GETTLER-RYAN INC

TRANSMITTAL

TO: Mr. Scott Seery
Alameda County Health Care Services
1131 Harbor Bay Parkway
Alameda, California 94502

DATE: September 23, 1998
G-R #: 180075

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	September 8, 1998	Groundwater Monitoring and Sampling Report Third Quarter 1998 - Event of June 26, 1998

COMMENTS:

At the request of Tosco Marketing Company, we are providing you a copy of the above referenced report. The site is monitored and sampled on a quarterly basis. If you have questions please contact the Tosco Project Manager, Ms. Tina R. Berry at (925) 277-2321.

Enclosure

cc: Mr. Dave Vossler, Gettler-Ryan Inc., Novato, CA

agency/7376trb.qmt

GETTLER-RYAN INC.

September 8, 1998
G-R Job #180075

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

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

Dear Ms. Berry:

This report documents the quarterly groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R). **On June 26, 1998, field personnel monitored and sampled seven wells (MW-1, MW-2B, MW-3, MW-4, MW-5, MW-6, and MW-8) at the above referenced site. In addition on August 18, 1998, field personnel developed, monitored and sampled one well (MW-7).**

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). 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,

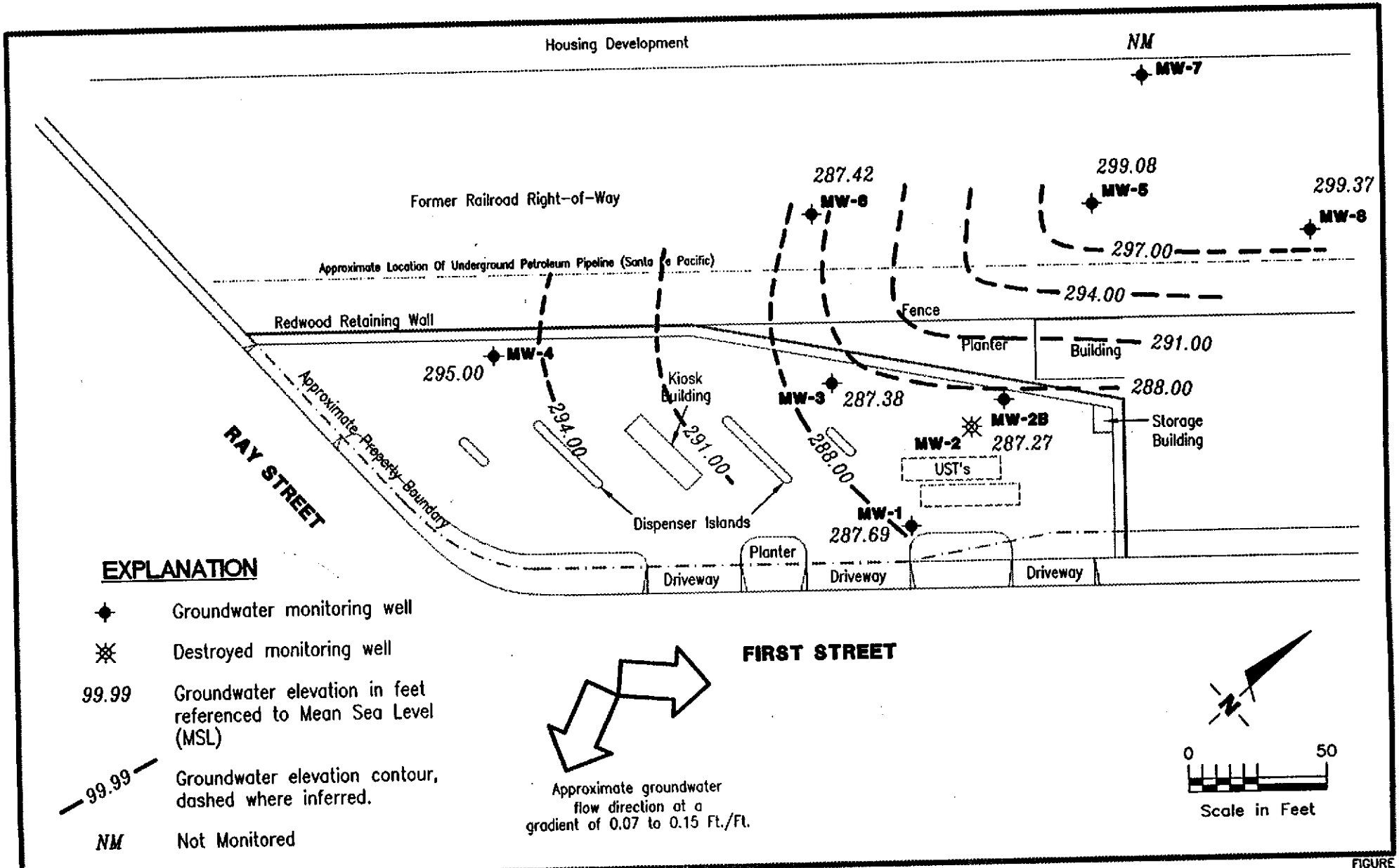
Deanna L. Harding
Project Coordinator

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: Product Thickness/Removal Data
Attachments: Standard Operating Procedure - Groundwater Sampling
Field Data Sheets
Chain of Custody Document and Laboratory Analytical Reports

7376.qml



FIGURE

Gettler - Ryan Inc.

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

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

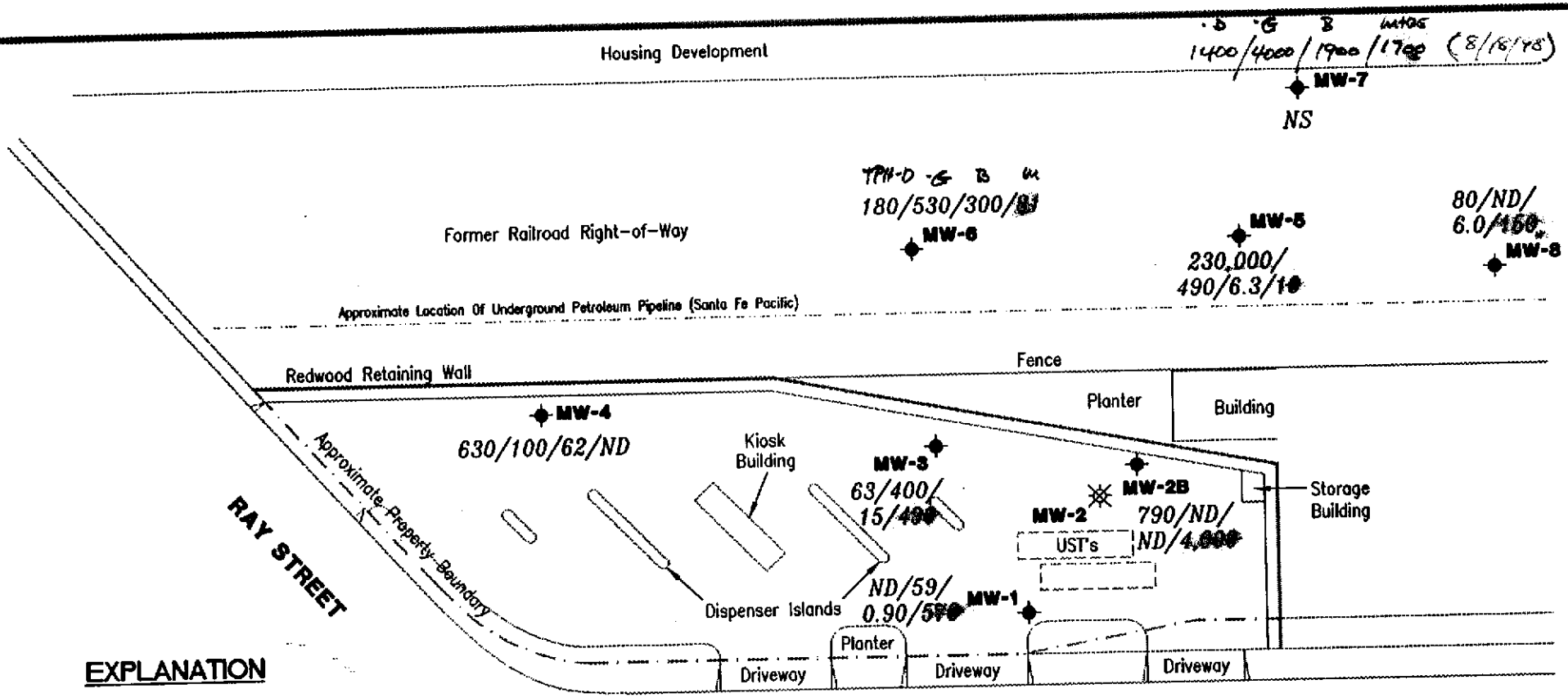
1

JOB NUMBER
180075

REVIEWED BY

DATE
June 26, 1998

REVISED DATE



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/MTBE concentrations in ppb
- *ND* Not Detected
- *ND* Not Detected

FIGURE **2**

Gettler - Ryan Inc.

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Dublin, CA 94568

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

JOB NUMBER 180075

REVIEWED BY

DATE June 26, 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)	TPH(G)	B	T	E	X	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**	--	--	--	--	--	--	--
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)	TPH(G)	B	T	E	X	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**	--	--	--	--	--	--	--
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**	--	--	--	--	--	--	--
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

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)	TPH(G)	B	T	E	X	MTBE
					<--------		ppb				-------->
MW-4	06/27/97	79.06	289.97	0.00	ND	ND	ND	ND	ND	ND	ND
(cont)	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**	--	--	--	--	--	--	--
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**	**292.83****	**0.005**	--	--	--	--	--	--	--
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
	09/29/97	86.02	277.10	0.00	ND	62[9]	ND	ND	ND	ND	43
	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**	--	--	--	--	--	--	--

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)	TPH(G)	B	T	E	X	MTBE
					<----------ppb---------->						
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
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	--	--	--	--	--	--	--
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

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
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

* 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.

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**	**--**

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.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility UNOCAL SS# 7376 (TOSCO) Job#: 180075

Address: 4191 FIRST STREET Date: 6-26-98

City: PLEASANTON, CA Sampler: STEVE BALIAN

Well ID MW-1 Well Condition: O.K

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

Total Depth 86.43 ft.

Depth to Water 79.29 ft.

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

7.14 X VF 1.21 = ____ X 3 (case volume) = Estimated Purge Volume: 3.64 (gal.)

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

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

Starting Time: 14:09 Weather Conditions: SUNNY

Sampling Time: 14:35 Water Color: CLEAR Odor: —

Purging Flow Rate: _____ gpm. Sediment Description: _____

Did well de-water? NO If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
14:13	1.5	6.68	452	74.7			
14:16	3	6.77	477	73.2			
14:19	4	6.79	481	73.0			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-1	3-VOA's	Y	HCl	SEQUOIA	TPH(G)/btex/mtbe
MW-1	1-AMBER	"	"	"	TPH-DIESEL

COMMENTS: _____

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WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility UNOCAL SS# 7376 (TOSCO) Job#: 180075

Address: 4191 FIRST STREET Date: 6-26-98

City: PLEASANTON, CA Sampler: STEVE BALIAN

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

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

Total Depth 85.26 ft.

Depth to Water 77.78 ft.

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

7.48 X VF 0.17 = 1.27 X 3 (case volume) = Estimated Purge Volume: 3.81 (gal.)

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

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

Starting Time: 14:48 Weather Conditions: SUNNY

Sampling Time: 15:10 Water Color: CLEAR Odor: —

Purging Flow Rate: _____ gpm. Sediment Description: _____

Did well de-water? NO If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
14:51	1.5	6.61	555	72.6			
14:55	3	6.63	552	72.0			
14:58	4	6.66	552	71.7			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-2B	3-VOA's	Y	HCl	SEQUOIA	TPH(G)/btex/mtbe
MW-2B	1-AMBER	"	"	"	TPH-DIESEL

COMMENTS: _____

9/97-fieldat.frm

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility UNOCAL SS# 7376 (TOSCO) Job#: 180075

Address: 4191 FIRST STREET Date: 6-26-98

City: PLEASANTON, CA Sampler: STEVE BALIAN

Well ID MW-3 Well Condition: O.K

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

Total Depth 94.11 ft.

Depth to Water 79.65 ft.

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

14.46 X VF 0.17 = 2.46 X 3 (case volume) = Estimated Purge Volume: 7.37 (gal.)

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

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

Starting Time: 15:24 Weather Conditions: SUNNY

Sampling Time: 15:40 Water Color: CLEAR Odor: —

Purging Flow Rate: 1.5 gpm. Sediment Description: _____

Did well de-water? NO If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
15:26	2.5	6.72	517	75.5			
15:27	5	6.69	494	75.1			
15:29	7.5	6.69	497	74.6			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-3	3-VOA's	Y	HCl	SEQUOIA	TPH(G)/btex/mtbe
MW-3	1-AMBER	"	"	"	TPH-DIESEL

COMMENTS: _____

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WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility UNOCAL SS# 7376 (TOSCO) Job#: 180075

Address: 4191 FIRST STREET Date: 6-26-98

City: PLEASANTON, CA Sampler: STEVE BALIAN

Well ID MW-4 Well Condition: O.K

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

Total Depth 93.07 ft.

Depth to Water 73.81 ft.

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

19.26 X VF 0.17 = 3.27 X 3 (case volume) = Estimated Purge Volume: 9.82 (gal.)

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

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

Starting Time: 13:30 Weather Conditions: SUNNY

Sampling Time: 13:50 Water Color: CLEAR Odor: _____

Purging Flow Rate: 1.5 gpm. Sediment Description: _____

Did well de-water? NO If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
13:32	3.5	6.96	436	78.4			
13:34	7	7.11	440	76.7			
13:36	10	7.25	430	77.0			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-4	3-VOA'S	Y	HCl	SEQUOIA	TPH(G)/btex/mtbe
MW-4	1-AMBER	"	"	"	TPH-DIESEL

COMMENTS: _____

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WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility UNOCAL SS# 7376 (Tosco) Job#: 180075

Address: 4191 FIRST STREET Date: 6-26-98

City: PLEASANTON, CA Sampler: STEVE BALIAN

Well ID MW-5 Well Condition: O.K

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

Total Depth 72.51 ft.

Depth to Water 64.13 ft.

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

8.38 x VF 0.17 = 1.42 x 3 (case volume) = Estimated Purge Volume: 4.27 (gal.)

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

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

Starting Time: 16:55 Weather Conditions: SUNNY

Sampling Time: 17:20 Water Color: CLEAR Odor: YES

Purging Flow Rate: _____ gpm. Sediment Description: _____

Did well de-water? NO If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
16:59	1.5	6.59	481	76.2			
17:03	3	6.59	489	73.6			
17:06	4.5	6.60	491	73.3			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-5	3-VOA's	Y	HCl	SEQUOIA	TPH(G)/btex/mtbe
MW-5	1-AMBER	Y	—	"	TPH-D

COMMENTS: SHEEN

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WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility UNOCAL SS# 7376 (TOSCO) Job#: 180075

Address: 4191 FIRST STREET Date: 6-26-98

City: PLEASANTON, CA Sampler: STEVE BALIAN

Well ID MW-6 Well Condition: O.K

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

Total Depth 88.00 ft.

Depth to Water 75.71 ft.

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

12.29 X VF 0.17 = 2.09 X 3 (case volume) = Estimated Purge Volume: 6.27 (gal.)

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

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

Starting Time: 15:49 Weather Conditions: SUNNY

Sampling Time: 16:10 Water Color: CLEAR Odor: —

Purging Flow Rate: 1 gpm. Sediment Description: _____

Did well de-water? NO If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
15:53	2.5	6.64	517	79.1			
15:55	4.5	6.63	512	75.1			
15:58	6.5	6.64	517	74.4			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-6	3-VOA's	Y	HCl	SEQUOIA	TPH(G)/btex/mtbe
MW-6	1-AMBER	"	"	"	TPH-DIESEL

COMMENTS: _____

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WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility UNOCAL SS# 7376 (TOSCO) Job#: 180075

Address: 4191 FIRST STREET Date: 6-26-98

City: PLEASANTON, CA Sampler: STEVE BALIAN

Well ID MW-8 Well Condition: O.K

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

Total Depth 86.40 ft.

Depth to Water 63.00 ft.

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

23.4 X VF 0.17 = 3.98 X 3 (case volume) = Estimated Purge Volume: 11.93 (gal.)

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

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

Starting Time: 16:19 Weather Conditions: SUNNY

Sampling Time: 16:40 Water Color: CLEAR Odor: —

Purging Flow Rate: 1.5 gpm. Sediment Description: _____

Did well de-water? No If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
16:22	4	6.65	514	74.5			
16:25	8	6.48	523	72.8			
16:28	12	6.98	548	72.4			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-8	3-VOA's	Y	HCl	SEQUOIA	TPH(G)/btex/mtbe
MW-8	1-AMBER	"	"	"	TPH-DIESEL

COMMENTS: _____

WELL MONITORING/DEVELOPMENT
FIELD DATA SHEET

Client/ Facility: Unocal/Tosco #7376 | Job#: 140107.C2

Address: 4191 First Street | Date: 8-18-98

City: ~~Livermore~~ CA Pleasanton | Sampler: F. Cline

Well ID: MW-7 | Well Condition: okay

Well Diameter: 2" in. | Hydrocarbon Thickness: ~~0~~ Ft. | Amount Bailed (product/water): ~~0~~ (gal.)

Total Depth: 77.75 ft. Initial | Volume Factor (VF): 2" = 0.17, 3" = 0.38, 4" = 0.66, 6" = 1.50, 12" = 5.80

Depth to Water: 68.75 ft.

8.25 − 6.25 = 2.0 x VF 0.17 = 1.4 x 10 (case volume) = Estimated Purge Volume: 14 (gal.) 10.6

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

Sampling Equipment: ~~Disposable Bailer~~; Bailer; Pressure Bailer; Grab Sample; Other:

Starting Time: 930 | Weather Conditions: clear warm

Sampling Time: 1030 | Water Color: Brown | Odor: None

Purging Flow Rate: 0.6 gpm. | Sediment Description: Light Silt

Did well de-water? No | If yes; Time: | Volume: (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
9:30	0	7.28	1460	18.6	Brown	Muddy	Initials
9:50	6	7.05	1250	18.9	"	"	Surge @ Bail
10.05	7	7.03	1250	19.1	Brown	Muddy	Pump @ 0.6 gpm
1008	9	6.86	1205	18.8	|	Cloudy	
1011	11	6.79	1097	19.0	|	Cloudy	
1014	13	6.79	1040	19.3	|	cloudy	
1017	15	6.78	1046	20.1	|	Clearing	
1020	17	6.77	1045	20.1	↓	Clearing	Sampled.

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-7	3x40ml VOA	Y	HCl	SEQ	6020 BTEX MTBE
MW-7	2x1Liter	Y	None	SEQ	TPH Diesel

COMMENTS: Cement around casing chipped below ground surface.

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Chain-of-Custody Record

TOSCO

Tosco Marketing Company
2000 Crow 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 (Name): Ms. Tina R. Berry
(Phone): (510) 277-2321
Laboratory Name: Sequoia Analytical
Laboratory Release Number:
Samples Collected by (Name): STEVE BALIAN
Collection Date: 6-26-98
Signature: STEVE BALIAN

9807016

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 (8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)	DO NOT BILL TB-LB ANALYSIS Remarks
TB-LB		1	W	G		HCl	Y	X								8070071
MW-1		4	"	"	14:35	"	Y	X	X							8070072 AD
MW-2B		4	"	"	15:10	"	Y	X	X							8070073
MW-3		4	"	"	15:40	"	Y	X	X							8070074
MW-4		4	"	"	13:50	"	Y	X	X							8070075
MW-5		4	"	"	17:20	"	Y	X	X							8070076
MW-6		4	"	"	16:10	"	Y	X	X							8070077
MW-8		4	"	"	16:40	"	Y	X	X							8070078

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
STEVE BALIAN	G-R Inc.	6-26-98 18:30			
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	G-R	6/29/98		Sequoia	6/29/98 2:50
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time
	Sequoia	6/29/98		6-30	158

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

Sequoia Analytical

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

Gettler-Ryan - Dublin	Client Project ID:	Tosco (Unocal) SS#7376, Pleasanton	Sampled:	Jun 26, 1998
6747 Sierra Court, Suite J	Sample Matrix:	Water	Received:	Jun 30, 1998
Dublin, CA 94568	Analysis Method:	EPA 3510/8015 Mod.	Reported:	Jul 15, 1998
Attention: Deanna Harding	First Sample #:	807-0072		

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 807-0072 MW-1	Sample I.D. 807-0073 MW-2B	Sample I.D. 807-0074 MW-3	Sample I.D. 807-0075 MW-4	Sample I.D. 807-0076 MW-5	Sample I.D. 807-0077 MW-6
Extractable Hydrocarbons	50	N.D.	790	63	630	230,000	180
Chromatogram Pattern:		--	Diesel & Unidentified Hydrocarbons >C20	Discrete Peaks	Diesel & Unidentified Hydrocarbons <C15	Diesel & Unidentified Hydrocarbons <C15 & >C20	Diesel & Unidentified Hydrocarbons >C20

Quality Control Data

Report Limit Multiplication Factor:	1.1	1.1	1.2	1.1	100	1.1
Date Extracted:	7/1/98	7/1/98	7/1/98	7/1/98	7/1/98	7/1/98
Date Analyzed:	7/7/98	7/7/98	7/7/98	7/7/98	7/7/98	7/7/98
Instrument Identification:	GCHP-3A	GCHP-3A	GCHP-3A	GCHP-3B	GCHP-3B	GCHP-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

JoHanne Fegley
Project Manager

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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:	Tosco (Unocal) SS#7376, Pleasanton	Sampled: Jun 26, 1998
6747 Sierra Court, Suite J	Sample Matrix:	Water	Received: Jun 30, 1998
Dublin, CA 94568	Analysis Method:	EPA 3510/8015 Mod.	Reported: Jul 15, 1998
Attention: Deanna Harding	First Sample #:	807-0078	

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 807-0078 MW-8
Extractable Hydrocarbons	50	80
Chromatogram Pattern:		Unidentified Hydrocarbons >C16

Quality Control Data

Report Limit Multiplication Factor:	1.1
Date Extracted:	7/1/98
Date Analyzed:	7/7/98
Instrument Identification:	GCHP-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
Project Manager

Sequoia Analytical

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Gettler-Ryan - Dublin	Client Project ID:	Tosco (Unocal) SS#7376, Pleasanton	Sampled: Jun 26, 1998
6747 Sierra Court, Suite J	Sample Matrix:	Water	Received: Jun 30, 1998
Dublin, CA 94568	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jul 15, 1998
Attention: Deanna Harding	First Sample #:	807-0071	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX / MTBE

Analyte	Reporting Limit µg/L	Sample I.D. 807-0071 TB-LB	Sample I.D. 807-0072 MW-1	Sample I.D. 807-0073 MW-2B	Sample I.D. 807-0074 MW-3	Sample I.D. 807-0075 MW-4	Sample I.D. 807-0076 MW-5
Purgeable Hydrocarbons	50	N.D.	59	N.D.	400	100	490
Benzene	0.50	N.D.	0.90	N.D.	15	62	6.3
Toluene	0.50	N.D.	N.D.	N.D.	N.D.	N.D.	2.8
Ethyl Benzene	0.50	N.D.	N.D.	N.D.	N.D.	N.D.	4.2
Total Xylenes	0.50	N.D.	N.D.	N.D.	1.9	N.D.	5.1
MTBE	2.5	N.D.	570	4,000	490	N.D.	10
Chromatogram Pattern:		--	Discrete Peaks	--	Discrete Peaks & Unidentified Hydrocarbons <C7	Discrete Peaks	Gasoline & Unidentified Hydrocarbons >C8

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	2.0	1.0	1.0
Date Analyzed:	7/10/98	7/10/98	7/10/98	7/11/98	7/10/98	7/10/98
Instrument Identification:	HP-5	HP-5	HP-5	HP-4	HP-5	HP-5
Surrogate Recovery, %: (QC Limits = 70-130%)	78	77	76	123	84	82

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

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Sequoia Analytical

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Gettler-Ryan - Dublin	Client Project ID:	Tosco (Unocal) SS#7376, Pleasanton	Sampled: Jun 26, 1998
6747 Sierra Court, Suite J	Sample Matrix:	Water	Received: Jun 30, 1998
Dublin, CA 94568	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jul 15, 1998
Attention: Deanna Harding	First Sample #:	807-0077	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX / MTBE

Analyte	Reporting Limit µg/L	Sample I.D. 807-0077 MW-6	Sample I.D. 807-0078 MW-8
Purgeable Hydrocarbons	50	530	N.D.
Benzene	0.50	300	6.0
Toluene	0.50	8.3	N.D.
Ethyl Benzene	0.50	2.8	N.D.
Total Xylenes	0.50	8.7	N.D.
MTBE	2.5	81	150
Chromatogram Pattern:		Gasoline	

Quality Control Data

Report Limit Multiplication Factor:	4.0	1.0
Date Analyzed:	7/11/98	7/10/98
Instrument Identification:	HP-5	HP-5
Surrogate Recovery, %: (QC Limits = 70-130%)	81	76

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

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Sequoia Analytical

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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: 8070071-078

Reported: Jul 15, 1998

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Analyst:	C. Westwater	C. Westwater	C. Westwater	C. Westwater	L. Diaz
MS/MSD Batch#:	8062743	8062743	8062743	8062743	BLK070198
Date Prepared:	7/11/98	7/11/98	7/11/98	7/11/98	7/1/98
Date Analyzed:	7/11/98	7/11/98	7/11/98	7/11/98	7/1/98
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4	HP-3B
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	500 µg/L
Matrix Spike % Recovery:	105	105	105	108	88
Matrix Spike Duplicate % Recovery:	105	100	105	107	80
Relative % Difference:	0.0	4.9	0.0	1.6	9.5
LCS Batch#:	4LCS071198	4LCS071198	4LCS071198	4LCS071198	LCS070198
Date Prepared:	7/11/98	7/11/98	7/11/98	7/11/98	7/1/98
Date Analyzed:	7/11/98	7/11/98	7/11/98	7/11/98	7/1/98
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4	HP-3B
LCS % Recovery:	95	100	105	107	74
% Recovery Control Limits:	70-130	70-130	70-130	70-130	60-140

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.

Sequoia Analytical

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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: 8070071-078
Reported: Jul 15, 1998

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	C. Westwater	C. Westwater	C. Westwater	C. Westwater
MS/MSD Batch#:	8062520	8062520	8062520	8062520
Date Prepared:	7/10/98	7/10/98	7/10/98	7/10/98
Date Analyzed:	7/10/98	7/10/98	7/10/98	7/10/98
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
Matrix Spike % Recovery:	100	95	110	102
Matrix Spike Duplicate % Recovery:	90	100	100	103
Relative % Difference:	11	5.1	9.5	1.6
LCS Batch#:	5LCS071098	5LCS071098	5LCS071098	5LCS071098
Date Prepared:	7/10/98	7/10/98	7/10/98	7/10/98
Date Analyzed:	7/10/98	7/10/98	7/10/98	7/10/98
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
LCS % Recovery:	90	100	105	105
% Recovery Control Limits:	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL, #1271

Julianne Fegley
Project Manager

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

Sequoia Analytical

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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: 8070071-078

Reported: Jul 15, 1998

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	C. Westwater	C. Westwater	C. Westwater	C. Westwater
MS/MSD Batch#:	8070042	8070042	8070042	8070042
Date Prepared:	7/11/98	7/11/98	7/11/98	7/11/98
Date Analyzed:	7/11/98	7/11/98	7/11/98	7/11/98
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
Matrix Spike % Recovery:	90	95	95	97
Matrix Spike Duplicate % Recovery:	90	95	95	98
Relative % Difference:	0.0	0.0	0.0	1.7
LCS Batch#:	5LCS071198	5LCS071198	5LCS071198	5LCS071198
Date Prepared:	7/11/98	7/11/98	7/11/98	7/11/98
Date Analyzed:	7/11/98	7/11/98	7/11/98	7/11/98
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
LCS % Recovery:	100	100	100	102
% Recovery Control Limits:	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL, #1271

Julianne Fegley
Project Manager

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

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East 11115 Montgomery, Suite B • Spokane, WA 99206 • (509) 924-9200
15055 S.W. Sequoia Pkwy, Suite 110 • Portland, OR 97222 • (503) 624-9800

Consultant Company: Cambrian Ryan Inc	Project Name: 140107.02
Address: 6747 Sierra Ct Suite J	UNOCAL Project Manager:
City: Dublin State: CA Zip Code: 94568	AFE #:
Telephone: 925 551-7555 FAX #: 551-7888	Site #, City, State: 7376 4191 First Street Pleasanton CA
Report To: Dr. Clyde Galimore Sampler: F. Cline	QC Data: ☐ Level D (Standard) ☐ Level C ☐ Level B ☐ Level A

Turnaround Time: ☒ 10 Work Days ☐ 5 Work Days ☐ 3 Work Days ☐ 2 Work Days ☐ 1 Work Day ☐ 2-8 Hours

☐ Drinking Water ☐ Waste Water ☐ Other

CODE: ☐ Misc. ☐ Detect. ☐ Eval ☐ Remed. ☐ Demol. ☐ Closure

Analyses Requested: 9208 BG2

	Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Laboratory Sample #	TPH Gas/BTEX MTBE	TPH Diesel	Comments
1.	MW-7	8-18-98/1020	W	5	VOA Amber	1	X	X	
2	Trip	— / —	W	2	VOA	2	X		
3									
4									
5									
6									
7									
8							—	—	
9									
10									

Relinquished By:	Date: 8-19-98	Time: 08:00	Received By: Dean Weber	Date: 8-19-98	Time: 0800
Relinquished By: Dean Weber	Date: 8-19-98	Time: 10:04	Received By:	Date: 8/19/98	Time: 10:04
Relinquished By:	Date: 8/19/98	Time:	Received By Lab:	Date: 8-19-98	Time: 1733

Were Samples Received in Good Condition? ☒ Yes ☐ No Samples on Ice? ☒ Yes ☐ No Method of Shipment: GSO

To be completed upon receipt of report:
1) Were the analyses requested on the Chain of Custody reported? ☐ Yes ☐ No If no, what analyses are still needed? _____
2) Was the report issued within the requested turnaround time? ☐ Yes ☐ No If no, what was the turnaround time? _____

Approved by: _____ Signature: _____ Company: _____ Date: _____

Pink - Client
Yellow - Laboratory
White - Laboratory

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Gettler Ryan/Geostrategies
6747 Sierra Court Suite J
Dublin, CA 94568

Attention: Deanna Harding

Client Proj ID: Unocal 7376, 140107.C2
Sample Descript: Trip
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9808B62-02

Sampled: 08/18/98
Received: 08/19/98

Analyzed: 08/28/98
Reported: 09/03/98

Instrument ID: HP1

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	115

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

SEQUOIA ANALYTICAL - ELAP #2000

Tod Granicher
Project Manager

Sequoia Analytical

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Gettler Ryan/Geostrategies
6747 Sierra Court Suite J
Dublin, CA 94568

Attention: Deanna Harding

Client Proj. ID: Unocal 7376, 140107.C2
Sample Descript: MW-7
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9808862-01

Sampled: 08/18/98
Received: 08/19/98
Extracted: 08/27/98
Analyzed: 09/02/98
Reported: 09/03/98

QC Batch Number: GC0827980HBPEXY
Instrument ID: GCHP19B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	100	1400
Chromatogram Pattern: Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	111

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

SEQUOIA ANALYTICAL - ELAP #1210

Tod Granicher
Project Manager

Sequoia Analytical

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Gettler Ryan/Geostrategies
6747 Sierra Court Suite J
Dublin, CA 94568

Attention: Deanna Harding

Client Proj. ID: Unocal 7376, 140107.C2
Sample Descript: MW-7
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9808B62-01

Sampled: 08/18/98
Received: 08/19/98

Analyzed: 08/28/98
Reported: 09/03/98

Instrument ID: HP1

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	1000	4000
Methyl t-Butyl Ether	50	1700
Benzene	10	1900
Toluene	10	48
Ethyl Benzene	10	160
Xylenes (Total)	10	N.D.
Chromatogram Pattern:		Gasoline

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	100

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

SEQUOIA ANALYTICAL - ELAP #2000

Tod Granicher
Project Manager