[MTBE] at the increase
Need MW further dg

GETTLER-RYAN INC.

TRANSMITTAL

February 15, 2000
G-R #:180225

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

CC: Mr. Glen Matteucci
ERI, Inc.
73 Digital Drive, Suite 100
Novato, California

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

RE: Tosco 76 Service Station #1156
4276 MacArthur Boulevard
Oakland, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	February 9, 2000	Groundwater Monitoring and Sampling Report First Quarter 2000 - Event of January 7, 2000

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 28, 2000***, this report will be distributed to the following:

Enclosure

cc: Ms. Eva Chu, Alameda County Health Care Services, 1131 Harbor Bay Parkway, Suite 250, Alameda, CA 94502
Mr. Bob Hale, Alameda County Public Works Agency, Water Resources Section, 951 Turner CT, Suite 300, Hayward, CA 94545

agency/1156dbd.qmt

GETTLER-RYAN INC.

February 9, 2000
G-R Job #180225

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

RE: First Quarter 2000 Groundwater Monitoring & Sampling Report
Tosco 76 Service Station #1156
4276 MacArthur Boulevard
Oakland, California

Dear Mr. De Witt:

This report documents the quarterly groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R). On January 7, 2000, field personnel monitored and sampled four wells (MW-1 through MW-4) 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 present in one well (MW-1). 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

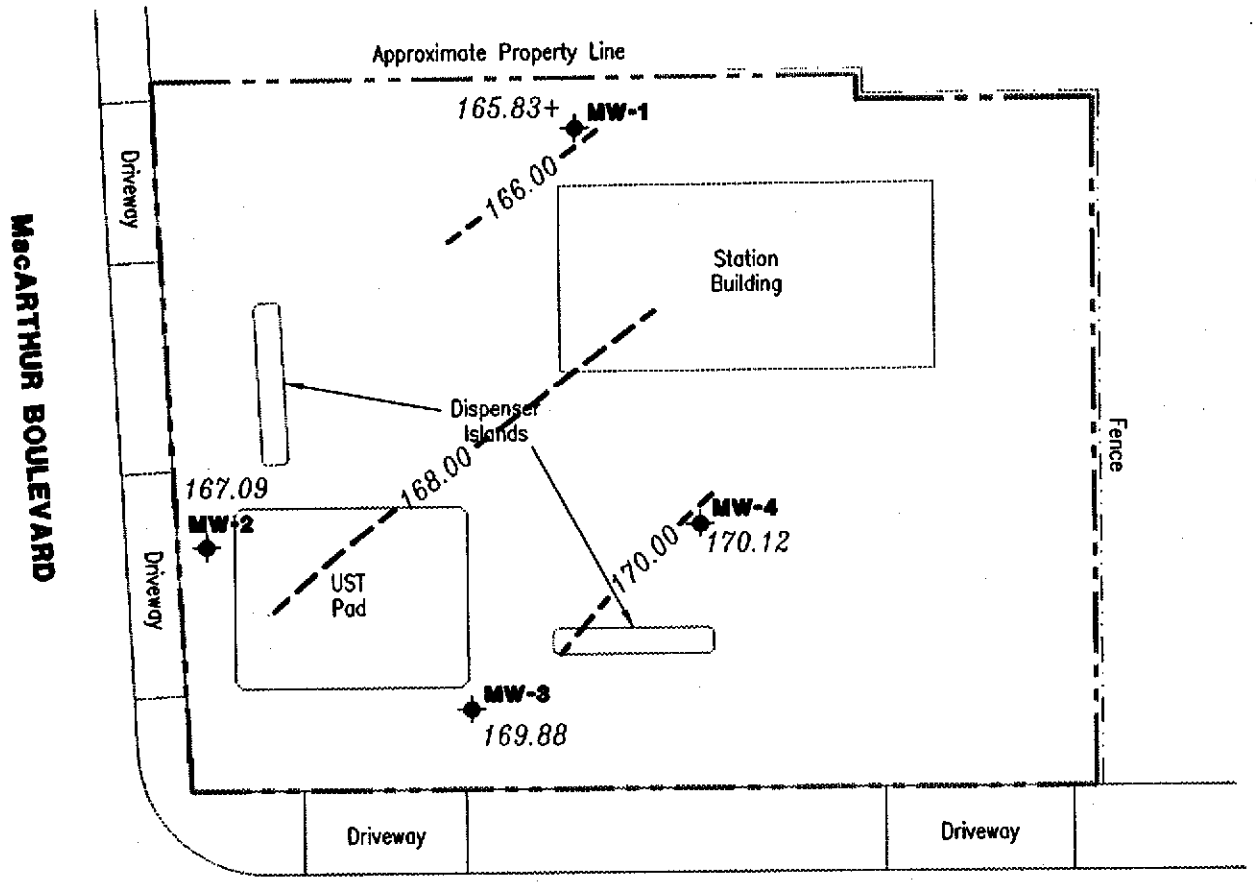
Barbara Sieminski
Project Geologist, R.G. No. 6676

REGISTERED GEOLOGIST
BARBARA SIEMINSKI
No. 6676
STATE OF CALIFORNIA

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

1156.qml

6747 Sierra Court, Suite J • Dublin, California 94568 • (925) 551-7555



EXPLANATION

- ✦ Groundwater monitoring well
- 99.99 Groundwater elevation in feet referenced to Mean Sea Level (MSL)
- 99.99 Groundwater elevation contour, dashed where inferred.
- \+ Groundwater elevation corrected for the presence of free product

Approximate groundwater flow direction at a gradient of 0.07 Ft./Ft.

N

0 30

Scale in Feet

BASE MAP: Morrow Surveying and ERI

Gettler - Ryan Inc.

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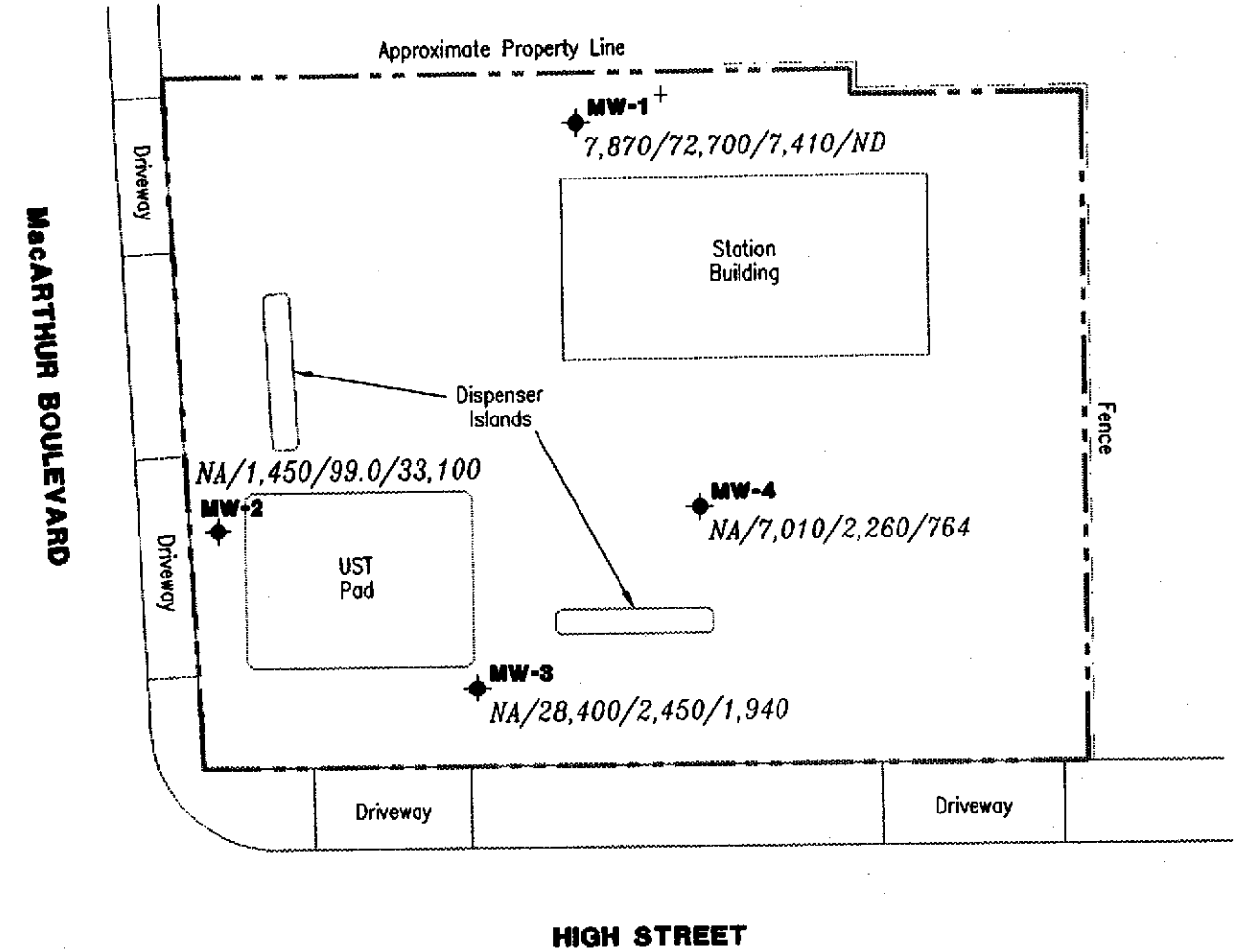
Dublin, CA 94568

POTENTIOMETRIC MAP
Tosco 76 Service Station #1156
4276 MacArthur Boulevard
Oakland, California

FIGURE 1

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
180225		January 7, 2000	



EXPLANATION

◆	Groundwater monitoring well
A/B/C/D	TPH(D) (Total Petroleum Hydrocarbons as Diesel)/TPH(G) (Total Petroleum Hydrocarbons as Gasoline)/Benzene/MTBE concentration in ppb
ND	Not Detected
NA	Not Analyzed
+	Free product present

N

0 30

Scale in Feet

BASE MAP: Morrow Surveying and ERI

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

CONCENTRATION MAP
Tosco 76 Service Station #1156
4276 MacArthur Boulevard
Oakland, California

FIGURE
2

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
180225		January 7, 2000	

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco 76 Service Station #1156
4276 MacArthur Boulevard
Oakland, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ppb)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-1											
174.86	07/20/99[5]	7.50	167.36	--	16,000[2]	120,000	11,000	27,000	3,300	18,000	ND[1]
	09/28/99	8.75	166.11	<0.01	2,410[2]	6,020[6]	1,030	1,040	68.5	412	321/333[3]
	01/07/00	**9.05**	**165.83****	**0.02**	**7,870[2,4]**	**72,700[6]**	**7,410**	**13,900**	**2,070**	**9,620**	**ND[1]**
MW-2											
173.01	07/20/99	5.40	167.61	--	--	ND[1]	ND[1]	ND[1]	ND[1]	ND[1]	4,500/11,000[3,4]
	09/28/99	5.60	167.41	0.00	--	1,390[6]	124	ND[1]	62.9	43.1	5,280/6,150[3]
	01/07/00	**5.92**	**167.09**	**0.00**	--	**1,450[6]**	**99.0**	**ND[1]**	**23.8**	**16.0**	**33,100**
MW-3											
178.44	07/20/99	8.50	169.94	--	--	1,000	76	52	79	76	330
	09/28/99	8.31	170.13	0.00	--	1,860[6]	174	95.4	71.8	135	443/288[3]
	01/07/00	**8.56**	**169.88**	**0.00**	--	**28,400[6]**	**2,450**	**3,090**	**1,560**	**3,910**	**1,940**
MW-4											
179.10	07/20/99	7.40	171.70	--	--	69	2.7	0.77	ND	7.1	100
	09/28/99	7.19	171.91	0.00	--	4,050[6]	1,250	72.0	51.3	133	416/459[3]
	01/07/00	**8.98**	**170.12**	**0.00**	--	**7,010[6]**	**2,260**	**167**	**271**	**276**	**764**
Trip Blank											
TB-LB	07/20/99	--	--	--	--	--	--	--	--	--	--
	09/28/99	--	--	--	--	ND	ND	ND	ND	ND	ND
	01/07/00	--	--	--	--	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Table

Groundwater Monitoring Data and Analytical Results

Tosco 76 Service Station #1156
4276 MacArthur Boulevard
Oakland, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to September 28, 1999, were compiled from reports prepared by Environmental Resolutions, Inc.

TOC = Top of Casing elevation
DTW = Depth to Water
(ft.) = Feet
GWE = Groundwater Elevation
(msl) = Referenced relative to mean sea level
TPH(D) = Total Petroleum Hydrocarbons as Diesel
TPH(G) = Total Petroleum Hydrocarbons as Gasoline

B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
MTBE = Methyl tertiary butyl ether

ppb = Parts per billion
ND = Not Detected
-- = Not Measured/Not Analyzed

* TOC elevations are based on City of Oakland Benchmark No. 3967, (Elevation = 174.40 feet msl).
** GWE has been corrected due to the presence of free product; Correction factor: [(TOC - DTW)+(Product Thickness x 0.77)].

1 Detection limit raised. Refer to analytical reports.
2 Laboratory report indicates unidentified hydrocarbons C9-C24.
3 MTBE by EPA Method 8260.
4 Laboratory analyzed sample past EPA recommended holding time.
5 Total Recoverable Petroleum Oil was ND.
6 Laboratory report indicates gasoline C6-C12.

Table 2

Groundwater Analytical Results

Tosco 76 Service Station #1156
4276 MacArthur Boulevard
Oakland, California

Well ID	Date	Ethanol (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	HVOCs (ppb)	SVOCs (ppb)
MW-1	07/20/99	--	--	11,000[3]	--	--	--	ND[1]	ND[2]
	09/28/99	--	ND[6]	333	ND[6]	ND[6]	ND[6]	ND[4]	ND[5]
	01/07/00	--	--	--	--	--	--	**ND[7,8]**	**ND[9]**
MW-2	09/28/99	--	ND[6]	6,150	ND[6]	ND[6]	ND[6]	--	--
MW-3	09/28/99	--	ND[6]	288	ND[6]	ND[6]	8.80	--	--
MW-4	09/28/99	--	ND[6]	459	ND[6]	ND[6]	ND[6]	--	--

Ta!

Groundwater A l Results

Tosco 76 Servic on #1156

4276 MacArthur Boulevard

Oakland, California

EXPLANATIONS:

Groundwater analytical results prior to September 28, 1999, were compiled from reports prepared by Environmental Resolutions, Inc.

TBA = Tertiary Butyl Alcohol
MTBE = Methyl Tertiary Butyl Ether
DIPE = Di-isopropyl Ether
ETBE = Ethyl Tertiary Butyl Ether
TAME = Tertiary Amyl Methyl Ether
EDB = 1,2-Dibromoethane
HVOCs = Halogenated Volatile Organic Compounds
SVOCs = Semi-Volatile Organic Compounds
ppb = Parts per billion
-- = Not Analyzed
ND = Not Detected

1 All HVOCs were ND except for Chlorobenzene at 12 ppb; 1,2-Dichlorobenzene (1,2-DCB) at 3.9 ppb; 1,1-Dichloroethane (1,1-DCA) at 2.0 ppb; 1,2-Dichloroethane (1,2-DCA) at 20 ppb; cis-1,2-Dichloroethene (cis-1,2-DCE) at 3.6 ppb; and 1,2-Dichloropropane (1,2-DCP) at 0.92 ppb.

2 All SVOCs were ND except for Benzyl alcohol at 37 ppb; 2,4-Dimethylphenol at 140 ppb; 2-Methylnaphthalene at 240 ppb; 4-Methylphenol at 27 ppb; and Naphthalene at 600 ppb.

3 Laboratory analyzed sample past EPA recommended holding time.

4 All HVOCs were ND except for Benzene at 6,130 ppb; Ethylbenzene at 1,590 ppb; Naphthalene at 534 ppb; Toluene at 11,900 ppb; 1,2,4-Trimethylbenzene at 1,240 ppb; 1,3,5-Trimethylbenzene at 318 ppb; and Total Xylenes at 7,360 ppb.

5 All SVOCs were ND (with a raised detection limit) except for 2,4-Dimethylphenol at 13.6 ppb; 2-Methylnaphthalene at 87.4 ppb; 2-Methylphenol at 26.4; 4-Methylphenol at 35.6; and Naphthalene at 292 ppb.

6 Detection limit raised. Refer to analytical reports.

7 All HVOCs were ND (with a raised detection limit) except for Benzene at 8,380 ppb; Ethylbenzene at 2,380 ppb; Naphthalene at 1,050 ppb; n-Propylbenzene at 371 ppb; Toluene at 17,600 ppb; 1,2,4-Trimethylbenzene at 2,210 ppb; 1,3,5-Trimethylbenzene at 597 ppb; and Total Xylenes at 10,800 ppb.

8 EPA Method 8260A for HVOCs

9 All SVOCs were ND (with a raised detection limit) except for 2-Methylnaphthalene at 315 ppb and Naphthalene at 615 ppb.

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds
EPA Method 8010 for HVOCs
EPA Method 8270 for SVOCs

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, 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 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 # Tosco 1156 — Job#: 180225

Address: 4276 MacArthur Blvd. — Date: 1/7/00

City: Oakland — Sampler: Vartkes

Well ID: MW-1 — Well Condition: OK

Well Diameter: 2 in. — Hydrocarbon Thickness: 0.02 (feet) — Amount Bailed (product/water): 1 lbs (Gallons)

Total Depth: 25.15 ft.

Depth to Water: 9.05 ft.

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

16.10 X VF 0.17 = 2.73 X 3 (case volume) = Estimated Purge Volume: 8.21 (gal.)

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

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

Starting Time: 1:25 — Weather Conditions: pt cldy

Sampling Time: 1:45 — Water Color: clear — Odor: Y

Purging Flow Rate: 1 gpm. — Sediment Description: _____

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

Time	Volume (gal.)	pH	Conductivity µmhos/cm X/00	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
1:28	3	7.63	10.49	71.3			
1:31	6	7.52	10.60	70.7			
1:34	8.5	7.49	10.64	70.4			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-1	3 VOAs	Y	HCl	SEQUOIA	TPH(G)/btex/mtbe
MW-1	3 VOAs	"	"	"	HVOCs (8260)
MW-1	1 Amber	"	NONE	"	TPH-D
MW-1	1 Amber	"	NONE	"	SVOCs (8270)

COMMENTS: _____

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WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/ Tosco
Facility # 1156 Job#: 180225
Address: 4276 MacArthur Blvd. Date: 1/7/00
City: Oakland Sampler: Vartkes

Well ID MW-2 Well Condition: OK
Well Diameter 2 in. Hydrocarbon Thickness: 0 (feet) Amount Bailed (product/water): 0 (Gallons)
Total Depth 25.45 ft.
Depth to Water 5.92 ft.

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

19.53 x VF 0.17 = 3.32 x 3 (case volume) = Estimated Purge Volume: 9.96 (gal.)

Purge Equipment: Disposable Bailer; Bailer; Stack; (Suction); Grundfos; Other: _____
Sampling Equipment: (Disposable Bailer); Bailer; Pressure Bailer; Grab Sample; Other: _____

Starting Time: 11:40 Weather Conditions: dry
Sampling Time: 12:00 Water Color: clear Odor: mild
Purging Flow Rate: 1 gpm. Sediment Description: _____
Did well de-water? no If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm X100	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
11:43	3.5	7.57	9.37	67.3			
11:47	7	7.40	9.20	67.9			
11:50	10	7.34	9.14	68.2			

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/ Tosco
Facility # 1156 Job#: 180225
Address: 4276 MacArthur Blvd. Date: 1/7/00
City: Oakland Sampler: Vartkes

Well ID MW-3 Well Condition: ok
Well Diameter 2 in. Hydrocarbon Thickness: 0 (feet) Amount Bailed (product/water): 0 (Gallons)
Total Depth 25.05 ft.
Depth to Water 8.56 ft.

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

16.49 X VF 0.17 = 2.80 X 3 (case volume) = Estimated Purge Volume: 8.40 (gal.)

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

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

Starting Time: 12:13 Weather Conditions: cldy
Sampling Time: 12:23 Water Color: clear Odor: Y
Purging Flow Rate: 1 gpm. Sediment Description:
Did well de-water? no If yes; Time: Volume: (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm X100	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
12:16	3	7.34	9.31	70.2			
12:19	6	7.18	9.48	69.3			
12:22	8.5	7.22	9.54	69.1			

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 # Tosco 1156 — Job#: 180225

Address: 4276 MacArthur Blvd. — Date: 1/7/00

City: Oakland — Sampler: Vartkes

Well ID: MW-4 — Well Condition: ok

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

Total Depth: 25.30 ft.

Depth to Water: 8.98 ft.

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

16.32 X VF 0.17 = 2.77 X 3 (case volume) = Estimated Purge Volume: 8.32 (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: cldy

Sampling Time: 1:10 — Water Color: clear — Odor: y

Purging Flow Rate: 1 gpm. — Sediment Description: _____

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

Time	Volume (gal.)	pH	Conductivity µmhos/cmX/00	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
12:53	3	7.30	11.66	71.4			
12:56	6	7.19	11.55	70.2			
12:59	8.5	7.13	11.49	70.0			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	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: TOSCO (76) SS#1156 / 7000054
Facility Address: 4276 MACARTHUR, OAKLAND CA
Consultant Project Number: 180225.85
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): 925-551-7888

Contact (Name): MR. DAVID DEWITT
(Phone): (925) 277-2384
Laboratory Name: Sequoia Analytical
Laboratory Release Number:
Samples Collected by (Name): Matthew Tashjian
Collection Date: 1/7/00
Signature: Matthew Tashjian

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 (TCLP or AA)	HVOCs (8260)	SVOCs (8270)				DO NOT BILL TB-LB ANALYSIS: Remarks
TB-LB		1	W	G		HCl	Y	X													
MW-1		8	"	"	1425 P	"	"	X	X							X	X				
MW-2		3	"	"	1200 P	"	"	X													
MW-3		3	"	"	1235 P	"	"	X													
MW-4		3	"	"	1110 P	"	"	X													

Relinquished By (Signature): [signature] — Organization: G-R Inc. — Date/Time: 1/7/00 3:30 PM — Received By (Signature): [signature] SC — Organization: SEQ SC — Date/Time: 1/7/00 1535

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

1551 Industrial Road
San Carlos, CA 94070-4111
(650) 232-9600
FAX (650) 232-9612

February 1, 2000

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

RE: Tosco(4)/L001054

Dear Deanna Harding:

Enclosed are the results of analyses for sample(s) received by the laboratory on January 7, 2000. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

for Wayne Stevenson
Project Manager

CA ELAP Certificate Number I-2360

Sequoia Analytical

1551 Industrial Road
San Carlos, CA 94070-4111
(650) 232-9600
FAX (650) 232-9612

February 1, 2000

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

RE: Tosco(4)/L001054

Dear Deanna Harding:

Enclosed are the results of analyses for sample(s) received by the laboratory on January 7, 2000. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

for Wayne Stevenson
Project Manager

CA ELAP Certificate Number I-2360

Sequoia Analytical

1551 Industrial Road
San Carlos, CA 94070-4111
(650) 232-9600
FAX (650) 232-9612

Gettler-Ryan/Geostrategies(1)	Project:	Tosco(4)	Sampled: 1/7/00
747 Sierra Court, Suite D	Project Number:	Tosco SS#1156	Received: 1/7/00
Dublin, CA 94568	Project Manager:	Deanna Harding	Reported: 2/1/00

ANALYTICAL REPORT FOR L001054

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
TB-LB	L001054-01	Water	1/7/00
MW-1	L001054-02	Water	1/7/00
MW-2	L001054-03	Water	1/7/00
MW-3	L001054-04	Water	1/7/00
MW-4	L001054-05	Water	1/7/00

Sequoia Analytical

1551 Industrial Road
San Carlos, CA 94070-4111
(650) 232-9600
FAX (650) 232-9612

Gettler-Ryan/Geostrategies(1)	Project:	Tosco(4)	Sampled: 1/7/00
6747 Sierra Court, Suite D	Project Number:	Tosco SS#1156	Received: 1/7/00
Dublin, CA 94568	Project Manager:	Deanna Harding	Reported: 2/1/00

Sample Description: **TB-LB**
Laboratory Sample Number: **L001054-01**

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
Sequoia Analytical - San Carlos								
Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT								
Purgeable Hydrocarbons as Gasoline	0010097	1/19/00	1/20/00		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		5.00	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*70.0-130*		*101*	%	

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Gettler-Ryan/Geostrategies(1)	Project:	Tosco(4)	Sampled: 1/7/00
6747 Sierra Court, Suite D	Project Number:	Tosco SS#1156	Received: 1/7/00
Dublin, CA 94568	Project Manager:	Deanna Harding	Reported: 2/1/00

Sample Description: **MW-1**
Laboratory Sample Number: **L001054-02**

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
Sequoia Analytical - San Carlos								
Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT								
Purgeable Hydrocarbons as Gasoline	0010104	1/20/00	1/20/00		10000	**72700**	ug/l	3
Benzene	"	"	"		100	**7410**	"	
Toluene	"	"	"		100	**13900**	"	
Ethylbenzene	"	"	"		100	**2070**	"	
Xylenes (total)	"	"	"		100	**9620**	"	
Methyl tert-butyl ether	"	"	"		1000	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*70.0-130*		*94.2*	*%*	
Volatile Organic Compounds by EPA Method 8260A								
Benzene	0010074	1/14/00	1/14/00		250	**8380**	ug/l	
Bromobenzene	"	"	"		250	ND	"	
Bromochloromethane	"	"	"		250	ND	"	
Bromodichloromethane	"	"	"		250	ND	"	
Bromoform	"	"	"		250	ND	"	
Bromomethane	"	"	"		625	ND	"	
n-Butylbenzene	"	"	"		250	ND	"	
sec-Butylbenzene	"	"	"		250	ND	"	
tert-Butylbenzene	"	"	"		250	ND	"	
Carbon tetrachloride	"	"	"		250	ND	"	
Chlorobenzene	"	"	"		250	ND	"	
Chloroethane	"	"	"		625	ND	"	
Chloroform	"	"	"		250	ND	"	
Chloromethane	"	"	"		625	ND	"	
2-Chlorotoluene	"	"	"		250	ND	"	
4-Chlorotoluene	"	"	"		250	ND	"	
Dibromochloromethane	"	"	"		250	ND	"	
1,2-Dibromoethane	"	"	"		250	ND	"	
Dibromomethane	"	"	"		250	ND	"	
1,2-Dibromo-3-chloropropane	"	"	"		625	ND	"	
1,2-Dichlorobenzene	"	"	"		250	ND	"	
1,3-Dichlorobenzene	"	"	"		250	ND	"	
1,4-Dichlorobenzene	"	"	"		250	ND	"	
Dichlorodifluoromethane	"	"	"		625	ND	"	
1,1-Dichloroethane	"	"	"		250	ND	"	
1,2-Dichloroethane	"	"	"		250	ND	"	
1,1-Dichloroethene	"	"	"		250	ND	"	
cis-1,2-Dichloroethene	"	"	"		250	ND	"	
trans-1,2-Dichloroethene	"	"	"		250	ND	"	
1,2-Dichloropropane	"	"	"		250	ND	"	
1,3-Dichloropropane	"	"	"		250	ND	"	

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Gettler-Ryan/Geostrategies(1)	Project:	Tosco(4)	Sampled: 1/7/00
6747 Sierra Court, Suite D	Project Number:	Tosco SS#1156	Received: 1/7/00
Dublin, CA 94568	Project Manager:	Deanna Harding	Reported: 2/1/00

Sample Description: **MW-1**
Laboratory Sample Number: **L001054-02**

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
Volatile Organic Compounds by EPA Method 8260A (continued)								
2,2-Dichloropropane	0010074	1/14/00	1/14/00		250	ND	ug/l	
1,1-Dichloropropene	"	"	"		250	ND	"	
Ethylbenzene	"	"	"		250	**2380**	"	
Hexachlorobutadiene	"	"	"		250	ND	"	
Isopropylbenzene	"	"	"		250	ND	"	
p-Isopropyltoluene	"	"	"		250	ND	"	
Methylene chloride	"	"	"		625	ND	"	
Naphthalene	"	"	"		625	**1050**	"	
n-Propylbenzene	"	"	"		250	**371**	"	
Styrene	"	"	"		250	ND	"	
1,1,1,2-Tetrachloroethane	"	"	"		250	ND	"	
1,1,2,2-Tetrachloroethane	"	"	"		250	ND	"	
Tetrachloroethene	"	"	"		250	ND	"	
Toluene	"	"	"		250	**17600**	"	
1,2,3-Trichlorobenzene	"	"	"		250	ND	"	
[illegible]robenzene	"	"	"		250	ND	"	
[illegible]loroethane	"	"	"		250	ND	"	
1,1,2-Trichloroethane	"	"	"		250	ND	"	
Trichloroethene	"	"	"		250	ND	"	
Trichlorofluoromethane	"	"	"		625	ND	"	
1,2,3-Trichloropropane	"	"	"		250	ND	"	
1,2,4-Trimethylbenzene	"	"	"		250	**2210**	"	
1,3,5-Trimethylbenzene	"	"	"		250	**597**	"	
Vinyl chloride	"	"	"		250	ND	"	
Total Xylenes	"	"	"		250	**10800**	"	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*76.0-114*		*108*	*%*	
Surrogate: Toluene-d8	"	"	"	*88.0-110*		*100*	"	
Surrogate: 4-BFB	"	"	"	*86.0-115*		*100*	"	
Diesel Hydrocarbons (C9-C24) by DHS LUFT								
Diesel Range Hydrocarbons	0A27032	1/27/00	1/29/00	DHS LUFT	250	**7870**	ug/l	1,4
Surrogate: n-Pentacosane	"	"	"	*50-150*		*163*	*%*	2
Semivolatile Organic Compounds by EPA Method 8270B								
Acenaphthene	0010375	1/14/00	1/20/00	EPA 8270B	25.0	ND	ug/l	
Acenaphthylene	"	"	"	EPA 8270B	25.0	ND	"	
Anthracene	"	"	"	EPA 8270B	25.0	ND	"	
Benzoic acid	"	"	"	EPA 8270B	50.0	ND	"	
Benzo (a) anthracene	"	"	"	EPA 8270B	25.0	ND	"	
Benzo (b) fluoranthene	"	"	"	EPA 8270B	25.0	ND	"	
Benzo (k) fluoranthene	"	"	"	EPA 8270B	25.0	ND	"	

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Jettler-Ryan/Geostrategies(1)	Project:	Tosco(4)	Sampled: 1/7/00
747 Sierra Court, Suite D	Project Number:	Tosco SS#1156	Received: 1/7/00
Dublin, CA 94568	Project Manager:	Deanna Harding	Reported: 2/1/00

Sample Description: **MW-1**
Laboratory Sample Number: **L001054-02**

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
Semivolatile Organic Compounds by EPA Method 8270B (continued)								
Benzo (ghi) perylene	0010375	1/14/00	1/20/00	EPA 8270B	25.0	ND	ug/l	
Benzo[a]pyrene	"	"	"	EPA 8270B	25.0	ND	"	
Benzyl alcohol	"	"	"	EPA 8270B	25.0	ND	"	
Bis(2-chloroethoxy)methane	"	"	"	EPA 8270B	25.0	ND	"	
Bis(2-chloroethyl)ether	"	"	"	EPA 8270B	25.0	ND	"	
Bis(2-chloroisopropyl)ether	"	"	"	EPA 8270B	25.0	ND	"	
Bis(2-ethylhexyl)phthalate	"	"	"	EPA 8270B	50.0	ND	"	
4-Bromophenyl phenyl ether	"	"	"	EPA 8270B	25.0	ND	"	
Butyl benzyl phthalate	"	"	"	EPA 8270B	25.0	ND	"	
4-Chloroaniline	"	"	"	EPA 8270B	50.0	ND	"	
2-Chloronaphthalene	"	"	"	EPA 8270B	25.0	ND	"	
4-Chloro-3-methylphenol	"	"	"	EPA 8270B	25.0	ND	"	
2-Chlorophenol	"	"	"	EPA 8270B	25.0	ND	"	
4-Chlorophenyl phenyl ether	"	"	"	EPA 8270B	25.0	ND	"	
Chrysene	"	"	"	EPA 8270B	25.0	ND	"	
Dibenz (a,h) anthracene	"	"	"	EPA 8270B	25.0	ND	"	
Dibenzofuran	"	"	"	EPA 8270B	25.0	ND	"	
Di-n-butyl phthalate	"	"	"	EPA 8270B	50.0	ND	"	
1,2-Dichlorobenzene	"	"	"	EPA 8270B	25.0	ND	"	
1,3-Dichlorobenzene	"	"	"	EPA 8270B	25.0	ND	"	
1,4-Dichlorobenzene	"	"	"	EPA 8270B	25.0	ND	"	
3,3'-Dichlorobenzidine	"	"	"	EPA 8270B	50.0	ND	"	
2,4-Dichlorophenol	"	"	"	EPA 8270B	25.0	ND	"	
Diethyl phthalate	"	"	"	EPA 8270B	25.0	ND	"	
2,4-Dimethylphenol	"	"	"	EPA 8270B	25.0	ND	"	
Dimethyl phthalate	"	"	"	EPA 8270B	25.0	ND	"	
4,6-Dinitro-2-methylphenol	"	"	"	EPA 8270B	50.0	ND	"	
2,4-Dinitrophenol	"	"	"	EPA 8270B	50.0	ND	"	
2,4-Dinitrotoluene	"	"	"	EPA 8270B	25.0	ND	"	
2,6-Dinitrotoluene	"	"	"	EPA 8270B	25.0	ND	"	
Di-n-octyl phthalate	"	"	"	EPA 8270B	25.0	ND	"	
Fluoranthene	"	"	"	EPA 8270B	25.0	ND	"	
Fluorene	"	"	"	EPA 8270B	25.0	ND	"	
Hexachlorobenzene	"	"	"	EPA 8270B	25.0	ND	"	
Hexachlorobutadiene	"	"	"	EPA 8270B	25.0	ND	"	
Hexachlorocyclopentadiene	"	"	"	EPA 8270B	50.0	ND	"	
Hexachloroethane	"	"	"	EPA 8270B	25.0	ND	"	
Indeno (1,2,3-cd) pyrene	"	"	"	EPA 8270B	25.0	ND	"	
Isophorone	"	"	"	EPA 8270B	25.0	ND	"	
2-Methylnaphthalene	"	"	"	EPA 8270B	25.0	**315**	"	
2-Methylphenol	"	"	"	EPA 8270B	25.0	ND	"	

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Gettler-Ryan/Geostrategies(1)	Project:	Tosco(4)	Sampled: 1/7/00
6747 Sierra Court, Suite D	Project Number:	Tosco SS#1156	Received: 1/7/00
Dublin, CA 94568	Project Manager:	Deanna Harding	Reported: 2/1/00

Sample Description: **MW-1**
Laboratory Sample Number: **L001054-02**

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
Semivolatile Organic Compounds by EPA Method 8270B (continued)								
4-Methylphenol	0010375	1/14/00	1/20/00	EPA 8270B	25.0	ND	ug/l	
Naphthalene	"	"	"	EPA 8270B	25.0	**615**	"	
2-Nitroaniline	"	"	"	EPA 8270B	50.0	ND	"	
3-Nitroaniline	"	"	"	EPA 8270B	50.0	ND	"	
4-Nitroaniline	"	"	"	EPA 8270B	50.0	ND	"	
Nitrobenzene	"	"	"	EPA 8270B	25.0	ND	"	
2-Nitrophenol	"	"	"	EPA 8270B	25.0	ND	"	
4-Nitrophenol	"	"	"	EPA 8270B	50.0	ND	"	
N-Nitrosodiphenylamine	"	"	"	EPA 8270B	25.0	ND	"	
N-Nitrosodi-n-propylamine	"	"	"	EPA 8270B	25.0	ND	"	
Pentachlorophenol	"	"	"	EPA 8270B	50.0	ND	"	
Phenanthrene	"	"	"	EPA 8270B	25.0	ND	"	
Phenol	"	"	"	EPA 8270B	25.0	ND	"	
Pyrene	"	"	"	EPA 8270B	25.0	ND	"	
1,2,4-Trichlorobenzene	"	"	"	EPA 8270B	25.0	ND	"	
2,4,5-Trichlorophenol	"	"	"	EPA 8270B	50.0	ND	"	
2,4,6-Trichlorophenol	"	"	"	EPA 8270B	25.0	ND	"	
Surrogate: 2-Fluorophenol	"	"	"	*21-110*		*48.4*	*%*	
Surrogate: Phenol-d6	"	"	"	*10-110*		*37.0*	"	
Surrogate: Nitrobenzene-d5	"	"	"	*35-114*		*88.0*	"	
Surrogate: 2-Fluorobiphenyl	"	"	"	*43-116*		*100*	"	
Surrogate: 2,4,6-Tribromophenol	"	"	"	*10-123*		*87.5*	"	
Surrogate: p-Terphenyl-d14	"	"	"	*33-141*		*115*	"	

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Gettler-Ryan/Geostrategies(1)	Project:	Tosco(4)	Sampled: 1/7/00
6747 Sierra Court, Suite D	Project Number:	Tosco SS#1156	Received: 1/7/00
Dublin, CA 94568	Project Manager:	Deanna Harding	Reported: 2/1/00

Sample Description: **MW-2**
Laboratory Sample Number: **L001054-03**

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
			Sequoia Analytical - San Carlos					
Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT								
Purgeable Hydrocarbons as Gasoline	0010106	1/20/00	1/20/00		500	**1450**	ug/l	3
Benzene	"	"	"		5.00	**99.0**	"	
Toluene	"	"	"		5.00	ND	"	
Ethylbenzene	"	"	"		5.00	**23.8**	"	
Xylenes (total)	"	"	"		5.00	**16.0**	"	
Methyl tert-butyl ether	0010104	"	"		2500	**33100**	"	
Surrogate: a,a,a-Trifluorotoluene	0010106	"	"	*70.0-130*		*75.8*	*%*	

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Gettler-Ryan/Geostrategies(1)	Project:	Tosco(4)	Sampled: 1/7/00
6747 Sierra Court, Suite D	Project Number:	Tosco SS#1156	Received: 1/7/00
Dublin, CA 94568	Project Manager:	Deanna Harding	Reported: 2/1/00

Sample Description: **MW-3**
Laboratory Sample Number: **L001054-04**

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
Sequoia Analytical - San Carlos								
Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT								
Purgeable Hydrocarbons as Gasoline	0010104	1/20/00	1/20/00		10000	**28400**	ug/l	3
Benzene	"	"	"		100	**2450**	"	
Toluene	"	"	"		100	**3090**	"	
Ethylbenzene	"	"	"		100	**1560**	"	
Xylenes (total)	"	"	"		100	**3910**	"	
Methyl tert-butyl ether	"	"	"		1000	**1940**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*70.0-130*		*97.2*	%	

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Gettler-Ryan/Geostrategies(1)	Project:	Tosco(4)	Sampled: 1/7/00
6747 Sierra Court, Suite D	Project Number:	Tosco SS#1156	Received: 1/7/00
Dublin, CA 94568	Project Manager:	Deanna Harding	Reported: 2/1/00

Sample Description: **MW-4**
Laboratory Sample Number: **L001054-05**

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
Sequoia Analytical - San Carlos								
Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT								
Purgeable Hydrocarbons as Gasoline	0010104	1/20/00	1/20/00		2000	**7010**	ug/l	3
Benzene	"	"	"		20.0	**2260**	"	
Toluene	"	"	"		20.0	**167**	"	
Ethylbenzene	"	"	"		20.0	**271**	"	
Xylenes (total)	"	"	"		20.0	**276**	"	
Methyl tert-butyl ether	"	"	"		200	**764**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*70.0-130*		*99.9*	*%*	

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Gettler-Ryan/Geostrategies(1)	Project:	Tosco(4)	Sampled: 1/7/00
6747 Sierra Court, Suite D	Project Number:	Tosco SS#1156	Received: 1/7/00
Dublin, CA 94568	Project Manager:	Deanna Harding	Reported: 2/1/00

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control
Sequoia Analytical - San Carlos

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 0010097	**Date Prepared: 1/19/00**					**Extraction Method: EPA 5030B [P/T]**				
Blank	**0010097-BLK1**									
Purgeable Hydrocarbons as Gasoline	1/19/00			**ND**	ug/l	**50.0**				
Benzene	"			**ND**	"	**0.500**				
Toluene	"			**ND**	"	**0.500**				
Ethylbenzene	"			**ND**	"	**0.500**				
Xylenes (total)	"			**ND**	"	**0.500**				
Methyl tert-butyl ether	"			**ND**	"	**5.00**				
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*9.29*	"	*70.0-130*	*92.9*			
LCS	**0010097-BS1**									
Benzene	1/19/00	10.0		8.76	ug/l	70.0-130	87.6			
Toluene	"	10.0		8.34	"	70.0-130	83.4			
Ethylbenzene	"	10.0		8.44	"	70.0-130	84.4			
Xylenes (total)	"	30.0		26.0	"	70.0-130	86.7			
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*9.61*	"	*70.0-130*	*96.1*			
LCS	**0010097-BS2**									
Purgeable Hydrocarbons as Gasoline	1/19/00	250		229	ug/l	70.0-130	91.6			
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*9.91*	"	*70.0-130*	*99.1*			
Matrix Spike	**0010097-MS1**		**L001065-34**							
Benzene	1/19/00	10.0	ND	7.87	ug/l	60.0-140	**78.7**			
Toluene	"	10.0	ND	7.49	"	60.0-140	**74.9**			
Ethylbenzene	"	10.0	ND	7.48	"	60.0-140	**74.8**			
Xylenes (total)	"	30.0	ND	22.5	"	60.0-140	**75.0**			
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*9.14*	"	*70.0-130*	*91.4*			
Matrix Spike Dup	**0010097-MSD1**		**L001065-34**							
Benzene	1/19/00	10.0	ND	9.20	ug/l	60.0-140	**92.0**	25.0	**15.6**	
Toluene	"	10.0	ND	8.44	"	60.0-140	**84.4**	25.0	**11.9**	
Ethylbenzene	"	10.0	ND	8.54	"	60.0-140	**85.4**	25.0	**13.2**	
Xylenes (total)	"	30.0	ND	25.8	"	60.0-140	**86.0**	25.0	**13.7**	
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*8.79*	"	*70.0-130*	*87.9*			
Batch: 0010104	**Date Prepared: 1/20/00**					**Extraction Method: EPA 5030B [P/T]**				
Blank	**0010104-BLK1**									
Purgeable Hydrocarbons as Gasoline	1/20/00			**ND**	ug/l	**50.0**				
Benzene	"			**ND**	"	**0.500**				
Toluene	"			**ND**	"	**0.500**				
Ethylbenzene	"			**ND**	"	**0.500**				
Xylenes (total)	"			**ND**	"	**0.500**				

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iettler-Ryan/Geostrategies(1)	Project: Tosco(4)	Sampled:	1/7/00
747 Sierra Court, Suite D	Project Number: Tosco SS#1156	Received:	1/7/00
ublin, CA 94568	Project Manager: Deanna Harding	Reported:	2/1/00

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control
Sequoia Analytical - San Carlos

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
lank (continued)	**0010104-BLK1**									
lethyl tert-butyl ether	1/20/00			**ND**	ug/l	**5.00**				
urrogate: a,a,a-Trifluorotoluene	"	*10.0*		*8.58*	"	*70.0-130*	*85.8*			
.CS	**0010104-BS1**									
lenzene	1/20/00	10.0		8.08	ug/l	70.0-130	80.8			
oluene	"	10.0		7.70	"	70.0-130	77.0			
thylbenzene	"	10.0		7.86	"	70.0-130	78.6			
ylenes (total)	"	30.0		24.2	"	70.0-130	80.7			
urrogate: a,a,a-Trifluorotoluene	"	*10.0*		*8.09*	"	*70.0-130*	*80.9*			
.CS	**0010104-BS2**									
urgeable Hydrocarbons as Gasoline	1/20/00	250		228	ug/l	70.0-130	91.2			
urrogate: a,a,a-Trifluorotoluene	"	*10.0*		*8.42*	"	*70.0-130*	*84.2*			
latrix Spike	**0010104-MS1**		**L001105-04**							
urgeable Hydrocarbons as Gasoline	1/20/00	250	ND	227	ug/l	60.0-140	**90.8**			
urrogate: a,a,a-Trifluorotoluene	"	*10.0*		*9.14*	"	*70.0-130*	*91.4*			
latrix Spike Dup	**0010104-MSD1**		**L001105-04**							
urgeable Hydrocarbons as Gasoline	1/20/00	250	ND	226	ug/l	60.0-140	**90.4**	25.0	**0.442**	
urrogate: a,a,a-Trifluorotoluene	"	*10.0*		*8.39*	"	*70.0-130*	*83.9*			
atch: 0010106	**Date Prepared: 1/20/00**					**Extraction Method: EPA 5030B [P/T]**				
lank	**0010106-BLK1**									
urgeable Hydrocarbons as Gasoline	1/20/00			**ND**	ug/l	**50.0**				
enzene	"			**ND**	"	**0.500**				
oluene	"			**ND**	"	**0.500**				
thylbenzene	"			**ND**	"	**0.500**				
ylenes (total)	"			**ND**	"	**0.500**				
lethyl tert-butyl ether	"			**ND**	"	**5.00**				
urrogate: a,a,a-Trifluorotoluene	"	*10.0*		*10.5*	"	*70.0-130*	*105*			
.CS	**0010106-BS1**									
enzene	1/20/00	10.0		9.79	ug/l	70.0-130	97.9			
oluene	"	10.0		9.38	"	70.0-130	93.8			
thylbenzene	"	10.0		9.27	"	70.0-130	92.7			
ylenes (total)	"	30.0		28.0	"	70.0-130	93.3			
urrogate: a,a,a-Trifluorotoluene	"	*10.0*		*10.9*	"	*70.0-130*	*109*			
.CS	**0010106-BS2**									
urgeable Hydrocarbons as Gasoline	1/20/00	250		255	ug/l	70.0-130	102			

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Gettler-Ryan/Geostrategies(1)	Project:	Tosco(4)	Sampled: 1/7/00
6747 Sierra Court, Suite D	Project Number:	Tosco SS#1156	Received: 1/7/00
Dublin, CA 94568	Project Manager:	Deanna Harding	Reported: 2/1/00

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control
Sequoia Analytical - San Carlos

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
LCS (continued)	**0010106-BS2**									
Surrogate: a,a,a-Trifluorotoluene	*1/20/00*	*10.0*		*12.2*	*ug/l*	*70.0-130*	*122*			
Matrix Spike	**0010106-MS1**		**L001105-01**							
Purgeable Hydrocarbons as Gasoline	1/20/00	250	ND	262	ug/l	60.0-140	**105**			
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*12.6*	"	*70.0-130*	*126*			
Matrix Spike Dup	**0010106-MSD1**		**L001105-01**							
Purgeable Hydrocarbons as Gasoline	1/20/00	250	ND	260	ug/l	60.0-140	**104**	25.0	**0.957**	
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*12.4*	"	*70.0-130*	*124*			

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ttler-Ryan/Geostrategies(1)	Project:	Tosco(4)	Sampled: 1/7/00
47 Sierra Court, Suite D	Project Number:	Tosco SS#1156	Received: 1/7/00
iblin, CA 94568	Project Manager:	Deanna Harding	Reported: 2/1/00

Volatile Organic Compounds by EPA Method 8260A/Quality Control
Sequoia Analytical - San Carlos

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
itch: 0010074	**Date Prepared: 1/13/00**				**Extraction Method: EPA 5030B [P/T]**					
ank	**0010074-BLK1**									
nzene	1/13/00			ND	ug/l	2.00				
omobenzene	"			ND	"	2.00				
omochloromethane	"			ND	"	2.00				
omodichloromethane	"			ND	"	2.00				
omoform	"			ND	"	2.00				
omomethane	"			ND	"	5.00				
Butylbenzene	"			ND	"	2.00				
c-Butylbenzene	"			ND	"	2.00				
t-Butylbenzene	"			ND	"	2.00				
rbon tetrachloride	"			ND	"	2.00				
lorobenzene	"			ND	"	2.00				
loroethane	"			ND	"	5.00				
loroform	"			ND	"	2.00				
loromethane	"			ND	"	5.00				
Chlorotoluene	"			ND	"	2.00				
Chlorotoluene	"			ND	"	2.00				
ibromochloromethane	"			ND	"	2.00				
2-Dibromoethane	"			ND	"	2.00				
ibromomethane	"			ND	"	2.00				
2-Dibromo-3-chloropropane	"			ND	"	5.00				
2-Dichlorobenzene	"			ND	"	2.00				
3-Dichlorobenzene	"			ND	"	2.00				
4-Dichlorobenzene	"			ND	"	2.00				
ichlorodifluoromethane	"			ND	"	5.00				
1-Dichloroethane	"			ND	"	2.00				
2-Dichloroethane	"			ND	"	2.00				
1-Dichloroethene	"			ND	"	2.00				
s-1,2-Dichloroethene	"			ND	"	2.00				
ans-1,2-Dichloroethene	"			ND	"	2.00				
2-Dichloropropane	"			ND	"	2.00				
3-Dichloropropane	"			ND	"	2.00				
2-Dichloropropane	"			ND	"	2.00				
1-Dichloropropene	"			ND	"	2.00				
thylbenzene	"			ND	"	2.00				
exachlorobutadiene	"			ND	"	2.00				
opropylbenzene	"			ND	"	2.00				
-Isopropyltoluene	"			ND	"	2.00				
lethylene chloride	"			ND	"	5.00				
aphthalene	"			ND	"	5.00				
-Propylbenzene	"			ND	"	2.00				

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Gettler-Ryan/Geostrategies(1)	Project:	Tosco(4)	Sampled: 1/7/00
6747 Sierra Court, Suite D	Project Number:	Tosco SS#1156	Received: 1/7/00
Dublin, CA 94568	Project Manager:	Deanna Harding	Reported: 2/1/00

Volatile Organic Compounds by EPA Method 8260A/Quality Control
Sequoia Analytical - San Carlos

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Blank (continued)	**0010074-BLK1**									
Styrene	1/13/00			ND	ug/l	2.00				
1,1,1,2-Tetrachloroethane	"			ND	"	2.00				
1,1,2,2-Tetrachloroethane	"			ND	"	2.00				
Tetrachloroethene	"			ND	"	2.00				
Toluene	"			ND	"	2.00				
1,2,3-Trichlorobenzene	"			ND	"	2.00				
1,2,4-Trichlorobenzene	"			ND	"	2.00				
1,1,1-Trichloroethane	"			ND	"	2.00				
1,1,2-Trichloroethane	"			ND	"	2.00				
Trichloroethene	"			ND	"	2.00				
Trichlorofluoromethane	"			ND	"	5.00				
1,2,3-Trichloropropane	"			ND	"	2.00				
1,2,4-Trimethylbenzene	"			ND	"	2.00				
1,3,5-Trimethylbenzene	"			ND	"	2.00				
Vinyl chloride	"			ND	"	2.00				
Total Xylenes	"			ND	"	2.00				
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*54.3*	"	*76.0-114*	*109*			
Surrogate: Toluene-d8	"	*50.0*		*54.7*	"	*88.0-110*	*109*			
Surrogate: 4-BFB	"	*50.0*		*54.5*	"	*86.0-115*	*109*			
Blank	**0010074-BLK2**									
Benzene	1/14/00			ND	ug/l	2.00				
Bromobenzene	"			ND	"	2.00				
Bromochloromethane	"			ND	"	2.00				
Bromodichloromethane	"			ND	"	2.00				
Bromoform	"			ND	"	2.00				
Bromomethane	"			ND	"	5.00				
n-Butylbenzene	"			ND	"	2.00				
sec-Butylbenzene	"			ND	"	2.00				
tert-Butylbenzene	"			ND	"	2.00				
Carbon tetrachloride	"			ND	"	2.00				
Chlorobenzene	"			ND	"	2.00				
Chloroethane	"			ND	"	5.00				
Chloroform	"			ND	"	2.00				
Chloromethane	"			ND	"	5.00				
2-Chlorotoluene	"			ND	"	2.00				
4-Chlorotoluene	"			ND	"	2.00				
Dibromochloromethane	"			ND	"	2.00				
1,2-Dibromoethane	"			ND	"	2.00				
Dibromomethane	"			ND	"	2.00				
1,2-Dibromo-3-chloropropane	"			ND	"	5.00				

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ettler-Ryan/Geostrategies(1)	Project:	Tosco(4)	Sampled: 1/7/00
47 Sierra Court, Suite D	Project Number:	Tosco SS#1156	Received: 1/7/00
ublin, CA 94568	Project Manager:	Deanna Harding	Reported: 2/1/00

Volatile Organic Compounds by EPA Method 8260A/Quality Control
Sequoia Analytical - San Carlos

nalyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
lank (continued)	**0010074-BLK2**									
2-Dichlorobenzene	1/14/00			ND	ug/l	2.00				
3-Dichlorobenzene	"			ND	"	2.00				
4-Dichlorobenzene	"			ND	"	2.00				
ichlorodifluoromethane	"			ND	"	5.00				
1-Dichloroethane	"			ND	"	2.00				
2-Dichloroethane	"			ND	"	2.00				
1-Dichloroethene	"			ND	"	2.00				
s-1,2-Dichloroethene	"			ND	"	2.00				
ans-1,2-Dichloroethene	"			ND	"	2.00				
2-Dichloropropane	"			ND	"	2.00				
3-Dichloropropane	"			ND	"	2.00				
2-Dichloropropane	"			ND	"	2.00				
1-Dichloropropene	"			ND	"	2.00				
hylbenzene	"			ND	"	2.00				
exachlorobutadiene	"			ND	"	2.00				
opropylbenzene	"			ND	"	2.00				
Isopropyltoluene	"			ND	"	2.00				
ethylene chloride	"			ND	"	5.00				
aphthalene	"			ND	"	5.00				
Propylbenzene	"			ND	"	2.00				
yrene	"			ND	"	2.00				
1,1,2-Tetrachloroethane	"			ND	"	2.00				
1,2,2-Tetrachloroethane	"			ND	"	2.00				
etrachloroethene	"			ND	"	2.00				
oluene	"			ND	"	2.00				
2,3-Trichlorobenzene	"			ND	"	2.00				
2,4-Trichlorobenzene	"			ND	"	2.00				
1,1-Trichloroethane	"			ND	"	2.00				
1,2-Trichloroethane	"			ND	"	2.00				
richloroethene	"			ND	"	2.00				
richlorofluoromethane	"			ND	"	5.00				
2,3-Trichloropropane	"			ND	"	2.00				
2,4-Trimethylbenzene	"			ND	"	2.00				
3,5-Trimethylbenzene	"			ND	"	2.00				
inyl chloride	"			ND	"	2.00				
otal Xylenes	"			ND	"	2.00				
urrogate: 1,2-Dichloroethane-d4	"	*50.0*		*54.0*	"	*76.0-114*	*108*			
urrogate: Toluene-d8	"	*50.0*		*54.6*	"	*88.0-110*	*109*			
urrogate: 4-BFB	"	*50.0*		*54.2*	"	*86.0-115*	*108*			

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Gettler-Ryan/Geostrategies(1)	Project:	Tosco(4)	Sampled: 1/7/00
6747 Sierra Court, Suite D	Project Number:	Tosco SS#1156	Received: 1/7/00
Dublin, CA 94568	Project Manager:	Deanna Harding	Reported: 2/1/00

Volatile Organic Compounds by EPA Method 8260A/Quality Control
Sequoia Analytical - San Carlos

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Blank	**0010074-BLK3**									
Benzene	1/18/00			ND	ug/l	2.00				
Bromobenzene	"			ND	"	2.00				
Bromochloromethane	"			ND	"	2.00				
Bromodichloromethane	"			ND	"	2.00				
Bromoform	"			ND	"	2.00				
Bromomethane	"			ND	"	5.00				
n-Butylbenzene	"			ND	"	2.00				
sec-Butylbenzene	"			ND	"	2.00				
tert-Butylbenzene	"			ND	"	2.00				
Carbon tetrachloride	"			ND	"	2.00				
Chlorobenzene	"			ND	"	2.00				
Chloroethane	"			ND	"	5.00				
Chloroform	"			ND	"	2.00				
Chloromethane	"			ND	"	5.00				
2-Chlorotoluene	"			ND	"	2.00				
[illegible]chlorotoluene	"			ND	"	2.00				
[illegible]romomethane	"			ND	"	2.00				
[illegible]omoethane	"			ND	"	2.00				
Dibromomethane	"			ND	"	2.00				
1,2-Dibromo-3-chloropropane	"			ND	"	5.00				
1,2-Dichlorobenzene	"			ND	"	2.00				
1,3-Dichlorobenzene	"			ND	"	2.00				
1,4-Dichlorobenzene	"			ND	"	2.00				
Dichlorodifluoromethane	"			ND	"	5.00				
1,1-Dichloroethane	"			ND	"	2.00				
1,2-Dichloroethane	"			ND	"	2.00				
1,1-Dichloroethene	"			ND	"	2.00				
cis-1,2-Dichloroethene	"			ND	"	2.00				
trans-1,2-Dichloroethene	"			ND	"	2.00				
1,2-Dichloropropane	"			ND	"	2.00				
1,3-Dichloropropane	"			ND	"	2.00				
2,2-Dichloropropane	"			ND	"	2.00				
1,1-Dichloropropene	"			ND	"	2.00				
Ethylbenzene	"			ND	"	2.00				
Hexachlorobutadiene	"			ND	"	2.00				
Isopropylbenzene	"			ND	"	2.00				
p-Isopropyltoluene	"			ND	"	2.00				
Methylene chloride	"			ND	"	5.00				
Naphthalene	"			ND	"	5.00				
n-Propylbenzene	"			ND	"	2.00				
Styrene	"			ND	"	2.00				

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Gettler-Ryan/Geostrategies(1)	Project:	Tosco(4)	Sampled: 1/7/00
6747 Sierra Court, Suite D	Project Number:	Tosco SS#1156	Received: 1/7/00
Dublin, CA 94568	Project Manager:	Deanna Harding	Reported: 2/1/00

Volatile Organic Compounds by EPA Method 8260A/Quality Control
Sequoia Analytical - San Carlos

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Blank (continued)	**0010074-BLK3**									
1,1,1,2-Tetrachloroethane	1/18/00			**ND**	ug/l	**2.00**				
1,1,2,2-Tetrachloroethane	"			**ND**	"	**2.00**				
Tetrachloroethene	"			**ND**	"	**2.00**				
Toluene	"			**ND**	"	**2.00**				
1,2,3-Trichlorobenzene	"			**ND**	"	**2.00**				
1,2,4-Trichlorobenzene	"			**ND**	"	**2.00**				
1,1,1-Trichloroethane	"			**ND**	"	**2.00**				
1,1,2-Trichloroethane	"			**ND**	"	**2.00**				
Trichloroethene	"			**ND**	"	**2.00**				
Trichlorofluoromethane	"			**ND**	"	**5.00**				
1,2,3-Trichloropropane	"			**ND**	"	**2.00**				
1,2,4-Trimethylbenzene	"			**ND**	"	**2.00**				
1,3,5-Trimethylbenzene	"			**ND**	"	**2.00**				
Vinyl chloride	"			**ND**	"	**2.00**				
Total Xylenes	"			**ND**	"	**2.00**				
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*45.9*	"	*76.0-114*	*91.8*			
Surrogate: Toluene-d8	"	*50.0*		*46.9*	"	*88.0-110*	*93.8*			
Surrogate: 4-BFB	"	*50.0*		*45.3*	"	*86.0-115*	*90.6*			
Blank	**0010074-BLK4**									
Benzene	1/19/00			**ND**	ug/l	**2.00**				
Bromobenzene	"			**ND**	"	**2.00**				
Bromochloromethane	"			**ND**	"	**2.00**				
Bromodichloromethane	"			**ND**	"	**2.00**				
Bromoform	"			**ND**	"	**2.00**				
Bromomethane	"			**ND**	"	**5.00**				
n-Butylbenzene	"			**ND**	"	**2.00**				
sec-Butylbenzene	"			**ND**	"	**2.00**				
tert-Butylbenzene	"			**ND**	"	**2.00**				
Carbon tetrachloride	"			**ND**	"	**2.00**				
Chlorobenzene	"			**ND**	"	**2.00**				
Chloroethane	"			**ND**	"	**5.00**				
Chloroform	"			**ND**	"	**2.00**				
Chloromethane	"			**ND**	"	**5.00**				
2-Chlorotoluene	"			**ND**	"	**2.00**				
4-Chlorotoluene	"			**ND**	"	**2.00**				
Dibromochloromethane	"			**ND**	"	**2.00**				
1,2-Dibromoethane	"			**ND**	"	**2.00**				
Dibromomethane	"			**ND**	"	**2.00**				
1,2-Dibromo-3-chloropropane	"			**ND**	"	**5.00**				
1,2-Dichlorobenzene	"			**ND**	"	**2.00**				

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Gettler-Ryan/Geostrategies(1)	Project:	Tosco(4)	Sampled: 1/7/00
6747 Sierra Court, Suite D	Project Number:	Tosco SS#1156	Received: 1/7/00
Dublin, CA 94568	Project Manager:	Deanna Harding	Reported: 2/1/00

Volatile Organic Compounds by EPA Method 8260A/Quality Control
Sequoia Analytical - San Carlos

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Blank (continued)	**0010074-BLK4**									
1,3-Dichlorobenzene	1/19/00			ND	ug/l	2.00				
[illegible]chlorobenzene	"			ND	"	2.00				
[illegible]fluoromethane	"			ND	"	5.00				
1,1-Dichloroethane	"			ND	"	2.00				
1,2-Dichloroethane	"			ND	"	2.00				
1,1-Dichloroethene	"			ND	"	2.00				
cis-1,2-Dichloroethene	"			ND	"	2.00				
trans-1,2-Dichloroethene	"			ND	"	2.00				
1,2-Dichloropropane	"			ND	"	2.00				
1,3-Dichloropropane	"			ND	"	2.00				
2,2-Dichloropropane	"			ND	"	2.00				
1,1-Dichloropropene	"			ND	"	2.00				
Ethylbenzene	"			ND	"	2.00				
Hexachlorobutadiene	"			ND	"	2.00				
Isopropylbenzene	"			ND	"	2.00				
p-Isopropyltoluene	"			ND	"	2.00				
Methylene chloride	"			ND	"	5.00				
Naphthalene	"			ND	"	5.00				
n-Propylbenzene	"			ND	"	2.00				
Styrene	"			ND	"	2.00				
[illegible]1,1,2-Tetrachloroethane	"			ND	"	2.00				
[illegible]2-Tetrachloroethane	"			ND	"	2.00				
[illegible]achloroethene	"			ND	"	2.00				
Toluene	"			ND	"	2.00				
1,2,3-Trichlorobenzene	"			ND	"	2.00				
1,2,4-Trichlorobenzene	"			ND	"	2.00				
1,1,1-Trichloroethane	"			ND	"	2.00				
1,1,2-Trichloroethane	"			ND	"	2.00				
Trichloroethene	"			ND	"	2.00				
Trichlorofluoromethane	"			ND	"	5.00				
1,2,3-Trichloropropane	"			ND	"	2.00				
1,2,4-Trimethylbenzene	"			ND	"	2.00				
1,3,5-Trimethylbenzene	"			ND	"	2.00				
Vinyl chloride	"			ND	"	2.00				
Total Xylenes	"			ND	"	2.00				
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*47.4*	"	*76.0-114*	*94.8*			
Surrogate: Toluene-d8	"	*50.0*		*46.3*	"	*88.0-110*	*92.6*			
Surrogate: 4-BFB	"	*50.0*		*46.8*	"	*86.0-115*	*93.6*			
LCS	**0010074-BS1**									
Benzene	1/13/00	50.0		42.5	ug/l	70.0-130	85.0			

Sequoia Analytical

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ettler-Ryan/Geostrategies(1)	Project: Tosco(4)	Sampled:	1/7/00
747 Sierra Court, Suite D	Project Number: Tosco SS#1156	Received:	1/7/00
ublin, CA 94568	Project Manager: Deanna Harding	Reported:	2/1/00

Volatile Organic Compounds by EPA Method 8260A/Quality Control
Sequoia Analytical - San Carlos

nalyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
CS (continued)	**0010074-BS1**									
hlorobenzene	1/13/00	50.0		44.2	ug/l	70.0-130	88.4			
,1-Dichloroethene	"	50.0		39.5	"	70.0-130	79.0			
oluene	"	50.0		44.4	"	70.0-130	88.8			
richloroethene	"	50.0		44.4	"	70.0-130	88.8			
urrogate: 1,2-Dichloroethane-d4	"	*50.0*		*42.8*	"	*76.0-114*	*85.6*			
urrogate: Toluene-d8	"	*50.0*		*50.0*	"	*88.0-110*	*100*			
urrogate: 4-BFB	"	*50.0*		*46.5*	"	*86.0-115*	*93.0*			
CS	**0010074-BS2**									
enzene	1/14/00	50.0		43.7	ug/l	70.0-130	87.4			
hlorobenzene	"	50.0		45.6	"	70.0-130	91.2			
,1-Dichloroethene	"	50.0		43.3	"	70.0-130	86.6			
oluene	"	50.0		45.1	"	70.0-130	90.2			
richloroethene	"	50.0		46.7	"	70.0-130	93.4			
urrogate: 1,2-Dichloroethane-d4	"	*50.0*		*50.7*	"	*76.0-114*	*101*			
urrogate: Toluene-d8	"	*50.0*		*49.7*	"	*88.0-110*	*99.4*			
urrogate: 4-BFB	"	*50.0*		*49.4*	"	*86.0-115*	*98.8*			
CS	**0010074-BS3**									
enzene	1/18/00	50.0		41.4	ug/l	70.0-130	82.8			
hlorobenzene	"	50.0		42.8	"	70.0-130	85.6			
,1-Dichloroethene	"	50.0		41.9	"	70.0-130	83.8			
oluene	"	50.0		42.0	"	70.0-130	84.0			
richloroethene	"	50.0		44.2	"	70.0-130	88.4			
urrogate: 1,2-Dichloroethane-d4	"	*50.0*		*48.6*	"	*76.0-114*	*97.2*			
urrogate: Toluene-d8	"	*50.0*		*46.1*	"	*88.0-110*	*92.2*			
urrogate: 4-BFB	"	*50.0*		*44.6*	"	*86.0-115*	*89.2*			
CS	**0010074-BS4**									
enzene	1/19/00	50.0		41.9	ug/l	70.0-130	83.8			
hlorobenzene	"	50.0		42.3	"	70.0-130	84.6			
,1-Dichloroethene	"	50.0		40.9	"	70.0-130	81.8			
oluene	"	50.0		41.7	"	70.0-130	83.4			
richloroethene	"	50.0		44.2	"	70.0-130	88.4			
urrogate: 1,2-Dichloroethane-d4	"	*50.0*		*46.3*	"	*76.0-114*	*92.6*			
urrogate: Toluene-d8	"	*50.0*		*46.3*	"	*88.0-110*	*92.6*			
urrogate: 4-BFB	"	*50.0*		*45.9*	"	*86.0-115*	*91.8*			
Matrix Spike	**0010074-MS1**		**L001075-01**							
enzene	1/14/00	50.0	ND	46.0	ug/l	60.0-140	**92.0**			
hlorobenzene	"	50.0	ND	45.4	"	60.0-140	**90.8**			

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Gettler-Ryan/Geostrategies(1)	Project:	Tosco(4)	Sampled: 1/7/00
6747 Sierra Court, Suite D	Project Number:	Tosco SS#1156	Received: 1/7/00
Dublin, CA 94568	Project Manager:	Deanna Harding	Reported: 2/1/00

Volatile Organic Compounds by EPA Method 8260A/Quality Control
Sequoia Analytical - San Carlos

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Matrix Spike (continued)	**0010074-MS1**		**L001075-01**							
1,1-Dichloroethene	1/14/00	50.0	3.05	49.5	ug/l	60.0-140	**92.9**			
Toluene	"	50.0	ND	45.2	"	60.0-140	**90.4**			
Trichloroethene	"	50.0	153	194	"	60.0-140	**82.0**			
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*54.8*	"	*76.0-114*	*110*			
Surrogate: Toluene-d8	"	*50.0*		*50.3*	"	*88.0-110*	*101*			
Surrogate: 4-BFB	"	*50.0*		*47.9*	"	*86.0-115*	*95.8*			
Matrix Spike Dup	**0010074-MSD1**		**L001075-01**							
[illegible]ene	1/14/00	50.0	ND	44.2	ug/l	60.0-140	**88.4**	25.0	**3.99**	
[illegible]enzene	"	50.0	ND	44.9	"	60.0-140	**89.8**	25.0	**1.11**	
[illegible]-Dichloroethene	"	50.0	3.05	46.8	"	60.0-140	**87.5**	25.0	**5.99**	
Toluene	"	50.0	ND	44.5	"	60.0-140	**89.0**	25.0	**1.56**	
Trichloroethene	"	50.0	153	198	"	60.0-140	**90.0**	25.0	**9.30**	
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*50.7*	"	*76.0-114*	*101*			
Surrogate: Toluene-d8	"	*50.0*		*50.3*	"	*88.0-110*	*101*			
Surrogate: 4-BFB	"	*50.0*		*46.5*	"	*86.0-115*	*93.0*			

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ettler-Ryan/Geostrategies(1)	Project:	Tosco(4)	Sampled: 1/7/00
747 Sierra Court, Suite D	Project Number:	Tosco SS#1156	Received: 1/7/00
ublin, CA 94568	Project Manager:	Deanna Harding	Reported: 2/1/00

Diesel Hydrocarbons (C9-C24) by DHS LUFT/Quality Control
Sequoia Analytical - Morgan Hill

nalyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
atch: 0A27032	**Date Prepared: 1/27/00**					**Extraction Method: EPA 3510B**				
lank	**0A27032-BLK1**									
iesel Range Hydrocarbons	1/28/00			**ND**	mg/l	**0.0500**				
urrogate: n-Pentacosane	"	*0.100*		*0.109*	"	*50-150*	*109*			
CS	**0A27032-BS1**									
iesel Range Hydrocarbons	1/28/00	1.00		0.833	mg/l	60-140	83.3			
urrogate: n-Pentacosane	"	*0.100*		*0.113*	"	*50-150*	*113*			
CS Dup	**0A27032-BSD1**									
iesel Range Hydrocarbons	1/28/00	1.00		0.907	mg/l	60-140	90.7	50	8.51	
urrogate: n-Pentacosane	"	*0.100*		*0.112*	"	*50-150*	*112*			

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Gettler-Ryan/Geostrategies(1)	Project:	Tosco(4)	Sampled: 1/7/00
6747 Sierra Court, Suite D	Project Number:	Tosco SS#1156	Received: 1/7/00
Dublin, CA 94568	Project Manager:	Deanna Harding	Reported: 2/1/00

Semivolatile Organic Compounds by EPA Method 8270B/Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 0010375	**Date Prepared: 1/14/00**					**Extraction Method: EPA 3510B**				
Blank	**0010375-BLK1**									
Acenaphthene	1/19/00			ND	ug/l	5.00				
Acenaphthylene	"			ND	"	5.00				
Anthracene	"			ND	"	5.00				
Benzoic acid	"			ND	"	10.0				
Benzo (a) anthracene	"			ND	"	5.00				
Benzo (b) fluoranthene	"			ND	"	5.00				
Benzo (k) fluoranthene	"			ND	"	5.00				
Benzo (ghi) perylene	"			ND	"	5.00				
Benzo[a]pyrene	"			ND	"	5.00				
Benzyl alcohol	"			ND	"	5.00				
Bis(2-chloroethoxy)methane	"			ND	"	5.00				
Bis(2-chloroethyl)ether	"			ND	"	5.00				
Bis(2-chloroisopropyl)ether	"			ND	"	5.00				
Bis(2-ethylhexyl)phthalate	"			ND	"	10.0				
4-Bromophenyl phenyl ether	"			ND	"	5.00				
Butyl benzyl phthalate	"			ND	"	5.00				
4-Chloroaniline	"			ND	"	10.0				
[illegible]oronaphthalene	"			ND	"	5.00				
[illegible]-methylphenol	"			ND	"	5.00				
[illegible]phenol	"			ND	"	5.00				
4-Chlorophenyl phenyl ether	"			ND	"	5.00				
Chrysene	"			ND	"	5.00				
Dibenz (a,h) anthracene	"			ND	"	5.00				
Dibenzofuran	"			ND	"	5.00				
Di-n-butyl phthalate	"			ND	"	10.0				
1,2-Dichlorobenzene	"			ND	"	5.00				
1,3-Dichlorobenzene	"			ND	"	5.00				
1,4-Dichlorobenzene	"			ND	"	5.00				
3,3'-Dichlorobenzidine	"			ND	"	10.0				
2,4-Dichlorophenol	"			ND	"	5.00				
Diethyl phthalate	"			ND	"	5.00				
2,4-Dimethylphenol	"			ND	"	5.00				
Dimethyl phthalate	"			ND	"	5.00				
4,6-Dinitro-2-methylphenol	"			ND	"	10.0				
2,4-Dinitrophenol	"			ND	"	10.0				
2,4-Dinitrotoluene	"			ND	"	5.00				
2,6-Dinitrotoluene	"			ND	"	5.00				
Di-n-octyl phthalate	"			ND	"	5.00				
Fluoranthene	"			ND	"	5.00				
Fluorene	"			ND	"	5.00				

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ettler-Ryan/Geostrategies(1)	Project:	Tosco(4)	Sampled: 1/7/00
747 Sierra Court, Suite D	Project Number:	Tosco SS#1156	Received: 1/7/00
ublin, CA 94568	Project Manager:	Deanna Harding	Reported: 2/1/00

Semivolatile Organic Compounds by EPA Method 8270B/Quality Control
Sequoia Analytical - Morgan Hill

nalyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
lank (continued)	**0010375-BLK1**									
exachlorobenzene	1/19/00			ND	ug/l	5.00				
exachlorobutadiene	"			ND	"	5.00				
exachlorocyclopentadiene	"			ND	"	10.0				
exachloroethane	"			ND	"	5.00				
deno (1,2,3-cd) pyrene	"			ND	"	5.00				
ophorone	"			ND	"	5.00				
Methylnaphthalene	"			ND	"	5.00				
Methylphenol	"			ND	"	5.00				
Methylphenol	"			ND	"	5.00				
aphthalene	"			ND	"	5.00				
Nitroaniline	"			ND	"	10.0				
Nitroaniline	"			ND	"	10.0				
Nitroaniline	"			ND	"	10.0				
itrobenzene	"			ND	"	5.00				
Nitrophenol	"			ND	"	5.00				
Nitrophenol	"			ND	"	10.0				
-Nitrosodiphenylamine	"			ND	"	5.00				
-Nitrosodi-n-propylamine	"			ND	"	5.00				
entachlorophenol	"			ND	"	10.0				
henanthrene	"			ND	"	5.00				
henol	"			ND	"	5.00				
yrene	"			ND	"	5.00				
2,4-Trichlorobenzene	"			ND	"	5.00				
4,5-Trichlorophenol	"			ND	"	10.0				
4,6-Trichlorophenol	"			ND	"	5.00				
urrogate: 2-Fluorophenol	"	*200*		*88.6*	"	*21-110*	*44.3*			
urrogate: Phenol-d6	"	*200*		*69.6*	"	*10-110*	*34.8*			
urrogate: Nitrobenzene-d5	"	*200*		*162*	"	*35-114*	*81.0*			
urrogate: 2-Fluorobiphenyl	"	*200*		*184*	"	*43-116*	*92.0*			
urrogate: 2,4,6-Tribromophenol	"	*200*		*180*	"	*10-123*	*90.0*			
urrogate: p-Terphenyl-d14	"	*200*		*216*	"	*33-141*	*108*			
CS	**0010375-BS1**									
cenaphthene	1/19/00	200		167	ug/l	46-118	83.5			
-Chloro-3-methylphenol	"	200		156	"	23-97	78.0			
-Chlorophenol	"	200		140	"	27-123	70.0			
,4-Dichlorobenzene	"	200		142	"	36-97	71.0			
,4-Dinitrotoluene	"	200		159	"	24-96	79.5			
-Nitrophenol	"	200		95.6	"	10-80	47.8			
-Nitrosodi-n-propylamine	"	200		176	"	41-116	88.0			
entachlorophenol	"	200		134	"	9-103	67.0			

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Gettler-Ryan/Geostrategies(1)	Project:	Tosco(4)	Sampled: 1/7/00
6747 Sierra Court, Suite D	Project Number:	Tosco SS#1156	Received: 1/7/00
Dublin, CA 94568	Project Manager:	Deanna Harding	Reported: 2/1/00

Semivolatile Organic Compounds by EPA Method 8270B/Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
LCS (continued)	**0010375-BS1**									
Phenol	1/19/00	200		97.9	ug/l	12-110	49.0			
Pyrene	"	200		168	"	26-127	84.0			
1,2,4-Trichlorobenzene	"	200		154	"	39-98	77.0			
Surrogate: 2-Fluorophenol	"	*200*		*110*	"	*21-110*	*55.0*			
Surrogate: Phenol-d6	"	*200*		*97.9*	"	*10-110*	*49.0*			
Surrogate: Nitrobenzene-d5	"	*200*		*155*	"	*35-114*	*77.5*			
Surrogate: 2-Fluorobiphenyl	"	*200*		*169*	"	*43-116*	*84.5*			
Surrogate: 2,4,6-Tribromophenol	"	*200*		*172*	"	*10-123*	*86.0*			
Surrogate: p-Terphenyl-d14	"	*200*		*191*	"	*33-141*	*95.5*			
LCS Dup	**0010375-BSD1**									
Acenaphthene	1/19/00	200		193	ug/l	46-118	96.5	30	14.4	
4-Chloro-3-methylphenol	"	200		191	"	23-97	95.5	30	20.2	
2-Chlorophenol	"	200		163	"	27-123	81.5	30	15.2	
1,4-Dichlorobenzene	"	200		166	"	36-97	83.0	30	15.6	
2,4-Dinitrotoluene	"	200		184	"	24-96	92.0	30	14.6	
4-Nitrophenol	"	200		106	"	10-80	53.0	30	10.3	
N-Nitrosodi-n-propylamine	"	200		203	"	41-116	102	30	14.2	
Pentachlorophenol	"	200		148	"	9-103	74.0	30	9.93	
Phenol	"	200		88.6	"	12-110	44.3	30	9.97	
Pyrene	"	200		182	"	26-127	91.0	30	8.00	
1,2,4-Trichlorobenzene	"	200		191	"	39-98	95.5	30	21.4	
Surrogate: 2-Fluorophenol	"	*200*		*107*	"	*21-110*	*53.5*			
Surrogate: Phenol-d6	"	*200*		*83.1*	"	*10-110*	*41.5*			
Surrogate: Nitrobenzene-d5	"	*200*		*185*	"	*35-114*	*92.5*			
Surrogate: 2-Fluorobiphenyl	"	*200*		*189*	"	*43-116*	*94.5*			
Surrogate: 2,4,6-Tribromophenol	"	*200*		*191*	"	*10-123*	*95.5*			
Surrogate: p-Terphenyl-d14	"	*200*		*206*	"	*33-141*	*103*			

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ettler-Ryan/Geostrategies(1)	Project:	Tosco(4)	Sampled:	1/7/00
747 Sierra Court, Suite D	Project Number:	Tosco SS#1156	Received:	1/7/00
ublin, CA 94568	Project Manager:	Deanna Harding	Reported:	2/1/00

Notes and Definitions

	Note
	Chromatogram Pattern: Unidentified Hydrocarbons C9-C24
	The surrogate recovery for this sample is above established control limits available due to sample dilution required from high analyte concentration and/or matrix interferences.
	Chromatogram Pattern: Gasoline C6-C12
	Sample was extracted and analyzed past EPA recommended holding time.
)ET	Analyte DETECTED
ID	Analyte NOT DETECTED at or above the reporting limit
IR	Not Reported
ry	Sample results reported on a dry weight basis
:ecov.	Recovery
:PD	Relative Percent Difference

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