



GETTLER-RYAN INC.

TRANSMITTAL

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

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	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



GETTLER - RYAN INC.

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

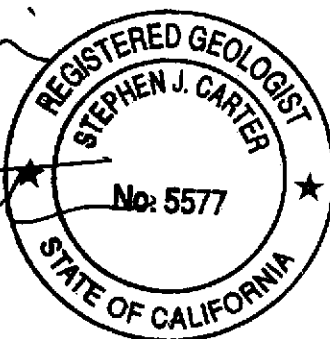
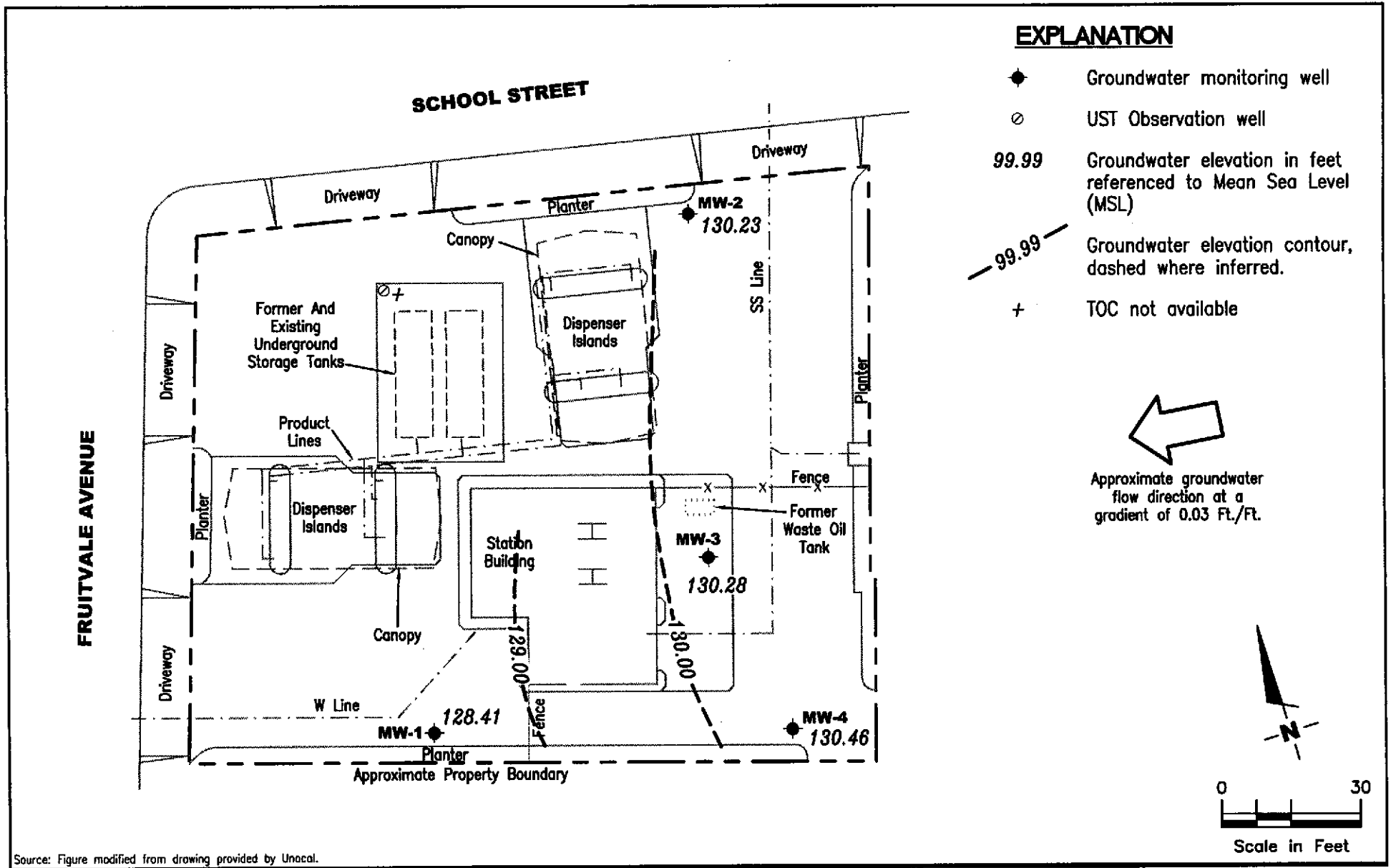


Figure 1: Potentiometric Map
Figure 2: Concentration Map
Table 1: Groundwater Monitoring Data and Analytical Results
Table 2: Groundwater Analytical Results
Table 3: Groundwater Analytical Results - Oxygenate Compounds
Attachments: Standard Operating Procedure - Groundwater Sampling
Field Data Sheets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

4625.qml



EXPLANATION

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

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

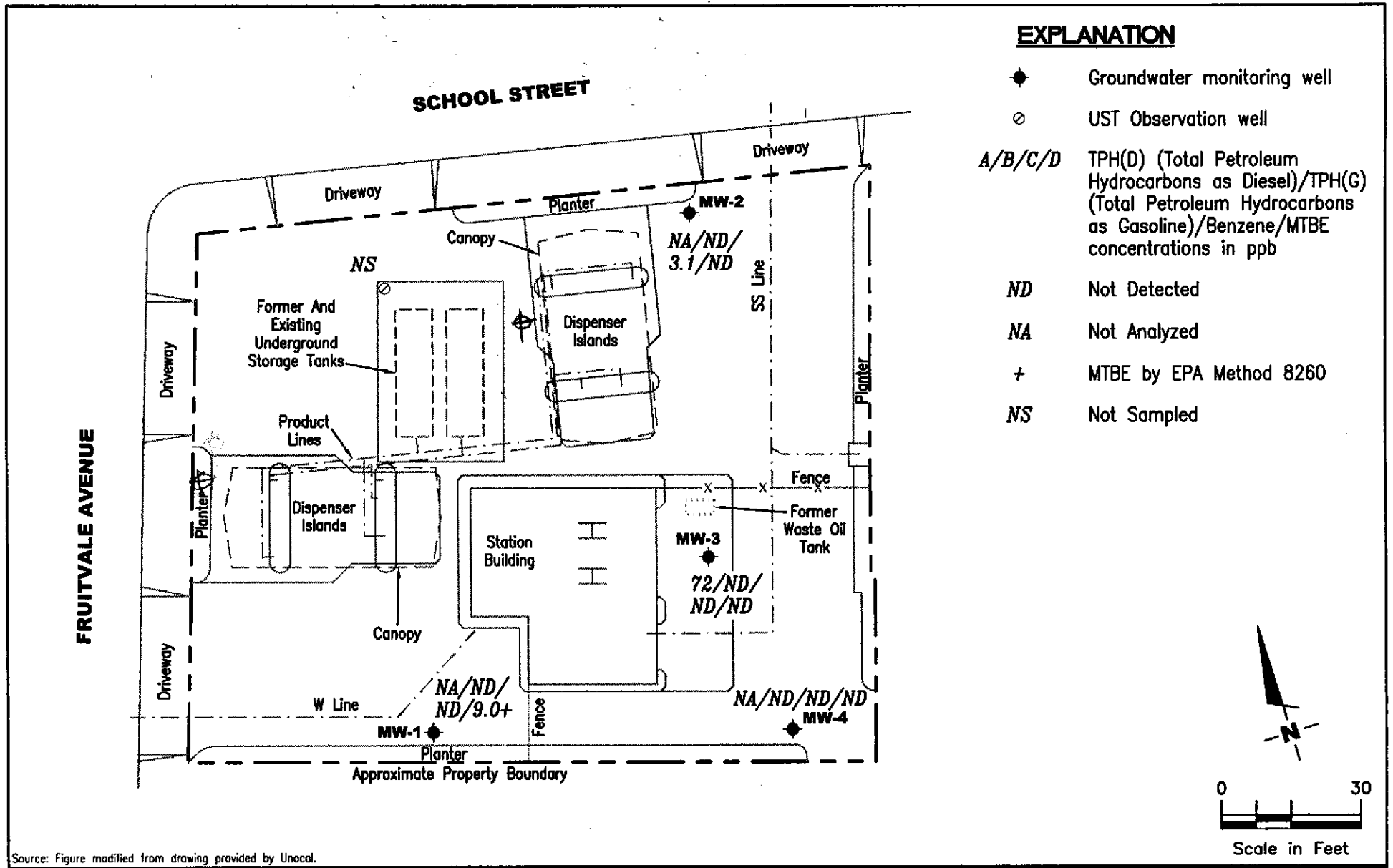
Source: Figure modified from drawing provided by Unocal.

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

FIGURE
1

PROJECT NUMBER 180255	REVIEWED BY	DATE February 9, 2001	REVISED DATE
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GETTLER - RYAN INC.
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 Dublin, CA 94568 (925) 551-7555

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

FIGURE
2

PROJECT NUMBER 180255 REVIEWED BY DATE February 9, 2001 REVISED DATE

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (76) Service Station #4625
 3070 Fruitvale Avenue
 Oakland, California

WELL ID/ TOC*	DATE	DTW (ft.)	S.L. (ft. bgs.)	GWE (msl)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-1											
136.36	05/03/00	11.81	5.0-25.0	124.55	--	ND	ND	ND	ND	ND	11/14 ²
	07/28/00	7.79		128.57	--	ND	ND	ND	ND	ND	21/19 ²
	10/29/00	7.90		128.46	--	62 ¹	ND	ND	ND	ND	6.5/3.9 ²
	02/09/01	7.95		128.41	--	ND	ND	ND	ND	ND	9.0/9.0 ²
MW-2											
138.64	05/03/00	8.59	5.0-25.0	130.05	--	2,400 ¹	53	ND ³	ND ³	240	³ ND/ND ²
	07/28/00	9.95		128.69	--	2,200 ¹	680	4.1	57	270	24/ND ²
	10/29/00	8.38		130.26	--	490 ¹	67	ND ³	23	22	ND ³
	02/09/01	8.41		130.23	--	ND	3.1	ND	0.52	1.1	ND
MW-3											
137.68	05/03/00	7.60	5.0-25.0	130.08	93 ⁵	ND	ND	ND	ND	ND	ND/ND ⁴
	07/28/00	8.82		128.86	ND ³	ND	ND	ND	ND	ND	ND/ND ⁴
	10/29/00	7.33		130.35	ND	ND	ND	ND	ND	ND	ND
	02/09/01	7.40		130.28	72 ⁶	ND	ND	ND	ND	ND	ND
MW-4											
136.60	05/03/00	6.48	5.0-25.0	130.12	--	ND	ND	ND	ND	ND	ND/ND ²
	07/28/00	7.55		129.05	--	ND	ND	ND	ND	ND	ND
	10/29/00	6.12		130.48	--	ND	ND	ND	ND	ND	ND
	02/09/01	6.14		130.46	--	ND	ND	ND	ND	ND	ND
UST OBSERVATION WELL											
	05/03/00	8.00		--	--	--	--	--	--	--	--
	07/28/00	9.28		--	--	--	--	--	--	--	--
	10/29/00	7.75		--	--	--	--	--	--	--	--
	02/09/01	6.14		--	--	--	--	--	--	--	--

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (76) Service Station #4625
 3070 Fruitvale Avenue
 Oakland, California

WELL ID/ TOC*	DATE	DTW (ft.)	S.I. (ft. bgs.)	GWE (mst)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (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

Table 1
Groundwater Monitoring Data and Analytical Results
Tosco (76) Service Station #4625
3070 Fruitvale Avenue
Oakland, California

EXPLANATIONS:

TOC = Top of Casing

DTW = Depth to Water

(ft.) = Feet

S.I. = Screen Interval

(ft. bgs.) = Feet Below Ground Surface

GWE = Groundwater Elevation

(msl) = Mean sea level

TPH-D = Total Petroleum Hydrocarbons as Diesel

TPH-G = Total Petroleum Hydrocarbons as Gasoline

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylenes

MTBE = Methyl tertiary butyl ether

(ppb) = Parts per billion

ND = Not Detected

-- = Not Measured/Not Analyzed

* TOC elevations were surveyed based on a cut square on School Street, City of Oakland Benchmark No. 3783, (Elevation = 136.99 feet msl).

¹ Laboratory report indicates gasoline C6-C12.

² MTBE by EPA Method 8260.

³ Detection limit raised. Refer to analytical reports.

⁴ MTBE by EPA Method 8240.

⁵ Laboratory report indicates unidentified hydrocarbons C9-C24.

⁶ Laboratory report indicates discrete peaks.

Table 2
Groundwater Analytical Results
 Tosco (76) Service Station #4625
 3070 Fruitvale Avenue
 Oakland, California

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

EXPLANATIONS:

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

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

ANALYTICAL METHODS:

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

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

Table 3
Groundwater Analytical Results - Oxygenate Compounds
 Tosco (76) Service Station #4625
 3070 Fruitvale Avenue
 Oakland, California

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)
MW-1	02/09/01	ND	ND	9.0	ND	ND	ND	ND	ND
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.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/
Facility # 4625
Address: 3070 Fruitvale Ave.
City: Oakland, CA.

Job#: 180255
Date: 2-9-01
Sampler: Joe

Well ID: MW-1
Well Diameter: 2 in.
Total Depth: 25.06 ft.
Depth to Water: 7.95 ft.

Well Condition: O.K.
Hydrocarbon Thickness: 0 in.
Amount Bailed (product/water): 0 (gal.)

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

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

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

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

Starting Time: 11:35
Sampling Time: 11:56 A.M.
Purging Flow Rate: 1 gpm.
Did well de-water? _____

Weather Conditions: cloudy/rainy
Water Color: clear Odor: none
Sediment Description: none
If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>11:45</u>	<u>3</u>	<u>7.17</u>	<u>6.36</u>	<u>71.9</u>	_____	_____	_____
<u>11:47</u>	<u>6</u>	<u>7.18</u>	<u>7.04</u>	<u>72.2</u>	_____	_____	_____
<u>11:49</u>	<u>9</u>	<u>7.24</u>	<u>7.15</u>	<u>73.0</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-1</u>	<u>3 VOA</u>	<u>Y</u>	<u>HCL</u>	<u>S eq.</u>	<u>TPHC, BTEX, MTSE</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: _____

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/
Facility # 4625
Address: 3070 Fruitvale Ave.
City: Oakland, CA.

Job#: 180255
Date: 2-9-01
Sampler: Joe

Well ID: MW-2
Well Diameter: 2 in.
Total Depth: 24.28 ft.
Depth to Water: 8.41 ft.

Well Condition: OK

Hydrocarbon Thickness:	<u>0</u> in.	Amount Bailed (product/water):	<u>0</u> (gal.)
Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66
	6" = 1.50	12" = 5.80	

15.87 x VF 0.17 = 2.70 x 3 (case volume) = Estimated Purge Volume: 8.5 (gal.)

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

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

Starting Time: 12:05
Sampling Time: 12:30 PM
Purging Flow Rate: 1 gpm.
Did well de-water? _____

Weather Conditions: cloudy/rainy
Water Color: clear Odor: none
Sediment Description: none
If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature $^{\circ}$ F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>12:18</u>	<u>2.5</u>	<u>7.56</u>	<u>8.31</u>	<u>73.0</u>	_____	_____	_____
<u>12:20</u>	<u>5</u>	<u>7.44</u>	<u>8.19</u>	<u>71.1</u>	_____	_____	_____
<u>12:22</u>	<u>8.5</u>	<u>7.48</u>	<u>8.14</u>	<u>71.4</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-2</u>	<u>3 VOA</u>	<u>Y</u>	<u>HCL</u>	<u>Seq.</u>	<u>TPHC, BTEX, MTBE</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: _____

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/
Facility # 4625
Address: 3070 Fruitvale Ave.
City: Oakland, CA.

Job#: 180255
Date: 2-9-01
Sampler: Joe

Well ID: MW-3
Well Diameter: 2 in.
Total Depth: 24.73 ft.
Depth to Water: 7.40 ft.

Well Condition: O.K.

Hydrocarbon Thickness:	<u>0</u> in.	Amount Bailed (product/water):	<u>0</u> gal.
Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66
	6" = 1.50	12" = 5.80	

17.33 x VF 0.17 = 2.95 x 3 (case volume) = Estimated Purge Volume: 9 gal.

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

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

Starting Time: 10:49
Sampling Time: 11:15 AM
Purging Flow Rate: 1 gpm
Did well de-water? _____

Weather Conditions: cloudy/rainy
Water Color: clear Odor: none
Sediment Description: none
If yes; Time: _____ Volume: _____ gal.

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature $^{\circ}$ F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>10:58</u>	<u>3</u>	<u>7.75</u>	<u>8.39</u>	<u>71.1</u>			
<u>11:00</u>	<u>6</u>	<u>7.65</u>	<u>8.58</u>	<u>71.5</u>			
<u>11:02</u>	<u>9</u>	<u>7.54</u>	<u>8.62</u>	<u>71.6</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-3</u>	<u>3 vOA</u>	<u>Y</u>	<u>HCL</u>	<u>Seq.</u>	<u>TPHC, BTEX, MTSE</u>
	<u>2 vOA</u>	<u>"</u>	<u>"</u>	<u>"</u>	<u>VOC's / 8240</u>
	<u>1 Amb.</u>	<u>"</u>	<u>-</u>	<u>"</u>	<u>SVOC's / 8270</u>
	<u>1 Amb</u>	<u>"</u>	<u>-</u>	<u>"</u>	<u>TPHD</u>
	<u>1 Amb.</u>	<u>"</u>	<u>HCL</u>	<u>"</u>	<u>Oil & Grease</u>
COMMENTS:	<u>1 plastic</u>	<u>"</u>	<u>HNO₃</u>	<u>"</u>	<u>Total Chromium</u>

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/
Facility # 4625
Address: 3070 Fruitvale Ave.
City: Oakland, CA.

Job#: 180255
Date: 2-9-01
Sampler: Joe

Well ID: mw-4
Well Diameter: 2 in.
Total Depth: 24.65 ft.
Depth to Water: 6.14 ft.

Well Condition: o.k.
Hydrocarbon Thickness: 0 in.
Amount Bailed (product/water): 6 (gal.)
Volume Factor (VF) table:

2" = 0.17	3" = 0.38	4" = 0.66
6" = 1.50	12" = 5.80	

18.51 X VF 0.17 = 3.15 X 3 (case volume) = Estimated Purge Volume: 9.5 (gal.)

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

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

Starting Time: 10:06
Sampling Time: 10:35 AM
Purging Flow Rate: 1 gpm.
Did well de-water? _____

Weather Conditions: cloudy/rainy
Water Color: clear Odor: none
Sediment Description: none
If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity (µmhos/cm)	Temperature (°F)	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>10:15</u>	<u>3</u>	<u>7.48</u>	<u>9.95</u>	<u>69.8</u>			
<u>10:17</u>	<u>6</u>	<u>7.27</u>	<u>9.92</u>	<u>69.9</u>			
<u>10:19</u>	<u>9.5</u>	<u>7.32</u>	<u>9.96</u>	<u>70.4</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>mw-4</u>	<u>3 v o A</u>	<u>Y</u>	<u>HCL</u>	<u>Sep.</u>	<u>TPHC, BTEX, MTSE</u>

COMMENTS: _____

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/
Facility # 4625
Address: 3070 Fruitvale Ave.
City: Oakland, CA.

Job#: 180255
Date: 2-9-01
Sampler: Joe

Well ID: UST Observation well Well Condition: O.K.
Well Diameter: 8 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)
Total Depth: 0 ft.
Depth to Water: 6.14 ft.

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

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

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

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

Starting Time: _____
Sampling Time: _____
Purging Flow Rate: _____ gpm.
Did well de-water? _____

Weather Conditions: cloudy/rainy
Water Color: clear Odor: none
Sediment Description: none
If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm}$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-</u>	<u>3 VOA</u>	<u>Y</u>	<u>HCL</u>	<u>Sep.</u>	<u>TPHC, BTEX, MTSE</u>

COMMENTS: only



Sequoia Analytical

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FAX (925) 988-9673
www.sequoialabs.com

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





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

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.

Dimple Sharma For 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:
06-Mar-01 14:05

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TB-LB (W102326-01) Water Sampled: 09-Feb-01 00:00 Received: 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	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	CC-3
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	CC-3
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	CC-3
<i>Surrogate: a,a,a-Trifluorotoluene</i>		97.7 %	70-130	"	"	"	"	"	
MW-1 (W102326-02) Water Sampled: 09-Feb-01 11:56 Received: 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	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	CC-3
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	CC-3
Methyl tert-butyl ether	9.0	2.5	"	"	"	"	"	"	CC-3
<i>Surrogate: a,a,a-Trifluorotoluene</i>		97.3 %	70-130	"	"	"	"	"	
MW-2 (W102326-03) Water Sampled: 09-Feb-01 12:30 Received: 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	"	"	"	"	"	"	CC-3
Toluene	ND	0.50	"	"	"	"	"	"	CC-3
Ethylbenzene	0.52	0.50	"	"	"	"	"	"	
Xylenes (total)	1.1	0.50	"	"	"	"	"	"	CC-3
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	CC-3
<i>Surrogate: a,a,a-Trifluorotoluene</i>		103 %	70-130	"	"	"	"	"	





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

**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE 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 11:15 Received: 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	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	CC-3
<i>Surrogate: a,a,a-Trifluorotoluene</i>		105 %	70-130		"	"	"	"	
MW-4 (W102326-05) Water Sampled: 09-Feb-01 10:35 Received: 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	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	CC-3
<i>Surrogate: a,a,a-Trifluorotoluene</i>		106 %	70-130		"	"	"	"	





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**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 11:15 Received: 12-Feb-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		"	"	"	"	





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Reported:
06-Mar-01 14:05

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (W102326-04) Water Sampled: 09-Feb-01 11:15 Received: 12-Feb-01 16:45									
Chromium	0.038	0.010	mg/l	1	1B26017	26-Feb-01	06-Mar-01	EPA 200.7	





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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (W102326-02) Water Sampled: 09-Feb-01 11:56 Received: 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	"	"	"	"	"	"	
Methyl tert-butyl ether	9.0	2.0	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	2.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.0	"	"	"	"	"	"	
Ethylene dibromide	ND	2.0	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		101 %		50-150	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		88.6 %		50-150	"	"	"	"	





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Reported:
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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 Sampled: 09-Feb-01 11:15 Received: 12-Feb-01 16:45									
Chloromethane	ND	2.0	ug/l	1	1B14010	16-Feb-01	16-Feb-01	EPA 8240B	
Vinyl chloride	ND	2.0	"	"	"	"	"	"	
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	"	"	"	"	"	"	
Methylene chloride	ND	10	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
Vinyl acetate	ND	5.0	"	"	"	"	"	"	
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	"	"	"	"	"	"	
Bromodichloromethane	ND	2.0	"	"	"	"	"	"	
2,2,5,5-Tetramethyltetrahydrofuran	ND	2.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	2.0	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	10	"	"	"	"	"	"	
Toluene	ND	2.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	2.0	"	"	"	"	"	"	
Tetrachloroethene	ND	2.0	"	"	"	"	"	"	
2-Hexanone	ND	10	"	"	"	"	"	"	
Dibromochloromethane	ND	2.0	"	"	"	"	"	"	
Chlorobenzene	ND	2.0	"	"	"	"	"	"	
Ethylbenzene	ND	2.0	"	"	"	"	"	"	
Total Xylenes	ND	2.0	"	"	"	"	"	"	
Styrene	ND	2.0	"	"	"	"	"	"	
Bromoform	ND	2.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	2.0	"	"	"	"	"	"	





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**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 Sampled: 09-Feb-01 11:15 Received: 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	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		113 %	50-150		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		113 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		102 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		105 %	50-150		"	"	"	"	





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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (W102326-04) Water Sampled: 09-Feb-01 11:15 Received: 12-Feb-01 16:45									
Acenaphthene	ND	5.0	ug/l	1	1B12017	15-Feb-01	28-Feb-01	EPA 8270B	
Acenaphthylene	ND	5.0	"	"	"	"	"	"	
Aniline	ND	5.0	"	"	"	"	"	"	
Anthracene	ND	5.0	"	"	"	"	"	"	
Benzoic acid	ND	10	"	"	"	"	"	"	
Benzo (a) anthracene	ND	5.0	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	5.0	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	5.0	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	5.0	"	"	"	"	"	"	
Benzo[a]pyrene	ND	5.0	"	"	"	"	"	"	
Benzyl alcohol	ND	5.0	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	5.0	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	5.0	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	5.0	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	10	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	5.0	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	50	"	"	"	"	"	"	
4-Chloroaniline	ND	25	"	"	"	"	"	"	
2-Chloronaphthalene	ND	5.0	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	5.0	"	"	"	"	"	"	
2-Chlorophenol	ND	5.0	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	5.0	"	"	"	"	"	"	
Chrysene	ND	5.0	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	10	"	"	"	"	"	"	
Dibenzofuran	ND	5.0	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	10	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	10	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	10	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	5.0	"	"	"	"	"	"	
Diethyl phthalate	ND	5.0	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	5.0	"	"	"	"	"	"	
Dimethyl phthalate	ND	5.0	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	10	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	10	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	10	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	10	"	"	"	"	"	"	





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Reported:
06-Mar-01 14:05

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (W102326-04) Water Sampled: 09-Feb-01 11:15 Received: 12-Feb-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	"	"	"	"	"	"	
Fluorene	ND	5.0	"	"	"	"	"	"	
Hexachlorobenzene	ND	10	"	"	"	"	"	"	
Hexachlorobutadiene	ND	10	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	10	"	"	"	"	"	"	
Hexachloroethane	ND	5.0	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	10	"	"	"	"	"	"	
Isophorone	ND	5.0	"	"	"	"	"	"	
2-Methylnaphthalene	ND	5.0	"	"	"	"	"	"	
2-Methylphenol	ND	5.0	"	"	"	"	"	"	
4-Methylphenol	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
2-Nitroaniline	ND	10	"	"	"	"	"	"	
3-Nitroaniline	ND	10	"	"	"	"	"	"	
4-Nitroaniline	ND	20	"	"	"	"	"	"	
Nitrobenzene	ND	5.0	"	"	"	"	"	"	
2-Nitrophenol	ND	5.0	"	"	"	"	"	"	
4-Nitrophenol	ND	10	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	5.0	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	5.0	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	5.0	"	"	"	"	"	"	
Pentachlorophenol	ND	10	"	"	"	"	"	"	
Phenanthrene	ND	5.0	"	"	"	"	"	"	
Phenol	ND	5.0	"	"	"	"	"	"	
Pyrene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	10	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	10	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		44.5 %		21-110	"	"	"	"	
Surrogate: Phenol-d6		26.1 %		10-110	"	"	"	"	
Surrogate: Nitrobenzene-d5		71.5 %		35-114	"	"	"	"	
Surrogate: 2-Fluorobiphenyl		71.0 %		43-116	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		71.3 %		10-123	"	"	"	"	
Surrogate: p-Terphenyl-d14		51.7 %		33-141	"	"	"	"	





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

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





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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 & Analyzed: 16-Feb-01										
Purgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	2.5	"							
<i>Surrogate: a,a,a-Trifluorotoluene</i>	30.0		"	30.0		100	70-130			
LCS (1B16001-BS1) Prepared & Analyzed: 16-Feb-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	"	20.0		98.0	70-130			
Xylenes (total)	58.2	0.50	"	60.0		97.0	70-130			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	29.9		"	30.0		99.7	70-130			
Matrix Spike (1B16001-MS1) Source: W102177-07 Prepared & Analyzed: 16-Feb-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	"	20.0	ND	91.0	70-130			
Xylenes (total)	53.9	0.50	"	60.0	ND	89.8	70-130			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	30.2		"	30.0		101	70-130			
Matrix Spike Dup (1B16001-MSD1) Source: W102177-07 Prepared & Analyzed: 16-Feb-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	"	20.0	ND	96.0	70-130	5.35	20	
Xylenes (total)	57.3	0.50	"	60.0	ND	95.5	70-130	6.12	20	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	31.4		"	30.0		105	70-130			





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**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
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Batch 1B16002 - EPA 5030B [P/T]

Blank (1B16002-BLK1)

Prepared & Analyzed: 16-Feb-01

Purgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	2.5	"							
<i>Surrogate: a, a, a-Trifluorotoluene</i>	33.3		"	30.0		111	70-130			

LCS (1B16002-BS1)

Prepared & Analyzed: 16-Feb-01

Benzene	24.0	0.50	ug/l	20.0		120	70-130			
Toluene	20.1	0.50	"	20.0		101	70-130			
Ethylbenzene	22.0	0.50	"	20.0		110	70-130			
Xylenes (total)	60.0	0.50	"	60.0		100	70-130			
<i>Surrogate: a, a, a-Trifluorotoluene</i>	39.2		"	30.0		131	70-130			S-03

Matrix Spike (1B16002-MS1)

Source: W102201-19RE1 Prepared & Analyzed: 16-Feb-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	"	20.0	ND	103	70-130			
Xylenes (total)	55.9	0.50	"	60.0	ND	93.2	70-130			
<i>Surrogate: a, a, a-Trifluorotoluene</i>	34.4		"	30.0		115	70-130			

Matrix Spike Dup (1B16002-MSD1)

Source: W102201-19RE1 Prepared & Analyzed: 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	"	20.0	ND	93.5	70-130	9.67	20	
Xylenes (total)	51.5	0.50	"	60.0	ND	85.8	70-130	8.19	20	
<i>Surrogate: a, a, a-Trifluorotoluene</i>	32.5		"	30.0		108	70-130			





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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) Prepared & Analyzed: 23-Feb-01										
Diesel Range Hydrocarbons	ND	50	ug/l							
Surrogate: n-Pentacosane	30.0		"	33.3		90.1	50-150			
LCS (1B23003-BS1) Prepared & Analyzed: 23-Feb-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 & Analyzed: 23-Feb-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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Project Number: Tosco # 4625
Project Manager: Deanna L. Harding

Reported:
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-01 Analyzed: 06-Mar-01					
Chromium	ND	0.010	mg/l							
LCS (1B26017-BS1)										
					Prepared: 26-Feb-01 Analyzed: 06-Mar-01					
Chromium	1.02	0.010	mg/l	1.00		102	80-120			
LCS Dup (1B26017-BSD1)										
					Prepared: 26-Feb-01 Analyzed: 06-Mar-01					
Chromium	1.01	0.010	mg/l	1.00		101	80-120	0.985	20	
Matrix Spike (1B26017-MS1)										
		Source: W102220-01			Prepared: 26-Feb-01 Analyzed: 06-Mar-01					
Chromium	0.893	0.010	mg/l	1.00	ND	89.3	80-120			
Matrix Spike Dup (1B26017-MSD1)										
		Source: W102220-01			Prepared: 26-Feb-01 Analyzed: 06-Mar-01					
Chromium	0.873	0.010	mg/l	1.00	ND	87.3	80-120	2.27	20	





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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
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Batch 1B15012 - EPA 5030B [P/T]

Blank (1B15012-BLK2)

Prepared & Analyzed: 23-Feb-01

Ethanol	ND	500	ug/l							
tert-Butyl alcohol	ND	50	"							
Methyl tert-butyl ether	ND	2.0	"							
Di-isopropyl ether	ND	2.0	"							
Ethyl tert-butyl ether	ND	2.0	"							
tert-Amyl methyl ether	ND	2.0	"							
1,2-Dichloroethane	ND	2.0	"							
Ethylene dibromide	ND	2.0	"							
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 & Analyzed: 23-Feb-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)

Source: W102356-03

Prepared & Analyzed: 22-Feb-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)

Source: W102356-03

Prepared & Analyzed: 22-Feb-01

Methyl tert-butyl ether	56.3	2.0	ug/l	50.0	ND	113	60-150	7.18	25	
Surrogate: Dibromofluoromethane	50.6		"	50.0		101	50-150			
Surrogate: 1,2-Dichloroethane-d4	58.1		"	50.0		116	50-150			





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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-01 Analyzed: 17-Feb-01										
Chloromethane	ND	2.0	ug/l							
Vinyl chloride	ND	2.0	"							
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	"							
Methylene chloride	ND	10	"							
Methyl tert-butyl ether	ND	2.0	"							
trans-1,2-Dichloroethene	ND	2.0	"							
Vinyl acetate	ND	5.0	"							
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	"							
Bromodichloromethane	ND	2.0	"							
2,2,5,5-Tetramethyltetrahydrofuran	ND	2.0	"							
cis-1,3-Dichloropropene	ND	2.0	"							
4-Methyl-2-pentanone	ND	10	"							
Toluene	ND	2.0	"							
trans-1,3-Dichloropropene	ND	5.0	"							
1,1,2-Trichloroethane	ND	2.0	"							
Tetrachloroethene	ND	2.0	"							
2-Hexanone	ND	10	"							
Dibromochloromethane	ND	2.0	"							
Chlorobenzene	ND	2.0	"							
Ethylbenzene	ND	2.0	"							





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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
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Batch 1B14010 - EPA 5030B [P/T]

Blank (1B14010-BLK1)

Prepared: 16-Feb-01 Analyzed: 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	"							
1,3-Dichlorobenzene	ND	2.0	"							
1,4-Dichlorobenzene	ND	2.0	"							
1,2-Dichlorobenzene	ND	2.0	"							
<i>Surrogate: Dibromofluoromethane</i>	27.0		"	25.0		108	50-150			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	24.7		"	25.0		98.8	50-150			
<i>Surrogate: Toluene-d8</i>	24.7		"	25.0		98.8	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	25.5		"	25.0		102	50-150			

LCS (1B14010-BS1)

Prepared & Analyzed: 16-Feb-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	"	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			
<i>Surrogate: Dibromofluoromethane</i>	25.3		"	25.0		101	50-150			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	24.1		"	25.0		96.4	50-150			
<i>Surrogate: Toluene-d8</i>	24.8		"	25.0		99.2	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	24.9		"	25.0		99.6	50-150			

Matrix Spike (1B14010-MS1)

Source: W102099-01

Prepared & Analyzed: 16-Feb-01

1,1-Dichloroethene	24.0	2.0	ug/l	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	"	25.0	ND	96.8	60-140			
Chlorobenzene	23.6	2.0	"	25.0	ND	94.4	60-140			
<i>Surrogate: Dibromofluoromethane</i>	29.0		"	25.0		116	50-150			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	28.5		"	25.0		114	50-150			
<i>Surrogate: Toluene-d8</i>	25.4		"	25.0		102	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	26.5		"	25.0		106	50-150			





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Reported:
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**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)		Source: W102099-01			Prepared & Analyzed: 16-Feb-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	"	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		"	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		"	25.0		105	50-150			





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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
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Batch 1B12017 - EPA 3510B

Blank (1B12017-BLK1)

Prepared: 12-Feb-01 Analyzed: 16-Feb-01

Acenaphthene	ND	5.0	ug/l							
Acenaphthylene	ND	5.0	"							
Aniline	ND	5.0	"							
Anthracene	ND	5.0	"							
Benzoic acid	ND	10	"							
Benzo (a) anthracene	ND	5.0	"							
Benzo (b) fluoranthene	ND	5.0	"							
Benzo (k) fluoranthene	ND	5.0	"							
Benzo (ghi) perylene	ND	5.0	"							
Benzo[a]pyrene	ND	5.0	"							
Benzyl alcohol	ND	5.0	"							
Bis(2-chloroethoxy)methane	ND	5.0	"							
Bis(2-chloroethyl)ether	ND	5.0	"							
Bis(2-chloroisopropyl)ether	ND	5.0	"							
Bis(2-ethylhexyl)phthalate	ND	10	"							
4-Bromophenyl phenyl ether	ND	5.0	"							
Butyl benzyl phthalate	ND	50	"							
4-Chloroaniline	ND	25	"							
2-Chloronaphthalene	ND	5.0	"							
4-Chloro-3-methylphenol	ND	5.0	"							
2-Chlorophenol	ND	5.0	"							
4-Chlorophenyl phenyl ether	ND	5.0	"							
Chrysene	ND	5.0	"							
Dibenz (a,h) anthracene	ND	10	"							
Dibenzofuran	ND	5.0	"							
Di-n-butyl phthalate	ND	10	"							
1,2-Dichlorobenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	5.0	"							
1,4-Dichlorobenzene	ND	10	"							
3,3'-Dichlorobenzidine	ND	10	"							
2,4-Dichlorophenol	ND	5.0	"							
Diethyl phthalate	ND	5.0	"							
2,4-Dimethylphenol	ND	5.0	"							
Dimethyl phthalate	ND	5.0	"							

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.





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6747 Sierra Court Suite J
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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
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Batch 1B12017 - EPA 3510B

Prepared: 12-Feb-01 Analyzed: 16-Feb-01

Blank (1B12017-BLK1)										
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	"							
Fluorene	ND	5.0	"							
Hexachlorobenzene	ND	10	"							
Hexachlorobutadiene	ND	10	"							
Hexachlorocyclopentadiene	ND	10	"							
Hexachloroethane	ND	5.0	"							
Indeno (1,2,3-cd) pyrene	ND	10	"							
Isophorone	ND	5.0	"							
2-Methylnaphthalene	ND	5.0	"							
2-Methylphenol	ND	5.0	"							
4-Methylphenol	ND	5.0	"							
Naphthalene	ND	5.0	"							
2-Nitroaniline	ND	10	"							
3-Nitroaniline	ND	10	"							
4-Nitroaniline	ND	20	"							
Nitrobenzene	ND	5.0	"							
2-Nitrophenol	ND	5.0	"							
4-Nitrophenol	ND	10	"							
N-Nitrosodimethylamine	ND	5.0	"							
N-Nitrosodiphenylamine	ND	5.0	"							
N-Nitrosodi-n-propylamine	ND	5.0	"							
Pentachlorophenol	ND	10	"							
Phenanthrene	ND	5.0	"							
Phenol	ND	5.0	"							
Pyrene	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	5.0	"							
2,4,5-Trichlorophenol	ND	10	"							
2,4,6-Trichlorophenol	ND	10	"							
Surrogate: 2-Fluorophenol	69.9		"	150		46.6	21-110			





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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
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Batch 1B12017 - EPA 3510B

Blank (1B12017-BLK1)

Prepared: 12-Feb-01 Analyzed: 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-01 Analyzed: 16-Feb-01

Acenaphthene	ND	5.0	ug/l							
Acenaphthylene	ND	5.0	"							
Aniline	ND	5.0	"							
Anthracene	ND	5.0	"							
Benzoic acid	ND	10	"							
Benzo (a) anthracene	ND	5.0	"							
Benzo (b) fluoranthene	ND	5.0	"							
Benzo (k) fluoranthene	ND	5.0	"							
Benzo (ghi) perylene	ND	5.0	"							
Benzo[a]pyrene	ND	5.0	"							
Benzyl alcohol	ND	5.0	"							
Bis(2-chloroethoxy)methane	ND	5.0	"							
Bis(2-chloroethyl)ether	ND	5.0	"							
Bis(2-chloroisopropyl)ether	ND	5.0	"							
Bis(2-ethylhexyl)phthalate	ND	10	"							
4-Bromophenyl phenyl ether	ND	5.0	"							
Butyl benzyl phthalate	ND	50	"							
4-Chloroaniline	ND	25	"							
2-Chloronaphthalene	ND	5.0	"							
4-Chloro-3-methylphenol	ND	5.0	"							
2-Chlorophenol	ND	5.0	"							
4-Chlorophenyl phenyl ether	ND	5.0	"							
Chrysene	ND	5.0	"							
Dibenz (a,h) anthracene	ND	10	"							
Dibenzofuran	ND	5.0	"							
Di-n-butyl phthalate	ND	10	"							
1,2-Dichlorobenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	5.0	"							





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
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Batch 1B12017 - EPA 3510B

Prepared: 15-Feb-01 Analyzed: 16-Feb-01

1,4-Dichlorobenzene	ND	10	ug/l
3,3'-Dichlorobenzidine	ND	10	"
2,4-Dichlorophenol	ND	5.0	"
Diethyl phthalate	ND	5.0	"
2,4-Dimethylphenol	ND	5.0	"
Dimethyl phthalate	ND	5.0	"
4,6-Dinitro-2-methylphenol	ND	10	"
2,4-Dinitrophenol	ND	10	"
2,4-Dinitrotoluene	ND	10	"
2,6-Dinitrotoluene	ND	10	"
Di-n-octyl phthalate	ND	10	"
Fluoranthene	ND	5.0	"
Fluorene	ND	5.0	"
Hexachlorobenzene	ND	10	"
Hexachlorobutadiene	ND	10	"
Hexachlorocyclopentadiene	ND	10	"
Hexachloroethane	ND	5.0	"
Indeno (1,2,3-cd) pyrene	ND	10	"
Isophorone	ND	5.0	"
2-Methylnaphthalene	ND	5.0	"
2-Methylphenol	ND	5.0	"
4-Methylphenol	ND	5.0	"
Naphthalene	ND	5.0	"
2-Nitroaniline	ND	10	"
3-Nitroaniline	ND	10	"
4-Nitroaniline	ND	20	"
Nitrobenzene	ND	5.0	"
2-Nitrophenol	ND	5.0	"
4-Nitrophenol	ND	10	"
N-Nitrosodimethylamine	ND	5.0	"
N-Nitrosodiphenylamine	ND	5.0	"
N-Nitrosodi-n-propylamine	ND	5.0	"
Pentachlorophenol	ND	10	"
Phenanthrene	ND	5.0	"





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
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Batch 1B12017 - EPA 3510B

Prepared: 15-Feb-01 Analyzed: 16-Feb-01

Phenol	ND	5.0	ug/l							
Pyrene	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	5.0	"							
2,4,5-Trichlorophenol	ND	10	"							
2,4,6-Trichlorophenol	ND	10	"							
<i>Surrogate: 2-Fluorophenol</i>	76.2		"	150		50.8	21-110			
<i>Surrogate: Phenol-d6</i>	48.8		"	150		32.5	10-110			
<i>Surrogate: Nitrobenzene-d5</i>	80.1		"	100		80.1	35-114			
<i>Surrogate: 2-Fluorobiphenyl</i>	72.4		"	100		72.4	43-116			
<i>Surrogate: 2,4,6-Tribromophenol</i>	117		"	150		78.0	10-123			
<i>Surrogate: p-Terphenyl-d14</i>	81.7		"	100		81.7	33-141			

Blank (1B12017-BLK3)

Prepared: 15-Feb-01 Analyzed: 16-Feb-01

Acenaphthene	ND	10	ug/l							
Acenaphthylene	ND	10	"							
Aniline	ND	10	"							
Anthracene	ND	10	"							
Benzoic acid	ND	20	"							
Benzo (a) anthracene	ND	10	"							
Benzo (b) fluoranthene	ND	10	"							
Benzo (k) fluoranthene	ND	10	"							
Benzo (ghi) perylene	ND	10	"							
Benzo[a]pyrene	ND	10	"							
Benzyl alcohol	ND	10	"							
Bis(2-chloroethoxy)methane	ND	10	"							
Bis(2-chloroethyl)ether	ND	10	"							
Bis(2-chloroisopropyl)ether	ND	10	"							
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	"							
4-Chloro-3-methylphenol	ND	10	"							
2-Chlorophenol	ND	10	"							
4-Chlorophenyl phenyl ether	ND	10	"							





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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
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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	"							
Dibenzofuran	ND	10	"							
Di-n-butyl phthalate	ND	20	"							
1,2-Dichlorobenzene	ND	10	"							
1,3-Dichlorobenzene	ND	10	"							
1,4-Dichlorobenzene	ND	20	"							
3,3'-Dichlorobenzidine	ND	20	"							
2,4-Dichlorophenol	ND	10	"							
Diethyl phthalate	ND	10	"							
2,4-Dimethylphenol	ND	10	"							
Dimethyl phthalate	ND	10	"							
4,6-Dinitro-2-methylphenol	ND	20	"							
2,4-Dinitrophenol	ND	20	"							
2,4-Dinitrotoluene	ND	20	"							
2,6-Dinitrotoluene	ND	20	"							
Di-n-octyl phthalate	ND	20	"							
Fluoranthene	ND	10	"							
Fluorene	ND	10	"							
Hexachlorobenzene	ND	20	"							
Hexachlorobutadiene	ND	20	"							
Hexachlorocyclopentadiene	ND	20	"							
Hexachloroethane	ND	10	"							
Indeno (1,2,3-cd) pyrene	ND	20	"							
Isophorone	ND	10	"							
2-Methylnaphthalene	ND	10	"							
2-Methylphenol	ND	10	"							
4-Methylphenol	ND	10	"							
Naphthalene	ND	10	"							
2-Nitroaniline	ND	20	"							
3-Nitroaniline	ND	20	"							
4-Nitroaniline	ND	40	"							
Nitrobenzene	ND	10	"							
2-Nitrophenol	ND	10	"							





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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
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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	"							
N-Nitrosodi-n-propylamine	ND	10	"							
Pentachlorophenol	ND	20	"							
Phenanthrene	ND	10	"							
Phenol	ND	10	"							
Pyrene	ND	10	"							
1,2,4-Trichlorobenzene	ND	10	"							
2,4,5-Trichlorophenol	ND	20	"							
2,4,6-Trichlorophenol	ND	20	"							
<i>Surrogate: 2-Fluorophenol</i>	181		"	300		60.3	21-110			
<i>Surrogate: Phenol-d6</i>	133		"	300		44.3	10-110			
<i>Surrogate: Nitrobenzene-d5</i>	167		"	200		83.5	35-114			
<i>Surrogate: 2-Fluorobiphenyl</i>	170		"	200		85.0	43-116			
<i>Surrogate: 2,4,6-Tribromophenol</i>	240		"	300		80.0	10-123			
<i>Surrogate: p-Terphenyl-d14</i>	151		"	200		75.5	33-141			

LCS (1B12017-BS1)

Prepared: 12-Feb-01 Analyzed: 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	"	150		74.7	27-123			
1,4-Dichlorobenzene	70.8	10	"	100		70.8	36-97			
2,4-Dinitrotoluene	79.2	10	"	100		79.2	24-96			
4-Nitrophenol	53.9	10	"	150		35.9	10-80			
N-Nitrosodi-n-propylamine	89.3	5.0	"	100		89.3	41-116			
Pentachlorophenol	122	10	"	150		81.3	9-103			
Phenol	56.8	5.0	"	150		37.9	12-110			
Pyrene	75.8	5.0	"	100		75.8	26-127			
1,2,4-Trichlorobenzene	79.3	5.0	"	100		79.3	39-98			
<i>Surrogate: 2-Fluorophenol</i>	89.7		"	150		59.8	21-110			
<i>Surrogate: Phenol-d6</i>	57.5		"	150		38.3	10-110			
<i>Surrogate: Nitrobenzene-d5</i>	89.4		"	100		89.4	35-114			
<i>Surrogate: 2-Fluorobiphenyl</i>	84.8		"	100		84.8	43-116			
<i>Surrogate: 2,4,6-Tribromophenol</i>	133		"	150		88.7	10-123			





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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
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Batch 1B12017 - EPA 3510B

LCS (1B12017-BS1)

Prepared: 12-Feb-01 Analyzed: 16-Feb-01

<i>Surrogate: p-Terphenyl-d14</i>	79.3		ug/l	100		79.3	33-141			
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LCS (1B12017-BS2)

Prepared: 15-Feb-01 Analyzed: 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	"	100		58.2	36-97			
2,4-Dinitrotoluene	79.0	10	"	100		79.0	24-96			
4-Nitrophenol	45.5	10	"	150		30.3	10-80			
N-Nitrosodi-n-propylamine	95.3	5.0	"	100		95.3	41-116			
Pentachlorophenol	120	10	"	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			
<i>Surrogate: 2-Fluorophenol</i>	82.3		"	150		54.9	21-110			
<i>Surrogate: Phenol-d6</i>	51.6		"	150		34.4	10-110			
<i>Surrogate: Nitrobenzene-d5</i>	85.5		"	100		85.5	35-114			
<i>Surrogate: 2-Fluorobiphenyl</i>	75.8		"	100		75.8	43-116			
<i>Surrogate: 2,4,6-Tribromophenol</i>	132		"	150		88.0	10-123			
<i>Surrogate: p-Terphenyl-d14</i>	76.1		"	100		76.1	33-141			

LCS Dup (1B12017-BSD1)

Prepared: 12-Feb-01 Analyzed: 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	"	100		80.2	24-96	1.25	30	
4-Nitrophenol	43.8	10	"	150		29.2	10-80	20.7	30	
N-Nitrosodi-n-propylamine	90.8	5.0	"	100		90.8	41-116	1.67	30	
Pentachlorophenol	126	10	"	150		84.0	9-103	3.23	30	
Phenol	47.7	5.0	"	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	
<i>Surrogate: 2-Fluorophenol</i>	80.5		"	150		53.7	21-110			
<i>Surrogate: Phenol-d6</i>	47.3		"	150		31.5	10-110			





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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
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Batch 1B12017 - EPA 3510B

LCS Dup (1B12017-BSD1)

Prepared: 12-Feb-01 Analyzed: 16-Feb-01

Surrogate: Nitrobenzene-d5	91.5		ug/l	100		91.5	35-114			
Surrogate: 2-Fluorobiphenyl	86.8		"	100		86.8	43-116			
Surrogate: 2,4,6-Tribromophenol	131		"	150		87.3	10-123			
Surrogate: p-Terphenyl-d14	80.3		"	100		80.3	33-141			





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Reported:
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**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)										
Prepared: 26-Feb-01 Analyzed: 02-Mar-01										
TRPH	ND	5.0	mg/l							
LCS (1B26011-BS1)										
Prepared: 26-Feb-01 Analyzed: 02-Mar-01										
TRPH	81.6	5.0	mg/l	100		81.6	70-130			
LCS Dup (1B26011-BSD1)										
Prepared: 26-Feb-01 Analyzed: 02-Mar-01										
TRPH	82.2	5.0	mg/l	100		82.2	70-130	0.733	30	





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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

