GETTLER-RYAN INC.

OCT 0 9 2001

TRANSMITTAL

September 19, 2001
G-R #: 180264

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

CC: Mr. Douglas Lee
Gettler-Ryan, Inc.
Dublin, California

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

RE: Tosco (76) Service Station #0018
6201 Claremont Boulevard
Oakland, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	September 10, 2001	Groundwater Monitoring and Sampling Report Third Quarter - Event of August 10, 2001

COMMENTS:

This report is being sent to you for your review/comment, prior to being distributed on your behalf. If no comments are received by ***October 3, 2001***, this report will be distributed to the following:

cc: Mr. D[redacted]
A[redacted] GA 94580

Enclosure

trans/0018-dbd

GETTLER-RYAN INC.

September 10, 2001
G-R Job #180264

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

RE: Third Quarter Event of August 10, 2001
Groundwater Monitoring & Sampling Report
Tosco (76) Service Station #0018
6201 Claremont 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 the wells. Static water level data and groundwater elevations are summarized in Table 1. A Potentiometric Map is included as Figure 1.

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

Sincerely,

Deanna Marie Nixon
- For -
Deanna L. Harding
Project Coordinator

Hagop Kevork
P.E. No. C55734

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

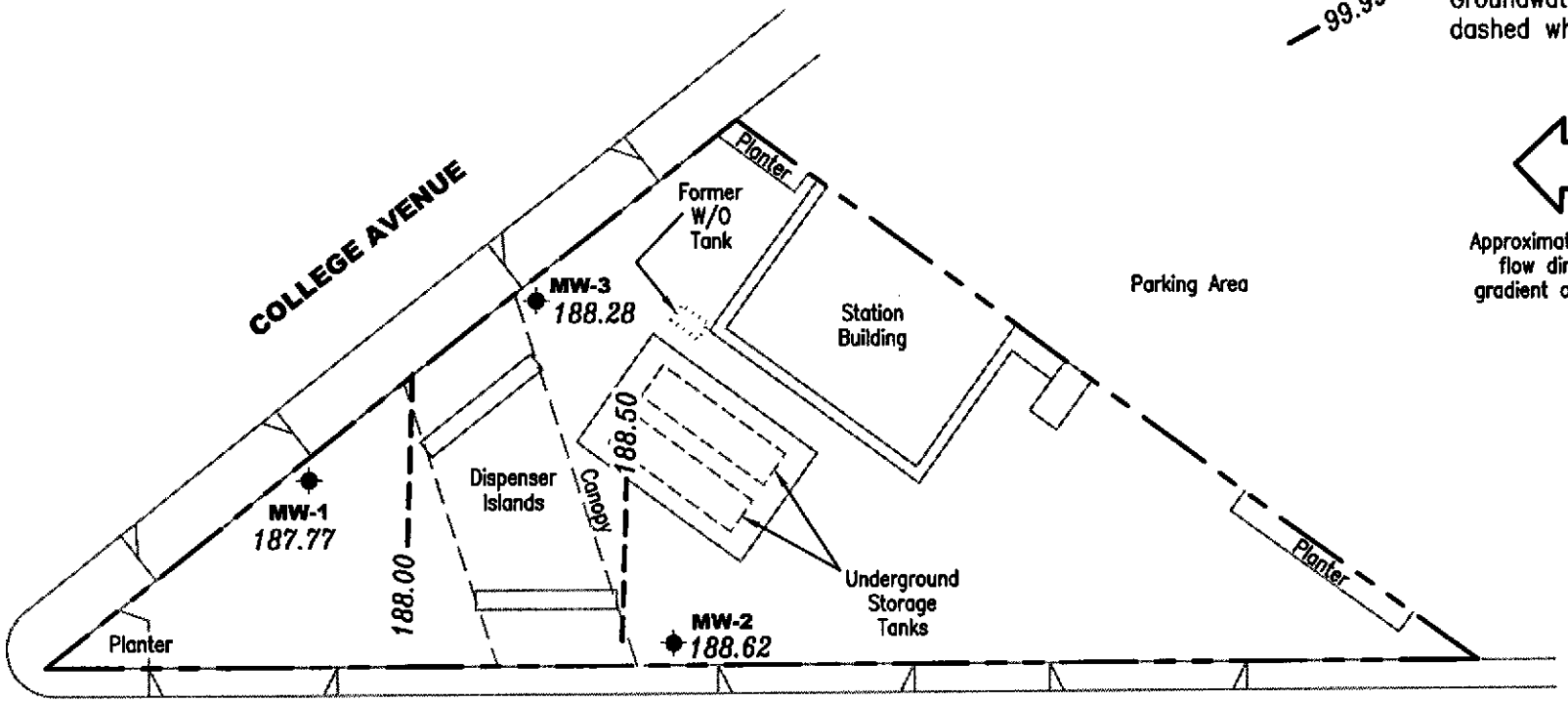
Figure 1: Potentiometric Map
Figure 2: Concentration Map
Table 1: Groundwater Monitoring Data and Analytical Results
Table 2: Groundwater Analytical Results - Oxygenate Compounds
Attachments: Standard Operating Procedure - Groundwater Sampling
Field Data Sheets
Chain of Custody Document and Laboratory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

0018-qml

EXPLANATION

- Groundwater monitoring well
- 99.99 — Groundwater elevation in feet referenced to Mean Sea Level (MSL)
- 99.99 — Groundwater elevation contour, dashed where inferred.

Approximate groundwater flow direction at a gradient of 0.01 Ft./Ft.



N

0 40

Scale in Feet

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

POTENTIOMETRIC MAP
Tosco (76) Service Station #0018
6201 Claremont Avenue
Oakland, California

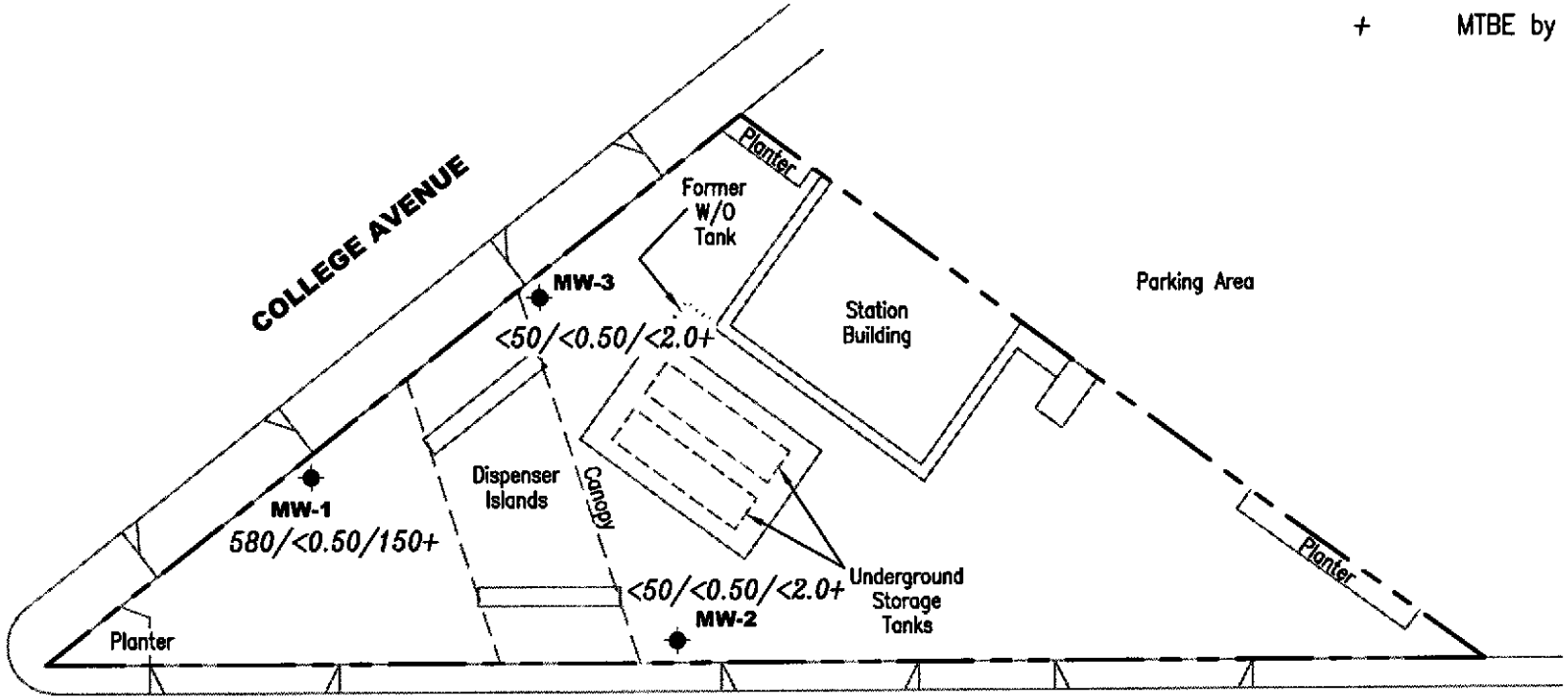
FIGURE 1

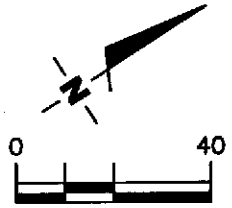
PROJECT NUMBER	REVIEWED BY	DATE	REVISED DATE
180264		August 10, 2001	

FILE NAME: P:\ENVIRO\TOSCO\0018\001-0018.DWG | Layout Tab: Pot3

EXPLANATION

- ✦ Groundwater monitoring well
- *A/B/C* TPH(G) (Total Petroleum Hydrocarbons as Gasoline)/ Benzene/MTBE concentrations in ppb
- \+ MTBE by EPA Method 8260





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

CONCENTRATION MAP
Tosco (76) Service Station #0018
6201 Claremont Avenue
Oakland, California

FIGURE
2

PROJECT NUMBER	REVIEWED BY	DATE	REVISED DATE
180264		August 10, 2001	

FILE NAME: P:\Enviro\Tosco\0018\Q01-0018.DWG | Layout Tab: Con3

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (76) Service Station #0018
6201 Claremont Avenue
Oakland, California

WELL ID/ TOC*	DATE	DTW (ft.)	S.I. (ft. bgs)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-1										
208.15	08/24/00	18.55	10.0-30.0	189.60	120[1]	0.67	ND	0.86	1.4	54/54[2]
	11/16/00	20.30		187.85	169[3]	ND	1.20	1.74	0.629	68.6/97.7[2]
	02/09/01	20.16		187.99	330[3]	1.3	ND	1.0	4.6	140/150[2]
	05/11/01	17.68		190.47	1,250[3]	ND[4]	ND[4]	ND[4]	ND[4]	145/122[2]
	08/10/01	**20.38**		**187.77**	**580[3]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**110/150[2]**
MW-2										
210.27	08/24/00	19.69	10.0-30.0	190.58	ND	ND	ND	ND	ND	ND/ND[2]
	11/16/00	21.61		188.66	ND	ND	ND	ND	ND	ND/ND[2]
	02/09/01	21.52		188.75	ND	ND	ND	ND	ND	ND/ND[2]
	05/11/01	18.76		191.51	ND	ND	ND	ND	ND	ND/ND[2]
	08/10/01	**21.65**		**188.62**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<5.0/<2.0[2]**
MW-3										
208.98	08/24/00	18.68	10.0-30.0	190.30	ND	ND	ND	ND	ND	4.7/2.3[2]
	11/16/00	20.56		188.42	ND	ND	ND	ND	ND	ND/ND[2]
	02/09/01	20.45		188.53	ND	ND	ND	ND	ND	ND/ND[2]
	05/11/01	17.75		191.23	ND	ND	ND	ND	ND	ND/ND[2]
	08/10/01	**20.70**		**188.28**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<5.0/<2.0[2]**
Trip Blank										
TB-LB	08/24/00	--	--	--	ND	ND	ND	ND	ND	ND
	11/16/00	--		--	ND	ND	ND	ND	ND	ND
	02/09/01	--		--	ND	ND	ND	ND	ND	ND
	05/11/01	--		--	ND	ND	ND	ND	ND	ND
	08/10/01	**--**		**--**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<5.0**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (76) Service Station #0018
6201 Claremont 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-G = Total Petroleum Hydrocarbons as Gasoline
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
MTBE = Methyl tertiary butyl ether

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

* TOC elevations have been surveyed relative to msl; per the city of Oakland benchmark being a cut square in the top of curb, at the curb return at the northeast corner of College Avenue and Miles Avenue, (Benchmark Elevation = 179.075 feet, msl).

[1] Laboratory report indicates gasoline C6-C12.

[2] MTBE by EPA Method 8260.

[3] Laboratory report indicates unidentified hydrocarbons C6-C12.

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

Table 2

Groundwater Analytical Results - Oxygenate Compounds

Tosco (76) Service Station #0018
6201 Claremont 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	08/24/00	ND	ND	54	ND	ND	ND	--	--
	11/16/00	ND	ND	97.7	ND	ND	ND	--	--
	02/09/01	ND	ND	150	ND	ND	ND	ND	ND
	05/11/01	ND	ND	122	ND	ND	ND	ND	ND
	08/10/01	**<1,000**	**<100**	**150**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**
MW-2	08/24/00	ND	ND	ND	ND	ND	ND	--	--
	11/16/00	ND	ND	ND	ND	ND	ND	--	--
	02/09/01	ND	ND	ND	ND	ND	ND	ND	ND
	05/11/01	ND	ND	ND	ND	ND	ND	ND	ND
	08/10/01	**<1,000**	**<100**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**
MW-3	08/24/00	ND	ND	2.3	ND	ND	ND	--	--
	11/16/00	ND	ND	ND	ND	ND	ND	--	--
	02/09/01	ND	ND	ND	ND	ND	ND	ND	ND
	05/11/01	ND	ND	ND	ND	ND	ND	ND	ND
	08/10/01	**<1,000**	**<100**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**

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

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 # 0018 Job#: 180264

Address: 6201 Claremont Blvd. Date: 8-10-01

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 30.03 ft.

Depth to Water 20.38 ft.

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

9.65 X VF 0.17 = 1.64 X 3 (case volume) = Estimated Purge Volume: 5 (gal.)

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

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

Starting Time: 8:36

Sampling Time: 9:10 Am (0910)

Purging Flow Rate: 0.5 gpm

Did well de-water?

Weather Conditions: clear

Water Color: clear Odor: yes

Sediment Description:

If yes; Time: Volume: (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
8:43	1.5	6.72	5.62	67.0			
8:56	3	6.89	5.68	67.2			
8:59	5	6.95	5.65	66.8			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-1	3 VOA	Y	HCL	Seq.	TPHG, BTEX, MTBE
	2 VOA	"	"	"	(6) Oxy's 1,2 DCA/EDB SW8260

COMMENTS:

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 0018 Job#: 180264

Address: 6201 Claremont Blvd. Date: 8-10-01

City: Oakland, CA Sampler: Joe

Well ID MW-2 Well Condition: Ok.

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

Total Depth 30.06 ft.

Depth to Water 21.65 ft.

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

8.41 X VF 0.17 = 1.43 X 3 (case volume) = Estimated Purge Volume: 4.5 (gal.)

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

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

Starting Time: 7:12 Weather Conditions: clear

Sampling Time: 7:45 A.m (0745) Water Color: clear Odor: none

Purging Flow Rate: 0.5 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)
7:28	1.5	7.41	10.64	66.6			
7:31	3	7.30	10.62	66.5			
7:35	4.5	7.27	10.57	66.4			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-2	3 VOA	Y	HCL	Seq.	TPHG, BTEX, MTBE
	2 VOA	"	"	"	(6) Oxy's 1,2 DCA/EDB SW8260

COMMENTS: _____

8/97-fieldat.frm

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 0018 Job#: 180264

Address: 6201 Claremont Blvd. Date: 8-10-01

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): 0 (gal.)

Total Depth 29.98 ft.

Depth to Water 20.70 ft.

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

9.28 X VF 0.17 = 1.58 X 3 (case volume) = Estimated Purge Volume: 5 (gal.)

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

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

Starting Time: 8:10

Sampling Time: 8:27 a.m. (0827)

Purging Flow Rate: 0.5 gpm

Did well de-water?

Weather Conditions: clear

Water Color: clear Odor: none

Sediment Description:

If yes; Time: Volume: (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
8:12	1.5	7.54	12.08	66.3			
8:16	3	7.50	11.65	66.1			
8:20	5	7.56	11.64	66.2			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-3	3 VOA	Y	HCL	Seq.	TPHG, BTEX, MTBE
	2 VOA	"	"	"	(6) Oxy's 1,2 DCA/EDB SW8260

COMMENTS:

Chain-of-Custody-Record

TOSCO

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

Facility Number: Tosco # 0018
Facility Address: 6201 Claremont Blvd. Oakland
Consultant Project Number: 180264
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. Dave DeWitt
(Phone) (925) 277-2384
Laboratory Name: Sequoia Analytical
Laboratory Release Number:
Samples Collected by (Name): JOE ASEMIAN
Collection Date: 8-10-01
Signature:

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed: TPH Gas + BTEX w/MTBE (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)	(6) Oxy's 12 DCA / EDB's by 8260					DO NOT BILL TB-LB ANALYSIS / Remarks
TB-LB	01	voA	W	G	—	HCL	Y	✓													L108076
MW-1	02	5 voA	"	"	0910	"	"	✓								✓					
MW-2	03	"	"	"	0745	"	"	✓								✓					
MW-3	04	"	"	"	0827	"	"	✓								✓					

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	G-R Inc.	8-10-01 1800			8/10/01 1801
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
(650) 232-9600
FAX (650) 232-9612
www.sequoialabs.com

28 August, 2001

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

RE: Tosco(1)
Sequoia Report: L108076

Enclosed are the results of analyses for samples received by the laboratory on 08/10/01 18:00. 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 #2360

Sequoia Analytical

1551 Industrial Road
San Carlos CA 94070
(650) 232-9600
FAX (650) 232-9612
www.sequoialabs.com

Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: TOSCO# 0018, OAKLAND, CA	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	08/28/01 07:39

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-LB	L108076-01	Water	08/10/01 00:00	08/10/01 18:00
MW-1	L108076-02	Water	08/10/01 09:10	08/10/01 18:00
MW-2	L108076-03	Water	08/10/01 07:45	08/10/01 18:00
MW-3	L108076-04	Water	08/10/01 08:27	08/10/01 18:00

Sequoia Analytical - San Carlos

Latonya K. Pelt

Latonya Pelt, Project Manager

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

Sequoia Analytical

1551 Industrial Road
San Carlos CA 94070
(650) 232-9600
FAX (650) 232-9612
www.sequoialabs.com

Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568	Project: Tosco(1) Project Number: TOSCO# 0018, OAKLAND, CA Project Manager: Deanna Harding	**Reported:** 08/28/01 07:39

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

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TB-LB (L108076-01) Water Sampled: 08/10/01 00:00 Received: 08/10/01 18:00									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	1080106	08/24/01	08/24/01	DHS LUFT	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*100 %*	*70-130*		"	"	"	"	
MW-1 (L108076-02) Water Sampled: 08/10/01 09:10 Received: 08/10/01 18:00									
Purgeable Hydrocarbons as Gasoline	**580**	50	ug/l	1	1080106	08/24/01	08/24/01	DHS LUFT	P-03
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**110**	5.0	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*209 %*	*70-130*		"	"	"	"	*S-04*
MW-2 (L108076-03) Water Sampled: 08/10/01 07:45 Received: 08/10/01 18:00									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	1080106	08/24/01	08/24/01	DHS LUFT	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*99.9 %*	*70-130*		"	"	"	"	

Sequoia Analytical

1551 Industrial Road
San Carlos CA 94070
(650) 232-9600
FAX (650) 232-9612
www.sequoialabs.com

Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: TOSCO# 0018, OAKLAND, CA	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	08/28/01 07:39

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

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (L108076-04) Water Sampled: 08/10/01 08:27 Received: 08/10/01 18:00									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	1080106	08/24/01	08/24/01	DHS LUFT	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*95.0 %*		*70-130*	"	"	"	"	

Sequoia Analytical

1551 Industrial Road
San Carlos CA 94070
(650) 232-9600
FAX (650) 232-9612
www.sequoialabs.com

Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568	Project: Tosco(1) Project Number: TOSCO# 0018, OAKLAND, CA Project Manager: Deanna Harding	**Reported:** 08/28/01 07:39

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 (L108076-02) Water Sampled: 08/10/01 09:10 Received: 08/10/01 18:00									
Ethanol	ND	1000	ug/l	1	1080063	08/15/01	08/15/01	EPA 8260B	
1,2-Dibromoethane	ND	2.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.0	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	**150**	2.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	100	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*113 %*	*76-114*		"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*88-110*		"	"	"	"	
MW-2 (L108076-03) Water Sampled: 08/10/01 07:45 Received: 08/10/01 18:00									
Ethanol	ND	1000	ug/l	1	1080063	08/15/01	08/16/01	EPA 8260B	
1,2-Dibromoethane	ND	2.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.0	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	100	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*108 %*	*76-114*		"	"	"	"	
Surrogate: Toluene-d8		*106 %*	*88-110*		"	"	"	"	
MW-3 (L108076-04) Water Sampled: 08/10/01 08:27 Received: 08/10/01 18:00									
Ethanol	ND	1000	ug/l	1	1080063	08/15/01	08/16/01	EPA 8260B	
1,2-Dibromoethane	ND	2.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.0	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	100	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*108 %*	*76-114*		"	"	"	"	
Surrogate: Toluene-d8		*104 %*	*88-110*		"	"	"	"	

Sequoia Analytical

1551 Industrial Road
San Carlos CA 94070
(650) 232-9600
FAX (650) 232-9612
www.sequoialabs.com

Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: TOSCO# 0018, OAKLAND, CA	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	08/28/01 07:39

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

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1080106 - EPA 5030B (P/T)										
Blank (1080106-BLK1)				Prepared & Analyzed: 08/24/01						
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	5.0	"							
Surrogate: a,a,a-Trifluorotoluene	*9.27*		"	*10.0*		*92.7*	*70-130*			
LCS (1080106-BS1)				Prepared & Analyzed: 08/24/01						
Benzene	9.22	0.50	ug/l	10.0		92.2	70-130			
Toluene	9.14	0.50	"	10.0		91.4	70-130			
Ethylbenzene	9.44	0.50	"	10.0		94.4	70-130			
Xylenes (total)	28.0	0.50	"	30.0		93.3	70-130			
Surrogate: a,a,a-Trifluorotoluene	*10.4*		"	*10.0*		*104*	*70-130*			
LCS (1080106-BS2)				Prepared & Analyzed: 08/24/01						
Purgeable Hydrocarbons as Gasoline	216	50	ug/l	250		86.4	70-130			
Surrogate: a,a,a-Trifluorotoluene	*11.3*		"	*10.0*		*113*	*70-130*			
Matrix Spike (1080106-MS1)		**Source: L108076-04**		Prepared: 08/24/01		Analyzed: 08/25/01				
Benzene	8.92	0.50	ug/l	10.0	ND	89.2	60-140			
Toluene	8.94	0.50	"	10.0	ND	89.4	60-140			
Ethylbenzene	9.35	0.50	"	10.0	ND	93.5	60-140			
Xylenes (total)	28.0	0.50	"	30.0	ND	93.3	60-140			
Surrogate: a,a,a-Trifluorotoluene	*10.6*		"	*10.0*		*106*	*70-130*			
Matrix Spike Dup (1080106-MSD1)		**Source: L108076-04**		Prepared: 08/24/01		Analyzed: 08/25/01				
Benzene	9.98	0.50	ug/l	10.0	ND	99.8	60-140	11.2	25	
Toluene	9.82	0.50	"	10.0	ND	98.2	60-140	9.38	25	
Ethylbenzene	10.1	0.50	"	10.0	ND	101	60-140	7.71	25	
Xylenes (total)	30.2	0.50	"	30.0	ND	101	60-140	7.56	25	
Surrogate: a,a,a-Trifluorotoluene	*10.6*		"	*10.0*		*106*	*70-130*			

Sequoia Analytical

1551 Industrial Road
San Carlos CA 94070
(650) 232-9600
FAX (650) 232-9612
www.sequoialabs.com

Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568	Project: Tosco(1) Project Number: TOSCO# 0018, OAKLAND, CA Project Manager: Deanna Harding	**Reported:** 08/28/01 07:39

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 1080063 - EPA 5030B [P/T]										
Blank (1080063-BLK1)				Prepared & Analyzed: 08/15/01						
Ethanol	ND	1000	ug/l							
1,2-Dibromoethane	ND	2.0	"							
1,2-Dichloroethane	ND	2.0	"							
Di-isopropyl ether	ND	2.0	"							
Ethyl tert-butyl ether	ND	2.0	"							
Methyl tert-butyl ether	ND	2.0	"							
Tert-amyl methyl ether	ND	2.0	"							
Tert-butyl alcohol	ND	100	"							
Surrogate: 1,2-Dichloroethane-d4	*52.6*		"	*50.0*		*105*	*76-114*			
Surrogate: Toluene-d8	*52.2*		"	*50.0*		*104*	*88-110*			
Blank (1080063-BLK2)				Prepared & Analyzed: 08/15/01						
Ethanol	ND	1000	ug/l							
1,2-Dibromoethane	ND	2.0	"							
1,2-Dichloroethane	ND	2.0	"							
Di-isopropyl ether	ND	2.0	"							
Ethyl tert-butyl ether	ND	2.0	"							
Methyl tert-butyl ether	ND	2.0	"							
Tert-amyl methyl ether	ND	2.0	"							
Tert-butyl alcohol	ND	100	"							
Surrogate: 1,2-Dichloroethane-d4	*55.2*		"	*50.0*		*110*	*76-114*			
Surrogate: Toluene-d8	*54.0*		"	*50.0*		*108*	*88-110*			
Blank (1080063-BLK3)				Prepared & Analyzed: 08/17/01						
Ethanol	ND	1000	ug/l							
1,2-Dibromoethane	ND	2.0	"							
1,2-Dichloroethane	ND	2.0	"							
Di-isopropyl ether	ND	2.0	"							
Ethyl tert-butyl ether	ND	2.0	"							
Methyl tert-butyl ether	ND	2.0	"							
Tert-amyl methyl ether	ND	2.0	"							
Tert-butyl alcohol	ND	100	"							
Surrogate: 1,2-Dichloroethane-d4	*48.4*		"	*50.0*		*96.8*	*76-114*			
Surrogate: Toluene-d8	*50.3*		"	*50.0*		*101*	*88-110*			

Sequoia Analytical

1551 Industrial Road
San Carlos CA 94070
(650) 232-9600
FAX (650) 232-9612
www.sequoialabs.com

Gettler-Ryan/Geostrategies(1)	Project: Tosco(1)	
6747 Sierra Court, Suite J	Project Number: TOSCO# 0018, OAKLAND, CA	**Reported:**
Dublin CA, 94568	Project Manager: Deanna Harding	08/28/01 07:39

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 1080063 - EPA 5030B [P/T]										
LCS (1080063-BS1)				Prepared & Analyzed: 08/15/01						
Methyl tert-butyl ether	45.8	2.0	ug/l	50.0		91.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	*52.9*		"	*50.0*		*106*	*76-114*			
Surrogate: Toluene-d8	*53.1*		"	*50.0*		*106*	*88-110*			
LCS (1080063-BS3)				Prepared & Analyzed: 08/17/01						
Methyl tert-butyl ether	51.4	2.0	ug/l	50.0		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	*49.6*		"	*50.0*		*99.2*	*76-114*			
Surrogate: Toluene-d8	*51.2*		"	*50.0*		*102*	*88-110*			
Matrix Spike (1080063-MS1)		**Source: L108076-03**		Prepared: 08/15/01		Analyzed: 08/17/01				
Methyl tert-butyl ether	48.5	2.0	ug/l	50.0	ND	97.0	60-140			
Surrogate: 1,2-Dichloroethane-d4	*49.7*		"	*50.0*		*99.4*	*76-114*			
Surrogate: Toluene-d8	*49.9*		"	*50.0*		*99.8*	*88-110*			
Matrix Spike Dup (1080063-MSD1)		**Source: L108076-03**		Prepared: 08/15/01		Analyzed: 08/17/01				
Methyl tert-butyl ether	49.1	2.0	ug/l	50.0	ND	98.2	60-140	1.23	25	
Surrogate: 1,2-Dichloroethane-d4	*51.2*		"	*50.0*		*102*	*76-114*			
Surrogate: Toluene-d8	*49.7*		"	*50.0*		*99.4*	*88-110*			

Sequoia Analytical

1551 Industrial Road
San Carlos CA 94070
(650) 232-9600
FAX (650) 232-9612
www.sequoialabs.com

Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568	Project: Tosco(1) Project Number: TOSCO# 0018, OAKLAND, CA Project Manager: Deanna Harding	**Reported:** 08/28/01 07:39

Notes and Definitions

P-03	Chromatogram Pattern: Unidentified Hydrocarbons C6-C12
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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