RO-450

GETTLER-RYAN INC.

TRANSMITTAL

FEB 15 2002

January 28, 2002
G-R #180203

TO: Mr. David B. De Witt
Phillips 66 Company
2000 Crow Canyon Place, Suite 400
San Ramon, California 94583

CC: Mr. Paul Blank
ERI, Inc.
73 Digital Drive, Suite 100
Novato, California 94949

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

RE: Former Tosco 76 Service Station #0843
1629 Webster Street
Alameda, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	January 18, 2002	Groundwater Monitoring and Sampling Report Fourth Quarter - Event of December 10, 2001

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 ***February 12, 2002***, this report will be distributed to the following:

cc: **Ms. Eva Chu, Alameda County Dept., of Environmental Health, 1131 Harbor Bay Parkway, Alameda, CA 94502**

Enclosure

MtBE alternating but TPHg still elevated, especially at MW-2

trans/0843.dbd

GETTLER-RYAN INC.

January 18, 2002
G-R Job #180203

Mr. David B. De Witt
Phillips 66 Company
2000 Crow Canyon Place, Suite 400
San Ramon, California 94583

RE: Fourth Quarter Event of December 10, 2001
Groundwater Monitoring & Sampling Report
Former Tosco 76 Service Station #0843
1629 Webster Street
Alameda, California

Dear Mr. De Witt:

This report documents the most recent groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R) at the referenced site. All field work was conducted in accordance with G-R Standard Operating Procedure - Groundwater Sampling (attached).

Static groundwater levels were measured and all wells were checked for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were not present in the wells. Static water level data and groundwater elevations are summarized in Table 1. A Potentiometric Map is included as Figure 1.

Groundwater samples were collected from the monitoring wells as specified by G-R Standard Operating Procedure - Groundwater Sampling (attached). The field data sheets are also attached. The samples were analyzed by Sequoia Analytical. Analytical results are summarized in Tables 1 and 2. A Concentration Map is included as Figure 2. The chain of custody document and laboratory analytical reports are also attached.

Sincerely,

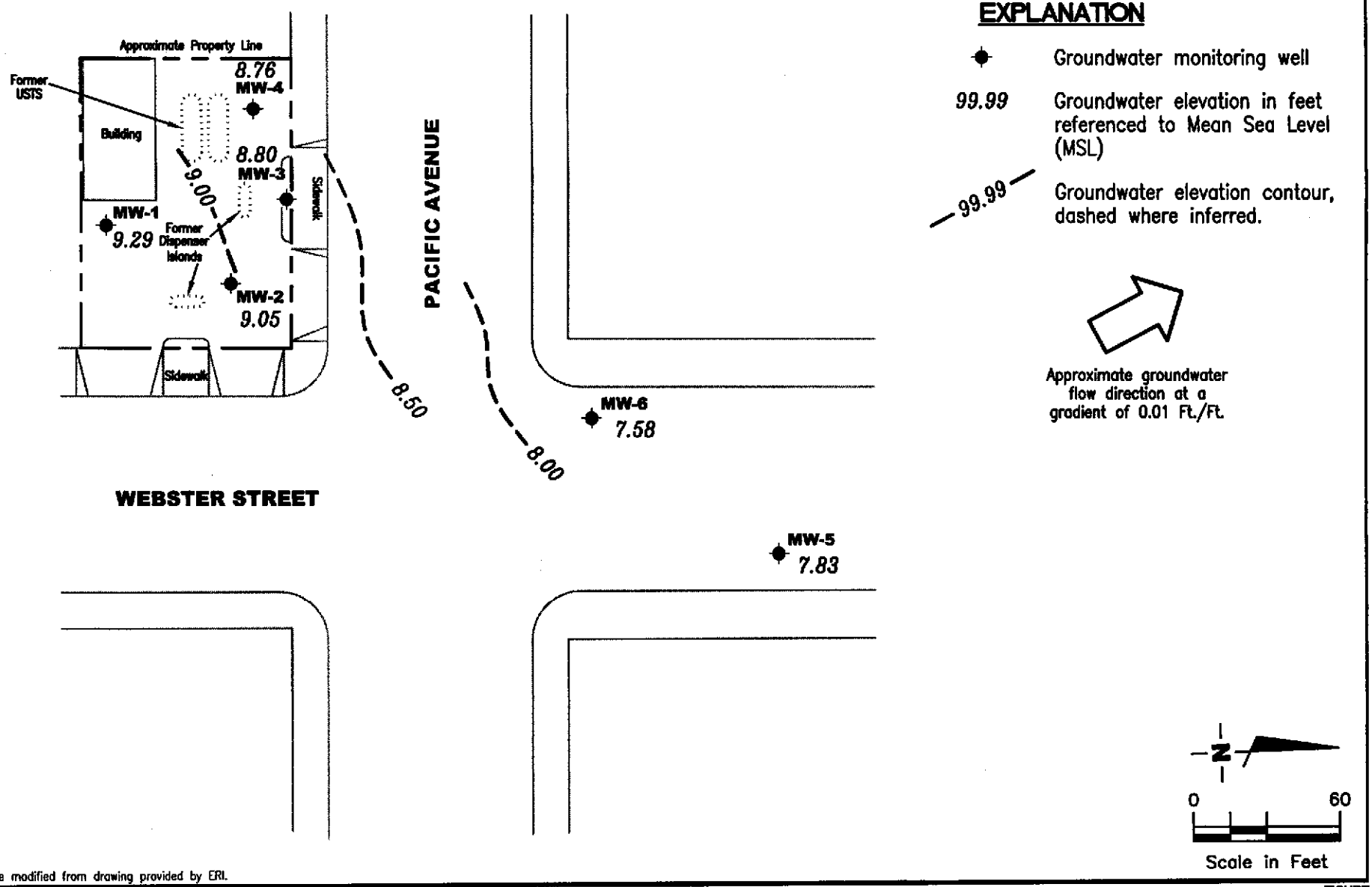
Deanna L. Harding
Project Coordinator

- For -

Hagop Kevork
P.E. No. C55734

REGISTERED PROFESSIONAL ENGINEER
HAGOP KEVORK
No. C 55734
Exp. 12/31/04
CIVIL
STATE OF CALIFORNIA

Figure 1: Potentiometric Map
Figure 2: Concentration Map
Table 1: Groundwater Monitoring Data and Analytical Results
Table 2: Groundwater Analytical Results - Oxygenate Compounds
Attachments: Standard Operating Procedure - Groundwater Sampling
Field Data Sheets
0843.qml Chain of Custody Document and Laboratory Analytical Reports



Source: Figure modified from drawing provided by ERI.

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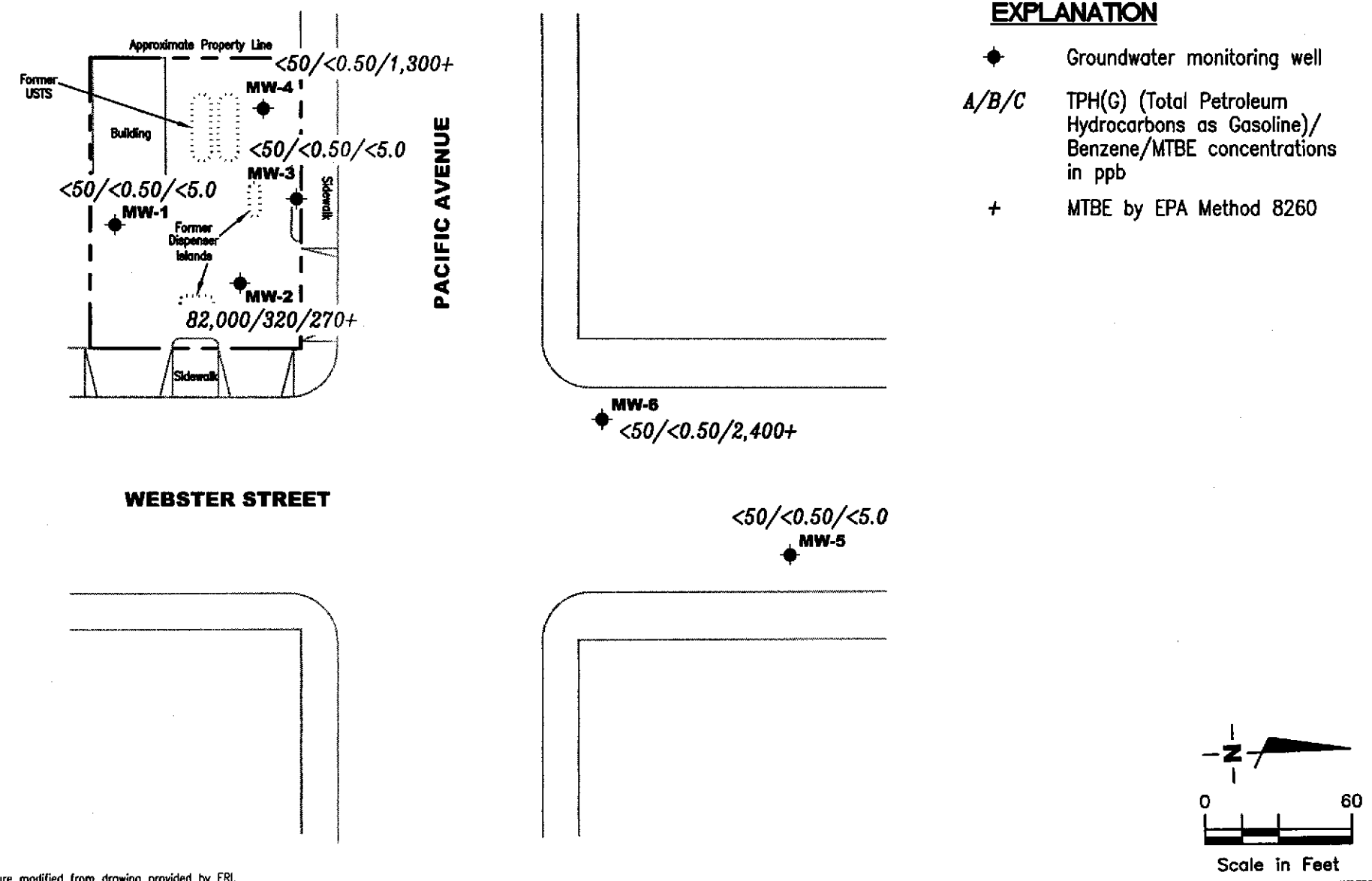
POTENTIOMETRIC MAP
Former Tosco 76 Service Station #0843
1629 Webster Street
Alameda, California

FIGURE
1

PROJECT NUMBER	REVIEWED BY	DATE	REVISED DATE
180203		December 10, 2001	

FILE NAME: P:\Enviro\Tosco\0843\Q01-0843.DWG | Layout Tab: Pot4



Source: Figure modified from drawing provided by ERI.

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CONCENTRATION MAP
Former Tosco 76 Service Station #0843
1629 Webster Street
Alameda, California

FIGURE
2

PROJECT NUMBER	REVIEWED BY	DATE	REVISED DATE
180203		December 10, 2001	

FILE NAME: P:\ENVIRO\TOSCO\0843\001-0843.DWG | Layout Tab: Con4

Table 1

Groundwater Monitoring Data and Analytical Results

Former Tosco 76 Service Station #0843

1629 Webster Street

Alameda, California

WELL ID/ TOC* (ft.)	DATE	DTW (ft.)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-1									
16.18	03/05/99[1]	--	--	86.6[3]	ND	2.04	ND	4.06	23.9[2]
	06/03/99	6.24	9.94	ND	ND	ND	ND	ND	ND/ND[2]
	09/02/99	7.19	8.99	ND	ND	ND	ND	ND	ND/ND[2]
	12/14/99	8.07	8.11	ND	ND	ND	ND	ND	ND
	03/14/00	5.47	10.71	ND	ND	ND	ND	ND	ND
	05/31/00	6.22	9.96	ND	ND	ND	ND	ND	ND
	08/29/00	6.82	9.36	ND	ND	ND	ND	ND	ND
	12/01/00	7.54	8.64	ND	ND	ND	ND	ND	ND
	03/17/01	5.73	10.45	ND	ND	ND	ND	ND	ND
	05/23/01	6.43	9.75	ND	ND	ND	ND	ND	ND
	09/24/01	7.12	9.06	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	12/10/01	**6.89**	**9.29**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<5.0**
MW-2	03/05/99[1]	--	--	34,400	2,070	7,710	2,340	8,240	8,460[2]
15.57	06/03/99	5.96	9.61	51,200[4]	1,820	7,570	2,510	7,320	6,460/8,800[2]
	09/02/99	6.85	8.72	17,000[5]	1,000	3,100	1,400	3,700	4,000/3,720[2]
	12/14/99	7.65	7.92	83,000[5]	3,000	22,000	4,500	17,000	9,100/11,000[2]
	03/14/00	5.26	10.31	31,000[5]	1,600	4,600	2,300	7,300	5,700/8,700[2]
	05/31/00	5.60	9.97	9,970[5]	598	1,030	487	2,060	2,500/1,670[2]
	08/29/00	6.35	9.22	7,900[5]	390	1,500	280	1,900	1,800/1,300[2]
	12/01/00	7.06	8.51	87,500[5]	1,860	17,400	5,590	19,400	6,220/3,790[2]
	03/17/01	5.98	9.59	4,310[5]	371	59.0	280	682	321/433[2]
	05/23/01	6.97	8.60	45,400[5]	374	4,490	2,790	10,900	[7]ND/406[2]
	09/24/01	7.56	8.01	76,000[3]	430	13,000	4,700	18,000	<2,000/480[2]
	12/10/01	**6.52**	**9.05**	**82,000[3]**	**320**	**9,100**	**4,400**	**16,000**	**<2,500/270[2]**
MW-3	03/05/99[1]	--	--	135[3]	ND	ND	ND	4.84	2.46[2]
15.11	06/03/99	5.57	9.54	ND	ND	ND	ND	ND	5.23/12.7[2]
	09/02/99	6.50	8.61	ND	ND	ND	ND	ND	13/11.0[2]

Table 1

Groundwater Monitoring Data and Analytical Results

Former Tosco 76 Service Station #0843

1629 Webster Street

Alameda, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-3	12/14/99	7.28	7.83	ND	ND	ND	ND	ND	ND
(cont)	03/14/00	4.87	10.24	ND	ND	ND	ND	ND	7.2/6.3[2]
	05/31/00	5.58	9.53	ND	ND	ND	ND	ND	ND
	08/29/00	6.06	9.05	ND	ND	ND	ND	ND	ND
	12/01/00	6.76	8.35	ND	ND	ND	ND	ND	ND
	03/17/01	5.09	10.02	ND	ND	ND	ND	ND	ND
	05/23/01	5.72	9.39	ND	ND	ND	ND	ND	ND
	09/24/01	6.34	8.77	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	12/10/01	**6.31**	**8.80**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<5.0**
MW-4	03/05/99[1]	--	--	ND	ND	ND	ND	2.44	25.2[2]
15.17	06/03/99	5.45	9.72	ND	ND	ND	ND	ND	ND/3.96[2]
	09/02/99	6.48	8.69	ND	ND	ND	ND	ND	23/27.0[2]
	12/14/99	7.27	7.90	ND	ND	ND	ND	ND	200/270[2]
	03/14/00	4.67	10.50	ND	ND	ND	ND	ND	46/49[2]
	05/31/00	5.48	9.69	ND	ND	ND	ND	ND	ND
	08/29/00	6.10	9.07	ND	ND	ND	ND	ND	6.1/3.2[2]
	12/01/00	6.79	8.38	ND	ND	ND	ND	ND	152/101[2]
	03/17/01	5.01	10.16	ND	ND	ND	ND	ND	ND
	05/23/01	5.78	9.39	ND	ND	ND	ND	ND	ND
	09/24/01	6.42	8.75	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	12/10/01	**6.41**	**8.76**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**1,700/1,300[2]**
MW-5	12/14/99	6.45	6.89	ND	ND	ND	ND	ND	3.5/3.8[2]
13.34	03/14/00	4.46	8.88	ND	ND	ND	ND	ND	ND
	05/31/00	5.18	8.16	ND	ND	ND	ND	ND	ND
	08/29/00	5.46	7.88	ND	ND	ND	ND	ND	ND
	12/01/00	5.95	7.39	ND	ND	ND	ND	ND	ND
	03/17/01	5.36	7.98	ND	ND	ND	ND	ND	ND

Table 1

Groundwater Monitoring Data and Analytical Results

Former Tosco 76 Service Station #0843

1629 Webster Street

Alameda, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-5	05/23/01	5.09	8.25	ND	ND	ND	ND	ND	ND
(cont)	09/24/01	5.58	7.76	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	12/10/01	**5.51**	**7.83**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<5.0**
MW-6	12/14/99	6.64	7.44	ND	ND	ND	ND	ND	11,000/18,000[2]
14.08	03/14/00	4.72	9.36	ND[7]	ND[7]	ND[7]	ND[7]	ND[7]	19,000/21,000[2,6]
	05/31/00	5.28	8.80	ND[7]	ND[7]	ND[7]	ND[7]	ND[7]	13,200
	08/29/00	5.39	8.69	ND	ND	ND	ND	ND	270/400[2]
	12/01/00	6.11	7.97	ND	ND	ND	ND	ND	6,330/3,640[2]
	03/17/01	6.02	8.06	18,700[5]	2,950	989	1,040	3,000	10,200/11,500[2]
	05/23/01	5.82	8.26	ND[7]	ND[7]	ND[7]	ND[7]	ND[7]	4,660[8]
	09/24/01[10]	6.59	7.49	<50	<0.50	<0.50	<0.50	<0.50	160/190[9]
	12/10/01	**6.50**	**7.58**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**3,200/2,400[2]**
Trip Blank	03/05/99[1]	--	--	ND	ND	ND	ND	ND	ND[2]
TB-LB	06/03/99	--	--	ND	ND	ND	ND	ND	ND
	09/02/99	--	--	ND	ND	ND	ND	ND	ND
	12/14/99	--	--	ND	ND	ND	ND	ND	ND
	03/14/00	--	--	ND	ND	ND	ND	ND	ND
	05/31/00	--	--	ND	ND	ND	ND	ND	ND
	08/29/00	--	--	ND	ND	ND	ND	ND	ND
	12/01/00	--	--	ND	ND	ND	ND	ND	ND
	03/17/01	--	--	ND	ND	ND	ND	ND	ND
	05/23/01	--	--	ND	ND	ND	ND	ND	ND
	09/24/01	--	--	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	12/10/01	--	--	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<5.0**

Table 1

Groundwater Monitoring Data and Analytical Results

Former Tosco 76 Service Station #0843

1629 Webster Street

Alameda, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to June 3, 1999, were compiled from reports prepared by ERI, Inc.

TOC = Top of Casing
(ft.) = Feet
DTW = Depth to Water
GWE = Groundwater Elevation
(msl) = 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 are based on USC&GS Benchmark WEB PAC - 1947 - R 1951; (Elevation = 14.054 feet).

[1] B,T,E,X by EPA Method 8260.

[2] MTBE by EPA Method 8260.

[3] Laboratory report indicates weathered gasoline C6-C12.

[4] Laboratory report indicates chromatogram pattern C6-C12.

[5] Laboratory report indicates gasoline C6-C12.

[6] Laboratory report indicates sample was analyzed 03/28/00 but required reanalysis at a dilution. The dilution was analyzed outside of the EPA recommended holding time.

[7] Detection limit raised. Refer to analytical reports.

[8] Laboratory did not perform analysis for MTBE by EPA Method 8260 as requested on the Chain of Custody for 8020 MTBE hits.

[9] MTBE by EPA Method 8260 was analyzed past the EPA recommended holding time.

[10] Due to laboratory error, MW-6 was not analyzed within the EPA recommended holding time.

Table 2

Groundwater Analytical Results - Oxygenate Compounds

Former Tosco 76 Service Station #0843

1629 Webster Street

Alameda, California

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)
MW-1	09/02/99	ND	ND	ND	ND	ND	ND	--	--
MW-2	09/02/99	ND[1]	ND[1]	3,720	ND[1]	ND[1]	ND[1]	--	--
	12/14/99	ND[1]	ND[1]	11,000	ND[1]	ND[1]	ND[1]	ND[1]	ND[1]
	03/14/00	ND[1]	1,300	8,700	ND[1]	ND[1]	ND[1]	ND[1]	ND[1]
	05/31/00	ND[1]	ND[1]	1,670	ND[1]	ND[1]	ND[1]	ND[1]	ND[1]
	08/29/00	ND	250	1,300	ND	ND	ND	ND	ND
	12/01/00	ND[1]	ND[1]	3,790	ND[1]	ND[1]	ND[1]	ND[1]	ND[1]
	03/17/01	ND[1]	ND[1]	433	14.8	ND[1]	ND[1]	ND[1]	ND[1]
	05/23/01	ND[1]	ND[1]	406	ND[1]	ND[1]	ND[1]	ND[1]	ND[1]
	09/24/01	<50,000	<5,000	480	<100	<100	<100	<100	<100
	12/10/01	**<12,000**	**<500**	**270**	**<25**	**<25**	**<25**	**<25**	**<25**
MW-3	09/02/99	ND	ND	11.0	ND	ND	ND	--	--
	03/14/00	--	--	6.3	--	--	--	--	--
MW-4	09/02/99	ND	ND	27.0	ND	ND	ND	--	--
	12/14/99	--	--	270	--	--	--	--	--
	03/14/00	--	--	49	--	--	--	--	--
	08/29/00	--	--	3.2	--	--	--	--	--
	12/10/01	**<7,100**	**<290**	**1,300**	**<14**	**<14**	**<14**	**<14**	**<14**
MW-5	12/14/99	--	--	3.8	--	--	--	--	--

Table 2

Groundwater Analytical Results - Oxygenate Compounds

Former Tosco 76 Service Station #0843

1629 Webster Street

Alameda, California

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)
MW-6	12/14/99	--	--	18,000	--	--	--	--	--
	03/14/00	--	--	21,000[2]	--	--	--	--	--
	08/29/00	--	--	400	--	--	--	--	--
	03/17/01	ND[1]	ND[1]	11,500	ND[1]	ND[1]	ND[1]	219	ND[1]
	05/23/01[3]	--	--	--	--	--	--	--	--
	09/24/01[4]	<1,000	<100	190	<2.0	<2.0	<2.0	<2.0	<2.0
	12/10/01	**<12,000**	**<500**	**2,400**	**<25**	**<25**	**<25**	**<25**	**<25**

Table 2

Groundwater Analytical Results - Oxygenate Compounds

Former Tosco 76 Service Station #0843

1629 Webster Street

Alameda, California

EXPLANATIONS:

TBA = Tertiary butyl alcohol

MTBE = Methyl tertiary butyl ether

DIPE = Di-isopropyl ether

ETBE = Ethyl tertiary butyl ether

TAME = Tertiary amyl methyl ether

1,2-DCA = 1,2-Dichloroethane

EDB = 1,2-Dibromoethane

(ppb) = Parts per billion

-- = Not Analyzed

ND = Not Detected

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

1 Detection limit raised. Refer to analytical reports.

2 Laboratory report indicates sample was analyzed 03/28/00 but required reanalysis at a dilution. The dilution was analyzed outside of the EPA recommended holding time.

3 Laboratory did not perform analyzsis for oxygenates as requested on the Chain of Custody, on all 8020 MTBE hits.

4 Laboratory report indicates sample was analyzed past the EPA recommended holding time.

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 an 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, temperature, pH and electrical conductivity are measured. If purging is to occur, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or polyvinyl chloride bailers. The measurements are taken 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 Phillips 66 Company, the purge water and decontamination water generated during sampling activities is transported to Phillips 66 - San Francisco Refinery, located in Rodeo, California.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 0843 Job#: 180203

Address: 1629 Webster St. Date: 12-10-01

City: ALAMEDA, CA Sampler: Joe

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

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

Total Depth 20.05 ft.

Depth to Water 6.89 ft.

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

13.16 X VF 0.17 = 2.24 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: 1:30 Weather Conditions: wet / cold

Sampling Time: 1:55 P.m (1355) Water Color: clear Odor: None

Purging Flow Rate: 1 gpm. Sediment Description:

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

Time	Volume (gal.)	pH	Conductivity (µmhos/cm)	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
1:40	2.5	7.91	10.72	71.3			
1:42	5	7.48	11.12	715			
1:44	7	7.56	11.15	71.9			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-1	3 VOA	Y	HCL	Seq.	TPHG, BTEX, MTBE

COMMENTS: 2" cap & padlock

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 0843 Job#: 180203

Address: 1629 Webster St Date: 12-10-01

City: ALAMEDA, CA Sampler: Joe

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

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

Total Depth 20.25 ft

Depth to Water 6.52 ft

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

13.73 x VF 0.17 = 2.33 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: 4:28 Weather Conditions: wet/wet

Sampling Time: 4:51 p.m (1648) Water Color: clear Odor: yes

Purging Flow Rate: 0.5 gpm Sediment Description:

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

Time	Volume (gal.)	pH	Conductivity (mmhos/cm)	Temperature (F)	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
4:35	2.5	7.17	3.97	65.1			
4:38	5	7.18	3.68	65.7			
4:43	7	7.22	3.65	65.6			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-2	3 VOA	Y	HCL	Seq.	TPHG, BTEX, MTBE
	2 VOA	"	"	"	(8) Oxy's, by 8260

COMMENTS: 2" cap & padlock

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/ Facility # 0843

Job#: 180203

Address: 1629 Webster St.

Date: 12-10-01

City: ALAMEDA, CA

Sampler: Joe

Well ID: MW-3

Well Condition: O.K.

Well Diameter: 2 in.

Hydrocarbon Thickness: 0 in.

Amount Bailed (product/water): 0 (gal.)

Total Depth: 19.90 ft.

Depth to Water: 6.31 ft.

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

13.59 x VF 0.17 = 2.31 X 3 (case volume) = Estimated Purge Volume: 7 (gal.)

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

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

Starting Time: 2:08

Weather Conditions: wet/cold

Sampling Time: 2:30 p.m (1430)

Water Color: clear

Odor: none

Purging Flow Rate: 1 gpm.

Sediment Description: ______

Did well de-water? ______

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

Time	Volume (gal.)	pH	Conductivity ($10^{?}$) µmhos/cm	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
2:15	2.5	7.61	10.16	69.9			
2:17	5	7.60	10.11	71.0			
2:19	7	7.62	10.09	71.4			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-3	3 VOA	Y	HCL	Seq.	TPHG, BTEX, MTBE

COMMENTS: 2" cap & padlock

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 0843 Job#: 180203

Address: 1629 Webster St. Date: 12-10-01

City: ALAMEDA, CA Sampler: Joe

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

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

Total Depth 19.80 ft.

Depth to Water 6.41 ft.

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

13.39 X VF 0.17 = 2.28 X 3 (case volume) = Estimated Purge Volume: 7 (gal.)

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

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

Starting Time: 2:39 Weather Conditions: wet / cold

Sampling Time: 3:02 p.m (1503) Water Color: clear Odor: none

Purging Flow Rate: 1 gpm Sediment Description: _____

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

Time	Volume (gal.)	pH	Conductivity (mmhos/cm)	Temperature (F)	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
2:50	2.5	7.86	12.22	72.1			
2:51	5	7.41	12.31	72.4			
2:53	7	7.38	12.34	71.9			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-4	3 VOA	Y	HCL	Seq.	TPHG, BTEX, MTBE

COMMENTS: _____

5/97-fieldsh.frm

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 0843 Job#: 180203

Address: 1629 Webster St. Date: 12-10-01

City: ALAMEDA, CA Sampler: Joe

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

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

Total Depth 20.22 ft.

Depth to Water 5.51 ft.

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

14.71 X VF 0.17 = 2.50 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: 3:30 Weather Conditions: wet

Sampling Time: 3:50 p.m. (1550) Water Color: clear Odor: none

Purging Flow Rate: 1 gpm. Sediment Description:

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

Time	Volume (gal.)	pH	Conductivity (µmhos/cm)	Temperature (F)	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
3:37	2.5	7.19	8.09	72.1			
3:39	5	7.27	8.12	71.6			
3:41	7.5	7.36	8.17	71.8			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-5	3 VOA	Y	HCL	Seq.	TPHG, BTEX, MTBE

COMMENTS:

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 0843 Job#: 180203

Address: 1629 Webster St. Date: 12-10-01

City: ALAMEDA, CA Sampler: Joe

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

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

Total Depth 20.15 ft.

Depth to Water 6.50 ft.

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

13.65 x VF 0.17 = 2.32 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: 4:00 Weather Conditions: wet

Sampling Time: 4:20 p.m (1620) Water Color: clear Odor: mild

Purging Flow Rate: 1 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)
4:08	2.5	7.29	5.75	71.6			
4:10	5	7.30	6.02	71.5			
4:12	7	7.26	5.98	71.7			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-6	3 VOA	Y	HCL	Seq.	TPHG, BTEX, MTBE

COMMENTS: _____

GLOBAL ID# T0600102263

Chain-of-Custody-Record

TOSCO

Tosco Marketing Company
2570 Crow Canyon Pl., Ste. 400
San Ramon, California 94583

Facility Number: TOSCO (Former) SS #0843
Facility Address: 1629 Webster Street, Alameda, CA
Consultant Project Number: 180203.85
Consultant Name: Gettler-Ryan Inc. (G-R Inc.)
Address: 6747 SIERRA COURT, SUITE J, DUBLIN, CA 94568
Project Contact (Name): Deanna L. Harding
(Phone): (925) 551-7555 (Fax Number): 925-551-7899

Contact (Name): MR. Dave DeWitt
(Phone): 925-277-2384
Laboratory Name: Sequoia Analytical
Laboratory Release Number:
Samples Collected by (Name): JOE ATENIAN
Collection Date: 12-10-01
Signature:

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed: TPH Gas + BTEX w/MTBE (8015)	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 (6AP or AA)	(8) OXYS 8260					DO NOT BILL TB-LB ANALYSIS
112066																					8 Oxy's – MTBE, TBA, DIPE, ETBE TAME, 1,2DCA EDB, Ethanol
TB-LB	01	1 VOA	W	G	—	HCL	Y	✓													
MW-1	02	3 VOA	1	1	1355	1	1	✓													RUN 8 OXY'S BY 8260 ON ALL 8020 MTBE HITS.
MW-2	03	5 VOA	1	1	1651	1	1	✓								✓					
MW-3	04	3 VOA	1	1	1430	1	1	✓													
MW-4	05	〃	1	1	1503	1	1	✓													
MW-5	06	〃	1	1	1550	1	1	✓													
MW-6	07	〃	1	1	1620	1	1	✓													

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	G-R Inc.	12-10-01 1900			12/10/01 1900
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

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

Sequoia
Analytical

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27 December, 2001

Deanna Harding
Gettler-Ryan/Geostrategies(1)
6747 Sierra Court, Suite J
Dublin, CA 94568

RE: Tosco(1)
Sequoia Report: L112066

Enclosed are the results of analyses for samples received by the laboratory on 12/10/01 19:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Richard G. Yee For Latonya Pelt
Project Manager

CA ELAP Certificate #2360

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Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: Tosco (Former) SS#0843, Alameda, CA	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	12/27/01 07:27

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-LB	L112066-01	Water	12/10/01 00:00	12/10/01 19:00
MW-1	L112066-02	Water	12/10/01 13:55	12/10/01 19:00
MW-2	L112066-03	Water	12/10/01 16:51	12/10/01 19:00
MW-3	L112066-04	Water	12/10/01 14:30	12/10/01 19:00
MW-4	L112066-05	Water	12/10/01 15:03	12/10/01 19:00
MW-5	L112066-06	Water	12/10/01 15:50	12/10/01 19:00
MW-6	L112066-07	Water	12/10/01 16:20	12/10/01 19:00

Sequoia Analytical - San Carlos

Richard G. Yee For Latonya Pelt, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: Tosco (Former) SS#0843, Alameda, CA	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	12/27/01 07:27

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TB-LB (L112066-01) Water Sampled: 12/10/01 00:00 Received: 12/10/01 19:00									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	1120073	12/18/01	12/18/01	EPA 8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*88.3 %*	*70-130*		"	"	"	"	
MW-1 (L112066-02) Water Sampled: 12/10/01 13:55 Received: 12/10/01 19:00									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	1120073	12/18/01	12/18/01	EPA 8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*94.1 %*	*70-130*		"	"	"	"	
MW-2 (L112066-03) Water Sampled: 12/10/01 16:51 Received: 12/10/01 19:00									
Purgeable Hydrocarbons as Gasoline	**82000**	25000	ug/l	500	1120072	12/18/01	12/18/01	EPA 8021B	P-02
Benzene	**320**	250	"	"	"	"	"	"	
Toluene	**9100**	250	"	"	"	"	"	"	
Ethylbenzene	**4400**	250	"	"	"	"	"	"	
Xylenes (total)	**16000**	250	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2500	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*97.2 %*	*70-130*		"	"	"	"	

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Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: Tosco (Former) SS#0843, Alameda, CA	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	12/27/01 07:27

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (L112066-04) Water Sampled: 12/10/01 14:30 Received: 12/10/01 19:00									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	1120073	12/18/01	12/18/01	EPA 8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*86.6 %*		*70-130*		"	"	"	
MW-4 (L112066-05) Water Sampled: 12/10/01 15:03 Received: 12/10/01 19:00									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	1120073	12/18/01	12/18/01	EPA 8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**1700**	100	"	20	"	"	"	"	M-04
Surrogate: a,a,a-Trifluorotoluene		*72.1 %*		*70-130*		"	"	"	
MW-5 (L112066-06) Water Sampled: 12/10/01 15:50 Received: 12/10/01 19:00									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	1120073	12/18/01	12/18/01	EPA 8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*86.0 %*		*70-130*		"	"	"	

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Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: Tosco (Former) SS#0843, Alameda, CA	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	12/27/01 07:27

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-6 (L112066-07) Water Sampled: 12/10/01 16:20 Received: 12/10/01 19:00									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	1120073	12/18/01	12/18/01	EPA 8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**3200**	100	"	20	"	"	"	"	M-04
Surrogate: a,a,a-Trifluorotoluene		*72.0 %*		*70-130*	"	"	"	"	

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Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: Tosco (Former) SS#0843, Alameda, CA	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	12/27/01 07:27

Volatile Organic 8 Oxygenated Compounds by EPA Method 8260B

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2 (L112066-03) Water Sampled: 12/10/01 16:51 Received: 12/10/01 19:00									
Ethanol	ND	12000	ug/l	25	1120078	12/20/01	12/20/01	EPA 8260B	
1,2-Dibromoethane	ND	25	"	"	"	"	"	"	
1,2-Dichloroethane	ND	25	"	"	"	"	"	"	
Di-isopropyl ether	ND	25	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	25	"	"	"	"	"	"	
Methyl tert-butyl ether	**270**	25	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	25	"	"	"	"	"	"	
Tert-butyl alcohol	ND	500	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*88.0 %*		*70-130*		"	"	"	
Surrogate: Toluene-d8		*88.6 %*		*70-130*		"	"	"	
MW-4 (L112066-05) Water Sampled: 12/10/01 15:03 Received: 12/10/01 19:00									
Ethanol	ND	7100	ug/l	14.28	1120078	12/20/01	12/20/01	EPA 8260B	
1,2-Dibromoethane	ND	14	"	"	"	"	"	"	
1,2-Dichloroethane	ND	14	"	"	"	"	"	"	
Di-isopropyl ether	ND	14	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	14	"	"	"	"	"	"	
Methyl tert-butyl ether	**1300**	14	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	14	"	"	"	"	"	"	
Tert-butyl alcohol	ND	290	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*92.0 %*		*70-130*		"	"	"	
Surrogate: Toluene-d8		*98.4 %*		*70-130*		"	"	"	
MW-6 (L112066-07) Water Sampled: 12/10/01 16:20 Received: 12/10/01 19:00									
Ethanol	ND	12000	ug/l	25	1120078	12/20/01	12/20/01	EPA 8260B	
1,2-Dibromoethane	ND	25	"	"	"	"	"	"	
1,2-Dichloroethane	ND	25	"	"	"	"	"	"	
Di-isopropyl ether	ND	25	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	25	"	"	"	"	"	"	
Methyl tert-butyl ether	2400	25	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	25	"	"	"	"	"	"	
Tert-butyl alcohol	ND	500	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*87.6 %*		*70-130*		"	"	"	
Surrogate: Toluene-d8		*99.8 %*		*70-130*		"	"	"	

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Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: Tosco (Former) SS#0843, Alameda, CA	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	12/27/01 07:27

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B - Quality Control

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1120072 - EPA 5030B (P/T)										
Blank (1120072-BLK1)				Prepared & Analyzed: 12/18/01						
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	5.0	"							
Surrogate: a,a,a-Trifluorotoluene	*8.26*		"	*10.0*		*82.6*	*70-130*			
LCS (1120072-BS1)				Prepared & Analyzed: 12/18/01						
Benzene	9.81	0.50	ug/l	10.0		98.1	70-130			
Toluene	8.98	0.50	"	10.0		89.8	70-130			
Ethylbenzene	8.69	0.50	"	10.0		86.9	70-130			
Xylenes (total)	25.8	0.50	"	30.0		86.0	70-130			
Surrogate: a,a,a-Trifluorotoluene	*10.1*		"	*10.0*		*101*	*70-130*			
LCS (1120072-BS2)				Prepared & Analyzed: 12/18/01						
Purgeable Hydrocarbons as Gasoline	290	50	ug/l	250		116	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.31*		"	*10.0*		*93.1*	*70-130*			
Matrix Spike (1120072-MS1)		Source: L112078-03		Prepared & Analyzed: 12/18/01						
Benzene	9.59	0.50	ug/l	10.0	ND	95.9	60-140			
Toluene	8.85	0.50	"	10.0	ND	88.5	60-140			
Ethylbenzene	8.58	0.50	"	10.0	ND	85.8	60-140			
Xylenes (total)	25.8	0.50	"	30.0	ND	86.0	60-140			
Surrogate: a,a,a-Trifluorotoluene	*9.68*		"	*10.0*		*96.8*	*70-130*			
Matrix Spike Dup (1120072-MSD1)		Source: L112078-03		Prepared & Analyzed: 12/18/01						
Benzene	11.6	0.50	ug/l	10.0	ND	116	60-140	19.0	25	
Toluene	10.7	0.50	"	10.0	ND	107	60-140	18.9	25	
Ethylbenzene	10.4	0.50	"	10.0	ND	104	60-140	19.2	25	
Xylenes (total)	30.8	0.50	"	30.0	ND	103	60-140	17.7	25	
Surrogate: a,a,a-Trifluorotoluene	*9.32*		"	*10.0*		*93.2*	*70-130*			

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Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: Tosco (Former) SS#0843, Alameda, CA	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	12/27/01 07:27

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B - Quality Control

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1120073 - EPA 5030B (P/T)										
Blank (1120073-BLK1)				Prepared & Analyzed: 12/18/01						
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	5.0	"							
Surrogate: a,a,a-Trifluorotoluene	*8.79*		"	*10.0*		*87.9*	*70-130*			
LCS (1120073-BS1)				Prepared & Analyzed: 12/18/01						
Benzene	11.3	0.50	ug/l	10.0		113	70-130			
Toluene	11.2	0.50	"	10.0		112	70-130			
Ethylbenzene	11.2	0.50	"	10.0		112	70-130			
Xylenes (total)	33.8	0.50	"	30.0		113	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.05*		"	*10.0*		*90.5*	*70-130*			
LCS (1120073-BS2)				Prepared & Analyzed: 12/18/01						
Purgeable Hydrocarbons as Gasoline	278	50	ug/l	250		111	70-130			
Surrogate: a,a,a-Trifluorotoluene	*8.52*		"	*10.0*		*85.2*	*70-130*			
Matrix Spike (1120073-MS1)	Source: L112066-02			Prepared & Analyzed: 12/18/01						
Benzene	10.9	0.50	ug/l	10.0	ND	109	60-140			
Toluene	10.8	0.50	"	10.0	ND	108	60-140			
Ethylbenzene	10.8	0.50	"	10.0	ND	108	60-140			
Xylenes (total)	32.8	0.50	"	30.0	ND	109	60-140			
Surrogate: a,a,a-Trifluorotoluene	*9.10*		"	*10.0*		*91.0*	*70-130*			
Matrix Spike Dup (1120073-MSD1)	Source: L112066-02			Prepared & Analyzed: 12/18/01						
Benzene	9.19	0.50	ug/l	10.0	ND	91.9	60-140	17.0	25	
Toluene	9.03	0.50	"	10.0	ND	90.3	60-140	17.9	25	
Ethylbenzene	8.99	0.50	"	10.0	ND	89.9	60-140	18.3	25	
Xylenes (total)	27.1	0.50	"	30.0	ND	90.3	60-140	19.0	25	
Surrogate: a,a,a-Trifluorotoluene	*8.67*		"	*10.0*		*86.7*	*70-130*			

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6747 Sierra Court, Suite J	Project Number: Tosco (Former) SS#0843, Alameda, CA	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	12/27/01 07:27

Volatile Organic 8 Oxygenated Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1120078 - EPA 5030B [P/T]										
Blank (1120078-BLK1)				Prepared & Analyzed: 12/20/01						
Ethanol	ND	500	ug/l							
1,2-Dibromoethane	ND	1.0	"							
1,2-Dichloroethane	ND	1.0	"							
Di-isopropyl ether	ND	1.0	"							
Ethyl tert-butyl ether	ND	1.0	"							
Methyl tert-butyl ether	ND	1.0	"							
Tert-amyl methyl ether	ND	1.0	"							
Tert-butyl alcohol	ND	20	"							
Surrogate: 1,2-Dichloroethane-d4	*41.9*		"	*50.0*		*83.8*	*70-130*			
Surrogate: Toluene-d8	*50.1*		"	*50.0*		*100*	*70-130*			
LCS (1120078-BS1)				Prepared & Analyzed: 12/20/01						
Methyl tert-butyl ether	55.0	1.0	ug/l	50.0		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	*43.5*		"	*50.0*		*87.0*	*70-130*			
Surrogate: Toluene-d8	*52.6*		"	*50.0*		*105*	*70-130*			
Matrix Spike (1120078-MS1)		**Source: L112065-06**		Prepared & Analyzed: 12/20/01						
Methyl tert-butyl ether	52.9	1.0	ug/l	50.0	ND	106	60-140			
Surrogate: 1,2-Dichloroethane-d4	*41.6*		"	*50.0*		*83.2*	*70-130*			
Surrogate: Toluene-d8	*55.8*		"	*50.0*		*112*	*70-130*			
Matrix Spike Dup (1120078-MSD1)		**Source: L112065-06**		Prepared & Analyzed: 12/20/01						
Methyl tert-butyl ether	54.1	1.0	ug/l	50.0	ND	108	60-140	1.87	25	
Surrogate: 1,2-Dichloroethane-d4	*42.2*		"	*50.0*		*84.4*	*70-130*			
Surrogate: Toluene-d8	*55.5*		"	*50.0*		*111*	*70-130*			

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6747 Sierra Court, Suite J	Project Number: Tosco (Former) SS#0843, Alameda, CA	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	12/27/01 07:27

Notes and Definitions

M-04	MTBE was reported from second analysis.
P-02	Chromatogram Pattern: Weathered Gasoline C6-C12
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference