 04/18/01 15:21

Volatile Organic 8 Oxyganated 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 1040012 - EPA 5030B [P/T]										
Blank (1040012-BLK1)				Prepared & Analyzed: 04/03/01						
Ethanol	ND	1000	ug/l							
1,2-Dibromoethane	ND	2.00	"							
1,2-Dichloroethane	ND	2.00	"							
Di-isopropyl ether	ND	2.00	"							
Ethyl tert-butyl ether	ND	2.00	"							
Methyl tert-butyl ether	ND	2.00	"							
Tert-amyl methyl ether	ND	2.00	"							
Tert-butyl alcohol	ND	100	"							
Surrogate: 1,2-Dichloroethane-d4	*48.3*		"	*50.0*		*96.6*	*76-114*			
Surrogate: Toluene-d8	*46.1*		"	*50.0*		*92.2*	*88-110*			
Blank (1040012-BLK2)				Prepared & Analyzed: 04/04/01						
Ethanol	ND	1000	ug/l							
1,2-Dibromoethane	ND	2.00	"							
1,2-Dichloroethane	ND	2.00	"							
Di-isopropyl ether	ND	2.00	"							
Ethyl tert-butyl ether	ND	2.00	"							
Methyl tert-butyl ether	ND	2.00	"							
Tert-amyl methyl ether	ND	2.00	"							
Tert-butyl alcohol	ND	100	"							
Surrogate: 1,2-Dichloroethane-d4	*46.4*		"	*50.0*		*92.8*	*76-114*			
Surrogate: Toluene-d8	*52.1*		"	*50.0*		*104*	*88-110*			
LCS (1040012-BS1)				Prepared & Analyzed: 04/03/01						
Methyl tert-butyl ether	48.8	2.00	ug/l	50.0		97.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	*49.8*		"	*50.0*		*99.6*	*76-114*			
Surrogate: Toluene-d8	*50.7*		"	*50.0*		*101*	*88-110*			

Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: Unocal SS#7176	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	04/18/01 15:21

Volatile Organic 8 Oxyganated 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 1040012 - EPA 5030B [P/T]										
LCS (1040012-BS2)				Prepared & Analyzed: 04/04/01						
Methyl tert-butyl ether	39.8	2.00	ug/l	50.0		79.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	*47.5*		"	*50.0*		*95.0*	*76-114*			
Surrogate: Toluene-d8	*51.5*		"	*50.0*		*103*	*88-110*			
Matrix Spike (1040012-MS1)		**Source: L104006-05**		Prepared & Analyzed: 04/03/01						
Methyl tert-butyl ether	134	2.00	ug/l	50.0	87.3	93.4	60-140			
Surrogate: 1,2-Dichloroethane-d4	*48.7*		"	*50.0*		*97.4*	*76-114*			
Surrogate: Toluene-d8	*48.8*		"	*50.0*		*97.6*	*88-110*			
Matrix Spike Dup (1040012-MSD1)		**Source: L104006-05**		Prepared & Analyzed: 04/03/01						
Methyl tert-butyl ether	132	2.00	ug/l	50.0	87.3	89.4	60-140	1.50	25	
Surrogate: 1,2-Dichloroethane-d4	*48.5*		"	*50.0*		*97.0*	*76-114*			
Surrogate: Toluene-d8	*53.7*		"	*50.0*		*107*	*88-110*			

Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568	Project: Tosco(1) Project Number: Unocal SS#7176 Project Manager: Deanna Harding	**Reported:** 04/18/01 15:21

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

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1D12014 - EPA 3510B										
Blank (1D12014-BLK1)				Prepared & Analyzed: 04/12/01						
Diesel Range Hydrocarbons	ND	50	ug/l							
Surrogate: n-Pentacosane	*24.7*		"	*33.3*		*74.2*	*50-150*			
LCS (1D12014-BS1)				Prepared & Analyzed: 04/12/01						
Diesel Range Hydrocarbons	463	50	ug/l	500		92.6	60-140			
Surrogate: n-Pentacosane	*27.0*		"	*33.3*		*81.1*	*50-150*			
LCS Dup (1D12014-BSD1)				Prepared & Analyzed: 04/12/01						
Diesel Range Hydrocarbons	232	50	ug/l	500		46.4	60-140	66.5	50	Q-01
Surrogate: n-Pentacosane	*20.3*		"	*33.3*		*61.0*	*50-150*			

Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: Unocal SS#7176	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	04/18/01 15:21

Diesel Hydrocarbons (C9-C24) with Silica Gel Cleanup by DHS LUFT - Quality Control

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1D12014 - EPA 3510B										
Blank (1D12014-BLK1)				Prepared: 04/12/01 Analyzed: 04/18/01						
Diesel Range Hydrocarbons	ND	50	ug/l							
Surrogate: n-Pentacosane	*22.0*		"	*33.3*		*66.1*	*50-150*			
LCS (1D12014-BS1)				Prepared: 04/12/01 Analyzed: 04/18/01						
Diesel Range Hydrocarbons	327	50	ug/l	500		65.4	50-125			
Surrogate: n-Pentacosane	*21.3*		"	*33.3*		*64.0*	*50-150*			

Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568	Project: Tosco(1) Project Number: Unocal SS#7176 Project Manager: Deanna Harding	**Reported:** 04/18/01 15:21

Notes and Definitions

D-11	Chromatogram Pattern: Unidentified Hydrocarbons < C16
P-02	Chromatogram Pattern: Weathered Gasoline C6-C12
P-03	Chromatogram Pattern: Unidentified Hydrocarbons C6-C12
Q-01	The spike recovery for this QC sample is outside of established control limits. Review of associated batch QC indicates the recovery for this analyte does not represent an out-of-control condition for the batch.
S-03	The surrogate recovery for this sample is outside of established control limits. Review of associated QC indicates the recovery for this surrogate does not represent an out-of-control condition.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference