RO231
Barney

GETTLER-RYAN INC.

TRANSMITTAL

February 19, 2002
G-R #180066

TO: Mr. David B. De Witt
Phillips 66 Company
2000 Crow Canyon Place, Suite 400
San Ramon, California 94586

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 #0752
800 Harrison Street
Oakland, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	February 13, 2002	Groundwater Monitoring and Sampling Report First Quarter - Event of January 14, 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 ***March 5, 2002***, this report will be distributed to the following:

cc: Ms. Jennifer Eberle, Alameda County Health Care Services, 1131 Harbor Bay Parkway, Alameda, CA 94502

Enclosure

trans/0752-DBD

GETTLER-RYAN INC.

February 13, 2002
G-R Job #180066

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

RE: First Quarter Event of January 14, 2002
Groundwater Monitoring & Sampling Report
Tosco (Unocal) Service Station #0752
800 Harrison Street
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 the wells. Static water level data and groundwater elevations are summarized in Table 1. Dissolved Oxygen Concentrations are summarized in Table 5. A Potentiometric Map is included as Figure 1.

Groundwater samples were collected from the monitoring wells as specified by G-R Standard Operating Procedure - Groundwater Sampling (attached). The field data sheets are also attached. The samples were analyzed by Sequoia Analytical. Analytical results are summarized in Tables 1, 2, 3, and 4. A Concentration Map is included as Figure 2. The chain of custody document and laboratory analytical reports are also attached.

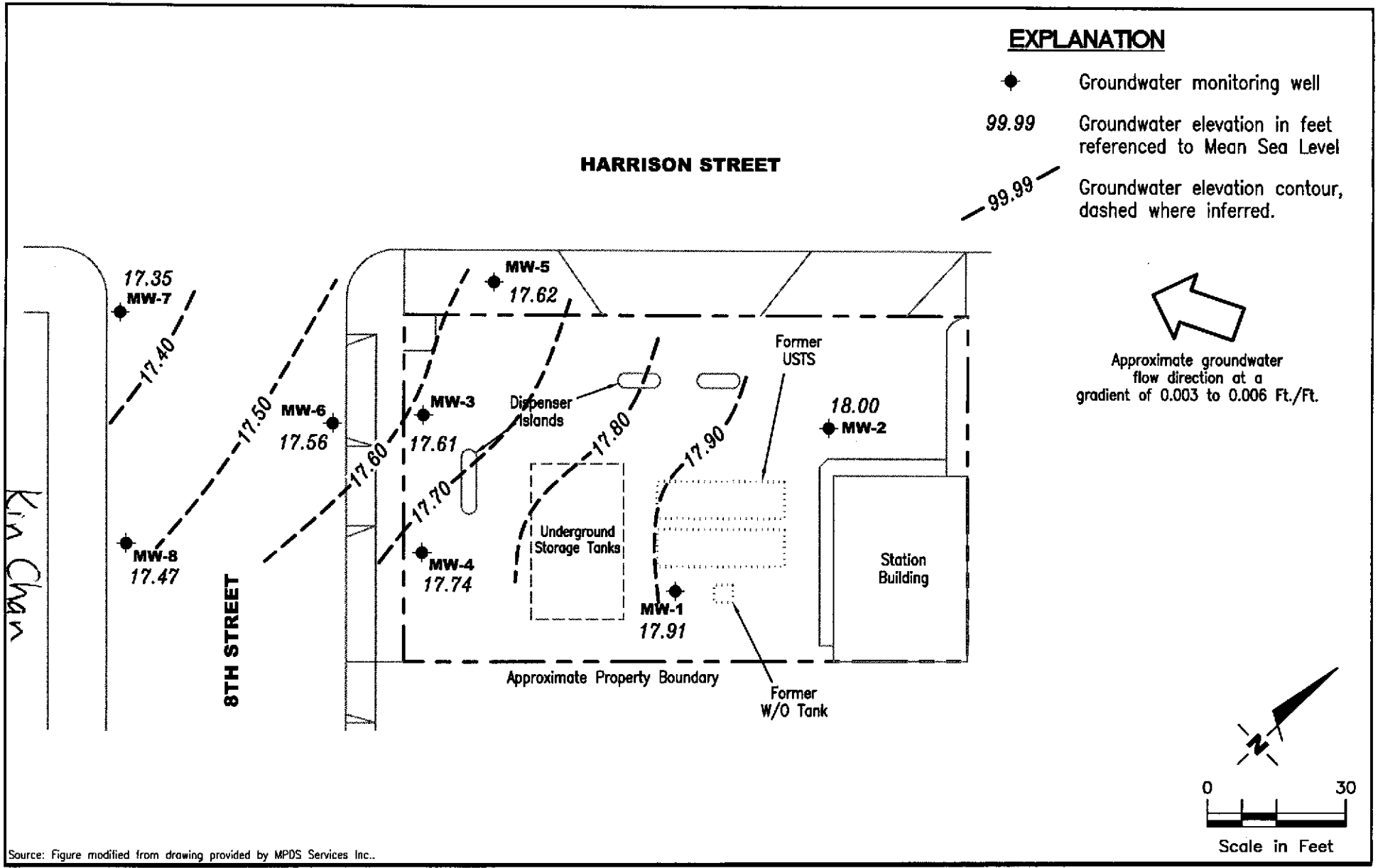
Sincerely,

Deanna L. Harding
Project Coordinator

Hagop Kevork
P.E. No. C55734

REGISTERED PROFESSIONAL ENGINEER
HAGOP KEVORK
No. C 55734
Exp. 12/31/04
CIVIL
STATE OF CALIFORNIA

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: Groundwater Analytical Results
Table 4: Groundwater Analytical Results
Table 5: Dissolved Oxygen Concentrations
Attachments: Standard Operating Procedure - Groundwater Sampling
Field Data Sheets
0752.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 #0752
800 Harrison Street
Oakland, California

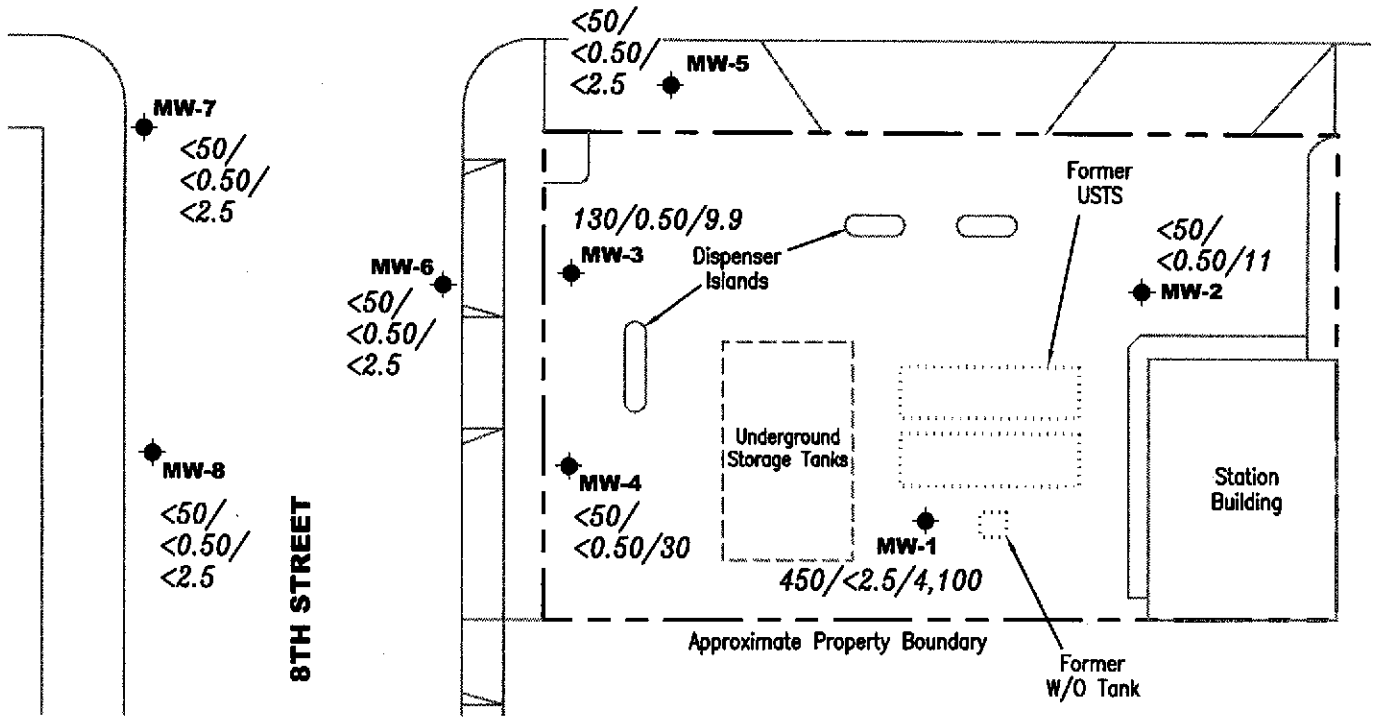
FIGURE
1

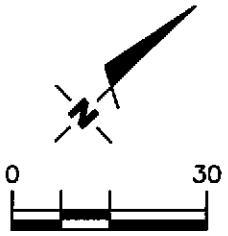
PROJECT NUMBER	REVIEWED BY	DATE	REVISED DATE
180066		January 14, 2002	

FILE NAME: P:\Enviro\TOSCO\0752\Q02-0752.dwg | Layout Tab: Pat1

EXPLANATION

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





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

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Dublin, CA 94568 (925) 551-7555

CONCENTRATION MAP
Tosco (Unocal) Service Station #0752
800 Harrison Street
Oakland, California

FIGURE
2

PROJECT NUMBER	REVIEWED BY	DATE	REVISED DATE
180066		[redacted]	

FILE NAME: P:\Enviro\TOSCO\0752\002-0752.dwg | Layout Tab: Con1

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #0752
800 Harrison Street
Oakland, California

WELL ID/ TOC*		DATE	DTW (ft.)	GWE (msl)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	Chloro-form** (ppb)	PCE** (ppb)	TCE** (ppb)
MW-1		06/05/91	--	--	ND	47	ND	ND	ND	ND	--	7.8	2.9	1.3
		09/30/91	--	--	ND	ND	ND	ND	ND	ND	--	--	--	--
		12/30/91	--	--	ND	ND	ND	ND	ND	ND	--	6.4	2.1	0.9
		04/02/92	--	--	94	ND	ND	ND	ND	ND	--	7.1	2.6	1.4
		06/30/92	--	--	120	ND	ND	ND	ND	ND	--	9.5	2.2	1.3
		09/15/92	--	--	ND	76	1.0	ND	ND	ND	--	12	2.2	1.3
34.94		12/21/92	21.17	13.77	ND	95	0.69	ND	ND	1.0	--	12	1.4	0.83
		04/28/93[1]	--	--	470[2]	920	3.1	2.3	1.2	9.7	--	12	0.89	0.85
		07/23/93	20.13	14.81	ND	ND	0.5	0.66	ND	ND	--	16	1.3	0.91
34.69		10/05/93	20.30	14.39	57[3]	92[5]	1.5	ND	ND	0.72	--	13	1.3	0.66
		01/03/94[6]	20.52	14.17	ND	ND	ND	ND	ND	ND	--	18	1.4	0.93
		04/02/94	20.16	14.53	ND	ND	ND	ND	ND	ND	--	15	1.1	0.68
		07/05/94	19.27	15.42	--	250	4.8	13	1.2	7.3	--	--	--	--
		10/06/94	20.87	13.82	--	540	1.4	ND	0.66	.11	--	--	--	--
		01/02/95	19.67	15.02	--	140	ND	ND	ND	ND	--	--	--	--
		04/03/95	17.61	17.08	--	580	3.6	0.75	ND	4.0	--	--	--	--
		07/14/95	18.58	16.11	--	260	2.1	ND	ND	1.2	--	--	--	--
		10/10/95	19.60	15.09	--	220	2.0	ND	25	5.6	29	--	--	--
		01/03/96	19.69	15.00	--	190	2.4	ND	0.71	1.2	--	--	--	--
		04/10/96	17.65	17.04	--	540	8.9	1.7	1.5	7.4	50	--	--	--
		07/09/96	18.52	16.17	--	490	3.0	1.4	1.3	2.5	150	--	--	--
		01/24/97	17.72	16.97	--	760	27	0.89	5.2	10	510	--	--	--
		07/23/97	19.42	15.27	--	ND	ND	ND	ND	ND	550	--	--	--
	NP	01/26/98	17.46	17.23	--	1,800[8]	ND[9]	ND[9]	ND[9]	ND[9]	4,800	--	--	--
	NP	07/03/98	18.61	16.08	--	ND[9]	ND[9]	ND[9]	ND[9]	ND[9]	1,800	--	--	--
		01/14/99	18.92	15.77	--	83[10]	ND	ND	ND	ND	230	--	--	--
		07/15/99	17.84	16.85	--	110	ND	ND	ND	1.0	290	--	--	--
		01/07/00	19.13	15.56	--	ND	ND	ND	ND	ND	260	--	--	--
		07/19/00	20.27	14.42	--	ND	ND	ND	ND	ND	648	--	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #0752
800 Harrison Street
Oakland, California

WELL ID/ TOC*	DATE	DTW (ft.)	GWE (msl)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	Chloro-form** (ppb)	PCE** (ppb)	TCE** (ppb)
MW-1	01/02/01	20.04	14.65	--	ND	ND	ND	ND	ND	119	--	--	--
(cont)	05/23/01	18.27	16.42	--	84[12]	ND	ND	ND	ND	760	--	--	--
	07/30/01	18.56	16.13	--	<50	<0.50	<0.50	<0.50	<0.50	350	--	--	--
	10/15/01	18.72	15.97	--	96[12]	<0.50	<0.50	<0.50	<0.50	160	--	--	--
	01/14/02	**16.78**	**17.91**	--	**450[15]**	**<2.5**	**<2.5**	**<2.5**	**3.3**	**4,100**	--	--	--
MW-2	06/05/91	--	--	--	49	ND	ND	ND	ND	--	--	--	--
	09/30/91	--	--	--	130	18	0.53	14	9.6	--	--	--	--
	12/30/91	--	--	--	91	16	0.89	11	1.9	--	--	--	--
	04/02/92	--	--	--	88	12	0.32	6.3	7.2	--	--	--	--
	06/30/92	--	--	--	76	9.3	0.76	4.8	6.9	--	--	--	--
	09/15/92	--	--	--	1,300	91	5.7	80	110	--	--	--	--
34.97	12/21/92	20.85	14.12	--	960	97	3.2	74	96	--	--	--	--
	04/28/93	--	--	--	1,300	76	1.9	130	87	--	--	--	--
	07/23/93	19.81	15.16	--	66	1.8	ND	2.5	2.0	--	--	--	--
34.72	10/05/93	19.95	14.77	--	120	12	ND	2.1	12	--	--	--	--
	01/03/94	20.21	14.51	--	260	25	ND	5.5	26	--	--	--	--
	04/02/94	19.88	14.84	--	ND	0.65	ND	ND	0.99	--	--	--	--
	07/05/94	19.07	15.65	--	160	16	ND	0.73	10	--	--	--	--
	10/06/94	20.55	14.17	--	170	15	ND	1.4	11	--	--	--	--
	01/02/95	19.25	15.47	--	190	27	ND	0.95	11	--	--	--	--
	04/03/95	17.49	17.23	--	2,400	65	6.6	19	63	--	--	--	--
	07/14/95	18.30	16.42	--	750	270	ND	ND	13	--	--	--	--
	10/10/95	19.25	15.47	--	50	1.6	ND	ND	ND	200	--	--	--
	01/03/96	19.40	15.32	--	ND	ND	ND	ND	ND	--	--	--	--
	04/10/96	17.35	17.37	--	300	42	ND	2.4	9.0	620	--	--	--
	07/09/96	18.22	16.50	--	760	230	ND	1.3	2.4	1,500	--	--	--
	01/24/97	17.59	17.13	--	2,900	400	350	190	720	1,300	--	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #0752
800 Harrison Street
Oakland, California

WELL ID/ TOC*		DATE	DTW (ft.)	GWE (msl)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	Chloro-form** (ppb)	PCE** (ppb)	TCE** (ppb)
MW-2		07/23/97	19.13	15.59	--	ND	ND	ND	ND	ND	65	--	--	--
(cont)	NP	01/26/98	17.12	17.60	--	ND	ND	ND	ND	0.58	13	--	--	--
	NP	07/03/98	18.20	16.52	--	140	26	ND	0.95	5.0	330	--	--	--
		01/14/99	18.56	16.16	--	ND	0.54	ND	ND	ND	350	--	--	--
		07/15/99	17.39	17.33	--	ND	0.88	ND	ND	ND	39	--	--	--
		01/07/00	18.78	15.94	--	ND	ND	ND	ND	ND	24	--	--	--
		07/19/00	19.68	15.04	--	ND	1.45	ND	ND	ND	117	--	--	--
		01/02/01	19.73	14.99	--	ND	ND	ND	ND	ND	11.4	--	--	--
		05/23/01	18.16	16.56	--	ND	ND	ND	ND	ND	33	--	--	--
		07/30/01	18.34	16.38	--	<50	<0.50	<0.50	<0.50	<0.50	67	--	--	--
		10/15/01	18.52	16.20	--	<50	<0.50	<0.50	<0.50	<0.50	31	--	--	--
		01/14/02	**16.72**	**18.00**	--	**<50**	**<0.50**	**<0.50**	**<0.50**	**0.56**	**11**	--	--	--
MW-3		06/05/91	--	--	--	5,800	1,200	40	140	97	--	--	--	--
		09/30/91	--	--	--	6,800	1,400	130	290	240	--	--	--	--
		12/30/91	--	--	--	7,200	2,100	690	410	550	--	--	--	--
		04/02/92	--	--	--	8,000	1,400	200	300	310	--	--	--	--
		06/30/92	--	--	--	8,900	1,900	210	430	550	--	--	--	--
		09/15/92	--	--	--	10,000	1,900	330	400	580	--	--	--	--
33.39		12/21/92	20.02	13.37	--	8,500	1,500	150	310	330	--	--	--	--
		04/28/93	--	--	--	2,600	220	7.6	41	27	--	--	--	--
		07/23/93	19.00	14.39	--	4,400	660	26	160	82	--	--	--	--
33.14		10/05/93	19.20	13.94	--	9,200	720	88	140	140	--	--	--	--
		01/03/94	19.40	13.74	--	4,900	830	100	170	150	--	--	--	--
		04/02/94	19.01	14.13	--	6,000	800	30	140	110	--	--	--	--
		07/05/94	18.14	15.00	--	25,000[5]	ND	ND	ND	ND	--	--	--	--
		10/06/94	19.73	13.41	--	49,000[4]	1,300	200	280	300	--	--	--	--
		01/02/95	18.36	14.78	--	480	1.6	ND	1.4	ND	--	--	--	--

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Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #0752
800 Harrison Street
Oakland, California

WELL ID/ TOC*		DATE	DTW (ft.)	GWE (msl)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	Chloro-form** (ppb)	PCE** (ppb)	TCE** (ppb)
MW-3		04/03/95	16.38	16.76	--	8,100[5]	65	ND	ND	ND	--	--	--	--
(cont)		07/14/95	17.49	15.65	--	ND	1,300	ND	ND	ND	--	--	--	--
		10/10/95	18.50	14.64	--	3,100	1,400	36	50	53	190,000	--	--	--
		01/03/96[7]	18.54	14.60	--	ND	2,300	110	150	140	--	--	--	--
		04/10/96	16.40	16.74	--	940	38	33	39	47	69,000	--	--	--
		07/09/96	17.43	15.71	--	ND	2,000	ND	150	160	140,000	--	--	--
		01/24/97	16.57	16.57	--	540	8.0	ND	11	9.9	45	--	--	--
		07/23/97	18.38	14.76	--	7,400	1,900	180	140	340	45,000	--	--	--
	NP	01/26/98	16.22	16.92	--	250	2.2	1.9	0.87	1.9	4.0	--	--	--
	NP	07/03/98	17.46	15.68	--	230	1.8	2.5	1.5	3.4	6.3	--	--	--
		01/14/99	17.73	15.41	--	400[10]	8.2	2.7	0.90	5.9	140	--	--	--
		07/15/99	16.58	16.56	--	290[10]	3.3	3.6	1.7	2.5	~~13~~	--	--	--
		01/07/00	17.84	15.30	--	ND[9]	890	91	100	480	20,000	--	--	--
		07/19/00	18.92	14.22	--	354[12]	3.87	2.61	0.646	ND	~~13.7~~	--	--	--
		01/02/01	19.07	14.07	--	464[12]	ND	3.69	3.91	ND	21.1	--	--	--
		05/23/01	17.12	16.02	--	420[11]	7.6	3.1	3.0	5.1	1,900	--	--	--
		07/30/01	17.38	15.76	--	290[12]	4.6	4.1	<0.50	3.4	23	--	--	--
		10/15/01	17.61	15.53	--	400[12]	<0.50	<0.50	<0.50	<0.50	13	--	--	--
		01/14/02	**15.53**	**17.61**	**--**	**130[16]**	**0.50**	**0.61**	**1.1**	**<0.50**	**9.9**	**--**	**--**	**--**
MW-4		10/19/92	--	--	--	480	0.51	2.1	2.8	6.8	--	--	--	--
33.12		12/21/92	19.73	13.39	--	220[4]	ND	ND	0.97	0.74	--	--	--	--
		04/28/93	--	--	--	ND	ND	ND	ND	ND	--	--	--	--
		07/23/93	18.72	14.40	--	85[4]	ND	ND	ND	ND	--	--	--	--
32.71		10/05/93	18.74	13.97	--	130[5]	ND	ND	ND	ND	--	--	--	--
		01/03/94	18.93	13.78	--	210	ND	ND	0.76	1.6	240	9.0	1.0	ND
		04/02/94	18.53	14.18	--	89	ND	ND	ND	ND	--	--	--	--
		07/05/94	17.67	15.04	--	190[5]	ND	ND	ND	ND	--	--	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #0752

800 Harrison Street

Oakland, California

WELL ID/ TOC*		DATE	DTW (ft.)	GWE (msl)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	Chloro-form** (ppb)	PCE** (ppb)	TCE** (ppb)
MW-4		10/06/94	19.25	13.46	--	170	0.85	ND	ND	0.74	--	--	--	--
(cont)		01/02/95	17.75	14.96	--	ND	ND	ND	ND	ND	--	--	--	--
		04/03/95	15.87	16.84	--	98[5]	ND	ND	ND	ND	--	--	--	--
		07/14/95	17.01	15.70	--	ND	ND	ND	ND	ND	--	--	--	--
		10/10/95	18.03	14.68	--	ND	ND	ND	ND	ND	120	--	--	--
		01/03/96[7]	18.05	14.66	--	ND	ND	ND	ND	ND	--	--	--	--
		04/10/96	16.00	16.71	--	ND	ND	ND	ND	ND	240	--	--	--
		07/09/96	16.96	15.75	--	ND	ND	ND	ND	ND	480	--	--	--
		01/24/97	16.04	16.67	--	ND	ND	ND	ND	ND	270	--	--	--
		07/23/97	17.87	14.84	--	ND	ND	ND	ND	ND	460	--	--	--
	NP	01/26/98	16.05	16.66	--	ND	ND	ND	ND	ND	17	--	--	--
	NP	07/03/98	16.95	15.76	--	ND	ND	ND	ND	ND	3.8	--	--	--
		01/14/99	17.34	15.37	--	ND	ND	ND	ND	ND	4,600	--	--	--
		07/15/99	16.36	16.35	--	ND	ND	ND	ND	ND	ND	--	--	--
		01/07/00	17.81	14.90	--	ND	ND	ND	ND	ND	450	--	--	--
		07/19/00	18.94	13.77	--	ND	ND	ND	ND	ND	ND	--	--	--
		01/02/01	18.85	13.86	--	ND	ND	ND	ND	ND	ND	--	--	--
		05/23/01	16.82	15.89	--	ND	ND	ND	ND	ND	ND	--	--	--
		07/30/01	16.88	15.83	--	<50	<0.50	<0.50	<0.50	<0.50	4.9	--	--	--
		10/15/01	17.08	15.63	--	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--	--
		01/14/02	**14.97**	**17.74**	--	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**30**	--	--	--
MW-5		10/19/92	--	--	--	2,700	61	5.0	100	61	--	--	--	--
33.25		12/21/92	19.75	13.50	--	1,700	51	4.7	83	34	--	--	--	--
		04/28/93	--	--	--	6,700	200	190	250	430	--	--	--	--
		07/23/93	18.74	14.51	--	2,000	122	8.0	68	47	--	--	--	--
32.95		10/05/93	18.83	14.12	--	1,700	70	6.2	54	40	--	--	--	--
		01/03/94	19.05	13.90	--	1,500	44	ND	42	46	--	--	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #0752

800 Harrison Street

Oakland, California

WELL ID/ TOC*		DATE	DTW (ft.)	GWE (msl)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	Chloro-form** (ppb)	PCE** (ppb)	TCE** (ppb)
MW-5		04/02/94	18.68	14.27	--	1,800	46	5.1	38	35	--	--	--	--
(cont)		07/05/94	17.90	15.05	--	2,200	97	8.4	37	36	--	--	--	--
		10/06/94	19.37	13.58	--	1,600	79	5.7	28	22	--	--	--	--
		01/02/95	17.92	15.03	--	1,700	50	8.6	30	28	--	--	--	--
		04/03/95	16.15	16.80	--	5,400[5]	190	240	170	420	--	--	--	--
		07/14/95	17.18	15.77	--	3,800	210	100	130	190	--	--	--	--
		10/10/95	18.15	14.80	--	1,300	92	14	15	39	1,100	--	--	--
		01/03/96[7]	18.20	14.75	--	630	53	4.4	8.3	13	--	--	--	--
		04/10/96	16.05	16.90	--	500	25	18	7.0	20	640	--	--	--
		07/09/96	17.11	15.84	--	1,000	44	20	10	34	150	--	--	--
		01/24/97	16.36	16.59	--	4,000	190	400	160	430	600	--	--	--
		07/23/97	18.08	14.87	--	1,700	200	23	18	45	2,500	--	--	--
	NP	01/26/98	16.27	16.68	--	ND	ND	ND	ND	ND	ND	--	--	--
	NP	07/03/98	17.27	15.68	--	ND	ND	ND	ND	ND	ND	--	--	--
		01/14/99	17.55	15.40	--	330	61	4.1	2.2	2.9	560	--	--	--
		07/15/99	16.41	16.54	--	1,100	170	ND[9]	ND[9]	27	660	--	--	--
		01/07/00	17.85	15.10	--	1,000[11]	180	6.3	ND[9]	14	430	--	--	--
		07/19/00	18.87	14.08	--	2,980[11]	289	57.3	65.3	43.4	976	--	--	--
		10/03/00	18.47	14.48	--	--	--	--	--	--	--/553[13]	--	--	--
		01/02/01	19.01	13.94	--	1,150[11]	87.2	17.8	7.97	9.32	368	--	--	--
		05/23/01	17.38	15.57	--	840[11]	42	10	13	7.1	130	--	--	--
		07/30/01	17.12	15.83	--	1,900[12]	82	24	6.9	13	370	--	--	--
		10/15/01	17.33	15.62	--	26,000[14]	390	230	58	1,300	<500	--	--	--
		01/14/02	**15.33**	**17.62**	**--**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.5**	**--**	**--**	**--**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #0752
800 Harrison Street
Oakland, California

WELL ID/ TOC*		DATE	DTW (ft.)	GWE (msl)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	Chloro-form** (ppb)	PCE** (ppb)	TCE** (ppb)
MW-6		10/19/92	--	--	--	3,900	420	12	60	28	--	--	--	--
32.42		12/21/92	19.17	13.25	--	2,300	370	11	39	15	--	--	--	--
		04/28/93	--	--	--	1,200	54	1.5	11	5.3	--	--	--	--
		07/23/93	18.17	14.25	--	580	19	0.99	3.4	2.7	--	--	--	--
32.16		10/05/93	18.35	13.81	--	1,400	34	ND	5.3	7.3	--	--	--	--
		01/03/94	18.54	13.62	--	1,400	57	ND	8.5	11	--	--	--	--
		04/02/94	18.15	14.01	--	5,300[4]	ND	ND	ND	ND	--	--	--	--
		07/05/94	17.25	14.91	--	ND	ND	ND	ND	ND	--	--	--	--
		10/06/94	18.85	13.31	--	11,000[5]	ND	ND	ND	ND	--	--	--	--
		01/02/95	17.51	14.65	--	550	18	0.92	2.0	1.8	--	--	--	--
		04/03/95	15.48	16.68	--	6,600[5]	ND	ND	ND	ND	--	--	--	--
		07/14/95	16.63	15.53	--	ND	ND	ND	ND	ND	--	--	--	--
		10/10/95	17.68	14.48	--	ND	81	ND	ND	ND	75,000	--	--	--
		01/03/96[7]	17.66	14.50	--	70	9.9	0.58	ND	0.81	--	--	--	--
		04/10/96	15.56	16.60	--	300	25	4.7	0.94	2.7	53,000	--	--	--
		07/09/96	16.59	15.57	--	1,800	410	ND	12	ND	76,000	--	--	--
		01/24/97	15.69	16.47	--	ND	0.80	ND	ND	ND	390	--	--	--
		07/23/97	17.53	14.63	--	5,700	1,100	240	240	700	16,000	--	--	--
	NP	01/26/98	15.44	16.72	--	ND	ND	ND	ND	ND	ND	--	--	--
	NP	07/03/98	16.58	15.58	--	ND	ND	ND	ND	ND	ND	--	--	--
		01/14/99	17.02	15.14	--	ND	ND	ND	ND	ND	14	--	--	--
		07/15/99	15.95	16.21	--	ND	ND	ND	ND	ND	2.8	--	--	--
		01/07/00	16.96	15.20	--	78[11]	24	ND	0.66	17	280	--	--	--
		07/19/00	18.04	14.12	--	ND	ND	1.32	ND	0.974	ND	--	--	--
		01/02/01	18.10	14.06	--	ND	ND	ND	ND	ND	ND	--	--	--
		05/23/01	16.42	15.74	--	ND	ND	ND	ND	ND	ND	--	--	--
		07/30/01	16.49	15.67	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--	--
		10/15/01	16.67	15.49	--	<50	<0.50	0.62	<0.50	<0.50	<5.0	--	--	--
		01/14/02	**14.60**	**17.56**	--	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.5**	--	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #0752

800 Harrison Street

Oakland, California

WELL ID/ TOC*		DATE	DTW (ft.)	GWE (msl)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	Chloro-form** (ppb)	PCE** (ppb)	TCE** (ppb)
MW-7														
32.49		04/28/93	--	--	--	110	2.8	1.3	1.4	1.7	--	--	--	--
		07/23/93	18.60	13.89	--	790	23	3.3	28	5.4	--	--	--	--
32.20		10/05/93	18.76	13.44	--	360	10	1.2	0.91	0.99	--	--	--	--
		01/03/94	18.91	13.29	--	ND	0.93	ND	0.75	1.9	--	--	--	--
		04/02/94	18.50	13.70	--	360	2.0	ND	ND	0.8	--	--	--	--
		07/05/94	17.52	14.68	--	ND	ND	ND	ND	ND	--	--	--	--
		10/06/94	19.25	12.95	--	340	5.6	0.85	ND	1.2	--	--	--	--
		01/02/95	17.67	14.53	--	ND	ND	ND	ND	ND	--	--	--	--
		04/03/95	15.81	16.39	--	570	24	ND	3.4	5.8	--	--	--	--
		07/14/95	17.05	15.15	--	ND	14	ND	ND	ND	--	--	--	--
		10/10/95	18.08	14.12	--	740	170	ND	ND	ND	13,000	--	--	--
		01/03/96[7]	18.02	14.18	--	360	16	1.3	2.7	1.4	--	--	--	--
		04/10/96	15.81	16.39	--	120	4.1	1.5	ND	0.88	3,200	--	--	--
		07/09/96	16.99	15.21	--	ND	ND	ND	ND	ND	3,400	--	--	--
		01/24/97	16.08	16.12	--	ND	16	ND	ND	ND	6,600	--	--	--
		07/23/97	17.99	14.21	--	ND	1.5	ND	ND	0.62	10,000	--	--	--
	NP	01/26/98	15.56	16.64	--	ND	ND	ND	ND	0.56	ND	--	--	--
	NP	07/03/98	17.04	15.16	--	ND	ND	ND	ND	ND	ND	--	--	--
		01/14/99	INACCESSIBLE (PARKED CAR)			--	--	--	--	--	--	--	--	--
		07/15/99	15.72	16.48	--	ND	ND	ND	ND	ND	290	--	--	--
		01/07/00	16.80	15.40	--	ND	7.7	ND	ND	4.4	98	--	--	--
		07/19/00	17.88	14.32	--	ND	ND	1.27	ND	0.979	ND	--	--	--
		01/02/01	17.97	14.23	--	ND	ND	ND	ND	ND	ND	--	--	--
		05/23/01	16.81	15.39	--	ND	ND	ND	ND	ND	ND	--	--	--
		07/30/01	16.79	15.41	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--	--
		10/15/01	16.98	15.22	--	<50	<0.50	0.58	<0.50	<0.50	<5.0	--	--	--
		01/14/02	**14.85**	**17.35**	--	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.5**	--	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #0752
800 Harrison Street
Oakland, California

WELL ID/ TOC*		DATE	DTW (ft.)	GWE (msl)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	Chloro-form** (ppb)	PCE** (ppb)	TCE** (ppb)
MW-8														
32.33		04/28/93	--	--	--	450	18	1.8	1.8	1.4	--	--	--	--
		07/23/93	18.45	13.88	--	260	5.1	ND	0.6	ND	--	--	--	--
32.00		10/05/93	18.57	13.43	--	120[5]	1.7	ND	ND	ND	--	--	--	--
		01/03/94[1]	18.73	13.27	--	ND	ND	ND	ND	ND	51	1.5	1.2	ND
		04/02/94	18.30	13.70	--	150	1.2	ND	ND	ND	--	--	--	--
		07/05/94	17.41	14.59	--	730	17	ND	1.6	ND	--	--	--	--
		10/06/94	18.98	13.02	--	140[5]	ND	ND	ND	ND	--	--	--	--
		01/02/95	17.58	14.42	--	440	18	0.72	2.0	1.8	--	--	--	--
		04/03/95	15.54	16.46	--	960	11	ND	ND	ND	--	--	--	--
		07/14/95	16.81	15.19	--	280	4.2	2.6	1.1	3.3	--	--	--	--
		10/10/95	17.85	14.15	--	110	1.3	0.62	0.67	ND	170	--	--	--
		01/03/96[7]	17.82	14.18	--	63	ND	0.51	ND	1.8	--	--	--	--
		04/10/96	15.70	16.30	--	ND	1.1	0.61	ND	ND	60	--	--	--
		07/09/96	16.78	15.22	--	72	1.0	ND	ND	ND	140	--	--	--
		01/24/97	15.79	16.21	--	ND	ND	ND	ND	ND	76	--	--	--
		07/23/97	17.69	14.31	--	ND	ND	ND	ND	ND	270	--	--	--
	NP	01/26/98	15.50	16.50	--	ND	ND	ND	ND	0.76	2.9	--	--	--
	NP	07/03/98	16.80	15.20	--	ND	ND	ND	ND	ND	ND	--	--	--
		01/14/99	17.13	14.87	--	ND	ND	ND	ND	ND	11	--	--	--
		07/15/99	15.85	16.15	--	ND	ND	ND	ND	ND	ND	--	--	--
		01/07/00	16.94	15.06	--	ND	ND	ND	ND	ND	11	--	--	--
		07/19/00	18.06	13.94	--	ND	ND	2.99	0.521	ND	ND	--	--	--
		01/02/01	18.12	13.88	--	ND	ND	ND	ND	ND	ND	--	--	--
		05/23/01	16.96	15.04	--	ND	ND	ND	ND	ND	ND	--	--	--
		07/30/01	16.52	15.48	--	<50	<0.50	<0.50	<0.50	<0.50	2.7	--	--	--
		10/15/01	16.72	15.28	--	<50	<0.50	0.65	<0.50	<0.50	<5.0	--	--	--
		01/14/02	**14.53**	**17.47**	**--**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.5**	**--**	**--**	**--**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #0752
800 Harrison Street
Oakland, California

WELL ID/ TOC*	DATE	DTW (ft.)	GWE (msl)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	Chloro-form** (ppb)	PCE** (ppb)	TCE** (ppb)
Trip Blank													
TB-LB	01/26/98	--	--	--	ND	ND	ND	ND	ND	ND	--	--	--
	07/03/98	--	--	--	ND	ND	ND	ND	ND	ND	--	--	--
	01/14/99	--	--	--	ND	ND	ND	ND	ND	ND	--	--	--
	07/15/99	--	--	--	ND	ND	ND	ND	ND	ND	--	--	--
	01/07/00	--	--	--	ND	ND	ND	ND	ND	ND	--	--	--
	07/19/00	--	--	--	ND	ND	ND	ND	ND	ND	--	--	--
	01/02/01	--	--	--	ND	ND	ND	ND	ND	ND	--	--	--
	05/23/01	--	--	--	ND	ND	ND	ND	ND	ND	--	--	--
	07/30/01	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--	--
	10/15/01	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--	--
	01/14/02	**--**	**--**	**--**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.5**	**--**	**--**	**--**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #0752

800 Harrison Street

Oakland, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to January 26, 1998, were compiled from reports prepared by MPDS Services, Inc.

TOC = Top of Casing
DTW = Depth to Water
(ft.) = Feet
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
PCE = Tetrachloroethene
TCE = Trichloroethene
(ppb) = Parts per billion
ND = Not Detected
-- = Not Measured/Not Analyzed
NP = No Purge

* TOC elevations are relative to msl, per the City of Oakland benchmark disk stamped "25/A" at the northeast corner of 7th and Harrison (Elevation = 28.81 feet, msl). Prior to October 5, 1993, the DTW measurements were taken from the top of well covers.

** All EPA Method 8010 constituents were ND, except as indicated below.

1 1,2-Dichloroethane (1,2-DCA) was detected in MW-8 at a concentration of 4.0 ppb on 01/03/94, and 1.1 ppb in MW-1 on 04/28/93.

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

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

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

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

6 A fuel fingerprint analysis was conducted on this sample. Laboratory report indicates total extractable petroleum hydrocarbons in this sample were not detected in high enough concentrations to compare with known standards and approximate their makeup.

7 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.

8 Laboratory report indicates gasoline and unidentified hydrocarbons C6-C8.

9 Detection limit raised. Refer to analytical reports.

10 Laboratory report indicates gasoline and unidentified hydrocarbons C6-C12.

11 Laboratory report indicates gasoline C6-C12.

12 Laboratory report indicates unidentified hydrocarbons C6-C12.

13 MTBE by EPA Method 8260.

14 Laboratory report indicates weathered gasoline C6-C12.

15 Laboratory report indicates gasoline C6-C10.

16 Laboratory report indicates unidentified hydrocarbons C6-C10.

Table 2

Groundwater Analytical Results - Oxygenate Compounds

Tosco (Unocal) Service Station #0752
800 Harrison Street
Oakland, California

WELL ID	DATE	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)
MW-5	10/03/00	ND[1]	553	ND[1]	ND[1]	ND[1]	ND[1]	ND[1]

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

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

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

Table 3

Groundwater Analytical Results

Tosco (Unocal) Service Station #0752
800 Harrison Street
Oakland, California

WELL ID	DATE	TOG (ppm)	Cadmium (ppm)	Chromium (ppm)	Lead (ppm)	Nickel (ppm)	Zinc (ppm)
MW-1	06/05/91	ND	ND	0.0083	0.011	0.063	0.023
	09/30/91	ND	ND	0.019	ND	ND	0.11
	12/30/91	ND	ND	0.0078	0.0057	ND	0.046
	04/02/92	ND	ND	0.015	0.016	ND	0.02
	06/30/92	ND	ND	0.079	0.009	0.1	0.087

EXPLANATIONS:

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

TOG = Total Oil and Grease
(ppm) = Parts per million
ND = Not Detected

Table 4

Groundwater Analytical Results

Tosco (Unocal) Service Station #0752
800 Harrison Street
Oakland, California

WELL ID	DATE	BOD (ppm)	Bicarbonate Alkalinity (ppm)	Calcium (ppm)	Iron (ppm)	Manganese (ppm)	Nitrate (ppm)	Sulfate (ppm)	Heterotrophic Plate Count (CFU/mL)
MW-1	04/10/96	--	160	21	15	2.6	--	--	--
MW-2	01/03/96	2.2	130	27	77	3.0	0.22	97	>5,700
	04/10/96	--	460	58	60	7.0	--	--	--
MW-3	01/03/96	4.3	430	43	61	5.4	0.23	16	350
	04/10/96	--	360	40	60	3.7	--	--	--
MW-4	01/03/96	ND	120	20	61	3.3	10	44	1,000
	04/10/96	--	160	25	43	2.0	--	--	--
MW-5	01/03/96	3.4	240	31	80	3.3	ND	17	>5,700
	04/10/96	--	240	22	18	2.4	--	--	--
MW-6	04/10/96	--	240	35	61	3.7	--	--	--
MW-7	04/10/96	--	210	44	120	4.8	--	--	--
MW-8	01/03/96	ND	310	37	62	3.3	0.57	20	>5,700
	04/10/96	--	380	37	63	3.6	--	--	--

Table 4

Groundwater Analytical Results

Tosco (Unocal) Service Station #0752

880 Harrison Street

Oakland, California

EXPLANATIONS:

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

BOD = Biochemical Oxygen Demand

(ppm) = Parts per million

(CFU/mL) = Colony Forming Units per milliliter

-- = Not Analyzed

ND = Not Detected

Table 5

Dissolved Oxygen Concentrations

Tosco (Unocal) Service Station #0752

800 Harrison Street

Oakland, California

WELL ID	DATE	Before Purging *(mg/L)*	After Purging *(mg/L)*
MW-1	04/10/96	--	3.04
	07/09/96	--	3.13
	01/24/97	--	2.56
	07/23/97	2.26	2.81
	01/26/98	3.97	--
	07/03/98	3.58	--
MW-2	01/03/96		1.80
	04/10/96	--	5.88
	07/09/96	--	0.71
	01/24/97	--	2.37
	07/23/97	1.40	0.97
	01/26/98	4.12	--
	07/03/98	3.99	--
MW-3	01/03/96		1.50
	04/10/96	--	4.63
	07/09/96	--	1.04
	01/24/97	--	1.46
	07/23/97	3.84	1.37
	01/26/98	1.84	--
	07/03/98	2.16	--
MW-4	01/03/96		1.20
	04/10/96	--	5.23
	07/09/96	--	4.91
	01/24/97	--	3.04
	07/23/97	9.28	3.68
	01/26/98	3.36	--
	07/03/98	4.07	--
MW-5	01/03/96		2.80
	04/10/96	--	3.73
	07/09/96	--	3.25
	01/24/97	--	1.47
	07/23/97	7.96	4.56
	01/26/98	5.30	--
	07/03/98	4.73	--

Table 5

Dissolved Oxygen Concentrations

Tosco (Unocal) Service Station #0752

800 Harrison Street

Oakland, California

WELL ID	DATE	Before Purging (mg/L)	After Purging (mg/L)
MW-6	04/10/96		4.50
	07/09/96	--	3.62
	01/24/97	--	6.21
	07/23/97	10.90	3.31
	01/26/98	2.55	--
	07/03/98	3.11	--
MW-7	04/10/96	--	5.10
	07/09/96	--	2.34
	01/24/97	--	1.91
	07/23/97	3.25	2.83
	01/26/98	3.44	--
	07/03/98	3.83	--
MW-8	01/03/96	--	1.30
	04/10/96	--	4.80
	07/09/96	--	1.32
	01/24/97	--	2.09
	07/23/97	4.08	3.27
	01/26/98	4.71	--
	07/03/98	5.16	--

EXPLANATIONS:

Dissolved oxygen concentrations prior to January 26, 1998, were compiled from reports prepared by MPDS Services, Inc.

(mg/L) = Milligrams per liter

-- = Not Measured

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 # 0752 Job#: 180066

Address: 800 Harrison st Date: 1-14-02

City: Oakland, CA Sampler: Joe

Well ID: MW-1 Well Condition: O.K

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

Total Depth: 33.42 ft.

Depth to Water: 16.78 ft.

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

16.64 X VF 0.17 = 2.83 X 3 (case volume) = Estimated Purge Volume: 9 (gal.)

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

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

Starting Time: 11:12 Weather Conditions: clear

Sampling Time: 11:43 Am (1143) 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)
11:26	3	7.49	9.22	71.6			
11:28	6	7.56	8.55	71.2			
11:31	9	7.58	8.48	71.9			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-1	3 VOA	Y	HCL	Seq.	TPHG, BTEX, MTBE

COMMENTS: _____

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 0752 Job#: 180066

Address: 800 Harrison st. Date: 1-14-02

City: Oakland, CA. Sampler: Joe

Well ID MW-2 Well Condition: O.K

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

Total Depth 30.30 ft.

Depth to Water 16.72 ft.

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

13.58 X VF 0.17 = 2.31 X 3 (case volume) = Estimated Purge Volume: 7 (gal.)

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

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

Starting Time: 11:52 Weather Conditions: clear

Sampling Time: 12:18pm (1218) 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 (µmhos/cm)	Temperature (F)	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
12:03	2.5	7.16	6.51	72.2			
12:05	5	7.12	6.58	72.1			
12:07	7	7.19	6.61	72.4			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-2	3 VOA	Y	HCL	Seq.	TPHG, BTEX, MTBE

COMMENTS:

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/
Facility # 0752 Job#: 180066

Address: 800 Harrison st. Date: 1-14-02

City: Oakland, CA. Sampler: Joe

Well ID MW-3 Well Condition: O.K

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

Total Depth 30.45 ft.

Depth to Water 15.53 ft.

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

14.92 X VF 0.17 = 2.54 X 3 (case volume) = Estimated Purge Volume: 8 (gal.)

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

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

Starting Time: 1:20 Weather Conditions: clear

Sampling Time: 1:44 p.m (1344) 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 µmhos/cm	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
1:29	3.5	7.14	3.16	72.9			
1:31	5	7.18	3.22	73.0			
1:33	8	7.20	3.21	72.4			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-3	3 VOA	Y	HCL	Seq.	TPHG, BTEX, MTBE

COMMENTS:

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 0752 Job#: 180066

Address: 800 Harrison st. Date: 1-14-02

City: Oakland, CA. Sampler: Joe

Well ID MW-4 Well Condition: O.K

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

Total Depth 32.36 ft.

Depth to Water 14.97 ft.

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

17.39 X VF 0.17 = 2.96 X 3 (case volume) = Estimated Purge Volume: 9 (gal.)

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

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

Starting Time: 10:30 Weather Conditions: Clear

Sampling Time: 10:55 Am (1055) Water Color: Clear Odor: Some

Purging Flow Rate: 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)
10:42	3	7.40	10.32	71.1			
10:44	6	7.53	10.44	71.9			
10:46	9	7.58	10.48	72.0			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-4	3 VOA	Y	HCL	Seq.	TPHG, BTEX, MTBE

COMMENTS:

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 0752 Job#: 180066

Address: 800 Harrison st. Date: 1-14-02

City: Oakland, CA. Sampler: Joe

Well ID MW-5 Well Condition: O.K

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

Total Depth 31.65 ft.

Depth to Water 15.33 ft.

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

16.32 X VF 0.17 = 2.77 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: 12:40 Weather Conditions: clear

Sampling Time: 1:08 p.m (13.08) 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 (°) µmhos/cm X	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
12:53	3	7.46	3.90	71.7			
12:55	5.5	7.26	4.07	71.8			
12:57	8.5	7.20	4.12	71.9			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-5	3 VOA	Y	HCL	Seq.	TPHG, BTEX, MTBE

COMMENTS: _____

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 0752 Job#: 180066

Address: 800 Harrison st. Date: 1-14-02

City: Oakland, CA. Sampler: Joe

Well ID MW-6 Well Condition: O.K

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

Total Depth 30.85 ft.

Depth to Water 14.60 ft.

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

16.25 X VF 0.17 = 2.76 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: 9:10 Weather Conditions: clear

Sampling Time: 9:30 Am (0930) Water Color: clear Odor:

Purging Flow Rate: 1 gpm Sediment Description:

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

Time	Volume (gal.)	pH	Conductivity (µmhos/cm)	Temperature (°F)	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
9:12	3	8.06	9.10	71.5		none	
9:14	5.5	7.65	9.15	71.6			
9:16	8.5	7.66	9.03	71.2			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-6	3VOA	Y	HCL	Seq.	TPHG, BTEX, MTBE

COMMENTS:

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 0752 Job#: 180066

Address: 800 Harrison st. Date: 1-14-02

City: Oakland, CA. Sampler: Joe

Well ID MW-7 Well Condition: O.K

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

Total Depth 31.43 ft.

Depth to Water 14.85 ft.

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

16.58 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: 9:45 Weather Conditions: clear

Sampling Time: 10:14 AM (1014) Water Color: clear Odor: mold

Purging Flow Rate: 1 gpm Sediment Description: _____

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

Time	Volume (gal.)	pH	Conductivity (C) µmhos/cm	Temperature F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
9:55	3	7.50	8.11	73.1			
9:58	5.5	7.37	7.46	72.6			
10:01	8.5	7.33	7.42	72.4			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-7	3 VOA	Y	HCL	Seq.	TPHG, BTEX, MTBE

COMMENTS: _____

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 0752 Job#: 180066

Address: 800 Harrison st. Date: 1-14-02

City: Oakland, CA. Sampler: Joe

Well ID MW-8 Well Condition: O.K

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

Total Depth 27.84 ft.

Depth to Water 14.53 ft.

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

13.31 X VF 0.17 = 2.26 X 3 (case volume) = Estimated Purge Volume: 7 (gal.)

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

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

Starting Time: 8:16 Weather Conditions: clear

Sampling Time: 8:45 Am (0845) Water Color: clear Odor: Some

Purging Flow Rate: 1 gpm Sediment Description:

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

Time	Volume (gal.)	pH	Conductivity (µmhos/cm)	Temperature (F)	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
8:30	2.5	7.40	6.95	71.6			
8:33	5	7.30	7.02	71.5			
8:35	7	7.22	6.88	72.0			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-8	3 VOA	Y	HCL	Seq.	TPHG, BTEX, MTBE

COMMENTS:

GLOBAL ID# T0600101486

Chain-of-Custody-Record

TOSCO

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

Facility Number UNOCAL SS# 0752
Facility Address 800 Harrison St., Oakland, CA
Consultant Project Number 180066.85
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 1-14-02
Signature [signature] MLA0327

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water 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 (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 (ICAP or AA)					DO NOT BILL TB-LB ANALYSIS Remarks
TB-LB		1 VOA	W	G	—	HCL	Y	✓												
MW-1		3 VOA	/	/	1143	/	/	✓												
MW-2		/	/	/	1218	/	/	✓												
MW-3		/	/	/	1344	/	/	✓												
MW-4		/	/	/	1055	/	/	✓												
MW-5		/	/	/	1308	/	/	✓												
MW-6		/	/	/	0930	/	/	✓												
MW-7		/	/	/	1014	/	/	✓												
MW-8		/	/	/	0845	/	/	✓												

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
[signature]	G-R Inc.	1-14-02 1645	[signature]	Sequoia	1-14-02 1645
[signature]	Organization	Date/Time 1/16/02	Received By (Signature) [signature]	Organization	Date/Time 1/16/02 1405
[signature]	Organization	Date/Time 1/16/02	Received For Laboratory By (Signature) [signature]		Date/Time 1-16-02 1410

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

Sequoia
Analytical

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

29 January, 2002

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

RE: Unocal SS#0752
Sequoia Report: MLA0327

Enclosed are the results of analyses for samples received by the laboratory on 01/14/02 16:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Aaron Porter For James Hartley
Project Manager

CA ELAP Certificate #1210

Sequoia Analytical

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www.sequoialabs.com

Gettler Ryan/Geostrategies - Tosco/Unocal	Project: Unocal SS#0752	
6747 Sierra Ct, Suite J	Project Number: 800 Harrison St., Oakland CA	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	01/29/02 07:56

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-LB	MLA0327-01	Water	01/14/02 00:00	01/14/02 16:45
MW-1	MLA0327-02	Water	01/14/02 11:43	01/14/02 16:45
MW-2	MLA0327-03	Water	01/14/02 12:18	01/14/02 16:45
MW-3	MLA0327-04	Water	01/14/02 13:44	01/14/02 16:45
MW-4	MLA0327-05	Water	01/14/02 10:55	01/14/02 16:45
MW-5	MLA0327-06	Water	01/14/02 13:08	01/14/02 16:45
MW-6	MLA0327-07	Water	01/14/02 09:30	01/14/02 16:45
MW-7	MLA0327-08	Water	01/14/02 10:14	01/14/02 16:45
MW-8	MLA0327-09	Water	01/14/02 08:45	01/14/02 16:45

Sequoia Analytical - Morgan Hill

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.

Aaron Porter For James Hartley, Project Manager

Sequoia Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
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www.sequoialabs.com

Gettler Ryan/Geostrategies - Tosco/Unocal	Project: Unocal SS#0752	
6747 Sierra Ct, Suite J	Project Number: 800 Harrison St., Oakland CA	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	01/29/02 07:56

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
TB-LB (MLA0327-01) Water Sampled: 01/14/02 00:00 Received: 01/14/02 16:45									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2A24003	01/24/02	01/24/02	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		*103 %*		*70-130*	"	"	"	"	
MW-1 (MLA0327-02) Water Sampled: 01/14/02 11:43 Received: 01/14/02 16:45									
Gasoline Range Organics (C6-C10)	**450**	250	ug/l	5	2A25026	01/25/02	01/25/02	8015Bm/8021B	P-01
Benzene	ND	2.5	"	"	"	"	"	"	
Toluene	ND	2.5	"	"	"	"	"	"	
Ethylbenzene	ND	2.5	"	"	"	"	"	"	
Xylenes (total)	**3.3**	2.5	"	"	"	"	"	"	
Methyl tert-butyl ether	**4100**	250	"	100	"	"	"	"	M-03
Surrogate: a,a,a-Trifluorotoluene		*92.1 %*		*70-130*	"	"	"	"	
MW-2 (MLA0327-03) Water Sampled: 01/14/02 12:18 Received: 01/14/02 16:45									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2A23004	01/23/02	01/23/02	8015Bm/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	**0.56**	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**11**	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*84.2 %*		*70-130*	"	"	"	"	

Sequoia Analytical

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www.sequoialabs.com

Gettler Ryan/Geostrategies - Tosco/Unocal	Project: Unocal SS#0752	
6747 Sierra Ct, Suite J	Project Number: 800 Harrison St., Oakland CA	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	01/29/02 07:56

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
MW-3 (MLA0327-04) Water Sampled: 01/14/02 13:44 Received: 01/14/02 16:45									
Gasoline Range Organics (C6-C10)	**130**	50	ug/l	1	2A24003	01/24/02	01/24/02	8015Bm/8021B	P-03
Benzene	**0.50**	0.50	"	"	"	"	"	"	
Toluene	**0.61**	0.50	"	"	"	"	"	"	
Ethylbenzene	**1.1**	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**9.9**	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*99.4 %*	*70-130*		"	"	"	"	
MW-4 (MLA0327-05) Water Sampled: 01/14/02 10:55 Received: 01/14/02 16:45									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2A23004	01/23/02	01/23/02	8015Bm/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**30**	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*85.2 %*	*70-130*		"	"	"	"	
MW-5 (MLA0327-06) Water Sampled: 01/14/02 13:08 Received: 01/14/02 16:45									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2A23004	01/23/02	01/23/02	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		*82.5 %*	*70-130*		"	"	"	"	

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Gettler Ryan/Geostrategies - Tosco/Unocal	Project: Unocal SS#0752	
6747 Sierra Ct, Suite J	Project Number: 800 Harrison St., Oakland CA	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	01/29/02 07:56

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
MW-6 (MLA0327-07) Water Sampled: 01/14/02 09:30 Received: 01/14/02 16:45									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2A23004	01/23/02	01/23/02	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		*81.6 %*	*70-130*		"	"	"	"	
MW-7 (MLA0327-08) Water Sampled: 01/14/02 10:14 Received: 01/14/02 16:45									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2A23004	01/23/02	01/23/02	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		*81.4 %*	*70-130*		"	"	"	"	
MW-8 (MLA0327-09) Water Sampled: 01/14/02 08:45 Received: 01/14/02 16:45									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2A23004	01/23/02	01/23/02	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		*80.0 %*	*70-130*		"	"	"	"	

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Gettler Ryan/Geostrategies - Tosco/Unocal	Project: Unocal SS#0752	
6747 Sierra Ct, Suite J	Project Number: 800 Harrison St., Oakland CA	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	01/29/02 07:56

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 2A23004 - EPA 5030B [P/T]										
Blank (2A23004-BLK1)				Prepared & Analyzed: 01/23/02						
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	*8.83*		"	*10.0*		*88.3*	*70-130*			
LCS (2A23004-BS1)				Prepared & Analyzed: 01/23/02						
Benzene	9.67	0.50	ug/l	10.0		96.7	70-130			
Toluene	9.03	0.50	"	10.0		90.3	70-130			
Ethylbenzene	10.2	0.50	"	10.0		102	70-130			
Xylenes (total)	28.9	0.50	"	30.0		96.3	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.10*		"	*10.0*		*91.0*	*70-130*			
LCS (2A23004-BS2)				Prepared & Analyzed: 01/23/02						
Gasoline Range Organics (C6-C10)	231	50	ug/l	250		92.4	70-130			
Surrogate: a,a,a-Trifluorotoluene	*12.8*		"	*10.0*		*128*	*70-130*			
Matrix Spike (2A23004-MS1)		Source: MLA0327-05		Prepared & Analyzed: 01/23/02						
Gasoline Range Organics (C6-C10)	467	50	ug/l	550	ND	84.9	60-140			
Benzene	6.72	0.50	"	6.60	ND	100	60-140			
Toluene	33.5	0.50	"	39.7	ND	84.4	60-140			
Ethylbenzene	8.64	0.50	"	9.20	ND	93.9	60-140			
Xylenes (total)	41.2	0.50	"	46.1	ND	89.4	60-140			
Surrogate: a,a,a-Trifluorotoluene	*6.12*		"	*10.0*		*61.2*	*70-130*			*S-04*
Matrix Spike Dup (2A23004-MSD1)		Source: MLA0327-05		Prepared & Analyzed: 01/23/02						
Gasoline Range Organics (C6-C10)	478	50	ug/l	550	ND	86.9	60-140	2.33	25	
Benzene	6.90	0.50	"	6.60	ND	103	60-140	2.64	25	
Toluene	35.3	0.50	"	39.7	ND	88.9	60-140	5.23	25	
Ethylbenzene	8.80	0.50	"	9.20	ND	95.7	60-140	1.83	25	
Xylenes (total)	42.0	0.50	"	46.1	ND	91.1	60-140	1.92	25	
Surrogate: a,a,a-Trifluorotoluene	*10.1*		"	*10.0*		*101*	*70-130*			

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Gettler Ryan/Geostrategies - Tosco/Unocal	Project: Unocal SS#0752	
6747 Sierra Ct, Suite J	Project Number: 800 Harrison St., Oakland CA	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	01/29/02 07:56

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 2A24003 - EPA 5030B [P/T]										
Blank (2A24003-BLK1)				Prepared & Analyzed: 01/24/02						
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	*9.85*		"	*10.0*		*98.5*	*70-130*			
LCS (2A24003-BS1)				Prepared & Analyzed: 01/24/02						
Benzene	10.8	0.50	ug/l	10.0		108	70-130			
Toluene	10.3	0.50	"	10.0		103	70-130			
Ethylbenzene	9.74	0.50	"	10.0		97.4	70-130			
Xylenes (total)	29.7	0.50	"	30.0		99.0	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.83*		"	*10.0*		*98.3*	*70-130*			
LCS (2A24003-BS2)				Prepared & Analyzed: 01/24/02						
Gasoline Range Organics (C6-C10)	292	50	ug/l	250		117	70-130			
Surrogate: a,a,a-Trifluorotoluene	*11.2*		"	*10.0*		*112*	*70-130*			
Matrix Spike (2A24003-MS1)		**Source: MLA0381-06**		Prepared & Analyzed: 01/24/02						
Gasoline Range Organics (C6-C10)	606	50	ug/l	550	ND	110	60-140			
Benzene	9.69	0.50	"	6.60	ND	147	60-140			QM-07
Toluene	39.0	0.50	"	39.7	ND	98.2	60-140			
Ethylbenzene	8.70	0.50	"	9.20	ND	94.6	60-140			
Xylenes (total)	42.9	0.50	"	46.1	ND	93.1	60-140			
Surrogate: a,a,a-Trifluorotoluene	*12.9*		"	*10.0*		*129*	*70-130*			
Matrix Spike Dup (2A24003-MSD1)		**Source: MLA0381-06**		Prepared & Analyzed: 01/24/02						
Gasoline Range Organics (C6-C10)	590	50	ug/l	550	ND	107	60-140	2.68	25	
Benzene	9.54	0.50	"	6.60	ND	145	60-140	1.56	25	QM-07
Toluene	36.9	0.50	"	39.7	ND	92.9	60-140	5.53	25	
Ethylbenzene	8.39	0.50	"	9.20	ND	91.2	60-140	3.63	25	
Xylenes (total)	42.3	0.50	"	46.1	ND	91.8	60-140	1.41	25	
Surrogate: a,a,a-Trifluorotoluene	*11.9*		"	*10.0*		*119*	*70-130*			

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6747 Sierra Ct, Suite J	Project Number: 800 Harrison St., Oakland CA	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	01/29/02 07:56

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 2A25026 - EPA 5030B [P/T]										
Blank (2A25026-BLK1)				Prepared & Analyzed: 01/25/02						
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	*9.72*		"	*10.0*		*97.2*	*70-130*			
LCS (2A25026-BS1)				Prepared & Analyzed: 01/25/02						
Benzene	10.4	0.50	ug/l	10.0		104	70-130			
Toluene	9.85	0.50	"	10.0		98.5	70-130			
Ethylbenzene	9.19	0.50	"	10.0		91.9	70-130			
Xylenes (total)	28.2	0.50	"	30.0		94.0	70-130			
Surrogate: a,a,a-Trifluorotoluene	*10.1*		"	*10.0*		*101*	*70-130*			
LCS (2A25026-BS2)				Prepared & Analyzed: 01/25/02						
Gasoline Range Organics (C6-C10)	295	50	ug/l	250		118	70-130			
Surrogate: a,a,a-Trifluorotoluene	*10.1*		"	*10.0*		*101*	*70-130*			
LCS Dup (2A25026-BSD2)				Prepared & Analyzed: 01/25/02						
Gasoline Range Organics (C6-C10)	298	50	ug/l	250		119	70-130	1.01	25	
Surrogate: a,a,a-Trifluorotoluene	*10.3*		"	*10.0*		*103*	*70-130*			

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6747 Sierra Ct, Suite J	Project Number: 800 Harrison St., Oakland CA	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	01/29/02 07:56

Notes and Definitions

M-03	This result is from a second dilution of the sample. An initial result was reported from a previous dilution of the sample necessary to report other analytes in a different range.
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.
S-04	The surrogate recovery for this sample is outside control limits due to interference from the sample matrix.
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