GETTLER-RYAN INC.

April 1, 1999
G-R Job #180041

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

RE: Annual 1999 Groundwater Monitoring & Sampling Report
Tosco (Unocal) Service Station #5487
28250 Hesperian Boulevard
Hayward, California

Dear Mr. De Witt:

This report documents the annual groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R). On February 2, 1999, field personnel monitored seven wells (MW-1 through MW-7) and sampled three wells (MW-5, MW-6 and MW-7) 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 the wells. Static water level data and groundwater elevations are summarized in Table 1. 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 Table 1, and a Concentration Map is included as Figure 2. The chain of custody document and laboratory analytical reports are also attached.

Sincerely,

Deanna L. Harding
Project Coordinator

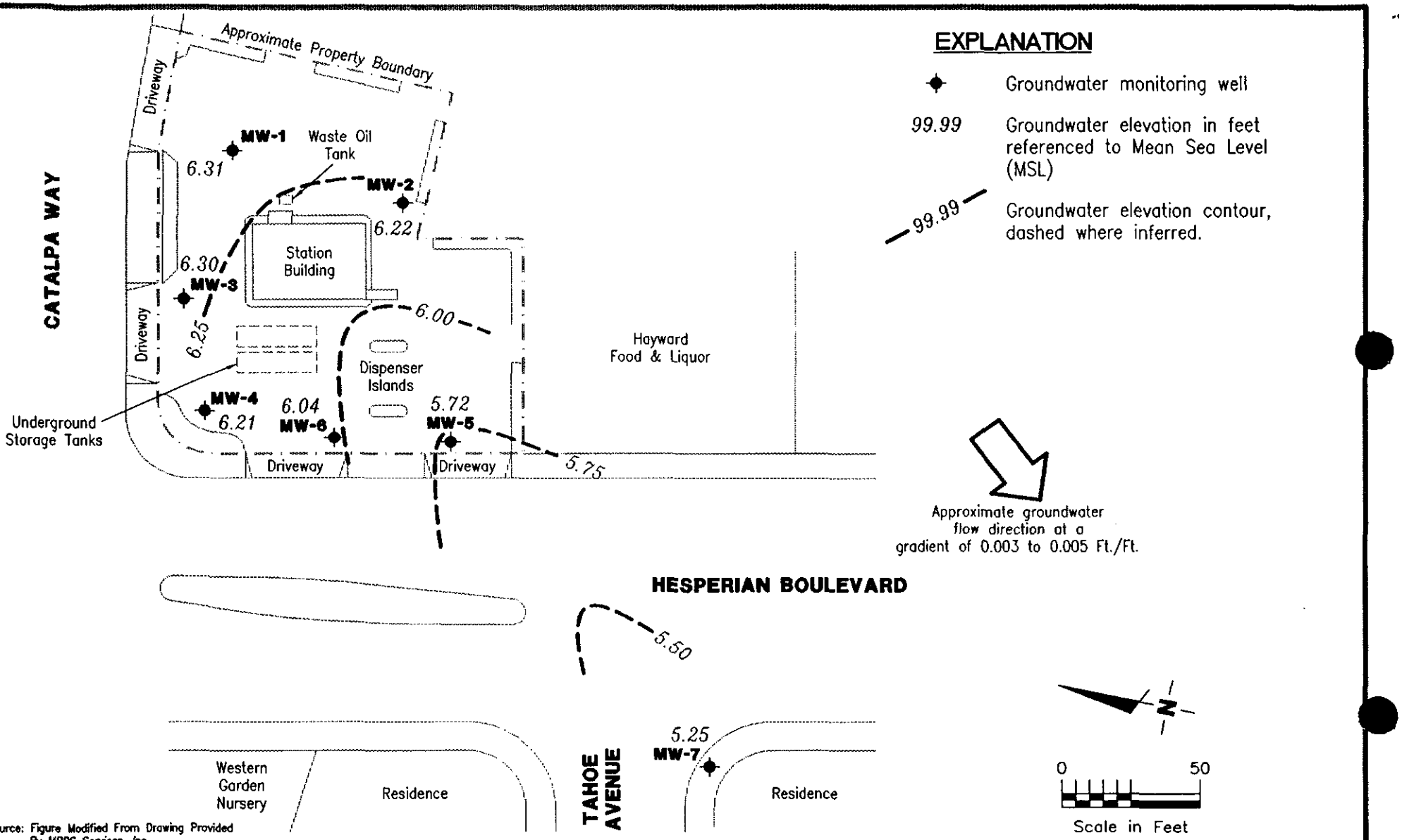
Stephen J. Carter
Senior Geologist, R.G. No. 5577

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

255487 33 X SF
X TRANSMITTAL
3 4 5

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

5487.qml



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

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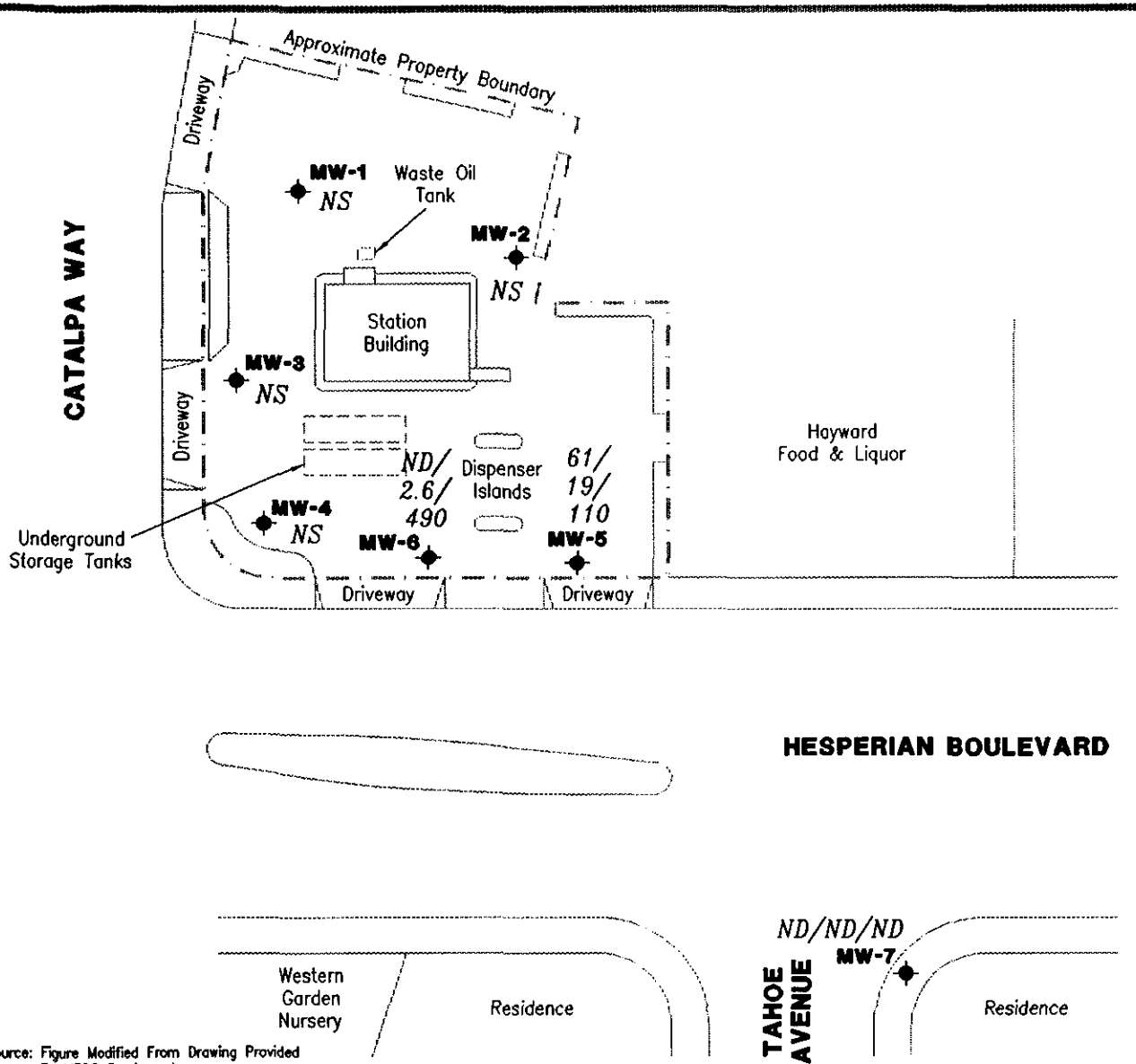
Dublin, CA 94568

POTENTIOMETRIC MAP
Tosco (Unocal) Service Station No. 5487
28250 Hesperian Boulevard
Hayward, California

FIGURE
1

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
180041		February 2, 1999	



EXPLANATION

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

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

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Dublin, CA 94568

CONCENTRATION MAP
Tosco (Unocal) Service Station No. 5487
28250 Hesperian Boulevard
Hayward, California

FIGURE
2

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
180041		February 2, 1999	

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) service Station #5487

28250 Hesperian Boulevard

Hayward, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	TPH(G) *(ppb)*	B *(ppb)*	T *(ppb)*	E *(ppb)*	X *(ppb)*	MTBE *(ppb)*
MW-1									
	04/26/89[1]	--	--	ND	2.1	ND	ND	ND	--
	08/16/89[2]	--	--	ND	ND	ND	ND	ND	--
	11/14/89[1]	--	--	ND	ND	ND	ND	ND	--
	02/16/90[1]	--	--	ND	ND	ND	ND	ND	--
	05/16/90[1]	--	--	ND	ND	ND	ND	ND	--
	08/29/90[1]	--	--	ND	ND	ND	ND	0.74	--
	11/15/90[1]	--	--	ND	ND	ND	ND	ND	--
	02/11/91[1]	--	--	ND	ND	ND	ND	ND	--
	05/10/91	--	--	ND	ND	ND	ND	ND	--
	08/02/91	--	--	ND	ND	ND	ND	ND	--
	11/07/91	--	--	ND	ND	ND	ND	ND	--
	08/04/92	--	--	ND	ND	ND	ND	ND	--
12.57	05/03/93	6.87	5.70	--	--	--	--	--	--
	08/05/93	7.49	5.08	ND	ND	ND	ND	ND	--
11.73	11/05/93	6.98	4.75	--	--	--	--	--	--
	02/07/94	6.26	5.47	--	--	--	--	--	--
	05/02/94	6.27	5.46	--	--	--	--	--	--
	08/02/94	6.89	4.84	ND	ND	ND	ND	ND	--
	11/02/94	7.07	4.66	--	--	--	--	--	--
	02/01/95	5.17	6.56	--	--	--	--	--	--
	05/02/95	5.65	6.08	--	--	--	--	--	--
	08/03/95	6.21	5.52	ND	ND	ND	ND	ND	--
	11/06/95	6.80	4.93	--	--	--	--	--	--
	02/02/96	3.88	7.85	SAMPLED ANNUALLY		--	--	--	--
	02/07/97	4.63	7.10	SAMPLING DISCONTINUED		--	--	--	--
	02/09/98	2.70	9.03	--	--	--	--	--	--
	02/02/99	**5.42**	**6.31**	**--**	**--**	**--**	**--**	**--**	**--**
MW-2									
	04/26/89[1]	--	--	ND	ND	ND	ND	ND	--
	08/16/89[2]	--	--	ND	ND	ND	ND	ND	--
	11/14/89[1]	--	--	ND	ND	ND	ND	ND	--
	02/16/90	--	--	ND	ND	ND	ND	ND	--
	05/16/90[1]	--	--	ND	ND	ND	ND	ND	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) service Station #5487

28250 Hesperian Boulevard

Hayward, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	TPH(G) *(ppb)*	B *(ppb)*	T *(ppb)*	E *(ppb)*	X *(ppb)*	MTBE *(ppb)*
MW-2	08/29/90	--	--	ND	ND	ND	ND	ND	--
(cont)	11/15/90	--	--	ND	ND	ND	ND	ND	--
	02/11/91	--	--	ND	ND	ND	ND	ND	--
	05/10/91	--	--	ND	ND	ND	ND	ND	--
	08/02/91	--	--	ND	ND	ND	ND	ND	--
	11/07/91	--	--	ND	ND	ND	ND	ND	--
	08/04/92	--	--	ND	ND	ND	ND	ND	--
12.89	05/03/93	7.30	5.59	--	--	--	--	--	--
	08/05/93	7.97	4.92	ND	ND	ND	ND	ND	--
12.58	11/05/93	7.97	4.61	--	--	--	--	--	--
	02/07/94	7.09	5.49	--	--	--	--	--	--
	05/02/94	7.23	5.35	--	--	--	--	--	--
	08/02/94	7.87	4.71	ND	ND	ND	ND	ND	--
	11/02/94	7.98	4.60	--	--	--	--	--	--
	02/01/95	6.13	6.45	--	--	--	--	--	--
	05/02/95	7.04	5.54	--	--	--	--	--	--
	08/03/95	7.19	5.39	ND	ND	ND	ND	ND	--
	11/06/95	7.80	4.78	--	--	--	--	--	--
	02/02/96	5.91	6.67	SAMPLED ANNUALLY		--	--	--	--
	02/07/97	5.65	6.93	SAMPLING DISCONTINUED		--	--	--	--
	02/09/98	3.63	8.95	--	--	--	--	--	--
	02/02/99	**6.36**	**6.22**	--	--	--	--	--	--
MW-3									
	04/26/89[1]	--	--	ND	ND	ND	ND	ND	--
	08/16/89	--	--	ND	ND	ND	ND	ND	--
	11/14/89	--	--	ND	ND	ND	ND	ND	--
	02/16/90	--	--	ND	ND	ND	ND	ND	--
	05/16/90	--	--	ND	ND	ND	ND	ND	--
	08/29/90	--	--	ND	ND	0.52	ND	ND	--
	11/15/90	--	--	ND	ND	ND	ND	ND	--
	02/11/91	--	--	ND	ND	ND	ND	ND	--
	05/10/91	--	--	ND	ND	ND	ND	ND	--
	08/02/91	--	--	ND	ND	ND	ND	ND	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) service Station #5487

28250 Hesperian Boulevard

Hayward, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	TPH(G) *(ppb)*	B *(ppb)*	T *(ppb)*	E *(ppb)*	X *(ppb)*	MTBE *(ppb)*
MW-3	11/07/91	--	--	ND	ND	ND	ND	ND	--
(cont)	08/04/92	--	--	ND	ND	ND	ND	ND	--
12.46	05/03/93	6.82	5.64	--	--	--	--	--	--
	08/05/93	7.50	4.96	--	--	--	--	--	--
11.99	11/05/93	7.35	4.64	--	--	--	--	--	--
	02/07/94	6.58	5.41	--	--	--	--	--	--
	05/02/94	6.62	5.37	--	--	--	--	--	--
	08/02/94	7.24	4.75	ND	ND	ND	ND	ND	--
	11/02/94	7.42	4.57	--	--	--	--	--	--
	02/01/95	5.55	6.44	--	--	--	--	--	--
	05/02/95	5.70	6.29	--	--	--	--	--	--
	08/03/95	6.59	5.40	ND	ND	ND	ND	ND	--
	11/06/95	7.20	4.79	--	--	--	--	--	--
	02/02/96	4.08	7.91	SAMPLED ANNUALLY		--	--	--	--
	02/07/97	5.04	6.95	SAMPLING DISCONTINUED		--	--	--	--
	02/09/98	3.11	8.88	--	--	--	--	--	--
	02/02/99	**5.69**	**6.30**	**--**	**--**	**--**	**--**	**--**	**--**
MW-4									
	04/26/89[1]	--	--	ND	0.33	ND	ND	ND	--
	08/16/89	--	--	ND	ND	ND	ND	ND	--
	11/14/89	--	--	ND	ND	ND	ND	ND	--
	02/16/90	--	--	ND	ND	ND	ND	ND	--
	05/16/90	--	--	ND	ND	ND	ND	ND	--
	08/29/90	--	--	ND	ND	ND	ND	ND	--
	11/15/90	--	--	ND	ND	ND	ND	ND	--
	02/11/91	--	--	ND	ND	ND	ND	ND	--
	05/10/91	--	--	ND	ND	ND	ND	ND	--
	08/02/91	--	--	ND	ND	ND	ND	ND	--
	11/07/91	--	--	ND	ND	ND	ND	ND	--
	08/04/92	--	--	ND	ND	ND	ND	ND	--
12.09	05/03/93	6.60	5.49	--	--	--	--	--	--
	08/05/93	7.28	4.81	ND	ND	ND	ND	ND	--
11.58	11/05/93	7.07	4.51	--	--	--	--	--	--
	02/07/94	6.21	5.37	--	--	--	--	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) service Station #5487

28250 Hesperian Boulevard

Hayward, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	TPH(G) *(ppb)*	B *(ppb)*	T *(ppb)*	E *(ppb)*	X *(ppb)*	MTBE *(ppb)*
MW-4	05/02/94	6.32	5.26	--	--	--	--	--	--
(cont)	08/02/94	6.95	4.63	ND	ND	ND	ND	ND	--
	11/02/94	7.13	4.45	SAMPLED ANNUALLY		--	--	--	--
	02/01/95	5.23	6.35	--	--	--	--	--	--
	05/02/95	5.43	6.15	--	--	--	--	--	--
	08/03/95	6.33	5.25	ND	ND	ND	ND	ND	--
	11/06/95	6.90	4.68	--	--	--	--	--	--
	02/02/96	3.71	7.87	--	--	--	--	--	--
	02/07/97	4.46	7.12	SAMPLING DISCONTINUED		--	--	--	--
	02/09/98	2.55	9.03	--	--	--	--	--	--
	02/02/99	**5.37**	**6.21**	**--**	**--**	**--**	**--**	**--**	**--**
MW-5									
	04/26/89[1]	--	--	ND	ND	ND	ND	ND	--
	08/16/89	--	--	4,400	1,400	84	200	950	--
	08/31/89	--	--	910	120	7.1	50	53	--
	11/14/89	--	--	73	4.7	0.97	2.9	16	--
	02/16/90	--	--	ND	ND	ND	ND	ND	--
	05/16/90	--	--	1,100	310	2.8	70	110	--
	08/29/90	--	--	ND	0.70	ND	0.57	1.1	--
	11/15/90	--	--	ND	ND	ND	ND	0.47	--
	02/11/91	--	--	58	23	ND	2.9	1.3	--
	05/10/91	--	--	ND	ND	ND	ND	ND	--
	08/02/91	--	--	100	43	0.33	12	5.2	--
	11/07/91	--	--	700	43	1.7	29	24	--
	02/05/92	--	--	120	20	ND	4.4	4.7	--
	05/05/92	--	--	170	45	0.48	9.0	6.8	--
	08/04/92	--	--	80	13	ND	4.5	6.9	--
	11/05/92	--	--	120	16	ND	3.5	3.0	--
	02/02/93	--	--	77[3]	5.0	ND	1.2	1.3	--
11.18	05/03/93	6.16	5.02	260	35	ND	2.3	3.1	--
	08/05/93	6.97	4.21	530	210	0.62	54	44	--
10.79	11/05/93	6.81	3.98	110	12	ND	2.3	2.3	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) service Station #5487

28250 Hesperian Boulevard

Hayward, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	TPH(G) *(ppb)*	B *(ppb)*	T *(ppb)*	E *(ppb)*	X *(ppb)*	MTBE *(ppb)*
MW-5	02/07/94	5.70	5.09	180	22	ND	6.4	5.9	--
(cont)	05/02/94	5.96	4.83	170[3]	38	0.73	8.5	8.4	--
	08/02/94	6.68	4.11	59	16	ND	2.4	3.1	--
	11/02/94	6.86	3.93	450	73	1.6	6.2	11	--
	02/01/95	4.85	5.94	170	11	ND	2.4	3.9	--
	05/02/95	4.95	5.84	ND	7.5	0.51	1.2	1.6	--
	08/03/95	6.03	4.76	ND	12	ND	0.70	ND	--
	11/06/95	6.70	4.09	160	80	ND	7.4	10	120
	02/02/96	3.50	7.29	64	20	ND	3.9	6.1	150
	02/07/97	4.26	6.53	85	16	0.56	1.7	3.8	250
	02/09/98	2.29	8.50	220	54	ND	3.2	5.9	230
	02/02/99	**5.07**	**5.72**	**61[6]**	**19**	**ND**	**1.3**	**2.1**	**110**
MW-6	08/04/92	--	--	540	12	7.9	35	110	--
	11/05/92	--	--	300	16	2.3	14	14	--
	02/02/93	--	--	400[3]	66	5.5	32	13	--
11.47	05/03/93	6.28	5.19	520	47	2.6	33	48	--
	08/05/93	7.05	4.42	230	25	1.6	12	29	--
11.18	11/05/93	7.02	4.16	100	1.8	ND	0.79	2.2	--
	02/07/94	6.00	5.18	1,100	130	14	13	130	--
	05/02/94	6.18	5.00	440[3]	20	4.2	11	26	--
	08/02/94	6.88	4.30	220	13	1.0	12	28	--
	11/02/94	7.05	4.13	840	30	2.5	26	57	--
	02/01/95	5.04	6.14	340	26	0.77	2.6	7.0	--
	05/02/95	5.00	6.18	ND	5.7	ND	0.81	1.1	--
	08/03/95	6.26	4.92	ND	0.76	ND	ND	ND	--
	11/06/95	6.87	4.31	210	17	0.66	14	37	130
	02/02/96	3.64	7.54	300	51	0.65	30	18	280
	02/07/97	4.41	6.77	66	5.8	1.2	2.1	6.6	450
	02/09/98	2.51	8.67	ND[5]	1.0	ND[5]	ND[5]	ND[5]	450
	02/02/99	**5.14**	**6.04**	**ND**	**2.6**	**ND**	**1.0**	**2.9**	**490**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) service Station #5487

28250 Hesperian Boulevard

Hayward, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	TPH(G) *(ppb)*	B *(ppb)*	T *(ppb)*	E *(ppb)*	X *(ppb)*	MTBE *(ppb)*
MW-7									
	07/30/96	--	--	ND	ND	ND	ND	ND	ND
9.39	02/07/97	3.75	5.64	ND	ND	ND	ND	ND	ND
	02/09/98	1.69	7.70	ND	ND	ND	ND	ND	ND
	02/02/99	**4.14**	**5.25**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
MWD[4]	05/10/91	--	--	ND	ND	ND	ND	ND	--
Trip Blank									
TB-LB	02/09/98	--	--	ND	ND	ND	ND	ND	ND
	02/02/99	**--**	**--**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5487
28250 Hesperian Boulevard
Hayward, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to February 9, 1998, were compiled from reports prepared by MPDS Services, Inc.

TOC = Top of Casing elevation
DTW = Depth to Water
(ft.) = Feet
GWE = Groundwater Elevation
msl = Relative to mean sea level
TPH(D) = Total Petroleum Hydrocarbons as Diesel
TPH(G) = Total Petroleum Hydrocarbons as Gasoline

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

ppb = Parts per billion
ppm = Parts per million
ND = Not Detected
-- = Not Measured/Not Analyzed
TOG = Total Oil and Grease

* *Prior to November 5, 1993, the elevations of the Top of Well Covers have been surveyed relative to Mean Sea Level (msl), per the City of Hayward Benchmark (Elevation = 10.97 feet, msl).* TOC elevations are relative to Mean Sea Level (msl), per the City of Hayward Benchmark (Elevation = 10.97 feet msl).

1 TPH(D), TOG and all EPA Method 8010 constituents were ND.
2 TOG for the samples collected from MW-1 and MW-2 were 23 ppm and 7.4 ppm, respectively. TPH(D) and all EPA Method 8010 constituents were ND for both samples.
3 Laboratory report indicates that the hydrocarbons detected appear to be a gasoline and non-gasoline mixture.
4 MWD was a quality assurance duplicate water sample collected from well MW-5.
5 Detection limit raised. Refer to analytical results.
6 Laboratory report indicates unidentified hydrocarbons C6-C12.

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/ Tosco
Facility # 5487 Job#: 180041
Address: 28250 Hesperian Blvd. Date: 2/2/99
City: Hayward Sampler: Vartka

Well ID MW-1 Well Condition: ok
Well Diameter 2 in. Hydrocarbon Thickness: 0 (feet) Amount Bailed (product/water): 0 (Gallons)
Total Depth 27.20 ft.
Depth to Water 5.42 ft.

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

_____ X VF _____ = _____ X 3 (case volume) = Estimated Purge Volume: _____ (gal.)

Purge Equipment:	Sampling Equipment:
Disposable Bailer	Disposable Bailer
Bailer	Bailer
Stack	Pressure Bailer
Suction	Grab Sample
Grundfos	Other: _____
Other: _____	

Starting Time: _____ Weather Conditions: _____
Sampling Time: _____ Water Color: _____ Odor: _____
Purging Flow Rate: _____ gpm. Sediment Description: _____
Did well de-water? _____ If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm X100	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	3 VOA	Y	HCl	SEQUOIA	~~TPH(G)/btex/mtbe~~

COMMENTS: Monitor only

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/ Tosco
Facility # 5487 Job#: 180041
Address: 28250 Hesperian Blvd. Date: 2/2/99
City: Hayward Sampler: Vaeth

Well ID MW-2 Well Condition: ok

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

Total Depth 23.80 ft.

Depth to Water 6.36 ft.

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

_____ X VF _____ = _____ X 3 (case volume) = Estimated Purge Volume: _____ (gal.)

Purge Equipment:	Sampling Equipment:
Disposable Bailer	Disposable Bailer
Bailer	Bailer
Stack	Pressure Bailer
Suction	Grab Sample
Grundfos	Other: _____
Other: _____	

Starting Time: _____ Weather Conditions: _____
Sampling Time: _____ Water Color: _____ Odor: _____
Purging Flow Rate: _____ gpm. Sediment Description: _____
Did well de-water? _____ If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm X100	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	3 VOA	Y	HCl	SEQUOIA	TPH(G)/btex/mtbe

COMMENTS: Monitor only

9/97-fieldst.frm

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/ Tosco
Facility # 5487 Job#: 180041
Address: 28250 Hesperian Blvd. Date: 2/2/99
City: Hayward Sampler: Vartkes

Well ID MW-3 Well Condition: OK

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

Total Depth 24.40 ft.

Depth to Water 5.69 ft.

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

_____ X VF _____ = _____ X 3 (case volume) = Estimated Purge Volume: _____ (gal.)

Purge Equipment:	Sampling Equipment:
Disposable Bailer	Disposable Bailer
Bailer	Bailer
Stack	Pressure Bailer
Suction	Grab Sample
Grundfos	Other: _____
Other: _____	

Starting Time: _____ Weather Conditions: _____
Sampling Time: _____ Water Color: _____ Odor: _____
Purging Flow Rate: _____ gpm. Sediment Description: _____
Did well de-water? _____ If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm X100	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	3 VOA	Y	HCl	SEQUOIA	TPH(G)/btex/mtbe

COMMENTS: Monitor only

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/ Tosco
Facility #5487 Job#: 180041
Address: 28250 Hesperian Blvd. Date: 2/2/99
City: Hayward Sampler: Varkey

Well ID MW-4 Well Condition: OK

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

Total Depth 24.55 ft.

Depth to Water 5.37 ft.

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

_____ X VF _____ = _____ X 3 (case volume) = Estimated Purge Volume: _____ (gal.)

Purge Equipment:	Sampling Equipment:
Disposable Bailer	Disposable Bailer
Bailer	Bailer
Stack	Pressure Bailer
Suction	Grab Sample
Grundfos	Other: _____
Other: _____	

Starting Time: _____ Weather Conditions: _____
Sampling Time: _____ Water Color: _____ Odor: _____
Purging Flow Rate: _____ gpm. Sediment Description: _____
Did well de-water? _____ If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm X100	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	3-VOA	Y	HCl	SEQUOIA	TPH(G)/btex/mtbe

COMMENTS: Monitor only

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/ Tosco
Facility # 5487 Job#: 180041
Address: 28250 Hesperian Blvd. Date: 2/2/99
City: Hayward Sampler: Vaughn

Well ID MW-5 Well Condition: OK

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

Total Depth 24.15 ft.

Depth to Water 5.07 ft.

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

19.08 X VF 0.17 = 3.24 X 3 (case volume) = Estimated Purge Volume: 9.73 (gal.)

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

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

Starting Time: 11:09 Weather Conditions: clear
Sampling Time: 11:25 Water Color: clear Odor: Y
Purging Flow Rate: 1 gpm. Sediment Description: _____
Did well de-water? NO If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm X100	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
11:12	3.5	7.50	9.20	70.6			
11:16	7	7.36	9.32	69.5			
11:19	10	7.31	9.28	69.0			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-5	3 VOA	Y	HCl	SEQUOIA	TPH(G)/btex/mtbe

COMMENTS: _____

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/ Tosco
Facility # 5487 Job#: 180041
Address: 28250 Hesperian Blvd. Date: 2/2/99
City: Hayward Sampler: Vaeth

Well ID MW-6 Well Condition: ok

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

Total Depth 18.00 ft.

Depth to Water 5.14 ft.

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

12.86 X VF 0.17 = 2.19 X 3 (case volume) = Estimated Purge Volume: 6.56 (gal.)

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

Starting Time: 10:40 Weather Conditions: clear
Sampling Time: 10:55 Water Color: clear Odor: no
Purging Flow Rate: 1 gpm. Sediment Description:
Did well de-water? no If yes; Time: Volume: (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm X100	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
10:42	2	7.54	7.81	69.5			
10:44	4.5	7.40	7.90	68.5			
10:47	7	7.41	7.97	68.3			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-6	3 VOA	Y	HCl	SEQUOIA	TPH(G)/btex/mtbe

COMMENTS:

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/ Tosco
Facility # 5487 Job#: 180041
Address: 28250 Hesperian Blvd. Date: 2/2/99
City: Hayward Sampler: Vasthy

Well ID MW-7 Well Condition: OK

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

Total Depth 19.14 ft.

Depth to Water 4.14 ft.

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

15.00 X VF 0.17 = 2.55 X 3 (case volume) = Estimated Purge Volume: 7.65 (gal.)

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

Starting Time: 10:10 Weather Conditions: clear
Sampling Time: 10:25 Water Color: clear Odor: no
Purging Flow Rate: 1 gpm. Sediment Description:
Did well de-water? no If yes; Time: Volume: (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm X100	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
10:12	2.5	7.68	8.38	66.7			
10:15	5	7.51	8.21	67.8			
10:18	8	7.49	8.16	68.2			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-7	3 VOA	Y	HCl	SEQUOIA	TPH(G)/btex/mtbe

COMMENTS:

TOSCO

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

Facility Number UNOCAL SS #5487
Facility Address 28250 Hesperian Blvd., HAYWARD CA
Consultant Project Number 180041.85
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) 925-551-7888

Contact (Name) MR. DAVID DEWITT
(Phone) (925) 277-2384
Laboratory Name Sequoia Analytical
Laboratory Release Number 9902067
Samples Collected by (Name) Vasken Tashjian
Collection Date 2/2/99
Signature Vasken Tashjian

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed: TPH Gas + BTEX w/MTBE (8020)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (TCLP or AA)					DO NOT BILL TB-LB ANALYS Remarks
TB-LB		1	W	G		HCl	Y	X								9020302	A			
MW-5		3	"	"	11:25 AM	"	"	X								9020303	A-C			
MW-6		3	"	"	10:55 AM	"	"	X								9020304				
MW-7		3	"	"	10:25 AM	"	"	X								9020305	↓			

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Turn Around Time (Circle Choice)
Vasken Tashjian	G-R Inc.	2/2/99 2:20 PM		SEQUOIA	2/2/99 1420	24 Hrs.
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	48 Hrs.
	SEQUOIA	2/2/99		CSC	2-2 1610	5 Days
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time	10 Days
	CSC	2-2 1810	Ronald Jensen		2/2/99 18:10	As Contracted

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

Gettler-Ryan - Dublin	Client Project ID:	Unocal SS#5487, Hayward	Sampled:	Feb 2, 1999
6747 Sierra Court, Suite J	Sample Matrix:	Water	Received:	Feb 2, 1999
Dublin, CA 94568	Analysis Method:	EPA 5030/8015 Mod./8020	Reported:	Feb 19, 1999
Attention: Deanna Harding	First Sample #:	902-0302		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX / MTBE

Analyte	Reporting Limit µg/L	Sample I.D. 902-0302 TB-LB	Sample I.D. 902-0303 MW-5	Sample I.D. 902-0304 MW-6	Sample I.D. 902-0305 MW-7
Purgeable Hydrocarbons	50	N.D.	61	N.D.	N.D.
Benzene	0.50	N.D.	19	2.6	N.D.
Toluene	0.50	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.50	N.D.	1.3	1.0	N.D.
Total Xylenes	0.50	N.D.	2.1	2.9	N.D.
MTBE	2.5	N.D.	110	490	N.D.
Chromatogram Pattern:		--	Unidentified Hydrocarbons C6 - C12	--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0
Date Analyzed:	2/9/99	2/9/99	2/10/99	2/9/99
Instrument Identification:	HP-9	HP-9	HP-9	HP-9
Surrogate Recovery, %: (QC Limits = 70-130%)	96	94	108	94

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

9020302.GET <1>

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

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

Client Project ID: Unocal SS#5487, Hayward
Matrix: Liquid

QC Sample Group: 9020302-305

Reported: Feb 19, 1999

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	C. Westwater	C. Westwater	C. Westwater	C. Westwater
MS/MSD Batch#:	9011771	9011771	9011771	9011771
Date Prepared:	2/9/99	2/9/99	2/9/99	2/9/99
Date Analyzed:	2/9/99	2/9/99	2/9/99	2/9/99
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	105	110	110	108
Matrix Spike Duplicate % Recovery:	110	115	115	115
Relative % Difference:	4.7	4.4	4.4	6.0
LCS Batch#:	9LCS020999	9LCS020999	9LCS020999	9LCS020999
Date Prepared:	2/9/99	2/9/99	2/9/99	2/9/99
Date Analyzed:	2/9/99	2/9/99	2/9/99	2/9/99
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9
LCS % Recovery:	95	105	105	105
% Recovery Control Limits:	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL, #1271

Julianne Fegley
Project Manager

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.