April 2, 2001 G-R #180255

TO:

Mr. David B. De Witt

Tosco Marketing Company

2000 Crow Canyon Place, Suite 400

San Ramon, California 94583

FROM:

Deanna L. Harding

Project Coordinator Gettler-Ryan Inc.

6747 Sierra Court, Suite J Dublin, California 94568 CC:

Mr. David Vossler

Gettler-Ryan Inc.

Petaluma, California

RE: Tosco (76) SS #4625

3070 Fruitvale Avenue Oakland, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	March 26, 2001	Groundwater Monitoring and Sampling Report First Quarter - Event of February 9, 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 *April 12, 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

March 26, 2001 G-R Job #180255

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

RE: First Quarter Event of February 9, 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

Stephen J. Carter

Senior Geologist, R.G. No. 5577

Figure 1:

Potentiometric Map

Figure 2: Table 1:

Concentration Map
Groundwater Monitoring Data and Analytical Results

Table 2:

Groundwater Analytical Results

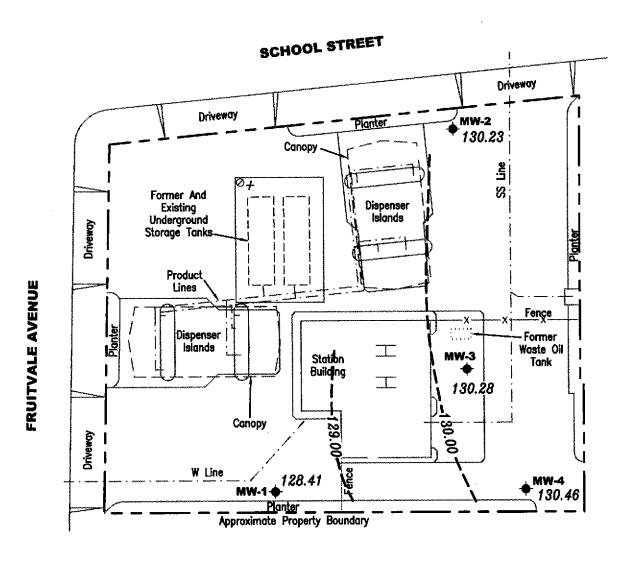
Table 3: Attachments:

Groundwater Analytical Results – Oxygenate Compounds Standard Operating Procedure - Groundwater Sampling

Field Data Sheets

Chain of Custody Document and Laboratory Analytical Reports

4625.qm)



EXPLANATION

Groundwater monitoring well

UST Observation well

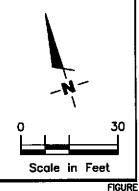
99.99 Groundwater elevation in feet referenced to Mean Sea Level

(MSL)

Groundwater elevation contour, dashed where inferred.

TOC not available

Approximate groundwater flow direction at a gradient of 0.03 Ft./Ft.



Source: Figure modified from drowing provided by Unacal.



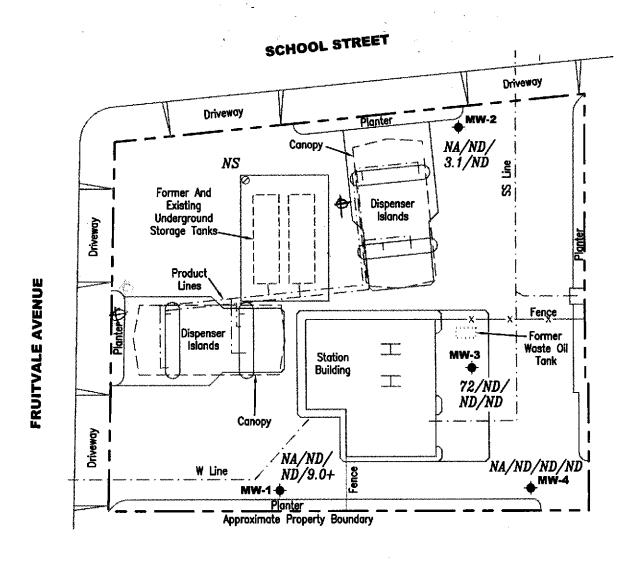
POTENTIOMETRIC MAP

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

PROJECT NUMBER REVIEWED BY 180255

DATE February 9, 2001 REVISED DATE

FILE NAME: P:\Enviro\Tosco\4625\Q01-4625.dwg | Layout Tab: Pot1



EXPLANATION

Groundwater monitoring well

UST Observation well

A/B/C/DTPH(D) (Total Petroleum

Hydrocarbons as Diesel)/TPH(G) (Total Petroleum Hydrocarbons as Gasoline)/Benzene/MTBE concentrations in ppb

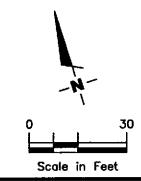
Not Detected ND

NA Not Analyzed

MTBE by EPA Method 8260

NS Not Sampled

REVISED DATE



Source: Figure modified from drawing provided by Unocal.

PROJECT NUMBER

180255



REVIEWED BY

CONCENTRATION MAP

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

DATE

February 9, 2001

FIGURE

FILE NAME: P:\Enviro\Tosco\4625\Q01-4625.dwg | Layout Tab: Con1

Table 1
Groundwater Monitoring Data and Analytical Results
Tosco (76) Service Station #4625

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

WELL ID/	DATE	DTW	S.I.	GWE	TPH-D	TPH-G	В	T	E	X	MTBE
TOC*		(ft.)	(ft. bgs.)	(msl)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
MW-1											
136.36	05/03/00	11.81	5.0-25.0	124.55		ND	ND	ND	ND	ND	11/14 ²
1,0.00	07/28/00	7.79	5.0 2.0.0	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
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		2,200¹	680	4.1	57	270	24/ND ²
	10/29/00	8.38		130.26		490¹	67	ND ³	23	22	ND^3
	02/09/01	8.41		130.23		ND	3.1	ND	0.52	1.1	ND
MW-3											
137.68	05/03/00	7.60	5.0-25.0	130.08	93 ⁵	ND	ND	ND	ND	ND	ND/ND⁴
	07/28/00	8.82		128.86	ND^3	ND	ND	ND	ND	ND	ND/ND⁴
	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
MW-4											
136.60	05/03/00	6.48	5.0-25.0	130.12	n-	ND	ND	ND	ND	ND	ND/ND ²
	07/28/00	7.55		129.05		ND	ND	ND	ND	ND	NĎ
	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
UST OBSER	RVATION WEI	LL									
	05/03/00	8.00									
	07/28/00	9.28									
	10/29/00	7.75				**					
	02/09/01	6.14									

Groundwater Monitoring Data and Analytical Results

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

WELL ID/	DATE	ranga ng ng kipika kanalog da babasa da k	S.I. GWE	TPH-D	TPH-G	В	T	E	X (1)	MTBE
TOC*		(ft.) (ft	. bgs.) (msl)	(ppb)	(ppb)	(ррв)	(ppb)	(ppb)	(ppb)	(ppb)
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

Groundwater Monitoring Data and Analytical Results

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

EXPLANATIONS:

TOC = Top of Casing

B = Benzene

(ppb) = Parts per billion

DTW = Depth to Water

T = Toluene

ND = Not Detected

(ft.) = Feet

E = Ethylbenzene

-- = Not Measured/Not Analyzed

S.I. = Screen Interval

X = Xylenes

(ft. bgs.) = Feet Below Ground Surface

MTBE = Methyl tertiary butyl ether

GWE = Groundwater Elevation

(msl) = Mean sea level

TPH-D = Total Petroleum Hydrocarbons as Diesel

TPH-G = Total Petroleum Hydrocarbons as Gasoline

- TOC elevations were surveyed based on a cut square on School Street, City of Oakland Benchmark No. 3783, (Elevation = 136.99 feet msl).
- Laboratory report indicates gasoline C6-C12.
- 2 MTBE by EPA Method 8260.
- Detection limit raised. Refer to analytical reports.
- MTBE by EPA Method 8240.
- 5 Laboratory report indicates unidentified hydrocarbons C9-C24.
- Laboratory report indicates discrete peaks.

Groundwater Analytical Results

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

- 0000 000 0000 0000 0000 0000 0000 0000 0000			Chromium	TOG
	(ppb)	(ppb)	(ppm)	(ppm)
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
•	07/28/00 10/29/00	05/03/00 ND 07/28/00 ND ¹ 10/29/00 ND	05/03/00 ND ND ND 07/28/00 ND ND ND ND	05/03/00 ND ND ND ND 07/28/00 ND¹ ND 1.8 10/29/00 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

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.

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

Groundwater Analytical Results - Oxygenate Compounds

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

WELLID	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
MW-3	07/28/00 ¹		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

(ppb) = Parts per billion

-- = Not Analyzed

ND = Not Detected

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

¹ VOCs by EPA Method 8240.

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.

Client/ Facility # <u>462</u>	-5		Job#:	180255	· · · · · · · · · · · · · · · · · · ·	
Address: 30	70 Fruitvale	Ave.	Date:	2-9-0		
City: Oa	Eland, CA.	<u> </u>	Sample	r: <u>50e</u>		_
Well ID	<u> mw- (</u>	Well	Condition:	0.16		_
Well Diameter		•	ocarbon O	Amount B	Z.Linn	all
Total Depth	25.06 to		ume 2" = 0.17	3" = 0.3	8 4" = 0.66	7
Depth to Water	7.95 #	Fac	tor (VF)	6" = 1.50	12" = 5.80	
		VF 0.17	_2.91 x 3 (case vol	ume) = Estimated P	urge Volume:(g.	<u>Lla</u> u
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundfos Other:	_	Sampling Equipment: Ot	Disposable Bailer Pressure Baile Grab Sample	er	y
	//:35 //:56.A re:	. M	4	n: were	Odor: <u>Marce</u>	
Time \\ \\ \frac{11.45}{4.7} \\ \\ \frac{1.47}{4.7} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	Volume pH (gal.) 3 7.17 6 7.18 9 7.24	1000 p.com 1 6 7	1.36 71.9 7.04 72.2	(mg/L)	ORP Alkalin (mV) (ppr	•
SAMPLE ID	(#) - CONTAINER	LABOR	ATORY INFORMATI	ON LABORATORY	ANALYSES	
Mm - 1	3 VOA	Υ	H CL	ડે છ્યુ.	TPHC BTEX , MT	8E
						二
COMMENTS: _	<u> </u>					
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Client/ Facility # <u>46</u> 2	-5		Job#:	180255		
	70 Fruitvale	Ave.	Date:	2-9-0		
City: Oa	Fland, CA.		Sample	r: <u>506</u>		
Well ID	mw-2	Well Con	dition:	0.10		 -
Well Diameter	2 _{in} _	Hydrocar Thicknes		Amount Ba		gal.)
Total Depth	24.28 n	Volume	2" = 0.17		4" = 0.66 12" = 5.80	7
Depth to Water	8.41 #	Factor (/F)	6" = 1.50		
	-	4		slume) = Estimated Pu	rge Valume: 8.5 ((ساهي
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundfos Other:	_	Sampling Equipment: C	Disposable Ba Bailer Pressure Baile Grab Sample other:		7
	12:0: 	<i>g.</i> Wa mo. Sec	ter Color:C	on: <u>incree</u>	Odor: Mone	(gal.)
12:18	Volume pH (gal.) 2.5 7.56 7.44 9.7.48	µmhos/c	<u> </u>	(mgr)	ORP Alkali (mV) (pp	inity om)
SAMPLE ID	(#) - CONTAINER		ORY INFORMAT	LABORATORY	ANALYSES	
mw-2	3 VOA	Y	H CL	S eq.	TPHG. BTEX, M-	TGE
COMMENTS:	· · · · · · · · · · · · · · · · · · ·					

Client/ Facility # 4 6 2	-5	 	Job#:		
Address: 30	70 Fruitvale	Ave.	Date:	2-9-0	
City:OA	Eland, CA.		Samp	ler: <u> </u>	
Well ID	_ww-3_	Well	Condition:	0,10	
Well Diameter	2 in	•	ocarbon <i>C</i>	Amount B	
Total Depth	24.73 4		ume 2" = 0.		
Depth to Water	7.40 1	Fac	tor (VF)	6" = 1.50	12" = 5.90
	<u>17.33</u> x	VF _0.17	=2.95 × 3 (case)	volume) = Estimated P	urge Volume:(gal.)
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundfos Other:	_ _	Sampling Equipment:	Disposable 8. Bailer Pressure Bail Grab Sample Other:	er
		5 A.m	Water Color:	tion: were	Odor: Merce
10:58	Volume pH (gal.)	, <u>, , , , , , , , , , , , , , , , , , </u>	ductivity N Tempe hos/cm 7	/ (mg/L)	ORP Alkalinity (mV) (ppm)
11:00	6 7.65 9 7.54		2.62 71.		
SAMPLE ID	(#) - CONTAINER	LABOI REFRIG.	RATORY INFORMA PRESERV. TYPE	LABORATORY	ANALYSES
Mui- 3	3 VOA	Y	HCL	Seq.	TPHC BTEX , MTGE
	2 VO A		11	11	VOC3/8240
	1 Amb.			<i>ii</i>	SVOCS/8270 TPHD
	1 Amb	11	H(L	<i>ii</i>	Oil+Grepse Total Chromius
COMMENTS: _	1 plastic	1,	<u> HNO</u>	//	Total Chromius
COMMENTS: _	1 plastic		HN03	,,	IC+AT CHIOMIO

3/37-fieldet.fm

Client/ Facility #463	25		Job#:	180255		
	70 Fruitvale	Ave.	Date:	2-9-0		
City:O&	atland, CA.		Sampl	er: <u> </u>		
Weil ID	mw-4	Well	Condition:	0.16	 	
Well Diameter	2 in	-	carbon 6	Amount B		(cel.)
Total Depth	24.65	Volu	ness:		8 4"	= 0.66
Depth to Water	6.14 n		or (VF)	6* = 1.50	1.2" = 5.80	
	x	VF _0.17	_315 x 3 (case v	rolume) = Estimated P	Purge Volume:	9. 5 losi)
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundfos Other:		Sampling Equipment:	Disposable B Bailer Pressure Bail Grab Sample Other:	er	y
Starting Time: Sampling Time: Purging Flow Ra Did well de-wate	10:06 10:35 te:	Am v		, 11	Odor: 100	
10:15	Volume pH (gal.) 3 748 7.17 9. 7.32	9.	uctivity N Temper os/cm 7 P P P P P P P P P P P P P P P P P P	(mg/L)	ORP (mV)	Alkalinity (ppm)
SAMPLE ID		LABOR REFRIG.	ATORY INFORMA	TION LABORATORY	ANAL	YSES
MW-4	3 VOA	Y Y	H CL	ડે છે.	TPHC . BTG	
00141	<u></u>	L				
COMMENTS: .						
		•				

Client/ Facility # <u>46</u> 2	5		Job#:	180255		
	70 Fruitvale	Ave.	Date:	2-9-0		
	Floud CA.			er: <u> </u>		
Well ID	UST Observati		Condition:	0.10		
Well Diameter	in		carbon 🤣	Amount B	110	(oal.)
Total Depth	<u> </u>	Volum	ness:			
Depth to Water	G14 +		r (VF)	6" = 1.50	12" = 5.80	
	x	VF 0.17 .	X 3 (case v	olume) = Estimated P	urge Volume:	(gal.)
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundfos Other:	_	Sampling Equipment:	Disposable Bailer Pressure Bail Grab Sample Other:	er	,
Starting Time: Sampling Time: Purging Flow Rat Did well de-wate	te:	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Water Color:C Sediment Descript	ion: done Volum	Odor: Mers	(Qal.)
Time	Volume pH (gal.)	Condu µmh	activity ~ Temperos/cm ~	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
	eq =			$\neq =$		
			/			
SAMPLE ID	(#) - CONTAINER	LABOR	ATORY INFORMA	TION LABORATORY /	ANALYS	ES
mw-	3 VOA	Y	H CL	Seq.V	TPHC BTEX	MTSE
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COMMENTS:	MCON					



Relinquished By (Signature)

Relinquiched By (Signature)

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

Contact (Name) Mr. David De Witt
(Phone) (925) 277-2384
Laboratory Name Sequoia Analytical
Laboratory Release Number
Samples Collected by (Name) DEADENIAN
Collection Date: 2-9-01
Signature 5 COMP

5 Days

10 Days

As Contracted

Date/Time

Date/Time

Organization

San Partico, Com-			roject co	ירון לסטלווי ימ'	hone) (92	5) 551-75	55.(Fax	Number	1(925)551	-78 <u>98</u>	si	gnature .	7	ct	$-\infty$	<u> </u>							
	T		78	V.	ilone) <u>.</u>					,	<u></u>		Analyse	• To Be	Perform	ned					DO NOT BILL TB-LB ANALYSIS			
Somple Number	Lab Sample Number	Number of Containers	Matrix S = Soll A = Air W = Water C = Chartool	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	load (Yes or No)	TPH Gat BTEX WANTSE (\$016) (\$020)	TPH Disect (8015)	Off and Greate (5520)	Purpeable Holocarbons (8010)	Purgeable Aromadas (8020)	Purgeoble Organics (8240)	Extractable Organics (8270)	Metale C4,C2-Pb,Zn,Mi (CAP or AA)	YOC> 64 8240	SVOCS 648270	Total		Run 8260 - 6 Oxy's on ALL 8020 Mibe hits. +				
TB-LB	OIA	VOA	W	G-	~	Het	Υ	1		<u> </u>											7 0200.			
mw-1	0-A60	vot	,	,	11:56	,	1	1	<u> </u>	ļ			<u> </u>											
MW-2	102A-C	واسم ع	,	,	12:30	,	/	\leq		_			 						┟╌╌┨					
ww-3	OUA-I	No.A	,	,	11115	/	/	14	<u></u>	\	<u> </u>				 	<u> </u>	<u> </u>	\ <u> </u>		<u> </u>				
mw-4	OSAC	¥04	/ .	1	10:35	/	V	1~	<u> </u>	 - -	 		 -	 -	 		 -	 -						
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Received By (Signature)

Miko Gsim

Realeved For Laboratory By (Signature)

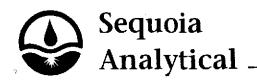
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Date/Time



6 March, 2001

Deanna L. Harding Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Dublin, CA 94568

RE: Tosco Sequoia Report W102326

Enclosed are the results of analyses for samples received by the laboratory on 12-Feb-01 16:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Dimple Sharma For Charlie Westwater

Project Manager

CA ELAP Certificate #1271



404 N. Wiget Lane Walnut Creek, CA 94598 (925) 988-9600 FAX (925) 988-9673 www.sequoialabs.com

Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Dublin CA, 94568

Project: Tosco

Project Number: Tosco # 4625

Project Manager: Deanna L. Harding

Reported: 06-Mar-01 14:05

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-LB	W102326-01	Water	09-Feb-01 00:00	12-Feb-01 16:45
MW-1	W102326-02	Water	09-Feb-01 11:56	12-Feb-01 16:45
MW-2	W102326-03	Water	09-Feb-01 12:30	12-Feb-01 16:45
MW-3	W102326-04	Water	09-Feb-01 11:15	12-Feb-01 16:45
MW-4	W102326-05	Water	09-Feb-01 10:35	12-Feb-01 16:45

Dimple Sharma For Charlie Westwater, Project Manager

6747 Sierra Court Suite J Dublin CA, 94568 Project: Tosco

Project Number: Tosco # 4625 Project Manager: Deanna L. Harding Reported:

06-Mar-01 14:05

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT Sequoia Analytical - Walnut Creek

						•			
Analyte	Result	eporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TB-LB (W102326-01) Water	Sampled: 09-Feb-01 00:00	Receive	d: 12-Fel	-01 16:45					
Purgeable Hydrocarbons	ND	50	ug/l	1	1B16002	16-Feb-01	16-Feb-01	EPA 8015M/8020	
Benzene	ND	0.50	**	**	н	**	11	н	
Toluene	ND	0.50		"	rr .	f 1	11		CC-3
Ethylbenzene	ND	0.50	n	11	**	n	11	••	
Xylenes (total)	ND	0.50	"	"	**	н	**	m	CC-3
Methyl tert-butyl ether	ND	2.5	**	**	**	11	**	**	CC-3
Surrogate: a,a,a-Trifluorotolue	ne	97.7%	70-	130	"	н	rt	"	
MW-1 (W102326-02) Water	Sampled: 09-Feb-01 11:56	Receive	d: 12-Feb	-01 16:45					
Purgeable Hydrocarbons	ND	50	ug/l	1	1B16002	16-Feb-01	16-Feb-01	EPA 8015M/8020	
Benzene	ND	0.50	н	н	"	**	H	•	
Toluene	ND	0.50	н	n	Ħ	11	"	#	CC-3
Ethylbenzene	ND	0.50	H	н	**	**	*	117	
Xylenes (total)	ND	0.50	н	H	"	H	н	**	CC-3
Methyl tert-butyl ether	9.0	2.5	n	"		n	H	77	CC-3
Surrogate: a,a,a-Trifluorotolue	ne	97.3 %	70-	130	"	"	"	"	
MW-2 (W102326-03) Water	Sampled: 09-Feb-01 12:30	Receive	d: 12-Feb	-01 16:45					
Purgeable Hydrocarbons	ND	50	ug/l	1	1B16002	16-Feb-01	16-Feb-01	EPA 8015M/8020	
Benzene	3.1	0.50	**	•	11	#	н	**	CC-3
Toluene	ND	0.50	*	**	н	**		•	CC-3
Ethylbenzene	0.52	0.50	11	77	н		10	**	
Xylenes (total)	1.1	0.50	•	"	H	u	n	#	CC-3
Methyl tert-butyl ether	ND	2.5	**	"	"	•	**	**	CC-3
Surrogate: a,a,a-Trifluorotolue	ne	103 %	70-	130	**	11	"	н	



6747 Sierra Court Suite J Dublin CA, 94568 Project: Tosco

Project Number: Tosco # 4625 Project Manager: Deanna L. Harding Reported: 06-Mar-01 14:05

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT Sequoia Analytical - Walnut Creek

Analyte	R Result	eporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (W102326-04) Water	Sampled: 09-Feb-01 11:15	Receive	d: 12-Feb	-01 16:45					
Purgeable Hydrocarbons	ND	50	ug/l	1	1B16001	16-Feb-01	16-Feb-01	EPA 8015M/8020	
Benzene	ND	0.50	n.	*	U	H	u	11	
Toluene	ND	0.50	н	**	н	H	н	17	
Ethylbenzene	ND	0.50	н	47	н	11	Ħ	**	
Xylenes (total)	ND	0.50	н	**	н	11	71	н	
Methyl tert-butyl ether	ND	2.5	R	**	H	**	**	**	CC-3
Surrogate: a,a,a-Trifluorotolue	me	105 %	70	130	н	Ħ	"	н	
MW-4 (W102326-05) Water	Sampled: 09-Feb-01 10:35	Receive	d: 12-Feb	-01 16:45					
Purgeable Hydrocarbons	ND	50	ug/l	1	1B16001	16-Feb-01	16-Feb-01	EPA 8015M/8020	
Benzene	ND	0.50		u	**	11	11	**	
Toluene	ND	0.50			br	tr.	ti .	11	
Ethylbenzene	ND	0.50		**	H	#	**	•	
Xylenes (total)	ND	0.50	"	71	tt	11	**	**	
Methyl tert-butyl ether	ND	2.5	W	11	n	u	н	Ħ	CC-3
Surrogate: a,a,a-Trifluorotolue	ne	106 %	70-	130	"	п	"	"	



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Gettler Ryan, Inc. - Dublin

6747 Sierra Court Suite J Dublin CA, 94568 Project: Tosco

Project Number: Tosco # 4625

Reported: 06-Mar-01 14:05

Project Manager: Deanna L. Harding

Diesel Hydrocarbons (C9-C24) by DHS LUFT

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (W102326-04) Water	Sampled: 09-Feb-01 11:1	5 Receive	d: 12-Fet	-01 16:45			· 		
Diesel Range Hydrocarbons	72	50	ug/l	1	1B23003	23-Feb-01	24-Feb-01	EPA 8015M	D-06
Surrogate: n-Pentacosane		82.0 %	50-	150	#	fr.	"	"	

Page 4 of 30





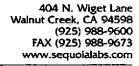
6747 Sierra Court Suite J Dublin CA, 94568 Project: Tosco

Project Number: Tosco # 4625 Project Manager: Deanna L. Harding Reported:

06-Mar-01 14:05

Total Metals by EPA 200 Series Methods Sequoia Analytical - Walnut Creek

Analyte	R Result	eporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (W102326-04) Water	Sampled: 09-Feb-01 11:15	Receive	d: 12-Fel	-01 16:45			<u>.</u>		
Chromium	0.038	0.010	mg/l	1	1B26017	26-Feb-01	06-Mar-01	EPA 200.7	





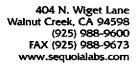
6747 Sierra Court Suite J Dublin CA, 94568 Project: Tosco

Project Number: Tosco # 4625 Project Manager: Deanna L. Harding Reported:

06-Mar-01 14:05

Volatile Organic Compounds by EPA Method 8260B Sequoia Analytical - Walnut Creek

Analyte	Result	eporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (W102326-02) Water	Sampled: 09-Feb-01 11:56	Receive	d: 12-Feb-	01 16:45					
Ethanol	ND	500	ug/l	1	1B15012	23-Feb-01	23-Feb-01	EPA 8260B	
tert-Butyl alcohol	ND	50	**	н	tı	H	9	**	
Methyl tert-butyl ether	9.0	2.0	11	H	п	hr	99	11	
Di-isopropyl ether	ND	2.0	ш	**	n	*	"	11	
Ethyl tert-butyl ether	ND	2.0	H	**	"	**	u	11	
tert-Amyl methyl ether	ND	2.0	11	*	ч	**	**	H	
1,2-Dichloroethane	ND	2.0	**		**	•	II	"	
Ethylene dibromide	ND	2.0	*	,,	71	**	11		
Surrogate: Dibromofluorometh	iane	101 %	50-1	50	"	n	"	"	
Surrogate: 1,2-Dichloroethane		88.6 %	50-1	50	"	#	"	"	





6747 Sierra Court Suite J Dublin CA, 94568 Project: Tosco

Project Number: Tosco # 4625 Project Manager: Deanna L. Harding Reported:

06-Mar-01 14:05

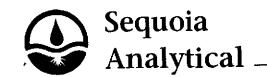
Volatile Organic Compounds by EPA Method 8240B Sequoia Analytical - Walnut Creek

Analyte	Result	teporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (W102326-04) Water	Sampled: 09-Feb-01 11:15	Receive	d: 12-Fel	b-01 16:45					
Chloromethane	ND	2.0	ug/l	1	1B14010	16-Feb-01	16-Feb-01	EPA 8240B	
Vinyl chloride	ND	2.0	h	Pt	**	H	11	n	
Bromomethane	ND	5.0	**	"	**	"	**	n	
Chloroethane	ND	2.0	**		**	н	•	n	
Trichlorofluoromethane	ND	2.0			n	n	н	P	
1,1-Dichloroethene	ND	2.0	. "	*1	11	**	11	11	
Acetone	ND	10	*	n	n	*	11	11	
Carbon disulfide	ND	2.0	**	Ħ	II	**	11	11	
Methylene chloride	ND	10	**	**	II .	n	Ħ		
Methyl tert-butyl ether	ND	2.0	#	**	н	**	11	11	
trans-1,2-Dichloroethene	ND	2.0	**	ti	Ħ	**	11	11	
Vinyl acetate	ND	5.0	11	"	P	**	11		
1,1-Dichloroethane	ND	2.0	**	**		11	n	н	
cis-1,2-Dichloroethene	ND	2.0	"	**	**	11	ti	"	
2-Butanone	ND	10	**	11	•	11	er e	n	
Chloroform	ND	2.0	**	11	"	**	+1	10	
1,1,1-Trichloroethane	ND	2.0	**	11	tr	11	11	m .	
Carbon tetrachloride	ND	2.0	**	11	m	11	Ħ	H	
Benzene	ND	2.0	11	Ħ	*	"	11	n	
1,2-Dichloroethane	ND	2.0	11	n	77	u	**	H	
Trichloroethene	ND	2.0	н	Ħ	**	11	11	H	
1,2-Dichloropropane	ND	2.0	н	n	**	11	11	. •	
Bromodichloromethane	ND	2.0	h	*	**	11	11	H	
2,2,5,5-Tetramethyltetrahydrofu	aran ND	2.0	H	11	**	en en	11	11	
cis-1,3-Dichloropropene	ND	2.0	H	H	**	11	11	14	
4-Methyl-2-pentanone	ND	10		н	. "	Ħ	11	11	
Toluene	ND	2.0	н		п	u	11	11	
trans-1,3-Dichloropropene	ND	5.0	"	"	11	11	**	**	
1,1,2-Trichloroethane	ND	2.0		11	u	11	**	**	
Tetrachloroethene	ND	2.0		**	#	#1	#	н .	
2-Hexanone	ND	10		n	u	11	***	u	
Dibromochloromethane	ND	2.0	11		"	11	**	H	
Chlorobenzene	ND	2.0		H		**	**	11	
Ethylbenzene	ND	2.0	11	**	11	11	**	**	
Total Xylenes	ND	2.0	**			••	••		
Styrene	ND	2.0		N		"	**	**	
Bromoform	ND	2.0		"		11	**	**	
1,1,2,2-Tetrachloroethane	ND	2.0			11	.,	•	4	

Sequoia Analytical - Walnut Creek







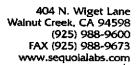
6747 Sierra Court Suite J Dublin CA, 94568 Project: Tosco

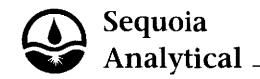
Project Number: Tosco # 4625 Project Manager: Deanna L. Harding Reported:

06-Mar-01 14:05

Volatile Organic Compounds by EPA Method 8240B Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (W102326-04) Water Sample	d: 09-Feb-01 11:15	Receive	i: 12-Feb-	01 16:45					
1,3-Dichlorobenzene	ND	2.0	ug/l	1	1B14010	16-Feb-01	16-Feb-01	EPA 8240B	
1,4-Dichlorobenzene	ND	2.0	n	**	**	n	11	w	
1,2-Dichlorobenzene	ND	2.0	11	"	**				
Surrogate: Dibromofluoromethane		113 %	50-1	150	п	"	п	tr	
Surrogate: 1,2-Dichloroethane-d4		113 %	50-1	150	"	"	"	#	
Surrogate: Toluene-d8		102 %	50-1	150	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		105 %	50-1	150	"	ff	H	"	





6747 Sierra Court Suite J Dublin CA, 94568 Project: Tosco

Project Number: Tosco # 4625

Project Manager: Deanna L. Harding

Reported: 06-Mar-01 14:05

Semivolatile Organic Compounds by EPA Method 8270C

Sequoia Analytical - Walnut Creek

Analyte	Result	eporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (W102326-04) Water	Sampled: 09-Feb-01 11:15	Received	l: 12-Fel	-01 16:45					
Acenaphthene	ND	5.0	ug/l	1	1B12017	15-Feb-01	28-Feb-01	EPA 8270B	
Acenaphthylene	ND	5.0	n	17	11	Ħ	11	u	
Aniline	ND	5.0	**	**	11	**	11	11	
Anthracene	ND	5.0	**	**	11	**	11	*1	
Benzoic acid	ND	10	п	=	11	**	*11	11	
Benzo (a) anthracene	ND	5.0	11	Ħ	11	•	41	**	
Benzo (b) fluoranthene	ND	5.0	**	**	11		#	**	
Benzo (k) fluoranthene	ND	5.0	•	**	11	e	**	t y	
Benzo (ghi) perylene	ND	5.0	77	**	91	n		19	
Benzo[a]pyrene	ND	5.0	**	**	11	*	**	ti.	
Benzyl alcohol	ND	5.0	•		41	Ħ	E 3	n	
Bis(2-chloroethoxy)methane	ND	5.0	**	**	#	Ħ	ţı	n	
Bis(2-chloroethyl)ether	ND	5.0	**	**	11	n	**	•	
Bis(2-chloroisopropyl)ether	ND	5.0	**	u	**	н	**	Ħ	
Bis(2-ethylhexyl)phthalate	ND	10	n	**	n	11		11	
1-Bromophenyl phenyl ether	ND	5.0	**	"	n	н	*	11	
Butyl benzyl phthalate	ND	50	**		**	11	п	n	
1-Chloroaniline	ND	25		"	п	11	11	**	
2-Chloronaphthalene	ND	5.0	**	H	•	11	11	**	
1-Chloro-3-methylphenol	ND	5.0	.,		11	"	н	#	
2-Chlorophenol	ND	5.0		h	11	**	**	"	
-Chlorophenyl phenyl ether	ND	5.0	n	H	"	"	н	н	
Chrysene	ND	5.0		н			••	11	
Dibenz (a,h) anthracene	ND	10	**	н		₩		H	
Dibenzofuran	ND	5.0		н	**	,	**	11	
Di-n-butyl phthalate	ND	10	H	tı	•	*		11	
,2-Dichlorobenzene	ND	5.0	n	19	n	#	n	u	
,3-Dichlorobenzene	ND	5.0	II	11	п	11	*	**	
,4-Dichlorobenzene	ND	10	**	**		H*	**		
3,3'-Dichlorobenzidine	ND	10	11	**		н	11		
,4-Dichlorophenol	ND	5.0	**	11	H	n	**	10	
Diethyl phthalate	ND	5.0	**	**	rr	n	••	n	
,4-Dimethylphenol	ND	5.0	**		H	11	"	Н	
Dimethyl phthalate	ND	5.0	"	n	u	11	#	*1	
,6-Dinitro-2-methylphenol	ND	10	••	. #		u		**	
,4-Dinitrophenol	ND	10	11	#	11	**	n	**	
,4-Dinitrotoluene	ND	10	77	**	91	Ħ	H	**	
,6-Dinitrotoluene	ND	10	**		41	_	**		

Sequoia Analytical - Walnut Creek





6747 Sierra Court Suite J Dublin CA, 94568 Project: Tosco

Project Number: Tosco # 4625 Project Manager: Deanna L. Harding **Reported:** 06-Mar-01 14:05

Semivolatile Organic Compounds by EPA Method 8270C Sequoia Analytical - Walnut Creek

Analyte	Result	eporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (W102326-04) Water	Sampled: 09-Feb-01 11:15	Received	l: 12-Fel	-01 16:45					
Di-n-octyl phthalate	ND	10	ug/l	1	1B12017	15-Feb-01	28-Feb-01	EPA 8270B	
Fluoranthene	ND	5.0	H	"	#	17	n		
Fluorene	ND	5.0	**	"	*	*1	•		
Hexachlorobenzene	ND	10	11	Ħ	**	*1	77		
Hexachlorobutadiene	ND	10	н	н	"	н	"	11	
Hexachlorocyclopentadiene	ND	10	*	n	н	**	lt .	H	
Hexachloroethane	ND	5.0	#	**	"	**			
Indeno (1,2,3-cd) pyrene	ND	10	**	"	*	H	*	77	
Isophorone	ND	5.0	11	II .	**	17		"	
2-Methylnaphthalene	ND	5.0	n	**	н	"	11	11 H	
2-Methylphenol	ND	5.0	,,	"	н	I†	11	n 	
4-Methylphenol	ND	5.0	**	"	41	11	II	ų	
Naphthalene	ND	5.0	*1	"	**	41	#	**	
2-Nitroaniline	ND	10	н	н	**	tr	"		
3-Nitroaniline	ND	10	"		11	H	u	"	
4-Nitroaniline	ND	20	**	"	"	н	11	II.	
Nitrobenzene	ND	5.0		II	n	11	H	**	
2-Nitrophenol	ND	5.0	11	11	71	11	n	Ħ	
4-Nitrophenol	ND	10		"	**	"	"	11	
N-Nitrosodimethylamine	ND	5.0	n	π	Ħ	**	"	11	
N-Nitrosodiphenylamine	ND	5.0	"	II		**	11	H	
N-Nitrosodi-n-propylamine	ND	5.0	11	н	77	91	*		
Pentachlorophenol	ND	10	H	"	**	**	7	•	
Phenanthrene	ND	5.0	#	н	н	87	11	"	
Phenol	ND	5.0	**	**	"	**	11	11	
Pyrene	ND	5.0	11	11	**	11	n	,,	
1,2,4-Trichlorobenzene	ND	5.0	Ħ	n	н	H	11	•	
2,4,5-Trichlorophenol	ND	10	"	. "	11		*	**	
2,4,6-Trichlorophenol	ND	10			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	*	"		
Surrogate: 2-Fluorophenol		44.5 %	2.	1-110	"	"	n	п	
Surrogate: Phenol-d6		26.1 %	1	0-110	"	"	u	rr	
Surrogate: Nitrobenzene-d5		71.5%	3.	5-114	n	"	W	"	
Surrogate: 2-Fluorobiphenyl		71.0 %		3-116	n	"	"	#	
Surrogate: 2,4,6-Tribromophe	nol	71.3 %		0-123	"	#	,,	,,	
Surrogate: p-Terphenyl-d14	***	51.7%		3-141	"	n	n	H	



6747 Sierra Court Suite J Dublin CA, 94568 Project: Tosco

Project Number: Tosco # 4625 Project Manager: Deanna L. Harding Reported:

06-Mar-01 14:05

Conventional Chemistry Parameters by APHA/EPA Methods

Sequoia Analytical - Walnut Creek

Analyte	Result	eporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (W102326-04) Water	Sampled: 09-Feb-01 11:15	Receive	d: 12-Fe	b-01 16:45					
TRPH	ND	5.0	mg/l	1	1B26011	26-Feb-01	02-Mar-01	SM 5520B/F	

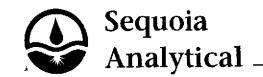
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The results in this report apply to the samples analyzed in accordance with the chain of

custody document. This analytical report must be reproduced in its entirety.

Page 11 of 30



6747 Sierra Court Suite J Dublin CA, 94568 Project: Tosco

Project Number: Tosco # 4625 Project Manager: Deanna L. Harding **Reported:** 06-Mar-01 14:05

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1B16001 - EPA 5030B [P/T]										
Blank (1B16001-BLK1)				Prepared	& Analyz	ed: 16-Fet	- 01			
Purgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50	** `							
Toluene	ND	0.50	11							
Ethylbenzene	ND	0.50	**							
Xylenes (total)	ND	0.50	11							
Methyl tert-butyl ether	ND	2.5	Þ							
Surrogate: a,a,a-Trifluorotoluene	30.0		. "	30.0		100	70-130			
LCS (1B16001-BS1)				Prepared	& Analyz	ed: 16-Fel	b-01			
Benzene	18.3	0.50	ug/l	20.0		91.5	70-130			
Toluene .	18.9	0.50	. "	20.0		94.5	70-130			
Ethylbenzene	19.6	0.50	11	20.0		98.0	70-130			
Xylenes (total)	58.2	0.50	11	60.0		97.0	70-130			
Surrogate: a,a,a-Trifluorotoluene	29.9		"	30.0		99.7	70-130			
Matrix Spike (1B16001-MS1)	So	urce: W1021	<i>77-</i> 07	Prepared	& Analyz	ed: 16-Fe	b-01			
Benzene	17.0	0.50	ug/l	20.0	ND	85.0	70-130			
Toluene	17.5	0.50	"	20.0	ND	87.5	70-130			
Ethylbenzene	18.2	0.50	11	20.0	ND	91.0	70-130			
Xylenes (total)	53.9	0.50	Ħ	60.0	ND	89.8	70-130			
Surrogate: a,a,a-Trifluorotoluene	30.2		"	30.0		101	70-130			
Matrix Spike Dup (1B16001-MSD1)	So	urce: W1021	177-07	Prepared	& Analyz	ed: 16-Fe	b-01			
Benzene	17.6	0.50	ug/l	20.0	ND	88.0	70-130	3.47	20	
Toluene	18.5	0.50	"	20.0	ND	92 .5	70-130	5.56	20	
Ethylbenzene	19.2	0.50	11	20.0	ND	96.0	70-130	5.35	20	
Xylenes (total)	57.3	0.50	H	60.0	ND	95.5	70-130	6.12	20	
Surrogate: a, a, a-Trifluorotoluene	31.4		"	30.0		105	70-130			

Page 12 of 30

Project: Tosco

6747 Sierra Court Suite J Dublin CA, 94568 Project Number: Tosco # 4625 Project Manager: Deanna L. Harding **Reported:** 06-Mar-01 14:05

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1B16002 - EPA 5030B [P/T]							•	•		
Blank (1B16002-BLK1)	-		· ·	Prepared	& Analyz	ed: 16-Fet	>-01			
Purgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50	11							
Toluene	ND	0.50	11							
Ethylbenzene	ND	0.50	**							
Xylenes (total)	ND	0.50	11							
Methyl tert-butyl ether	ND	2.5	Ħ							
Surrogate: a, a, a-Trifluorotoluene	33.3		ir	30.0		111	70-130			
LCS (1B16002-BS1)				Prepared	& Analyz	ed: 16-Fet	o-01			
Benzene	24.0	0.50	ug/l	20.0		120	70-130			
Toluene	20.1	0.50	17	20.0		101	70-130			
Ethylbenzene	22.0	0.50	Ħ	20.0		110	70-130			
Xylenes (total)	60.0	0.50	u u	60.0		100	70-130			
Surrogate: a,a,a-Trifluoratoluene	39.2		"	30.0		131	70-130			S-03
Matrix Spike (1B16002-MS1)	Sc	ource: W1022	01-19 RE	1Prepared	& Analyz	ed: 16-Feb	o-01			
Benzene	23.2	0.50	ug/l	20.0	ND	116	70-130			
Toluene	19.2	0.50	"	20.0	ND	96.0	70-130			
Ethylbenzene	20.6	0.50	n	20.0	ND	103	70-130			
Xylenes (total)	55.9	0.50	n	60.0	ND	93.2	70-130			
Surrogate: a,a,a-Trifluorotoluene	34.4		77	30.0	·	115	70-130		··	
Matrix Spike Dup (1B16002-MSD1)	Sc	ource: W1022	01-19 RE	1Prepared	& Analyz	ed: 16-Feb	>- 01			
Benzene	22.3	0.50	ug/l	20.0	ND	111	70-130	3.96	20	
Toluene	18.0	0.50	"	20.0	ND	90.0	70-130	6.45	20	
Ethylbenzene	18.7	0.50	11	20.0	ND	93.5	70-130	9.67	20	
Xylenes (total)	51.5	0.50	11	60.0	ND	85.8	70-130	8.19	20	
Surrogate: a,a,a-Trifluorotoluene	32.5		**	30.0		108	70-130			



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Gettler Ryan, Inc. - Dublin

6747 Sierra Court Suite J Dublin CA, 94568 Project: Tosco

Project Number: Tosco # 4625

Project Manager: Deanna L. Harding

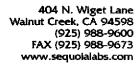
Reported:

06-Mar-01 14:05

Diesel Hydrocarbons (C9-C24) by DHS LUFT - Quality Control Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1B23003 - EPA 3510B										
Blank (1B23003-BLK1)	<u> </u>			Prepared	& Analyz	ed: 23-Feb	>-01			
Diesel Range Hydrocarbons	ND	50	ug/l				•			
Surrogate: n-Pentacosane	30.0	<u></u>	"	33.3	-	90.1	50-150	-		
LCS (1B23003-BS1)				Prepared	& Analyz	ed: 23-Fel	o-01			
Diesel Range Hydrocarbons	456	50	ug/l	500		91.2	60-140			
Surrogate: n-Pentacosane	31.7		"	33.3		95.2	50-150			
LCS Dup (1B23003-BSD1)				Prepared	& Analyz	ed: 23-Fel	b-01			
Diesel Range Hydrocarbons	490	50	ug/l	500		98.0	60-140	7.19	50	
Surrogate: n-Pentacosane	33.0		"	33.3		99.1	50-150			

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Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J

Dublin CA, 94568

Project: Tosco

Project Number: Tosco # 4625

Reported:

Project Manager: Deanna L. Harding

06-Mar-01 14:05

Total Metals by EPA 200 Series Methods - Quality Control Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1B26017 - 200.7										
Blank (1B26017-BLK1)				Prepared:	26-Feb-0	1 Analyze	d: 06-Mar	-01		
Chromium	ND	0,010	mg/l		•	-				
LCS (1B26017-BS1)				Prepared:	26-Feb-0	1 Analyze	:d: 06-Mar	-01		
Chromium	1.02	0.010	mg/l	1.00		102	80-120			
LCS Dup (1B26017-BSD1)				Prepared	26-Feb-0	1 Analyze	d: 06-Mar	-01		
Chromium	1.01	0.010	mg/l	1.00	· · · · · · · · · · · · · · · · · · ·	101	80-120	0.985	20	
Matrix Spike (1B26017-MS1)	So	urce: W1022	20-01	Prepared	26-Feb-0	l Analyze	ed: 06-Mar	-01		
Chromium	0.893	0.010	mg/l	1.00	ND	89.3	80-120			
Matrix Spike Dup (1B26017-MSD1)	So	urce: W1022	20-01	Prepared	26-Feb-0	l Analyze	ed: 06-Mar	-01		
Chromium	0.873	0.010	mg/l	1.00	ND	87.3	80-120	2.27	20	

6747 Sierra Court Suite J Dublin CA, 94568 Project: Tosco

Project Number: Tosco # 4625 Project Manager: Deanna L. Harding **Reported:** 06-Mar-01 14:05

Volatile Organic Compounds by EPA Method 8260B - Quality Control Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1B15012 - EPA 5030B [P/T]	-									
Blank (1B15012-BLK2)				Prepared	& Analyz	ed: 23-Fel	o-01			
Ethanol	ND	500	ug/l							
ert-Butyl alcohol	ND	50	•							
Methyl tert-butyl ether	ND	2.0	**							
Di-isopropyl ether	ND	2.0								
Ethyl tert-butyl ether	ND	2.0	n							
tert-Amyl methyl ether	ND	2.0	19							
1,2-Dichloroethane	ND	2.0	н							
Ethylene dibromide	ND	2.0	P							
Surrogate: Dibromofluoromethane	55.9		#	50.0		112	50-150			
Surrogate: 1,2-Dichloroethane-d4	52.1		"	50.0		104	50-150			
LCS (1B15012-BS2)				Prepared	& Analyz	ed: 23-Fel	b-01			
Methyl tert-butyl ether	49.9	2.0	ug/l	50.0		99.8	70-130			
Surrogate: Dibromofluoromethane	55.6		"	50.0		111	50-150			
Surrogate: 1,2-Dichloroethane-d4	50.5			50.0		101	50-150			
Matrix Spike (1B15012-MS1)	S	ource: W1023	356-03	Prepared	& Analyz	ed: 22-Fe	b-01			
Methyl tert-butyl ether	52.4	2.0	ug/l	50.0	ND	105	60-150			
Surrogate: Dibromofluoromethane	49.5		"	50.0	•	99.0	50-150	, .		
Surrogate: 1,2-Dichloroethane-d4	57.2		"	50,0		114	50-150			
Matrix Spike Dup (1B15012-MSD1)	S	ource: W1023	356-03	Prepared	& Analyz	ed: 22-Fe	b-01			
Methyl tert-butyl ether	56.3	2.0	ug/l	50,0	ND	113	60-150	7.18	25	
Surrogate: Dibromofluoromethane	50.6		н	50.0		101	50-150			
Surrogate: 1,2-Dichloroethane-d4	58.1		n	50.0		116	50-150			



6747 Sierra Court Suite J Dublin CA, 94568 Project: Tosco

Project Number: Tosco # 4625 Project Manager: Deanna L. Harding Reported:

06-Mar-01 14:05

Volatile Organic Compounds by EPA Method 8240B - Quality Control Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1B14010 - EPA 5030B [P/T]										
Blank (1B14010-BLK1)				Prepared:	16-Feb-0	l Analyze	d: 17-Feb-	01		
Chloromethane	ND	2.0	ug/l							
Vinyl chloride	ND	2.0	•							
Bromomethane	ND	5.0	"							
Chloroethane	ND	2.0	tı							
Frichlorofluoromethane	ND	2.0	н							
1,1-Dichloroethene	ND	2.0	h							
Acetone	ND	10	н							
Carbon disulfide	ND	2.0	n							
Methylene chloride	ND	10	*							
Methyl tert-butyl ether	ND	2.0	**							
rans-1,2-Dichloroethene	ND	2.0								
Vinyl acetate	ND	5.0	п							
,1-Dichloroethane	ND	2.0	Ħ							
is-1,2-Dichloroethene	ND	2.0	**							
-Butanone	ND	10	n							
Chloroform	ND	2.0	**							
, l, l-Trichloroethane	ND	2.0	u							
Carbon tetrachloride	ND	2.0	"							
Benzene	ND	2.0	**							
,2-Dichloroethane	ND	2.0	"							
Prichloroethene	ND	2.0	11							
,2-Dichloropropane	ND	2.0	н							
Bromodichloromethane	ND	2.0	п							
2,2,5,5-Tetramethyltetrahydrofuran	ND	2.0	h							
sis-1,3-Dichloropropene	ND	2.0	п							
l-Methyl-2-pentanone	ND	10	н							
Coluene	ND	2.0	п							
rans-1,3-Dichloropropene	ND	5.0	н							
,1,2-Trichloroethane	ND	2.0								
Tetrachloroethene	ND	2.0	**							
-Hexanone	ND	10								
Dibromochloromethane	ND	2.0								
Chlorobenzene	ND	2.0								
ithylbenzene	ND	2.0	Ħ							

Sequoia Analytical - Walnut Creek



5747 Sierra Court Suite J Dublin CA, 94568 Project: Tosco

Project Number: Tosco # 4625

Project Manager: Deanna L. Harding

Reported: 06-Mar-01 14:05

Volatile Organic Compounds by EPA Method 8240B - Quality Control Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
	Kesun	Limit	CINE							
Batch 1B14010 - EPA 5030B [P/T]										
Blank (1B14010-BLK1)				Prepared	16-Feb-0	1 Analyze	d: 17-Feb-	-01		
Total Xylenes	ND	2.0	ug/l							
Styrene	ND	2.0								
Bromoform	ND	2.0	,,							
1,1,2,2-Tetrachloroethane	ND	2.0	11							
1,3-Dichlorobenzene	ND	2.0	**							
1,4-Dichlorobenzene	ND	2.0	n							
1,2-Dichlorobenzene	ND	2.0	**							
Surrogate: Dibromofluoromethane	27.0		"	25.0	<u> </u>	108	50-150			
Surrogate: 1,2-Dichloroethane-d4	24.7		"	25.0		98.8	50-150			
Surrogate: Toluene-d8	24.7		"	25.0		98.8	50-150			
Surrogate: 4-Bromofluorobenzene	25.5		H	25.0		102	50-150	,		
LCS (1B14010-BS1)				Prepared	& Analyz	ed: 16-Fe	b-01			
1,1-Dichloroethene	22.5	2.0	ug/l	25.0		90.0	65-135			
Methyl tert-butyl ether	25.9	2.0	**	25.0		104	70-130			
Benzene	22.8	2.0	11	25.0		91.2	70-130			
Trichloroethene	23.0	2.0	"	25.0		92.0	70-130			
Toluene	23.4	2.0	**	25.0		93.6	70-130			
Chlorobenzene	24.0	2.0		25.0		96.0	70-130			
Surrogate: Dibromofluoromethane	25.3		#	25.0		101	50-150			
Surrogate: 1,2-Dichloroethane-d4	24.1		**	25.0		96.4	50-150			
Surrogate: Toluene-d8	24.8		"	25.0		99.2	50-150			
Surrogate: 4-Bromofluorobenzene	24.9		"	25,0		99.6	50-150			
Matrix Spike (1B14010-MS1)	S	ource: W1020	099-01	Prepared	& Analyz	zed: 16-Fe	b-01			
1,1-Dichloroethene	24.0	2.0	ug/I	25.0	ND	96.0	60-140			
Methyl tert-butyl ether	29.1	2.0	"	25.0	ND	116	60-140			
Benzene	24.8	2.0	**	25.0	ND	99.2	60-140			
Trichloroethene	24.1	2.0	**	25.0	ND	96.4	60-140			
Toluene	24.2	2.0	н	25.0	ND	96.8	60-140			
Chlorobenzene	23.6	2.0	n	25.0	ND	94.4	60-140			
Surrogate: Dibromofluoromethane	29.0	.174	- "	25.0		116	50-150			
Surrogate: 1,2-Dichloroethane-d4	28.5		"	25.0		114	50-150			
Surrogate: Toluene-d8	25.4		"	25.0		102	50-150			
Surrogate: 4-Bromofluorobenzene	26.5		"	25.0		106	50-150			

Sequoia Analytical - Walnut Creek



6747 Sierra Court Suite J

Dublin CA, 94568

Project: Tosco

Project Number: Tosco # 4625 Project Manager: Deanna L. Harding Reported:

06-Mar-01 14:05

Volatile Organic Compounds by EPA Method 8240B - Quality Control Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1B14010 - EPA 5030B [P/T]										
Matrix Spike Dup (1B14010-MSD1)	So	urce: W1020	99-01	Prepared	& Analyz	ed: 16-Fel	o-01			
1,1-Dichloroethene	26.9	2.0	ug/l	25.0	ND	108	60-140	11.4	25	
Methyl tert-butyl ether	33.3	2.0	**	25.0	ND	133	60-140	13.5	25	
Benzene	28.2	2.0	11	25.0	ND	113	60-140	12.8	25	
Trichloroethene	27.4	2.0	**	25.0	ND	110	60-140	12.8	25	
Toluene	27.6	2.0	•	25.0	ND	110	60-140	13.1	25	
Chlorobenzene	26.9	2.0	**	25.0	ND	108	60-140	13.1	25	
Surrogate: Dibromofluoromethane	28.6	······································	n	25.0		114	50-150			
Surrogate: 1,2-Dichloroethane-d4	28.0		"	25.0		112	50-150			
Surrogate: Toluene-d8	25.3		**	25.0		101	50-150			
Surrogate: 4-Bromofluorobenzene	26.3		n	25.0		105	50-150			

Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J

Dublin CA, 94568

Project: Tosco

Project Number: Tosco # 4625 Project Manager: Deanna L. Harding Reported:

06-Mar-01 14:05

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 1B12017 - EPA 3510B										
Blank (1B12017-BLK1)				Prepared:	12-Feb-0	Analyze	d: 16-Feb-	01		
Acenaphthene	ND	5.0	ug/l							
Acenaphthylene	ND	5.0	н							
Aniline	ND	5.0	**							
Anthracene	ND	5.0	T.							
Benzoic acid	ND	10	**							
Benzo (a) anthracene	ND	5.0	**							
Benzo (b) fluoranthene	ND	5.0	**							
Benzo (k) fluoranthene	ND	5.0	11							
Benzo (ghi) perylene	ND	5.0	11							
Benzo[a]pyrene	ND	5.0	*11							
Benzyl alcohol	ND	5.0	f I							
3is(2-chloroethoxy)methane	ND	5.0	11							
Bis(2-chloroethyl)ether	ND	5.0	11							
Bis(2-chloroisopropyl)ether	ND	5.0	11							
Bis(2-ethylhexyl)phthalate	ND	10	n							
l-Bromophenyl phenyl ether	ND	5.0	H							
Butyl benzyl phthalate	ND	50								
-Chloroaniline	ND	25	.,							
-Chloronaphthalene	ND	5.0	Ħ							
-Chloro-3-methylphenol	ND	5.0	77							
-Chlorophenol	ND	5.0	**							
-Chlorophenyl phenyl ether	ND	5.0	**							
Chrysene	ND	5.0	**							
Dibenz (a,h) anthracene	ND	10	n							
Dibenzofuran	ND	5.0	n							
Di-n-butyl phthalate	ND	10	\$1						•	
,2-Dichlorobenzene	ND	5.0	11							
,3-Dichlorobenzene	ND	5.0	u u							
,4-Dichlorobenzene	ND	10	11*							
,3'-Dichlorobenzidine	ND	10	**							
,4-Dichlorophenol	ND	5.0	11							
Diethyl phthalate	ND	5.0	,,							
,4-Dimethylphenol	ND	5.0	"							
Dimethyl phthalate	ND	5.0	н							

Sequoia Analytical - Walnut Creek





Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J

Dublin CA, 94568

Project: Tosco

Project Number: Tosco # 4625

Project Manager: Deanna L. Harding

Reported:

06-Mar-01 14:05

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 1B12017 - EPA 3510B						-				
Blank (1B12017-BLK1)				Prepared:	12-Feb-0	l Analyze	- d: 16 -Fe b-	01		
4,6-Dinitro-2-methylphenol	ND	10	ug/l					-		··· ·
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	11							
Fluorene	ND	5.0	11							
Hexachlorobenzene	ND	10	Ħ							
Hexachlorobutadiene	ND	10	H							
Hexachlorocyclopentadiene	ND	10	•							
Hexachloroethane	ND	5.0	н							
Indeno (1,2,3-cd) pyrene	ND	10	*			•				
Isophorone	ND	5.0	11							
2-Methylnaphthalene	ND	5.0	u							
2-Methylphenol	ND	5.0	11							
4-Methylphenol	ND	5.0	11							
Naphthalene	ND	5.0	п							
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	*1							
N-Nitrosodi-n-propylamine	ND	5.0	*1							
Pentachiorophenol	ND	10	#1							
Phenanthrene	ND	5.0	11							
Phenol	ND	5.0	Ħ							
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	69.9			150		46.6	21-110		 	

Sequoia Analytical - Walnut Creek





6747 Sierra Court Suite J Dublin CA, 94568 Project: Tosco

Project Number: Tosco # 4625 Project Manager: Deanna L. Harding Reported:

06-Mar-01 14:05

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 1B12017 - EPA 3510B			·							
Blank (1B12017-BLK1)				Prepared:	12-Feb-0	l Analyze	d: 16-Feb-	-01		
Surrogate: Phenol-d6	42.4		ug/l	150		28.3	10-110		_	
Surrogate: Nitrobenzene-d5	79.3		"	100		79.3	35-114			
Surrogate: 2-Fluorobiphenyl	78.9			100		78.9	43-116			
Surrogate: 2,4,6-Tribromophenol	124		. #	150		82.7	10-123			
Surrogate: p-Terphenyl-d14	77.2		"	100		77.2	33-141			
Blank (1B12017-BLK2)				Prepared:	15-Feb-0	l Analyze	d: 16-Feb-	-01		
Acenaphthene	ND	5.0	ug/l	•						
Acenaphthylene	ND	5.0	н							
Aniline	ND	5.0	Ħ		•				•	
Anthracene	ND	5.0	**							
Benzoic acid	ND	10								
Benzo (a) anthracene	ND	5,0	77							
Benzo (b) fluoranthene	ND	5.0	31							
Benzo (k) fluoranthene	ND	5,0	*							
Benzo (ghi) perylene	ND	5.0	и							
Benzo[a]pyrene	ND	5.0	"							
Benzyl alcohol	ND	5.0	Ħ							
Bis(2-chloroethoxy)methane	ND	5.0	11							
Bis(2-chloroethyl)ether	ND	5.0	н							
Bis(2-chloroisopropyl)ether	ND	5.0	"							
Bis(2-ethylhexyl)phthalate	ND	10	"							
4-Bromophenyl phenyl ether	ND	5.0	0							
Butyl benzyl phthalate	ND	50	**							
4-Chloroaniline	ND	25	*							
2-Chloronaphthalene	ND	5.0	11							
4-Chloro-3-methylphenol	ND	5.0	•							
2-Chlorophenol	ND	5.0	"							
4-Chlorophenyl phenyl ether	ND	5.0	"							
Chrysene	ND	5.0	11							
Dibenz (a,h) anthracene	ND	10	п							
Dibenzofuran	ND	5.0	п							
Di-n-butyl phthalate	ND	10	ti							
1,2-Dichlorobenzene	ND	5.0	Ħ							
1,3-Dichlorobenzene	ND	5.0								

Sequoia Analytical - Walnut Creek





Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J

Dublin CA, 94568

Project: Tosco

Project Number: Tosco # 4625

Project Manager: Deanna L. Harding

Reported: 06-Mar-01 14:05

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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 1B12017 - EPA 3510B										
Blank (1B12017-BLK2)				Prepared:	15-Feb-0	l Analyze	d: 16-Feb-	01		
1,4-Dichlorobenzene	ND	10	ug/l							
3,3'-Dichlorobenzidine	ND	10	**							
2,4-Dichlorophenol	ND	5.0	10							
Diethyl phthalate	ND	5.0	11							
2,4-Dimethylphenol	ND	5.0	**							
Dimethyl phthalate	ND	5,0	и							
4,6-Dinitro-2-methylphenol	ND	10	H							
2,4-Dinitrophenol	ND	10	**							
2,4-Dinitrotoluene	ND	10	77							
2,6-Dinitrotoluene	ND	10	n							
Di-n-octyl phthalate	ND	10	11							
Fluoranthene	ND	5.0	**							
Fluorene	ND	5.0	"							
Hexachlorobenzene	ND	10	97							
Hexachlorobutadiene	ND	10	**							
Hexachlorocyclopentadiene	ND	10	"							
Hexachloroethane	ND	5.0	н							
Indeno (1,2,3-cd) pyrene	ND	10	"							
Isophorone	ND	5.0	•							
2-Methylnaphthalene	ND	5.0	77							
2-Methylphenol	ND	5.0	**							
4-Methylphenol	ND	5.0	49							
Naphthalene	ND	5.0	n							
2-Nitroaniline	ND	10	H						٠	
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	20	•							
Nitrobenzene	ND	5.0	**							
2-Nitrophenol	· ND	5.0							•	
4-Nitrophenol	ND	10	11							
N-Nitrosodimethylamine	ND	5.0	н							
N-Nitrosodiphenylamine	ND	5.0	**							
N-Nitrosodi-n-propylamine	ND	5.0	**							
Pentachlorophenol	ND	10	**							
Phenanthrene	ND	5.0	**							

Sequoia Analytical - Walnut Creek



6747 Sierra Court Suite J Dublin CA, 94568 Project: Tosco

Project Number: Tosco # 4625 Project Manager: Deanna L. Harding Reported:

06-Mar-01 14:05

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 1B12017 - EPA 3510B											
Blank (1B12017-BLK2)	Prepared: 15-Feb-01 Analyzed: 16-Feb-01										
Phenol	ND	5.0	ug/l								
Pyrene	ND	5.0	W								
1,2,4-Trichlorobenzene	ND	5.0	Ð								
2,4,5-Trichlorophenol	ND	10	11								
2,4,6-Trichlorophenol	ND	10	**								
Surrogate: 2-Fluorophenol	76.2		"	150		50.8	21-110	-			
Surrogate: Phenol-d6	48.8		"	150		32.5	10-110				
Surrogate: Nitrobenzene-d5	80.1		"	100		80.1	35-114				
Surrogate: 2-Fluorobiphenyl	72.4		"	100		72.4	43-116				
Surrogate: 2,4,6-Tribromophenol	117		"	150		78.0	10-123				
Surrogate: p-Terphenyl-dl4	81.7		"	100		81.7	33-141				
Blank (1B12017-BLK3)				Prepared:	15-Feb-0	l Analyze	d: 16-Feb-	-01			
Acenaphthene	ND	10	ug/l								
Acenaphthylene	ND	10	**								
Aniline	ND	10	**								
Anthracene	ND	10	н			-					
Benzoic acid	ND	20	"								
Benzo (a) anthracene	ND	10	"								
Benzo (b) fluoranthene	ND	10									
Benzo (k) fluoranthene	ND	10									
Benzo (ghi) perylene	ND	10	11								
Велго[а]ругеле	ND	10	•								
Benzyl alcohol	ND	10	**								
Bis(2-chloroethoxy)methane	ND	10	**								
Bis(2-chloroethyl)ether	ND	10	11						,		
Bis(2-chloroisopropyl)ether	ND	10	н								
Bis(2-ethylhexyl)phthalate	ND	20	**								
4-Bromophenyl phenyl ether	ND	10	**								
Butyl benzyl phthalate	ND	100									
4-Chloroaniline	ND	50									
2-Chloronaphthalene	ND	10	π								
I-Chloro-3-methylphenol	ND	10	**								
2-Chlorophenol	ND	10	11								
4-Chlorophenyl phenyl ether	ND	10									

Sequoia Analytical - Walnut Creek

Notes

RPD

Limit



Gettler Ryan, Inc. - Dublin

6747 Sierra Court Suite J Dublin CA, 94568

Analyte

Project: Tosco

Project Number: Tosco # 4625 Project Manager: Deanna L. Harding

Reported: 06-Mar-01 14:05

%REC

Limits

RPD

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control Sequoia Analytical - Walnut Creek

Units

Reporting

Result

ND

ND

ND

ND

ND

ND

ND

ND

ND

10 10

10

10

20

20

40

10

10

Limit

Spike

Level

Source

Result

%REC

Batch 1B12017 - EPA 3510B					
Blank (1B12017-BLK3)		· · ·		Prepared: 15-Feb-01 Analyzed: 16-Feb-01	
Chrysene	ND	10	ug/l		
Dibenz (a,h) anthracene	ND	. 20	П		
Dibenzofuran	ND	10	**		
Di-n-butyl phthalate	ND	20	t+		
1,2-Dichlorobenzene	ND	10	11		
1,3-Dichlorobenzene	ND	10	**		
1,4-Dichlorobenzene	ND	20	•		
3,3'-Dichlorobenzidine	ND	20	**		
2,4-Dichlorophenol	ND	10	•		
Diethyl phthalate	ND	10	*1		
2,4-Dimethylphenol	ND	10	"		
Dimethyl phthalate	ND	10	**		
4,6-Dinitro-2-methylphenol	ND	20	11		
2,4-Dinitrophenol	ND	20	**		
2,4-Dinitrotoluene	ND	20	lt.		
2,6-Dinitrotoluene	ND	20	••		
Di-n-octyl phthalate	ND	20	71		
Fluoranthene	ND	10	11		
Fluorene	ND	10	Ħ		
Hexachlorobenzene	ND	20	**		
Hexachlorobutadiene	ND	20	n		
Hexachlorocyclopentadiene	ND	20	**		
Hexachloroethane	ND	10	"		
Indeno (1,2,3-cd) pyrene	ND	20	*1		
Isophorone	ND	10	11		

Sequoia Analytical - Walnut Creek

2-Methylnaphthalene

2-Methylphenol

4-Methylphenol

Naphthalene

2-Nitroaniline

3-Nitroaniline

4-Nitroaniline

Nitrobenzene

2-Nitrophenol



Gettler Ryan, Inc. - Dublin 8747 Sierra Court Suite J Project: Tosco

Project Number: Tosco # 4625

Reported: 06-Mar-01 14:05

Dublin CA, 94568

Project Manager: Deanna L. Harding

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 1B12017 - EPA 3510B							_					
Blank (1B12017-BLK3)	Prepared: 15-Feb-01 Analyzed: 16-Feb-01											
4-Nitrophenol	ND	20	ug/l									
N-Nitrosodimethylamine	ND	10	*									
N-Nitrosodiphenylamine	ND	10	v									
N-Nitrosodi-n-propylamine	ND	10	"									
Pentachlorophenol	ND	20	п									
Phenanthrene	ND	10	Ħ									
Phenol	ND	10										
Pyrene	ND	10	77									
1,2,4-Trichlorobenzene	ND	10	**									
2,4,5-Trichlorophenol	ND	20	11									
2,4,6-Trichlorophenol	ND	20	Ħ									
Surrogate: 2-Fluorophenol	181		н	300		60.3	21-110					
Surrogate: Phenol-d6	133		*	300		44.3	10-110					
Surrogate: Nitrobenzene-d5	167		"	200		83.5	35-114					
Surrogate: 2-Fluorobiphenyl	170		*	200		<i>85.0</i>	43-116					
Surrogate: 2,4,6-Tribromophenol	240		#	300		80.0	10-123					
Surrogate: p-Terphenyl-d14	151		"	200		75.5	33-141					
LCS (1B12017-BS1)					: 12-Feb-0	l Analyze	d: 16-Feb-	-01				
Acenaphthene	78.9	5.0	ug/l	100		78.9	46-118					
4-Chloro-3-methylphenol	125	5.0		150		83.3	23-97					
2-Chlorophenol	112	5.0	11	150		74.7	27-123					
1,4-Dichlorobenzene	70.8	10	н	100		70.8	36-97					
2,4-Dinitrotoluene	79.2	10		100		79.2	24-96					
4-Nitrophenol	53.9	10	u	150		35.9	10-80					
N-Nitrosodi-n-propylamine	89.3	5.0	77	100		89.3	41-116					
Pentachlorophenol	122	10	"	150		81.3	9-103					
Phenol	56.8	5.0	51	150		37.9	12-110					
Ругепе	75.8	5.0	Ħ	100		75.8	26-127					
1,2,4-Trichlorobenzene	79.3	5.0		100		79.3	39-98		÷			
Surrogate: 2-Fluorophenol	89.7	.,		150		59.8	21-110					
Surrogate: Phenol-d6	57.5		"	150		38.3	10-110					
Surrogate: Nitrobenzene-d5	89.4		"	100		89.4	35-114					
Surrogate: 2-Fluorobiphenyl	84.8		11	100		84.8	43-116					
Surrogate: 2,4,6-Tribromophenol	133		"	150		88.7	10-123					

Sequoia Analytical - Walnut Creek



6747 Sierra Court Suite J **Dublin CA**, 94568

Project: Tosco

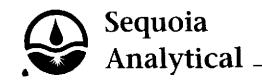
Project Number: Tosco # 4625 Project Manager: Deanna L. Harding

Reported: 06-Mar-01 14:05

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 1B12017 - EPA 3510B												
LCS (1B12017-BS1)	Prepared: 12-Feb-01 Analyzed: 16-Feb-01											
Surrogate: p-Terphenyl-d14	79.3		ug/l	100		79.3	33-141		-			
LCS (1B12017-BS2)				Prepared:	15-Feb-0	l Analyze	d: 16-Feb-	01				
Acenaphthene	76.3	5.0	ug/l	100		76.3	46-118					
4-Chloro-3-methylphenol	126	5.0		150		84.0	23-97					
2-Chlorophenol	116	5.0		150		77.3	27-123					
1,4-Dichlorobenzene	58.2	10	77	100		58.2	36-97					
2,4-Dinitrotoluene	79 .0	10	"	100		79.0	24-96					
4-Nitrophenol	45.5	10	11	150		30.3	10-80					
N-Nitrosodi-n-propylamine	95.3	5.0	P	100		95.3	41-116					
Pentachlorophenol	120	10	u	150		80.0	9-103					
Phenol	52.8	5.0	#	150		35.2	12-110					
Pyrene	73.7	5.0	•	100		73.7	26-127					
1,2,4-Trichlorobenzene	66.1	5.0	**	100		66.1	39-98					
Surrogate: 2-Fluorophenol	82.3		"	150		54.9	21-110					
Surrogate: Phenol-d6	51.6		Ħ	150		34.4	10-110					
Surrogate: Nitrobenzene-d5	<i>85.5</i>		"	100		85.5	35-114					
Surrogate: 2-Fluorobiphenyl	75.8		*	100		<i>75.8</i>	43-116					
Surrogate: 2,4,6-Tribromophenol	132		"	150		88.0	10-123					
Surrogate: p-Terphenyl-dl4	76.1		#	100		76.1	33-141					
LCS Dup (1B12017-BSD1)				Prepared	: 12-Feb-0	1 Analyz	ed: 16-Feb	-01	_			
Acenaphthene	80,6	5.0	ug/l	100		80.6	46-118	2.13	30			
4-Chloro-3-methylphenol	124	5.0		150		82.7	23-97	0.803	30			
2-Chlorophenol	115	5.0	**	150		76.7	27-123	2.64	30			
1,4-Dichlorobenzene	76.2	10	**	100		76.2	36-97	7.35	30			
2,4-Dinitrotoluene	80.2	10	11	100		80.2	24-96	1.25	30			
4-Nitrophenol	43.8	10	11	150		29.2	10-80	20.7	30			
N-Nitrosodi-n-propylamine	90,8	5.0	11	100		90.8	41-116	1.67	30			
Pentachlorophenol	126	10	Ħ	150		84.0	9-103	3.23	30			
Phenol	47.7	5.0	n	150		31.8	12-110	17.4	30			
Pyrene	80.0	5.0		100		80.0	26-127	5.39	30			
1,2,4-Trichlorobenzene	82.9	5.0	**	100		82.9	39-98	4.44	30			
Surrogate: 2-Fluorophenol	80.5			150		53.7	21-110					
Surrogate: Phenol-d6	47.3		"	150		31.5	10-110					

Sequoia Analytical - Walnut Creek



404 N. Wiget Lane Walnut Creek, CA 94598 (925) 988-9600 FAX (925) 988-9673 www.sequoialabs.com

Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J

Dublin CA, 94568

Project: Tosco

Project Number: Tosco # 4625 Project Manager: Deanna L. Harding Reported:

06-Mar-01 14:05

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 1B12017 - EPA 3510B										
LCS Dup (1B12017-BSD1)	-			Prepared:	12-Feb-0	l Analyze	d: 16-Feb-	01		
Surrogate: Nitrobenzene-d5	91.5	·	ug/l	100		91.5	35-114			
Surrogate: 2-Fluorobiphenyl	86.8		u	100		86.8	43-116			
Surrogate: 2,4,6-Tribromophenol	131		"	150		87.3	10-123			
Surrogate: p-Terphenyl-dl4	80.3		#	100		80.3	33-141			



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Gettler Ryan, Inc. - Dublin

6747 Sierra Court Suite J Dublin CA, 94568 Project: Tosco

Project Number: Tosco # 4625

Reported: 06-Mar-01 14:05

Project Manager: Deanna L. Harding

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1B26011 - EPA 3510B										
Blank (1B26011-BLK1)	<u> </u>			Prepared	26-Feb-0	l Analyze	d: 02-Mar	-01		
ТКРН	ND	5.0	mg/l							
LCS (1B26011-BS1)				Prepared	26-Feb-0	1 Analyze	:d: 02-Mar	-01		
TRPH	81.6	5.0	mg/l	100		81.6	70-130			
LCS Dup (1B26011-BSD1)				Prepared	: 26-Feb-0	1 Analyze	d: 02-Mar	-01		
TRPH	82.2	5.0	mg/l	100		82.2	70-130	0.733	30	



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Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Dublin CA, 94568

Project: Tosco

Project Number: Tosco # 4625 Project Manager: Deanna L. Harding Reported: 06-Mar-01 14:05

Notes and Definitions

CC-3 Continuing Calibration indicates that the quantitative result for this analyte includes a greater than 15% degree of uncertainty. The value as reported is within method acceptance.

D-06 Discrete peaks.

S-03 The surrogate recovery for this sample is outside of established control limits. Review of associated QC indicates the recovery for this surrogate does not represent an out-of-control condition.

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