GETTLER-RYAN INC.

September 8, 1998
G-R Job #180106

Ms. Tina R. Berry
Tosco Marketing Company
2000 Crow Canyon Place, Suite 400
San Ramon, California 94583

RE: Semi-Annual 1998 Groundwater Monitoring & Sampling Report
Tosco (Unocal) Service Station #7004
15599 Hesperian Boulevard
San Leandro, California

Dear Ms. Berry:

This report documents the semi-annual groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R). On July 8, 1998, field personnel monitored and sampled seven wells (MW-1 through MW-6 and RW-1) 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. Dissolved oxygen concentrations are 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,

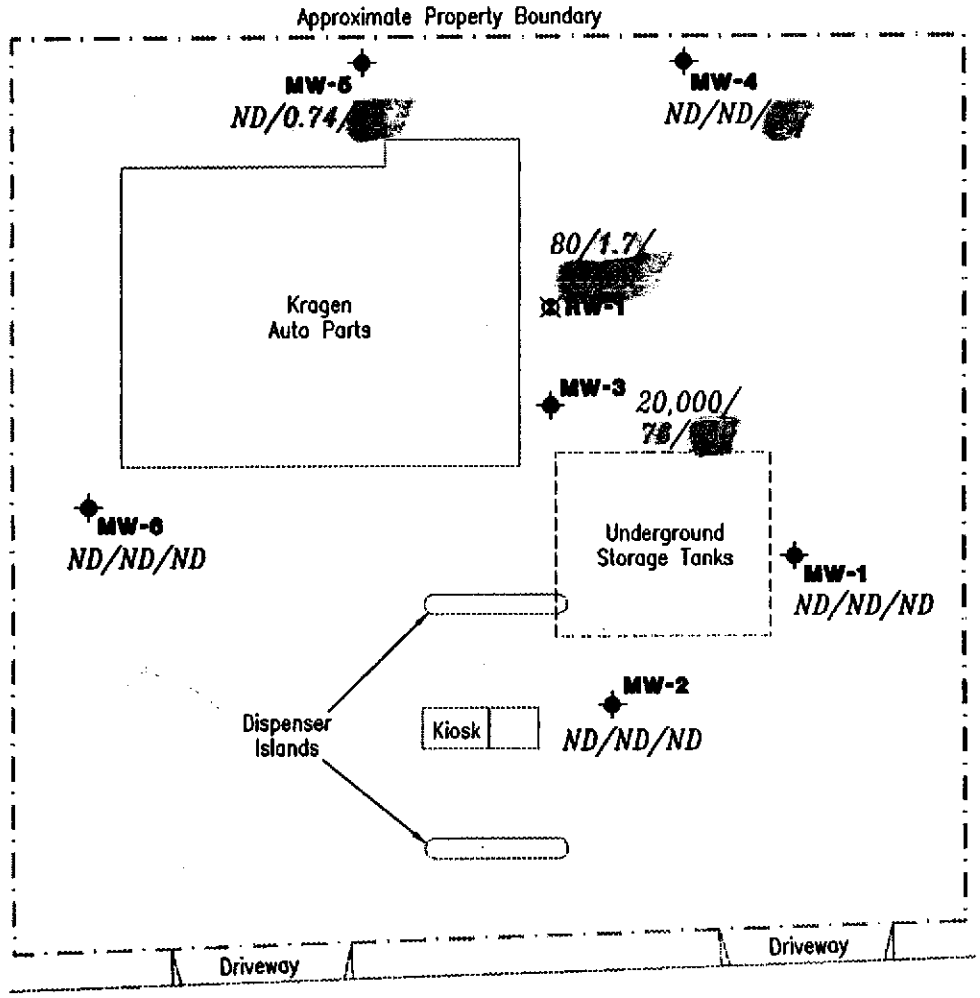
Deanna L. Harding
Project Coordinator

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

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

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

7004.qml



EXPLANATION

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

N

0 40

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. 7004
15599 Hesperian Boulevard
San Leandro, California

FIGURE
2

JOB NUMBER
180106

REVIEWED BY

DATE
July 8, 1998

REVISED DATE

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #7004

15599 Hesperian Boulevard

San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	TPH(G)	B	T	E	X	MTBE
				<--------	ppb	--------			-->
MW-1	05/04/91	--	--	ND	ND	ND	ND	ND	--
	07/23/91	--	--	ND	ND	ND	ND	ND	--
	10/14/91	--	--	ND	ND	ND	ND	ND	--
	01/14/92	--	--	ND	ND	ND	ND	ND	--
	04/14/92	--	--	76[1]	ND	ND	ND	ND	--
	07/09/92	--	--	70[1]	ND	ND	ND	ND	130
	10/28/92	--	--	SAMPLED SEMI-ANNUALLY		--	--	--	--
	01/21/93	--	--	ND	ND	ND	ND	ND	42
36.89	04/20/93	14.89	22.00	--	--	--	--	--	56
	07/22/93	14.34	22.55	ND	ND	ND	ND	ND	77
36.39	10/06/93	14.87	21.52	--	--	--	--	--	--
	01/11/94	15.14	21.25	ND	ND	ND	ND	ND	--
	04/06/94	14.19	22.20	--	--	--	--	--	--
	07/08/94	14.66	21.73	ND	ND	ND	ND	ND	--
	10/06/94	16.71	19.68	--	--	--	--	--	--
	01/05/95	14.68	21.71	ND	ND	ND	ND	ND	--
	04/05/95	11.76	24.63	--	--	--	--	--	--
	07/14/95	12.93	23.46	ND	0.65	2.2	ND	2.3	--
	10/12/95	14.29	22.10	--	--	--	--	--	--
	01/08/96	14.18	22.21	ND	ND	ND	ND	ND	--
	07/08/96	12.74	23.65	ND	ND	ND	ND	ND	ND
	01/03/97	12.89	23.50	87[1]	ND	ND	ND	ND	ND
	07/02/97	13.66	22.73	ND	ND	ND	ND	ND	ND
	01/15/98	13.08	23.31	ND	ND	ND	ND	ND	ND
	07/08/98	**11.25**	**25.14**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
MW-2	05/04/91	--	--	ND	ND	ND	ND	ND	--
	07/23/91	--	--	ND	ND	ND	ND	ND	--
	10/14/91	--	--	ND	ND	ND	ND	ND	--
	01/14/92	--	--	ND	ND	ND	ND	ND	--
	04/14/92	--	--	45[1]	ND	ND	ND	ND	--
	07/09/92	--	--	ND	ND	ND	ND	ND	49

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #7004

15599 Hesperian Boulevard

San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	TPH(G)	B	T	E	X	MTBE
				<----------ppb---------->					
MW-2	10/28/92	--	--	SAMPLED SEMI-ANNUALLY		--	--	--	--
(cont)	01/21/93	--	--	ND	ND	ND	ND	ND	17
37.35	04/20/93	15.20	22.15	--	--	--	--	--	80
	07/22/93	14.75	22.60	62[1]	ND	ND	ND	ND	42
37.07	10/06/93	15.49	21.58	--	--	--	--	--	--
	01/11/94	15.77	21.30	120[1]	ND	ND	ND	ND	--
	04/06/94	14.83	22.24	--	--	--	--	--	--
	07/08/94	15.28	21.79	140[1]	ND	ND	ND	ND	--
	10/06/94	16.32	20.75	--	--	--	--	--	--
	01/05/95	15.30	21.77	310[1]	ND	ND	ND	ND	--
	04/05/95	12.12	24.95	--	--	--	--	--	--
	07/14/95	13.55	23.52	86[1]	ND	ND	ND	ND	--
	10/12/95	14.88	22.19	--	--	--	--	--	--
	01/08/96	14.81	22.26	91[1]	ND	ND	ND	ND	--
	07/08/96	13.37	23.70	100[1]	ND	ND	ND	ND	ND
	01/03/97	13.14	23.93	160[1]	ND	ND	ND	ND	ND
	07/02/97	14.26	22.81	91[1]	ND	ND	ND	ND	ND
	01/15/98	13.31	23.76	ND	ND	ND	ND	ND	ND
	07/08/98	**11.57**	**25.50**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
MW-3	05/04/91	--	--	34,000	6,100	32	1,200	6,100	--
	07/23/91	--	--	17,000	5,500	26	1,800	2,800	--
	10/14/91	--	--	25,000	6,300	78	2,000	1,400	--
	01/14/92	--	--	13,000	6,600	19	2,600	1,800	--
	04/14/92	--	--	16,000	3,400	19	1,400	1,300	--
	07/09/92	--	--	13,000	3,200	12	1,900	1,100	--
	10/28/92	--	--	15,000	4,400	15	2,400	800	--
	01/21/93	--	--	12,000	2,800	11	1,600	590	--
37.22	04/20/93	15.13	22.09	18,000	3,700	11	2,300	1,300	410
	07/22/93	13.52	23.70	16,000	4,500	17	3,600	1,900	440
36.79	10/06/93	15.41	21.38	24,000	4,100	ND	3,600	2,000	ND
	01/11/94	15.66	21.13	19,000	3,300	31	3,300	890	--
	04/06/94	14.72	22.07	24,000	3,100	ND	3,300	820	--
	07/08/94	15.20	21.59	18,000	2,200	25	2,500	860	--
	10/06/94	16.23	20.56	20,000	2,100	26	3,000	900	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #7004

15599 Hesperian Boulevard

San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	TPH(G)	B	T	E	X	MTBE
				<--------		ppb			-------->
MW-3	01/05/95	15.12	21.67	20,000	2,100	ND	3,200	3,800	--
(cont)	04/05/95	12.03	24.76	18,000	2,100	ND	3,700	690	--
	07/14/95	13.46	23.33	21,000	1,600	ND	3,900	1,500	--
	10/12/95	14.81	21.98	17,000	1,000	ND	3,600	1,000	--[3]
	01/08/96	14.70	22.09	14,000	760	ND	3,100	380	--[4]
	07/08/96	13.29	23.50	16,000	470	45	4,400	1,000	340
	01/03/97	13.09	23.70	14,000	160	ND	2,100	120	620
	07/02/97	13.96	22.83	23,000	110	ND	3,600	1,600	1,200
	01/15/98	13.26	23.53	12,000	33	ND[5]	2,800	120	1,100
	07/08/98	**11.64**	**25.15**	**20,000**	**76**	**ND[5]**	**4,100**	**1,400**	**750**
MW-4	07/23/91	--	--	ND	ND	ND	ND	ND	--
	10/14/91	--	--	ND	ND	ND	ND	ND	--
	01/14/92	--	--	ND	ND	ND	ND	ND	--
	04/14/92	--	--	ND	ND	ND	ND	ND	--
	07/09/92	--	--	ND	ND	ND	ND	ND	--
	10/28/92	--	--	SAMPLED SEMI-ANNUALLY		--	--	--	--
	01/21/93	--	--	ND	ND	ND	ND	ND	--
35.81	04/20/93	13.84	21.97	--	--	--	--	--	65
	07/22/93	13.52	22.29	ND	ND	ND	ND	ND	54
35.44	10/06/93	14.17	21.27	--	--	--	--	--	--
	01/11/94	14.42	21.02	ND	ND	ND	ND	ND	--
	04/06/94	13.44	22.00	--	--	--	--	--	--
	07/08/94	13.96	21.48	ND	ND	ND	ND	ND	--
	10/06/94	15.00	20.44	--	--	--	--	--	--
	01/05/95	13.83	21.61	ND	ND	ND	ND	ND	--
	04/05/95	11.05	24.39	--	--	--	--	--	--
	07/14/95	12.23	23.21	ND	ND	ND	ND	ND	--
	10/12/95	13.59	21.85	--	--	--	--	--	--
	01/08/96	13.43	22.01	ND	ND	ND	ND	ND	--[4]
	07/08/96	12.04	23.40	ND	ND	ND	ND	ND	ND
	01/03/97	12.38	23.06	80[1]	ND	ND	ND	ND	ND
	07/02/97	13.00	22.44	ND	ND	ND	ND	ND	25
	01/15/98	12.50	22.94	ND	ND	ND	ND	ND	ND
	07/08/98	**10.53**	**24.91**	**ND**	**ND**	**ND**	**ND**	**ND**	**25**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #7004

15599 Hesperian Boulevard

San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	TPH(G)	B	T	E	X	MTBE
				<----------ppb---------->					
MW-5	07/23/91	--	--	260	1.2	0.39	10	0.71	--
	10/14/91	--	--	140	0.72	ND	1.3	0.89	--
	01/14/92	--	--	60[1]	ND	ND	ND	ND	--
	04/14/92	--	--	86[1]	ND	ND	ND	ND	--
	07/09/92	--	--	ND	ND	ND	ND	ND	71
	10/28/92	--	--	ND	ND	ND	ND	ND	45
	01/21/93	--	--	100[1]	ND	ND	ND	ND	160
37.01	04/20/93	14.87	22.14	99[1]	ND	ND	ND	ND	120
	07/22/93	14.82	22.19	59[2]	ND	ND	2.6	ND	42
36.81	10/06/93	15.61	21.20	150	1.1	ND	3.1	0.85	57
	01/11/94	15.84	20.97	160	ND	0.79	0.54	ND	--
	04/06/94	14.90	21.91	260	1.4	ND	0.88	ND	--
	07/08/94	15.38	21.43	200	ND	ND	ND	ND	--
	10/06/94	16.42	20.39	350	1.3	ND	ND	ND	--
	01/05/95	15.20	21.61	85	ND	ND	ND	ND	--
	04/05/95	11.72	25.09	ND	ND	ND	ND	ND	--
	07/14/95	13.69	23.12	180	1.3	ND	7.9	ND	--
	10/12/95	15.02	21.79	310	ND	ND	31	1.2	--[3]
	01/08/96	14.85	21.96	ND	0.55	ND	ND	0.58	--[4]
	07/08/96	13.52	23.29	140	2.1	1.4	5.6	0.51	110
	07/12/96	14.50	22.31	--	--	--	--	--	--
	01/03/97	12.85	23.96	12,000	150	ND	2,100	120	660
	07/02/97	13.79	23.02	ND	ND	ND	ND	ND	72
	01/15/98	13.03	23.78	69[6]	ND	ND	ND	ND	--[7]
	07/08/98	**12.05**	**24.76**	**ND**	**0.74**	**ND**	**ND**	**ND**	**95**
MW-6	07/23/91	--	--	ND	ND	ND	ND	ND	--
	10/14/91	--	--	ND	ND	ND	ND	ND	--
	01/14/92	--	--	ND	ND	ND	ND	ND	--
	04/14/92	--	--	ND	ND	ND	ND	ND	--
	07/09/92	--	--	ND	ND	ND	ND	ND	--

ORC well

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #7004
15599 Hesperian Boulevard
San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	TPH(G)	B	T	E	X	MTBE
				<----------ppb---------->					
MW-6	10/28/92	--	--	SAMPLED SEMI-ANNUALLY		--	--	--	--
(cont)	01/21/93	--	--	ND	ND	ND	ND	ND	--
37.55	04/20/93	15.27	22.28	--	--	--	--	--	ND
	07/22/93	15.20	22.35	ND	ND	ND	ND	ND	ND
37.13	10/06/93	15.75	21.38	--	--	--	--	--	--
	01/11/94	16.02	21.11	ND	ND	ND	ND	ND	--
	04/06/94	15.07	22.06	--	--	--	--	--	--
	07/08/94	15.55	21.58	ND	ND	ND	ND	ND	--
	10/06/94	16.58	20.55	--	--	--	--	--	--
	01/05/95	15.42	21.71	ND	ND	ND	ND	ND	--
	04/05/95	12.14	24.99	--	--	--	--	--	--
	07/14/95	13.87	23.26	ND	ND	ND	ND	ND	--
	10/12/95	15.17	21.96	--	--	--	--	--	--
	01/08/96	15.05	22.08	ND	ND	ND	ND	ND	--
	07/08/96	13.71	23.42	ND	ND	ND	ND	ND	ND
	01/03/97	13.12	24.01	97[1]	ND	ND	ND	ND	ND
	07/02/97	14.57	22.56	ND	ND	ND	ND	ND	ND
	01/15/98	13.30	23.83	ND	ND	ND	ND	ND	ND
	07/08/98	**12.33**	**24.80**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
RW-1	**07/08/98**	**11.72**	**--**	**80[8]**	**1.7**	**ND**	**ND**	**ND**	**1,300**
Trip Blank									
TB-LB	01/15/98	--	--	ND	ND	ND	ND	ND	ND
	07/08/98	**--**	**--**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #7004
15599 Hesperian Boulevard
San Leandro, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to January 15, 1998, were compiled from reports prepared by MPDS Services, Inc.

TOC = Top of Casing elevation
DTW = Depth to Water
(ft.) = Feet
GWE = Groundwater Elevation
msl = Relative to mean sea level

TPH(G) = Total Petroleum Hydrocarbons as Gasoline
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes

MTBE = Methyl tertiary butyl ether
ppb = Parts per billion
ND = Not Detected
-- = Not Measured/Not Analyzed/Not Available

* TOC elevations are relative to mean sea level (msl), based on the City of San Leandro Benchmark (Elevation = 36.04 feet msl). Prior to October 6, 1993, the DTW measurements were taken from the top of well covers.

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

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

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

4 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.

5 Detection limit raised. Refer to analytical results.

6 Laboratory report indicates unidentified hydrocarbons C6-C8.

7 Laboratory narrative: MTBE was not reported due to the presence of a chlorinated hydrocarbon pattern.

8 Laboratory report indicates discrete peaks and unidentified hydrocarbons < C7.

Table 2

Dissolved Oxygen Concentrations

Tosco (Unocal) Service Station #7004
15599 Hesperian Boulevard
San Leandro, California

Well ID	Date	Before Purging *(mg/L)*	After Purging *(mg/L)*
MW-5	07/02/97	3.82	3.97
	01/03/97	4.35	4.27
	07/12/96	3.44	3.67
	01/15/98	4.19	4.38
	07/08/98	**4.67**	**4.60**

EXPLANATIONS:

Dissolved oxygen concentrations prior to January 15, 1998, were compiled from reports prepared by MPDS Services, Inc.

mg/L = milligrams per liter

Note: Measurements were taken using a LaMotte DO4000 dissolved oxygen meter.

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 # 7004 Job#: 180106

Address: 15599 Hesperian Blvd. Date: 7-8-98

City: San Leandro Sampler: Joe

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

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

Total Depth 24.48 ft.

Depth to Water 11.25 ft.

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

13.23 X VF 0.17 = 2.25 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: 12:00 Weather Conditions: clear

Sampling Time: 12:30 P.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 x1000	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
12:12	2.5	7.44	6.33	70.1			
12:15	5	7.50	6.34	70.2			
12:17	7	7.47	6.37	70.5			

LABORATORY INFORMATION

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

COMMENTS: _____

9/97-fieldat.frm

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 7004 Job#: 180106

Address: 15599 Hesperian Blvd. Date: 7-8-98

City: San Leandro Sampler: Joe

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

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

Total Depth 24.56 ft.

Depth to Water 11.57 ft.

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

12.99 X VF 0.17 = 2.21 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: 11:08 Weather Conditions: clear

Sampling Time: 11:30 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 x1000	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
11:15	2.5	7.19	5.88	70.1			
11:17	5	7.29	6.11	70.8			
11:20	7	7.36	5.92	71.2			

LABORATORY INFORMATION

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

COMMENTS: _____

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WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 7004 Job#: 180106

Address: 15599 Hesperian Blvd. Date: 7-8-98

City: San Leandro Sampler: Joe

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

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

Total Depth 25.00 ft.

Depth to Water 11.64 ft.

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

13.36 X VF 0.17 = 2.27 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: 12:50 Weather Conditions: clear

Sampling Time: 1:15 p.m. Water Color: clear Odor: strong

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)
1:00	2.5	7.88	1.95	70.8			
1:03	5	7.57	1.90	71.0			
1:06	7	7.46	1.86	70.6			

LABORATORY INFORMATION

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

COMMENTS:

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WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 7004 Job#: 180106

Address: 15599 Hesperian Blvd. Date: 7-8-98

City: San Leandro Sampler: Joe

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

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

Total Depth 25.68 ft.

Depth to Water 10.53 ft.

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

15.15 X VF 0.17 = 2.58 X 3 (case volume) = Estimated Purge Volume: 8 (gal.)

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

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

Starting Time: 10:25 Weather Conditions: clear

Sampling Time: 10:55 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 x1000	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
1:38	3	7.19	7.17	70.2			
1:40	5	7.31	6.50	71.2			
1:43	8	7.42	6.55	71.8			

LABORATORY INFORMATION

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

COMMENTS: _____

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WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 7004 Job#: 180106

Address: 15599 Hesperian Blvd. Date: 7-8-98

City: San Leandro Sampler: Joe

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

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

Total Depth 26.22 ft.

Depth to Water 12.05 ft.

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

14.17 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: 09:45 Weather Conditions: clear

Sampling Time: 10:07 AM Water Color: clear Odor: None

Purging Flow Rate: gpm. Sediment Description: None

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

Time	Volume (gal.)	pH	Conductivity µmhos/cm x100	Temperature °F	D.O. (mg/L) Before	D.O. (mg/L) After	ORP (mV)	Alkalinity (ppm)
9:55	2.5	7.04	5.11	70.2	4.67	4.60		
9:57	5	6.95	4.90	70.6				
9:59	7	6.93	5.04	70.1				

LABORATORY INFORMATION

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

COMMENTS: ORC well.
DO readings before and after purging.

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WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 7004 Job#: 180106

Address: 15599 Hesperian Blvd. Date: 7-8-98

City: San Leandro Sampler: Joe

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

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

Total Depth 25.70 ft.

Depth to Water 12.33 ft.

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

13.37 X VF 0.17 = 2.27 X 3 (case volume) = Estimated Purge Volume: 7 (gal.)

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

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

Starting Time: 8:55 Weather Conditions: clear

Sampling Time: 9:30 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 x1000	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
9:15	2.5	6.90	7.21	72.0			
9:17	5	6.70	7.18	71.8			
9:20	7	6.56	7.12	71.4			

LABORATORY INFORMATION

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

COMMENTS: _____

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 7004 Job#: 180106

Address: 15599 Hesperian Blvd. Date: 7-8-98

City: San Leandro Sampler: Joe

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

Well Diameter 6 in. Hydrocarbon Thickness: (feet) Amount Bailed (product/water): (Gallons)

Total Depth 26.70 ft.

Depth to Water 11.72 ft.

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

14.98 X VF 1.50 = 22.47 X 3 (case volume) = Estimated Purge Volume: 68 (gal.)

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

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

Starting Time: 1:30 Weather Conditions: clear

Sampling Time: 2:15 P.M Water Color: clear Odor: None

Purging Flow Rate: 2.5 gpm. Sediment Description: None

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

Time	Volume (gal.)	pH	Conductivity µmhos/cm x1000	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
1:45	23	7.10	4.26	69.5			
1:55	46	7.16	5.02	69.6			
2:04	68	7.09	4.85	69.8			

LABORATORY INFORMATION

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

COMMENTS: _____

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Chain-of-Custody-Record

TOSCO

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

Facility Number UNOCAL SS# 7004
Facility Address 15599 Hesperian Blvd, San Leandro, CA
Consultant Project Number 180-106
Consultant Name Gettler-Ryan Inc. (G-R Inc.)
Address 6747 Sierra Court, Suite J, Dublin, CA 94568
Project Contact (Name) Deanna L. Harding
(Phone) 925-551-7555 (Fax Number) 925-551-7888

Contact (Name) MS. TINA BERRY
(Phone) 925-277-2321
Laboratory Name Sequoia Analytical
Laboratory Release Number 9807183
Samples Collected by (Name) JOE AJEMIAN
Collection Date 7-8-98
Signature

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed: TPH Gas + BTEX w/MTBE (8020)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)						DO NOT BILL TB-LB ANALYSIS: Remarks
TB-LB		1 VOA	W	—	—	HCl	Y	✓			8070751										
MW-1		3 VOA	/	G	12:30 P.M	/	/	✓			8070752										
MW-2		/	/	/	11:30 A.M	/	/	✓			8070753										
MW-3		/	/	/	1:15 P.M	/	/	✓			8070754										
MW-4		/	/	/	10:55 A.M	/	✓	✓			8070755										
MW-5		/	/	/	10:07 A.M	/	/	✓			8070756										
MW-6		/	/	/	9:30 A.M	/	/	✓			8070757										
RW-1		/	/	/	2:15 P.M	/	/	✓			8070758										

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	G-R Inc.	7-8-98 4:30 P.M		CCSC	7-9 1500
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time
	CCSC	7-9 1900			7/9/98 1900

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

Received TTLMS 7-9 1900

1630 KLC

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#7004, San Leandro	Sampled: Jul 8, 1998
6747 Sierra Court, Suite J	Sample Matrix:	Water	Received: Jul 9, 1998
Dublin, CA 94568	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jul 28, 1998
Attention: Deanna Harding	First Sample #:	807-0751	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX / MTBE

Analyte	Reporting Limit µg/L	Sample I.D. 807-0751 TB-LB	Sample I.D. 807-0752 MW-1	Sample I.D. 807-0753 MW-2	Sample I.D. 807-0754 MW-3	Sample I.D. 807-0755 MW-4	Sample I.D. 807-0756 MW-5
Purgeable Hydrocarbons	50	N.D.	N.D.	N.D.	20,000	N.D.	N.D.
Benzene	0.50	N.D.	N.D.	N.D.	76	N.D.	0.74
Toluene	0.50	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.50	N.D.	N.D.	N.D.	4,100	N.D.	N.D.
Total Xylenes	0.50	N.D.	N.D.	N.D.	1,400	N.D.	N.D.
MTBE	5.0	N.D.	N.D.	N.D.	750	25	95
Chromatogram Pattern:		--	--	--	Gasoline	--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	100	1.0	1.0
Date Analyzed:	7/22/98	7/22/98	7/22/98	7/22/98	7/22/98	7/22/98
Instrument Identification:	HP-5	HP-5	HP-5	HP-4	HP-5	HP-5
Surrogate Recovery, %: (QC Limits = 70-130%)	90	85	85	105	98	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

Julianne Fegley
Project Manager

8070751.GET <1>

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#7004, San Leandro	Sampled:	Jul 8, 1998
6747 Sierra Court, Suite J	Sample Matrix:	Water	Received:	Jul 9, 1998
Dublin, CA 94568	Analysis Method:	EPA 5030/8015 Mod./8020	Reported:	Jul 28, 1998
Attention: Deanna Harding	First Sample #:	807-0757		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX / MTBE

Analyte	Reporting Limit µg/L	Sample I.D. 807-0757 MW-6	Sample I.D. 807-0758 RW-1
Purgeable Hydrocarbons	50	N.D.	80
Benzene	0.50	N.D.	1.7
Toluene	0.50	N.D.	N.D.
Ethyl Benzene	0.50	N.D.	N.D.
Total Xylenes	0.50	N.D.	N.D.
MTBE	5.0	N.D.	1,300
Chromatogram Pattern:		--	Discrete Peaks & Unidentified Hydrocarbons <C7

Quality Control Data		
Report Limit Multiplication Factor:	1.0	1.0
Date Analyzed:	7/22/98	7/22/98
Instrument Identification:	HP-5	HP-5
Surrogate Recovery, %: (QC Limits = 70-130%)	78	78

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

8070751.GET <2>

Sequoia Analytical

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

Client Project ID: Unocal SS#7004, San Leandro
Matrix: Liquid
QC Sample Group: 8070751-758
Reported: Jul 28, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC072298 802004A	GC072298 802004A	GC072298 802004A	GC072298 802004A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	C. Westwater	C. Westwater	C. Westwater	C. Westwater
MS/MSD #:	8070725	8070725	8070725	8070725
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/22/98	7/22/98	7/22/98	7/22/98
Analyzed Date:	7/22/98	7/22/98	7/22/98	7/22/98
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Result:	20	21	21	67
MS % Recovery:	100	105	105	112
Dup. Result:	20	21	22	68
MSD % Recov.:	100	105	110	113
RPD:	0.0	0.0	4.7	1.5
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	4LCS072298	4LCS072298	4LCS072298	4LCS072298
Prepared Date:	7/22/98	7/22/98	7/22/98	7/22/98
Analyzed Date:	7/22/98	7/22/98	7/22/98	7/22/98
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	18	19	19	61
LCS % Recov.:	90	95	95	102

MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL, #1271

Julianne Fegley
Project Manager

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

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

Sequoia Analytical

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

Client Project ID: Unocal SS#7004, San Leandro
Matrix: Liquid
QC Sample Group: 8070751-758
Reported: Jul 28, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC072298	GC072298	GC072298	GC072298
	802005A	802005A	802005A	802005A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	C. Westwater	C. Westwater	C. Westwater	C. Westwater
MS/MSD #:	8070752	8070752	8070752	8070752
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/22/98	7/22/98	7/22/98	7/22/98
Analyzed Date:	7/22/98	7/22/98	7/22/98	7/22/98
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
Result:	19	20	20	62
MS % Recovery:	95	100	100	103
Dup. Result:	19	20	20	63
MSD % Recov.:	95	100	100	105
RPD:	0.0	0.0	0.0	1.6
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	5LCS072298	5LCS072298	5LCS072298	5LCS072298
Prepared Date:	7/22/98	7/22/98	7/22/98	7/22/98
Analyzed Date:	7/22/98	7/22/98	7/22/98	7/22/98
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
LCS Result:	18	19	19	60
LCS % Recov.:	90	95	95	100

MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL, #1271

Julianne Fegley
Project Manager

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

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference