GETTLER-RYAN INC.

1059/R0229

TRANSMITTAL

July 22, 2002
G-R #180061

925-277-2384

AUG 07 2002

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 #5325
3220 Lakeshore Avenue
Oakland, California

U-1 & U-2 high MTBE

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	July 15, 2002	Groundwater Monitoring and Sampling Report Second Quarter - Event of June 4, 2002

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 ***August 2, 2002***, this report will be distributed to the following:

cc: Alameda County Health Care Services, 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502

Enclosure

trans/5325-DBD

GETTLER-RYAN INC.

July 15, 2002
G-R Job #180061

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

RE: Second Quarter Event of June 4, 2002
Groundwater Monitoring & Sampling Report
Tosco (Unocal) Service Station #5325
3220 Lakeshore Avenue
Oakland, 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 any wells. Static water level data and groundwater elevations are summarized in Table 1. Field Measurements are summarized in Table 3. A Potentiometric Map is included as Figure 1.

Groundwater samples were collected from the monitoring wells and submitted to a state certified laboratory for analyses. The field data sheets for this event are attached. Analytical results are presented in the table(s) listed below. A Concentration Map is included as Figure 2. The chain of custody document and laboratory analytical report are also attached.

Sincerely,

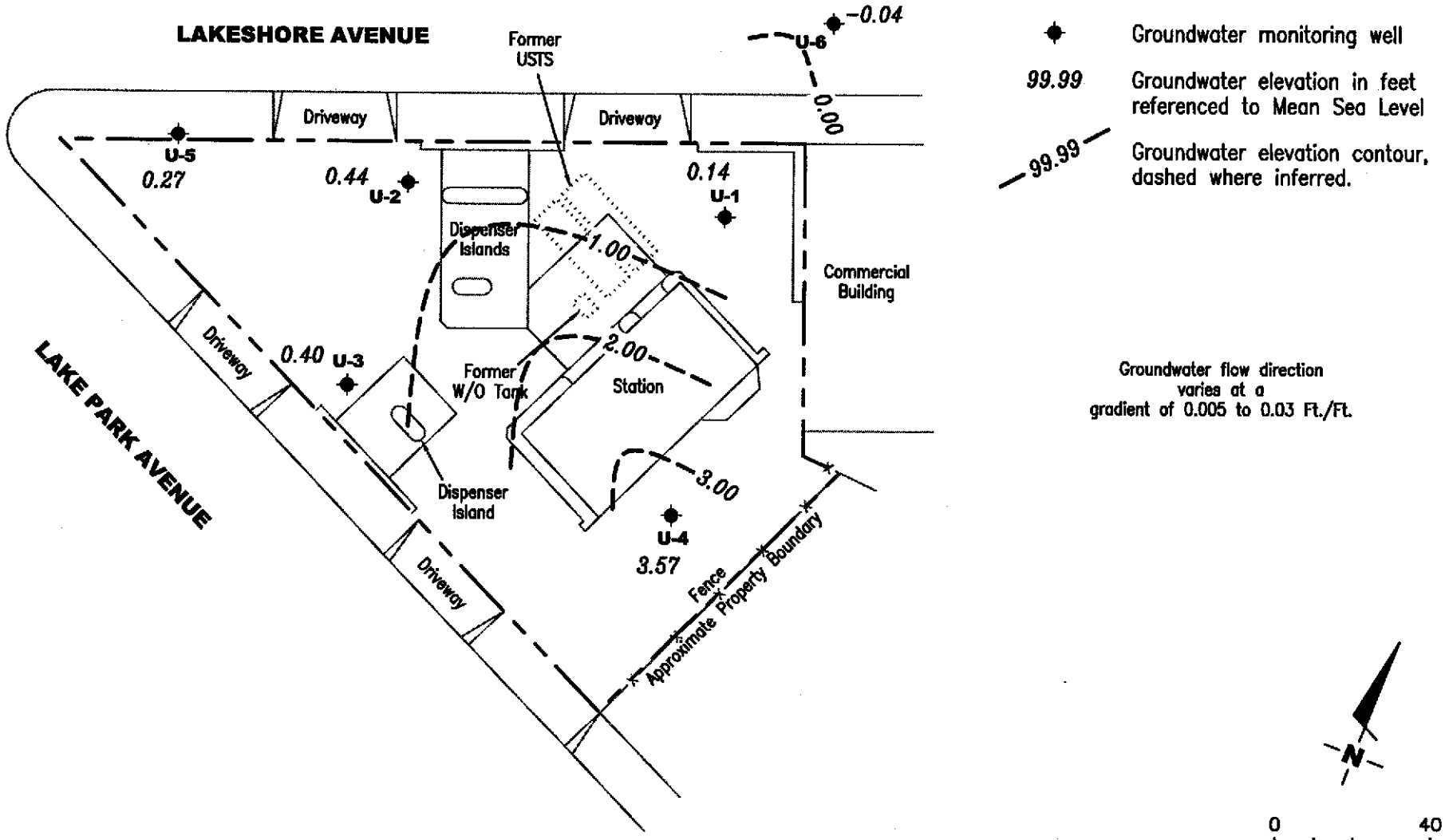
Deanna L. Harding
Project Coordinator

Hagop Kevork
P.E. No. C55734

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:	Field Measurements and Groundwater Analytical Results
Attachments:	Standard Operating Procedure - Groundwater Sampling
	Field Data Sheets
	Chain of Custody Document and Laboratory Analytical Reports

5325.qml

6747 Sierra Court, Suite J • Dublin, California 94568 • (925) 551-7555



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

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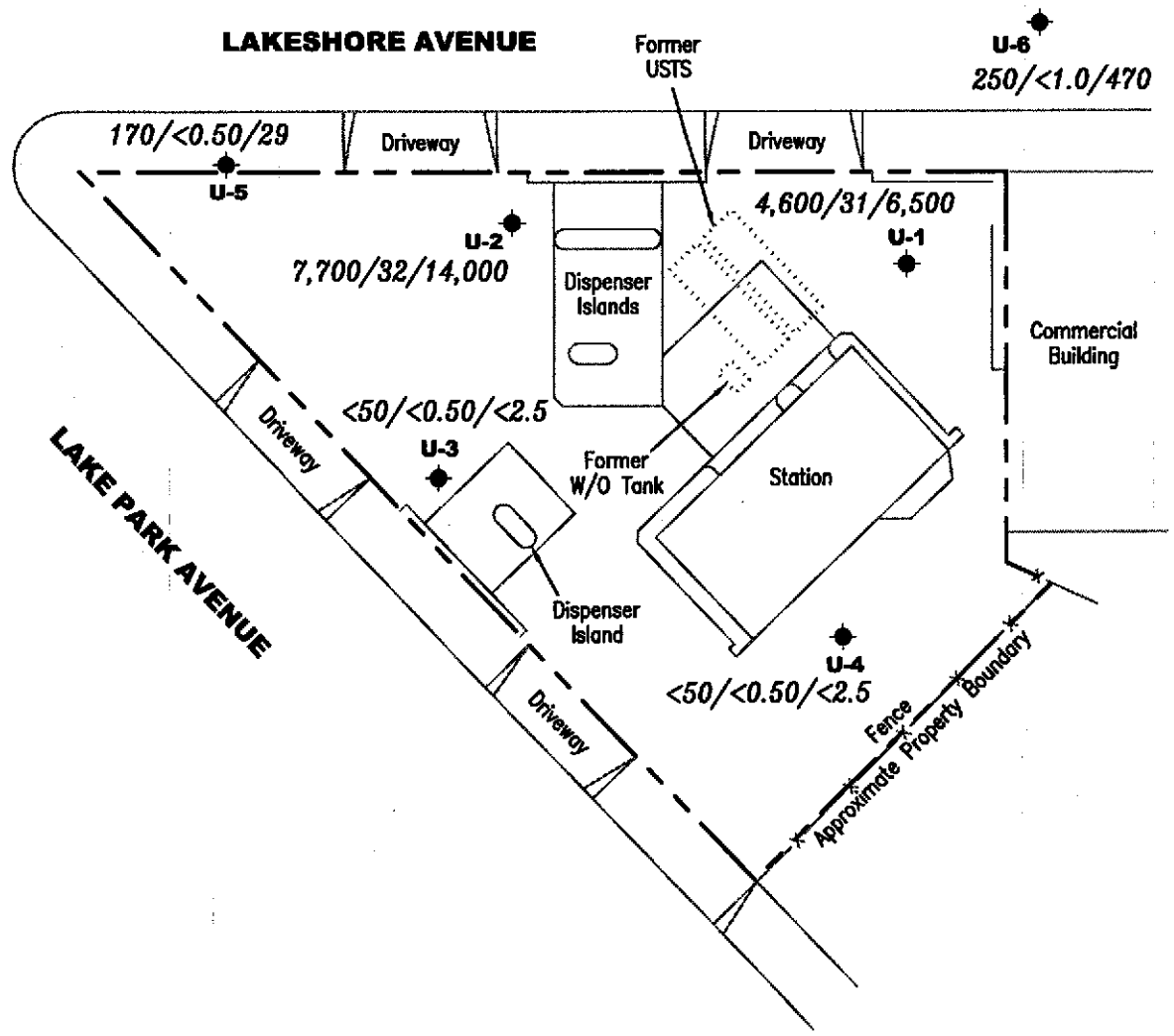
POTENTIOMETRIC MAP
Tosco (Unocal) Service Station #5325
3220 Lakeshore Avenue
Oakland, California

FIGURE
1

PROJECT NUMBER	REVIEWED BY	DATE	REVISED DATE
180061		June 4, 2002	

FILE NAME: P:\Enviro\TOSCO\5325\Q02-5325.DWG | Layout Tab: Pot2



EXPLANATION

- ✦ Groundwater monitoring well
- *A/B/C* Total Petroleum Hydrocarbons (TPH) as Gasoline/Benzene/ MTBE concentrations in ppb

N

0 40

Scale in Feet

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

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

CONCENTRATION MAP
Tosco (Unocal) Service Station #5325
3220 Lakeshore Avenue
Oakland, California

FIGURE
2

PROJECT NUMBER
180061

REVIEWED BY

DATE
June 4, 2002

REVISED DATE

FILE NAME: P:\Enviro\TOSCO\5325\Q02-5325.DWG | Layout Tab: Con2

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5325

3220 Lakeshore Avenue

Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft. bgs)	GWE (ft.)	Product Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
U-1	08/10/90	--	5.0-20.0	--	--	690	38	75	8.6	130	--
	01/07/91	--		--	--	250	22	16	4.2	17	--
	04/01/91	--		--	--	160	13	8.6	1.0	15	--
	07/03/91	--		--	--	140	21	4.3	0.36	17	--
	10/09/91	--		--	--	ND	ND	ND	ND	ND	--
	02/12/92	--		--	--	250	ND	ND	ND	ND	--
	05/05/92	--		--	--	230	1.2	ND	ND	ND	--
	06/11/92	--		--	--	1,000	80	1.4	6.7	41	--
	08/20/92	--		--	--	400[1]	1.0	ND	ND	0.6	--
	02/22/93	--		--	--	34,000	1,400	5,500	910	7,300	--
	05/07/93	--		--	--	8,700	600	240	650	3,300	--
	08/08/93	--		--	--	4,900[2]	79	ND	832	270	--
5.32	11/16/93	8.61		-3.29	0.00	690[3]	ND	ND	ND	ND	--
	02/16/94	8.54		-3.22	0.00	6,800[4]	ND	ND	ND	ND	--
8.46	06/22/94	8.39		0.07	0.00	200	ND	ND	5.9	21	--
	09/22/94	8.66		-0.20	0.00	6,100[3]	ND	ND	ND	ND	--
	12/24/94	8.04		0.42	0.00	50,000	2,500	9,700	2,400	17,000	--
	03/25/95	7.72		1.02**	0.37	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--
	06/21/95	9.30		-0.69**	0.20	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--
	09/19/95	9.29		-0.53**	0.40	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--
	12/19/95	8.98		-0.50**	0.03	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--
	03/18/96	8.25		0.21	0.00	27,000	ND	2,300	1,400	11,000	4,900
	06/27/96	7.92		0.54	<0.01	120,000	540	4,300	2,600	26,000	ND
	09/26/96	9.10		-0.62**	0.02	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--
	12/09/96	6.88		1.60**	0.03	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--
	03/14/97	9.02		-0.15**	0.55	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--
	06/30/97	8.41		0.07**	0.02	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--
	09/19/97	8.56		-0.08**	0.02	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--
	12/12/97	8.58		-0.11**	0.01	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--
	03/03/98[17]	8.23		0.26**	0.04	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--
	06/15/98[17]	8.37		0.09	Sheen	52,000	ND[7]	900	1,800	13,000	ND[7]

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5325

3220 Lakeshore Avenue

Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft. bgs)	GWE (ft.)	Product Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
U-1	09/30/98[17]	8.94	5.0-20.0	-0.48	Sheen	1,000,000[8]	ND[7]	2,600	13,000	83,000	4,800
(cont)	12/28/98[17]	8.57		-0.11	<0.01	1,100,000[9]	ND[7]	1,600	8,600	71,000	5,700
	03/22/99[17]	8.18		0.28	Sheen	130,000	470	1,100	2,000	28,000	5,700
	06/09/99	9.37		-0.91	0.00	40,000	230	640	590	13,000	3,500/2,100[10]
	09/08/99[17]	9.53		-1.07	0.00	55,000[11]	217	202	745	14,300	6,890/6,690[10]
	12/07/99[17]	9.67		-1.21	0.00	41,200[13]	89.3	ND[7]	385	6,930	15,800/14,700[12]
	03/13/00[17]	8.44		0.02	0.00	48,000[11]	490	610	2,400	10,000	22,000/23,000[10]
	06/21/00[17]	9.45		-0.99	0.00	37,000[11]	200	ND[7]	1,200	7,200	15,000/20,000[10]
	09/27/00[17]	9.29		-0.83	0.00	15,000[11]	92	ND[7]	540	2,800	74,000/83,000[15]
	12/12/00[17]	9.37		-0.91	0.00	50,000[16]	ND[7]	ND[7]	250	1,900	12,000/15,000[12]
	03/07/01[17]	8.45		0.01	0.00	6,220[13]	29.8	10.4	96.3	638	11,200/11,800[10]
	06/06/01[17]	9.29		-0.83	0.00	5,200[13]	17	ND[7]	69	420	6,500/8,700[12]
	09/24/01[17]	9.39		-0.93	0.00	4,300[18]	36	<25	65	590	4,400/4,400[10]
	12/10/01[20]	9.17		-0.71	0.00	11,000[18]	220	<100	380	1,500	5,100/5,100[10]
	03/11/02[20]	9.44		-0.98	0.00	5,500[13]	28	<20	360	690	6,400/6,300[10]
	06/04/02[20]	**8.32**		**0.14**	**0.00**	**4,600[18]**	**31**	**<10**	**240**	**180**	**6,500**
U-2	08/10/90	--	5.0-20.0	--	--	780	27	46	15	130	--
	01/07/91	--		--	--	1,900	67	5.8	58	69	--
	04/01/91	--		--	--	1,700	250	89	34	190	--
	07/03/91	--		--	--	2,100	150	25	3.1	290	--
	10/09/91	--		--	--	230	7.1	ND	ND	11	--
	02/12/92	--		--	--	410	1.9	ND	0.36	0.4	--
	05/05/92	--		--	--	1,600	120	52	6.2	290	--
	06/11/92	--		--	--	620	17	2.1	ND	37	--
	08/20/92	--		--	--	700	28	6.5	1.3	4.6	--
	02/22/93	--		--	--	3,400	2,400	2,100	1,200	5,800	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5325
3220 Lakeshore Avenue
Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft. bgs)	GWE (ft.)	Product Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
U-2	05/07/93	--	5.0-20.0	--	--	17,000	1,800	660	1,700	4,000	--
(cont)	08/08/93	--		--	--	5,600[2]	420	ND	410	670	--
4.53	11/16/93	8.17		-3.64	0.00	510[3]	ND	ND	ND	ND	--
	02/16/94	7.73		-3.20	0.00	980[4]	49	13	2.7	40	--
7.62	06/22/94	7.60		0.02	0.00	31,000	2,200	62	1,500	3,500	--
	09/22/94	7.93		-0.31	0.00	8,500[3]	29	ND	ND	ND	--
	12/24/94	7.27		0.35	0.00	32,000	1,500	890	1,300	5,000	--
	03/25/95	7.01		0.61	0.00	170,000	1,900	21,000	4,800	33,000	--
	06/21/95	6.98		0.64	0.00	16,000	2,100	ND	1,800	1,700	--
	09/19/95	7.70		-0.08	0.00	3,000	610	ND	78	240	--[5]
	12/19/95	7.30		0.32	0.00	1,600	140	55	52	270	--[6]
	03/18/96	6.45		1.17	0.00	12,000	2,200	ND	1,200	2,200	22,000
	06/27/96	7.41		0.21	0.00	28,000	3,400	ND	2,800	3,100	3,000
	09/26/96	7.90		-0.28	0.00	5,900	750	ND	ND	ND	18,000
	12/09/96	6.76		0.86	0.00	13,000	5,100	290	980	370	2,700
	03/14/97	7.12		0.52**	0.03	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--
	06/30/97	6.19		1.43	<0.01	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--
	09/19/97	7.31		0.31	<0.01	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--
	12/12/97	6.75		0.88**	<0.01	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--
	03/03/98	6.36		1.26	Sheen	80,000	3,000	1,100	820	16,000	16,000
	06/15/98	6.51		1.11	Sheen	48,000	1,800	330	470	7,900	20,000
	09/30/98	7.17		0.45	Sheen	60,000	1,300	ND[7]	500	9,700	19,000
	12/28/98	7.06		0.56	0.00	63,000	590	160	320	5,600	16,000
	03/22/99	6.82		0.80	0.00	28,000	1,100	ND[7]	360	2,900	25,000
	06/09/99	7.51		0.11	0.00	21,000	110	190	310	2,600	7,900/7,800[10]
	09/08/99	8.16		-0.54	0.00	23,300[11]	477	138	286	4,110	16,400/15,300[10]
	12/07/99	8.31		-0.69	0.00	4,840[13]	17.2	ND[7]	ND[7]	157	14,900/15,600[12]
	03/13/00	6.69		0.93	0.00	11,000[11]	380	160	ND[7]	2,100	22,000/26,000[10]
	06/21/00	7.67		-0.05	0.00	9,100[11]	22	ND[7]	ND[7]	800	16,000/22,000[10]
	09/27/00	7.44		0.18	0.00	2,900[11]	43	ND[7]	ND[7]	39	20,000/26,000[15]
	12/12/00	7.51		0.11	0.00	3,600[11]	17	ND[7]	ND[7]	87	8,000/7,800[12]

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5325

3220 Lakeshore Avenue

Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft. bgs)	GWE (ft.)	Product Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
U-2	03/07/01	7.15	5.0-20.0	0.47	0.00	1,670[13]	51.0	ND[7]	7.20	19.5	5,930/7,900[10]
(cont)	06/06/01	7.57		0.05	0.00	1,100[11]	14	ND[7]	9.3	35	9,200/10,000[12]
	09/24/01	7.63		-0.01	0.00	1,000[18]	25	<2.5	12	100	9,800/11,000[10]
	12/10/01	6.78		0.84	0.00	83	14	0.55	3.4	6.8	2,500/2,500[10]
	03/11/02	7.12		0.50	0.00	<1,000	28	<10	40	31	11,000/11,000[10]
	06/04/02	**7.18**		**0.44**	**0.00**	**7,700[18]**	**32**	**<25**	**33**	**48**	**14,000**
U-3	08/10/90	--	5.0-20.0	--	--	ND	ND	ND	ND	ND	--
	01/07/91	--		--	--	ND	ND	ND	ND	1.8	--
	04/01/91	--		--	--	ND	1.0	2.9	0.53	5.4	--
	07/03/91	--		--	--	ND	ND	ND	ND	ND	--
	10/09/91	--		--	--	ND	ND	ND	ND	ND	--
	02/12/92	--		--	--	ND	ND	ND	ND	ND	--
	05/05/92	--		--	--	ND	ND	ND	ND	ND	--
	06/11/92	--		--	--	ND	ND	ND	ND	ND	--
	08/20/92	--		--	--	ND	ND	ND	ND	ND	--
	02/22/93	--		--	--	ND	ND	ND	ND	ND	--
	05/07/93	--		--	--	ND	ND	ND	ND	ND	--
	08/08/93	--		--	--	210	5.0	9.7	0.7	4.1	--
7.86	11/16/93	11.82		-3.96	0.00	ND	ND	ND	ND	ND	--
	02/16/94	11.62		-3.76	0.00	ND	ND	ND	ND	ND	--
10.98	06/22/94	11.64		-0.66	0.00	ND	ND	ND	ND	ND	--
	09/22/94	11.76		-0.78	0.00	ND	ND	ND	ND	ND	--
	12/24/94	11.28		-0.30	0.00	ND	ND	ND	ND	ND	--
	03/25/95	10.96		0.02	0.00	ND	ND	ND	ND	ND	--
	06/21/95	11.37		-0.39	0.00	ND	ND	ND	ND	ND	--
	09/19/95	11.55		-0.57	0.00	ND	ND	ND	ND	ND	--[5]
	12/19/95	11.45		-0.47	0.00	ND	ND	ND	ND	ND	--
	03/18/96	11.10		-0.12	0.00	ND	ND	ND	ND	ND	--
	06/27/96	11.16		-0.18	0.00	440	49	50	51	140	50

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5325
3220 Lakeshore Avenue
Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft. bgs)	GWE (ft.)	Product Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
U-3	09/26/96	11.55	5.0-20.0	-0.57	0.00	ND	ND	ND	ND	ND	ND
(cont)	12/09/96	10.12		0.86	0.00	ND	ND	ND	ND	ND	29
	03/14/97	10.87		0.11	0.00	ND	ND	ND	ND	ND	ND
	06/30/97	11.08		-0.10	0.00	ND	ND	ND	ND	ND	ND
	09/19/97	11.05		-0.07	0.00	ND	ND	ND	ND	ND	ND
	12/12/97	10.58		0.40	0.00	ND	ND	ND	ND	ND	ND
	03/03/98	9.84		1.14	0.00	ND	ND	ND	ND	ND	ND
	06/15/98	10.56		0.42	0.00	ND	ND	ND	ND	ND	ND
	09/30/98	11.12		-0.14	0.00	ND	ND	ND	ND	ND	ND
	12/28/98	10.96		0.02	0.00	ND	ND	ND	ND	ND	ND
	03/22/99	9.46		1.52	0.00	ND	ND	ND	ND	ND	ND
	06/09/99	11.01		-0.03	0.00	ND	ND	ND	ND	ND	ND
	09/08/99	11.31		-0.33	0.00	ND	ND	ND	ND	ND	ND
	12/07/99	11.26		-0.28	0.00	ND	ND	ND	ND	ND	ND
	03/13/00	8.28		2.70	0.00	ND	ND	ND	ND	ND	ND
	06/21/00	11.12		-0.14	0.00	ND	ND	ND	ND	ND	ND
	09/27/00	11.07		-0.09	0.00	ND	ND	ND	ND	ND	ND
	12/12/00	10.94		0.04	0.00	ND	ND	ND	ND	ND	ND
	03/07/01	8.32		2.66	0.00	ND	ND	ND	ND	ND	ND
	06/06/01	10.94		0.04	0.00	ND	ND	ND	ND	ND	ND
	09/24/01	11.03		-0.05	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	12/10/01	8.16		2.82	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	03/11/02	7.82		3.16	0.00	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	06/04/02	**10.58**		**0.40**	**0.00**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.5**
U-4											
11.15	06/22/94	10.16	5.0-20.0	0.99	0.00	ND	ND	ND	ND	ND	--
	09/22/94	10.79		0.36	0.00	ND	0.78	1.3	ND	1.4	--
	12/24/94	9.81		1.34	0.00	ND	ND	ND	ND	ND	--
	03/25/95	9.51		1.64	0.00	ND	ND	ND	ND	ND	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5325
3220 Lakeshore Avenue
Oakland, California

WELL ID/ TOC* (ft.)	DATE	DTW (ft.)	S.I. (ft. bgs)	GWE (ft.)	Product Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
U-4	06/21/95	9.54	5.0-20.0	1.61	0.00	ND	ND	ND	ND	ND	--
(cont)	09/19/95	10.17		0.98	0.00	ND	ND	ND	ND	ND	--
	12/19/95	9.98		1.17	0.00	ND	ND	ND	ND	ND	--
	03/18/96	9.66		1.49	0.00	ND	ND	ND	ND	ND	--
	06/27/96	9.74		1.41	0.00	ND	ND	ND	ND	ND	ND
	09/26/96	10.14		1.01	0.00	ND	ND	ND	ND	ND	ND
	12/09/96	8.67		2.48	0.00	ND	ND	ND	ND	ND	33
	03/14/97	9.35		1.80	0.00	ND	ND	ND	ND	ND	ND
	06/30/97	9.89		1.26	0.00	ND	ND	ND	ND	ND	ND
	09/19/97	9.96		1.19	0.00	ND	ND	ND	ND	ND	ND
	12/12/97	8.56		2.59	0.00	ND	ND	ND	ND	ND	ND
	03/03/98	7.85		3.30	0.00	ND	ND	ND	ND	ND	ND
	06/15/98	9.08		2.07	0.00	ND	ND	ND	ND	ND	ND
	09/30/98	9.75		1.40	0.00	ND	ND	ND	ND	ND	ND
	12/28/98	9.59		1.56	0.00	ND	ND	ND	ND	ND	ND
	03/22/99	8.34		2.81	0.00	ND	ND	ND	ND	ND	ND
	06/09/99	9.39		1.76	0.00	ND	ND	ND	ND	ND	ND
	09/08/99	9.90		1.25	0.00	ND	ND	ND	ND	ND	ND
	12/07/99	10.05		1.10	0.00	ND	ND	ND	ND	ND	ND
	03/13/00	7.24		3.91	0.00	ND	ND	ND	ND	ND	ND
	06/21/00	9.48		1.67	0.00	ND	ND	ND	ND	ND	ND
	09/27/00	9.42		1.73	0.00	ND	ND	ND	ND	ND	ND
	12/12/00	9.50		1.65	0.00	ND	ND	ND	ND	ND	ND
	03/07/01	6.88		4.27	0.00	ND	ND	ND	ND	ND	ND
	06/06/01	9.18		1.97	0.00	ND	ND	ND	ND	ND	ND
	09/24/01	9.21		1.94	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	12/10/01	7.32		3.83	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	03/11/02	6.92		4.23	0.00	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	06/04/02	**7.58**		**3.57**	**0.00**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.5**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5325
3220 Lakeshore Avenue
Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft. bgs)	GWE (ft.)	Product Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
U-5											
6.98	06/22/94	6.83	5.0-20.0	0.15	0.00	210	7.1	13	4.5	26	--
	09/22/94	6.90		0.08	0.00	170	8.4	10	8.5	18	--
	12/24/94	6.43		0.55	0.00	8,700	560	70	670	430	--
	03/25/95	6.35		0.63	0.00	44,000	390	960	1,500	7,600	--
	06/21/95	7.11		-0.13	0.00	400	2.3	ND	9.1	3.5	--
	09/19/95	6.99		-0.01	0.00	850	14	7.1	13	66	--[5]
	12/19/95	7.17		-0.19	0.00	ND	ND	ND	ND	ND	--
	03/18/96	6.65		0.33	0.00	100	0.67	0.5	0.51	5.4	--
	06/27/96	6.49		0.49	0.00	16,000	280	150	1,400	4,600	530
	09/26/96	7.13		-0.15	0.00	ND	ND	0.57	ND	0.96	ND
	12/09/96	5.90		1.08	0.00	1,300	29	46	ND	140	97
	03/14/97	6.99		-0.01	0.00	ND	ND	ND	ND	ND	14
	06/30/97	7.08		-0.10	0.00	4,200	74	51	180	980	270
	09/19/97	6.78		0.20	0.00	6,300	160	13	370	1000	480
	12/12/97	6.94		0.04	0.00	60	1.3	ND	1.6	2.1	47
	03/03/98	6.50		0.48	0.00	1,700	29	ND[7]	150	190	330
	06/15/98	6.85		0.13	0.00	1,500	32	ND[7]	91	83	330
	09/30/98	7.31		-0.33	0.00	1,700	44	ND[7]	39	150	60
	12/28/98	7.25		-0.27	0.00	1,400	59	ND[7]	13	27	150
	03/22/99	6.86		0.12	0.00	780	8.9	ND	0.76	4.5	350
	06/09/99	7.28		-0.30	0.00	1,000	ND[7]	ND[7]	10	35	280/350[10]
	09/08/99	7.52		-0.54	0.00	2,620[11]	26.2	ND[7]	32.2	157	280/239[12]
	12/07/99	7.67		-0.69	0.00	949[11]	9.26	ND[7]	11.2	22.7	235/301[12]
	03/13/00	6.73		0.25	0.00	880[14]	12	1.0	5.6	8.7	46/37[10]
	06/21/00	7.39		-0.41	0.00	700[11]	4.0	ND	0.99	4.0	120/140[10]
	09/27/00	7.45		-0.47	0.00	400[11]	1.9	ND	ND	1.5	160/250[15]
	12/12/00	7.68		-0.70	0.00	770[11]	3.2	ND[7]	ND[7]	ND[7]	27/13[12]
	03/07/01	6.83		0.15	0.00	623[13]	5.15	ND	ND	0.669	35.7/43.4[10]
	06/06/01	7.42		-0.44	0.00	110[13]	ND	ND	ND	ND	ND

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5325
3220 Lakeshore Avenue
Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft. bgs)	GWE (ft.)	Product Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
U-5	09/24/01	7.50	5.0-20.0	-0.52	0.00	270[19]	<0.50	<0.50	<0.50	<0.50	40/42[10]
(cont)	12/10/01	6.65		0.33	0.00	420[18]	13	0.60	0.66	<0.50	<2.5
	03/11/02	7.00		-0.02	0.00	260[13]	<0.50	<0.50	<0.50	<0.50	42/47[10]
	06/04/02	**6.71**		**0.27**	**0.00**	**170[19]**	**<0.50**	**0.77**	**0.87**	**0.69**	**29**
U-6											
7.14	06/22/94	7.14	5.0-24.0	0.00	0.00	ND	ND	ND	ND	ND	--
	09/22/94	7.34		-0.20	0.00	130	1.3	0.8	ND	0.73	--
	12/24/94	6.67		0.47	0.00	6,900	500	59	600	380	--
	03/25/95	6.29		0.85	0.00	47,000	450	1,300	1,700	8,200	--
	06/21/95	7.60		-0.46	0.00	ND	ND	ND	ND	ND	--
	09/19/95	7.70		-0.56	0.00	ND	ND	ND	ND	ND	--[5]
	12/19/95	7.75		-0.61	0.00	210	2.5	1.0	2.9	17	--
	03/18/96	6.86		0.28	0.00	ND	ND	ND	ND	ND	--
	06/27/96	6.52		0.62	0.00	ND	ND	ND	ND	ND	510
	09/26/96	7.62		-0.48	0.00	ND	ND	ND	ND	ND	1,400
	12/09/96	5.88		1.26	0.00	1,200	29	48	6.4	140	58
	03/14/97	7.30		-0.16	0.00	ND	ND	ND	ND	ND	1,500
	06/30/97	7.35		-0.21	0.00	ND	ND	ND	ND	ND	990
	09/19/97	7.25		-0.11	0.00	ND	ND	ND	ND	ND	1,400
	12/12/97	7.29		-0.15	0.00	ND	ND	ND	ND	ND	680
	03/03/98	7.00		0.14	0.00	ND	ND	ND	ND	ND	1,600
	06/15/98	7.18		-0.04	0.00	ND[7]	ND[7]	ND[7]	ND[7]	ND[7]	1,000
	09/30/98	7.90		-0.76	0.00	ND	ND	ND	ND	ND	1,200
	12/28/98	7.79		-0.65	0.00	ND[7]	ND[7]	ND[7]	ND[7]	ND[7]	730
	03/22/99	7.47		-0.33	0.00	ND	ND	ND	ND	ND	1,800
	06/09/99	7.73		-0.59	0.00	ND[7]	ND[7]	ND[7]	ND[7]	ND[7]	1,000/850[10]
	09/08/99	7.95		-0.81	0.00	ND	ND	ND	ND	ND	851/1,040[10]
	12/07/99	8.10		-0.96	0.00	ND	ND	ND	ND	ND	1,140/1,150[12]
	03/13/00	6.95		0.19	0.00	ND	ND	ND	ND	ND	560/670[10]

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5325
3220 Lakeshore Avenue
Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft. bgs)	GWE (ft.)	Product Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
U-6	06/21/00	7.84	5.0-24.0	-0.70	0.00	ND	ND	ND	ND	ND	400/590[10]
(cont)	09/27/00	7.68		-0.54	0.00	ND	ND	ND	ND	ND	2,500/2,800[15]
	12/12/00	7.74		-0.60	0.00	ND	ND	ND	ND	ND	590/580[12]
	03/0701	7.27		-0.13	0.00	ND	ND	ND	ND	ND	310/321[12]
	06/06/01	7.80		-0.66	0.00	ND	ND	ND	ND	ND	250/330[12]
	09/24/01	7.82		-0.68	0.00	<50	<0.50	<0.50	<0.50	<0.50	530/660[10]
	12/10/01	7.15		-0.01	0.00	<50	<0.50	<0.50	<0.50	<0.50	220/220[10]
	03/11/02	7.32		-0.18	0.00	<50	<0.50	<0.50	<0.50	<0.50	720/760[10]
	06/04/02	**7.18**		**-0.04**	**0.00**	**250[19]**	**<1.0**	**<1.0**	**<1.0**	**<1.0**	**470**
Trip Blank											
TB-LB	03/03/98	--	--	--	--	ND	ND	ND	ND	ND	ND
	06/15/98	--		--	--	ND	ND	ND	ND	ND	ND
	09/30/98	--		--	--	ND	ND	1.7	ND	2.2	ND
	12/28/98	--		--	--	ND	ND	0.71	ND	0.72	9.5
	03/22/99	--		--	--	ND	ND	ND	ND	ND	ND
	06/09/99	--		--	--	ND	ND	ND	ND	ND	ND
	09/08/99	--		--	--	ND	ND	ND	ND	ND	ND
	12/07/99	--		--	--	ND	ND	0.762	ND	ND	ND
	03/13/00	--		--	--	ND	ND	ND	ND	ND	ND
	06/21/00	--		--	--	ND	ND	ND	ND	ND	ND
	09/27/00	--		--	--	ND	ND	ND	ND	ND	ND
	12/12/00	--		--	--	ND	ND	ND	ND	ND	ND
	03/07/01	--		--	--	ND	ND	ND	ND	ND	ND
	06/06/01	--		--	--	ND	ND	ND	ND	ND	ND
	09/24/01	--		--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	12/10/01	--		--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	03/11/02	--		--	--	<50	<0.50	<0.50	<0.50	<0.50	<5.0
QA	**06/04/02**	**--**		**--**	**--**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.5**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5325

3220 Lakeshore Avenue

Oakland, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to March 3, 1998, were compiled from reports prepared by MPDS Services, Inc.

TOC = Top of Casing
(ft.) = Feet
DTW = Depth to Water
S.I. = Screen Interval
(ft. bgs) = Feet Below Ground Surface
GWE = Groundwater Elevation
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
QA = Quality Assurance

* TOC elevations are surveyed relative to City of Oakland Benchmark, at the northeasterly corner of Weller and Cheney Avenue (Elevation = 9.055 feet, city datum; add 3.00' to U.S.G.S. datum). Prior to November 16, 1993, the DTW measurements were taken from the well cover.

** Groundwater elevation corrected due to the presence of free product; correction factor = [(TOC-DTW)+(Product Thickness x 0.75)].

1 The positive result for gasoline does not appear to have a typical gasoline pattern.

2 The concentration reported as gasoline is primarily due to the presence of a combination of gasoline and a discrete peak not indicative of gasoline.

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

4 Laboratory report indicates the hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.

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

6 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.

7 Detection limit raised. Refer to analytical reports.

8 Laboratory report indicates unidentified hydrocarbons C6-C12.

9 Laboratory report indicates gasoline and unidentified hydrocarbons >C8.

10 MTBE by EPA Method 8260.

11 Laboratory report indicates gasoline C6-C12.

12 MTBE by EPA Method 8260 analyzed past the recommended holding time.

13 Laboratory report indicates weathered gasoline C6-C12.

14 Laboratory report indicates gasoline C6-C12 + unidentified hydrocarbons <C6.

15 Laboratory report indicates sample was originally analyzed within holding time. Re-analysis for confirmation or dilution was performed past the recommended holding time.

16 Laboratory report indicates gasoline C6-C12 + unidentified hydrocarbons >C10.

17 Skimmer present in well.

18 Laboratory report indicates gasoline C6-C10.

19 Laboratory report indicates unidentified hydrocarbons C6-C10.

20 Skimmer not present in well.

Table 2

Groundwater Analytical Results - Oxygenate Compounds

Tosco (Unocal) Service Station #5325

3220 Lakeshore Avenue

Oakland, California

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)
U-1	09/27/00[1]	--	ND[2]	83,000	ND[2]	ND[2]	ND[2]	ND[2]	ND[2]
	12/12/00	--	--	15,000[3]	--	--	--	--	--
	03/07/01	ND[2]	ND[2]	11,800	ND[2]	ND[2]	ND[2]	ND[2]	ND[2]
	06/06/01[3]	ND[2]	ND[2]	8,700	ND[2]	ND[2]	ND[2]	ND[2]	ND[2]
	09/24/01	<400,000	<20,000	4,400	<1,000	<1,000	<1,000	<1,000	<1,000
	12/10/01	<8,000	<4,000	5,100	<100	<100	<100	<100	<100
	03/11/02	<25,000	<5,000	6,300	<100	<100	<100	<100	<100
	06/04/02[4]	--	--	--	--	--	--	--	--
U-2	09/27/00	--	--	26,000[1]	--	--	--	--	--
	12/12/00	--	--	7,800[3]	--	--	--	--	--
	03/07/01	ND[2]	ND[2]	7,900	ND[2]	ND[2]	ND[2]	ND[2]	ND[2]
	06/06/01[3]	ND[2]	ND[2]	10,000	ND[2]	ND[2]	ND[2]	ND[2]	ND[2]
	09/24/01	<400,000	<20,000	11,000	<1,000	<1,000	<1,000	<1,000	<1,000
	12/10/01	<4,000	<2,000	2,500	<50	<50	<50	<50	<50
	03/11/02	<50,000	<10,000	11,000	<200	<200	<200	<200	<200
	06/04/02[4]	--	--	--	--	--	--	--	--
U-5	09/27/00	--	--	250[1]	--	--	--	--	--
	12/12/00	--	--	13[3]	--	--	--	--	--
	03/07/01	ND	ND	43.4	ND	ND	ND	ND	ND
	09/24/01	<4,000	<200	42	<10	<10	<10	<10	<10
	03/11/02	<500	<100	47	<2.0	<2.0	<2.0	<2.0	<2.0
	06/04/02[4]	--	--	--	--	--	--	--	--
U-6	09/27/00	--	--	2,800[1]	--	--	--	--	--
	12/12/00	--	--	580[3]	--	--	--	--	--
	03/07/01[3]	ND[2]	ND[2]	321	ND[2]	ND[2]	ND[2]	ND[2]	ND[2]
	06/06/01[3]	ND[2]	ND[2]	330	ND[2]	ND[2]	ND[2]	ND[2]	ND[2]

Table 2

Groundwater Analytical Results - Oxygenate Compounds

Tosco (Unocal) Service Station #5325

3220 Lakeshore Avenue

Oakland, California

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)
U-6	09/24/01	<40,000	<2,000	660	<100	<100	<100	<100	<100
(cont)	12/10/01	<400	<200	220	<5.0	<5.0	<5.0	<5.0	<5.0
	03/11/02	<2,000	<400	760	<8.0	<8.0	<8.0	<8.0	<8.0
	06/04/02[4]	--	--	--	--	--	--	--	--

Table 2

Groundwater Analytical Results - Oxygenate Compounds

Tosco (Unocal) Service Station #5325

3220 Lakeshore Avenue

Oakland, 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 = 1,2-Dichloroethane

EDB = 1,2-Dibromoethane

(ppb) = Parts per billion

ND = Not Detected

-- = Not Analyzed

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

[1] Laboratory report indicates sample was originally analyzed within holding time. Re-analysis for confirmation or dilution was performed past the recommended holding time.

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

[3] Laboratory report indicates sample was analyzed outside the EPA recommended holding time.

[4] Due to Laboratory error, samples for oxgenate (8260) analyses was not performed.

Table 3

Field Measurements and Groundwater Analytical Results

Tosco (Unocal) Service Station #5325
3220 Lakeshore Avenue
Oakland, California

WELL ID	DATE	Ferrous Iron (ppm)	Nitrate as NO3 (ppm)	Phosphate as PO4 (ppm)	Redox Redox (mV)	D.O. Before Purge (mg/L)	ORP (mV)
U-1	06/15/98	39	ND	ND	382[2]	--	--
	09/30/98	17	ND	ND	366[2]	--	--
	12/28/98	4.3	6.3	28	298[2]	--	--
	03/22/99	4.9	ND	3.5	320[3]	--	--
	06/09/99	1.2	ND	ND	260[3]	--	--
	09/08/99	1.80	ND[1]	ND[1]	85[3]	--	--
	12/07/99	5.70	ND[1]	17.0	404[3]	1.36	--
	03/13/00	8.0	0.18	ND	[2]117/262[3]	--	--
	06/21/00	9.3	ND[1]	ND[1]	148[2]	1.53	--
	09/27/00	2.8	ND[1]	18.4	119[2]	1.63	--
	12/12/00	0.49	ND[1]	16.0	131[2]	1.48	--
	03/07/01	0.483	2.64	6.89	125[2]	1.91	--
	06/06/01	1.0[4]	ND	2.7	141[2]	1.77	--
	09/24/01	<0.10	0.45[5]	--	125[2]	1.64	--
	12/10/01	14	<0.50	2.2	141[2]	1.82	--
	03/11/02	15	<0.50	0.11	132[2]	2.21	--
	06/04/02	**<0.50**	**<0.50**	**<0.10**	**--**	**1.88**	**117**
U-2	03/03/98	25	ND	ND	369[2]	--	--
	06/15/98	42	ND	ND	341[2]	--	--
	09/30/98	25	ND	ND	354[2]	--	--
	12/28/98	28	ND	ND	276[2]	--	--
	03/22/99	0.68	ND	2.3	320[3]	--	--
	06/09/99	0.50	ND	ND	290[3]	--	--
	09/08/99	1.90	ND[1]	ND[1]	235[3]	--	--
	12/07/99	0.250	ND[1]	ND[1]	389[3]	2.28	--
	03/13/00	4.3	0.31	ND	[2]121/184[3]	--	--
	06/21/00	0.26	ND[1]	ND[1]	136[2]	1.96	--
	09/27/00	0.64	ND[1]	10.5	142[2]	2.12	--
	12/12/00	2.7	ND[1]	ND[1]	155[2]	2.35	--
	03/07/01	0.677	2.24	3.02	148[2]	2.21	--
	06/06/01	0.80[4]	ND	2.8	163[2]	2.67	--
	09/24/01	<0.10	0.49[5]	--	151[2]	2.10	--
	12/10/01	<0.10	<0.50	0.20	171[2]	2.81	--
	03/11/02	<0.10	<0.50	0.65	156[2]	2.77	--
	06/04/02	**<0.10**	**<0.50**	**<0.10**	**--**	**3.14**	**144**
U-3	06/30/97	1.4	21	0.86	190[3]	4.10	--
	09/19/97	0.57	19	ND	75[3]	4.20	--
	12/12/97	1.9	23	0.85	390[3]	2.97	--
	03/03/98	0.013	36	ND	358[2]	2.63	--
	06/15/98	0.16	33	ND	318[2]	2.93	--

Table 3

Field Measurements and Groundwater Analytical Results

Tosco (Unocal) Service Station #5325
3220 Lakeshore Avenue
Oakland, California

WELL ID	DATE	Ferrous Iron (ppm)	Nitrate as NO3 (ppm)	Phosphate as PO4 (ppm)	Redox Redox (mV)	D.O. Before Purge (mg/L)	ORP (mV)
U-3	09/30/98	0.040	31	ND	295[2]	3.11	--
(cont)	12/28/98	ND	29	ND	281[2]	3.59	--
	03/22/99	0.015	30	0.14	310[3]	4.02	--
	06/09/99	ND	26	1.2	350[3]	3.70	--
	09/08/99	ND	32.9	ND[1]	417[3]	3.96	--
	12/07/99	0.0520	27.9	ND[1]	437[3]	4.21	--
	03/13/00	0.15	33	ND	[2]226/307[3]	--	--
	06/21/00	0.20	32	ND[1]	225[2]	4.27	--
	09/27/00	ND	34	15.7	211[2]	4.67	--
	12/12/00	ND	31	ND[1]	246[2]	4.79	--
	03/07/01	ND	36.5	0.443	251[2]	5.16	--
	06/06/01	ND[4]	8.0	0.18	214[2]	4.79	--
	09/24/01	<0.10	23[5]	--	198[2]	4.27	--
	12/10/01	<0.10	21	0.11	188[2]	4.66	--
	03/11/02	<0.10	30	0.14	166[2]	5.06	--
	06/04/02	**<0.10**	**18**	**<0.10**	**--**	**5.79**	**151**
U-4	06/30/97	0.13	35	0.52	200[3]	5.40	--
	09/19/97	0.35	30	ND	45[3]	5.10	--
	12/12/97	0.68	31	0.73	380[3]	3.11	--
	03/03/98	0.018	3.2	ND	284[2]	2.94	--
	06/15/98	0.14	33	ND	256[2]	3.08	--
	09/30/98	0.049	31	ND	276[2]	4.05	--
	12/28/98	0.36	31	ND	280[2]	4.57	--
	03/22/99	ND	30	0.14	320[3]	4.26	--
	06/09/99	ND	35	0.91	340[3]	3.61	--
	09/08/99	ND	24	ND[1]	391[3]	3.75	--
	12/07/99	ND	27.7	ND[1]	478[3]	4.03	--
	03/13/00	ND	33	ND	[2]219/244[3]	--	--
	06/21/00	0.034	32	ND[1]	248[2]	4.89	--
	09/27/00	ND	28	ND[1]	198[2]	5.09	--
	12/12/00	ND	30	ND[1]	210[2]	4.86	--
	03/07/01	ND	33.9	0.226	233[2]	4.97	--
	06/06/01	ND[4]	7.4	0.21	248[2]	5.12	--
	09/24/01	<0.10	24[5]	--	262[2]	4.86	--
	12/10/01	<0.10	19	0.10	242[2]	5.05	--
	03/11/02	<0.10	31	0.14	195[2]	4.83	--
	06/04/02	**<0.10**	**27**	**<0.10**	**--**	**5.58**	**169**
U-5	06/30/97	16	ND	ND	160[3]	3.40	--
	09/19/97	0.22	ND	ND	63[3]	0.60	--
	12/12/97	6.7	ND	ND	400[3]	1.75	--

Table 3

Field Measurements and Groundwater Analytical Results

Tosco (Unocal) Service Station #5325
3220 Lakeshore Avenue
Oakland, California

WELL ID	DATE	Ferrous Iron (ppm)	Nitrate as NO3 (ppm)	Phosphate as PO4 (ppm)	Redox Redox (mV)	D.O. Before Purge (mg/L)	ORP (mV)
U-5	03/03/98	18	3.1	ND	345[2]	2.36	--
(cont)	06/15/98	17	ND	ND	333[2]	2.55	--
	09/30/98	17	ND	ND	318[2]	1.93	--
	12/28/98	17	6.6	ND	305[2]	1.64	--
	03/22/99	0.12	ND	2.4	340[3]	1.99	--
	06/09/99	0.23	ND	ND	320[3]	2.10	--
	09/08/99	2.10	ND[1]	ND[1]	335[3]	2.21	--
	12/07/99	0.310	ND[1]	ND[1]	408[3]	2.66	--
	03/13/00	0.33	0.16	ND	[2]111/264[3]	--	--
	06/21/00	0.15	ND[1]	ND[1]	159[2]	3.42	--
	09/27/00	0.33	ND[1]	ND[1]	136[2]	3.85	--
	12/12/00	0.086	ND[1]	ND[1]	122[2]	3.53	--
	03/07/01	1.07	3.02	4.00	141[2]	2.98	--
	06/06/01	ND[4]	ND	1.2	112[2]	2.67	--
	09/24/01	<0.10	0.77[5]	--	146[2]	3.15	--
	12/10/01	3.7	<0.50	2.6	96[2]	2.85	--
	03/11/02	0.10	<0.50	0.52	108[2]	3.15	--
	06/04/02	**<0.25**	**<0.50**	**<0.10**	--	**3.46**	**118**
U-6	06/30/97	88	0.80	ND	190[3]	0.30	--
	09/19/97	2.9	1.80	ND	ND[3]	0.60	--
	12/12/97	51	ND	ND	380[3]	2.70	--
	03/03/98	60	3.5	ND	327[2]	2.18	--
	06/15/98	590	4.8	ND	315[2]	2.48	--
	09/30/98	33	ND	ND	345[2]	3.06	--
	12/28/98	83	7.2	ND	297[2]	3.42	--
	03/22/99	2.1	ND	0.98	330[3]	3.88	--
	06/09/99	0.47	0.20	ND	320[3]	3.29	--
	09/08/99	0.140	5.59	ND[1]	305[3]	3.12	--
	12/07/99	0.260	ND[1]	ND[1]	443[3]	3.44	--
	03/13/00	0.79	0.26	ND	[2]68/222[3]	--	--
	06/21/00	1.9	ND[1]	ND[1]	159[2]	3.27	--
	09/27/00	2.6	ND[1]	ND[1]	170[2]	3.49	--
	12/12/00	ND	2.7	ND[1]	128[2]	3.06	--
	03/07/01	2.52	3.11	37.0	117[2]	2.85	--
	06/06/01	0.47[4]	0.15	0.70	97[2]	2.46	--
	09/24/01	<0.10	0.58[5]	--	123[2]	3.10	--
	12/10/01	0.99	0.50	2.0	112[2]	2.57	--
	03/11/02	1.2	<0.50	0.089	128[2]	3.03	--
	06/04/02	**<0.10**	**<0.50**	**<1.0**	--	**2.84**	**97**

Table 3

Field Measurements and Groundwater Analytical Results

Tosco (Unocal) Service Station #5325
3220 Lakeshore Avenue
Oakland, California

EXPLANATIONS:

Groundwater analytical results prior to March 3, 1998, were compiled from reports prepared by MPDS Services, Inc.

D.O. = Dissolved Oxygen
(ppm) = Parts per million
ND = Not Detected
(mV) = millivolts
(mg/L) = milligrams per liter
-- = Not Measured/Not Analyzed

1 Detection limit raised. Refer to analytical reports.

2 Field measurement.

3 Analyzed by laboratory.

4 Due to the transfer of samples from one laboratory to another laboratory; the sample was received beyond the EPA recommended holding time.

5 Laboratory report indicates the sample was analyzed beyond the EPA recommended holding time.

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 Phillips 66 Company, the purge water and decontamination water generated during sampling activities is transported to Phillips 66 - San Francisco Refinery, located in Rodeo, California.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 5325 Job#: 180061

Address: 3220 Lakeshore Ave Date: 6-4-02

City: Oakland, CA Sampler: Joe

Well ID O-1 Well Condition: O.K

Well Diameter 3 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)

Total Depth 19.67 ft.

Depth to Water 8.32 ft.

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

11.35 X VF 0.38 = 4.31 X 3 (case volume) = Estimated Purge Volume: 13 (gal.)

Purge Equipment: Disposable Bailer / Bailer / Stack / Suction / Grundfos / Other:

Sampling Equipment: Disposable Bailer / Bailer / Pressure Bailer / Grab Sample / Other:

Starting Time: 1:30 Weather Conditions: clear/hot

Sampling Time: 1:55 p.m (1355) Water Color: clear Odor: yes

Purging Flow Rate: 1 gpm. Sediment Description:

Did well de-water? If yes; Time: Volume: (gal.)

Time	Volume (gal.)	pH	Conductivity (mmhos/cm)	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
1:38	4	6.76	1.97	72.7	1.88	117	
1:41	8.5	6.85	1.58	73.6			
1:44	13	6.81	1.61	73.9			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
O-1	3 VOA	Y	HCL	Seq.	TPHG, BTEX, MTBE
	1 Amber	"	—	"	Ferrous Iron
	1 poly	"	—	"	Nitrate, phosphate

COMMENTS: No skimmer found in well.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 5325 Job#: 180061

Address: 3220 Lakeshore Ave. Date: 6-4-02

City: Oakland, CA. Sampler: Joe

Well ID: O-2 Well Condition: O.K

Well Diameter: 3 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)

Total Depth: 19.61 ft.

Depth to Water: 7.18 ft.

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

12.43 X VF 0.38 = 3.73 X 3 (case volume) = Estimated Purge Volume: 11.5 (gal.)

Purge Equipment: Disposable Bailer / Bailer / Stack / ~~Suction~~ / ~~Grundfos~~ / Other:

Sampling Equipment: ~~Disposable Bailer~~ / Bailer / Pressure Bailer / Grab Sample / Other:

Starting Time: 1:00 Weather Conditions: clear/hot

Sampling Time: 1:22 p.m. (1322) Water Color: clear Odor: Some

Purging Flow Rate: 1.5 gpm Sediment Description:

Did well de-water? If yes; Time: Volume: (gal.)

Time	Volume (gal.)	pH	Conductivity (mS) µmhos/cm	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
1:08	4	7.21	5.90	73.6	3.14	144	
1:10	8	7.20	5.82	73.2			
1:13	11.5	7.15	5.77	72.9			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
O-2	3 VOA	Y	HCL	Seq.	TPHG, BTEX, MTBE
	1 Amber	"	—	"	Ferrous Iron
	1 poly	"	—	"	Nitrate, phosphate

COMMENTS:

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 5325 Job#: 180061

Address: 3220 Lakeshore Ave Date: 6-4-02

City: Oakland, CA. Sampler: Joe

Well ID: U-3 Well Condition: O.K

Well Diameter: 3 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)

Total Depth: 19.35 ft.

Depth to Water: 10.58 ft.

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

8.77 X VF 0.38 = 3.33 X 3 (case volume) = Estimated Purge Volume: 10 (gal.)

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

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

Starting Time: 10:55 Weather Conditions: clear/hot

Sampling Time: 11:28Am (1128) Water Color: clear Odor: none

Purging Flow Rate: 1.2 gpm Sediment Description:

Did well de-water? If yes; Time: Volume: (gal.)

Time	Volume (gal.)	pH	Conductivity (mmhos/cm)	Temperature (F)	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
11:07	3.5	8.10	10.12	71.9	5.79	151	
11:10	7.5	7.66	10.32	72.5			
11:13	10	7.68	10.27	52.5			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
U-3	3 VOA	Y	HCL	Seq.	TPHG, BTEX, MTBE
	1 Amber	"	—	"	Ferrous Iron
	1 poly	"	—	"	Nitrate, phosphate

COMMENTS:

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 5325 Job#: 180061

Address: 3220 Lakeshore Ave Date: 6-4-02

City: Oakland, CA. Sampler: Joe

Well ID: O-4 Well Condition: O.K

Well Diameter: 4 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)

Total Depth: 20.17 ft.

Depth to Water: 7.58 ft.

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

12.59 X VF 0.66 = 8.31 X 3 (case volume) = Estimated Purge Volume: 25 (gal.)

Purge Equipment: Disposable Bailer; ~~Bailer~~; ~~Stack~~; ~~Suction~~; ~~Grundfos~~; Other:

Sampling Equipment: Disposable Bailer; ~~Bailer~~; Pressure Bailer; Grab Sample; Other:

Starting Time: 10:17 Weather Conditions: clear/hot

Sampling Time: 10:46 Am (1046) Water Color: clear Odor: none

Purging Flow Rate: 2.5 gpm Sediment Description:

Did well de-water? Time: Volume: (gal.)

Time	Volume (gal.)	pH	Conductivity (mmhos/cm)	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
10:26	8	7.65	9.09	72.2	5.58	169	
10:29	17	7.60	9.44	72.5			
10:32	26	7.53	9.45	72.1			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
O-4	3 VOA	Y	HCL	Seq.	TPHG, BTEX, MTBE
	1 Amber	"	—	"	Ferrous Iron
	1 poly	"	—	"	Nitrate, phosphate

COMMENTS:

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 5325 Job#: 180061

Address: 3220 Lakeshore Ave Date: 6-4-02

City: Oakland, CA Sampler: Joe

Well ID U-5 Well Condition: O.K

Well Diameter 4 in Hydrocarbon Thickness: 0 in Amount Bailed (product/water): 0 (gal.)

Total Depth 20.04 ft

Depth to Water 6.71 ft

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

13.33 X VF 0.66 = 8.80 X 3 (case volume) = Estimated Purge Volume: 26.5 (gal.)

Purge Equipment: Disposable Bailer / Bailer / Stack / Suction / Grundfos / Other:

Sampling Equipment: Disposable Bailer / Bailer / Pressure Bailer / Grab Sample / Other:

Starting Time: 12:22 Weather Conditions: clear/hot

Sampling Time: 12:52 p.m (1252) Water Color: clear Odor: Some

Purging Flow Rate: 2.5 gpm Sediment Description:

Did well de-water? If yes; Time: Volume: (gal.)

Time	Volume (gal.)	pH	Conductivity (mmhos/cm)	Temperature (F)	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
12:30	9	7.50	7.78	73.6	3.46	118	
12:34	18	7.40	7.66	73.2			
12:37	26.5	7.32	7.69	73.5			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
U-5	3 VOA	Y	HCL	Seq.	TPHG, BTEX, MTBE
	1 Amber	"	—	"	Ferrous Iron
	1 poly	"	—	"	Nitrate, phosphate

COMMENTS:

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 5325 Job#: 180061

Address: 3220 Lakeshore Ave. Date: 6-4-02

City: Oakland, CA. Sampler: Joe

Well ID: O-6 Well Condition: O.K

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

Total Depth: 23.75 ft.

Depth to Water: 7.18 ft.

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

16.57 X VF 0.17 = 2.82 X 3 (case volume) = Estimated Purge Volume: 8.5 (gal.)

Purge Equipment: Disposable Bailer / Bailer / Stack / Suction / Grundfos / Other:

Sampling Equipment: Disposable Bailer / Bailer / Pressure Bailer / Grab Sample / Other:

Starting Time: 11:40 Weather Conditions: clear/hot

Sampling Time: 12:10 p.m (1210) Water Color: clear Odor: none

Purging Flow Rate: 1 gpm. Sediment Description:

Did well de-water? If yes; Time: Volume: (gal.)

Time	Volume (gal.)	pH	Conductivity (mmhos/cm)	Temperature (F)	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
11:50	3	7.63	7.07	72.8	2.84	97	
11:52	5	7.52	6.96	733			
11:54	8.5	7.44	7.12	73.6			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
O-6	3 VOA	Y	HCL	Seq.	TPHG, BTEX, MTBE
	1 Amber	"	—	"	Ferrous Iron
	1 poly	"	—	"	Nitrate, phosphate

COMMENTS:

GLOBAL ID# T0600101463

Chain-of-Custody-Record

TOSCO

Tosco Marketing Company
2000 Crow Canyon Pl., Ste. 200
San Ramon, California 94583

Facility Number: TOSCO (UNOCAL) SS #5325
Facility Address: 3220 Lakeshore Ave., Oakland, CA
Consultant Project Number: 180061.85
Consultant Name: Gettler-Ryan Inc. (G-R Inc.)
Address: 6747 SIERRA COURT, SUITE J, DUBLIN, CA 94568
Project Contact (Name): Deanna L. Harding
(Phone): (925) 551-7555 (Fax Number): 925-551-7899

Contact (Name): MR. Dave DeWitt
(Phone): 925-277-2384
Laboratory Name: Sequoia Analytical
Laboratory Release Number:
Samples Collected by (Name): JOE A. JEMIAN
Collection Date: 6-4-02
Signature:

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	Lead (Yes or No)	Analyses To Be Performed: TPH Gas + BTEX + MTBE (8015)	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 (TLC or AA)	Nitrate Phosphate	Ferrous Iron	MLF 0107		
TB-LB SIA		1 VOA	W	G	—	HCL	Y	✓												01
U-1		3 VOA 1 amb 1 pint	/	/	1355	/	/	✓								✓	✓			02
U-2		"	/	/	1322	/	/	✓								✓	✓			03
U-3		"	/	/	1128	/	/	✓								✓	✓			04
U-4		"	/	/	1046	/	/	✓								✓	✓			05
U-5		"	/	/	1252	/	/	✓								✓	✓			06
U-6		"	/	/	1210	/	/	✓								✓	✓			07

SIA DO NOT BILL TB-LB ANALYSIS

RUN 8 OXY'S BY 8260 ON ALL 8020 MTBE HITS.

8 Oxy's – MTBE, TBA, DIPE, ETBE TAME, 1,2DCA EDB, Ethanol

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	G-R Inc.	6-4-02 1545			6/4/02 1545
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
		6/4/02		SEQ	6/4/02 1717
By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time
	SEQ	6/4/2 1900		SEQ	6/4/02 1900

Turn Around Time (Circle Choice)
24 Hrs.
48 Hrs.
5 Days
10 Days
As Contracted

Sequoia
Analytical

885 Jarvis Dr
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

21 June, 2002

Deanna Harding
Gettler Ryan/Geostrategies - Tosco/Unocal
6747 Sierra Ct, Suite J
Dublin, CA 94568

RE: #5325, Oakland
Sequoia Work Order: MLF0107

Enclosed are the results of analyses for samples received by the laboratory on 06/04/02 19:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

James Hartley
Project Manager

CA ELAP Certificate #1210

Sequoia Analytical

885 Jarvis Dr
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

Gettler Ryan/Geostrategies - Tosco/Unocal	Project: #5325, Oakland	
6747 Sierra Ct, Suite J	Project Number: 3220 Lakeshore Ave.	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	06/21/02 13:46

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
QA	MLF0107-01	Water	06/04/02 00:00	06/04/02 19:00
U-1	MLF0107-02	Water	06/04/02 13:55	06/04/02 19:00
U-2	MLF0107-03	Water	06/04/02 13:22	06/04/02 19:00
U-3	MLF0107-04	Water	06/04/02 11:28	06/04/02 19:00
U-4	MLF0107-05	Water	06/04/02 10:46	06/04/02 19:00
U-5	MLF0107-06	Water	06/04/02 12:52	06/04/02 19:00
U-6	MLF0107-07	Water	06/04/02 12:10	06/04/02 19:00

Due to a laboratory oversight, the 8260 oxygenates were not run within the recommended hold time. As per Dave Dewitt, the samples were not tested past hold time.

Sequoia Analytical - Morgan Hill

James Hartley, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Sequoia Analytical

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6747 Sierra Ct, Suite J	Project Number: 3220 Lakeshore Ave.	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	06/21/02 13:46

Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEXM by EPA 8021B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
QA (MLF0107-01) Water Sampled: 06/04/02 00:00 Received: 06/04/02 19:00									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2F13002	06/13/02	06/13/02	8015Bm/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*113 %*	*70-130*		"	"	"	"	
U-1 (MLF0107-02) Water Sampled: 06/04/02 13:55 Received: 06/04/02 19:00									
Gasoline Range Organics (C6-C10)	**4600**	1000	ug/l	20	2F17007	06/17/02	06/17/02	8015Bm/8021B	P-01
Benzene	**31**	10	"	"	"	"	"	"	
Toluene	ND	10	"	"	"	"	"	"	
Ethylbenzene	**240**	10	"	"	"	"	"	"	
Xylenes (total)	**180**	10	"	"	"	"	"	"	
Methyl tert-butyl ether	**6500**	50	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*92.0 %*	*70-130*		"	"	"	"	
U-2 (MLF0107-03) Water Sampled: 06/04/02 13:22 Received: 06/04/02 19:00									
Gasoline Range Organics (C6-C10)	**7700**	2500	ug/l	50	2F17007	06/17/02	06/17/02	8015Bm/8021B	P-01
Benzene	**32**	25	"	"	"	"	"	"	
Toluene	ND	25	"	"	"	"	"	"	
Ethylbenzene	**33**	25	"	"	"	"	"	"	
Xylenes (total)	**48**	25	"	"	"	"	"	"	
Methyl tert-butyl ether	**14000**	120	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*95.9 %*	*70-130*		"	"	"	"	

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6747 Sierra Ct, Suite J	Project Number: 3220 Lakeshore Ave.	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	06/21/02 13:46

Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEXM by EPA 8021B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
U-3 (MLF0107-04) Water Sampled: 06/04/02 11:28 Received: 06/04/02 19:00									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2F13002	06/13/02	06/13/02	8015Bm/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*105 %*	*70-130*		"	"	"	"	
U-4 (MLF0107-05) Water Sampled: 06/04/02 10:46 Received: 06/04/02 19:00									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2F13002	06/13/02	06/13/02	8015Bm/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*93.6 %*	*70-130*		"	"	"	"	
U-5 (MLF0107-06) Water Sampled: 06/04/02 12:52 Received: 06/04/02 19:00									
Gasoline Range Organics (C6-C10)	**170**	50	ug/l	1	2F17007	06/17/02	06/17/02	8015Bm/8021B	P-03
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	**0.77**	0.50	"	"	"	"	"	"	
Ethylbenzene	**0.87**	0.50	"	"	"	"	"	"	
Xylenes (total)	**0.69**	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**29**	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*117 %*	*70-130*		"	"	"	"	

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6747 Sierra Ct, Suite J	Project Number: 3220 Lakeshore Ave.	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	06/21/02 13:46

Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEXM by EPA 8021B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
U-6 (MLF0107-07) Water Sampled: 06/04/02 12:10 Received: 06/04/02 19:00									
Gasoline Range Organics (C6-C10)	**250**	100	ug/l	2	2F18003	06/18/02	06/18/02	8015Bm/8021B	P-03
Benzene	ND	1.0	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
Methyl tert-butyl ether	**470**	5.0	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*88.3 %*	*70-130*		"	"	"	"	

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6747 Sierra Ct, Suite J	Project Number: 3220 Lakeshore Ave.	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	06/21/02 13:46

Ferrous Iron by Hach method 8146/1;10 Phenanthroline Method

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
U-1 (MLF0107-02) Water Sampled: 06/04/02 13:55 Received: 06/04/02 19:00									
Ferrous Iron	ND	0.50	mg/l	5	2F13007	06/05/02	06/05/02	Hach Co. 8146	
U-2 (MLF0107-03) Water Sampled: 06/04/02 13:22 Received: 06/04/02 19:00									
Ferrous Iron	ND	0.10	mg/l	1	2F13007	06/05/02	06/05/02	Hach Co. 8146	
U-3 (MLF0107-04) Water Sampled: 06/04/02 11:28 Received: 06/04/02 19:00									
Ferrous Iron	ND	0.10	mg/l	1	2F13007	06/05/02	06/05/02	Hach Co. 8146	
U-4 (MLF0107-05) Water Sampled: 06/04/02 10:46 Received: 06/04/02 19:00									
Ferrous Iron	ND	0.10	mg/l	1	2F13007	06/05/02	06/05/02	Hach Co. 8146	
U-5 (MLF0107-06) Water Sampled: 06/04/02 12:52 Received: 06/04/02 19:00									
Ferrous Iron	ND	0.25	mg/l	2.5	2F13007	06/05/02	06/05/02	Hach Co. 8146	
U-6 (MLF0107-07) Water Sampled: 06/04/02 12:10 Received: 06/04/02 19:00									
Ferrous Iron	ND	0.10	mg/l	1	2F13007	06/05/02	06/05/02	Hach Co. 8146	

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Dublin CA, 94568	Project Manager: Deanna Harding	06/21/02 13:46

Anions by EPA Method 300.0

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
U-1 (MLF0107-02) Water Sampled: 06/04/02 13:55 Received: 06/04/02 19:00									
Nitrate as NO3	ND	0.50	mg/l	1	2F07025	06/04/02	06/05/02	EPA 300.0	
Phosphate (Ortho)	ND	0.10	"	"	"	"	"	"	
U-2 (MLF0107-03) Water Sampled: 06/04/02 13:22 Received: 06/04/02 19:00									
Nitrate as NO3	ND	0.50	mg/l	1	2F07025	06/04/02	06/05/02	EPA 300.0	
Phosphate (Ortho)	ND	0.10	"	"	"	"	"	"	
U-3 (MLF0107-04) Water Sampled: 06/04/02 11:28 Received: 06/04/02 19:00									
Nitrate as NO3	**18**	5.0	mg/l	10	2F07025	06/04/02	06/05/02	EPA 300.0	
Phosphate (Ortho)	ND	0.10	"	1	"	"	"	"	
U-4 (MLF0107-05) Water Sampled: 06/04/02 10:46 Received: 06/04/02 19:00									
Nitrate as NO3	**27**	5.0	mg/l	10	2F07025	06/04/02	06/05/02	EPA 300.0	
Phosphate (Ortho)	ND	0.10	"	1	"	"	"	"	
U-5 (MLF0107-06) Water Sampled: 06/04/02 12:52 Received: 06/04/02 19:00									
Nitrate as NO3	ND	0.50	mg/l	1	2F07025	06/04/02	06/05/02	EPA 300.0	
Phosphate (Ortho)	ND	0.10	"	"	"	"	"	"	
U-6 (MLF0107-07) Water Sampled: 06/04/02 12:10 Received: 06/04/02 19:00									
Nitrate as NO3	ND	0.50	mg/l	1	2F07025	06/04/02	06/05/02	EPA 300.0	
Phosphate (Ortho)	ND	0.10	"	"	"	"	"	"	

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Dublin CA, 94568	Project Manager: Deanna Harding	06/21/02 13:46

Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEXM by EPA 8021B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2F13002 - EPA 5030B [P/T]										
Blank (2F13002-BLK1)				Prepared & Analyzed: 06/13/02						
Gasoline Range Organics (C6-C10)	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	2.5	"							
Surrogate: a,a,a-Trifluorotoluene	*9.32*		"	*10.0*		*93.2*	*70-130*			
LCS (2F13002-BS1)				Prepared & Analyzed: 06/13/02						
Benzene	11.1	0.50	ug/l	10.0		111	70-130			
Toluene	11.1	0.50	"	10.0		111	70-130			
Ethylbenzene	11.3	0.50	"	10.0		113	70-130			
Xylenes (total)	33.7	0.50	"	30.0		112	70-130			
Surrogate: a,a,a-Trifluorotoluene	*11.5*		"	*10.0*		*115*	*70-130*			
LCS (2F13002-BS2)				Prepared & Analyzed: 06/13/02						
Gasoline Range Organics (C6-C10)	253	50	ug/l	250		101	70-130			
Surrogate: a,a,a-Trifluorotoluene	*11.5*		"	*10.0*		*115*	*70-130*			
Matrix Spike (2F13002-MS1)		Source: MLF0107-05		Prepared & Analyzed: 06/13/02						
Gasoline Range Organics (C6-C10)	439	50	ug/l	550	ND	79.8	60-140			
Benzene	9.66	0.50	"	6.60	ND	146	60-140			QM-07
Toluene	42.7	0.50	"	39.7	ND	108	60-140			
Ethylbenzene	10.6	0.50	"	9.20	ND	115	60-140			
Xylenes (total)	52.4	0.50	"	46.1	ND	114	60-140			
Surrogate: a,a,a-Trifluorotoluene	*10.3*		"	*10.0*		*103*	*70-130*			
Matrix Spike Dup (2F13002-MSD1)		Source: MLF0107-05		Prepared & Analyzed: 06/13/02						
Gasoline Range Organics (C6-C10)	430	50	ug/l	550	ND	78.2	60-140	2.07	25	
Benzene	9.35	0.50	"	6.60	ND	142	60-140	3.26	25	QM-07

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6747 Sierra Ct, Suite J	Project Number: 3220 Lakeshore Ave.	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	06/21/02 13:46

Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEXM by EPA 8021B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2F13002 - EPA 5030B [P/T]										
Matrix Spike Dup (2F13002-MSD1)		Source: MLF0107-05		Prepared & Analyzed: 06/13/02						
Toluene	41.7	0.50	ug/l	39.7	ND	105	60-140	2.37	25	
Ethylbenzene	10.1	0.50	"	9.20	ND	110	60-140	4.83	25	
Xylenes (total)	50.9	0.50	"	46.1	ND	110	60-140	2.90	25	
Surrogate: a,a,a-Trifluorotoluene	*9.88*		"	*10.0*		*98.8*	*70-130*			
Batch 2F17007 - EPA 5030B [P/T]										
Blank (2F17007-BLK1)				Prepared & Analyzed: 06/17/02						
Gasoline Range Organics (C6-C10)	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	2.5	"							
Surrogate: a,a,a-Trifluorotoluene	*10.4*		"	*10.0*		*104*	*70-130*			
LCS (2F17007-BS1)				Prepared & Analyzed: 06/17/02						
Benzene	10.1	0.50	ug/l	10.0		101	70-130			
Toluene	10.2	0.50	"	10.0		102	70-130			
Ethylbenzene	9.76	0.50	"	10.0		97.6	70-130			
Xylenes (total)	30.8	0.50	"	30.0		103	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.46*		"	*10.0*		*94.6*	*70-130*			
LCS (2F17007-BS2)				Prepared & Analyzed: 06/17/02						
Gasoline Range Organics (C6-C10)	238	50	ug/l	250		95.2	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.82*		"	*10.0*		*98.2*	*70-130*			

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6747 Sierra Ct, Suite J	Project Number: 3220 Lakeshore Ave.	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	06/21/02 13:46

Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEXM by EPA 8021B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2F17007 - EPA 5030B [P/T]										
Matrix Spike (2F17007-MS1)		Source: MLF0221-04		Prepared: 06/17/02 Analyzed: 06/18/02						
Gasoline Range Organics (C6-C10)	485	50	ug/l	550	ND	88.2	60-140			
Benzene	9.25	0.50	"	6.60	ND	140	60-140			
Toluene	47.2	0.50	"	39.7	ND	119	60-140			
Ethylbenzene	11.4	0.50	"	9.20	ND	123	60-140			
Xylenes (total)	57.9	0.50	"	46.1	ND	126	60-140			
Surrogate: a,a,a-Trifluorotoluene	*13.8*		"	*10.0*		*138*	*70-130*			*QM-07*
Matrix Spike Dup (2F17007-MSD1)		Source: MLF0221-04		Prepared: 06/17/02 Analyzed: 06/18/02						
Gasoline Range Organics (C6-C10)	477	50	ug/l	550	ND	86.7	60-140	1.66	25	
Benzene	8.91	0.50	"	6.60	ND	135	60-140	3.74	25	
Toluene	45.8	0.50	"	39.7	ND	115	60-140	3.01	25	
Ethylbenzene	11.3	0.50	"	9.20	ND	122	60-140	0.881	25	
Xylenes (total)	59.0	0.50	"	46.1	ND	128	60-140	1.88	25	
Surrogate: a,a,a-Trifluorotoluene	*11.7*		"	*10.0*		*117*	*70-130*			
Batch 2F18003 - EPA 5030B [P/T]										
Blank (2F18003-BLK1)				Prepared & Analyzed: 06/18/02						
Gasoline Range Organics (C6-C10)	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	2.5	"							
Surrogate: a,a,a-Trifluorotoluene	*9.02*		"	*10.0*		*90.2*	*70-130*			
LCS (2F18003-BS1)				Prepared & Analyzed: 06/18/02						
Benzene	9.09	0.50	ug/l	10.0		90.9	70-130			
Toluene	9.30	0.50	"	10.0		93.0	70-130			
Ethylbenzene	10.1	0.50	"	10.0		101	70-130			
Xylenes (total)	28.6	0.50	"	30.0		95.3	70-130			

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6747 Sierra Ct, Suite J	Project Number: 3220 Lakeshore Ave.	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	06/21/02 13:46

Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEXM by EPA 8021B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2F18003 - EPA 5030B [P/T]										
LCS (2F18003-BS1)				Prepared & Analyzed: 06/18/02						
Surrogate: a,a,a-Trifluorotoluene	*9.02*		*ug/l*	*10.0*		*90.2*	*70-130*			
LCS (2F18003-BS2)				Prepared & Analyzed: 06/18/02						
Gasoline Range Organics (C6-C10)	227	50	ug/l	250		90.8	70-130			
Surrogate: a,a,a-Trifluorotoluene	*10.1*		"	*10.0*		*101*	*70-130*			
Matrix Spike (2F18003-MS1)		**Source: MLF0334-03**		Prepared & Analyzed: 06/18/02						
Gasoline Range Organics (C6-C10)	528	50	ug/l	550	ND	96.0	60-140			
Benzene	8.33	0.50	"	6.60	ND	126	60-140			
Toluene	38.6	0.50	"	39.7	ND	97.2	60-140			
Ethylbenzene	10.5	0.50	"	9.20	ND	114	60-140			
Xylenes (total)	53.6	0.50	"	46.1	ND	116	60-140			
Surrogate: a,a,a-Trifluorotoluene	*11.7*		"	*10.0*		*117*	*70-130*			
Matrix Spike Dup (2F18003-MSD1)		**Source: MLF0334-03**		Prepared & Analyzed: 06/18/02						
Gasoline Range Organics (C6-C10)	493	50	ug/l	550	ND	89.6	60-140	6.86	25	
Benzene	7.93	0.50	"	6.60	ND	120	60-140	4.92	25	
Toluene	40.3	0.50	"	39.7	ND	102	60-140	4.31	25	
Ethylbenzene	10.5	0.50	"	9.20	ND	114	60-140	0.00	25	
Xylenes (total)	53.8	0.50	"	46.1	ND	117	60-140	0.372	25	
Surrogate: a,a,a-Trifluorotoluene	*9.31*		"	*10.0*		*93.1*	*70-130*			

Sequoia Analytical

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Gettler Ryan/Geostrategies - Tosco/Unocal	Project: #5325, Oakland	
6747 Sierra Ct, Suite J	Project Number: 3220 Lakeshore Ave.	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	06/21/02 13:46

Ferrous Iron by Hach method 8146/1;10 Phenanthroline Method - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2F13007 - General Preparation										
Blank (2F13007-BLK1)				Prepared & Analyzed: 06/05/02						
Ferrous Iron	ND	0.10	mg/l							
LCS (2F13007-BS1)				Prepared & Analyzed: 06/05/02						
Ferrous Iron	0.394	0.10	mg/l	0.400		98.5	80-120			
Matrix Spike (2F13007-MS1)		Source: MLF0107-05		Prepared & Analyzed: 06/05/02						
Ferrous Iron	0.442	0.10	mg/l	0.400	ND	110	80-120			
Matrix Spike Dup (2F13007-MSD1)		Source: MLF0107-05		Prepared & Analyzed: 06/05/02						
Ferrous Iron	0.448	0.10	mg/l	0.400	ND	112	80-120	1.35	20	

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Dublin CA, 94568	Project Manager: Deanna Harding	06/21/02 13:46

Anions by EPA Method 300.0 - Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2F07025 - General Preparation										
Blank (2F07025-BLK1)				Prepared: 06/04/02 Analyzed: 06/05/02						
Nitrate as NO3	ND	0.50	mg/l							
Phosphate (Ortho)	ND	0.10	"							
LCS (2F07025-BS1)				Prepared: 06/04/02 Analyzed: 06/05/02						
Nitrate as NO3	9.78	0.50	mg/l	10.0		97.8	90-110			
Phosphate (Ortho)	5.06	0.10	"	5.00		101	80-120			
Matrix Spike (2F07025-MS1)	Source: MLF0107-05			Prepared: 06/04/02 Analyzed: 06/05/02						
Nitrate as NO3	963	50	mg/l	1000	ND	93.6	80-120			
Phosphate (Ortho)	475	10	"	500	ND	95.0	75-125			
Matrix Spike Dup (2F07025-MSD1)	Source: MLF0107-05			Prepared: 06/04/02 Analyzed: 06/05/02						
Nitrate as NO3	986	50	mg/l	1000	ND	95.9	80-120	2.36	20	
Phosphate (Ortho)	483	10	"	500	ND	96.6	75-125	1.67	20	

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Dublin CA, 94568	Project Manager: Deanna Harding	06/21/02 13:46

Notes and Definitions

P-01	Chromatogram Pattern: Gasoline C6-C10
P-03	Chromatogram Pattern: Unidentified Hydrocarbons C6-C10
QM-07	The spike recovery was outside control limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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