December 29, 2000 G-R #180255

TO:

Mr. David B. De Witt

Tosco Marketing Company

2000 Crow Canyon Place, Suite 400

San Ramon, California 94583

CC:

Mr. David Vossler

Gettler-Ryan Inc.

Petaluma, California

FROM:

Deanna L. Harding

Project Coordinator

Gettler-Ryan Inc.

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

Tosco (76) SS #4625

3070 Fruitvale Avenue

Oakland, California

#### WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	December 11, 2000	Groundwater Monitoring and Sampling Report Fourth Quarter - Event of October 29, 2000

#### **COMMENTS:**

This report is being sent to you for your review/comment, prior to being distributed on your behalf. If no comments are received by *January 11, 2001*, this report will be distributed to the following:

#### Enclosure

ce: Mr. Don Hwang, Alamsta County Health Care Services, 1131 Harber Bay Purkway, Value Care Services, 1131 Harber Bay Purkway, 1

trans/4625-DBD

December 11, 2000 G-R Job #180255

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

RE: Fourth Quarter 2000 Groundwater Monitoring & Sampling Report

Tosco (76) Service Station #4625

3070 Fruitvale Avenue Oakland, California

Dear Mr. De Witt:

This report documents the quarterly groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R). On October 29, 2000, field personnel monitored and sampled four wells (MW-1 through MW-4) and monitored the UST Observation Well at the above referenced site.

Static groundwater levels were measured and all wells were checked for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were 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.

No. 5577

Sincerely,

Deanna L. Harding

Project Coordinator

Stephen J. Carter

Senior Geologist, R.G. No. 5577

Figure 1: Potentiometric Map

Figure 2: Concentration Map
Table 1: Groundwater Monitoring Data and Analytical Results

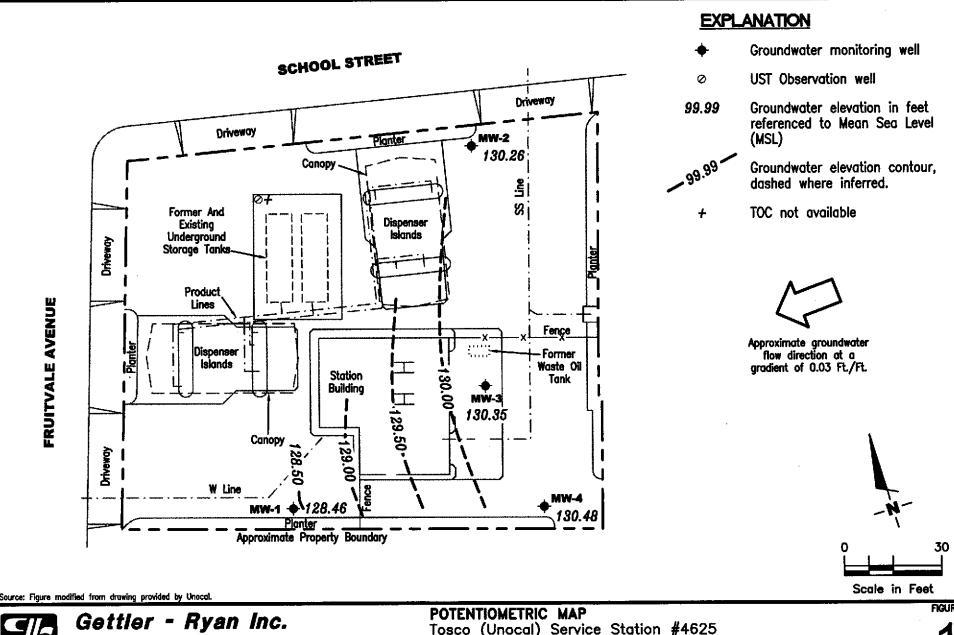
Table 2: Groundwater Analytical Results

Table 3: Groundwater Analytical Results – Oxygenate Compounds Attachments: Standard Operating Procedure - Groundwater Sampling

Field Data Sheets

Chain of Custody Document and Laboratory Analytical Reports

4625.qml



6747 Sierra Ct., Suite J Dublin, CA 94568

(925) 551-7555

Tosco (Unocal) Service Station #4625 3070 Fruitvale Avenue

Oakland, California

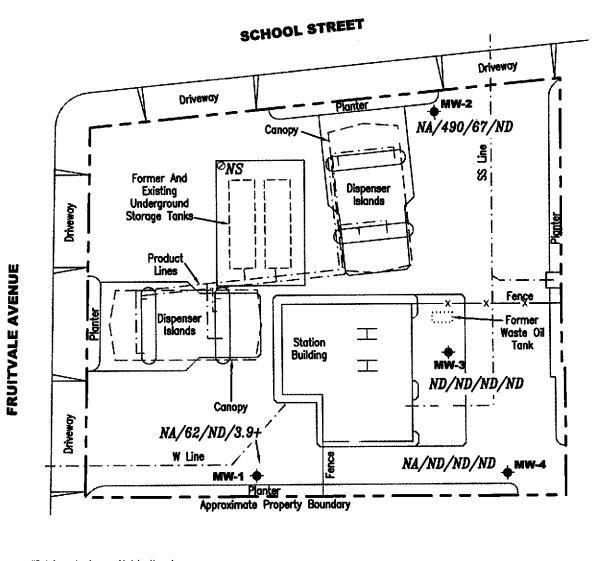
PROJECT NUMBER REVIEWED BY 180255

CATE October 29, 2000

REVISED DATE

FIGURE

FILE NAME: P:\ENVIRO\TOSCO\4625\Q00-4625.DWG | Layout Tab: Pot4



**EXPLANATION** 

Groundwater monitoring well

∅ UST Observation well

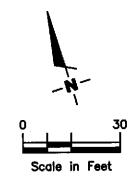
A/B/C/D TPH(D) (Total Petroleum Hydrocarbons as Diesel)/TPH(G) (Total Petroleum Hydrocarbons as Gasoline)/Benzene/MTBE concentrations in ppb

ND Not Detected

NA Not Analyzed

+ MTBE by EPA Method 8260

NS Not Sampled



Source: Figure modified from drawing provided by Unocal.



Gettler - Ryan Inc.

REVIEWED BY

6747 Sierra Ct., Suite J Dublin, CA 94568

(925) 551-7555

CONCENTRATION MAP

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

R

PROJECT NUMBER 180255

October 29, 2000

DATE

REVISED DATE

FILE NAME: P:\ENVIRO\TOSCO\4625\Q00-4625.DWG | Layout Tab: Con4

FIGURE

Table 1
Groundwater Monitoring Data and Analytical Results

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

WELL ID/	DATE	DTW	S.L	GWE	TPH(D)	TPH(G)	B	T	E	X	MTBE
TOC*		(ft.)	(ft. bgs.)	(msl)	(ррь)	(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	11/142
	07/28/00	7.79		128.57		ND	ND	ND	ND	ND	21/19 <sup>2</sup>
	10/29/00	7.90		128.46		<b>62</b> <sup>1</sup>	ND	ND	ND	ND	6.5/3.9 <sup>2</sup>
MW-2											
138.64	05/03/00	8.59	5.0-25.0	130.05		2,400 <sup>t</sup>	53	$ND^3$	$ND^3$	240	<sup>3</sup> ND/ND <sup>2</sup>
	07/28/00	9.95		128.69		2,200 <sup>1</sup>	680	4.1	57	270	24/ND <sup>2</sup>
	10/29/00	8.38		130.26		490¹	67	ND <sup>3</sup>	23	22	ND <sup>3</sup>
MW-3											
137.68	05/03/00	7.60	5.0-25.0	130.08	93 <sup>5</sup>	ND	ND	ND	ND	ND	ND/ND <sup>4</sup>
	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
MW-4											
136.60	05/03/00	6.48	5.0-25.0	130.12		ND	ND	ND	ND	ND	ND/ND <sup>2</sup>
	07/28/00	7.55		129.05		ND	ND	ND	ND	ND	ND
	10/29/00	6.12		130.48		ND	ND	ND	ND	ND	ND
UST OBSER	RVATION WEI	L <b>L</b>									
	05/03/00	8.00									
	07/28/00	9.28									
	10/29/00	7.75					••	n-e			

#### **Groundwater Monitoring Data and Analytical Results**

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

DATE	DTW	S.L	GWE	TPH(D)	TPH(G)	В	T	E	X	MTBE
	(fl.)	(ft. bgs.)	(msi)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
05/02/00			·		ND	ND	ND	ND	ND	ND
								ND	ND	ND
10/29/00			••		ND	ND	ND	ND	ND	ND
	05/03/00 07/28/00	05/03/00 07/28/00	(ft.) (ft. bgs.)  05/03/00  07/28/00	(fi.) (fi. bgs.) (msl)  05/03/00  07/28/00	05/03/00 07/28/00	(ft.) (ft. bgs.) (msl) (ppb) (ppb)  05/03/00 ND  07/28/00 ND	05/03/00 ND ND 07/28/00 ND ND	(ft.) (ft. bgs.) (msl) (ppb) (ppb) (ppb) (ppb) (ppb)  05/03/00 ND ND ND ND  07/28/00 ND ND ND	(ft.) (ft. bgs.) (msl) (ppb) (ppb) (ppb) (ppb) (ppb) (ppb) (ppb)  05/03/00 ND	(ft.)     (ft. bgs.)     (msl)     (ppb)     (ppb)     (ppb)     (ppb)     (ppb)     (ppb)       05/03/00        ND     ND     ND     ND     ND       07/28/00       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

X = Xylenes

S.I. = Screen Interval

(ft. bgs.) = Feet Below Ground Surface

MTBE = Methyl tertiary butyl ether

GWE = Groundwater Elevation

(msl) = Mean sea level

TPH(G) = Total Petroleum Hydrocarbons as Gasoline

TPH(D) = Total Petroleum Hydrocarbons as Diesel

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

#### **Groundwater Analytical Results**

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

•	WELL DATE	VOCs	SVOCs	Chromium	TOG
	<u></u>	(ppb)	(ppb)	(ppm)	(ррт)
	MW-3				
	05/03/00	ND	ND	ND	ND
	07/28/00	$ND^1$	ND	1.8	ND
	10/29/00	ND	ND	ND	7.0

#### **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

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)
MW-3	07/28/001		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

<sup>&</sup>lt;sup>1</sup> 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.

### WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/ -Facility	0500 76 t	± 46a	35_ Jo	b#:	8025	55	<del></del> _
Address: <u>20</u>	70 Fruitu	ALE 1	ANE D	ate:	0/2	d/ or	)
City: OAK	LAND, C	<u> </u>	S	ampler:	HANG	5 K	<u>.                                    </u>
Well ID	MW-1	Wel	l Condition:	-oK			·
Well Diameter	in		rocarbon ckness:	<b>E</b> (feet)	Amount Ba		(Gallons)
Total Depth	25.06 1			= 0.17	3" = 0.38	4	1" = 0.66
Depth to Water	<u>4~90 "</u>	Fac	ctor (VF)	6" = 1	.50	12" = 5.80	
	17.16 x	vf 0.17	= <u>2.9</u> x 3 (	case volume) =	Estimated Pu	rge Volume: 2	3. M Idal)
Purge Equipment:	Disposable Bailer Bailer	•	Sampli Equipп	_	sposable Ba	iler	
Equipmont.	Stack Suction	•		Ba	iller essure Baile	r	•
·	Grundfos			Gr	ab Sample	•	
· · · · · ·	Other:	<del></del>					· ————————————————————————————————————
Starting Time:	14:37		Weather Con-	•	CLOUI		·
Sampling Time:	14:55		Water Color: Sediment Des				
Purging Flow Re Did well de-wate	, i, ./\	gom.	If yes; Time	_			(gal.)
Time	Volume pH	Cond	luctivity To	mperature	<b>D.O.</b> ,	ORP	Alkalinity
	(gal.)		hos/cm	•F	(mg/L)	(mV)	(ppm)
14:40	3 7.1	9 9	<u> 23</u> _	680	<del></del>	<del></del>	
TUIGH	9 6.9	4 _8	68	67.3			
					<del></del>	<del> </del>	
			ATORY INFO	SAATION	<del></del>		
SAMPLE ID	(#) - CONTAINER	REFRIG.	ATORY INFOF		RATORY	ANAL	YSES
Assat F		Y	14 C C	SEQUOIA	\ 'K	J-13715	X/MTBE
MW-	2004						7
IAW -	20014						
MW	20014						
COMMENTS:	20014						

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## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/ Facility	0500 76#	4625		: <u>1</u>	3025	55	
Address: 30	70 Fruitur	HE AN	<u>€</u> Date	: <u> </u>	<u>o / 2</u>	9/0	<b>D</b>
	LAND, C	7	Sam	pler:	4A1(	2 K	1
City.	<u> </u>	· · · · · ·					
Well ID	MW-2	Well Co	ndition: _	OK			
Well Diameter	<u>in.</u>	Hydroca Thickne			Amount B	L/_	(Gallons)
Total Depth	24.281	Volume		0.17	3" = 0.38		" = 0.66
Depth to Water	8.38 m	Factor (		6" = 1	50	12" = 5.80	
	15.90 x	VF Q [ =_	2.T x 3 (case	volume) =	Estimated Pu	irge Volume: _	2 1 (gal.)
Purge Equipment:	Disposable Bailer Bailer		Sampling Equipmen		posable Ba	ailer	
	Stack	•		Bail Pre	ler ssure Baile	nr	
	Suction Grundfos			Gra	b Sample		
	Other:	<u> </u>		Oth	ner:		
Starting Time:	15:05	We	ather Conditi	ons:	CLOU	LDY	
Sampling Time:	15: 25	 Wa	nter Color:	. <del></del>		Odor:	<u>'E</u>
Purging Flow Re	ate:		diment Descri				· · · · · · · · · · · · · · · · · · ·
Did well de-wat	er? <u> </u>	If y	/es; Time: _		Volum	ne:	(gal.)
Time	Volume pH (gal.)	Conducti	,	erature F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
15:08		b 51	5 6	9.2			
13,00	6.6	<u>)</u>	30 6	8.9			·
15:14	8 6.6	3 -4	39 _6	8.5			
				-			
<del></del>							
	•		ORY INFORM				VOEC
SAMPLE ID	(#) - CONTAINER		RESERV. TYPE	SEQUOIA	ATORY	ANAL ANAL	EV MTRA
MW- 2	2 104	Y	14 C L	SECOOIA		<u> </u>	-7/1111111
			· · · · · · · · · · · · · · · · · · ·				
· · · · · · · · · · · · · · · · · · ·							
COMMENTS:		<del>_</del>	<del> </del>		···		
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## WELL MONITORING/SAMPLING FIFI D DATA SHEET

		LIEED DATA	· • · · · · · · · · · · · · · · · · · ·				
Client/ Facility	05co 76#1	16a5	Job#:	8025	5		
_		E AVE	Date:	0/29	100		
	LAND, CA	<u> </u>	Sampler:	1AIG	K.		•
City: <u>A</u> F	CH CH		Jampier				
	MW- 2		~ ~ ld				
Well ID	MW- 3	Well Condition		<u> </u>	<del> </del>		
Well Diameter	in.	Hydrocarbon Thickness:	777	Amount Baile (product/water)		(Gallons)	
Total Depth	24.73	Volume	2" = 0.17	3" = 0.38	4"	= 0.66	
Depth to Water	4.33 tt	Factor (VF)	6" = 1	50 1	2" = 5.80		
Deptil to Water	1 2 1	0 LM 2				a	
	M, 40 x VF	$\frac{ \mathcal{U}_1 '}{ \mathcal{U}_1 } = \frac{2}{2}$	X 3 (case volume) =	Estimated Purge	Volume:	(gal.)	
Purge	Disposable Bailer		mpling				
Equipment:	Bailer Stack	Eq	uipment: Dis Bai	<u>posable Baile</u> ler		-	
•	Suction		Pre	ssure Bailer	•		
	Grundfos			b Sample			
	Other:		Utr	ner:			
	12.54	Weather	Conditions:	Lloug	٧		
Starting Time: Sampling Time:	14:20		olor: CLOUT		dor:	<u> </u>	
Purging Flow Ra	ايم	0 0					-
Did well de-wat	11.0	- _ If yes; □	Time:	Volume:		(cal.)	
		<u>.</u>		D.O.	ORP	Alkalinity	
Time	Volume pH (gal.)	Conductivity	Temperature •F	(mg/L)	(mV)	(ppm)	
111110	3 6.86	436	68.5				
14:00 -	6.78	345	68.0	•			•
<u> </u>	<u> </u>		<del></del>			-	
14:01	9 6.43	398	68-2		***	<del></del>	•
							• .
		ABORATORY IN		RATORY	ANALY	'SES	
SAMPLE ID	13: 14 5 72	RIG. PRESERV	C SEQUOIA	<del>- 12</del>	/RTEX	ZMTBE/	824
NW- 3	3 AMREA	<del>Y</del>   14	7		VH-D	100	
	1-500 MLPLASTIC	<del>\( \)</del>		// T	otal cli	romium	
	IAMBER	<u>٧</u>		2)	SPA8	270	I
0014145170					· 		
COMMENTS:							<u>-</u>
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## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/ Facility	76±0500	4625	Job#	: <u>1</u> 9	8025	5	
Address: 30	70 FruitVA	LE AVE	Date	: <u>1</u>	0/29	1/00	)
	CLAND, CL		Sam	pler: 出	AIG	<u>K.</u>	· .
City.							
Well ID	MW-4	Well Condit	ion: _	OK			
Well Diameter	<u></u>	Hydrocarbo Thickness:	n		Amount Ba		(Gallons)
Total Depth	24.65 ft.	Volume	2" = 0	).17	3" = 0.38	4'	' = 0.66
Depth to Water	6.12 1	Factor (VF)	· .	6" = 1.:	50	12" = 5.80	
·	18.53 x v	F 0.17 = 3	_ X 3 (case	volume) =	Estimated Pur	ge Volume: _	9 (gal.)
Purge Equipment:	Disposable Bailer Bailer		Sampling Equipmen	t: Dis	posable Ba	iler	
·	Stack			Bail	ler ssure Baile	•	•
•	Suction Grundfos				ssore balle b Sample		
	Other:	<u>·`</u>		Oth	ner:	<del></del>	
Starting Time: Sampling Time: Purging Flow R		Water	Color:! ent Descri	CLEF ption:		Odor:	<del></del>
Did well de-wa	ter?O	If yes;	Time: _	<del>.</del>	Volum	e:	(gal.)
Time	Volume pH (gal.)	Conductivity  µmhos/cm	_	erature F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
13:29	3 6.60	733	6	8.2			
	6 6.53	698	6	1.8	·		· · · · · · · · · · · · · · · · · · ·
13:37	9 6.50	680	<u> </u>	11.6		<del></del>	
-		<del></del>			<del></del>		
	- · <u>- · · · · · · · · · · · · · · · · ·</u>						
SAMPLE ID	(#) - CONTAINER	LABORATORY REFRIG. PRESE	INFORM. RV. TYPE		RATORY	ANAL	YSES
MW-4	12 VOA		+ c L	SEQUOIA		G/BTEX	MTBE
			<u> </u>	<b> </b>			<u></u>
<u></u>		<u> </u>			<u> </u>		
COMMENTS:			·	<del></del>	<u></u>		
	J		<u></u>	· · · · · · · · · · · · · · · · · · ·	·		



Facility Number TOSCO SS #4625
Fortity Address 30/0 FRUITARE A
ultant Project Humber 180255
wilter Home Gettler-Ryan Inc. (G-R Inc.)

Conet

Address 6747 Sierra Court, Suite J. Dublin, CA 94568

Project Contact (Name) Deanns L. Harding

Contect (Name) Mr. David De Witt (Phone) (925) 277-2384 Laboratory Name Sequoia Analytical 

San Parest, California	916.406 94865	F	roject C	iontaet (Ni Pi	<sub>nme)</sub> <u>De</u> hone) (92	anna L. 5) 551-75	55(Fox	Number)	(925	551-	7888	Sk	gnature.		ook o	,	KON			DO NOT BILL
Sample Number	Lab Sample Number	Number of Containers	Metric S = Soll A = Ar W = Weber C = Chercool	G = Grab C = Composite D = Discrete	Ilme	Sample Preseration	load (Yee or No)	X wintbe teo201			Purgeable Holocarbors (2010)	maga:	Purgeoble Organics (8240)	onice	Metals CACP-PLZAM (CAP or AX)	5				TB-LB ANALYSIS  **Confirm  **Athen Hits  by running  **M toe  **Remarks  by 0260.
	ſ	1	\w	G	1	HCL	YES	+	<u> </u>	<b>_</b>			\	├				· ·	n when he is	
B-LB		2	W	G	14:55	HCL		1	<del> </del>	<del> </del>	╁	<del> </del>	╁╌╌	-	╁╌	╁──				
NW-2		2		G	15:25	HCC		1	1-	1.	-	┼─	1	V	+-	V				
1W-3		19	W		14:20	Her (WA	11	10	1	1	<del> </del>	┼	10-	+	+	<del>                                     </del>				
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adheriated 12		2/1		Organizati		Date/Time 10/3070 17:1	0 1	Received	By (SI	gnature)			Organ	zetlen		ote/Tim	•		Turn Ard	ound Time (Circle Choice)
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Relinguished E				Organiza	ilon	Date/Time				aborator				C		Date/Tim 0/30	100			As Contracted

Somale c rensen

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/ Facility # To:	sco76 #4	625	Job#:	1802	55_	
Address. 30	70 Fruit v	ale AVE.	Date:			
City: OAKI	AND, CA		Sampler:			
Well ID	UST WELL	Well Condition	on:	0 K		<del> </del>
Well Diameter	in_	Hydrocarbor Thickness:	1 <u> </u>	Amount Bail (product/water	_/	(gal.)
Total Depth	ft.	Volume	2" = 0.17	3" = 0.38	-	- 0.66
Depth to Water	ft.	Factor (VF)	6* = 1	L <b>.5</b> 0	12" = 5.80	
	×	VF	_ X 3 (case volume) :	= Estimated Pur	ge Volume:	(gal.)
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundfos Other:	E	B: Pi G	isposable Baile ailer ressure Bailer rab Sample	er	
Starting Time:		Weathe	r Conditions: _		···-	
Sampling Time:	<del></del>		Color:		Odor:	
Purging Flow Rat	:e:		nt Description: _			
Did well de-wate	er?	If yes;	Time:	Volume	:	(gal.)
Time	Volume pH (gal.)	Conductivity µmhos/cm	Temperature •C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
		·				
/_	· · ·		. <del></del>			<del></del>
		·				
	· · · · · · · · · · · · · · · · · · ·		INFORMATION			
SAMPLE ID	(#) - CONTAINER	REFRIG. PRESE	RV. TYPE LABO	DRATORY	ANALY	SES
		<del> </del>		<del></del>		
COMMENTS.	MONT	- OR ONLY	11	_		
COMMENTS: _						



F	odity Number TOSCO SS #4625 Olity Address 3070 FRUITVALE AVE., OAKLAND, CA
	Project Number 180255
	War Gettler-Ryan Inc. (G-K Inc.)
Addres	6747 Sierra Court, Suite J. Dublin, CA 94568
Projec	Contact (Name) Deanna L. Harding

Contact (Name) Mr. David De Witt (Phone) (925) 277-2384 WO10724 Leborotory Name Sequoia Analytical Loboratory Release Number\_

Toppe Marketing Ci 9000 Crew Caryon P San Ramon, Californ	1, 9m, 400 m 94545	Pi	roject Co	ntact (Na	me) <u>De</u>	anna L.	<u>Hardi</u>	ng		\	7000	-   <sup>c</sup>	ollection ignoture	Doct	000	01	Res	OH!			
				(Ph	one) <u>(</u> 92	5) 551-75	55(Fox	Number	1452	1331	1330	=		• To B	Perfor	-		<del></del>	<u>ノ</u>	_	DO NOT BILL TB-LB ANALYSIS
Semple Number	Lob Sample Number	Number of Containers	Matrix S = Soil A = Air W = Weter C = Charcoal	Type G = Grab C = Composite D = Clacrete	Im•	Sample Preservation	load (Yee or No)	1PH G=+ STEX wintTBE (\$016)	TPH Diesel (8015)	Off and Greater (5520)	Purgeable Halocarbons (8010)	Purpeable Aromatics (8020)	Puryacible Organica (8240)	Extractoble Organics (8270)	Hetale C4Cr.Pb.Zn.Ni (ICAP or AA)	TOTAL				4	confirm muse Hits by running muse Remorks
<u>''</u>		1	W	G		1706	YES	V				<u> </u>	<del> </del>	<del> </del>							
	01A 02.A.B	2	W	G	14:55			V		<u> </u>	<u> </u>		<u>.</u>	<del> </del>	├			-			
	13 A.B		W	6	15:25	HCL	$\coprod$	1	<del>  _</del>	ļ. <u>.</u>	<del> </del>	<del> </del>	-	1/	-	1					
	OHA-L	9	W	G		Her (NOA		1	1	V	<u> </u>		V	1	<del>                                     </del>	-					
	OSAB	2	W	G	13:50	HCL	<del>  Y</del> -	1	┼	┼─	<del>                                     </del>	<del> </del>	-		1						
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Relinquished E	y (Signature	)		rgonizatio	n en	Date/Time	'				By (SI			C.		0/30/	00 15				
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20 November, 2000

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

RE: Tosco Sequoia Report W010724

Enclosed are the results of analyses for samples received by the laboratory on 30-Oct-00 17:15. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

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:** 20-Nov-00 07:27

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TBLB	W010724-01	Water	29-Oct-00 00:00	30-Oct-00 17:15
MW-1	W010724-02	Water	29-Oct-00 14:55	30-Oct-00 17:15
MW-2	W010724-03	Water	29-Oct-00 15:25	30-Oct-00 17:15
MW-3	W010724-04	Water	29-Oct-00 14:20	30-Oct-00 17:15
MW-4	W010724-05	Water	29-Oct-00 13:50	30-Oct-00 17:15

Sequoia Analytical - Walnut Creek

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.

Charlie Westwater, Project Manager



Gettler Ryan, Inc. - Dublin

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

Project Number: Tosco # 4625 Project Manager: Deanna L. Harding Reported: 20-Nov-00 07:27

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

Analyte	Result R	eporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TBLB (W010724-01) Water	Sampled: 29-Oct-00 00:00	Received	l: 30-Oct	-00 17:15					
Purgeable Hydrocarbons	ND	50	ug/l	1	0K10007	10-Nov-00	10-Nov-00	EPA 8015M/8020	
Benzene	ND	0.50	**	π	ч		11	**	
Toluene	ND	0.50		· · ·	Ħ		If	tr	
Ethylbenzene	ND	0.50	Ħ	,,	**	**	ıı	. 11	
Xylenes (total)	ND	0.50	•	11	**	ч	11	H	
Methyl tert-butyl ether	ND	2.5	#	11	11	u		"	
Surrogate: a,a,a-Trifluorotolue	ene	105 %	70-	-130	"	"	"	"	
MW-1 (W010724-02) Water	Sampled: 29-Oct-00 14:55	Receive	d: 30-Oc	t-00 17:15					P-01
Purgeable Hydrocarbons	62	50	ug/l	1	0K10007	10-Nov-00	10-Nov-00	EPA 8015M/8020	
Benzene	ND	0.50	n	H	Ħ	49		H	
Toluene	ND	0.50	77	н	**	"	*	,	
Ethylbenzene	ND	0.50	**	n	ir	11			
Xylenes (total)	ND	0.50	"	H.		"		n	
Methyl tert-butyl ether	6.5	2.5	11	**	•	*		n	CC-3
Surrogate: a,a,a-Trifluorotolue	ne	96.3 %	70-	-130	#	н	"	<b>#</b> .	
MW-2 (W010724-03) Water	Sampled: 29-Oct-00 15:25	Receive	d: 30-Oc	t-00 17:15					P-01
Purgeable Hydrocarbons	490	130	ug/l	2.5	0K10007	10-Nov-00	10-Nov-00	EPA 8015M/8020	
Benzene	67	1.3	*	**		<b>n</b> .		*	
Toluene	ND	1.3	•	, н	Ħ			10	
Ethylbenzene	23	1.3	*	n	н	11	•	*	
Xylenes (total)	22	1.3	**	11	W.	lif .	#	•	
Methyl tert-butyl ether	ND	6.3	Ħ	11	**	*	**	n	
Surrogate: a,a,a-Trifluorotolue	ene	87.3 %	70-	-130	"	"	"	n	<del></del>





Dublin CA, 94568

Project: Tosco

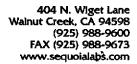
Project Number: Tosco # 4625

Reported: 20-Nov-00 07:27

Project Manager: Deanna L. Harding

## 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 (W010724-04) Water	Sampled: 29-Oct-00 14:20	Received	1: 30-Oc	t-00 17:15					
Purgeable Hydrocarbons	ND	50	ug/l	1	0K11002	11-Nov-00	11-Nov-00	EPA 8015M/8020	
Benzene	ND	0.50	n	n	**	**		#	
Toluene	ND	0.50	Ħ	n	#	п	H	11	
Ethylbenzene	ND	0.50		D	11	#	. •	tt	
Xylenes (total)	ND	0.50	н		91	"	**	н	
Methyl tert-butyl ether	ND	2.5	"	*	tt	H	n	**	
Surrogate: a,a,a-Trifluorotolue	ene	98.7 %	70	-130	n	"	п	er e	
MW-4 (W010724-05) Water	Sampled: 29-Oct-00 13:50	Receive	d: 30 <b>-</b> Oc	t-00 17:15					
Purgeable Hydrocarbons	ND	50	ug/l	1	0K10007	10-Nov-00	10-Nov-00	EPA 8015M/8020	
Benzene	ND	0.50	-	H	n	Ħ	•	н	
Toluene	ND	0.50	**	, u	Ħ	#			
Ethylbenzene	ND	0.50	**	n	н .	n	•	**	
Xylenes (total)	ND	0.50	м		#		**		
Methyl tert-butyl ether	ND	2.5	**	•	n	**	н	**	
Surrogate: a,a,a-Trifluorotolu	ene	115 %	70	-130	#	."	п	"	





Gettler Ryan, Inc. - Dublin

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

Project Number: Tosco # 4625

Project Manager: Deanna L. Harding

**Reported:** 20-Nov-00 07:27

### Diesel Hydrocarbons (C9-C24) by DHS LUFT

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (W010724-04) Water	Sampled: 29-Oct-00 14:20	Received	l: 30-Oct-	00 17:15					
Diesel Range Hydrocarbons	ND	50	ug/l	1	0K10013	10-Nov-00	12-Nov-00	EPA 8015M	
Surrogate: n-Pentacosane		117%	50-1	50	ır	"	"	"	





Project: Tosco

Project Number: Tosco # 4625

Project Manager: Deanna L. Harding

**Reported:** 20-Nov-00 07:27

## MTBE Confirmation by EPA Method 8260A

Analyte	Result	Reporting Limit	Units l	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (W010724-02) Water Sai	mpled: 29-Oct-00 14:55	Received	l: 30-Oct-0	17:15					
Methyl tert-butyl ether	3.9	2.0	ug/l	1	0K11008	11-Nov-00	12-Nov-00	EPA 8260B	
Surrogate: Dibromofluoromethane		96.0 %	50-15	0	"	#	"	#	
								N	





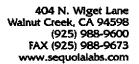
Gettler Ryan, Inc. - Dublin

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

Project Number: Tosco # 4625 Project Manager: Deanna L. Harding Reported: 20-Nov-00 07:27

Total Metals by EPA 200 Series Methods

Analyte	R Result	eporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (W010724-04) Water	Sampled: 29-Oct-00 14:20	Received	i: 30-Oc	t-00 17:15					
Chromium	ND	0.010	mg/l	1	0K01016	01-Nov-00	17-Nov-00	EPA 200.7	





Dublin CA, 94568

Project: Tosco

Project Number: Tosco # 4625

Project Manager: Deanna L. Harding

**Reported:** 20-Nov-00 07:27

## Volatile Organic Compounds by EPA Method 8240B

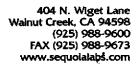
### Sequoia Analytical - Walnut Creek

Analyte	R Result	eporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (W010724-04) Water	Sampled: 29-Oct-00 14:20	Received	1: 30-Oc	t-00 17:15					
Chloromethane	ND	2.0	ug/l	1	0K08011	08-Nov-00	08-Nov-00	EPA 8240B	
Vinyl chloride	ND	2.0	н	n	*	11	**	**	
Bromomethane	ND	5.0	Ħ	p	**	п	**	W	
Chloroethane	ND	2.0	,	-	**	•	**	17	
Trichlorofluoromethane	ND	2.0		н	et	•	**		
1,1-Dichloroethene	ND	2.0	•	11	**	11	Ħ	Ħ	
Acetone	ND	10	**	Ħ	11	11	Ħ	"	
Carbon disulfide	ND	2.0	"	n		Ħ	**	п	
Methylene chloride	ND	10	ч	P		n	Ħ		
Methyl tert-butyl ether	ND	2.0	Ħ	**	,,	11		*	
trans-1,2-Dichloroethene	ND	2.0		-	W,	"		**	
Vinyl acetate	ND	5.0		n	**		•		
1,1-Dichloroethane	ND	2.0	**	u	#	**	₩	я	
cis-1,2-Dichloroethene	ND	2.0		н	п	**	**	4	
2-Butanone	ND	10	u	11	tt	H	#		
Chloroform	ND	2.0	н	11	71	**	44	н	
1,1,1-Trichloroethane	ND	2.0	,	19	n		#	77	
Carbon tetrachloride	ND	2.0	Ħ			Ħ	n	11	
Benzene	ND	2.0	-		Ħ	n	<b>H</b> .	H	
1.2-Dichloroethane	ND	2.0	#	**	**		•	Ħ	
Trichloroethene	ND	2.0	н	#	**	n	**	•	
1,2-Dichloropropane	ND	2.0	н	Ħ	n	•	п	n	
Bromodichloromethane	ND	2.0	n		H	**	H	**	
2,2,5,5-Tetramethyltetrahydrofu		2.0		*		Ħ	•	11	
cis-1,3-Dichloropropene	ND	2.0		77		**	n	Ħ	
4-Methyl-2-pentanone	ND	10	**		*	H	H	π	
Toluene	ND	2.0	ŧı	n	n		Ħ	n	
trans-1,3-Dichloropropene	ND	5.0	*	π	#	. #	**	n	
1,1,2-Trichloroethane	ND	2.0	"	*	•	*	π	11	•
Tetrachloroethene	ND	2.0	н	n	Ħ	н	H	it .	
2-Hexanone	ND	10		n	n	н	n	m	
Dibromochloromethane	ND	2.0		•	n	п	#	*	
Chlorobenzene	ND	2.0	n	**		H	n	**	
Ethylbenzene	ND	2.0		#	-	H	n	n	
Total Xylenes	ND	2.0	Ħ	"	**	Ħ		11	
Styrene	ND	2.0	H	11	u			и	
Bromoform	ND	2.0	н	n	н		*	#	
1,1,2,2-Tetrachloroethane	ND ND	2.0			#	n	Ħ	**	
1,1,4,4-1 ettacmoroemane	מא	2.0							

Sequoia Analytical - Walnut Creek

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.







Gettler Ryan, Inc. - Dublin

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

Project Number: Tosco # 4625

Project Manager: Deanna L. Harding

**Reported:** 20-Nov-00 07:27

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

Analyte	Result	eporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (W010724-04) Water Samp	pled: 29-Oct-00 14:20	Received	d: 30-Oct-0	0 17:15					
1,3-Dichlorobenzene	ND	2.0	ug/l	1	0K08011	08-Nov-00	08-Nov-00	EPA 8240B	
1,4-Dichlorobenzene	ND	2.0	77	n	#	41	н	Ħ	
1,2-Dichlorobenzene	ND	2.0			**	17	#	"	
Surrogate: Dibromofluoromethane		92.0 %	50-1.	50	"	н	π	"	
Surrogate: 1,2-Dichloroethane-d4		92.0 %	50-1	50	*	*	"	n	
Surrogate: Toluene-d8		98.0 %	50-1.	50	"	#	#	π	
Surrogate: 4-Bromofluorobenzene	•	92.0 %	50-1	50	"	#	"	rf	





Project: Tosco

Project Number: Tosco # 4625 Project Manager: Deanna L. Harding **Reported:** 20-Nov-00 07:27

## Semivolatile Organic Compounds by EPA Method 8270B

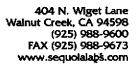
## Sequoia Analytical - Walnut Creek

Analyte	R Result	eporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (W010724-04) Water	Sampled: 29-Oct-00 14:20	Receive	d: 30-Oct	t-00 17:15					
Acenaphthene	ND	5.0	ug/l	1	0J31017	31-Oct-00	01-Nov-00	EPA 8270B	
Acenaphthylene	ND	5.0	#	+	**	77	н	"	
Aniline	ND	5.0	. #	n	H	н	н	"	
Anthracene	ND	5.0	•	n		Ħ	Ħ	77	
Benzoic acid	ND	10	#		7	*	•	**	
Benzo (a) anthracene	ND	5.0	"	н	н	н		m	
Benzo (b) fluoranthene	ND	5.0	#	11	Ħ	•	**	Ħ	
Benzo (k) fluoranthene	ND	5.0	17	*		11	**	•	
Benzo (ghi) perylene	ND	5.0	"	Ħ	. 11	u u	н	-	
Benzo[a]pyrene	ND	5.0		"		и .	п	•	
Benzyl alcohol	ND	5.0	77	*	•	Ħ	#	н	
Bis(2-chloroethoxy)methane	ND	5.0	**	•	•	H	n	н	
Bis(2-chloroethyl)ether	ND	5.0	*	Ħ	#	n	п	Ħ	
Bis(2-chloroisopropyl)ether	ND	5.0	*	**	**	**	Ħ	Ħ	
Bis(2-ethylhexyl)phthalate	ND	10	*	Ħ	n	<b>#</b>		#	
4-Bromophenyl phenyl ether	ND	5.0				#	77	Ħ	•
Butyl benzyl phthalate	ND	5.0	**	n		**	n	п -	
4-Chloroaniline	ND	10	н	• .	**	Ħ	**	H .	
2-Chloronaphthalene	ND	5.0	•	•	н	H	n	₽.	
4-Chioro-3-methylphenol	ND	5.0		e e	**	*	**		
2-Chlorophenol	ND	5.0		*	11	**	*	**	
4-Chlorophenyl phenyl ether	ND	5.0	•	H	*	π '		н	
Chrysene	ND	5.0	#		*	11	•	. "	
Dibenz (a,h) anthracene	ND	5.0	et	-	11	H	n	# '	
Dibenzofuran	ND	5.0	H	п	H	n	**	н	
Di-n-butyl phthalate	ND	10	,#	Ħ	11	*	H	m	
1,2-Dichlorobenzene	ND	5.0		,		n	Ħ	•	
1,3-Dichlorobenzene	ND	5.0	-			H	IT		
1,4-Dichlorobenzene	ND	5.0	н		•	Ħ	-	*	
3,3'-Dichlorobenzidine	ND	10	**	**	**	π-	#	**	
2,4-Dichlorophenol	ND	5.0	н	n	#	n	n	n	
Diethyl phthalate	ND	5.0	*	н	11	H		n	
2,4-Dimethylphenol	ND	5.0	n	Ħ	Ħ		**	**	
Dimethyl phthalate	ND	5.0	*	, "	,	•	**	#	
4,6-Dinitro-2-methylphenol	ND	10	**	,,		,,	n	n	
2,4-Dinitrophenol	ND	10	41	*		**		"	
2,4-Dinitrotoluene	ND	5.0	#		Ħ	#		n	
2,6-Dinitrotoluene	ND	5.0	,	#1	н				

Sequoia Analytical - Walnut Creek

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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:** 20-Nov-00 07:27

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

Analyte	R Result	eporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (W010724-04) Water	Sampled: 29-Oct-00 14:20	Received	l: 30-Oct	-00 17:15				· · · ·	
Di-n-octyl phthalate	ND	5.0	ug/l	1	0J31017	31-Oct-00	01-Nov-00	EPA 8270B	
Fluoranthene	ND	5.0	**	11	11		#	#	
Fluorene	ND	5.0	n	Ħ	"	*	н	"	
Hexachlorobenzene	ND	5.0	-	n	n	#	Ħ	"	
Hexachlorobutadiene	ND	5.0	**	II.	"	Ħ	N	*	
Hexachlorocyclopentadiene	ND	10	**	•	•	#1	*	•	
Hexachloroethane	ND	5.0	H	•	**	"		•	
Indeno (1,2,3-cd) pyrene	ND	5.0		n	π	IP	Ħ	Ħ	
Isophorone	ND	5.0	**	11	Ħ	*	•	**	
2-Methylnaphthalene	ND	5.0		*	**	*	#	"	
2-Methylphenol	ND	5.0	Ħ	н	н	#1		u	
4-Methylphenol	ND	5.0	**	#		n	#	ħ	
Naphthalene	ND	5.0	Ħ	**	-	Ħ	*	n	
2-Nitroaniline	ND	10	н.	π	•	**	"	'n	
3-Nitroaniline	ND	10		#	**	n	"		
4-Nitroaniline	ND	10		**	н	17	11	11	
Nitrobenzene	ND	5.0	**	п	Ħ		,,,	I <del>I</del>	
2-Nitrophenol	ND	5.0	π	H	17	**	**	•	
4-Nitrophenol	ND	10	#	H*	n	11		•	
N-Nitrosodimethylamine	ND	5.0	10		n	u	Ħ	•	
N-Nitrosodiphenylamine	ND	5.0	"	*	*	Ħ	"	Ħ	
N-Nitrosodi-n-propylamine	ND	5.0		11	-	**	Ħ	n	
Pentachlorophenol	ND	10		n	Ħ	n	#	Ħ	
Phenanthrene	ND	5.0	#	Ħ	Ħ	**	Ħ	<b>H</b>	
Phenol	ND	5.0	**	n	11	•	n	n	
Pyrene	ND	5.0	Ħ		**	**	H	11	
1,2,4-Trichlorobenzene	ND	5.0	•	11	н	11	н	**	
2,4,5-Trichlorophenol	ND	10	н	**	**	"	*	#	
2,4,6-Trichlorophenol	ND	5.0		**	**	n	n	n	
Surrogate: 2-Fluorophenol		18.5 %	21-	-110	. "	π	"	rr .	S-0
Surrogate: Phenol-d6		1.62 %	10	-110	"	*	"	**	S-0
Surrogate: Nitrobenzene-d5		37.8 %	35	-114	"	. #	"	. "	
Surrogate: 2-Fluorobiphenyl		39.8 %		-116	"	"	"	, M	S-0
Surrogate: 2,4,6-Tribromophen	iol	45.7 %		-123	"	"	u	"	
Surrogate: p-Terphenyl-d14		38.9 %		-141	π	H	π	"	





Project: Tosco

Project Number: Tosco # 4625

Project Manager: Deanna L. Harding

Reported: 20-Nov-00 07:27

## Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	R Result	eporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (W010724-04) Water	Sampled: 29-Oct-00 14:20	Received	l: 30-Oc	t-00 17:15					
TRPH	7.0	5.0	mg/l	1	0K16015	16-Nov-00	17-Nov-00	SM 5520B/F	



Project: Tosco

Project Number: Tosco # 4625 Project Manager: Deanna L. Harding **Reported:** 20-Nov-00 07:27

# 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 0K10007 - EPA 5030B [P/T]										
Blank (0K10007-BLK1)				Prepared	& Analyz	ed: 10-No	v-00			
Purgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50	n							
Toluene	ND	0.50	n							
Ethylbenzene	ND	0.50	H							
Xylenes (total)	ND	0.50	-							
Methyl tert-butyl ether	ND	2.5	#							
Surrogate: a,a,a-Trifluorotoluene	27.3		H	30.0		91.0	70-130			
LCS (0K10007-BS1)				Prepared	& Analyz	ed: 10-No	v-00			
Benzene	20.0	0.50	ug/l	20.0		100	70-130			
Toluene	20.4	0.50	**	20.0		102	70-130			
Ethylbenzene	20.5	0.50		20.0		103	70-130			
Xylenes (total)	59.1	0.50	Ħ	60.0		98.5	70-130			
Surrogate: a, a, a-Trifluorotoluene	30.1			30.0		100	70-130		•	
Matrix Spike (0K10007-MS1)	So	urce: W0107	00-13	Prepared	& Analyz	ed: 10-No	v-00			
Benzene	20.9	0.50	ug/l	20.0	ND	104	70-130			
Tokuene	21.3	0.50	**	20.0	ND	106	70-130			
Ethylbenzene	21.4	0.50	**	20.0	ND	107	70-130			
Xylenes (total)	61.7	0.50		60.0	ND	103	70-130			
Surrogate: a, a, a-Trifluorotoluene	30.9		n	30.0		103	70-130	_		
Matrix Spike Dup (0K10007-MSD1)	So	urce: W0107	700-13	Prepared	& Analyz	ed: 10-No	o <b>v-</b> 00			
Benzene	21.4	0.50	ug/l	20.0	ND	107	70-130	2.36	20	
Toluene	21.8	0.50	н	20.0	ND	109	70-130	2.32	20	
Ethylbenzene	21.8	0.50	*	20.0	ND	109	70-130	1.85	20	
Xylenes (total)	62.6	0.50	•	60.0	ND	104	70-130	1.45	20	
Surrogate: a, a, a-Trifluorotoluene	31.0		#	30.0		103	70-130			



Project: Tosco

Project Number: Tosco # 4625

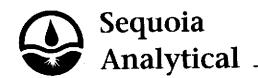
Reported: 20-Nov-00 07:27

Dublin CA, 94568

Project Manager: Deanna L. Harding

# 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 0K11002 - EPA 5030B [P/T]										
Blank (0K11002-BLK1)				Prepared	& Analyz	ed: 11-No	⊽-00			
Purgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50	-							
l'oluene	ND	0.50	11							
Sthylbenzene	ND	0.50	н							
Kylenes (total)	ND	0.50	H							
Methyl tert-butyl ether	ND	2.5	*							
Surrogate: a, a, a-Trifluorotoluene	36.3			30.0		121	70-130			
LCS (0K11002-BS1)				Prepared	& Analyz	ed: 11-No	v-00			
Benzene	20.8	0.50	ug/l	20.0		104	70-130			
Toluens .	21.2	0.50		20.0		106	70-130			
Ethylbenzene	21.2	0.50	**	20.0		106	70-130			
Xylenes (total)	61.0	0.50	14	60.0		102	70-130			
Surrogate: a,a,a-Trifhiorotoluene	30.4		п	30.0		101	70-130			
Matrix Spike (0K11002-MS1)	S	ource: W0110	)24-06	Prepared	& Analyz	ed: 11-No	v-00			
Benzene	22.2	0.50	ug/l	20.0	ND	111	70-130			
Toluene	22.5	0.50	н	20.0	ND	113	70-130			
Ethylbenzene	23.0	0.50	H	20.0	ND	115	70-130			
Xylenes (total)	66.0	0.50	#	60.0	ND	110	70-130			
Surrogate: a, a, a-Trifluorotoluene	32.2	<del></del>	"	30.0		107	70-130			
Matrix Spike Dup (0K11002-MSD1)	S	ource: W011	024-06	Prepared	& Analy	zed: 11-No	o⊽-00			
Benzene	20.4	0.50	ug/l	20.0	ND	102	70-130	8.45	20	
Toluene	20.6	0.50	**	20.0	ND	103	70-130	8.82	20	
Ethylbenzene	20.8	0.50	**	20.0	ND	104	70-130	10.0	20	
Xylenes (total)	60.4	0.50	н	60.0	ND	101	70-130	8.86	20	
Surrogate: a, a, a-Trifluorotoluene	29.7	•••	n	30.0	<del></del> -	99.0	70-130		<del></del>	



Gettler Ryan, Inc. - Dublin

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

Project Number: Tosco # 4625 Project Manager: Deanna L. Harding **Reported:** 20-Nov-00 07:27

## 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 0K10013 - EPA 3510B										
Blank (0K10013-BLK1)				Prepared:	: 10-Nov-0	0 Analyze	ed: 11-Nov	7-00	. <u> </u>	
Diesel Range Hydrocarbons	ND	50	ug/l							
Surrogate: n-Pentacosane	25.0		п	33.3		75.1	50-150			
LCS (0K10013-BS1)				Prepared	: 10-Nov-(	0 Analyz	ed: 11-Nov	v-00		
Diesel Range Hydrocarbons	428	50	ug/l	500		85.6	60-140			
Surrogate: n-Pentacosane	19.0		"	33.3		57.1	50-150			
LCS Dup (0K10013-BSD1)				Prepared	: 10-Nov-(	00 Analyz	ed: 12-Nov	v-00		
Diesel Range Hydrocarbons	407	50	ug/l	500		81.4	60-140	5.03	50	
Surrogate: n-Pentacosane	22.0	<del></del>	"	33.3		66.1	50-150			





Project: Tosco

Project Number: Tosco # 4625

Project Manager: Deanna L. Harding

**Reported:** 20-Nov-00 07:27

## MTBE Confirmation by EPA Method 8260A - Quality Control Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0K11008 - EPA 5030B [P/T]								·		
Blank (0K11008-BLK1)			_	Prepared	& Analyz	ed: 11-No	v-00		<u> </u>	
Methyl tert-butyl ether	ND	2.0	ug/l							
Surrogate: Dibromofluoromethane	46.0		*	50.0		92.0	50-150			
Surrogate: 1,2-Dichloroethane-d4	47.0		B	50.0		94.0	50-150			
LCS (0K11008-BS1)				Prepared	& Analyz	ed: 11-No	v-00			
Methyl tert-butyl ether	44.4	2.0	ug/l	50.0		88.8	70-130			
Surrogate: Dibromofluoromethane	49.0		#	50.0		98.0	50-150			
Surrogate: 1,2-Dichloroethane-d4	46.0		#	50.0		92.0	50-150			
LCS Dup (0K11008-BSD1)				Prepared	& Analyz	ed: 11-No	v-00			
Methyl text-butyl ether	44.7	2.0	ug/l	50.0		89.4	70-130	0.673	25	
Surrogate: Dibromofluoromethane	51.0		<i>n</i>	50.0		102	50-150			
Surrogate: 1,2-Dichloroethane-d4	47.0		п	50.0		94.0	50-150			

Page 15 of 26





**Dublin CA**, 94568

Project: Tosco

Project Number: Tosco # 4625

Reported: 20-Nov-00 07:27

Project Manager: Deanna L. Harding

## 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 0K01016 - 200.7										
Blank (0K01016-BLK1)	· · · · · · · · · · · · · · · · · · ·			Prepared:	01-Nov-0	00 Analyz	ed: 17-Nov	r-00		
Chromium	ND	0.010	mg/l							
LCS (0K01016-BS1)				Prepared:	01-Nov-0	0 Analyz	ed: 17-No	v-00		
Chromium	0.952	0.010	mg/l	1.00		95.2	80-120			
LCS Dup (0K01016-BSD1)				Prepared:	: 01-Nov-(	00 Analyz	ed: 17-No	v-00		
Chromium	0,965	0.010	mg/l	1.00	<del> ·</del>	96.5	80-120	1.36	20	
Matrix Spike (0K01016-MS1)	So	ource: W0107	24-04	Prepared	: 01-Nov-(	00 Analyz	ed: 17-No	v-00		
Chromium	0.969	0.010	mg/l	1.00	ND	96.9	80-120			
Matrix Spike Dup (0K01016-MSD1)	Se	ource: W0107	24-04	Prepared	: 01-Nov-0	00 Analyz	ed: 17-No	v-00		
Chromium	0.970	0.010	mg/l	1.00	ND	97.0	80-120	0.103	20	



**Dublin CA**, 94568

Project: Tosco

Project Number: Tosco # 4625

Project Manager: Deanna L. Harding

Reported: 20-Nov-00 07:27

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

Analsta	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Analyte	Vesim	Dillit							·	<del></del>
Batch 0K08011 - EPA 5030B [P/T]										
Blank (0K08011-BLK1)				Prepared	& Analyz	ed: 07-No	⊽-00			
Chloromethane	ND	2.0	ug/l			-				
Vinyl chloride	ND	2.0	H							
Bromomethane	ND	5.0	*							
Chloroethane	ND	2.0	n	•						
Trichlorofluoromethane	ND	2.0	"							
1,1-Dichloroethene	ND	2.0	If					•		
Acetone	ND	10	"							
Carbon disulfide	ND	2.0								
Methylene chloride	ND	10	**							
Methyl tert-butyl ether	ND	2.0	11							
trans-1,2-Dichloroethene	ND	2.0	11							
Vinyl acetate	ND	5.0	**							
1,1-Dichloroethane	ND	2.0	*							
pis-1,2-Dichloroethene	ND	2.0	H							
2-Butanone	ND	10	**							
Chloroform	ND	2.0	Ħ							
1,1,1-Trichloroethane	ND	2.0	**							
Carbon tetrachloride	ND	2.0	Ħ							
Benzene	ND	2.0	H							
1,2-Dichloroethane	'ND	2.0	•							
Trichloroethene	ND	2.0	н							
1,2-Dichloropropane	ND	2.0	π							
Bromodichloromethane	ND	2.0	n							•
2,2,5,5-Tetramethyltetrahydrofuran	ND	2.0								
cis-1,3-Dichloropropene	ND	2.0	-							
4-Methyl-2-pentanone	ND	10	u							
Toluene	ND	2.0	**							
trans-1,3-Dichloropropene	ND	5.0	н							
1.1.2-Trichloroethane	ND	2.0	н							
Tetrachloroethene	ND	2.0								
2-Hexanone	ND	10	**							
Dibromochloromethane	ND	2.0								
Chlorobenzene	ND	2.0	n							
Ethylbenzene	ND	2,0	H		•					

Sequoia Analytical - Walnut Creek

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Dublin CA, 94568

Project: Tosco

Project Number: Tosco # 4625

Project Manager: Deanna L. Harding

Reported: 20-Nov-00 07:27

## 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 0K08011 - EPA 5030B [P/T]				<del></del>		<del>_</del> _		<u>.</u>		
Blank (0K08011-BLK1)				Prepared	& Analyz	ed: 07-No	v-00			
Total Xylenes	ND	2.0	ug/l							
Styrene	ND	2.0	п							
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	**							
1,2-Dichlorobenzene	ND	2.0	Ħ							
Surrogate: Dibromofluoromethane	50.0		n	50.0	. <u>.</u>	100	50-150			
Surrogate: 1,2-Dichloroethane-d4	52.0		"	50.0		104	50-150 50-150			
Surrogate: Toluene-d8	52.0		"	50.0		104 98.0	50-150 50-150			
Surrogate: 4-Bromofluorobenzene	49.0		**	50.0		•				
Blank (0K08011-BLK2)				Prepared	& Analyz	ed: 08-No	ov-00			
Chloromethane	ND	2.0	ug/l							
Vinyl chloride	ND	2.0	*1							
Bromomethane	ND	5.0	"							
Chloroethane	ND	2.0	**							
Trichlorofluoromethane	ND	2.0	**							
1,1-Dichloroethene	ND	2.0	#							
Acetone	ND	-10	"							
Carbon disulfide	ND	2.0	Ħ							
Methylene chloride	ND	10	**							
Methyl tert-butyl ether	ND	2.0	**							
trans-1,2-Dichloroethene	ND	2.0	н							
Vinyl acetate	ND	5.0	91							
1,1-Dichloroethane	ND	2.0								
cis-1,2-Dichloroethene	ND	2.0								
2-Butanone	ND	10								
Chloroform	ND	2.0								
1,1,1-Trichloroethane	ND	2.0								
Carbon tetrachloride	ND	2.0								
Benzene	ND	2.0								
1,2-Dichloroethane	ND	2.0	"							
Trichloroethene	ND	2.0								
1,2-Dichloropropane	ND	2.0	•			•				

Sequoia Analytical - Walnut Creek

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**Dublin CA**, 94568

Project: Tosco

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

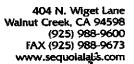
Reported: 20-Nov-00 07:27

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 0K08011 - EPA 5030B [P/T]										
Blank (0K08011-BLK2)				Prepared	& Analyz	ed: 08-No	v-00			
Bromodichloromethane	ND	2.0	ug/l							
2,2,5,5-Tetramethyltetrahydrofuran	ND	2.0	"							
cis-1,3-Dichloropropene	ND	2.0	*							
L-Methyl-2-pentanone	ND	10	**							
Foluene .	ND	2.0	II							
trans-1,3-Dichloropropene	ND	5:0	п							
1,1,2-Trichloroethane	ND	2.0	Ħ							
Tetrachloroethene	ND	2.0	н							
2-Hexanons	ND	10	п							
Dibromochloromethane	ND	2.0	**							
Chlorobenzene	ND	2.0								
Ethylbenzene	ND	2.0	11							
Total Xylenes	ND	2.0	**							
Styrene	ND	2.0								
Bromoform	ND	2.0	**							
1,1,2,2-Tetrachioroethane	ND	2.0	11							
1,3-Dichlorobenzene	ND	2.0	•							
1,4-Dichlorobenzene	ND	2.0	**							
1,2-Dichlorobenzene	ND	2.0	**							
Surrogate: Dibromofluoromethane	52.0			50.0		104	50-150			
Surrogate: Dioromanuoromethune Surrogate: 1,2-Dichloroethane-d4	48.0		<b>"</b>	50.0		96.0	50-150			
Surrogate: Toluene-d8	50.0		*	50.0		100	50-150			
Surrogate: 4-Bromofluorobenzene	47.0		**	50.0		94.0	50-150			
LCS (0K08011-BS1)				Prepare	d & Analy	/zed: 07-N	o⊽-00			
1,1-Dichloroethene	55.4	2.0	ug/l	70.0		79.1	65-135			
Methyl tert-butyl other	48.8	2.0		50.0		97.6	70-130			
Benzene	50.5	2.0		50.0		101	70-130			
Trichloroethene	49.9	2.0		50.0		99.8	70-130			
	48.4	2.0	ı "	50.0		96.8	70-130			
Toluene	49.7	2.0		50.0		99.4	70-130			
Chlorobenzene			, n	50.0		98.0	50-150			······
Surrogate: Dibromofluoromethane	49.0			50.0 50.0		94.0	50-150			
Surrogate: 1,2-Dichloroethane-d4	47.0 52.0		"	50.0		104	50-150			
Surrogate: Toluene-d8	32.0 49.0		H	50.0		98.0	50-150	ı		
Surrogate: 4-Bromofluorobenzene	49.U			24.0						

Sequoia Analytical - Walnut Creek

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Gettler Ryan, Inc. - Dublin

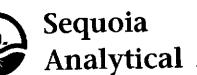
6747 Sierra Court Suite J Dublin CA, 94568 Project: Tosco

Project Number: Tosco # 4625 Project Manager: Deanna L. Harding **Reported:** 20-Nov-00 07:27

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

		Reporting	** ',	Spike	Source	%REC	%REC Limits	RPD	RPD Limit	Notes
Analyte	Result	Limit	Units	Level	Result	%KEC		ΚID	THILL	140668
Batch 0K08011 - EPA 5030B [P/T]										
LCS (0K08011-BS2)				Prepared	& Analyz	ed: 08-No				-
1,1-Dichloroethene	56.1	2.0	ug/l	70.0		80.1	65-135			
Methyl tert-butyl ether	48.2	2.0	**	50.0		96.4	70-130			
Benzene	52.6	2.0	H	50.0		105	70-130			
Trichloroethene	53.4	2.0		50.0		107	70-130			
Toluene	53.3	2.0	-	50.0		107	70-130			
Chlorobenzene	54.6	2.0	н	50.0		109	70-130			
Surrogate: Dibromofluoromethane	49.0		- "	50.0		98.0	50-150			
Surrogate: 1,2-Dichloroethane-d4	47.0		"	50.0		94.0	50-150	•		
Surrogate: Toluene-d8	51.0		"	50.0		102	50-150			
Surrogate: 4-Bromoftwarobenzene	49.0		"	50.0		98.0	50-150			
Matrix Spike (0K08011-MS1)	Sor	ırce: W0110	)41-01	Prepared	& Analyz	ed: 07-No	v-00			
1,1-Dichloroethene	53.6	2.0	ug/l	70.0	ND	76.6	60-140			
Methyl tert-butyl other	48.8	2.0	77	50.0	ND	97.6	60-140			
Benzene	51.9	2.0	н	50.0	ND	104	60-140			
Trichloroethene	51.7	2.0	-	50.0	ND	103	60-140			
Toluene	51.6	2.0	11	\$0.0	ND	103	60-140			
Chlorobenzene	50.2	2.0	11	50.0	ND	100	60-140			
Surrogate: Dibromostuoromethane	48.0		rr .	50.0		96.0	50-150			
Surrogate: 1,2-Dichloroethane-d4	46.0		#	50.0		92.0	50-150			
Surrogate: Toluene-d8	49.0		"	50.0		98.0	50-150			
Surrogate: 4-Bromofluorobenzene	49.0		#	50.0		98.0	50-150			
Matrix Spike Dup (0K08011-MSD1)	So	urce: W011	041-01	Prepared	l & Analyz	zed: 07-No	ov-00			
1,1-Dichloroethene	61.7	2.0	ug/l	70.0	ND	88.1	60-140	14.1	25	
Methyl tert-butyl ether	55.0	2.0	•	50.0	ND	110	60-140	11.9	25	
Benzene	59.5	2.0	7	50.0	ND	119	60-140	13.6	25	
Trichloroethene	57.9	2.0	#	50.0	ND	116	60-140	11.3	25	
Toluene	58.2	2.0	н	50.0	ND	116	60-140	12.0	25	
Chlorobenzene	59.1	2.0	**	50.0	ND	118	60-140	16.3	25	
Surrogate: Dibromofluoromethane	49.0		#	50.0		98.0	50-150			
Surrogate: 1,2-Dichloroethane-d4	47.0		#	50.0		94.0	50-150			
Surrogate: Toluene-d8	50.0		,,	50.0		100	50-150			
Surrogate: 4-Bromofluorobenzene	48.0		H	50.0		96.0	50-150			

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

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

Project Number: Tosco # 4625

Reported: 20-Nov-00 07:27

Dublin CA, 94568

Project Manager: Deanna L. Harding

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

		Reporting	TT*4-	Spike	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Analyte	Result	Limit	Units	Level	resun	- VORCEA				
Batch 0J31017 - EPA 3510B									<u></u>	
Blank (0J31017-BLK1)				Prepared:	31-Oct-0	Analyze	d: 01-Nov	-00		
Acenaphthene	ND	5.0	ug/l							
Acenaphthylene	ND	5.0								
Aniline	ND	5.0	u							•
Anthracene	ND	5.0	n							
Benzoic acid	ND	10								
Benzo (a) anthracene	ND	5.0	**							
Benzo (b) fluoranthene	ND	5.0	**							
Benzo (k) fluoranthene	ND	5.0	H							
Benzo (ghi) perylene	ND	5.0	**							
Benzo[a]pyrene	ND	5.0	"							
Benzyl alcohol	ND	5.0	n	•						
Bis(2-chloroethoxy)methane	ND	5.0								
Bis(2-chloroethyl)ether	ND	5.0	T							
Bis(2-chloroisopropyl)ether	ND	5.0	**							
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	5.0	Ħ							
Butyl benzyl phthalate	ND	5.0	**							
4-Chloroaniline	ND	10	×							
2-Chloronaphthalene	ND	5.0	н							
4-Chloro-3-methylphenol	ND	5.0	**							
2-Chlorophenol	ND	5.0	н							
4-Chlorophenyl phenyl ether	ND	5.0								
Chrysene	ND	5.0	н							
Dibenz (a,h) anthracene	ND	5.0								
Dibenzofuran	ND	5.0	•							
Di-n-butyl phthalate	ND	10	n							
1,2-Dichlorobenzene	ND	5.0	*	÷						
1,3-Dichlorobenzene	ND	5.0								
1,4-Dichlorobenzene	ND	5.0	**							
3,3'-Dichlorobenzidine	ND	10	. "							
2,4-Dichlorophenol	ND	5.0	n							
Diethyl phthalate	ND	5.0								
2,4-Dimethylphenol	ND	5.0								
Dimethyl phthalate	ND	5.0	, n		•					

Sequoia Analytical - Walnut Creek

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.

**Dublin CA**, 94568

Project: Tosco

Project Number: Tosco # 4625

Project Manager: Deanna L. Harding

Reported:

RPD

%REC

Source

20-Nov-00 07:27

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

Reporting

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	Limit	Notes
Batch 0J31017 - EPA 3510B										
Blank (0J31017-BLK1)	•			Prepared:	31-Oct-0	) Analyze	d: 01-Nov	-00		•••
,6-Dinitro-2-methylphenol	ND	10	ug/l							
4-Dinitrophenol	ND	10	17							
4-Dinitrotoluene	ND	5.0	n							
6-Dinitrotoluene	ND	5.0	н							
i-n-octyl phthalate	ND	5.0	11							
luoranthene	ND	5.0	11							
luorene	ND	5.0	"							
[exachlorobenzene	ND	5.0	н							
exachlorobutadiene	ND	5.0								
exachlorocyclopentadiene	ND	10	н							
exachloroethane	ND	5.0	**							
ideno (1,2,3-cd) pyrene	ND	5.0	н							
ophorone	ND	5.0	"							
-Methylnaphthalene	ND	5,0	*							-
Methylphenol	ND	5.0	**							
Methylphenol	ND	5.0	Ħ							
aphthalene	ND	5.0	W	1						
-Nitroaniline	ИD	10	n							
-Nitroaniline	ND	10	77							
-Nitroaniline	ND	10	н							
litrobenzene	ND	5.0	Ħ							
-Nitrophanol	ND	5.0	n							
-Nitrophenol	ND	10	n							
I-Nitrosodimethylamine	ND	5.0	-							
I-Nitrosodiphenylamine	ND	5.0	**							
I-Nitrosodi-n-propylamine	ND	5.0	Ħ							
entachlorophenol	ND	10	Ħ							
henanthrene	ND	5.0	"							
henol	ND	5.0	h							
угеле	ND	5.0	**							
,2,4-Trichlorobenzene	ND	5.0	. 4							
2,4,5-Trichlorophenol	ND	10	*							
2,4,6-Trichlorophenol	ND	5.0	#							
Surrogate: 2-Fluorophenol	43.8		m .	150	· · · ·	29.2	21-110			

Sequoia Analytical - Walnut Creek

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.



Project: Tosco

Project Number: Tosco # 4625 Project Manager: Deanna L. Harding Reported: 20-Nov-00 07:27

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD_	RPD Limit	Notes
Batch 0J31017 - EPA 3510B										
Blank (0J31017-BLK1)				Prepared:	31-Oct-0	O Analyze	d: 01-Nov-	-00		
Surrogate: Phenol-d6	27.6		ug/l	150		18.4	10-110			
Surrogate: Nitrobenzene-d5	46.9	_	"	100		46.9	35-214			
Surrogate: 2-Fluorobiphenyl	45.5		rr	100		45.5	43-116			
Surrogate: 2,4,6-Tribromophenol	80.I		*	150		53.4	10-123			
Surrogate: p-Terphenyl-dl4	38.0		"	100		38.Ô	33-141			
LCS (0J31017-BS1)		_			: 31-Oct-0		d: 01-Nov	-00	<del>-</del>	Q-0
Acenaphthene	42.2	5.0	ug/l	100		42.2	46-118			Q-0
4-Chloro-3-methylphenol	63.6	5.0	н	150		42.4	23-97			
2-Chlorophenol	56.6	5.0	н	150		37.7	27-123			
1.4-Dichlorobenzene	36.2	5.0	**	100		36.2	36-97			
2.4-Dinitrotoluene	44.1	5.0	н	100		44.1	24-96			
4-Nitrophenol	30.0	10	н	150		20.0	10-80			
N-Nitrosodi-n-propylamine	48.0	5.0	=	100		48.0	41-116			
= =:	77.4	10	11	150		51.6	9-103			
Pentachlorophenol	25.7	5,0		150		17.1	12-110			
Phenol	36.4	5.0	•	100		36.4	26-127			
Pyrene	39.3	5.0	**	100		39.3	39-98			
1,2,4-Trichlorobenzene						29.3	21-110		<del></del>	
Surrogate: 2-Fluorophenol	43.9		"	150 150		29.3 18.2	10-110			
Surrogate: Phenol-d6	27.3		" #	130 100		45.2	35-114			
Surrogate: Nitrobenzene-d5	45.2			100		42.9	43-116			S-0
Surrogate: 2-Fluorobiphenyl	42.9		,,	150		51.7	10-123			
Surrogate: 2,4,6-Tribromophenol	77.6		,,	100		37.7	33-141			
Surrogate: p-Terphenyl-dl4	37.7 " 100 37.7 33-142  Prepared: 31-Oct-00 Analyzed: 01-Nov-00									
LCS Dup (0J31017-BSD1)					a: 31-0ct-	44.2	46-118	4,63	30	Q-(
Acenaphthene	44.2	5,0	_	100			23-97	4.31	30	•
4-Chloro-3-methylphenol	66.4	5.0		150		44.3		4.83	30	
2-Chiorophonol	59.4	5.0		150		39.6	27-123		30	
1,4-Dichlorobenzene	36.5	5.0	**	100		36.5	36-97	0.825		
2,4-Dinitrotoluene	47.0	5.0	n	100		47.0	24-96	6.37	30	
4-Nitrophenol	29.0	10		150		19.3	10-80	3.39	30	
N-Nitrosodi-n-propylamine	51.8	5.0	. "	100		51.8	41-116	7.62	30	
Pentachlorophenol	82.2	10	, "	150		54.8	9-103	6.02	30	
Phenol	25.9	5.0	, "	150		17.3	12-110	0.775	. 30	
I IRAIUI	39.1	5.0		100		39.1	26-127	7.15	30	

Sequoia Analytical - Walnut Creek

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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:

RPD

%REC

20-Nov-00 07:27

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

Reporting

Spike

Source

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 0J31017 - EPA 3510B	· .		<u> </u>					<u>.                                    </u>		
LCS Dup (0J31017-BSD1)	S Dup (0J31017-BSD1) Prepared: 31-Oct-00 Analyzed: 01-Nov-00									
1,2,4-Trichlorobenzene	39.5	5.0	ug/l	100		39.5	39-98	0.508	30	
Surrogate: 2-Fluorophenol	44.5	<del></del>	"	150		29.7	21-110			
Surrogate: Phenol-d6	26.9		"	150		17.9	10-110			
Surrogate: Nitrobenzene-d5	46.8		"	100		46.8	35-114			
Surrogate: 2-Fluorobiphenyl	45.2		"	100		45.2	43-116			
Surrogate: 2,4,6-Tribromophenol	82.6		"	150		55.1	10-123			
Surrogate: p-Terphenyl-dl4	40.5		n	100		40.5	33-141			



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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:

20-Nov-00 07:27

## 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 0K16015 - EPA 3510B											
Blank (0K16015-BLK1)				Prepared:	16-Nov-0	0 Analyz	ed: 17-Nov	7-00			
TRPH	ND	5.0	mg/l								
LCS (0K16015-BS1)				Prepared: 16-Nov-00 Analyzed: 17-Nov-00							
TRPH	84.1	5.0	mg/l	100		84.1	70-130				
LCS Dup (0K16015-BSD1)	Prepared: 16-Nov-00 Analyzed: 17-Nov-00										
TRPH	84.3	5.0	mg/l	100	·	84.3	70-130	0.238	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: 20-Nov-00 07:27

#### **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.

P-01 Chromatogram Pattern: Gasoline C6-C12

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

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.

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

FROTECTION 10 SO