GETTLER-RYAN INC.

TRANSMITTAL

June 20, 2001
G-R #180255

JUL 12 2001

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

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

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

RE: Tosco (76) Service Station #4625
3070 Fruitvale Avenue
Oakland, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	June 12, 2001	Groundwater Monitoring and Sampling Report Second Quarter - Event of May 11, 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 ***July 6, 2001***, this report will be distributed to the following:

cc: **Mr. Don Hwang, Alameda County Health Care Services, 1131 Harbor Bay Parkway, Alameda, California 94502**

Enclosure

trans/4625-DBD

GETTLER-RYAN INC.

June 12, 2001
G-R Job #180255

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

RE: **Second Quarter Event of May 11, 2001**
Groundwater Monitoring & Sampling Report
Tosco (76) Service Station #4625
3070 Fruitvale Avenue
Oakland, 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 any of 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, 2 and 3. A Concentration Map is included as Figure 2. The chain of custody document and laboratory analytical reports are also attached.

Sincerely,

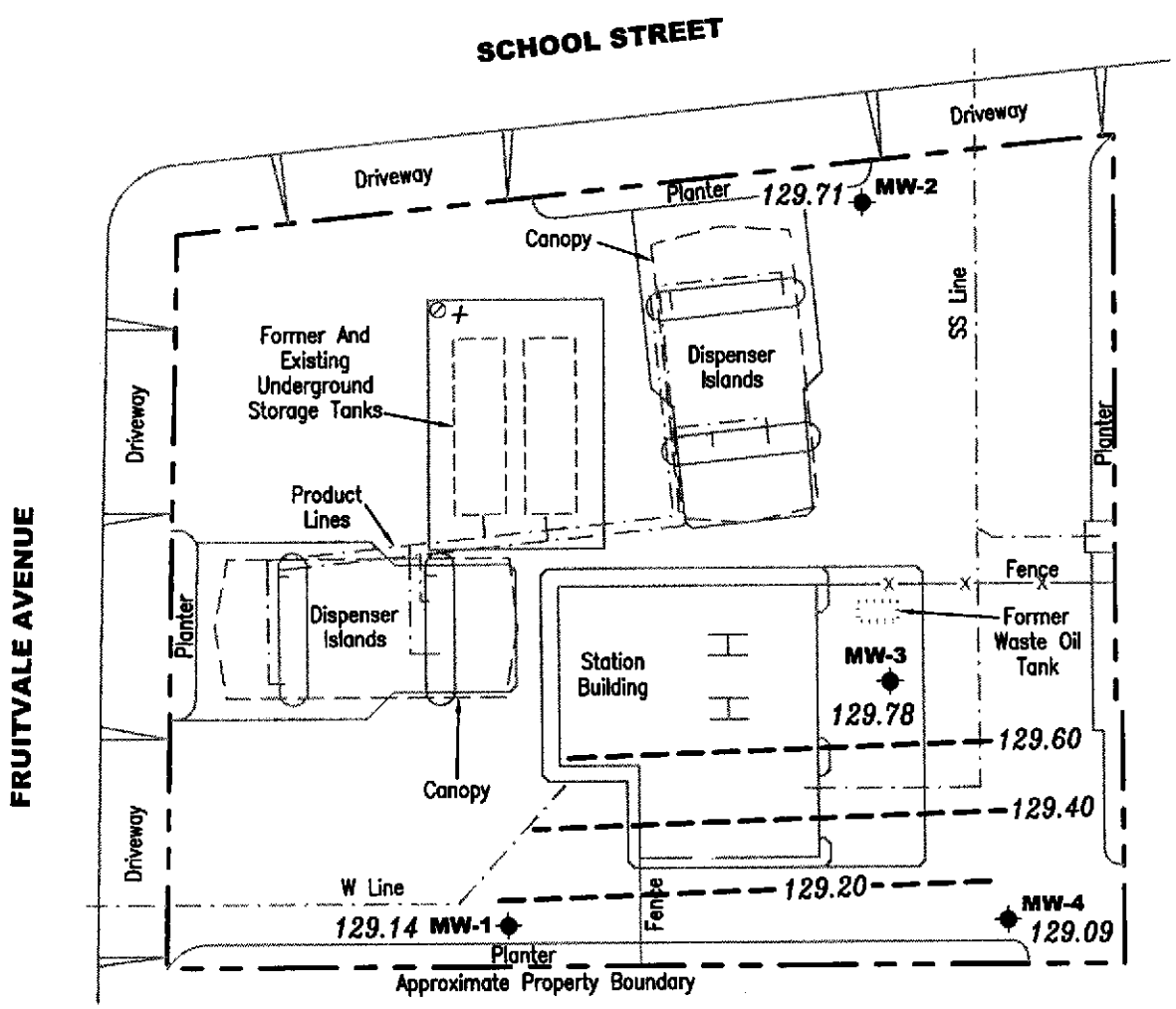
Deanna L. Harding
Project Coordinator

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

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

Figure 1:	Potentiometric Map
Figure 2:	Concentration Map
Table 1:	Groundwater Monitoring Data and Analytical Results
Table 2:	Groundwater Analytical Results
Table 3:	Groundwater Analytical Results – Oxygenate Compounds
Attachments:	Standard Operating Procedure - Groundwater Sampling
	Field Data Sheets
	Chain of Custody Document and Laboratory Analytical Reports

4625.qml



EXPLANATION

- Groundwater monitoring well
- UST Observation well
- 99.99 Groundwater elevation in feet referenced to Mean Sea Level (MSL)
- 99.99 Groundwater elevation contour, dashed where inferred.
- \+ TOC not available

Approximate groundwater flow direction at a gradient of 0.02 Ft./Ft.

N

0 30

Scale in Feet

Source: Figure modified from drawing provided by Unocal.

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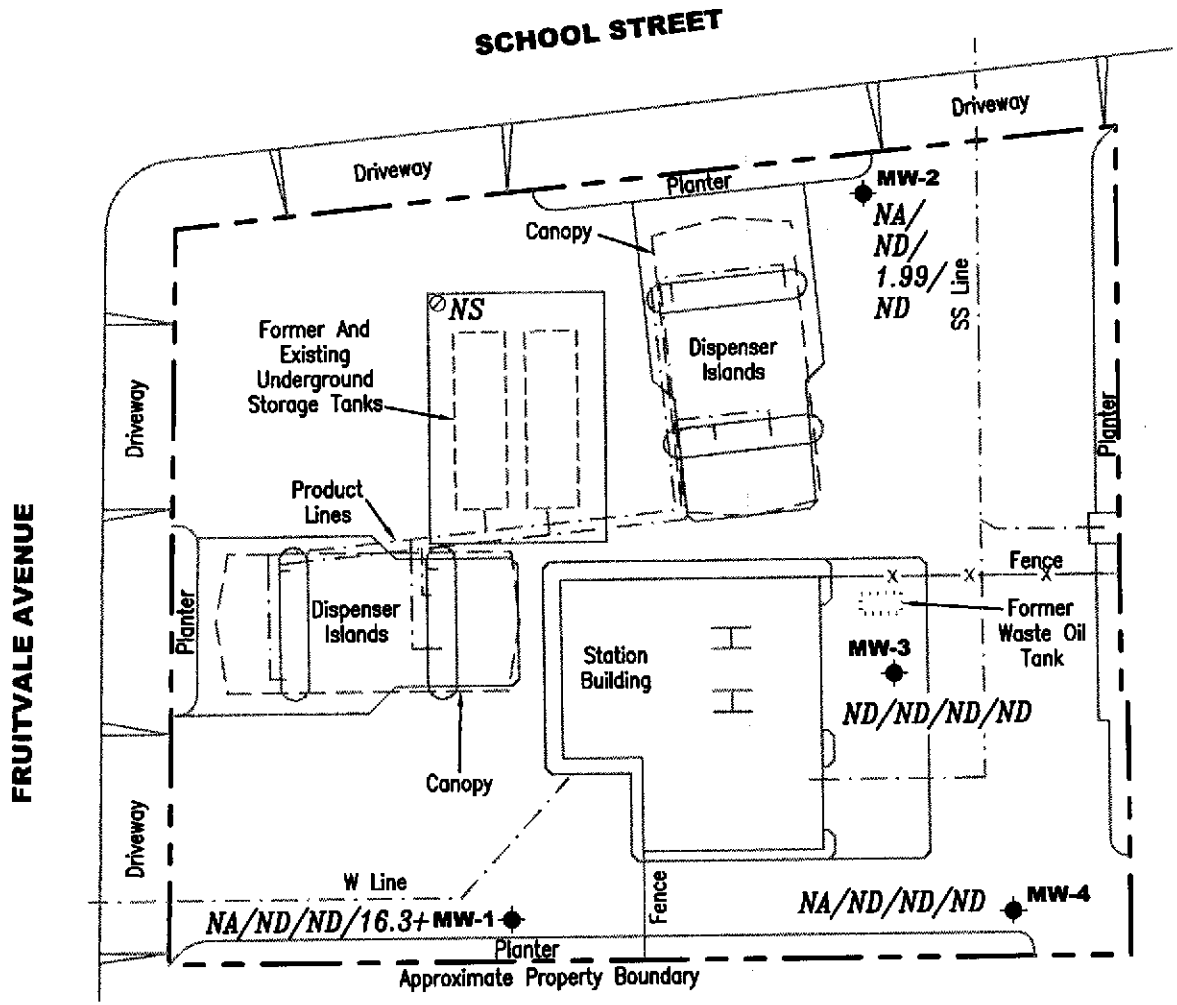
6747 Sierra Ct., Suite J
Dublin, CA 94568 (925) 551-7555

POTENTIOMETRIC MAP
Tosco (76) Service Station #4625
3070 Fruitvale Avenue
Oakland, California

FIGURE
1

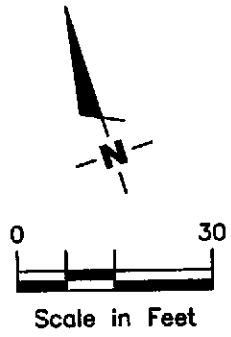
PROJECT NUMBER	REVIEWED BY	DATE	REVISED DATE
180255		May 11, 2001	

FILE NAME: P:\ENVIRO\TOSCO\4625\Q01-4625.DWG | Layout Tab: Pot2



EXPLANATION

◆	Groundwater monitoring well
⊘	UST Observation well
A/B/C/D	TPH(D) (Total Petroleum Hydrocarbons as Diesel)/TPH(G) (Total Petroleum Hydrocarbons as Gasoline)/Benzene/MTBE concentrations in ppb
ND	Not Detected
NA	Not Analyzed
+	MTBE by EPA Method 8260
NS	Not Sampled



Source: Figure modified from drawing provided by Unocal.

FIGURE 2

CONCENTRATION MAP
Tosco (76) Service Station #4625
3070 Fruitvale Avenue
Oakland, California

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

PROJECT NUMBER	REVIEWED BY	DATE	REVISED DATE
180255		May 11, 2001	

FILE NAME: P:\ENVIRO\TOSCO\4625\Q01-4625.DWG | Layout Tab: Con2

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (76) Service Station #4625
3070 Fruitvale Avenue
Oakland, California

WELL ID/ TOC*	DATE	DTW (ft.)	S.I. (ft. bgs.)	GWE (msl)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-1											
136.36	05/03/00	11.81	5.0-25.0	124.55	--	ND	ND	ND	ND	ND	11/14[2]
	07/28/00	7.79		128.57	--	ND	ND	ND	ND	ND	21/19[2]
	10/29/00	7.90		128.46	--	62[1]	ND	ND	ND	ND	6.5/3.9[2]
	02/09/01	7.95		128.41	--	ND	ND	ND	ND	ND	9.0/9.0[2]
	05/11/01	**7.22**		**129.14**	**--**	**ND**	**ND**	**ND**	**ND**	**ND**	**12.7/16.3[2]**
MW-2											
138.64	05/03/00	8.59	5.0-25.0	130.05	--	2,400[1]	53	ND[3]	ND[3]	240	[3]ND/ND[2]
	07/28/00	9.95		128.69	--	2,200[1]	680	4.1	57	270	24/ND[2]
	10/29/00	8.38		130.26	--	490[1]	67	ND[3]	23	22	ND[3]
	02/09/01	8.41		130.23	--	ND	3.1	ND	0.52	1.1	ND
	05/11/01	**8.93**		**129.71**	**--**	**ND**	**1.99**	**ND**	**ND**	**ND**	**ND**
MW-3											
137.68	05/03/00	7.60	5.0-25.0	130.08	93[5]	ND	ND	ND	ND	ND	ND/ND[4]
	07/28/00	8.82		128.86	ND[3]	ND	ND	ND	ND	ND	ND/ND[4]
	10/29/00	7.33		130.35	ND	ND	ND	ND	ND	ND	ND
	02/09/01	7.40		130.28	72[6]	ND	ND	ND	ND	ND	ND
	05/11/01	**7.90**		**129.78**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
MW-4											
136.60	05/03/00	6.48	5.0-25.0	130.12	--	ND	ND	ND	ND	ND	ND/ND[2]
	07/28/00	7.55		129.05	--	ND	ND	ND	ND	ND	ND
	10/29/00	6.12		130.48	--	ND	ND	ND	ND	ND	ND
	02/09/01	6.14		130.46	--	ND	ND	ND	ND	ND	ND
	05/11/01	**7.51**		**129.09**	**--**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (76) Service Station #4625
3070 Fruitvale Avenue
Oakland, California

WELL ID/ TOC*	DATE	DTW (ft.)	S.I. (ft. bgs.)	GWE (msl)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
UST OBSERVATION WELL											
	05/03/00	8.00	--	--	--	--	--	--	--	--	--
	07/28/00	9.28		--	--	--	--	--	--	--	--
	10/29/00	7.75		--	--	--	--	--	--	--	--
	02/09/01	6.14		--	--	--	--	--	--	--	--
	05/11/01	**7.96**		--	--	--	--	--	--	--	--
Trip Blank											
TB-LB	05/03/00	--	--	--	--	ND	ND	ND	ND	ND	ND
	07/28/00	--		--	--	ND	ND	ND	ND	ND	ND
	10/29/00	--		--	--	ND	ND	ND	ND	ND	ND
	02/09/01	--		--	--	ND	ND	ND	ND	ND	ND
	05/11/01	--		--	--	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (76) Service Station #4625
3070 Fruitvale Avenue
Oakland, California

EXPLANATIONS:

TOC = Top of Casing
DTW = Depth to Water
(ft.) = Feet
S.I. = Screen Interval
(ft. bgs.) = Feet Below Ground Surface
GWE = Groundwater Elevation
(msl) = 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 were surveyed based on a cut square on School Street, City of Oakland Benchmark No. 3783, (Elevation = 136.99 feet msl).

1 Laboratory report indicates gasoline C6-C12.
2 MTBE by EPA Method 8260.
3 Detection limit raised. Refer to analytical reports.
4 MTBE by EPA Method 8240.
5 Laboratory report indicates unidentified hydrocarbons C9-C24.
6 Laboratory report indicates discrete peaks.

Table 2

Groundwater Analytical Results

Tosco (76) Service Station #4625
3070 Fruitvale Avenue
Oakland, California

WELL ID	DATE	VOCs *(ppb)*	SVOCs *(ppb)*	Chromium *(ppm)*	TOG *(ppm)*
MW-3					
	05/03/00	ND	ND	ND	ND
	07/28/00	ND[1]	ND	1.8	ND
	10/29/00	ND	ND	ND	7.0
	02/09/01	ND	ND	0.038	ND
	05/11/01	**ND**	**ND**	**ND**	**ND**

EXPLANATIONS:

VOCs = Volatile Organic Compounds
SVOCs = Semi-Volatile Organic Compounds
TOG = Total Oil and Grease
(ppb) = Parts per billion
(ppm) = Parts per million
ND = Not Detected

[1] All VOCs by EPA Method 8240 were ND, except for Tertrachloroethene was detected at 2.7 ppb.

ANALYTICAL METHODS:

EPA Method 8240B for VOCs
EPA Method 8270B for SVOCs
EPA 200 Series Methods for Chromium

All EPA Method 8240 and 8270 constituents were ND, unless noted.

Table 3

Groundwater Analytical Results - Oxygenate Compounds

Tosco (76) Service Station #4625
3070 Fruitvale Avenue
Oakland, California

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)
MW-1	02/09/01	ND	ND	9.0	ND	ND	ND	ND	ND
	05/11/01	**ND**	**ND**	**16.3**	**ND**	**ND**	**ND**	**ND**	**ND**
MW-3	07/28/00	--	ND	ND	ND	ND	ND	ND	ND

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 = Ethylene dibromide or 1,2-Dibromoethane
(ppb) = Parts per billion
-- = Not Analyzed
ND = Not Detected

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

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 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 # 4625 Job#: 180255

Address: 3070 Fruitvale Ave. Date: 5-11-01

City: Oakland, 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: 25.06 ft

Depth to Water: 7.22 ft

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

17.84 x VF 0.17 = 3.03 X 3 (case volume) = Estimated Purge Volume: 9.5 (gal.)

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

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

Starting Time: 9:15 Weather Conditions: Hot

Sampling Time: 9:35 A.m (9:35) 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 µmhos/cm	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
9:22	3	7.38	5.58	73.1			
9:24	6	7.48	5.51	73.2			
9:26	9.5	7.42	5.54	72.9			

LABORATORY INFORMATION

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

COMMENTS: _____

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 4625 Job#: 180255

Address: 3070 Fruitvale Ave. Date: 5-11-01

City: Oakland, 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 24.28 ft

Depth to Water 8.93 ft

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

15.35 x VF 0.17 = 2.61 X 3 (case volume) = Estimated Purge Volume: 8 (gal.)

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

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

Starting Time: 9:42 Weather Conditions: Hot

Sampling Time: 10:07 A.m (10:07) 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 (C) µmhos/cm	Temperature F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
9:53	2.5	7.95	10.64	73.2			
9:55	5.5	7.50	10.68	73.5			
9:57	8	7.43	10.62	73.1			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-2	3 VOA	Y	HCL	Seq.	TPHG, BTEX, MTBE

COMMENTS:

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/ Facility # 4625 Job#: 180255

Address: 3070 Fruitvale Ave. Date: 5-11-01

City: Oakland, CA. Sampler: Joe

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

Well Diameter 2 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 5 (gal.)

Total Depth 24.73 ft.

Depth to Water 7.90 ft.

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

16.83 X VF 0.17 = 2.86 X 3 (case volume) = Estimated Purge Volume: 9 (gal.)

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

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

Starting Time: 10:15 Weather Conditions: Hot

Sampling Time: 10:40 A.M (10:40) 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 (mS) µmhos/cm	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
10:22	3	7.10	9.52	72.8			
10:24	6	7.12	9.53	73.0			
10:26	9	7.19	9.55	72.9			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-3	3 VOA	Y	HCL	Seq.	TPHG, BTEX, MTBE
	2 VOA	"	"	"	VOC's / 8240
	1 AmG	"	—	"	SVOC's / 8270
	1 AmG	"	—	"	TPHD
	1 AmG	"	HCl	"	Oil & Grease
	1 plastic	"	HNO_3	"	Total Chromium

COMMENTS:

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 4625 Job#: 180255

Address: 3070 Fruitvale Ave. Date: 5-11-01

City: Oakland, 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: 24.65 ft.

Depth to Water: 7.51 ft.

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

17.14 x VF 0.17 = 2.91 X 3 (case volume) = Estimated Purge Volume: 9 (gal.)

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

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

Starting Time: 8:30 Weather Conditions: Hot

Sampling Time: 8:55 A.m (8:55) 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)
8:40	3	7.56	10.33	71.6			
8:42	6	7.50	10.51	71.8			
8:44	9	7.41	10.58	72.0			

LABORATORY INFORMATION

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

COMMENTS:

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility #: 4625 Job#: 180255

Address: 3070 Fruitvale Ave. Date: 5-11-01

City: Oakland, CA. Sampler: Joe

Well ID: UST Observation well Well Condition: O.K.

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

Total Depth: ~~20~~ ft.

Depth to Water: 7.96 ft.

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

____ X VF 0.17 = ____ X 3 (case volume) = Estimated Purge Volume: ____ (gal.)

Purge Equipment: Disposable Bailer / Bailer / Stack / (Suction) / Grundfos / Other: ____

Sampling Equipment: (Disposable Bailer) / Bailer / Pressure Bailer / Grab Sample / Other: ____

Starting Time: ____

Sampling Time: ____

Purging Flow Rate: ____ gpm

Did well de-water? ____

Weather Conditions: Hot

Water Color: clear Odor: ____

Sediment Description: ____

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

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

LABORATORY INFORMATION

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

COMMENTS: MW - only

TOSCO

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

Facility Number: TOSCO SS #4625
Facility Address: 3070 FRUITVALE AVE., OAKLAND, CA
Consultant Project Number: 180255
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 De Witt
(Phone): (925)277-2384
Laboratory Name: Sequoia Analytical
Laboratory Release Number:
Samples Collected by (Name): JOE AJEMIAN
Collection Date: 5-11-01
Signature: [signature]

L105108

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)	TPH Gas + BTEX w/MTBE (8015) (8020)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)	VOC's by 8240	SVOC's by 8270	Total Chromium			Remarks
TB-LB	01	1 VOA	W	G	—	HCl	Y	✓													
MW-1	02	3 VOA	/	/	9:35	/	/	✓													
MW-2	03	3 VOA	/	/	10:07	/	/	✓													
MW-3	04	3 VOA [illegible]	/	/	10:40	/	/	✓	✓	✓	✓					✓	✓	✓			
MW-4	05	3 VOA	/	/	8:55	/	✓	✓													

Analyses To Be Performed

DO NOT BILL TB-LB ANALYSIS

*confirm mtbe Hits by running mtbe by 8260.

Amend COC to Run 6 Oxy's + 1,2 DCA + EDB by 8260 on all 8020 MTBE Hits
[signature]
5/14/01

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
[signature]	G-R Inc.	5-11-01 1610	[signature]	SEQUOIA	5/11/01 4:10 pm
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 (circled)

Sequoia Analytical

1551 Industrial Road
San Carlos, CA 94070-4111
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June 01 , 2001

Deanna Harding
Gettler-Ryan/Geostrategies(1)
6747 Sierra Court, Suite J
Dublin, CA 94568
RE: Tosco(1) / L105108

Enclosed are the results of analyses for samples received by the laboratory on 05/11/01. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Latonya K. Pelt

Latonya Pelt
Project Manager

CA ELAP Certificate Number 2360

Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: Tosco SS#4625, Oakland, CA	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	06/01/01 12:01

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-LB	L105108-01	Water	05/11/01 00:00	05/11/01 16:00
MW-1	L105108-02	Water	05/11/01 09:35	05/11/01 16:00
MW-2	L105108-03	Water	05/11/01 10:07	05/11/01 16:00
MW-3	L105108-04	Water	05/11/01 10:40	05/11/01 16:00
MW-4	L105108-05	Water	05/11/01 08:55	05/11/01 16:00

Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568	Project: Tosco(1) Project Number: Tosco SS#4625, Oakland, CA Project Manager: Deanna Harding	**Reported:** 06/01/01 12:01

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TB-LB (L105108-01) Water Sampled: 05/11/01 00:00 Received: 05/11/01 16:00									
Purgeable Hydrocarbons as Gasoline	ND	50.0	ug/l	1	1050100	05/23/01	05/23/01	DHS LUFT	
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		*95.8 %*		*70-130*		"	"	"	
MW-1 (L105108-02) Water Sampled: 05/11/01 09:35 Received: 05/11/01 16:00									
Purgeable Hydrocarbons as Gasoline	ND	50.0	ug/l	1	1050099	05/23/01	05/23/01	DHS LUFT	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	0.500	"	"	"	"	"	"	
Methyl tert-butyl ether	**12.7**	5.00	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*96.0 %*		*70-130*		"	"	"	
MW-2 (L105108-03) Water Sampled: 05/11/01 10:07 Received: 05/11/01 16:00									
Purgeable Hydrocarbons as Gasoline	ND	50.0	ug/l	1	1050099	05/23/01	05/23/01	DHS LUFT	
Benzene	**1.99**	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		*86.6 %*		*70-130*		"	"	"	

Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: Tosco SS#4625, Oakland, CA	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	06/01/01 12:01

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (L105108-04) Water Sampled: 05/11/01 10:40 Received: 05/11/01 16:00									
Purgeable Hydrocarbons as Gasoline	ND	50.0	ug/l	1	1050099	05/23/01	05/23/01	DHS LUFT	
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		*78.7 %*	*70-130*		"	"	"	"	
MW-4 (L105108-05) Water Sampled: 05/11/01 08:55 Received: 05/11/01 16:00									
Purgeable Hydrocarbons as Gasoline	ND	50.0	ug/l	1	1050099	05/23/01	05/23/01	DHS LUFT	
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		*94.6 %*	*70-130*		"	"	"	"	

Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568	Project: Tosco(1) Project Number: Tosco SS#4625, Oakland, CA Project Manager: Deanna Harding	Reported: 06/01/01 12:01

Volatile Organic Compounds by EPA Method 8240B

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (L105108-04) Water Sampled: 05/11/01 10:40 Received: 05/11/01 16:00									
Acetone	ND	20.0	ug/l	1	1050096	05/22/01	05/22/01	EPA Method 8240	
Benzene	ND	2.00	"	"	"	"	"	"	
Bromodichloromethane	ND	2.00	"	"	"	"	"	"	
Bromoform	ND	2.00	"	"	"	"	"	"	
Bromomethane	ND	2.00	"	"	"	"	"	"	
2-Butanone	ND	20.0	"	"	"	"	"	"	
Carbon disulfide	ND	2.00	"	"	"	"	"	"	
Carbon tetrachloride	ND	2.00	"	"	"	"	"	"	
Chlorobenzene	ND	2.00	"	"	"	"	"	"	
Chloroethane	ND	2.00	"	"	"	"	"	"	
2-Chloroethylvinyl ether	ND	20.0	"	"	"	"	"	"	
Chloroform	ND	2.00	"	"	"	"	"	"	
Chloromethane	ND	2.00	"	"	"	"	"	"	
Dibromochloromethane	ND	2.00	"	"	"	"	"	"	
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	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	2.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	2.00	"	"	"	"	"	"	
Ethylbenzene	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	20.0	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	20.0	"	"	"	"	"	"	
Styrene	ND	2.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	2.00	"	"	"	"	"	"	
Tetrachloroethene	ND	2.00	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	2.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	2.00	"	"	"	"	"	"	
Trichloroethene	ND	2.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	2.00	"	"	"	"	"	"	
Vinyl acetate	ND	5.00	"	"	"	"	"	"	
Vinyl chloride	ND	2.00	"	"	"	"	"	"	
Total Xylenes	ND	2.00	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*103 %*	*76-114*	"	"	"	"	"	
Surrogate: Toluene-d8		*98.8 %*	*88-110*	"	"	"	"	"	

Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568	Project: Tosco(1) Project Number: Tosco SS#4625, Oakland, CA Project Manager: Deanna Harding	**Reported:** 06/01/01 12:01

Volatile Organic Compounds by EPA Method 8240B

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (L105108-04) Water Sampled: 05/11/01 10:40 Received: 05/11/01 16:00									
Surrogate: 4-BFB		*98.8 %*	*86-115*		*1050096*	*05/22/01*	*05/22/01*	*EPA Method 8240*	

Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568	Project: Tosco(1) Project Number: Tosco SS#4625, Oakland, CA Project Manager: Deanna Harding	Reported: 06/01/01 12:01

Volatile Organic Compounds by EPA Method 8021B

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (L105108-04) Water Sampled: 05/11/01 10:40 Received: 05/11/01 16:00									
Bromodichloromethane	ND	0.500	ug/l	1	1050034	05/15/01	05/15/01	EPA 8021B	
Bromoform	ND	0.500	"	"	"	"	"	"	
Bromomethane	ND	1.00	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.500	"	"	"	"	"	"	
Chlorobenzene	ND	0.500	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	0.500	"	"	"	"	"	"	
Chloromethane	ND	1.00	"	"	"	"	"	"	
Dibromochloromethane	ND	0.500	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.500	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.500	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.500	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.500	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.500	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.500	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.500	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.500	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.500	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.500	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.500	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.500	"	"	"	"	"	"	
Tetrachloroethene	ND	0.500	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.500	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.500	"	"	"	"	"	"	
Trichloroethene	ND	0.500	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.500	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
Surrogate: 1-Chloro-2-fluorobenzene		*92.7 %*		*70-130*	"	"	"	"	

Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568	Project: Tosco(1) Project Number: Tosco SS#4625, Oakland, CA Project Manager: Deanna Harding	**Reported:** 06/01/01 12:01

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-1 (L105108-02) Water Sampled: 05/11/01 09:35 Received: 05/11/01 16:00									
Ethanol	ND	1000	ug/l	1	1050101	05/24/01	05/24/01	EPA 8260B	
1,2-Dibromoethane	ND	2.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.00	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.00	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	
Methyl tert-butyl ether	**16.3**	2.00	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.00	"	"	"	"	"	"	
Tert-butyl alcohol	ND	100	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*100 %*		*76-114*	"	"	"	"	
Surrogate: Toluene-d8		*106 %*		*88-110*	"	"	"	"	

Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568	Project: Tosco(1) Project Number: Tosco SS#4625, Oakland, CA Project Manager: Deanna Harding	**Reported:** 06/01/01 12:01

Diesel Hydrocarbons (C9-C24) by DHS LUFT

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (L105108-04) Water Sampled: 05/11/01 10:40 Received: 05/11/01 16:00									
Diesel Range Hydrocarbons	ND	50.0	ug/l	1	1E22016	05/22/01	05/24/01	DHS LUFT	
Surrogate: n-Pentacosane		*78.2 %*	*50-150*		"	"	"	"	

Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568	Project: Tosco(1) Project Number: Tosco SS#4625, Oakland, CA Project Manager: Deanna Harding	Reported: 06/01/01 12:01

Total Metals by EPA 200 Series Methods

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (L105108-04) Water Sampled: 05/11/01 10:40 Received: 05/11/01 16:00									
Chromium	ND	0.0100	mg/l	1	1E18013	05/18/01	05/25/01	EPA 200.7	

Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568	Project: Tosco(1) Project Number: Tosco SS#4625, Oakland, CA Project Manager: Deanna Harding	**Reported:** 06/01/01 12:01

Conventional Chemistry Parameters by APHA/EPA Methods

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (L105108-04) Water	**Sampled: 05/11/01 10:40**	**Received: 05/11/01 16:00**							
Oil & Grease	ND	6.25	mg/l	1	1E24001	05/24/01	05/24/01	SM 5520B	

Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: Tosco SS#4625, Oakland, CA	Reported:
Dublin CA, 94568	Project Manager: Deanna Harding	06/01/01 12:01

Semivolatile Organic Compounds by EPA Method 8270C

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (L105108-04) Water Sampled: 05/11/01 10:40 Received: 05/11/01 16:00									
Acenaphthene	ND	5.0	ug/l	1	1E16006	05/16/01	05/31/01	EPA 8270C	
Acenaphthylene	ND	5.0	"	"	"	"	"	"	
Aniline	ND	5.0	"	"	"	"	"	"	
Anthracene	ND	5.0	"	"	"	"	"	"	
Benzoic acid	ND	10	"	"	"	"	"	"	
Benzo (a) anthracene	ND	5.0	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	5.0	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	5.0	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	5.0	"	"	"	"	"	"	
Benzo[a]pyrene	ND	5.0	"	"	"	"	"	"	
Benzyl alcohol	ND	5.0	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	5.0	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	5.0	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	5.0	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	10	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	5.0	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	50	"	"	"	"	"	"	
4-Chloroaniline	ND	25	"	"	"	"	"	"	
2-Chloronaphthalene	ND	5.0	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	5.0	"	"	"	"	"	"	
2-Chlorophenol	ND	5.0	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	5.0	"	"	"	"	"	"	
Chrysene	ND	5.0	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	10	"	"	"	"	"	"	
Dibenzofuran	ND	5.0	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	10	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	10	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	10	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	5.0	"	"	"	"	"	"	
Diethyl phthalate	ND	5.0	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	5.0	"	"	"	"	"	"	
Dimethyl phthalate	ND	5.0	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	10	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	10	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	10	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	10	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	10	"	"	"	"	"	"	
Fluoranthene	ND	5.0	"	"	"	"	"	"	

Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568	Project: Tosco(1) Project Number: Tosco SS#4625, Oakland, CA Project Manager: Deanna Harding	**Reported:** 06/01/01 12:01

Semivolatile Organic Compounds by EPA Method 8270C

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (L105108-04) Water Sampled: 05/11/01 10:40 Received: 05/11/01 16:00									
Fluorene	ND	5.0	ug/l	1	1E16006	05/16/01	05/31/01	EPA 8270C	
Hexachlorobenzene	ND	10	"	"	"	"	"	"	
Hexachlorobutadiene	ND	10	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	10	"	"	"	"	"	"	
Hexachloroethane	ND	5.0	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	10	"	"	"	"	"	"	
Isophorone	ND	5.0	"	"	"	"	"	"	
2-Methylnaphthalene	ND	5.0	"	"	"	"	"	"	
2-Methylphenol	ND	5.0	"	"	"	"	"	"	
4-Methylphenol	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
2-Nitroaniline	ND	10	"	"	"	"	"	"	
3-Nitroaniline	ND	10	"	"	"	"	"	"	
4-Nitroaniline	ND	20	"	"	"	"	"	"	
Nitrobenzene	ND	5.0	"	"	"	"	"	"	
2-Nitrophenol	ND	5.0	"	"	"	"	"	"	
4-Nitrophenol	ND	10	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	5.0	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	5.0	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	5.0	"	"	"	"	"	"	
Pentachlorophenol	ND	10	"	"	"	"	"	"	
Phenanthrene	ND	5.0	"	"	"	"	"	"	
Phenol	ND	5.0	"	"	"	"	"	"	
Pyrene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	10	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	10	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*38.8 %*	*21-110*		"	"	"	"	
Surrogate: Phenol-d6		*23.2 %*	*10-110*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*75.4 %*	*35-114*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*80.1 %*	*43-116*		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*70.7 %*	*10-123*		"	"	"	"	
Surrogate: p-Terphenyl-d14		*59.9 %*	*33-141*		"	"	"	"	

Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568	Project: Tosco(1) Project Number: Tosco SS#4625, Oakland, CA Project Manager: Deanna Harding	Reported: 06/01/01 12:01

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1050099 - EPA 5030B (P/T)										
Blank (1050099-BLK1)				Prepared & Analyzed: 05/23/01						
Purgeable Hydrocarbons as Gasoline	ND	50.0	ug/l							
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	*7.36*		"	*10.0*		*73.6*	*70-130*			
LCS (1050099-BS1)				Prepared & Analyzed: 05/23/01						
Benzene	9.74	0.500	ug/l	10.0		97.4	70-130			
Toluene	10.1	0.500	"	10.0		101	70-130			
Ethylbenzene	10.6	0.500	"	10.0		106	70-130			
Xylenes (total)	31.6	0.500	"	30.0		105	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.21*		"	*10.0*		*92.1*	*70-130*			
LCS (1050099-BS2)				Prepared & Analyzed: 05/23/01						
Purgeable Hydrocarbons as Gasoline	244	50.0	ug/l	250		97.6	70-130			
Surrogate: a,a,a-Trifluorotoluene	*8.06*		"	*10.0*		*80.6*	*70-130*			
Matrix Spike (1050099-MS1)		Source: L105109-04		Prepared & Analyzed: 05/23/01						
Benzene	8.88	0.500	ug/l	10.0	ND	88.8	60-140			
Toluene	8.96	0.500	"	10.0	ND	89.6	60-140			
Ethylbenzene	8.87	0.500	"	10.0	ND	88.7	60-140			
Xylenes (total)	26.8	0.500	"	30.0	ND	89.3	60-140			
Surrogate: a,a,a-Trifluorotoluene	*8.69*		"	*10.0*		*86.9*	*70-130*			
Matrix Spike Dup (1050099-MSD1)		Source: L105109-04		Prepared & Analyzed: 05/23/01						
Benzene	8.97	0.500	ug/l	10.0	ND	89.7	60-140	1.01	25	
Toluene	8.98	0.500	"	10.0	ND	89.8	60-140	0.223	25	
Ethylbenzene	8.92	0.500	"	10.0	ND	89.2	60-140	0.562	25	
Xylenes (total)	26.9	0.500	"	30.0	ND	89.7	60-140	0.372	25	
Surrogate: a,a,a-Trifluorotoluene	*8.62*		"	*10.0*		*86.2*	*70-130*			

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1050100 - EPA 5030B (P/T)										
Blank (1050100-BLK1)				Prepared & Analyzed: 05/23/01						
Purgeable Hydrocarbons as Gasoline	ND	50.0	ug/l							
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	*9.12*		"	*10.0*		*91.2*	*70-130*			
LCS (1050100-BS1)				Prepared & Analyzed: 05/23/01						
Benzene	9.67	0.500	ug/l	10.0		96.7	70-130			
Toluene	10.1	0.500	"	10.0		101	70-130			
Ethylbenzene	10.9	0.500	"	10.0		109	70-130			
Xylenes (total)	32.6	0.500	"	30.0		109	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.93*		"	*10.0*		*99.3*	*70-130*			
LCS (1050100-BS2)				Prepared & Analyzed: 05/23/01						
Purgeable Hydrocarbons as Gasoline	237	50.0	ug/l	250		94.8	70-130			
Surrogate: a,a,a-Trifluorotoluene	*10.0*		"	*10.0*		*100*	*70-130*			
Matrix Spike (1050100-MS1)	**Source: L105115-01**			Prepared: 05/23/01 Analyzed: 05/24/01						
Benzene	8.55	0.500	ug/l	10.0	ND	85.5	60-140			
Toluene	8.42	0.500	"	10.0	ND	84.2	60-140			
Ethylbenzene	8.63	0.500	"	10.0	ND	86.3	60-140			
Xylenes (total)	25.7	0.500	"	30.0	ND	85.7	60-140			
Surrogate: a,a,a-Trifluorotoluene	*8.59*		"	*10.0*		*85.9*	*70-130*			
Matrix Spike Dup (1050100-MSD1)	**Source: L105115-01**			Prepared: 05/23/01 Analyzed: 05/24/01						
Benzene	8.28	0.500	ug/l	10.0	ND	82.8	60-140	3.21	25	
Toluene	8.18	0.500	"	10.0	ND	81.8	60-140	2.89	25	
Ethylbenzene	8.38	0.500	"	10.0	ND	83.8	60-140	2.94	25	
Xylenes (total)	24.9	0.500	"	30.0	ND	83.0	60-140	3.16	25	
Surrogate: a,a,a-Trifluorotoluene	*8.39*		"	*10.0*		*83.9*	*70-130*			

Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568	Project: Tosco(1) Project Number: Tosco SS#4625, Oakland, CA Project Manager: Deanna Harding	Reported: 06/01/01 12:01

Volatile Organic Compounds by EPA Method 8240B - Quality Control

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1050096 - EPA 5030B [P/T]										
Blank (1050096-BLK1)				Prepared & Analyzed: 05/22/01						
Acetone	ND	20.0	ug/l							
Benzene	ND	2.00	"							
Bromodichloromethane	ND	2.00	"							
Bromoform	ND	2.00	"							
Bromomethane	ND	2.00	"							
2-Butanone	ND	20.0	"							
Carbon disulfide	ND	2.00	"							
Carbon tetrachloride	ND	2.00	"							
Chlorobenzene	ND	2.00	"							
Chloroethane	ND	2.00	"							
2-Chloroethylvinyl ether	ND	20.0	"							
Chloroform	ND	2.00	"							
Chloromethane	ND	2.00	"							
Dibromochloromethane	ND	2.00	"							
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	"							
cis-1,3-Dichloropropene	ND	2.00	"							
trans-1,3-Dichloropropene	ND	2.00	"							
Ethylbenzene	ND	2.00	"							
2-Hexanone	ND	20.0	"							
Methylene chloride	ND	5.00	"							
4-Methyl-2-pentanone	ND	20.0	"							
Styrene	ND	2.00	"							
1,1,2,2-Tetrachloroethane	ND	2.00	"							
Tetrachloroethene	ND	2.00	"							
Toluene	ND	2.00	"							
1,1,1-Trichloroethane	ND	2.00	"							
1,1,2-Trichloroethane	ND	2.00	"							
Trichloroethene	ND	2.00	"							
Trichlorofluoromethane	ND	2.00	"							
Vinyl acetate	ND	5.00	"							
Vinyl chloride	ND	2.00	"							

Volatile Organic Compounds by EPA Method 8240B - Quality Control

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1050096 - EPA 5030B [P/T]										
Blank (1050096-BLK1)				Prepared & Analyzed: 05/22/01						
Total Xylenes	ND	2.00	ug/l							
Surrogate: 1,2-Dichloroethane-d4	*50.8*		"	*50.0*		*102*	*76-114*			
Surrogate: Toluene-d8	*49.2*		"	*50.0*		*98.4*	*88-110*			
Surrogate: 4-BFB	*49.3*		"	*50.0*		*98.6*	*86-115*			
LCS (1050096-BS1)				Prepared & Analyzed: 05/22/01						
Benzene	20.2	2.00	ug/l	20.0		101	65-135			
Chlorobenzene	20.2	2.00	"	20.0		101	70-130			
1,1-Dichloroethene	19.9	2.00	"	20.0		99.5	70-130			
Toluene	19.4	2.00	"	20.0		97.0	70-130			
Trichloroethene	20.0	2.00	"	20.0		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	*51.6*		"	*50.0*		*103*	*76-114*			
Surrogate: Toluene-d8	*50.3*		"	*50.0*		*101*	*88-110*			
Surrogate: 4-BFB	*48.6*		"	*50.0*		*97.2*	*86-115*			
Matrix Spike (1050096-MS1)	**Source: L105108-04**			Prepared & Analyzed: 05/22/01						
Benzene	20.9	2.00	ug/l	20.0	ND	104	60-140			
Chlorobenzene	21.2	2.00	"	20.0	ND	106	60-140			
1,1-Dichloroethene	21.0	2.00	"	20.0	ND	105	60-140			
Toluene	19.9	2.00	"	20.0	ND	99.5	60-140			
Trichloroethene	20.4	2.00	"	20.0	ND	102	60-140			
Surrogate: 1,2-Dichloroethane-d4	*51.9*		"	*50.0*		*104*	*76-114*			
Surrogate: Toluene-d8	*49.3*		"	*50.0*		*98.6*	*88-110*			
Surrogate: 4-BFB	*50.1*		"	*50.0*		*100*	*86-115*			
Matrix Spike Dup (1050096-MSD1)	**Source: L105108-04**			Prepared & Analyzed: 05/22/01						
Benzene	18.9	2.00	ug/l	20.0	ND	94.5	60-140	10.1	25	
Chlorobenzene	19.3	2.00	"	20.0	ND	96.5	60-140	9.38	25	
1,1-Dichloroethene	18.6	2.00	"	20.0	ND	93.0	60-140	12.1	25	
Toluene	18.4	2.00	"	20.0	ND	92.0	60-140	7.83	25	
Trichloroethene	19.2	2.00	"	20.0	ND	96.0	60-140	6.06	25	
Surrogate: 1,2-Dichloroethane-d4	*50.2*		"	*50.0*		*100*	*76-114*			
Surrogate: Toluene-d8	*48.7*		"	*50.0*		*97.4*	*88-110*			
Surrogate: 4-BFB	*50.1*		"	*50.0*		*100*	*86-115*			

Volatile Organic Compounds by EPA Method 8021B - Quality Control

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1050034 - EPA 5030B (P/T)										
Blank (1050034-BLK3)				Prepared & Analyzed: 05/11/01						
Bromodichloromethane	ND	0.500	ug/l							
Bromoform	ND	0.500	"							
Bromomethane	ND	1.00	"							
Carbon tetrachloride	ND	0.500	"							
Chlorobenzene	ND	0.500	"							
Chloroethane	ND	1.00	"							
Chloroform	ND	0.500	"							
Chloromethane	ND	1.00	"							
Dibromochloromethane	ND	0.500	"							
1,3-Dichlorobenzene	ND	0.500	"							
1,4-Dichlorobenzene	ND	0.500	"							
1,2-Dichlorobenzene	ND	0.500	"							
1,1-Dichloroethane	ND	0.500	"							
1,2-Dichloroethane	ND	0.500	"							
1,1-Dichloroethene	ND	0.500	"							
cis-1,2-Dichloroethene	ND	0.500	"							
trans-1,2-Dichloroethene	ND	0.500	"							
1,2-Dichloropropane	ND	0.500	"							
cis-1,3-Dichloropropene	ND	0.500	"							
trans-1,3-Dichloropropene	ND	0.500	"							
Methylene chloride	ND	5.00	"							
1,1,2,2-Tetrachloroethane	ND	0.500	"							
Tetrachloroethene	ND	0.500	"							
1,1,1-Trichloroethane	ND	0.500	"							
1,1,2-Trichloroethane	ND	0.500	"							
Trichloroethene	ND	0.500	"							
Trichlorofluoromethane	ND	0.500	"							
Vinyl chloride	ND	1.00	"							
Benzene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Toluene	ND	0.500	"							
Total Xylenes	ND	0.500	"							
Surrogate: 1-Chloro-2-fluorobenzene	*8.33*		"	*10.0*		*83.3*	*70-130*			

Volatile Organic Compounds by EPA Method 8021B - Quality Control

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1050034 - EPA 5030B (P/T)										
Blank (1050034-BLK5)				Prepared & Analyzed: 05/15/01						
1,2-Dibromoethane	ND	0.500	ug/l							
Bromodichloromethane	ND	0.500	"							
Bromoform	ND	0.500	"							
Bromomethane	ND	1.00	"							
Carbon tetrachloride	ND	0.500	"							
Chlorobenzene	ND	0.500	"							
Chloroethane	ND	1.00	"							
Chloroform	ND	0.500	"							
Chloromethane	ND	1.00	"							
Dibromochloromethane	ND	0.500	"							
1,3-Dichlorobenzene	ND	0.500	"							
1,4-Dichlorobenzene	ND	0.500	"							
1,2-Dichlorobenzene	ND	0.500	"							
1,1-Dichloroethane	ND	0.500	"							
1,2-Dichloroethane	ND	0.500	"							
1,1-Dichloroethene	ND	0.500	"							
cis-1,2-Dichloroethene	ND	0.500	"							
trans-1,2-Dichloroethene	ND	0.500	"							
1,2-Dichloropropane	ND	0.500	"							
cis-1,3-Dichloropropene	ND	0.500	"							
trans-1,3-Dichloropropene	ND	0.500	"							
Methylene chloride	ND	5.00	"							
1,1,2,2-Tetrachloroethane	ND	0.500	"							
Tetrachloroethene	ND	0.500	"							
1,1,1-Trichloroethane	ND	0.500	"							
1,1,2-Trichloroethane	ND	0.500	"							
Trichloroethene	ND	0.500	"							
Trichlorofluoromethane	ND	0.500	"							
Vinyl chloride	ND	1.00	"							
Benzene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Toluene	ND	0.500	"							
Total Xylenes	ND	0.500	"							
Surrogate: 1-Chloro-2-fluorobenzene	*9.42*		"	*10.0*		*94.2*	*70-130*			

Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: Tosco SS#4625, Oakland, CA	Reported:
Dublin CA, 94568	Project Manager: Deanna Harding	06/01/01 12:01

Volatile Organic Compounds by EPA Method 8021B - Quality Control

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1050034 - EPA 5030B (P/T)										
LCS (1050034-BS3)				Prepared & Analyzed: 05/11/01						
Chlorobenzene	10.7	0.500	ug/l	10.0		107	70-130			
1,1-Dichloroethene	10.5	0.500	"	10.0		105	70-130			
Trichloroethene	9.87	0.500	"	10.0		98.7	70-130			
Benzene	10.1	0.500	"	10.0		101	70-130			
Toluene	10.1	0.500	"	10.0		101	70-130			
Surrogate: 1-Chloro-2-fluorobenzene	*10.9*		"	*10.0*		*109*	*70-130*			
LCS (1050034-BS5)				Prepared & Analyzed: 05/15/01						
Chlorobenzene	8.88	0.500	ug/l	10.0		88.8	70-130			
1,1-Dichloroethene	9.90	0.500	"	10.0		99.0	70-130			
Trichloroethene	9.45	0.500	"	10.0		94.5	70-130			
Benzene	9.85	0.500	"	10.0		98.5	70-130			
Toluene	9.84	0.500	"	10.0		98.4	70-130			
Surrogate: 1-Chloro-2-fluorobenzene	*11.7*		"	*10.0*		*117*	*70-130*			
Matrix Spike (1050034-MS1)		**Source: L105095-01**		Prepared & Analyzed: 05/11/01						
Chlorobenzene	9.25	0.500	ug/l	10.0	ND	92.5	60-140			
1,1-Dichloroethene	9.34	0.500	"	10.0	ND	93.4	60-140			
Trichloroethene	8.83	0.500	"	10.0	ND	88.3	60-140			
Benzene	9.40	0.500	"	10.0	ND	94.0	60-140			
Toluene	9.56	0.500	"	10.0	ND	95.6	60-140			
Surrogate: 1-Chloro-2-fluorobenzene	*8.94*		"	*10.0*		*89.4*	*70-130*			
Matrix Spike Dup (1050034-MSD1)		**Source: L105095-01**		Prepared & Analyzed: 05/11/01						
Chlorobenzene	9.51	0.500	ug/l	10.0	ND	95.1	60-140	2.77	25	
1,1-Dichloroethene	9.77	0.500	"	10.0	ND	97.7	60-140	4.50	25	
Trichloroethene	8.68	0.500	"	10.0	ND	86.8	60-140	1.71	25	
Benzene	9.72	0.500	"	10.0	ND	97.2	60-140	3.35	25	
Toluene	9.86	0.500	"	10.0	ND	98.6	60-140	3.09	25	
Surrogate: 1-Chloro-2-fluorobenzene	*9.14*		"	*10.0*		*91.4*	*70-130*			

Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568	Project: Tosco(1) Project Number: Tosco SS#4625, Oakland, CA Project Manager: Deanna Harding	Reported: 06/01/01 12:01

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 1050101 - EPA 5030B [P/T]										
Blank (1050101-BLK1)				Prepared & Analyzed: 05/23/01						
Ethanol	ND	1000	ug/l							
1,2-Dibromoethane	ND	2.00	"							
1,2-Dichloroethane	ND	2.00	"							
Di-isopropyl ether	ND	2.00	"							
Ethyl tert-butyl ether	ND	2.00	"							
Methyl tert-butyl ether	ND	2.00	"							
Tert-amyl methyl ether	ND	2.00	"							
Tert-butyl alcohol	ND	100	"							
Surrogate: 1,2-Dichloroethane-d4	*48.1*		"	*50.0*		*96.2*	*76-114*			
Surrogate: Toluene-d8	*50.9*		"	*50.0*		*102*	*88-110*			
Blank (1050101-BLK2)				Prepared & Analyzed: 05/24/01						
Ethanol	ND	1000	ug/l							
1,2-Dibromoethane	ND	2.00	"							
1,2-Dichloroethane	ND	2.00	"							
Di-isopropyl ether	ND	2.00	"							
Ethyl tert-butyl ether	ND	2.00	"							
Methyl tert-butyl ether	ND	2.00	"							
Tert-amyl methyl ether	ND	2.00	"							
Tert-butyl alcohol	ND	100	"							
Surrogate: 1,2-Dichloroethane-d4	*46.6*		"	*50.0*		*93.2*	*76-114*			
Surrogate: Toluene-d8	*51.7*		"	*50.0*		*103*	*88-110*			
Blank (1050101-BLK3)				Prepared & Analyzed: 05/25/01						
Ethanol	ND	1000	ug/l							
1,2-Dibromoethane	ND	2.00	"							
1,2-Dichloroethane	ND	2.00	"							
Di-isopropyl ether	ND	2.00	"							
Ethyl tert-butyl ether	ND	2.00	"							
Methyl tert-butyl ether	ND	2.00	"							
Tert-amyl methyl ether	ND	2.00	"							
Tert-butyl alcohol	ND	100	"							
Surrogate: 1,2-Dichloroethane-d4	*46.6*		"	*50.0*		*93.2*	*76-114*			
Surrogate: Toluene-d8	*53.1*		"	*50.0*		*106*	*88-110*			

Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: Tosco SS#4625, Oakland, CA	Reported:
Dublin CA, 94568	Project Manager: Deanna Harding	06/01/01 12:01

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 1050101 - EPA 5030B [P/T]										
LCS (1050101-BS1)				Prepared & Analyzed: 05/23/01						
Methyl tert-butyl ether	45.9	2.00	ug/l	50.0		91.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	*48.2*		"	*50.0*		*96.4*	*76-114*			
Surrogate: Toluene-d8	*49.3*		"	*50.0*		*98.6*	*88-110*			
LCS (1050101-BS2)				Prepared & Analyzed: 05/24/01						
Methyl tert-butyl ether	47.5	2.00	ug/l	50.0		95.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	*47.8*		"	*50.0*		*95.6*	*76-114*			
Surrogate: Toluene-d8	*51.2*		"	*50.0*		*102*	*88-110*			
LCS (1050101-BS3)				Prepared & Analyzed: 05/25/01						
Methyl tert-butyl ether	48.6	2.00	ug/l	50.0		97.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	*49.5*		"	*50.0*		*99.0*	*76-114*			
Surrogate: Toluene-d8	*51.8*		"	*50.0*		*104*	*88-110*			
Matrix Spike (1050101-MS1)	**Source: L105146-06**			Prepared & Analyzed: 05/23/01						
Methyl tert-butyl ether	46.5	2.00	ug/l	50.0	ND	93.0	60-140			
Surrogate: 1,2-Dichloroethane-d4	*51.0*		"	*50.0*		*102*	*76-114*			
Surrogate: Toluene-d8	*50.6*		"	*50.0*		*101*	*88-110*			
Matrix Spike Dup (1050101-MSD1)	**Source: L105146-06**			Prepared & Analyzed: 05/23/01						
Methyl tert-butyl ether	49.0	2.00	ug/l	50.0	ND	98.0	60-140	5.24	25	
Surrogate: 1,2-Dichloroethane-d4	*50.1*		"	*50.0*		*100*	*76-114*			
Surrogate: Toluene-d8	*50.5*		"	*50.0*		*101*	*88-110*			

Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568	Project: Tosco(1) Project Number: Tosco SS#4625, Oakland, CA Project Manager: Deanna Harding	Reported: 06/01/01 12:01

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1E22016 - EPA 3510B										
Blank (1E22016-BLK1)				Prepared: 05/22/01 Analyzed: 05/24/01						
Diesel Range Hydrocarbons	ND	50.0	ug/l							
Surrogate: n-Pentacosane	*74.4*		"	*100*		*74.4*	*50-150*			
LCS (1E22016-BS1)				Prepared: 05/22/01 Analyzed: 05/24/01						
Diesel Range Hydrocarbons	727	50.0	ug/l	1000		72.7	60-140			
Surrogate: n-Pentacosane	*81.0*		"	*100*		*81.0*	*50-150*			
Matrix Spike (1E22016-MS1)		**Source: MKE0330-01**		Prepared: 05/22/01 Analyzed: 05/24/01						
Diesel Range Hydrocarbons	736	50.0	ug/l	1000	ND	73.6	50-150			
Surrogate: n-Pentacosane	*78.4*		"	*100*		*78.4*	*50-150*			
Matrix Spike Dup (1E22016-MSD1)		**Source: MKE0330-01**		Prepared: 05/22/01 Analyzed: 05/24/01						
Diesel Range Hydrocarbons	777	50.0	ug/l	1000	ND	77.7	50-150	5.42	50	
Surrogate: n-Pentacosane	*81.4*		"	*100*		*81.4*	*50-150*			

Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: Tosco SS#4625, Oakland, CA	Reported:
Dublin CA, 94568	Project Manager: Deanna Harding	06/01/01 12:01

Total Metals by EPA 200 Series Methods - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1E18013 - EPA 3005A										
Blank (1E18013-BLK1)				Prepared & Analyzed: 05/18/01						
Chromium	ND	0.0100	mg/l							
LCS (1E18013-BS1)				Prepared & Analyzed: 05/18/01						
Chromium	1.08	0.0100	mg/l	1.00		108	80-120			
Matrix Spike (1E18013-MS1)		Source: MKE0403-01		Prepared & Analyzed: 05/18/01						
Chromium	1.04	0.0100	mg/l	1.00	ND	104	80-120			
Matrix Spike Dup (1E18013-MSD1)		Source: MKE0403-01		Prepared & Analyzed: 05/18/01						
Chromium	1.04	0.0100	mg/l	1.00	ND	104	80-120	0	20	

Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568	Project: Tosco(1) Project Number: Tosco SS#4625, Oakland, CA Project Manager: Deanna Harding	**Reported:** 06/01/01 12:01

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1E24001 - General Prep										
Blank (1E24001-BLK1)				Prepared & Analyzed: 05/24/01						
Oil & Grease	ND	5.00	mg/l							
LCS (1E24001-BS1)				Prepared & Analyzed: 05/24/01						
Oil & Grease	19.1	5.00	mg/l	20.0		95.5	70-130			
LCS Dup (1E24001-BSD1)				Prepared & Analyzed: 05/24/01						
Oil & Grease	20.9	5.00	mg/l	20.0		104	70-130	9.00	30	

Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568	Project: Tosco(1) Project Number: Tosco SS#4625, Oakland, CA Project Manager: Deanna Harding	Reported: 06/01/01 12:01

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1E16006 - EPA 3510B Sep Funnel										
Blank (1E16006-BLK1)				Prepared: 05/16/01 Analyzed: 05/25/01						
Acenaphthene	ND	5.0	ug/l							
Acenaphthylene	ND	5.0	"							
Aniline	ND	5.0	"							
Anthracene	ND	5.0	"							
Benzoic acid	ND	10	"							
Benzo (a) anthracene	ND	5.0	"							
Benzo (b) fluoranthene	ND	5.0	"							
Benzo (k) fluoranthene	ND	5.0	"							
Benzo (ghi) perylene	ND	5.0	"							
Benzo[a]pyrene	ND	5.0	"							
Benzyl alcohol	ND	5.0	"							
Bis(2-chloroethoxy)methane	ND	5.0	"							
Bis(2-chloroethyl)ether	ND	5.0	"							
Bis(2-chloroisopropyl)ether	ND	5.0	"							
Bis(2-ethylhexyl)phthalate	ND	10	"							
4-Bromophenyl phenyl ether	ND	5.0	"							
Butyl benzyl phthalate	ND	50	"							
4-Chloroaniline	ND	25	"							
2-Chloronaphthalene	ND	5.0	"							
4-Chloro-3-methylphenol	ND	5.0	"							
2-Chlorophenol	ND	5.0	"							
4-Chlorophenyl phenyl ether	ND	5.0	"							
Chrysene	ND	5.0	"							
Dibenz (a,h) anthracene	ND	10	"							
Dibenzofuran	ND	5.0	"							
Di-n-butyl phthalate	ND	10	"							
1,2-Dichlorobenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	5.0	"							
1,4-Dichlorobenzene	ND	10	"							
3,3'-Dichlorobenzidine	ND	10	"							
2,4-Dichlorophenol	ND	5.0	"							
Diethyl phthalate	ND	5.0	"							
2,4-Dimethylphenol	ND	5.0	"							
Dimethyl phthalate	ND	5.0	"							
4,6-Dinitro-2-methylphenol	ND	10	"							
2,4-Dinitrophenol	ND	10	"							

Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568	Project: Tosco(1) Project Number: Tosco SS#4625, Oakland, CA Project Manager: Deanna Harding	Reported: 06/01/01 12:01

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1E16006 - EPA 3510B Sep Funnel										
Blank (1E16006-BLK1)				Prepared: 05/16/01 Analyzed: 05/25/01						
2,4-Dinitrotoluene	ND	10	ug/l							
2,6-Dinitrotoluene	ND	10	"							
Di-n-octyl phthalate	ND	10	"							
Fluoranthene	ND	5.0	"							
Fluorene	ND	5.0	"							
Hexachlorobenzene	ND	10	"							
Hexachlorobutadiene	ND	10	"							
Hexachlorocyclopentadiene	ND	10	"							
Hexachloroethane	ND	5.0	"							
Indeno (1,2,3-cd) pyrene	ND	10	"							
Isophorone	ND	5.0	"							
2-Methylnaphthalene	ND	5.0	"							
2-Methylphenol	ND	5.0	"							
4-Methylphenol	ND	5.0	"							
Naphthalene	ND	5.0	"							
2-Nitroaniline	ND	10	"							
3-Nitroaniline	ND	10	"							
4-Nitroaniline	ND	20	"							
Nitrobenzene	ND	5.0	"							
2-Nitrophenol	ND	5.0	"							
4-Nitrophenol	ND	10	"							
N-Nitrosodimethylamine	ND	5.0	"							
N-Nitrosodiphenylamine	ND	5.0	"							
N-Nitrosodi-n-propylamine	ND	5.0	"							
Pentachlorophenol	ND	10	"							
Phenanthrene	ND	5.0	"							
Phenol	ND	5.0	"							
Pyrene	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	5.0	"							
2,4,5-Trichlorophenol	ND	10	"							
2,4,6-Trichlorophenol	ND	10	"							
Surrogate: 2-Fluorophenol	*37.0*		"	*150*		*24.7*	*21-110*			
Surrogate: Phenol-d6	*21.6*		"	*150*		*14.4*	*10-110*			
Surrogate: Nitrobenzene-d5	*49.8*		"	*100*		*49.8*	*35-114*			
Surrogate: 2-Fluorobiphenyl	*49.8*		"	*100*		*49.8*	*43-116*			

Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: Tosco SS#4625, Oakland, CA	Reported:
Dublin CA, 94568	Project Manager: Deanna Harding	06/01/01 12:01

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1E16006 - EPA 3510B Sep Funnel										
Blank (1E16006-BLK1)				Prepared: 05/16/01 Analyzed: 05/25/01						
Surrogate: 2,4,6-Tribromophenol	*68.6*		*ug/l*	*150*		*45.7*	*10-123*			
Surrogate: p-Terphenyl-d14	*50.3*		*"*	*100*		*50.3*	*33-141*			
LCS (1E16006-BS1)				Prepared: 05/16/01 Analyzed: 05/25/01						
Acenaphthene	53.0	5.0	ug/l	100		53.0	46-118			
4-Chloro-3-methylphenol	80.3	5.0	"	150		53.5	23-97			
2-Chlorophenol	74.0	5.0	"	150		49.3	27-123			
1,4-Dichlorobenzene	49.1	10	"	100		49.1	36-97			
2,4-Dinitrotoluene	54.9	10	"	100		54.9	24-96			
4-Nitrophenol	22.8	10	"	150		15.2	10-80			
N-Nitrosodi-n-propylamine	59.5	5.0	"	100		59.5	41-116			
Pentachlorophenol	77.7	10	"	150		51.8	9-103			
Phenol	30.1	5.0	"	150		20.1	12-110			
Pyrene	54.8	5.0	"	100		54.8	26-127			
1,2,4-Trichlorobenzene	52.6	5.0	"	100		52.6	39-98			
Surrogate: 2-Fluorophenol	*48.4*		*"*	*150*		*32.3*	*21-110*			
Surrogate: Phenol-d6	*29.2*		*"*	*150*		*19.5*	*10-110*			
Surrogate: Nitrobenzene-d5	*58.0*		*"*	*100*		*58.0*	*35-114*			
Surrogate: 2-Fluorobiphenyl	*55.3*		*"*	*100*		*55.3*	*43-116*			
Surrogate: 2,4,6-Tribromophenol	*84.5*		*"*	*150*		*56.3*	*10-123*			
Surrogate: p-Terphenyl-d14	*53.2*		*"*	*100*		*53.2*	*33-141*			
LCS Dup (1E16006-BSD1)				Prepared: 05/16/01 Analyzed: 05/25/01						
Acenaphthene	50.6	5.0	ug/l	100		50.6	46-118	4.63	30	
4-Chloro-3-methylphenol	69.8	5.0	"	150		46.5	23-97	14.0	30	
2-Chlorophenol	63.7	5.0	"	150		42.5	27-123	15.0	30	
1,4-Dichlorobenzene	46.3	10	"	100		46.3	36-97	5.87	30	
2,4-Dinitrotoluene	51.4	10	"	100		51.4	24-96	6.59	30	
4-Nitrophenol	13.8	10	"	150		9.20	10-80	49.2	30	Q-01,Q-07
N-Nitrosodi-n-propylamine	56.1	5.0	"	100		56.1	41-116	5.88	30	
Pentachlorophenol	74.7	10	"	150		49.8	9-103	3.94	30	
Phenol	19.9	5.0	"	150		13.3	12-110	40.8	30	Q-07
Pyrene	52.9	5.0	"	100		52.9	26-127	3.53	30	
1,2,4-Trichlorobenzene	49.9	5.0	"	100		49.9	39-98	5.27	30	
Surrogate: 2-Fluorophenol	*35.0*		*"*	*150*		*23.3*	*21-110*			
Surrogate: Phenol-d6	*19.1*		*"*	*150*		*12.7*	*10-110*			

Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568	Project: Tosco(1) Project Number: Tosco SS#4625, Oakland, CA Project Manager: Deanna Harding	Reported: 06/01/01 12:01

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1E16006 - EPA 3510B Sep Funnel										
LCS Dup (1E16006-BSD1)				Prepared: 05/16/01 Analyzed: 05/25/01						
Surrogate: Nitrobenzene-d5	*55.2*		*ug/l*	*100*		*55.2*	*35-114*			
Surrogate: 2-Fluorobiphenyl	*55.2*		*"*	*100*		*55.2*	*43-116*			
Surrogate: 2,4,6-Tribromophenol	*80.8*		*"*	*150*		*53.9*	*10-123*			
Surrogate: p-Terphenyl-d14	*53.8*		*"*	*100*		*53.8*	*33-141*			

Notes and Definitions

Q-01	The spike recovery for this QC sample is outside of established control limits. Review of associated batch QC indicates the recovery for this analyte does not represent an out-of-control condition for the batch.
Q-07	The RPD value for this QC sample is above the established control limit. Review of associated QC indicates the high RPD does not represent an out-of-control condition for the batch.
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