GETTLER-RYAN INC.

May 11, 1999
G-R Job #180061

Mr. David B. De Witt
Tosco Marketing Company
2000 Crow Canyon Place, Suite 200
San Ramon, California 94583

RE: First Quarter 1999 Groundwater Monitoring & Sampling Report
Tosco (Unocal) Service Station #5325
3220 Lakeshore Avenue
Oakland, California

Dear Mr. De Witt:

This report documents the quarterly groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R). On March 22, 1999, field personnel monitored and sampled six wells (U-1 through U-6) at the above referenced site.

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. Dissolved Oxygen Concentrations are summarized in Table 3. A Potentiometric Map is included as Figure 1.

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

Sincerely,

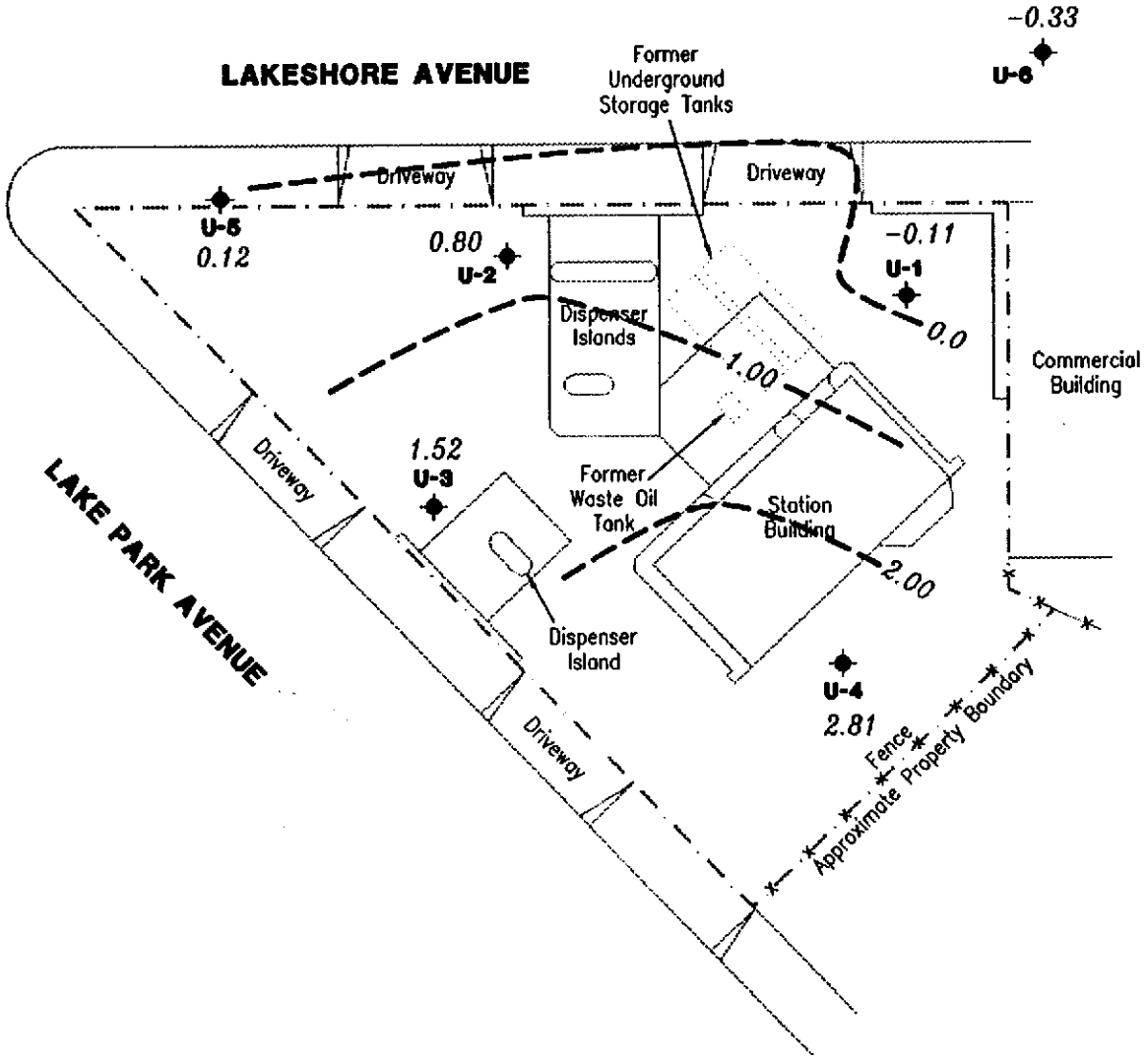
Deanna L. Harding
Project Coordinator

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

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

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

5325.qml



EXPLANATION

- Groundwater monitoring well
- 99.99 — Groundwater elevation in feet referenced to USGS–Datum (Feet)
- 99.99 — Groundwater elevation contour, dashed where inferred.

Approximate groundwater flow direction at a gradient of 0.04 Ft./Ft.

N

0 40

Scale in Feet

Source: Figure Modified From Drawing Provided By MPDS Services, Inc.

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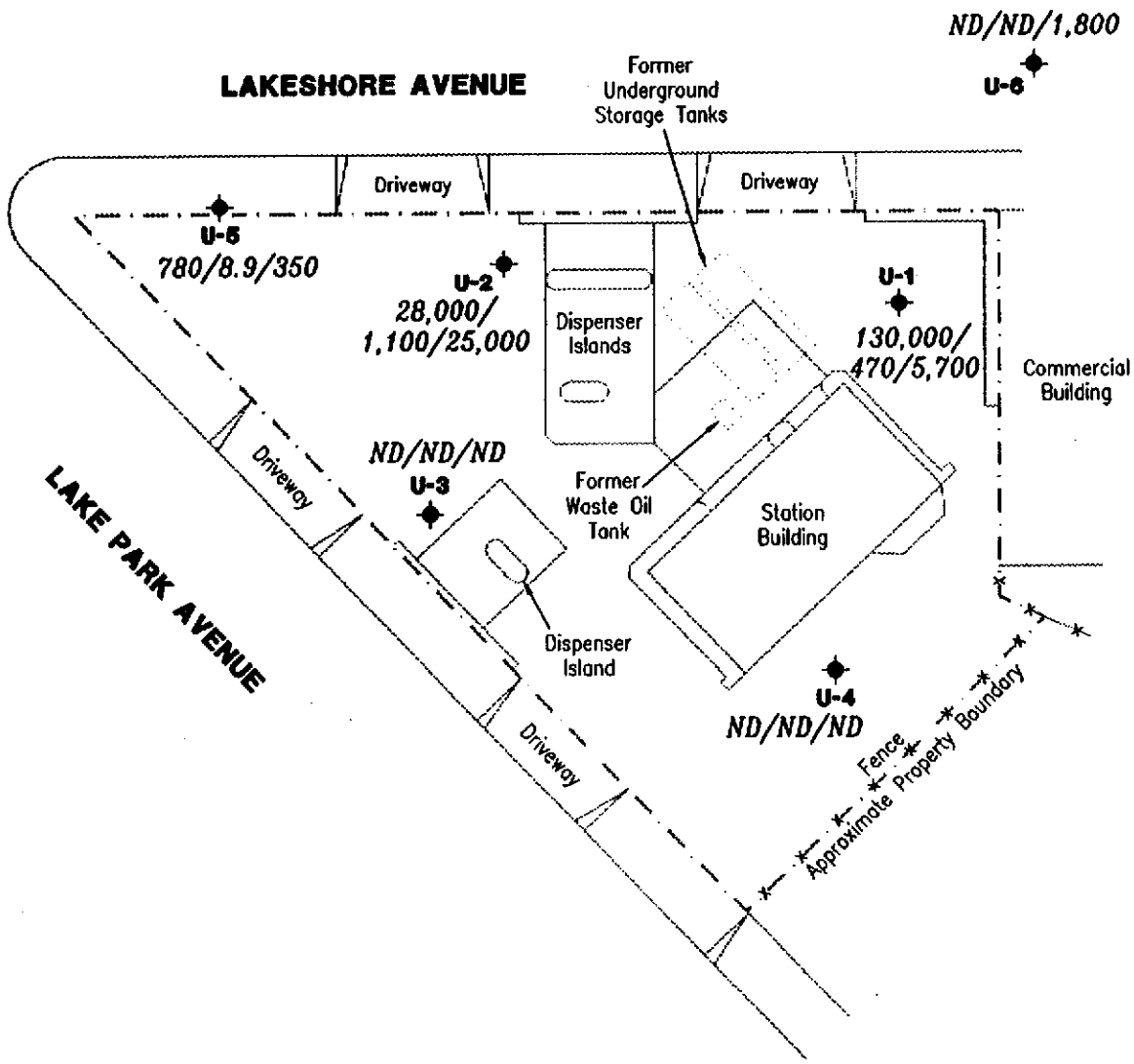
6747 Sierra Ct., Suite J (925) 551-7555
Dublin, CA 94568

POTENTIOMETRIC MAP
Tosco (Unocal) Service Station No. 5325
3220 Lakeshore Avenue
Oakland, California

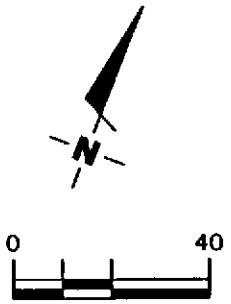
FIGURE 1

JOB NUMBER 180061 | REVIEWED BY | DATE March 22, 1999 | REVISED DATE



EXPLANATION

✦	Groundwater monitoring well
A/B/C	TPH(G) (Total Petroleum Hydrocarbons as Gasoline)/Benzene/MTBE concentrations in ppb
ND	Not Detected



Source: Figure Modified From Drawing Provided By MPDS Services, Inc.

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CONCENTRATION MAP
Tosco (Unocal) Service Station No. 5325
3220 Lakeshore Avenue
Oakland, California

FIGURE
2

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
180061		March 22, 1999	

Table 1

Groundwater Monitoring Data and Analytical Results

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

Well ID/ TOC*	Date	DTW (ft.)	GWE (ft.)	Product Thickness (ft.)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
U-1	08/10/90	--	--	--	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	8.23	0.26**	0.04	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				--	--
	06/15/98	8.37	0.09	Sheen	52,000	ND[7]	900	1,800	13,000	ND[7]
	09/30/98	8.94	-0.48	Sheen	1,000,000[8]	ND[7]	2,600	13,000	83,000	4,800
	12/28/98	8.57	-0.11	<0.01	1,100,000[9]	ND[7]	1,600	8,600	71,000	5,700
	03/22/99	**8.18**	**-0.11**	**Sheen**	**130,000** (~FP)	**470**	**1,100**	**2,000**	**28,000**	**5,700**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5325

3220 Lakeshore Avenue

Oakland, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (ft.)	Product Thickness (ft.)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
U-2	08/10/90	--	--	--	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	--
	05/07/93	--	--	--	17,000	1,800	660	1,700	4,000	--
	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**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5325

3220 Lakeshore Avenue

Oakland, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (ft.)	Product Thickness (ft.)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
U-3	08/10/90	--	--	--	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
	09/26/96	11.55	-0.57	0.00	ND	ND	ND	ND	ND	ND
	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**

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Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5325

3220 Lakeshore Avenue

Oakland, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (ft.)	Product Thickness (ft.)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
U-4										
11.15	06/22/94	10.16	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	--
	06/21/95	9.54	1.61	0.00	ND	ND	ND	ND	ND	--
	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**
U-5										
6.98	06/22/94	6.83	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

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5325

3220 Lakeshore Avenue

Oakland, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (ft.)	Product Thickness (ft.)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
U-5	03/14/97	6.99	-0.01	0.00	ND	ND	ND	ND	ND	14
(cont)	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**
U-6										
7.14	06/22/94	7.14	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**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5325

3220 Lakeshore Avenue

Oakland, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (ft.)	Product Thickness (ft.)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
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**

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
DTW = Depth to Water
(ft.) = Feet
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
ppm = Parts per million
ND = Not Detected
-- = Not Measured/Not Analyzed

* 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 results.

8 Laboratory report indicates unidentified hydrocarbons C6-C12.

9 Laboratory report indicates gasoline and unidentified hydrocarbons >C8.

Table 2

Groundwater Analytical Results

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

Well ID	Date	Iron (ppm)	Nitrate as NO3 (ppm)	Phosphate as PO4 (ppm)	Redox Potential (ppm)
U-1	06/15/98	39	ND	ND	382 (mV)
	09/30/98	17	ND	ND	366 (mV)
	12/28/98	4.3	6.3	28	298(mV)
	03/22/99	**4.9**	**ND**	**3.5**	**320(mV)**
U-2	03/03/98	25	ND	ND	369 (mV)
	06/15/98	42	ND	ND	341 (mV)
	09/30/98	25	ND	ND	354 (mV)
	12/28/98	28	ND	ND	276(mV)
	03/22/99	**0.68**	**ND**	**2.3**	**320(mV)**
U-3	06/30/97	1.4	21	0.86	190
	09/19/97	0.57	19	ND	75
	12/12/97	1.9	23	0.85	390
	03/03/98	0.013	36	ND	358 (mV)
	06/15/98	0.16	33	ND	318 (mV)
	09/30/98	0.040	31	ND	295 (mV)
	12/28/98	ND	29	ND	281(mV)
	03/22/99	**0.015**	**30**	**0.14**	**310(mV)**
U-4	06/30/97	0.13	35	0.52	200
	09/19/97	0.35	30	ND	45
	12/12/97	0.68	31	0.73	380
	03/03/98	0.018	3.2	ND	284 (mV)
	06/15/98	0.14	33	ND	256 (mV)
	09/30/98	0.049	31	ND	276 (mV)
	12/28/98	0.36	31	ND	280(mV)
	03/22/99	**ND**	**30**	**0.14**	**320(mV)**
U-5	06/30/97	16	ND	ND	160
	09/19/97	0.22	ND	ND	63
	12/12/97	6.7	ND	ND	400
	03/03/98	18	3.1	ND	345 (mV)
	06/15/98	17	ND	ND	333 (mV)
	09/30/98	17	ND	ND	318 (mV)
	12/28/98	17	6.6	ND	305(mV)
	03/22/99	**0.12**	**ND**	**2.4**	**340(mV)**

Table 2

Groundwater Analytical Results

Tosco (Unocal) Service Station #5325

3220 Lakeshore Avenue

Oakland, California

Well ID	Date	Iron *(ppm)*	Nitrate as NO3 *(ppm)*	Phosphate as PO4 *(ppm)*	Redox Potential *(ppm)*
U-6	06/30/97	88	0.80	ND	190
	09/19/97	2.9	1.80	ND	ND
	12/12/97	51	ND	ND	380
	03/03/98	60	3.5	ND	327 (mV)
	06/15/98	590	4.8	ND	315 (mV)
	09/30/98	33	ND	ND	345 (mV)
	12/28/98	83	7.2	ND	297(mV)
	03/22/99	**2.1**	**ND**	**0.98**	**330(mV)**

EXPLANATIONS:

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

ppm = Parts per million
ND = Not Detected
mV = millivolts

Table 3

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

Well ID	Date	Before Purge *(mg/L)*
U-3	06/30/97	4.1
	09/19/97	4.2
	12/12/97	2.97
	03/03/98	2.63
	06/15/98	2.93
	09/30/98	3.11
	12/28/98	3.59
	03/22/99	**4.02**
U-4	06/30/97	5.4
	09/19/97	5.1
	12/12/97	3.11
	03/03/98	2.94
	06/15/98	3.08
	09/30/98	4.05
	12/28/98	4.57
	03/22/99	**4.26**
U-5	06/30/97	3.4
	09/19/97	0.6
	12/12/97	1.75
	03/03/98	2.36
	06/15/98	2.55
	09/30/98	1.93
	12/28/98	1.64
	03/22/99	**1.99**
U-6	06/30/97	0.30
	09/19/97	0.60
	12/12/97	2.70
	03/03/98	2.18
	06/15/98	2.48
	09/30/98	3.06
	12/28/98	3.42
	03/22/99	**3.88**

EXPLANATIONS:

Dissolved oxygen concentrations prior to March 3, 1998, were compiled from reports prepared by MPDS Services, Inc.

mg/L = milligrams per liter

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan Inc. field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. Prior to sample collection, the type of analysis to be performed is determined. Loss prevention of volatile compounds is controlled and sample preservation for subsequent analysis is maintained.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using a MMC flexi-dip interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, static water level measurements are collected with the interface probe and are also recorded in the field notes.

After water levels are collected and prior to sampling, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or polyvinyl chloride bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging. Purging continues until these parameters stabilize.

Groundwater samples are collected using disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used when possible. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. For sampling sets greater than 20 samples, 5% trip blanks are included. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

As requested by Tosco Marketing Company, the purge water and decontamination water generated during sampling activities is transported to Tosco - San Francisco Area Refinery, located in Rodeo, California.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility #5325 Job#: 180061

Address: 3220 Lakeshore Ave. Date: 3-22-99

City: Oakland Sampler: Joe

Well ID U-1 Well Condition: O.K

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

Total Depth 19.73 ft.

Depth to Water 8.18 ft.

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

11.55 x VF 0.38 = 4.39 x 3 (case volume) = Estimated Purge Volume: 13.5 (gal.)

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

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

Starting Time: 11:00 Weather Conditions: cloudy

Sampling Time: 11:30 A.M. Water Color: clear Odor: yes

Purging Flow Rate: 1.5 gpm. Sediment Description: none

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

Time	Volume (gal.)	pH	Conductivity µmhos/cm x 1000	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
11:10	4	6.92	0.95	70.2			
11:12	7.5	6.95	0.88	70.1			
11:14	13.5	6.90	0.86	70.5			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
U-1	3 VOA	Y	HCL	SEQUOIA	TPH(G)/btex/mtbe
"	1 plastic	"	—	"	Iron
"	1 plastic	"	—	"	Nitrate, Phosphate
		"	—	"	Redox

COMMENTS: Sheen in sampled water

Skimmer in well had no FP in it.

9/97-fieldst.frm

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility #5325 Job#: 1800G1

Address: 3220 Lakeshore Ave. Date: 3-22-99

City: Oakland Sampler: Joe

Well ID U-2 Well Condition: O.K

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

Total Depth 19.67 ft.

Depth to Water 6.82 ft.

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

12.85 X VF 0.38 = 4.88 X 3 (case volume) = Estimated Purge Volume: 15 (gal.)

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

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

Starting Time: 10:15 Weather Conditions: cloudy

Sampling Time: 10:48 A.M Water Color: clear Odor: yes

Purging Flow Rate: 1.5 gpm. Sediment Description: none

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

Time	Volume (gal.)	pH	Conductivity x 1000 µmhos/cm	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
10:30	5	7.10	1.86	71.2			
10.33	10	6.84	1.80	70.1			
10.37	16	6.94	1.81	69.9			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
U-1	3 VOA	Y	HCL	SEQUOIA	TPH(G)/btex/mtbe
"	1 plastic	"	—	"	Iron
"	1 plastic	"	—	"	Nitrate, Phosphate
		"	—	"	Redox

COMMENTS: _____

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility #5325 Job#: 180061

Address: 3220 Lakeshore Ave. Date: 3-22-99

City: Oakland Sampler: Joe

Well ID U-3 Well Condition: O.K

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

Total Depth 19.42 ft.

Depth to Water 9.46 ft.

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

9.96 X VF 0.38 = 3.78 X 3 (case volume) = Estimated Purge Volume: 12 (gal.)

Purge Equipment:
- Disposable Bailer
- Bailer
- Stack
- (Suction)
- ~~Grundfos~~
- Other: _____

Sampling Equipment:
- (Disposable Bailer)
- ~~Bailer~~
- Pressure Bailer
- Grab Sample
- Other: _____

Starting Time: 7:15 Weather Conditions: cloudy

Sampling Time: 7:42 A.m Water Color: clear Odor: none

Purging Flow Rate: 1 gpm. Sediment Description: none

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)
7:25	4	7.68	6.14	71.2	4.02	[illegible]	
7:27	8	7.55	6.10	71.6			
7:30	12	7.51	6.12	71.9			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
U-1	3 voA	Y	HCL	SEQUOIA	TPH(G)/btex/mtbe
"	1 plastic	"	—	"	Iron
Dup	1 plastic	"	—	"	Nitrate, Phosphate
		"	—	"	Redox

COMMENTS: _____

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility #5325 Job#: 180061

Address: 3220 Lakeshore Ave. Date: 3-22-99

City: Oakland Sampler: Joe

Well ID U-4 Well Condition: OK

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

Total Depth 20.17 ft.

Depth to Water 8.34 ft.

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

11.83 X VF 0.66 = 7.81 X 3 (case volume) = Estimated Purge Volume: 24 (gal.)

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

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

Starting Time: 7:55 Weather Conditions: cloudy

Sampling Time: 8:30 Am Water Color: clear Odor: none

Purging Flow Rate: 2 gpm. Sediment Description: none

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

Time	Volume (gal.)	pH	Conductivity µmhos/cm x 10^0	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
8:10	8	7.41	6.04	69.2	4.26	[illegible]	
8:14	16	7.49	5.95	69.4			
8:17	24	7.47	6.85	70.1			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
U-1	3 VOA	Y	HCL	SEQUOIA	TPH(G)/btex/mtbe
"	1 plastic	"	—	"	Iron
"	1 plastic	"	—	"	Nitrate, Phosphate
		"	—		Redox

COMMENTS: _____

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility #5325 Job#: 1800G1

Address: 3220 Lakeshore Ave. Date: 3-22-99

City: Oakland Sampler: Joe

Well ID U-5 Well Condition: O.K

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

Total Depth 20.10 ft.

Depth to Water 6.86 ft.

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

13.24 X VF 0.66 = 8.74 X 3 (case volume) = Estimated Purge Volume: 27 (gal.)

Purge Equipment: Disposable Bailer / Bailer / Stack / (Suction) / Grundfos / Other: _____

Sampling Equipment: (Disposable Bailer) / Bailer / Pressure Bailer / Grab Sample / Other: _____

Starting Time: 9:30 Weather Conditions: cloudy

Sampling Time: 10:00 A.M. Water Color: clear Odor: yes

Purging Flow Rate: 2 gpm. Sediment Description: none

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

Time	Volume (gal.)	pH	Conductivity x 10^0 µmhos/cm	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
9:40	9	7.11	1.30	71.5	1.99	~~0.11~~	
9:44	18	7.07	1.40	71.6			
9:48	27	7.14	1.33	72.0			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
U-1	3 VOA	Y	HCL	SEQUOIA	TPH(G)/btex/mtbe
"	1 plastic	"	—	"	Iron
"	unpreserved	"	—	"	Nitrate, Phosphate
		"		"	Redox

COMMENTS: _____

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility #5325 Job#: 180061

Address: 3220 Lakeshore Ave. Date: 3-22-99

City: Oakland Sampler: Joe

Well ID U-6 Well Condition: OK

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

Total Depth 23.82 ft.

Depth to Water 7.47 ft.

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

16.38 X VF 0.17 = 2.78 X 3 (case volume) = Estimated Purge Volume: 8.5 (gal.)

Purge Equipment:	Disposable Bailer	Sampling Equipment:	(Disposable Bailer)
	Bailer		Bailer
	Stack		Pressure Bailer
	(Suction)		Grab Sample
	~~Grundfos~~		Other:
	Other:		

Starting Time: 8:45 Weather Conditions: cloudy

Sampling Time: 9:12 AM Water Color: clear Odor: none

Purging Flow Rate: 1 gpm. Sediment Description: none

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

Time	Volume (gal.)	pH	Conductivity µmhos/cm x 10^0	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
8:55	3	7.25	4.85	71.5	3.88	~~0.66~~	
8:58	6	7.31	4.90	71.6			
9:01	8.5	7.26	4.94	71.7			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
U-1	3 voA	Y	HCL	SEQUOIA	TPH(G)/btex/mtbe
"	1 plastic	"	—	"	Iron
"	~~Plastic~~	"	—	"	Nitrate, Phosphate
		"	—	"	Redox

COMMENTS:

TOSCO

Tosco Marketing Company
3500 Crow Canyon Pl., Ste. 400
San Ramon, California 94583

Facility Number: 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) 510-551-7555 (Fax Number) 510-551-7888

Contact (Name): TINA BERRY
(Phone): (925) 277-5325
Laboratory Name: Sequoia Analytical 9903619
Laboratory Release Number:
Samples Collected by (Name): JOE AJEMIAN
Collection Date: 3-22-99
Signature:

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)	Ferrous Iron	Nitrate, phosphate	Redox Potential			DO NOT BILL TB-LB ANALYSIS Remarks
TB-LB		1 VOA	W	—	—	HCL	Y	✓		9032521						—					please filter
U-1		3 VOA 1 pl.		G	11:30 A.M			✓		9032522			A-D			✓	✓	✓			from plain
U-2		"			10:48 A.M			✓		9032523						✓	✓	—			plastic and
U-3		"			7:42 A.M			✓		9032524						✓	✓	✓			preserve for
U-4		"			8:30 A.M			✓		9032525						✓	✓	✓			Ferrous Iron
U-5		"			10:00 A.M			✓		9032526						✓	✓	✓			analysis.
U-6		"			9:12 A.M			✓		9032527						✓	✓	✓			

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	G-R Inc.	3.22.99		CAS	3-24. 1400
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	CAS	3-24 1845			/
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time 1450 3/22/99

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

J Amis 3/24/99 1845

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (925) 988-9600, FAX (925) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342
1551 Industrial Road, San Carlos, CA 94070-4111, (650) 232-9600, FAX (650) 232-9612

Gettler-Ryan - Dublin	Client Project ID:	Unocal SS#5325, Oakland	Sampled: Mar 22, 1999
6747 Sierra Court, Suite J	Sample Matrix:	Water	Received: Mar 24, 1999
Dublin, CA 94568	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Apr 9, 1999
Attention: Deanna Harding	First Sample #:	903-2521	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX / MTBE

Analyte	Reporting Limit µg/L	Sample I.D. 903-2521 TB-LB	Sample I.D. 903-2522 U-1	Sample I.D. 903-2523 U-2	Sample I.D. 903-2524 U-3	Sample I.D. 903-2525 U-4	Sample I.D. 903-2526 U-5
Purgeable Hydrocarbons	50	N.D.	130,000	28,000	N.D.	N.D.	780
Benzene	0.50	N.D.	470	1,100	N.D.	N.D.	8.9
Toluene	0.50	N.D.	1,100	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.50	N.D.	2,000	360	N.D.	N.D.	0.76
Total Xylenes	0.50	N.D.	28,000	2,900	N.D.	N.D.	4.5
MTBE	2.5	N.D.	5,700	25,000	N.D.	N.D.	350
Chromatogram Pattern:		--	Gasoline	Gasoline	--	--	Gasoline

Quality Control Data

Report Limit Multiplication Factor:	1.0	200	200	1.0	1.0	1.0
Date Analyzed:	4/3/99	4/3/99	4/3/99	4/3/99	4/3/99	4/3/99
Instrument Identification:	HP-5	HP-4	HP-4	HP-4	HP-5	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	90	84	93	92	89	195 *

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

SEQUOIA ANALYTICAL, #1271

Julianne Fegley
Project Manager

Please Note:
* Surrogate recovery above control limit due to coelution.

9032521.GET <1>

Sequoia Analytical

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Gettler-Ryan - Dublin	Client Project ID:	Unocal SS#5325, Oakland	Sampled: Mar 22, 1999
6747 Sierra Court, Suite J	Sample Matrix:	Water	Received: Mar 24, 1999
Dublin, CA 94568	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Apr 9, 1999
Attention: Deanna Harding	First Sample #:	903-2527	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX / MTBE

Analyte	Reporting Limit µg/L	Sample I.D. 903-2527 U-6
Purgeable Hydrocarbons	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Total Xylenes	0.50	N.D.
MTBE	2.5	1,800
Chromatogram Pattern:		--

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Analyzed:	4/3/99
Instrument Identification:	HP-4
Surrogate Recovery, %: (QC Limits = 70-130%)	96

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

SEQUOIA ANALYTICAL, #1271

Julianne Fegley
Project Manager

9032521.GET <2>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342
1551 Industrial Road, San Carlos, CA 94070-4111, (650) 232-9600, FAX (650) 232-9612

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

Client Project ID: Unocal SS#5325, Oakland
Sample Descript: Water, U-1

Lab Number: 903-2522

Sampled: Mar 22, 1999
Received: Mar 24, 1999

Analyzed: Mar 22-25, 1999
Reported: Apr 9, 1999

LABORATORY ANALYSIS

Analyte	Detection Limit mg/L	Sample Results mg/L
Ferrous Iron	0.010	4.9
Nitrate as N	1.0	N.D.
Phosphate	0.10	3.5
Redox Potential (mV)	10	320

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

SEQUOIA ANALYTICAL, #1210

Julianne Fegley
Project Manager

9032521.GET <3>

Sequoia Analytical

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

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

Client Project ID: Unocal SS#5325, Oakland
Sample Descript: Water, U-2
Lab Number: 903-2523

Sampled: Mar 22, 1999
Received: Mar 24, 1999
Analyzed: Mar 22-25, 1999
Reported: Apr 9, 1999

LABORATORY ANALYSIS

Analyte	Detection Limit mg/L	Sample Results mg/L
Ferrous Iron	0.010	0.68
Nitrate as N	1.0	N.D.
Phosphate	0.10	2.3
Redox Potential (mV)	10	320

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

SEQUOIA ANALYTICAL, #1210

Julianne Fegley
Project Manager

9032521.GET <4>

Sequoia Analytical

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

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

Client Project ID: Unocal SS#5325, Oakland
Sample Descript: Water, U-3

Lab Number: 903-2524

Sampled: Mar 22, 1999
Received: Mar 24, 1999

Analyzed: Mar 22-25, 1999
Reported: Apr 9, 1999

LABORATORY ANALYSIS

Analyte	Detection Limit mg/L	Sample Results mg/L
Ferrous Iron	0.010	0.015
Nitrate as N	1.0	30
Phosphate	0.10	0.14
Redox Potential (mV)	10	310

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

SEQUOIA ANALYTICAL, #1210

Julianne Fegley
Project Manager

9032521.GET <5>

Sequoia Analytical

680 Chesapeake Drive	Redwood City, CA 94063	(650) 364-9600	FAX (650) 364-9233
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1455 McDowell Blvd. North, Ste. D	Petaluma, CA 94954	(707) 792-1865	FAX (707) 792-0342
1551 Industrial Road	San Carlos, CA 94070-4111	(650) 232-9600	FAX (650) 232-9612

Gettler-Ryan - Dublin	Client Project ID:	Unocal SS#5325, Oakland	Sampled:	Mar 22, 1999
6747 Sierra Court, Suite J	Sample Descript:	Water, U-4	Received:	Mar 24, 1999
Dublin, CA 94568				
Attention: Deanna Harding	Lab Number:	903-2525	Analyzed:	Mar 22-25, 1999
			Reported:	Apr 9, 1999

LABORATORY ANALYSIS

Analyte	Detection Limit mg/L	Sample Results mg/L
Ferrous Iron	0.010	N.D.
Nitrate as N	1.0	30
Phosphate	0.10	0.14
Redox Potential (mV)	10	320

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

SEQUOIA ANALYTICAL, #1210

Julianne Fegley
Project Manager

9032521.GET <6>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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1551 Industrial Road, San Carlos, CA 94070-4111, (650) 232-9600, FAX (650) 232-9612

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

Client Project ID: Unocal SS#5325, Oakland
Sample Descript: Water, U-5
Lab Number: 903-2526

Sampled: Mar 22, 1999
Received: Mar 24, 1999
Analyzed: Mar 22-25, 1999
Reported: Apr 9, 1999

LABORATORY ANALYSIS

Analyte	Detection Limit mg/L	Sample Results mg/L
Ferrous Iron	0.010	0.12
Nitrate as N	1.0	N.D.
Phosphate	0.10	2.4
Redox Potential (mV)	10	340

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

SEQUOIA ANALYTICAL, #1210

Julianne Fegley
Project Manager

9032521.GET <7>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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1551 Industrial Road, San Carlos, CA 94070-4111, (650) 232-9600, FAX (650) 232-9612

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

Client Project ID: Unocal SS#5325, Oakland
Sample Descript: Water, U-6
Lab Number: 903-2527

Sampled: Mar 22, 1999
Received: Mar 24, 1999
Analyzed: Mar 22-25, 1999
Reported: Apr 9, 1999

LABORATORY ANALYSIS

Analyte	Detection Limit mg/L	Sample Results mg/L
Ferrous Iron	0.010	2.1
Nitrate as N	1.0	N.D.
Phosphate	0.10	0.98
Redox Potential (mV)	10	330

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

SEQUOIA ANALYTICAL, #1210

Julianne Fegley
Project Manager

9032521.GET <8>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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1551 Industrial Road, San Carlos, CA 94070-4111, (650) 232-9600, FAX (650) 232-9612

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

Client Project ID: Unocal SS#5325, Oakland
Matrix: Liquid
QC Sample Group: 990-3619

Reported: Apr 9, 1999

QUALITY CONTROL DATA REPORT

ANALYTE	o-Phosphate	Nitrate	Phosphate
Method:	EPA 365.3	EPA 300.0	EPA 300.0
Analyst:	M. Laverenko	BE	BE
MS/MSD Batch#:	IN032499365300A	IN0324993000ACF	0324993000ACF
Date Prepared:	3/18/99	3/24/99	3/24/99
Date Analyzed:	3/18/99	3/24/99	3/24/99
Instrument I.D.#:	-	INAC1	INAC1
Conc. Spiked:	0.50	30	N.D.
Matrix Spike % Recovery:	0.70 123	120 90	64 64
Matrix Spike Duplicate % Recovery:	0.74 131	120 90	68 68
Relative % Difference:	6.3	0.0	6.1
LCS Batch#:	LCS032499	LCS032499	LCS032499
Date Prepared:	3/18/99	3/24/99	3/24/99
Date Analyzed:	3/18/99	3/24/99	3/24/99
Instrument I.D.#:	-		
LCS % Recovery:	0.51 102	9.3 93	8.4 84
% Recovery Control Limits:	80-120	90-110	90-110

SEQUOIA ANALYTICAL, #1271

Arthur G. Burton
Laboratory Director

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