



GETTLER-RYAN Inc.

ENVIRONMENTAL
PROTECTION

TRANSMITTAL

MAR 24 PM 2:08
March 9, 1999

G-R #:180075

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

CC: Mr. David Vossler
Gettler-Ryan Inc.
Novato, California

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

RE: Tosco (Unocal) SS #7376
4191 First Street
Pleasanton, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	February 26, 1999	Groundwater Monitoring and Sampling Report Fourth Quarter 1998 - December Event

COMMENTS:

This report is being sent to you for your review/comment, prior to being distributed on your behalf. If no comments are received by *March 22, 1999*, this report will be distributed to the following:

Enclosure

cc: ~~Mr. Scott Seay~~
Alameda County Health Care Services
1131 Harbor Bay Parkway
Alameda, California 94502

agency/7376dbd.qmt



GETTLER-RYAN INC.

February 26, 1999
G-R Job #180075

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

RE: Fourth Quarter 1998 Groundwater Monitoring & Sampling Report
Tosco (Unocal) Service Station #7376
4191 First Street
Pleasanton, California

Dear Mr. De Witt:

This report documents the quarterly groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R). On December 15, 1998, field personnel monitored seven wells (MW-1, MW-2B, MW-3, MW-4, MW-5, MW-7, and MW-8) and sampled six wells (MW-1, MW-2B, MW-3, MW-4, MW-7, and MW-8) at the above referenced site. One well (MW-6) was not located. On December 23, 1998, field personnel monitored eight wells (MW-1, MW-2B and MW-3 through MW-8) and sampled one well (MW-6). In addition on January 23, 1999, field personnel returned to the site to monitor and sample one well (MW-6) for additional analysis.

Static groundwater levels were measured and all wells were checked for the presence of separate-phase hydrocarbons. **Separate-phase hydrocarbons were present in one well (MW-5) during both visits.** Static water level data and groundwater elevations are summarized in Table 1. Product Thickness/Removal Data is summarized in Table 2. 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
Deanna L. Harding

Project Coordinator

Stephen J. Carter

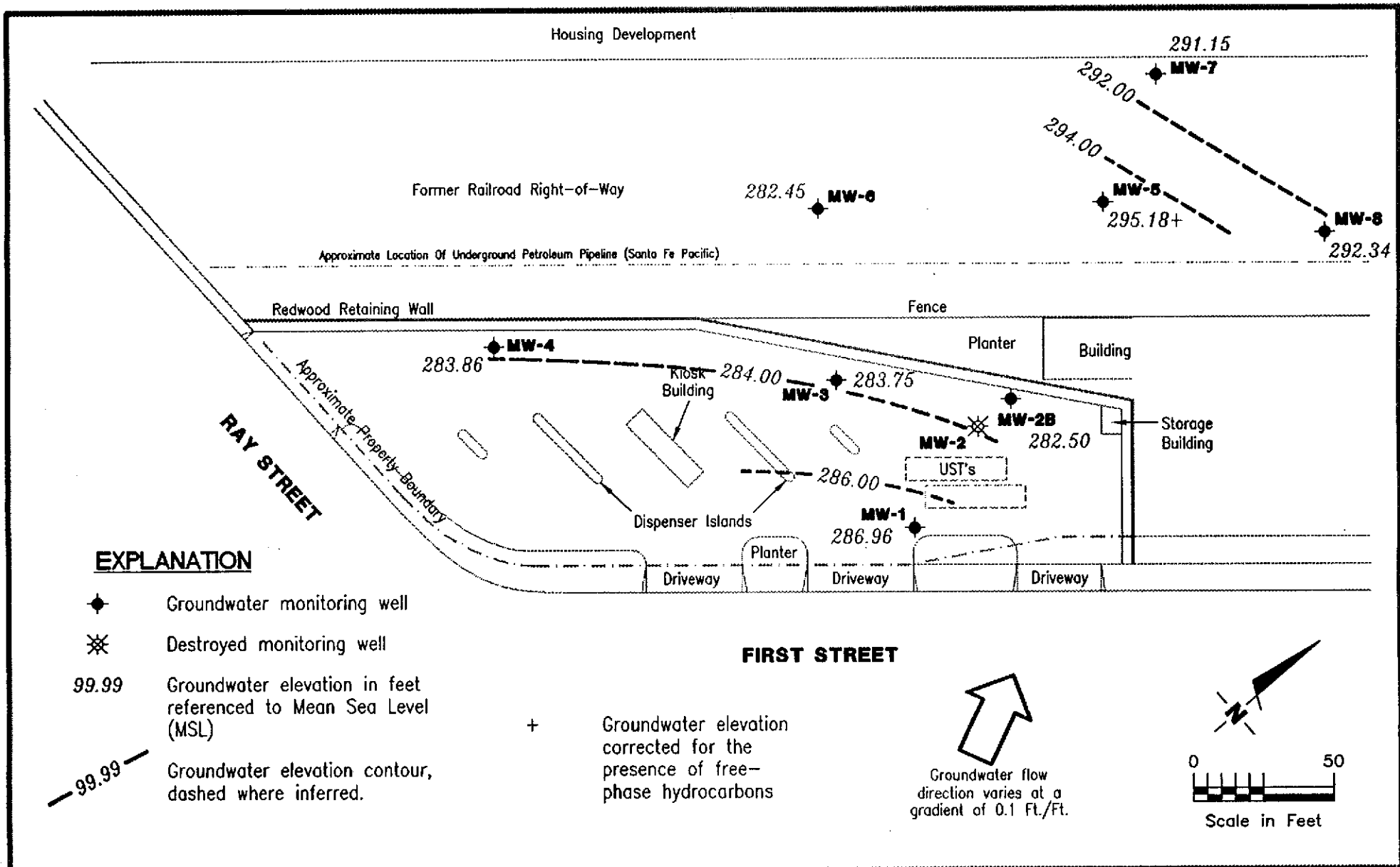
Stephen J. Carter

Senior Geologist, R.G. No. 5577



- Figure 1: Potentiometric Map - December 23, 1998
Figure 2: Concentration Map - December 15, 1998
Table 1: Groundwater Monitoring Data and Analytical Results
Table 2: Product Thickness/Removal Data
Attachments: Standard Operating Procedure - Groundwater Sampling
Field Data Sheets
Chain of Custody Document and Laboratory Analytical Reports

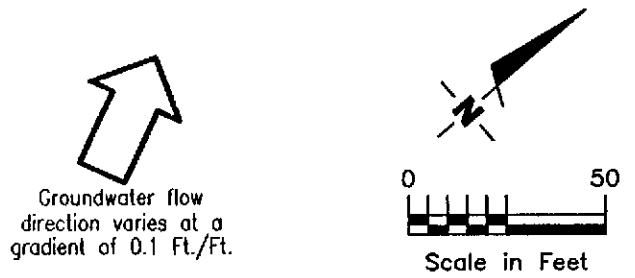
7376.qml



EXPLANATION

- ◆ Groundwater monitoring well
- ⊗ Destroyed monitoring well
- 99.99 Groundwater elevation in feet referenced to Mean Sea Level (MSL)
- 99.99- Groundwater elevation contour, dashed where inferred.

+ Groundwater elevation corrected for the presence of free-phase hydrocarbons

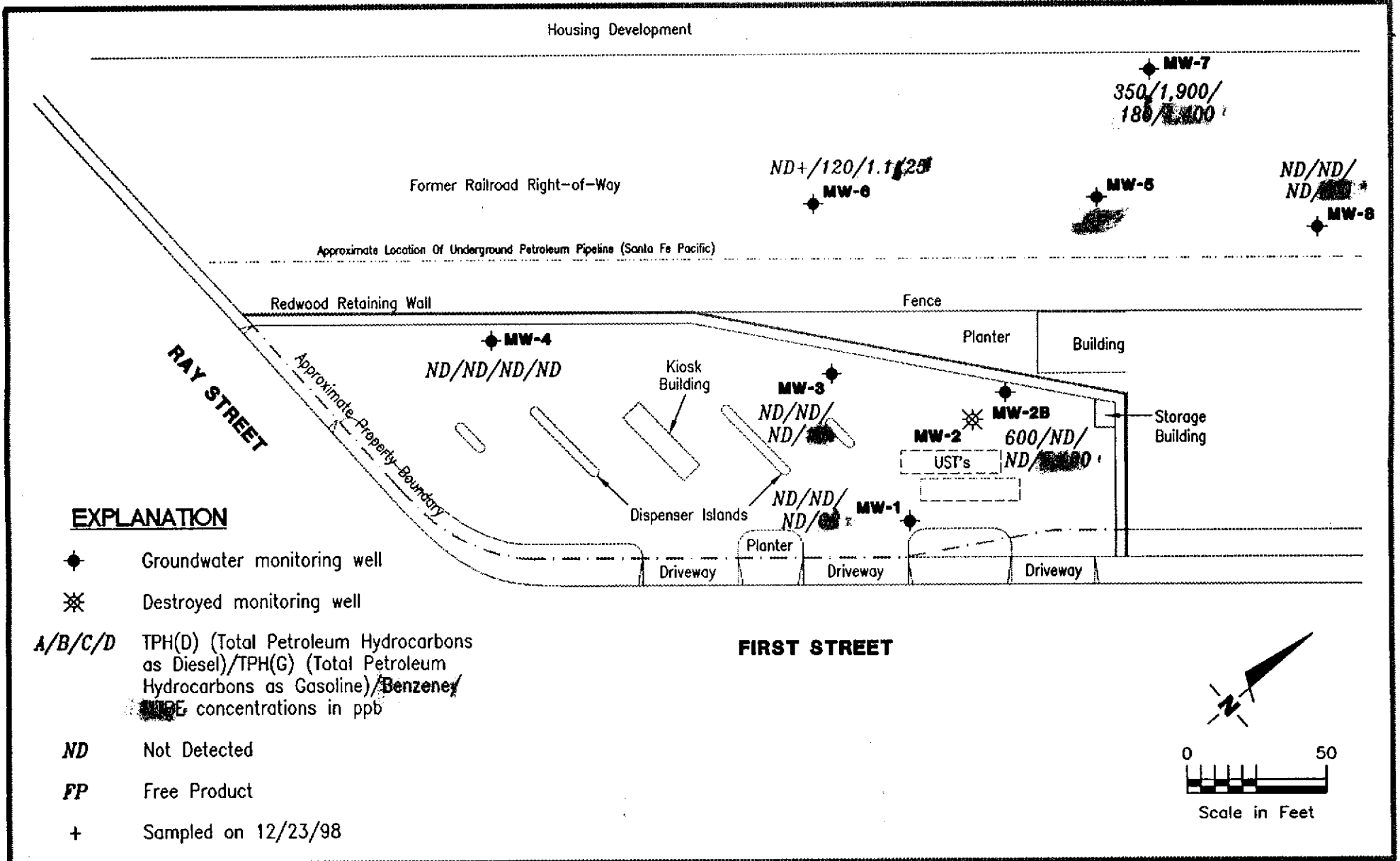


Gettler - Ryan Inc.
 6747 Sierra Ct., Suite J (925) 551-7555
 Dublin, CA 94568

POTENTIOMETRIC MAP
 Tosco (Unocal) Service Station No. 7376
 4191 First Street
 Pleasanton, California

FIGURE
1

Housing Development



EXPLANATION

◆ Groundwater monitoring well

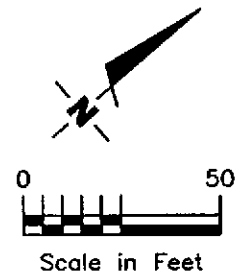
✱ Destroyed monitoring well

A/B/C/D TPH(D) (Total Petroleum Hydrocarbons as Diesel)/TPH(G) (Total Petroleum Hydrocarbons as Gasoline)/Benzene/TOPE concentrations in ppb

ND Not Detected

FP Free Product

+ Sampled on 12/23/98



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

CONCENTRATION MAP
 Tosco (Unocal) Service Station No. 7376
 4191 First Street
 Pleasanton, California

FIGURE
2

JOB NUMBER
 180075

REVIEWED BY

DATE
 December 15, 1998

REVISED DATE

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #7376
 4191 First Street
 Pleasanton, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-1	12/08/87 ¹	--	--	--	2,100 ²	50 ³	58	8	ND	10	--
366.99	12/07/94	81.04	285.95	0.00	--	ND	ND	ND	ND	ND	--
	03/01/95	80.09	286.90	0.00	120	ND	ND	1.1	ND	1.3	--
	06/01/95	77.53	289.46	0.00	54 ⁵	130	1.0	2.9	0.79	4.5	--
	09/06/95	79.00	287.99	0.00	690	ND	ND	ND	ND	ND	-- ⁶
	12/12/95	77.55	289.44	0.00	190 ⁵	ND	ND	ND	ND	ND	--
	03/01/96	75.09	291.90	0.00	56	ND	ND	ND	ND	ND	370
	06/15/96	75.07	291.92	0.00	ND	ND	ND	ND	ND	ND	270
	09/18/96	79.90	287.09	0.00	130 ⁵	ND	ND	ND	ND	ND	590
	12/21/96	78.96	288.03	0.00	ND	ND	ND	ND	ND	ND	150
	03/07/97	71.49	295.50	0.00	ND	ND	ND	ND	ND	ND	220
	06/27/97	80.05	286.94	0.00	ND	ND	ND	ND	ND	ND	17
	09/29/97	80.04	286.95	0.00	ND	ND	ND	ND	ND	ND	24
	12/15/97	80.07	286.92	0.00	ND	ND	ND	ND	ND	ND	25
	03/16/98	71.00	295.99	0.00	ND	ND	ND	0.52	ND	0.71	190
366.98	06/26/98	79.29	287.69	0.00	ND	59 ¹³	0.90	ND	ND	ND	570
	08/18/98	79.93	287.05	0.00	--	--	--	--	--	--	--
	09/22/98	79.99	286.99	0.00	240 ²⁰	ND	ND	ND	ND	ND	170
	12/15/98	80.02	286.96	0.00	ND	ND	ND	ND	ND	ND	63
	12/23/98	80.02	286.96	0.00	--	--	--	--	--	--	--
MW-2	12/08/87				620 ²	1,800 ³	910	800	260	1,200	--
	12/07/94	DAMAGED	--	--	--	--	--	--	--	--	--
	02/07/95	DESTROYED	--	--	--	--	--	--	--	--	--
MW-2B											
365.05	03/01/95	80.80	284.25	0.00	320	ND	ND	ND	ND	ND	--
	06/01/95	75.69	289.36	0.00	280	350	19	5.8	ND	7.7	--
	09/06/95	77.54	287.51	0.00	ND	ND	90	ND	ND	ND	-- ⁶
	12/12/95	75.96	289.09	0.00	850 ⁴	1,200	630	ND	15	57	-- ⁷
	03/01/96	73.27	291.78	0.00	870 ⁴	1,000	620	ND	ND	5.3	4,300
	06/15/96	73.21	291.84	0.00	420	910	350	ND	ND	ND	3,700
	09/18/96	81.08	283.97	0.00	600	1,200	95	ND	ND	ND	5,200

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #7376
 4191 First Street
 Pleasanton, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-2B	12/21/96	77.35	287.70	0.00	470	330 ⁸	57	ND	ND	ND	2,900
(cont)	03/07/97	69.67	295.38	Sheen	870 ⁴	190	28	0.64	ND	1.5	4,300
	06/27/97	82.40	282.65	0.00	680 ⁴	98	3.4	1.0	0.53	ND	3,100
	09/29/97	82.72	282.33	0.00	430	ND	ND	ND	ND	ND	3,000
	12/15/97	82.57	282.48	0.00	490	54 ⁹	ND	ND	ND	ND	4,100
	03/16/98	69.13	295.92	Sheen	4,000 ¹⁰	ND ¹¹	17	ND ¹¹	ND ¹¹	ND ¹¹	4,400
365.05	06/26/98	77.78	287.27	0.00	790 ¹⁴	ND	ND	ND	ND	ND	4,000
	08/18/98	83.99	281.06	0.00	--	--	--	--	--	--	--
	09/22/98	83.89	281.16	0.00	930 ²⁰	ND ¹¹	ND ¹¹	ND ¹¹	ND ¹¹	21	4,600
	12/15/98	82.84	282.21	0.00	600	ND	ND	ND	ND	ND	5,100
	12/23/98	82.55	282.50	0.00	--	--	--	--	--	--	--
MW-3	12/08/87	--	--	--	2,300 ²	24,000 ³	2,600	1,300	160	660	--
367.01	12/07/94	85.54	281.47	0.00	--	ND	ND	ND	ND	ND	--
	03/01/95	83.20	283.81	0.00	140 ⁴	ND	ND	1.1	ND	1.1	--
	06/01/95	77.60	289.41	0.00	140 ⁵	62	7.8	0.90	ND	1.6	--
	09/06/95	79.28	287.73	0.00	880 ⁵	4,100	380	490	130	710	-- ⁶
	12/12/95	77.73	289.28	0.00	3,100 ⁴	19,000	600	380	2,100	5,300	-- ⁷
	03/01/96	75.18	291.83	0.00	1,500 ⁵	3,400	950	3.2	1,900	290	59
	06/15/96	75.13	291.88	0.00	400 ⁴	780	190	8.8	3.8	4.0	630
	09/18/96	82.84	284.17	0.00	170	2,800	340	12	11	110	2,500
	12/21/96	79.29	287.72	0.00	64 ⁴	51	1.3	ND	ND	0.53	20
	03/07/97	71.58	295.43	0.00	570 ⁴	1,400	53	14	29	68	220
	06/27/97	83.27	283.74	0.00	ND	ND	ND	ND	ND	ND	27
	09/29/97	83.33	283.68	0.00	ND	ND	ND	ND	ND	ND	11
	12/15/97	83.35	283.66	0.00	ND	ND	ND	ND	ND	ND	19
	03/16/98	71.07	295.94	0.00	670 ¹⁰	130 ¹²	6.5	1.9	1.5	1.6	210
367.03	06/26/98	79.65	287.38	0.00	63 ¹³	400 ¹⁵	15	ND ¹¹	ND ¹¹	1.9	490
	08/18/98	83.29	283.74	0.00	--	--	--	--	--	--	--
	09/22/98	83.33	283.70	0.00	95 ²⁰	ND	ND	ND	ND	ND	24
	12/15/98	83.29	283.74	0.00	ND	ND	ND	ND	ND	ND	18
	12/23/98	83.28	283.75	0.00	--	--	--	--	--	--	--

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #7376
 4191 First Street
 Pleasanton, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-4											
369.03	09/18/96	73.67	295.36	0.00	200	160	14	ND	ND	1.6	ND
	12/21/96	77.69	291.34	0.00	ND	ND	ND	ND	ND	ND	ND
	03/07/97	68.04	300.99	0.00	ND	ND	1.9	0.99	ND	1.5	ND
	06/27/97	79.06	289.97	0.00	ND	ND	ND	ND	ND	ND	ND
	09/29/97	85.83	283.20	0.00	ND	ND	ND	ND	ND	ND	ND
	12/15/97	87.26	281.77	0.00	ND	ND	ND	ND	ND	ND	ND
	03/16/98	75.09	293.94	0.00	ND	ND	ND	0.69	ND	0.82	ND
368.81	06/26/98	73.81	295.00	0.00	630 ¹⁶	100 ¹³	62	ND	ND	ND	ND
	08/18/98	78.75	290.06	0.00	--	--	--	--	--	--	--
	09/22/98	83.95	284.86	0.00	74 ²⁰	ND	ND	ND	ND	ND	2.8
	12/15/98	85.41	283.40	0.00	ND	ND	ND	ND	ND	ND	ND
	12/23/98	84.95	283.86	0.00	--	--	--	--	--	--	--
MW-5											
363.23	09/18/96	64.20	299.03	0.00	4,700 ⁵	36,000	6,700	410	730	6,500	4,100
	12/21/96	61.77	301.46	Sheen	4,700 ⁴	25,000	3,200	300	780	3,600	2,600
	03/07/97	56.30	306.93	Sheen	2,100 ⁴	14,000	1,300	120	410	1,200	1,700
	06/27/97	68.88	295.03**	0.90	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--
	09/29/97	69.47	294.02**	0.35	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--
	12/15/97	64.92	298.53**	0.30	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--
	03/16/98	49.63	313.67**	0.09	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--
363.21	06/26/98	64.13	299.08	Sheen	230,000 ¹⁷	490 ¹⁸	6.3	2.8	4.2	5.1	10
	08/18/98	70.40	292.81**	0.005	--	--	--	--	--	--	--
	09/22/98	69.10	294.16**	0.06	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--
	12/15/98	68.84	294.50**	0.17	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--
	12/23/98	68.42	295.18**	0.50	--	--	--	--	--	--	--
MW-6											
363.12	09/18/96	79.07	284.05	0.00	ND	160	5.4	ND	ND	ND	ND
	12/21/96	75.40	287.72	0.00	ND	300 ⁸	96	1.3	ND	1.7	21
	03/07/97	67.61	295.51	0.00	190 ⁴	1,800 ⁸	920	18	ND	31	290
	06/27/97	80.45	282.67	0.00	73 ⁵	ND	0.73	ND	ND	38	38

Table 1
Groundwater Monitoring Data and Analytical Results
Tosco (Unocal) Service Station #7376
4191 First Street
Pleasanton, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-6	09/29/97	86.02	277.10	0.00	ND	62 ⁹	ND	ND	ND	ND	43
(cont)	12/15/97	84.03	279.09	0.00	ND	78 ⁹	ND	ND	ND	ND	39
	03/16/98	67.15	295.97	0.00	100 ¹⁰	210 ¹²	36	2.5	ND	3.0	64
363.13	06/26/98	75.71	287.42	0.00	180 ¹⁴	530	300	8.3	2.8	8.7	81
	08/18/98	74.86	288.27	0.00	--	--	--	--	--	--	--
	09/22/98	UNABLE TO LOCATE		--	--	--	--	--	--	--	--
	12/15/98	UNABLE TO LOCATE		--	--	--	--	--	--	--	--
	12/23/98	80.80	282.33	0.00	--	120 ²³	1.1	ND	ND	0.78	25
	01/23/99	80.68	282.45	0.00	ND	--	--	--	--	--	--
MW-7											
355.97	06/26/98	--	--	--	--	--	--	--	--	--	--
	08/18/98	68.75	287.22	0.00	1,400 ²⁰	4,000	1,900	48	160	ND ¹¹	1,700
	09/22/98	66.35	289.62	0.00	780 ²⁰	3,200	1,100	ND	22	ND	1,500
	12/15/98	65.03	290.94	0.00	350 ²¹	1,900 ²²	180	2.7	2.9	3.8	1,400
	12/23/98	64.82	291.15	0.00	--	--	--	--	--	--	--
MW-8											
362.37	06/26/98	63.00	299.37	0.00	80 ¹⁹	ND	6.0	ND	ND	ND	150
	08/18/98	73.38	288.99	0.00	--	--	--	--	--	--	--
	09/22/98	70.89	291.48	0.00	120 ²⁰	ND	ND	ND	ND	ND	9.5
	12/15/98	70.29	292.08	0.00	ND	ND	ND	ND	ND	ND	3.0
	12/23/98	70.03	292.34	0.00	--	--	--	--	--	--	--
Trip Blank											
TB-LB	03/16/98	--	--	--	--	ND	ND	ND	ND	ND	ND
	06/26/98	--	--	--	--	ND	ND	ND	ND	ND	ND
	08/18/98	--	--	--	--	ND	ND	ND	ND	ND	ND
	09/22/98	--	--	--	--	ND	ND	ND	ND	ND	ND
	12/15/98	--	--	--	--	ND	ND	ND	ND	ND	ND
	12/23/98	--	--	--	--	ND	ND	ND	ND	ND	ND

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #7376
 4191 First Street
 Pleasanton, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to March 16, 1998, were compiled from reports prepared by MPDS Services, Inc.

TOC = Top of Casing	B = Benzene	ppb = Parts per billion
DTW = Depth to Water	T = Toluene	ND = Not Detected
(ft.) = Feet	E = Ethylbenzene	-- = Not Measured/Not Analyzed
GWE = Groundwater Elevation	X = Xylenes	
msl = Relative to mean sea level	MTBE = Methyl tertiary butyl ether	
TPH(G) = Total Petroleum Hydrocarbons as Gasoline		

* TOC elevations have been surveyed relative to mean sea level (msl) per City of Pleasanton Benchmark V1, a brass disk on the north curb of Ray Street, approximately 200 feet northwest of the centerline of First Street (Elevation = 367.17 feet msl).

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

- 1 1,2-Dichloroethene (1,2-DCE) was detected at a concentration of 18 ppb.
- 2 Reported as Total Extractable Hydrocarbons (TEH).
- 3 Reported as Total Petroleum Hydrocarbons (TPH).
- 4 Laboratory report indicates the hydrocarbons detected appeared to be a diesel and non-diesel mixture.
- 5 Laboratory report indicates the hydrocarbons detected did not appear to be diesel.
- 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 Laboratory report indicates the hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.
- 9 Laboratory report indicates the hydrocarbons detected did not appear to be gasoline.
- 10 Laboratory report indicates diesel and unidentified hydrocarbons > C16.
- 11 Detection limit raised. Refer to analytical results.
- 12 Laboratory report indicates gasoline and unidentified hydrocarbons < C7.
- 13 Laboratory report indicates discrete peaks.
- 14 Laboratory report indicates diesel and unidentified hydrocarbons > C20.
- 15 Laboratory report indicates discrete peaks and unidentified hydrocarbons < C7.
- 16 Laboratory report indicates diesel and unidentified hydrocarbons < C15.
- 17 Laboratory report indicates diesel and unidentified hydrocarbons < C15 and > C20.
- 18 Laboratory report indicates gasoline and unidentified hydrocarbons > C8.
- 19 Laboratory report indicates unidentified hydrocarbons > C16.
- 20 Laboratory report indicates unidentified hydrocarbons C9-C24.
- 21 Laboratory report indicates diesel and unidentified hydrocarbons < C12.
- 22 Laboratory report indicates unidentified hydrocarbons C6-C12.
- 23 Laboratory report indicates unidentified hydrocarbons C6-C9.

Table 2
Product Thickness/Removal Data
 Tosco (Unocal) Service Station #7376
 4191 First Street
 Pleasanton, California

Well ID	Date	DTW (ft.)	Product Thickness (ft.)	Amount Bailed (Product + Water) gallons
MW-5	03/07/97	56.30	Sheen	--
	06/27/97	68.88	0.90	--
	09/29/97	69.47	0.35	--
	12/15/97	64.92	0.30	--
	03/16/98	49.63	0.09	0.25
	06/26/98	63.00	Sheen	--
	08/18/98	70.40	0.005	--
	09/22/98	69.10	0.06	--
	12/15/98	68.84	0.17	--
	12/23/98	68.42	0.50	--

EXPLANATIONS:

Product thickness/removal data prior to March 16, 1998, were compiled from reports prepared by MPDS Services, Inc.

DTW = Depth to water

(ft.) = Feet

-- = Not Measured/Not Available

Amount Bailed history will be updated in future reports.

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.

*TOSCO (UNOCAL) SS#7376
PLEASANTON, CA*

*MONITORING & SAMPLING
EVENT OF DECEMBER 15, 1998*

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/ Facility # Tosco 7376
 Address: 491 First St.
 City: Pleasanton

Job#: 180075
 Date: 12/15/98
 Sampler: Vartkes

Well ID MW-1
 Well Diameter 2 in.
 Total Depth 86.43 ft.
 Depth to Water 80.02 ft.

Well Condition: ok
 Hydrocarbon Thickness: ∅ (feet) Amount Bailed (product/water): ∅ (Gallons)

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

6.41 x VF 0.17 = 1.09 x 3 (case volume) = Estimated Purge Volume: 3.27 (gal.)

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

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

Starting Time: 10:45
 Sampling Time: 12:58
 Purging Flow Rate: 0.5 gpm.
 Did well de-water? no

Weather Conditions: clear
 Water Color: brn Odor: no
 Sediment Description: Silt
 If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm} \times 100$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>11:47</u>	<u>1</u>	<u>7.53</u>	<u>5.54</u>	<u>69.0</u>			
<u>11:49</u>	<u>2</u>	<u>7.38</u>	<u>5.43</u>	<u>69.5</u>			
<u>11:50</u>	<u>3.5</u>	<u>7.29</u>	<u>5.40</u>	<u>69.8</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-1</u>	<u>3 VOA</u>	<u>Y</u>	<u>HCl</u>	<u>SEQUOIA</u>	<u>TPH(G)/btex/mtbe</u>
<u>"</u>	<u>1 Amber</u>	<u>"</u>	<u>NONE</u>	<u>"</u>	<u>TPHD</u>

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/ Tosco
 Facility # 7376
 Address: 491 First st.
 City: Pleasanton

Job#: 180075
 Date: 12/15/98
 Sampler: Vortex

Well ID MW-2B

Well Condition: OK

Well Diameter 2 in.

Hydrocarbon Thickness: ∅ (feet) Amount Bailed (product/water): ∅ (Gallons)

Total Depth 85.25 ft.

Depth to Water 82.84 ft.

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

2.41 X VF 0.17 = 0.41 X 3 (case volume) = Estimated Purge Volume: 1.23 (gal.)

Purge Equipment: Disposable Bailer
 Bailer
 Stack
 Suction
~~Grab Sample~~
 Other: _____

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

Starting Time: 12:20

Weather Conditions: clear

Sampling Time: 12:40

Water Color: clear Odor: no

Purging Flow Rate: _____ gpm.

Sediment Description: none

Did well de-water? no

If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm} \times 100$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>12:24</u>	<u>0.5</u>	<u>7.21</u>	<u>7.13</u>	<u>68.3</u>			
<u>12:27</u>	<u>1</u>	<u>7.03</u>	<u>6.98</u>	<u>68.7</u>			
<u>12:32</u>	<u>1.5</u>	<u>6.98</u>	<u>6.93</u>	<u>68.9</u>			
_____	_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-2B</u>	<u>3 VOA</u>	<u>Y</u>	<u>HCl</u>	<u>SEQUOIA</u>	<u>TPH(GI)/btex/mtbe</u>
<u>"</u>	<u>1 Amber</u>	<u>"</u>	<u>NONE</u>	<u>"</u>	<u>TPHD</u>
_____	_____	_____	_____	_____	_____

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/ Facility Tosco # 7376 Job#: 180075
 Address: 491 First st. Date: 12/15/98
 City: Pleasanton Sampler: Vartkas

Well ID MW-3 Well Condition: OK
 Well Diameter 2 in. Hydrocarbon Amount Bailed
 Thickness: φ (feet) (product/water): φ (Gallons)
 Total Depth 94.11 ft. Volume 2" = 0.17 3" = 0.38 4" = 0.66
 Depth to Water 83.29 ft. Factor (VF) 6" = 1.50 12" = 5.80

10.82 X VF 0.17 = 1.84 X 3 (case volume) = Estimated Purge Volume: 552 (gal.)

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

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

Starting Time: 10:14 Weather Conditions: clear
 Sampling Time: 10:39 Water Color: clear Odor: NO
 Purging Flow Rate: 1 gpm. Sediment Description: none
 Did well de-water? NO If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm}/100$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>10:16</u>	<u>2</u>	<u>7.49</u>	<u>5.64</u>	<u>69.7</u>			
<u>10:18</u>	<u>4</u>	<u>7.33</u>	<u>5.53</u>	<u>69.1</u>			
<u>10:20</u>	<u>6</u>	<u>7.28</u>	<u>5.48</u>	<u>68.9</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-3</u>	<u>3 VOA</u>	<u>Y</u>	<u>HCl</u>	<u>SEQUOIA</u>	<u>TPH(GI)/btex/mtbe</u>
<u>"</u>	<u>1 Amber</u>	<u>"</u>	<u>NONE</u>	<u>"</u>	<u>TPHD</u>

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/ Facility Tosco #7376
 Address: 491 First St.
 City: Pleasanton

Job#: 180075
 Date: 12/15/98
 Sampler: Vartkes

Well ID MW-4

Well Condition: ok

Well Diameter 2 in.

Hydrocarbon Thickness: φ (feet) Amount Bailed (product/water): φ (Gallons)

Total Depth 93.01 ft.

Depth to Water 85.41 ft.

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

7.60 X VF 0.17 = 1.29 X 3 (case volume) = Estimated Purge Volume: 3.88 (gal.)

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

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

Starting Time: 9:33
 Sampling Time: 9:56
 Purging Flow Rate: 1 gpm.
 Did well de-water? no

Weather Conditions: clear
 Water Color: clear Odor: no
 Sediment Description: none
 If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm} \times 100$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>9:34</u>	<u>1</u>	<u>7.39</u>	<u>4.77</u>	<u>67.5</u>			
<u>9:36</u>	<u>2.5</u>	<u>7.21</u>	<u>4.59</u>	<u>68.1</u>			
<u>9:38</u>	<u>4</u>	<u>7.17</u>	<u>4.62</u>	<u>68.3</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-4</u>	<u>3 VOA</u>	<u>Y</u>	<u>HCl</u>	<u>SEQUOIA</u>	<u>TPH(GI)/btex/mtbe</u>
<u>"</u>	<u>1 Amber</u>	<u>"</u>	<u>NONE</u>	<u>"</u>	<u>TPHD</u>

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/ Tosco
 Facility # 7376
 Address: 491 First st.
 City: Pleasanton

Job#: 180075
 Date: 12/15/98
 Sampler: Vortex

Well ID MW-5

Well Condition: ok

Well Diameter 2 in.

Hydrocarbon Thickness: 0.17 (feet) Amount Bailed (Gallons)

Total Depth 72.52 ft.

Depth to Water 68.84 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: Disposable Bailer
 Bailer
 Stack
 Suction
Grundfos
 Other: _____

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

Starting Time: _____
 Sampling Time: _____
 Purging Flow Rate: _____ gpm.
 Did well de-water? _____

Weather Conditions: _____
 Water Color: _____ Odor: _____
 Sediment Description: _____
 If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm} \times 100$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW</u>	<u>3 VOA</u>	<u>Y</u>	<u>HEI</u>	<u>SEQUOIA</u>	<u>TPH(GI)/btex/mtbe</u>
<u>"</u>	<u>1 Amber</u>	<u>"</u>	<u>NONE</u>	<u>"</u>	<u>TPH(D)</u>

COMMENTS: Not sampled due to the presence of free Product.
Sticky (Dark brown)

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/ Tosco
 Facility# 7376
 Address: 4191 First st.
 City: Pleasanton

Job#: 180075
 Date: 12/15/98
 Sampler: Natke

Well ID MW-6

Well Condition: *Covered with gravel.

Well Diameter _____ in.

Hydrocarbon Amount Bailed
 Thickness: _____ (feet) (product/water): _____ (Gallons)

Total Depth _____ ft.

Depth to Water _____ ft.

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

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

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

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

Starting Time: _____
 Sampling Time: _____
 Purging Flow Rate: _____ gpm.
 Did well de-water? _____

Weather Conditions: _____
 Water Color: _____ Odor: _____
 Sediment Description: _____
 If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm X 100	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	<u>3 10A</u>	<u>Y</u>	<u>HCl</u>	<u>SEQUOIA</u>	<u>TPH(G)/btex/mtbe</u>

COMMENTS: * Unable to locate

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/ Tosco
Facility # 7376

Job#: 180075

Address: 4191 First St.

Date: 12/15/98

City: Pleasanton

Sampler: Vac+6

Well ID MW-7

Well Condition: OK

Well Diameter 2 in.

Hydrocarbon Thickness: Ø (feet) Amount Bailed (product/water): Ø (Gallons)

Total Depth 76.90 ft.

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

Depth to Water 65.03 ft.

11.87 x VF 0.17 = 2.02 x 3 (case volume) = Estimated Purge Volume: 6.05 (gal.)

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

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

Starting Time: 12:55

Weather Conditions: Clear

Sampling Time: 1:20

Water Color: brn Odor: 4

Purging Flow Rate: _____ gpm.

Sediment Description: silt

Did well de-water? no

If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm} \times 100$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>1:01</u>	<u>2</u>	<u>7.19</u>	<u>5.44</u>	<u>69.0</u>			
<u>1:07</u>	<u>4</u>	<u>7.02</u>	<u>5.39</u>	<u>69.5</u>			
<u>1:15</u>	<u>6.5</u>	<u>6.91</u>	<u>5.37</u>	<u>69.8</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-7</u>	<u>3 VOA</u>	<u>Y</u>	<u>HCl</u>	<u>SEQUOIA</u>	<u>TPH(G)/btex/mtbe</u>
<u>"</u>	<u>1 Amber</u>	<u>n</u>	<u>NONE</u>	<u>"</u>	<u>TPHD</u>

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/ Facility: Tosco # 7376 Job#: 180075
 Address: 4191 First St. Date: 12/15/98
 City: Pleasanton Sampler: Vaithu

Well ID: HW-8 Well Condition: OK
 Well Diameter: 2 in. Hydrocarbon Thickness: ∅ (feet) Amount Bailed (product/water): ∅ (Gallons)
 Total Depth: 86.40 ft.
 Depth to Water: 70.29 ft.

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

16.11 X VF 0.17 = 2.74 X 3 (case volume) = Estimated Purge Volume: 8.22 (gal.)

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

Starting Time: 10:55 Weather Conditions: clear
 Sampling Time: 11:23 Water Color: brown Odor: no
 Purging Flow Rate: 1 gpm. Sediment Description: silt
 Did well de-water? no If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm} \times 100$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>10:58</u>	<u>3</u>	<u>7.53</u>	<u>5.73</u>	<u>68.1</u>			
<u>11:01</u>	<u>6</u>	<u>7.35</u>	<u>5.88</u>	<u>68.5</u>			
<u>11:04</u>	<u>8.5</u>	<u>7.30</u>	<u>5.81</u>	<u>68.7</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>HW-8</u>	<u>3 VOA</u>	<u>Y</u>	<u>HCl</u>	<u>SEQUOIA</u>	<u>TPH(GI)/btex/mtbe</u>
<u>"</u>	<u>1 Amber</u>	<u>~</u>	<u>NONE</u>	<u>~</u>	<u>TPHD</u>

COMMENTS: _____



Tosco Marketing Company
3000 Coon Canyon Pl, Ste. 400
San Ramon, California 94583

Facility Number TOSCO (UNOCAL) SS#7376
 Facility Address 4191 First Street, Pleasanton, CA
 Consultant Project Number 180075.85
 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 (Home) Ms. Tina R. Barry
 (Phone) (510) 277-2321
 Laboratory Name Sequoia Analytical **9812382**
 Laboratory Release Number _____
 Samples Collected by (Name) Varthia Tashjian
 Collection Date 12/15/98
 Signature Varthia Tashjian

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite D = Diacetic	Time	Sample Preservation	Iced (Yes or No)	Analytes To Be Performed											Remarks	
								TPH Gas + STEK w/MTBE (8016)	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)					
✓ TB-LB		1	W	G		HUI	Y	X											8121384	
✗ MW-1		4	u	-	11:45 AM			X	X										8121385	A-ID
✗ MW-2B		4	u	-	12:40 PM			X	X										8121386	
✗ MW-3		4	u	-	10:39 AM			X	X										8121387	
✗ MW-4		4	u	-	9:30 AM			X	X										8121388	
✗ MW-7		4	u	-	1:20 PM			X	X										8121389	
✗ MW-8		4	u	-	11:23 AM			X	X										8121390	✓

Relinquished By (Signature) <i>Varthia Tashjian</i>	Organization G-R Inc.	Date/Time 12/15/98 2:35 PM	Received By (Signature) <i>[Signature]</i>	Organization COC	Date/Time 12-16 1500	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. 5 Days 10 Days As Contracted
Relinquished By (Signature) <i>[Signature]</i>	Organization COC	Date/Time 12-16 1900	Received By (Signature) <i>[Signature]</i>	Organization	Date/Time	
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature) <i>[Signature]</i>		Date/Time 12/15/98 1431	

[Handwritten Signature] 12/16/98 1900



Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(925) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (925) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

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

Client Project ID: Tosco (Unocal) SS#7376, Pleasanto
Sample Matrix: Water
Analysis Method: EPA 5030/8015 Mod./8020
First Sample #: 812-1384

Sampled: Dec 15, 1998
Received: Dec 16, 1998
Reported: Jan 4, 1999

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX / MTBE

Analyte	Reporting Limit µg/L	Sample I.D. 812-1384 TB-LB	Sample I.D. 812-1385 MW-1	Sample I.D. 812-1386 MW-2B	Sample I.D. 812-1387 MW-3	Sample I.D. 812-1388 MW-4	Sample I.D. 812-1389 MW-7
Purgeable Hydrocarbons	50	N.D.	N.D.	N.D.	N.D.	N.D.	1,900
Benzene	0.50	N.D.	N.D.	N.D.	N.D.	N.D.	180
Toluene	0.50	N.D.	N.D.	N.D.	N.D.	N.D.	2.7
Ethyl Benzene	0.50	N.D.	N.D.	N.D.	N.D.	N.D.	2.9
Total Xylenes	0.50	N.D.	N.D.	N.D.	N.D.	N.D.	3.8
MTBE	2.5	N.D.	63	5,100	18	N.D.	1,400
Chromatogram Pattern:		--	--	--	--	--	Unidentified Hydrocarbons C6 - C12

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	5.0
Date Analyzed:	12/21/98	12/21/98	12/22/98	12/21/98	12/21/98	12/21/98
Instrument Identification:	HP-9	HP-9	HP-9	HP-9	HP-9	HP-9
Surrogate Recovery, %: (QC Limits = 70-130%)	97	97	97	98	97	125

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
Julianne Fegley
Project Manager



Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(925) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (925) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

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

Client Project ID: Tosco (Unocal) SS#7376, Pleasanto
Sample Matrix: Water
Analysis Method: EPA 5030/8015 Mod./8020
First Sample #: 812-1390

Sampled: Dec 15, 1998
Received: Dec 16, 1998
Reported: Jan 4, 1999

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX / MTBE

Analyte	Reporting Limit µg/L	Sample I.D. 812-1390 MW-8
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	3.0

Chromatogram Pattern: --

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Analyzed:	12/21/98
Instrument Identification:	HP-9
Surrogate Recovery, %: (QC Limits = 70-130%)	100

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
Julianne Fegley
Project Manager



Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(925) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (925) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

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

Client Project ID: Tosco (Unocal) SS#7376, Pleasanto
Sample Matrix: Water
Analysis Method: EPA 3510/8015 Mod.
First Sample #: 812-1385

Sampled: Dec 15, 1998
Received: Dec 16, 1998
Reported: Jan 4, 1999

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 812-1385 MW-1	Sample I.D. 812-1386 MW-2B	Sample I.D. 812-1387 MW-3	Sample I.D. 812-1388 MW-4	Sample I.D. 812-1389 MW-7	Sample I.D. 812-1390 MW-8
Extractable Hydrocarbons	50	N.D.	600	N.D.	N.D.	350	N.D.
Chromatogram Pattern:		--	Diesel	--	--	Diesel & Unidentified Hydrocarbons <C12	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	1.0
Date Extracted:	12/21/98	12/21/98	12/21/98	12/21/98	12/21/98	12/21/98
Date Analyzed:	12/22/98	12/22/98	12/22/98	12/22/98	12/22/98	12/22/98
Instrument Identification:	HP-3A	HP-3A	HP-3A	HP-3A	HP-3A	HP-3A

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

SEQUOIA ANALYTICAL, #1271

Julianne Fegley
Julianne Fegley
Project Manager



Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(925) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (925) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

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

Client Project ID: Tosco (Unocal) SS#7376, Pleasanton
Matrix: Liquid

QC Sample Group: 8121384-390

Reported: Jan 4, 1999

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015 M.
Analyst:	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb	K. Grubb

MS/MSD Batch#:	8121388	8121388	8121388	8121388	BLK122198
Date Prepared:	12/21/98	12/21/98	12/21/98	12/21/98	12/21/98
Date Analyzed:	12/21/98	12/21/98	12/21/98	12/21/98	12/22/98
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9	HP-3A
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	500 µg/L
Matrix Spike % Recovery:	105	115	120	122	74
Matrix Spike Duplicate % Recovery:	100	110	115	118	54
Relative % Difference:	4.9	4.4	4.3	2.8	31

LCS Batch#:	9LCS122198	9LCS122198	9LCS122198	9LCS122198	-
Date Prepared:	12/21/98	12/21/98	12/21/98	12/21/98	-
Date Analyzed:	12/21/98	12/21/98	12/21/98	12/21/98	-
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9	-
LCS % Recovery:	95	105	110	115	-

% Recovery Control Limits:	70-130	70-130	70-130	70-130	60-140
----------------------------	--------	--------	--------	--------	--------

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.

SEQUOIA ANALYTICAL, #1271

Julianne Fegley
Julianne Fegley
Project Manager



Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(925) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (925) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

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

Client Project ID: Tosco (Unocal) SS#7376, Pleasanton
Matrix: Liquid

QC Sample Group: 8121384-390

Reported: Jan 4, 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	Benzene	Toluene	Ethyl Benzene	Xylenes
Batch#:	8121403	8121403	8121403	8121403
Date Prepared:	12/22/98	12/22/98	12/22/98	12/22/98
Date Analyzed:	12/22/98	12/22/98	12/22/98	12/22/98
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:	115	115	115	122
Matrix Spike Duplicate % Recovery:	110	115	115	118
Relative % Difference:	4.4	0.0	0.0	2.8

LCS Batch#:	9LCS122298	9LCS122298	9LCS122298	9LCS122298
Date Prepared:	12/22/98	12/22/98	12/22/98	12/22/98
Date Analyzed:	12/22/98	12/22/98	12/22/98	12/22/98
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9
LCS % Recovery:	105	110	110	117

% Recovery Control Limits:	Benzene	Toluene	Ethyl Benzene	Xylenes
	70-130	70-130	70-130	70-130

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.

SEQUOIA ANALYTICAL, #1271

Julianne Fegley
Julianne Fegley
Project Manager

*TOSCO (UNOCAL) SS#7376
PLEASANTON, CA*

*MONITORING & SAMPLING
EVENT OF DECEMBER 23, 1998*

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/
Facility # TOSCO #7375
Address: 4191 First Street
City: Pleasanton, CA

Job#: 180075
Date: 12-23-98
Sampler: Frank Cline

Well ID MW-1
Well Diameter 2" in
Total Depth 86.43 ft
Depth to Water 80.02 ft

Well Condition: Okay
Hydrocarbon Thickness: 0 in
Amount Bailed (product/water): 0 (gal.)

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: Disposable Bailer
Bailer
Stack
Suction
Grundfos
Other: _____

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

Starting Time: _____
Sampling Time: _____
Purging Flow Rate: _____ gpm
Did well de-water? _____

Weather Conditions: _____
Water Color: _____ Odor: _____
Sediment Description: _____
If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature $^{\circ}$ F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW</u>	<u>VOA</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	

COMMENTS: MONITOR ONLY

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/
Facility # Tosco #7375
Address: 4191 First Street
City: Pleasanton, CA

Job#: 180075
Date: 12-23-98
Sampler: Frank Cline

Well ID MW-2B

Well Condition: Okay

Well Diameter 2" in

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

Total Depth 85.25 ft

Depth to Water 82.55 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: Disposable Bailer
Bailer
Stack
Suction
Grundfos
Other: _____

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

Starting Time: _____
Sampling Time: _____
Purging Flow Rate: _____ gpm.
Did well de-water? _____

Weather Conditions: _____
Water Color: _____ Odor: _____
Sediment Description: _____
If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature $^{\circ}$ F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW</u>	<u>VOA</u>	<u>Y</u>	<u>HEC</u>	<u>SEQUOIA</u>	

COMMENTS: MONITOR ONLY

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/Facility # TOSCO #7375 Job#: 180075
 Address: 4191 First Street Date: 12-23-98
 City: Pleasanton, CA Sampler: Frank Cline

Well ID MW-3 Well Condition: okay
 Well Diameter 2" in. Hydrocarbon Amount Bailed
 Thickness: 0 in. (product/water): 0 (gal.)
 Total Depth 94.11 ft
 Depth to Water 83.28 ft

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

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

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

Sampling Equipment: Disposable Bailer
 Bailer
 Pressure Bailer
 Grab Sample
 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 μ mhos/cm	Temperature $^{\circ}$ F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW</u>	<u>VOA</u>	<u>Y</u>	<u>HEC</u>	<u>SEQUOIA</u>	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: MONITOR ONLY

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/
Facility # Tosco #7375
Address: 4191 First Street
City: Pleasanton, CA

Job#: 180075
Date: 12-23-98
Sampler: Frank Cline

Well ID MW-4
Well Diameter 2" in.
Total Depth 93.01 ft
Depth to Water 84.95 ft

Well Condition: Okay

Hydrocarbon Thickness:	<u>0</u> in.	Amount Bailed (product/water):	<u>0</u> (gal)
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: Disposable Bailer
Bailer
Stack
Suction
Grundfos
Other: _____

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

Starting Time: _____
Sampling Time: _____
Purging Flow Rate: _____ gpm.
Did well de-water? _____

Weather Conditions: _____
Water Color: _____ Odor: _____
Sediment Description: _____
If yes; Time: _____ Volume: _____ (gal)

Time	Volume (gal)	pH	Conductivity μ mhos/cm	Temperature $^{\circ}$ F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-</u>	<u>VOA</u>	<u>Y</u>	<u>HCE</u>	<u>SEQUOIA</u>	

COMMENTS: MONITOR ONLY

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/
Facility # Tosco #7375
Address: 4191 First Street
City: Pleasanton, CA

Job#: 180075
Date: 12-23-98
Sampler: Frank Cline

Well ID MW-5
Well Diameter 2" in
Total Depth 72.52 ft
Depth to Water 68.42 ft

Well Condition: Okay
Hydrocarbon Thickness: 0.50 in. Amount Bailed (product/water): 0 (gal.)

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: Disposable Bailer
Bailer
Stack
Suction
Grundfos
Other: _____

Sampling Equipment: Disposable Bailer
Bailer
Pressure Bailer
Grab Sample
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)	Temperature (°F)	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	VOA	Y	HCL	SEQUOIA	

COMMENTS: MONITOR ONLY

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/
Facility # TOSCO # 7375
Address: 4191 First Street
City: Pleasanton, CA

Job#: 180075
Date: 12-23-98
Sampler: Frank Cline

Well ID MW-6
Well Diameter 2" in.
Total Depth 86.85 ft.
Depth to Water 80.80 ft.

Well Condition: * Okay
Hydrocarbon Thickness: _____ in. Amount Bailed (product/water): _____ (gal.)
Volume Factor (VF) 2" = 0.17 3" = 0.38 4" = 0.66
6" = 1.50 12" = 5.80

6.05 X VF 0.17 = 1.0 X 3 (case volume) = Estimated Purge Volume: 3.1 (gal.)

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

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

Starting Time: 11:45
Sampling Time: 12:00
Purging Flow Rate: NA gpm.
Did well de-water? _____

Weather Conditions: clear warming
Water Color: _____ Odor: None
Sediment Description: _____
If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature $^{\circ}$ F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>11:50</u>	<u>1</u>	<u>6.42</u>	<u>1236</u>	<u>18.1</u>	_____	_____	_____
<u>11:55</u>	<u>2</u>	<u>6.48</u>	<u>1232</u>	<u>19.2</u>	_____	_____	_____
<u>12:00</u>	<u>3</u>	<u>6.45</u>	<u>1234</u>	<u>19.0</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-6</u>	<u>3 x VOA</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPHG/BTEX/MTBE</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: * well located under gravel - found with metal detector

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/
Facility # TOSCO #7375
Address: 4191 First Street
City: Pleasanton, CA

Job#: 180075
Date: 12-23-98
Sampler: Frank Cline

Well ID MW-7
Well Diameter 2" in.
Total Depth 76.90 ft.
Depth to Water 64.82 ft.

Well Condition: okay

Hydrocarbon Thickness:	<u>0</u> in.	Amount Bailed (product/water):	<u>0</u> (gal.)
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: Disposable Bailer
Bailer
Stack
Suction
Grundfos
Other: _____

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

Starting Time: _____
Sampling Time: _____
Purging Flow Rate: _____ gpm.
Did well de-water? _____

Weather Conditions: _____
Water Color: _____ Odor: _____
Sediment Description: _____
If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature $^{\circ}$ F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-</u>	<u>VOA</u>	<u>Y</u>	<u>HCC</u>	<u>SEQUOIA</u>	

COMMENTS: MONITOR ONLY

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/
Facility # TOSCO #7375
Address: 4191 First Street
City: Pleasanton, CA

Job#: 180075
Date: 12-23-98
Sampler: Frank Cline

Well ID MW-8
Well Diameter 2" in
Total Depth 86.40 ft
Depth to Water 70.03 ft

Well Condition: Okay

Hydrocarbon Thickness: <u>0</u> in.	Amount Bailed (product/water): <u>0</u> (gal.)		
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: Disposable Bailer
Bailer
Stack
Suction
Grundfos
Other: _____

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

Starting Time: _____
Sampling Time: _____
Purging Flow Rate: _____ gpm.
Did well de-water? _____

Weather Conditions: _____
Water Color: _____ Odor: _____
Sediment Description: _____
If yes; Time: _____ Volume: _____ (gal.)

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

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-8</u>	<u>VOA</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	

COMMENTS: MONITOR ONLY



Tosco Marketing Company
3000 Crow Canyon Pl., Box 400
San Ramon, California 94583

Facility Number TOSCO (UNOCAL) SS#7376
 Facility Address 4191 First Street, Pleasanton, CA
 Consultant Project Number 180075.85
 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) Ms. Tina R. Berry
 (Phone) (510) 277-2321

Laboratory Name Sequoia Analytical
 Laboratory Release Number 9812534
 Samples Collected by (Name) F. Clive
 Collection Date 12-23-98
 Signature _____

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type C = Grab G = Composite D = Discrete	Time	Sample Preservation	Iodid (Yes or No)	Analysis To Be Performed										Remarks		
								TPH Gas + BTEX w/MTBE (8016)	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)					
TB-LB		1	W	TS	-	HC	Y	X												8122023
MW-6		3	W	G	1205	HC	Y	X												8122024

Relinquished By (Signature) _____	Organization G-R Inc.	Date/Time 12-23-98/1300	Received By (Signature) John Weller	Organization G-R INC.	Date/Time 12-23-98
Relinquished By (Signature) John Weller	Organization G-R INC.	Date/Time 12-23-98	Received By (Signature) Karl [Signature]	Organization WC, Seg	Date/Time 12/23/98 1330
Relinquished By (Signature) [Signature]	Organization	Date/Time 12/23/98 1600	Received For Laboratory By (Signature) DRAUMS	Organization	Date/Time 12/23/98

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



Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(925) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (925) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

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

Client Project ID: Tosco (Unocal)SS#7376, Pleasanton
Sample Matrix: Water
Analysis Method: EPA 5030/8015 Mod./8020
First Sample #: 812-2023

Sampled: Dec 23, 1998
Received: Dec 23, 1998
Reported: Jan 12, 1999

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX / MTBE

Analyte	Reporting Limit µg/L	Sample I.D. 812-2023 TB-LB	Sample I.D. 812-2024 MW-6
Purgeable Hydrocarbons	50	N.D.	120
Benzene	0.50	N.D.	1.1
Toluene	0.50	N.D.	N.D.
Ethyl Benzene	0.50	N.D.	N.D.
Total Xylenes	0.50	N.D.	0.78
MTBE	2.5	N.D.	25

Chromatogram Pattern: -- Unidentified Hydrocarbons C6 - C9

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0
Date Analyzed:	1/1/99	1/1/99
Instrument Identification:	HP-9	HP-9
Surrogate Recovery, %: (QC Limits = 70-130%)	97	104

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
Julianne Fegley
Project Manager



Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(925) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (925) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

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

Client Project ID: Tosco (Unocal)SS#7376, Pleasanton
Matrix: Liquid

QC Sample Group: 8122023-024

Reported: Jan 12, 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	Benzene	Toluene	Ethyl Benzene	Xylenes
Batch#:	8122026	8122026	8122026	8122026
Date Prepared:	1/1/99	1/1/99	1/1/99	1/1/99
Date Analyzed:	1/1/99	1/1/99	1/1/99	1/1/99
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:	111	107	112	117
Matrix Spike Duplicate % Recovery:	111	102	112	118
Relative % Difference:	0.0	4.8	0.0	1.4

LCS Batch#:	9LCS010199	9LCS010199	9LCS010199	9LCS010199
Date Prepared:	1/1/99	1/1/99	1/1/99	1/1/99
Date Analyzed:	1/1/99	1/1/99	1/1/99	1/1/99
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9
LCS % Recovery:	110	115	115	122

% Recovery Control Limits:	70-130	70-130	70-130	70-130
----------------------------	--------	--------	--------	--------

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.

SEQUOIA ANALYTICAL, #1271

Julianne Fegley
Julianne Fegley
Project Manager

*TOSCO (UNOCAL) SS#7376
PLEASANTON, CA*

*MONITORING & SAMPLING
EVENT OF JANUARY 23, 1999*

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/
Facility # Unocal / Tosco / # 7376
Address: 4191 First Street
City: Pasadena CA

Job#: 1800675 180075
Date: 1-23-99
Sampler: FM

Well ID MW-6²
Well Diameter 2" in.
Total Depth 86.85 ~~74.6~~ ft.
Depth to Water 80.88 ft.

Well Condition: okay
Hydrocarbon Thickness: 0 in. Amount Bailed 0 (gal.)
Volume Factor (VF) 2" = 0.17 3" = 0.38 4" = 0.66
6" = 1.50 12" = 5.90

~~646.17~~ X VF 0.17 = 1.05 X 3 (case volume) = Estimated Purge Volume: 3.15 (gal.)

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

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

Starting Time: 1703
Sampling Time: 1712
Purging Flow Rate: N/A gpm.
Did well de-water? No

Weather Conditions: clear cooling
Water Color: clear Odor: None
Sediment Description: None
If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature $^{\circ}$ F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>1705</u>	<u>1</u>	<u>6.58</u>	<u>1270</u>	<u>19.2</u>	_____	_____	_____
<u>1710</u>	<u>2</u>	<u>6.40</u>	<u>1285</u>	<u>19.3</u>	_____	_____	_____
<u>1712</u>	<u>3</u>	<u>6.42</u>	<u>1280</u>	<u>19.2</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-6</u>	<u>40A</u>	<u>Y</u>	<u>None</u>	<u>SEQUOIA</u>	_____
<u>MW-6</u>	<u>2x low</u>	<u>Y</u>	<u>None</u>	<u>SISQ</u>	<u>TPH Rise 1</u>
_____	_____	_____	_____	_____	_____

COMMENTS: _____



TOSCO

Tosco Marketing Company
2008 Cow Canyon Pl., Ste. 400
San Ramon, California 94583

Facility Number TOSCO (UNOCAL) SS#7376
 Facility Address 4191 First Street, Pleasanton, CA
 Consultant Project Number 180075.85
 Consultant Name Gettler-Ryan Inc. (G-R Inc.)
 Address 6747 Sierra Court, Suite I, Dublin, CA 94568
 Project Contact (Name) Deanna L. Harding
 (Phone) 510-551-7555 (Fax Number) 510-551-7888

Contact (Name) DAVID DEWITT
 (Phone) (910) 277-2324
 Laboratory Name Sequoia Analytical
 Laboratory Release Number 9911420
 Samples Collected by (Name) Frank Cline
 Collection Date 1-23-99
 Signature [Signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composites D = Discrete	Time	Sample Preservation	Iod (Yes or No)	Analytes To Be Performed										DO NOT BILL TB-LB ANALYSIS NO T.B incl. Remarks	
								TPH GM + STEK W/M/T/B (8016)	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)				
TB-LB																			
MW-6		2	W	G	1715	None	Y	X										9011545 AB	*5 DAY TAT

Relinquished By (Signature) <i>[Signature]</i>	Organization G-R Inc.	Date/Time 1-25-99/0800	Received By (Signature) <i>[Signature]</i>	Organization G-R INC.	Date/Time 1-25-99	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. 6 Days 10 Days As Contracted
Relinquished By (Signature) <i>[Signature]</i>	Organization G-R INC.	Date/Time 1-25-99	Received By (Signature) <i>[Signature]</i>	Organization W.C. Seg	Date/Time 1/25/99 1040	
Relinquished By (Signature) <i>[Signature]</i>	Organization	Date/Time 1/25/99 1200	Received For Laboratory By (Signature) <i>[Signature]</i>		Date/Time 1/25/2000	



Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(925) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (925) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

RECEIVED

FEB 03 1999

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

Client Project ID: Tosco (Unocal) SS#7376, Pleasanton
Sample Matrix: Water
Analysis Method: EPA 3510/8015 Mod.
First Sample #: 901-1545

Sampled: Jan 23, 1999
Received: Jan 25, 1999
Reported: Feb 3, 1999

GETTLER-RYAN INC.

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 901-1545 MW-6
Extractable Hydrocarbons	50	N.D.

Chromatogram Pattern: ..

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Extracted:	1/28/99
Date Analyzed:	1/28/99
Instrument Identification:	HP-3B

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

SEQUOIA ANALYTICAL, #1271

Julianne Fegley

Julianne Fegley
Project Manager



Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(925) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (925) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

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

Client Project ID: Tosco (Unocal) SS#7376, Pleasanton
Matrix: Liquid

QC Sample Group: 901-1545

Reported: Feb 3, 1999

QUALITY CONTROL DATA REPORT

ANALYTE	Diesel
Method:	EPA 8015M.
Analyst:	K. Grubb

MS/MSD
Batch#: BLK012899

Date Prepared: 1/28/99
Date Analyzed: 1/28/99
Instrument I.D.#: HP-3A
Conc. Spiked: 500 µg/L

Matrix Spike
% Recovery: 94

Matrix Spike
Duplicate %
Recovery: 100

Relative %
Difference: 6.2

LCS Batch#: LCS012899

Date Prepared: 1/28/99
Date Analyzed: 1/28/99
Instrument I.D.#: HP-3A

LCS %
Recovery: 88

% Recovery	
Control Limits:	60-140

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.

SEQUOIA ANALYTICAL, #1271

Julianne Fegley
Julianne Fegley
Project Manager