GETTLER-RYAN INC.

TRANSMITTAL

May 6, 1999
G-R #:180107

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

CC: Mr. Tim Ripp
Pacific Environmental Group
2025 Gateway Pl., Suite 440,
San Jose, California 95110

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

RE: Tosco (Unocal) SS #5430
1935 Washington Avenue
San Leandro, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	April 26, 1999	Groundwater Monitoring and Sampling Report Semi-Annual 1999 - Event of March 2, 1999

COMMENTS:

This report is being sent to you for your review/comment, prior to being distributed on your behalf. If no comments are received by ***May 18, 1999***, this report will be distributed to the following:

Enclosure

cc: Mr. Scott Seery, Alameda County Health Care Services, 1131 Harbor Bay Parkway, Alameda, CA 94501
Mr. Michael Bakaldin, City of San Leandro Fire Dept., 835 East 14th Street, San Leandro, CA 94577

99 MAY 19 PM 4:41
ENVIRONMENTAL PROTECTION

agency/5430dbd.qmt

PACIFIC
ENVIRONMENTAL
GROUP, INC.

AN ITT COMPANY

STID 1747
505

April 20, 1999
Project 311-038.1A

Mr. John Jang
Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, California 94612

Re: 76 Service Station 5430
Quarterly Summary Report
First Quarter 1999

Dear Mr. Jang:

As directed by Mr. David DeWitt of Tosco Marketing Company, Pacific Environmental Group, Inc. is forwarding the quarterly summary report for the following location:

Service Station	Location
5430	1935 Washington Avenue, San Leandro

If you have questions or comments, please do not hesitate to contact our office at (408) 441-7500.

Sincerely,

Pacific Environmental Group, Inc.

Timothy L. Ripp
Project Geologist

Enclosure

cc: Mr. David DeWitt, Tosco Marketing Company
Mr. Kevin Tinsley, Alameda County Environmental Health Care Services

2025 Gateway Place, Suite 440 • San Jose, California 95110-1014 (408) 441-7500 FAX (408) 441-7539

Quarterly Summary Report
First Quarter 1999

76 Service Station 5430
1935 Washington Avenue at Castro Street
San Leandro, California

County STID #: 1747
County: Alameda

BACKGROUND

Unocal files suggest that a product line leak occurred in June 1976, and that one of the original underground gasoline storage tanks failed a precision test in October 1981. In December 1981, the two original steel gasoline storage tanks were replaced with two fiberglass gasoline storage tanks. There are currently six on-site groundwater monitoring wells and one off-site groundwater monitoring well in use at the site. In July 1997, three off-site exploratory borings were drilled on the property to the south of the 76 station. Based on the findings of that investigation, the lateral extent of hydrocarbon impact to groundwater is considered delineated. The product dispensers and associated underground product piping were replaced in July and August 1998. The underground waste oil storage tank was also removed and replaced with an aboveground waste oil storage tank.

RECENT QUARTER ACTIVITIES

No activities were performed.

NEXT QUARTER ACTIVITIES

Semi-annual groundwater monitoring and sampling activities will be performed in June 1999, and reported in August 1999.

CHARACTERIZATION/REMEDIAL STATUS

Soil contamination delineated? Yes.
Dissolved groundwater delineated? Yes.
Free product delineated? Not applicable.
Amount of groundwater contaminant recovered this quarter? None.
Soil remediation in progress? Not applicable.
Anticipated start date? Not applicable.
Anticipated completion date? Not applicable.
Dissolved/free product remediation in progress? No.
Anticipated start? Unknown.
Anticipated completion? Unknown.

CONSULTANT: PEG/IT

GETTLER-RYAN INC.

April 26, 1999
G-R Job #180107

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

RE: Semi-Annual 1999 Groundwater Monitoring & Sampling Report
Tosco (Unocal) Service Station #5430
1935 Washington Avenue
San Leandro, California

Dear Mr. De Witt:

This report documents the semi-annual groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R). On March 2, 1999, field personnel monitored and sampled seven wells (U-1 through U-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,

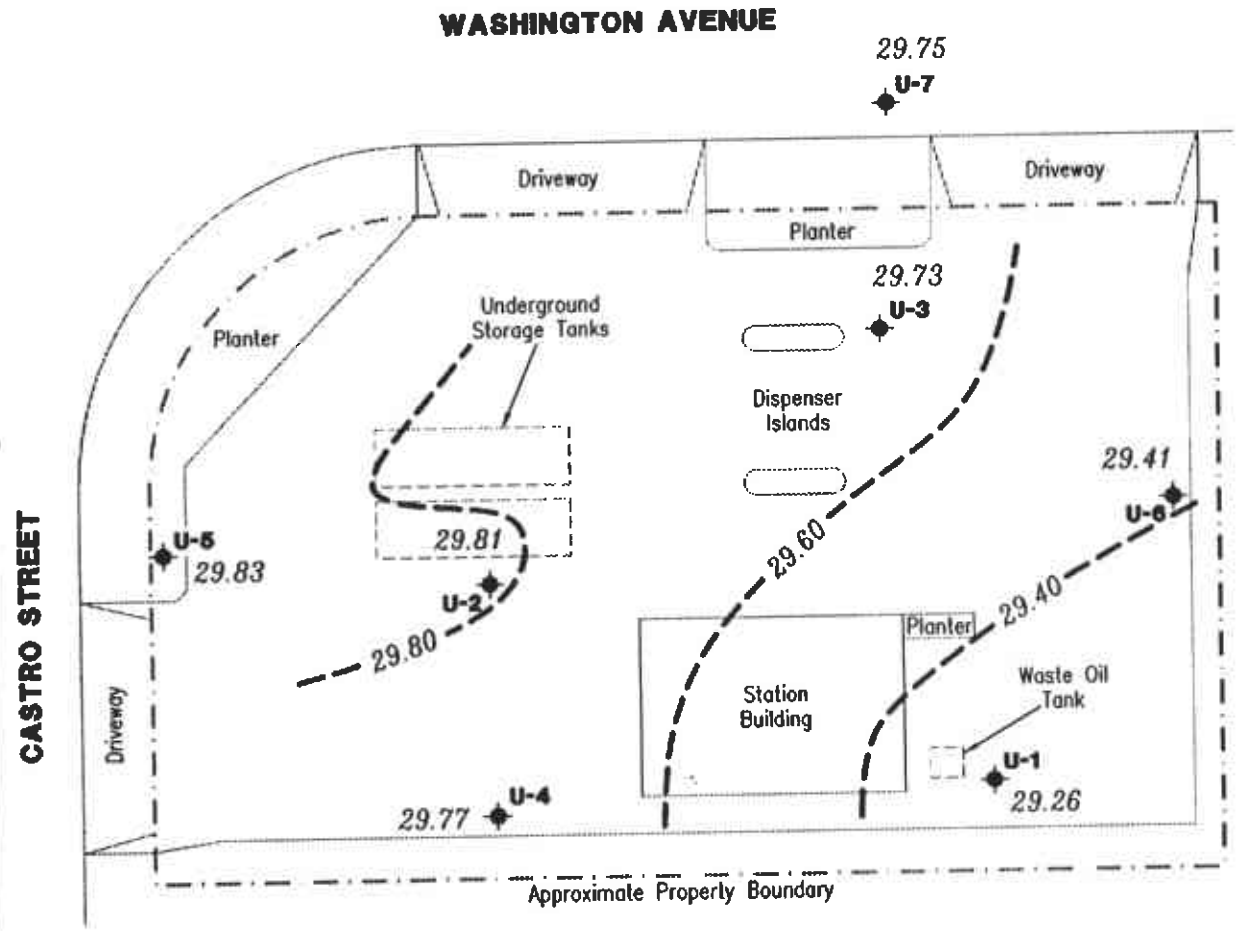
Deanna L. Harding
Project Coordinator

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

REGISTERED GEOLOGIST
RICKY L. FEARS
No. 6728
STATE OF CALIFORNIA

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

5430.qml



EXPLANATION

- ✦ Groundwater monitoring well
- 99.99 Groundwater elevation in feet referenced to benchmark, Datum 1929, USGS adjusted
- 99.99 Groundwater elevation contour, dashed where inferred.
- Approximate groundwater flow direction at a gradient of 0.01 Ft./Ft.

N

0 30

Scale in Feet

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

FIGURE 1

Gettler - Ryan Inc.

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

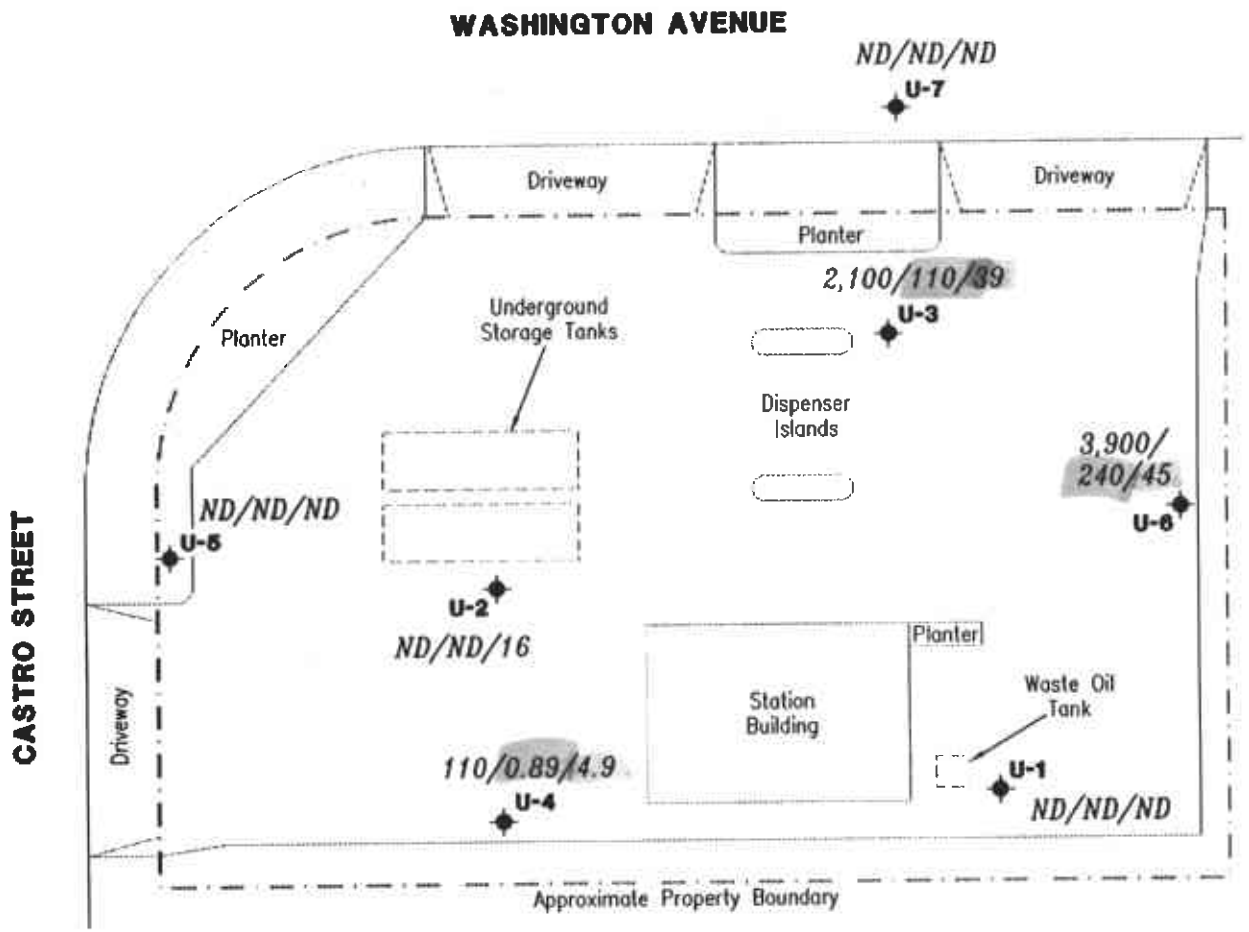
POTENTIOMETRIC MAP
Tosco (Unocal) Service Station No. 5430
1935 Washington Avenue
San Leandro, California

JOB NUMBER 180107

REVIEWED BY

DATE March 2, 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

Scale in Feet

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

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

CONCENTRATION MAP
Tosco (Unocal) Service Station No. 5430
1935 Washington Avenue
San Leandro, California

FIGURE
2

JOB NUMBER
180107

REVIEWED BY

DATE
March 2, 1999

REVISED DATE

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5430

1935 Washington Avenue

San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (ft.)	TPH(D) *(ppb)*	TPH(G) *(ppb)*	B *(ppb)*	T *(ppb)*	E *(ppb)*	X *(ppb)*	MTBE *(ppb)*	1,2-DCB *(ppb)*	1,2-DCA *(ppb)*
U-1												
56.58	08/13/93[1]	31.60	24.98	50[2]	310	0.84	ND	2.6	1.0	--	--	--
	09/07/93	31.60	24.98	--	--	--	--	--	--	--	--	--
56.10	12/16/93[1]	33.19	22.91	130[3]	ND	ND	ND	ND	ND	--	--	--
	01/13/94	33.06	23.04	--	--	--	--	--	--	--	--	--
	02/09/94	32.70	23.40	--	--	--	--	--	--	--	--	--
	03/25/94[1]	31.07	25.03	57[3]	58	0.63	0.79	ND	0.65	--	--	--
	05/18/94	31.76	24.34	--	--	--	--	--	--	--	--	--
	06/19/94[1]	32.26	23.84	61[3]	51	ND	1.4	ND	2.7	--	ND	7.4
	07/27/94	33.07	23.03	--	--	--	--	--	--	--	--	--
	08/18/94	33.50	22.60	--	--	--	--	--	--	--	--	--
	09/15/94[1]	33.93	22.17	83[3]	ND	0.50	0.85	ND	0.77	--	ND	9.5
	10/11/94	33.25	22.85	--	--	--	--	--	--	--	--	--
	11/08/94	34.05	22.05	--	--	--	--	--	--	--	--	--
	12/06/94[1]	32.37	23.73	ND	ND	ND	ND	ND	ND	--	ND	5.8
	01/10/95	31.29	24.81	--	--	--	--	--	--	--	--	--
56.09	03/14/95	27.86	28.23	71[3]	380	20	ND	ND	10	--	--	--
	06/20/95	28.20	27.89	170[3]	500	50	ND	ND	4.4	--	--	--
	09/18/95	30.65	25.44	72.00	57	1.2	0.75	0.57	2.2	--[6]	--	--
	12/14/95	32.20	23.89	ND	ND	0.72	1.4	1.2	3.6	--	ND	3.8
	03/06/96	26.53	29.56	ND	96	4.5	ND	ND	3.7	ND	--	--
	06/04/96	27.43	28.66	170[3]	410	48	ND	3.4	7.9	ND	--	--
	09/06/96	30.25	25.84	ND	ND	ND	ND	ND	ND	ND	--	--
	03/08/97	26.03	30.06	--	ND	ND	ND	ND	ND	ND	ND	43
	09/04/97	31.56	24.53	--	ND	ND	ND	ND	ND	ND	ND	4.5
	03/09/98	20.63	35.46	--	ND	ND	ND	ND	ND	ND	ND	ND
	09/01/98	27.82	28.27	--	ND	0.59	ND	ND	ND	3.1	ND	8.9
	03/02/99	**26.83**	**29.26**	--	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**4.5**
U-2												
55.77	08/13/93	30.87	24.90	--	1,400	ND	ND	ND	ND	--	--	--
	09/07/93	30.87	24.90	--	--	--	--	--	--	--	--	--
55.27	12/16/93	32.19	23.08	--	330	1.7	ND	11	8.5	--	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5430

1935 Washington Avenue

San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (ft.)	TPH(D) *(ppb)*	TPH(G) *(ppb)*	B *(ppb)*	T *(ppb)*	E *(ppb)*	X *(ppb)*	MTBE *(ppb)*	1,2-DCB *(ppb)*	1,2-DCA *(ppb)*
U-2	01/13/94	32.13	23.14	--	--	--	--	--	--	--	--	--
(cont)	02/09/94	33.50	21.77	--	--	--	--	--	--	--	--	--
	03/25/94	30.09	25.18	--	130	0.70	0.78	0.65	0.64	--	ND	11
(D)	03/25/94	--	--	--	--	--	--	--	--	--	ND	ND
	05/18/94	30.73	24.54	--	--	--	--	--	--	--	--	--
	06/19/94	31.31	23.96	--	180[4]	ND	ND	ND	0.86	--	ND	0.54
	07/27/94	32.12	23.15	--	--	--	--	--	--	--	--	--
	08/18/94	32.50	22.77	--	--	--	--	--	--	--	--	--
	09/15/94	33.00	22.27	--	1,000[5]	44	ND	ND	ND	--	ND	0.66
	10/11/94	32.35	22.92	--	--	--	--	--	--	--	--	--
	11/08/94	33.09	22.18	--	--	--	--	--	--	--	--	--
	12/06/94	31.44	23.83	--	250	19	ND	ND	ND	--	ND	ND
	01/10/95	30.25	25.02	--	--	--	--	--	--	--	--	--
55.29	03/14/95	26.36	28.93	--	89	ND	ND	ND	1.2	--	--	--
	06/20/95	26.74	28.55	--	ND	ND	0.58	ND	1.7	--	--	--
	09/18/95	29.65	25.64	--	ND	ND	ND	ND	0.85	--[6]	--	--
	12/14/95	31.10	24.19	--	ND	ND	0.89	ND	2.0	--[7]	ND	ND
	03/06/96	25.17	30.12	--	ND	ND	ND	ND	ND	80	--	--
	06/04/96	26.03	29.26	--	ND	ND	ND	ND	ND	110	--	--
	09/06/96	29.18	26.11	--	ND	ND	ND	ND	ND	ND	--	--
	03/08/97	24.64	30.65	--	ND	ND	ND	ND	ND	42	--	--
	09/04/97	30.59	24.70	--	ND	ND	ND	ND	ND	46	--	--
	03/09/98	19.22	36.07	--	ND	ND	ND	ND	ND	4.4	--	--
	09/01/98	26.40	28.89	--	ND	ND	ND	ND	ND	25	--	--
	03/02/99	**25.48**	**29.81**	--	**ND**	**ND**	**ND**	**ND**	**ND**	**16**	--	--
U-3												
55.66	08/13/93	30.70	24.96	--	23,000	1,000	ND	1,700	1,600	--	--	--
	09/07/93	30.70	24.96	--	--	--	--	--	--	--	--	--
55.24	12/16/93	32.08	23.16	--	15,000	570	ND	940	670	--	--	--
	01/13/94	31.98	23.26	--	--	--	--	--	--	--	--	--
	02/09/94	33.82	21.42	--	--	--	--	--	--	--	--	--
	03/25/94	30.03	25.21	--	18,000	560	40	1,000	770	--	ND	480
	05/18/94	30.66	24.58	--	--	--	--	--	--	--	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5430

1935 Washington Avenue

San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (ft.)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	1,2-DCB (ppb)	1,2-DCA (ppb)
U-3	06/19/94	31.19	24.05	--	17,000	580	ND	1,300	90	--	ND	410
(cont)	07/27/94	31.98	23.26	--	--	--	--	--	--	--	--	--
	08/18/94	32.39	22.85	--	--	--	--	--	--	--	--	--
	09/15/94	32.84	22.40	--	12,000	370	ND	970	610	--	ND	420
	10/11/94	32.20	23.04	--	--	--	--	--	--	--	--	--
	11/08/94	33.01	22.23	--	--	--	--	--	--	--	--	--
	12/06/94	31.34	23.90	--	17,000	390	ND	990	560	--	ND	430
	01/10/95	30.23	25.01	--	--	--	--	--	--	--	--	--
55.23	03/14/95	25.44	29.79	--	13,000	860	120	1,300	1,700	--	--	--
	06/20/95	26.70	28.53	--	9,800	590	ND	800	1,000	--	--	--
	09/18/95	29.55	25.68	--	9,800	600	ND	1,000	760	--[6]	--	--
	12/14/95	31.02	24.21	--	10,000	520	ND	920	630	--[7]	ND	240
	03/06/96	25.25	29.98	--	19,000	1,400	ND	1,800	3,000	73	--	--
	06/04/96	26.00	29.23	--	8,800	510	ND	600	830	ND	--	--
	09/06/96	29.06	26.17	--	15,000	360	20	540	450	ND	--	--
	03/08/97	24.65	30.58	--	3,500	310	ND	230	630	ND	ND	100
	09/04/97	30.44	24.79	--	700	27	ND	48	34	ND	ND	160
	03/09/98	19.20	36.03	--	410	22	1.2	ND[9]	6.1	24	ND	4.4
	09/01/98	26.33	28.90	--	ND	ND	ND	ND	ND	6.1	ND	ND
	03/02/99	**25.50**	**29.73**	**--**	**2,100**	**110**	**2.6**	**ND[9]**	**240**	**39**	**ND**	**6.7**
U-4												
55.39	03/14/95	26.52	28.87	--	490	3.2	2.1	0.79	1.2	--	ND	ND
	06/20/95	26.90	28.49	--	ND	ND	ND	ND	1.5	--	--	--
	09/18/95	29.79	25.60	--	ND	ND	ND	ND	ND	--[6]	--	--
	12/14/95	31.23	24.16	--	ND	ND	0.59	ND	0.79	--[7]	ND	ND
	03/06/96	25.30	30.09	--	ND	ND	ND	ND	0.62	50	--	--
	06/04/96	26.19	29.20	--	ND	ND	ND	ND	ND	290	--	--
	09/06/96	29.32	26.07	--	ND	ND	ND	ND	ND	ND	--	--
	03/08/97	24.79	30.60	--	ND	ND	ND	ND	ND	ND	--	--
	09/04/97	30.71	24.68	--	ND	ND	ND	ND	ND	18	--	--
	03/09/98	19.37	36.02	--	ND	ND	ND	ND	ND	ND	--	--
	09/01/98	26.56	28.83	--	ND	ND	ND	ND	ND	ND	--	--
	03/02/99	**25.62**	**29.77**	**--**	**110**	**0.89**	**0.53**	**ND**	**0.79**	**4.9**	**--**	**--**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5430

1935 Washington Avenue

San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (ft.)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	1,2-DCB (ppb)	1,2-DCA (ppb)
U-5												
54.18	03/14/95	25.20	28.98	--	ND	ND	ND	ND	1.2	--	ND	ND
	06/20/95	25.60	28.58	--	ND	ND	ND	ND	1.6	--	--	--
	09/18/95	28.55	25.63	--	ND	ND	ND	ND	0.66	--	--	--
	12/14/95	29.94	24.24	--	ND	ND	ND	ND	ND	--	ND	ND
	03/06/96	24.03	30.15	--	ND	ND	ND	ND	ND	ND	--	--
	06/04/96	24.91	29.27	--	ND	ND	ND	ND	ND	ND	--	--
	09/06/96	28.06	26.12	--	ND	ND	ND	ND	ND	ND	--	--
	03/08/97	23.49	30.69	--	ND	ND	ND	ND	ND	ND	--	--
	09/04/97	29.46	24.72	--	ND	ND	ND	ND	ND	ND	--	--
	03/09/98	18.10	36.08	--	ND	ND	ND	ND	ND	ND	--	--
	09/01/98	25.27	28.91	--	ND	ND	ND	ND	ND	ND	--	--
	03/02/99	**24.35**	**29.83**	**--**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**--**	**--**
U-6												
55.36	03/14/95	26.94	28.42	--	14,000	170	36	790	1,500	--	ND	210
	06/20/95	27.15	28.21	--	8,500	170	11	950	1,300	--	--	--
	09/18/95	29.95	25.41	--	9,500	260	ND	1,400	1,800	--[6]	--	--
	12/14/95	31.32	24.04	--	15,000	240	ND	1,400	1,700	--[7]	ND	370
	03/06/96	25.71	29.65	--	2,400	54	ND	170	250	ND	--	--
	06/04/96	26.52	28.84	--	4,600	83	ND	400	520	46	--	--
	09/06/96	29.41	25.95	--	12,000	180	6.4	690	600	95	--	--
	03/08/97	25.25	30.11	--	2,000	180	ND	96	290	ND	--	--
	09/04/97	30.75	24.61	--	680	17	ND	52	39	ND	--	--
	03/09/98	19.84	35.52	--	690	41	8.5	3.2	140	16	--	--
	09/01/98	INACCESSIBLE (PAVED OVER)			--	--	--	--	--	--	--	--
	03/02/99	**25.95**	**29.41**	**--**	**3,900**	**240**	**ND[9]**	**650**	**430**	**45**	**--**	**--**
U-7												
55.05	03/14/95	26.13	28.92	--	ND	ND	ND	ND	ND	--	ND	ND
	06/20/95	26.38	28.67	--	ND	ND	ND	ND	ND	--	--	--
	09/18/95	29.21	25.84	--	ND	ND	ND	ND	ND	--	--	--
	12/14/95	30.75	24.30	--	ND	ND	ND	ND	0.88	--	ND	ND

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5430
1935 Washington Avenue
San Leandro, California

EXPLANATIONS:

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

TOC = Top of Casing
DTW = Depth to Water
(ft.) = Feet
GWE = Groundwater Elevation
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
1,2-DCB = 1,2-Dichlorobenzene
1,2-DCA = 1,2-Dichloroethane
ppb = Parts per billion
ND = Not Detected
-- = Not Measured/Not Analyzed
(D) = Duplicate

* TOC elevations were surveyed March 1995, based on Benchmark provided by City of San Leandro, City Engineers Office, Datum 1929, USGS adjusted. Prior to December 16, 1993, the DTW measurements were taken from the top of well covers.

1 Total Oil and Grease (TOG) was ND.

2 Not a typical diesel pattern; lower boiling hydrocarbons in the boiling range of stoddard calculated as diesel.

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

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

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 Carbon tetrachloride was detected at a concentration of 1.3 ppb.

9 Detection limit raised. Refer to analytical results.

10 Carbon tetrachloride was detected at a concentration of 2.0 ppb, and Chloroform was detected at a concentration of 0.60 ppb.

11 Carbon tetrachloride was detected at a concentration of 1.2 ppb.

Note: All EPA Method 8010 constituents were ND, except as indicated above.

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 #5430 Job#: 180107

Address: 1935 Washington Ave. Date: 3-2-99

City: San Leandro, CA Sampler: Joe

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

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

Total Depth 39.60 ft.

Depth to Water 26.83 ft.

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

12.77 X VF 0.17 = 2.17 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: 11:00 Weather Conditions: clear

Sampling Time: 11:22 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)
11:10	2.5	7.79	7.63	69.7			
11:12	5	7.39	7.60	70.3			
11:14	7	7.47	7.61	70.7			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
U-1	3 VOA	Y	HCL	SEQUOIA	TPH(G)/btex/mtbe
"	2 VOA	"	"	"	8010

COMMENTS: _____

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility #5430 Job#: 180107

Address: 1935 Washington Ave. Date: 3-2-99

City: San Leandro, CA Sampler: Joe

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

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

Total Depth 39.27 ft.

Depth to Water 25.48 ft.

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

13.79 X VF 0.17 = 2.34 X 3 (case volume) = Estimated Purge Volume: 7.5 (gal.)

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

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

Starting Time: 10:25 Weather Conditions: clear

Sampling Time: 10:50 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)
10:35	2.5	7.58	7.41	70.2			
10:37	5	7.50	7.46	70.5			
10:40	7.5	7.52	7.49	70.5			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
U-2	3 VOA	Y	HCL	SEQUOIA	TPH(G)/btex/mtbe

COMMENTS: _____

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility #5430 Job#: 180107

Address: 1935 Washington Ave. Date: 3-2-99

City: San Leandro, CA Sampler: Joe

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

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

Total Depth 38.53 ft.

Depth to Water 25.50 ft.

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

13.03 X VF 0.17 = 2.22 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: 9:50 Weather Conditions: clear

Sampling Time: 10:12 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)
9:55	2.5	7.47	7.96	71.5			
9:57	5	7.40	7.90	71.2			
9:59	7	7.38	7.92	70.7			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
U-3	3 VOA	Y	HCL	SEQUOIA	TPH(G)/btex/mtbe
"	2 VOA	"	"	"	8010

COMMENTS: _____

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility #5430 Job#: 180107

Address: 1935 Washington Ave. Date: 3-2-99

City: San Leandro, CA Sampler: Joe

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

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

Total Depth 39.03 ft.

Depth to Water 25.62 ft.

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

13.41 X VF 0.17 = 2.28 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: 9:15 Weather Conditions: clear

Sampling Time: 9:36 AM 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)
9:22	2.5	8.10	5.85	71.9			
9:25	5	7.58	5.80	72.10			
9:27	7	7.62	5.87	72.2			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
U-4	3 VOA	Y	HCL	SEQUOIA	TPH(G)/btex/mtbe

COMMENTS: _____

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility #5430 Job#: 180107

Address: 1935 Washington Ave. Date: 3-2-99

City: San Leandro, CA Sampler: Joe

Well ID U-5 Well Condition: O.K.

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

Total Depth 38.51 ft.

Depth to Water 24.35 ft.

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

14.16 X VF 0.17 = 2.41 X 3 (case volume) = Estimated Purge Volume: 7.5 (gal.)

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

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

Starting Time: 8:38 Weather Conditions: clear

Sampling Time: 8:57 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)
8:45	2.5	7.36	6.76	71.5			
8:47	5	7.32	6.71	71.6			
8:49	7.5	7.41	6.69	71.7			

LABORATORY INFORMATION

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

COMMENTS: _____

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility #5430 Job#: 180107

Address: 1935 Washington Ave. Date: 3-2-99

City: San Leandro, CA Sampler: Joe

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

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

Total Depth 40.00 ft.

Depth to Water 25.95 ft.

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

14.05 X VF 0.17 = 2.39 X 3 (case volume) = Estimated Purge Volume: 7.5 (gal.)

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

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

Starting Time: 8:00 Weather Conditions: clear

Sampling Time: 8:25 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)
8:12	2.5	7.29	4.79	71.1			
8:15	5	7.31	5.28	72.2			
8:17	7.5	7.26	5.33	72.3			

LABORATORY INFORMATION

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

COMMENTS: _____

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility #5430 Job#: 180107

Address: 1935 Washington Ave. Date: 3-2-99

City: San Leandro, CA Sampler: Joe

Well ID U-7 Well Condition: O.K.

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

Total Depth 37.78 ft.

Depth to Water 25.30 ft.

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

12.48 X VF 0.17 = 2.12 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: 7:20 Weather Conditions: clear

Sampling Time: 7:45 AM 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)
7:30	2.5	7.40	5.93	72.3			
7:32	5	7.38	5.83	70.9			
7:35	7	7.35	5.77	70.8			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
U-7	3 VOA	Y	HCL	SEQUOIA	TPH(G)/btex/mtbe
"	2 VOA	"	"	"	8010

COMMENTS: _____

Chain-of-Custody Record

TOSCO

Texaco Marketing Company
3000 Crow Canyon Pl., Ste. 400
San Ramon, California 94583

Facility Number: UNOCAL SS#5430
Facility Address: 1935 WASHINGTON AVE. SAN LEANDRO, CA.
Consultant Project Number: 180107.85
Consultant Name: Gettler-Ryan Inc. (G-R Inc.)
Address: 6747 Sierra Court, Suite J, Dublin, CA 94568
Project Contact (Name): Deanna L. Harding
(Phone): 510-551-7555 (Fax Number): 510-551-7888

Contact (Name): Mr. DAVID DEWITT
(Phone): (925)-277-2384
Laboratory Name: Sequoia Analytical
Laboratory Release Number:
Samples Collected by (Name): JOE AJEMIAN
Collection Date: 3-2-99
Signature:

9903137

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) (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 (ICAP or AA)					DO NOT BILL TB-LB ANALYSIS: Remarks
TB-LB		1 voA	W	—	—	HCl	Y	✓					9030481							
U-1		3 voA	/	G	11:22 A.M	—	—	✓			✓		9030482			A-E				
U-2		3 voA	/	/	10:50 A.M	—	—	✓					9030483			A-C				
U-3		3 voA	/	/	10:12 A.M	—	—	✓			✓		9030484			A-E				
U-4		3 voA	/	/	9:36 A.M	—	—	✓					9030485			A-C				
U-5		3 voA	/	/	8:57 A.M	—	—	✓					9030486			↓				
U-6		3 voA	/	/	8:15 A.M	—	—	✓					9030487			↓				
U-7		3 voA	/	/	7:45 A.M	—	—	✓			✓		9030488			A-E				

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	G-R Inc.	3-2-99		CAS	3-3 1415
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	CAS	33			
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time
			Nelle Lane		3/2/99 1330

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

THANK

2/2/99

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#5430, San Leandro	Sampled: Mar 2, 1999
6747 Sierra Court, Suite J	Sample Matrix:	Water	Received: Mar 3, 1999
Dublin, CA 94568	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Mar 18, 1999
Attention: Deanna Harding	First Sample #:	903-0481	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX / MTBE

Analyte	Reporting Limit µg/L	Sample I.D. 903-0481 TB-LB	Sample I.D. 903-0482 U-1	Sample I.D. 903-0483 U-2	Sample I.D. 903-0484 U-3	Sample I.D. 903-0485 U-4	Sample I.D. 903-0486 U-5
Purgeable Hydrocarbons	50	N.D.	N.D.	N.D.	2,100	110	N.D.
Benzene	0.50	N.D.	N.D.	N.D.	110	0.89	N.D.
Toluene	0.50	N.D.	N.D.	N.D.	2.6	0.53	N.D.
Ethyl Benzene	0.50	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Total Xylenes	0.50	N.D.	N.D.	N.D.	240	0.79	N.D.
MTBE	2.5	N.D.	N.D.	16	39	4.9	N.D.
Chromatogram Pattern:		--	--	--	Gasoline	Gasoline	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	5.0	1.0	1.0
Date Analyzed:	3/10/99	3/10/99	3/10/99	3/10/99	3/11/99	3/10/99
Instrument Identification:	HP-9	HP-5	HP-5	HP-2	HP-5	HP-9
Surrogate Recovery, %: (QC Limits = 70-130%)	96	96	93	156 *	95	95

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.

Sequoia Analytical

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1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Gettler-Ryan - Dublin	Client Project ID:	Unocal SS#5430, San Leandro	Sampled:	Mar 2, 1999
6747 Sierra Court, Suite J	Sample Matrix:	Water	Received:	Mar 3, 1999
Dublin, CA 94568	Analysis Method:	EPA 5030/8015 Mod./8020	Reported:	Mar 18, 1999
Attention: Deanna Harding	First Sample #:	903-0487		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX / MTBE

Analyte	Reporting Limit µg/L	Sample I.D. 903-0487 U-6	Sample I.D. 903-0488 U-7
Purgeable Hydrocarbons	50	3,900	N.D.
Benzene	0.50	240	N.D
Toluene	0.50	N.D.	N.D.
Ethyl Benzene	0.50	650	N.D.
Total Xylenes	0.50	430	N.D.
MTBE	2.5	45	N.D.
Chromatogram Pattern:		Gasoline	--

Quality Control Data

Report Limit Multiplication Factor:	5.0	1.0
Date Analyzed:	3/10/99	3/10/99
Instrument Identification:	HP-2	HP-9
Surrogate Recovery, %: (QC Limits = 70-130%)	101	93

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

Sequoia Analytical

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1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Gettler-Ryan - Dublin	Client Project ID:	Unocal SS#5430, San Leandro	Sampled:	Mar 2, 1999
6747 Sierra Court, Suite J	Sample Descript:	Water, U-1	Received:	Mar 3, 1999
Dublin, CA 94568	Analysis Method:	EPA 5030/8010	Analyzed:	Mar 12, 1999
Attention: Deanna Harding	Lab Number:	903-0482	Reported:	Mar 18, 1999

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	**0.50**	**4.5**
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.

Surrogates	Control Limit %		% Recovery
Chloro-2-fluorobenzene	50	150	95
4-Bromofluorobenzene	50	150	88

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

SEQUOIA ANALYTICAL, #1271

Julianne Fegley
Project Manager

Sequoia Analytical

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1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Gettler-Ryan - Dublin	Client Project ID:	Unocal SS#5430, San Leandro	Sampled: Mar 2, 1999
6747 Sierra Court, Suite J	Sample Descript:	Water, U-3	Received: Mar 3, 1999
Dublin, CA 94568	Analysis Method:	EPA 5030/8010	Analyzed: Mar 12, 1999
Attention: Deanna Harding	Lab Number:	903-0484	Reported: Mar 18, 1999

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	6.7
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.

Surrogates	Control Limit %		% Recovery
Chloro-2-fluorobenzene	50	150	90
4-Bromofluorobenzene	50	150	108

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

SEQUOIA ANALYTICAL, #1271

Julianne Fegley

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Project Manager

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Gettler-Ryan - Dublin	Client Project ID:	Unocal SS#5430, San Leandro	Sampled:	Mar 2, 1999
6747 Sierra Court, Suite J	Sample Descript:	Water, U-7	Received:	Mar 3, 1999
Dublin, CA 94568	Analysis Method:	EPA 5030/8010	Analyzed:	Mar 12, 1999
Attention: Deanna Harding	Lab Number:	903-0488	Reported:	Mar 18, 1999

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	1.2
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.

Surrogates	Control Limit %		% Recovery
Chloro-2-fluorobenzene	50	150	106
4-Bromofluorobenzene	50	150	105

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

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

Client Project ID: Unocal SS#5430, San Leandro
Matrix: Liquid
QC Sample Group: 9030481-488
Reported: Mar 18, 1999

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD Batch#:	9030368	9030368	9030368	9030368
Date Prepared:	3/10/99	3/10/99	3/10/99	3/10/99
Date Analyzed:	3/10/99	3/10/99	3/10/99	3/10/99
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	100	95	100	102
Matrix Spike Duplicate % Recovery:	95	90	95	102
Relative % Difference:	5.1	5.4	5.1	0.0
LCS Batch#:	2LCS031099	2LCS031099	2LCS031099	2LCS031099
Date Prepared:	3/10/99	3/10/99	3/10/99	3/10/99
Date Analyzed:	3/10/99	3/10/99	3/10/99	3/10/99
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
LCS % Recovery:	100	95	100	108
% Recovery Control Limits:	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL, #1271

Julianne Fegley
Project Manager

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

Client Project ID: Unocal SS#5430, San Leandro
Matrix: Liquid
QC Sample Group: 9030481-488

Reported: Mar 18, 1999

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD Batch#:	9030257	9030257	9030257	9030257
Date Prepared:	3/10/99	3/10/99	3/10/99	3/10/99
Date Analyzed:	3/10/99	3/10/99	3/10/99	3/10/99
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	95	95	95	100
Matrix Spike Duplicate % Recovery:	100	100	100	103
Relative % Difference:	5.1	5.1	5.1	3.3
LCS Batch#:	5LCS031099	5LCS031099	5LCS031099	5LCS031099
Date Prepared:	3/10/99	3/10/99	3/10/99	3/10/99
Date Analyzed:	3/10/99	3/10/99	3/10/99	3/10/99
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
LCS % Recovery:	110	115	110	117
% Recovery Control Limits:	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL, #1271

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

Client Project ID: Unocal SS#5430, San Leandro
Matrix: Liquid

QC Sample Group: 9030481-488

Reported: Mar 18, 1999

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD Batch#:	9030299	9030299	9030299	9030299
Date Prepared:	3/10/99	3/10/99	3/10/99	3/10/99
Date Analyzed:	3/10/99	3/10/99	3/10/99	3/10/99
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:	100	100	100	98
Matrix Spike Duplicate % Recovery:	95	100	100	98
Relative % Difference:	5.1	0.0	0.0	0.0
LCS Batch#:	9LCS031099	9LCS031099	9LCS031099	9LCS031099
Date Prepared:	3/10/99	3/10/99	3/10/99	3/10/99
Date Analyzed:	3/10/99	3/10/99	3/10/99	3/10/99
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9
LCS % Recovery:	100	105	100	102
% Recovery Control Limits:	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL, #1271

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Attention: Deanna Harding

Client Project ID: Unocal SS#5430, San Leandro
Matrix: Liquid
QC Sample Group: 9030481-488

Reported: Mar 18, 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#:	9030401	9030401	9030401	9030401
Date Prepared:	3/11/99	3/11/99	3/11/99	3/11/99
Date Analyzed:	3/11/99	3/11/99	3/11/99	3/11/99
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	110	110	110	108
Matrix Spike Duplicate % Recovery:	95	100	95	98
Relative % Difference:	15	9.5	15	9.7
LCS Batch#:	5LCS031199	5LCS031199	5LCS031199	5LCS031199
Date Prepared:	3/11/99	3/11/99	3/11/99	3/11/99
Date Analyzed:	3/11/99	3/11/99	3/11/99	3/11/99
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
LCS % Recovery:	95	100	100	102
% Recovery Control Limits:	70-130	70-130	70-130	70-130

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Gettler-Ryan - Dublin
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Dublin, CA 94568
Attention: Deanna Harding

Client Project ID: Unocal SS#5430, San Leandro
Matrix: Liquid
QC Sample Group: 9030481-488

Reported: Mar 18, 1999

QUALITY CONTROL DATA REPORT

ANALYTE	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
Method:	EPA 8010	EPA 8010	EPA 8010
Analyst:	P. Kosovskaya	P. Kosovskaya	P. Kosovskaya
MS/MSD Batch#:	9030432	9030432	9030432
Date Prepared:	3/12/99	3/12/99	3/12/99
Date Analyzed:	3/13/99	3/13/99	3/13/99
Instrument I.D.#:	HP-7	HP-7	HP-7
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L
Matrix Spike % Recovery:	140	110	130
Matrix Spike Duplicate % Recovery:	115	85	110
Relative % Difference:	20	15	17
LCS Batch#:	LCS031299	LCS031299	LCS031299
Date Prepared:	3/12/99	3/12/99	3/12/99
Date Analyzed:	3/12/99	3/12/99	3/12/99
Instrument I.D.#:	HP-7	HP-7	HP-7
LCS % Recovery:	105	100	100
% Recovery Control Limits:	65-135	70-130	70-130

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