

R253



GETTLER-RYAN INC.

TRANSMITTAL

April 2, 2003
G-R #180062

Alameda County
APR 2 1 2003
Environmental Health

TO: Mr. David B. De Witt
ConocoPhillips
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 (Unocal) Service Station
#5781
3535 Pierson Street
Oakland California** 94619

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	March 27, 2003	Groundwater Monitoring and Sampling Report Annual - Event of February 22, 2003

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 16, 2003**, this report will be distributed to the following:

cc: Ms. Eva Chu, Alameda County Health Care Services, 1131 Harbor Bay Parkway, Alameda, CA 94502

Enclosure

trans/5781-DBD



GETTLER-RYAN INC.

March 27, 2003
G-R Job #180062

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

RE: Annual Event of February 22, 2003
Groundwater Monitoring & Sampling Report
Tosco (Unocal) Service Station #5781
3535 Pierson Street
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).

A static groundwater level was measured and the well was checked for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were not present in the well. Static water level and groundwater elevation data are summarized in Table 1. A Groundwater Elevation Map is included as Figure 1.

The groundwater samples were collected from the monitoring well as specified by G-R Standard Operating Procedure - Groundwater Sampling (attached). The field data is also attached. The samples were analyzed by Sequoia Analytical. Analytical results are summarized in Table 1, and 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

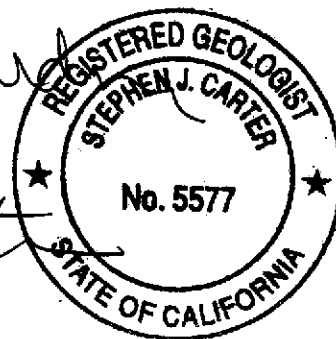
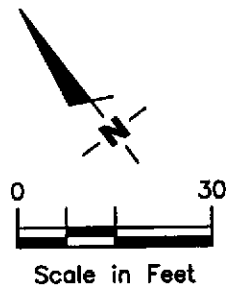
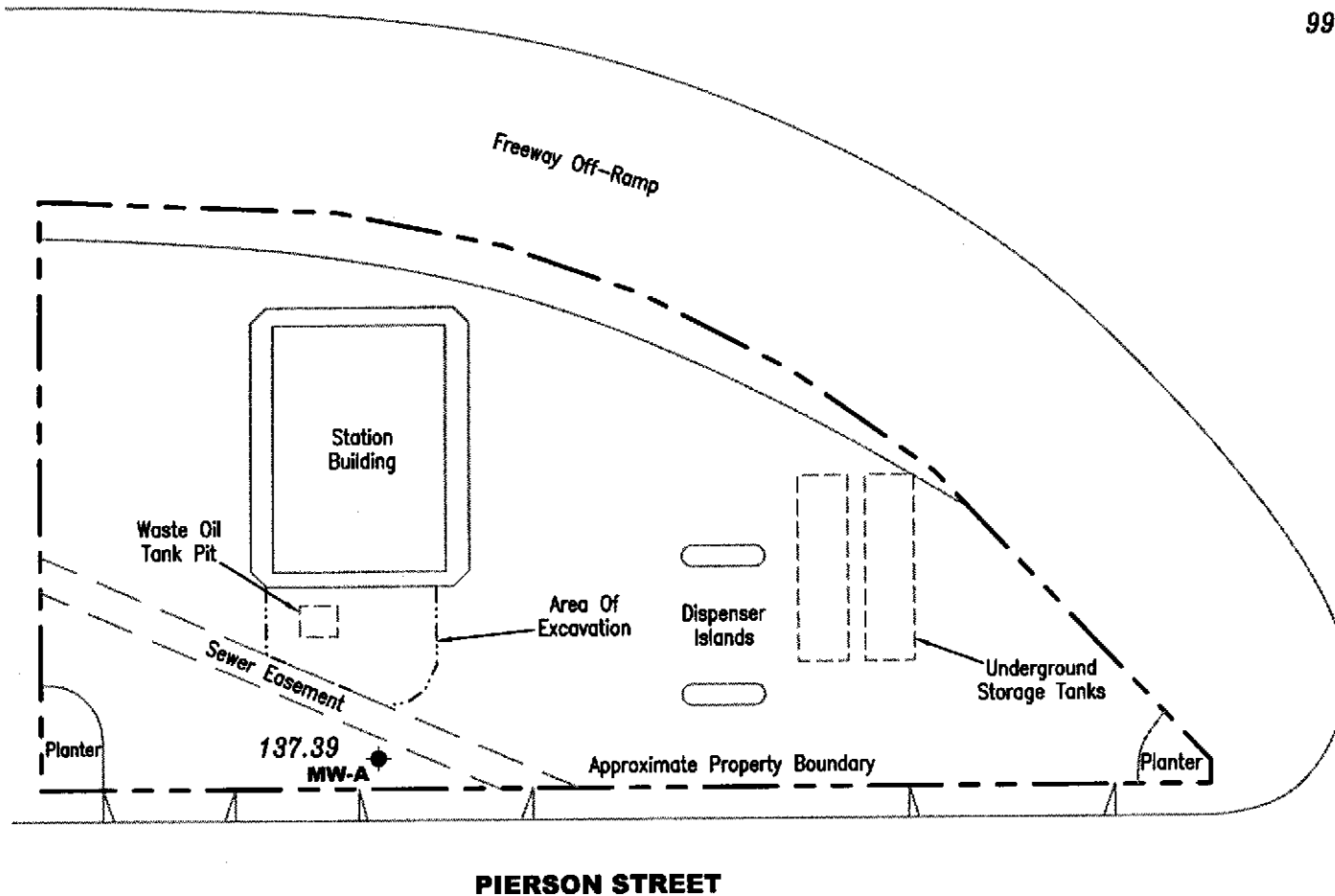


Figure 1: Groundwater Elevation Map
Figure 2: Concentration Map
Table 1: Groundwater Monitoring Data and Analytical Results
Table 2: Groundwater Analytical Results - Oxygenate Compounds
Attachments: Standard Operating Procedure - Groundwater Sampling
Field Data Sheet
Chain of Custody Document and Laboratory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

5781.qml

EXPLANATION

- ◆ Groundwater monitoring well
- 99.99 Groundwater elevation in feet referenced to Mean Sea Level



Source: Figure modified from drawing provided by MPDS Services, Inc.

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

GROUNDWATER ELEVATION MAP
 Tosco (Unocal) Service Station #5781
 3535 Pierson Street
 Oakland, California

FIGURE
1

PROJECT NUMBER
 180062

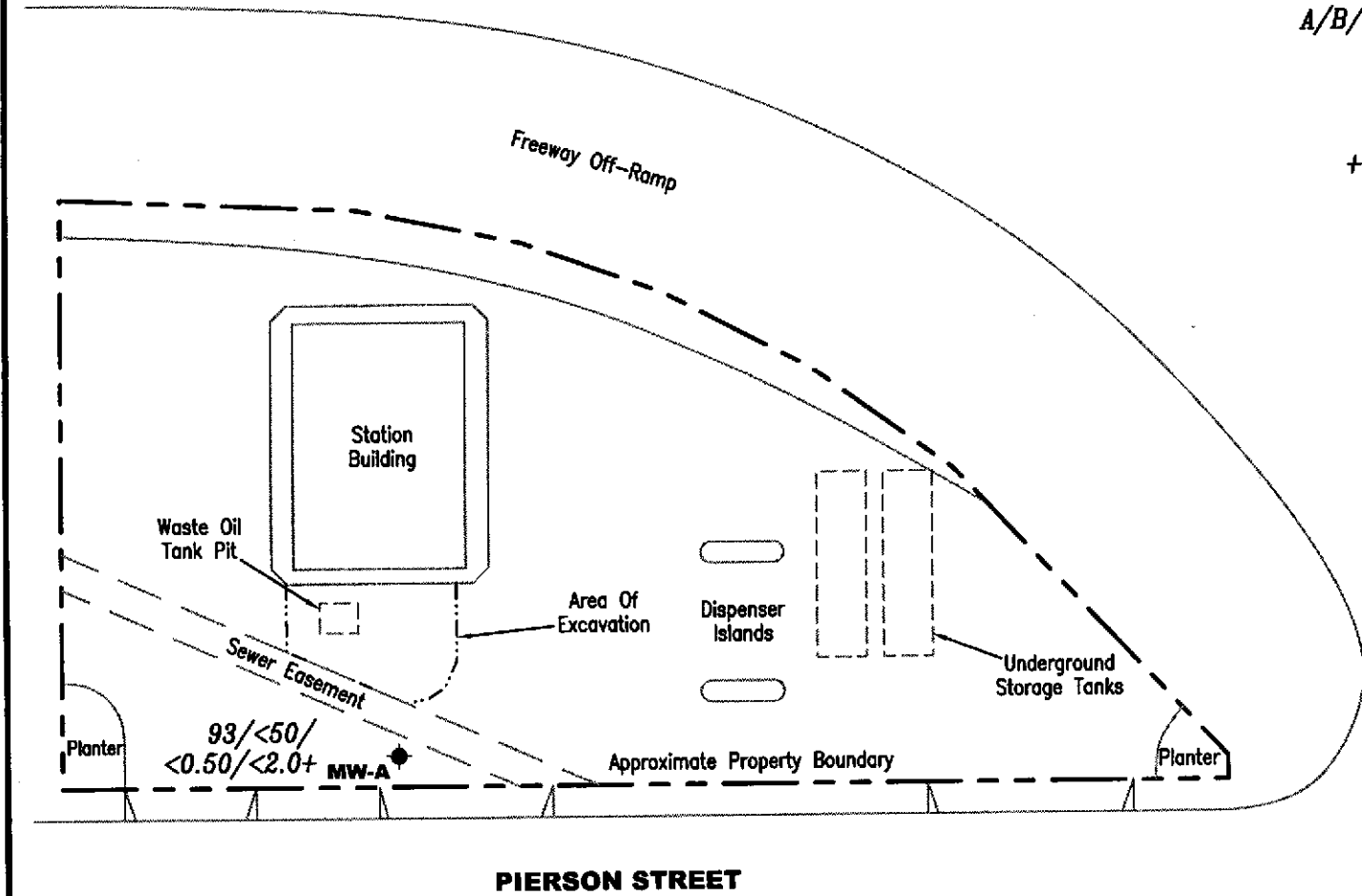
REVIEWED BY

DATE
 February 22, 2003

REVISED DATE

EXPLANATION

- ◆ Groundwater monitoring well
- A/B/C/D Total Petroleum Hydrocarbons (TPH) as Diesel/TPH as Gasoline/Benzene/MTBE concentrations in ppb
- + MTBE by EPA Method 8260



Source: Figure modified from drawing provided by MPDS Services, Inc.

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

CONCENTRATION MAP
 Tosco (Unocal) Service Station #5781
 3535 Pierson Street
 Oakland, California

FIGURE

2

PROJECT NUMBER
 180062

REVIEWED BY

DATE
 February 22, 2003

REVISED DATE

Table 1
Groundwater Monitoring Data and Analytical Results
Tosco (Unocal) Service Station #5781
3535 Pierson Street
Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-A	12/18/90 ¹	--	--	73	ND	ND	ND	ND	ND	--
	05/03/91 ¹	--	--	ND	ND	ND	ND	ND	ND	--
	08/07/91 ¹	--	--	ND	ND	ND	ND	ND	ND	--
	11/08/91 ¹	--	--	ND	ND	ND	ND	ND	ND	--
151.80	02/06/92 ¹	19.88	131.92	ND	ND	ND	ND	ND	ND	--
	08/04/92 ¹	18.95	132.85	ND	ND	ND	ND	ND	0.51	--
	02/10/93 ¹	17.71	134.09	ND	ND	ND	ND	ND	ND	--
	02/10/94 ¹	15.25	136.55	ND	ND	ND	0.52	ND	0.92	--
	02/09/95 ¹	15.68	136.12	ND	ND	ND	ND	ND	ND	--
	02/06/96 ²	12.52	139.28	120 ³	ND	ND	ND	ND	2.1	--
	02/05/97 ¹	13.01	138.79	61 ⁴	ND	ND	ND	ND	ND	ND
	02/02/98 ^{1,5}	11.91	139.89	ND	ND	ND	ND	ND	ND	ND
	02/22/99 ⁶	11.24	140.56	ND	ND	ND	ND	ND	ND	ND
	02/26/00 ⁷	12.16	139.64	ND	ND	ND	1.01	ND	ND	ND
	03/07/01 ⁸	11.91	139.89	131 ⁹	ND	ND	ND	ND	ND	ND/ND ¹⁰
	02/22/02 ⁸	14.08	137.72	<50	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	02/22/03 ^{12,13}	14.41	137.39	93 ¹¹	<50	<0.50	<0.50	<0.50	<0.50	<2.0/<2.0 ¹⁰
Trip Blank										
TB-LB	02/02/98	--	--	--	ND	ND	ND	ND	ND	ND
	02/22/99	--	--	--	ND	ND	ND	ND	ND	ND
	02/26/00	--	--	--	ND	ND	ND	ND	ND	ND
	03/07/01	--	--	--	ND	ND	ND	ND	ND	ND
	02/22/02	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<5.0
QA	02/22/03	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.0

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #5781
 3535 Pierson Street
 Oakland, California

EXPLANATIONS:

Groundwater monitoring data and laboratory results prior to February 2, 1998, were compiled from reports prepared by MPDS Services, Inc.

TOC = Top of Casing elevation (ft.) = Feet	TPH-G = Total Petroleum Hydrocarbons as Gasoline B = Benzene	(ppb) = Parts per billion (ppm) = Parts per million
DTW = Depth to Water	T = Toluene	ND = Not Detected
GWE = Groundwater Elevation	E = Ethylbenzene	-- = Not Measured/Not Analyzed
MSL = Mean Sea Level	X = Xylenes	TOG = Total Oil and Grease
TPH-D = Total Petroleum Hydrocarbons as Diesel	MTBE = Methyl tertiary butyl ether	QA = Quality Assurance/Trip Blank

* TOC elevation has been surveyed relative to Mean Sea Level (msl) (Elevation = 119.80 msl).

- 1 TOG and all EPA Method 8010 compounds were ND.
- 2 TOG and all EPA Method 8010 compounds were ND except for tetrachloroethene, which was detected at a concentration of 1.8 ppb.
- 3 Laboratory report indicates the hydrocarbons detected did not appear to be diesel.
- 4 Laboratory report indicates the hydrocarbons detected appeared to be diesel and non-diesel mixture.
- 5 All EPA Method 8010 constituents were ND. Total recoverable petroleum hydrocarbons TRPH/TOG by SM 5520 B&F, was detected at 7 ppm.
- 6 TOG and all EPA Method 8010 compounds were ND except for Methylene chloride, which was detected at a concentration of 10 ppb.
- 7 TOG and all EPA Method 8010 compounds analyzed by EPA Method 8260B were ND except for Bromodichloromethane, which was detected at a concentration of 7.33 ppb, and Chloroform at 44.8 ppb.
- 8 TOG and all EPA Method 8021B compounds were less than the reporting limit.
- 9 Laboratory report indicates unidentified hydrocarbons C9-C24.
- 10 MTBE by EPA Method 8260.
- 11 Laboratory report indicates hydrocarbon pattern is present in the fuel quantitation range but does not resemble the pattern of the requested fuel.
- 12 All VOCs by EPA Method 8260 were less than the reporting limit.
- 13 TOG was detected at 5,900 ppb.

Table 2
Groundwater Analytical Results - Oxygenate Compounds
 Tosco (Unocal) Service Station #5781
 3535 Pierson Street
 Oakland, California

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)
MW-A	03/07/01	ND	ND	ND	ND	ND	ND	ND	ND
	02/22/03	<500	<100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0

EXPLANATIONS:

TBA = Tertiary butyl alcohol
 MTBE = Methyl tertiary butyl ether
 DIPE = Di-isopropyl ether
 ETBE = Ethyl tertiary butyl ether
 TAME = Tertiary amyl methyl ether
 1,2-DCA = 1,2-Dichloroethane
 EDB = 1,2-Dibromoethane
 (ppb) = Parts per billion
 ND = Not Detected

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan Inc. field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. Prior to sample collection, the type of analysis to be performed is determined. Loss prevention of volatile compounds is controlled and sample preservation for subsequent analysis is maintained.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, all depth to water level measurements are collected with a static water level indicator and are also recorded in the field notes, prior to purging and sampling any wells.

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 disposable 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 and is labeled as QA. 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 Phillips 66 Company, the purge water and decontamination water generated during sampling activities is transported to Phillips 66 - San Francisco Refinery, located in Rodeo, California.



GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: ConocoPhillips#5781
 Site Address: 3535 Pierson Street
 City: Oakland, CA

Job Number: 180062
 Event Date: 2-22-03 (inclusive)
 Sampler: Sim Heron

Well ID: MW-A
 Well Diameter: 2 in.
 Total Depth: 44.86 ft.
 Depth to Water: 14.41 ft.
30.4 xVF .17 = 5.16

Date Monitored: 2-22-03 Well Condition: OK

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

x3 (case volume) = Estimated Purge Volume: 15.5 gal.

Purge Equipment:
 Disposable Bailer _____
 Stainless Steel Bailer _____
 Stack Pump X
 Suction Pump _____
 Grundfos _____
 Other: _____

Sampling Equipment:
 Disposable Bailer X
 Pressure Bailer _____
 Discrete Bailer _____
 Other: _____

Time Started: _____ (2400 hrs)
 Time Bailed: _____ (2400 hrs)
 Depth to Product: _____ ft
 Depth to Water: _____ ft
 Hydrocarbon Thickness: _____ ft
 Visual Confirmation/Description: _____
 Skimmer / Absorbant Sock (circle one)
 Amt Removed from Skimmer: _____ gal
 Amt Removed from Well: _____ gal
 Product Transferred to: _____

Start Time (purge): 0940 Weather Conditions: clean
 Sample Time/Date: 1010 12-22-03 Water Color: clear Odor: NO
 Purging Flow Rate: 2 gpm. Sediment Description: None
 Did well de-water? NO If yes, Time: _____ Volume: _____ gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm)	Temperature (°F)	D.O. (mg/L)	ORP (mV)
<u>0943</u>	<u>5</u>	<u>7.68</u>	<u>1348</u>	<u>18.3</u>		
<u>0946</u>	<u>10</u>	<u>6.81</u>	<u>1330</u>	<u>20.0</u>		
<u>0949</u>	<u>15</u>	<u>6.64</u>	<u>1353</u>	<u>20.3</u>		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- <u>A</u>	<u>5</u> x voa vial	YES	HCL	SEQUOIA	TPH-G(8015)/BTX/MTBE(8021)/ 8 Oxy's(8260)
	<u>1</u> x Amber	YES	NP	SEQUOIA	TPH-D
	<u>3</u> x voa vial	YES	HCL	SEQUOIA	HVOC'S(8010 list)8021B
	<u>1</u> x Amber	YES	HCL	SEQUOIA	TOG(Total Oil & Grease)

COMMENTS: New TWD Taken

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Size: _____

Toaco Corp./ Phillips 66 Co. 2000 Crow Canyon Place Suite 400 San Ramon, CA 94583	Facility Number <u>#5781</u>	Laboratory Name <u>SEQUOIA ANALYTICAL</u>
	Facility Address <u>3535 Pierson Street, Oakland, CA</u>	Consultant <u>GETTLER-RYAN INC.</u> <u>DEANNA L. HARDING</u>
	Global ID <u>T0600101467</u> Project <u>180062.80</u>	Address <u>6747 SIERRA CT., SUITE J, DUBLIN, CA 94568</u>
	Client Contact <u>Mr. David DeWitt</u>	Phone <u>925-551-7555</u> Fax <u>925-551-7899</u>
	Phone <u>925-277-2384</u>	Samples Collected by <u>Jim Herron</u>

SAMPLE ID	Number of Containers Matrix	S = Soil A = Air W = Water C = Charcoal	Sample Preservation	Date/Time (2400 Hrs)	TPH-GAS/ETEX/MTBE EPA 8015/8021B	TPH-DIESEL EPA 8015	TPH-DIESEL w/SARA gel EPA 8015	TPH-GAS EPA 8015	TPH-GAS/ETEX/MTBE EPA 8260	OXYGENATES EPA 8260	METHANOL EPA 8015	TOTAL OIL & GREASE EPA 8320	METALS Cd, Cr, Pb, Zn, Ni	NITRATE/SULFATE/ALKALINITY EPA 300 SERIES	INOC'S (8010) EPA 8021B	VOC'S (8240) EPA 8260	SACCS EPA 8270	Remarks
					<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
QA	2	W	Hcl	2-22-03	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5302579-01 -02
MW-A	10	W	Hcl	2-22-03 1010	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

- OXYGENATES 8260
- 1 - MTBE
 - 2 - TBA
 - 3 - TAME
 - 4 - DIPE
 - 5 - ETBE
 - 6 - 1,2-DCA
 - 7 - EDB
 - 8 - ETHANOL

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Iced Y/N	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. 72 Hrs. 5 Days 10 Days <input checked="" type="radio"/> Contracted
<i>[Signature]</i>	G-R	2-22-03 1500	<i>[Signature]</i>	G-R	2/24/03		
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Iced Y/N	
<i>[Signature]</i>	G-R	2/24/03	<i>[Signature]</i>	SEA	2/24/03	Y	
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time	Iced Y/N	
<i>[Signature]</i>	SEA	2/24/03	<i>[Signature]</i>		2/24/03	1530	

FILE NAME P:\enviro\chainofcustody\04-coc.doc Logent Tabz Model

Michael [Signature] 2-25-03
[Signature] 2-25-03
 2-25-03 GRR



11 March, 2003

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

RECEIVED

GETTLER-RYAN INC.
GENERAL CONTRACTOR

RE: Tosco 5781, Oakland, CA
Sequoia Work Order: S302579

Enclosed are the results of analyses for samples received by the laboratory on 02/24/03 15:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ron Chew
Client Services Representative

CA ELAP Certificate #2374



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

Project: Tosco 5781, Oakland, CA
Project Number: N/A
Project Manager: Deanna L. Harding

S302579
Reported:
03/11/03 12:55

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
QA	S302579-01	Water	02/22/03 00:00	02/24/03 15:30
MW-A	S302579-02	Water	02/22/03 00:00	02/24/03 15:30

Gettler-Ryan - Dublin 6747 Sierra Court, Ste. J Dublin CA, 94568	Project: Tosco 5781, Oakland, CA Project Number: N/A Project Manager: Deanna L. Harding	S302579 Reported: 03/11/03 12:55
--	---	--

Gasoline (2-Methylpentane to 1,2,4-Trimethylbenzene) and BTEX by EPA 8015M and 8021B
Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
QA (S302579-01) Water Sampled: 02/22/03 00:00 Received: 02/24/03 15:30									
Purgeable Hydrocarbons	ND	50	ug/l	1	3030038	03/04/03	03/04/03	EPA 8015/8021	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		88 %		60-140	"	"	"	"	
MW-A (S302579-02) Water Sampled: 02/22/03 00:00 Received: 02/24/03 15:30									
Purgeable Hydrocarbons	ND	50	ug/l	1	3030038	03/04/03	03/04/03	EPA 8015/8021	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		90 %		60-140	"	"	"	"	

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

Project: Tosco 5781, Oakland, CA
Project Number: N/A
Project Manager: Deanna L. Harding

S302579
Reported:
03/11/03 12:55

**Diesel Hydrocarbons by DHS LUFT
Sequoia Analytical - Sacramento**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-A (S302579-02) Water Sampled: 02/22/03 00:00 Received: 02/24/03 15:30									
Diesel Range Organics (C10-C28)	93	50	ug/l	1	3030095	03/06/03	03/07/03	DHS LUFT	HC-12
<i>Surrogate: Octacosane</i>		126 %	50-150		"	"	"	"	

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

 Project: Tosco 5781, Oakland, CA
 Project Number: N/A
 Project Manager: Deanna L. Harding

 S302579
 Reported:
 03/11/03 12:55

Volatile Organic Compounds 8021B list by EPA Method 8260B
Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-A (S302579-02) Water Sampled: 02/22/03 00:00 Received: 02/24/03 15:30									
Freon 113	ND	1.0	ug/l	1	3030099	03/06/03	03/07/03	EPA 8260B	
Bromodichloromethane	ND	0.50	"	"	"	"	"	"	
Bromoform	ND	0.50	"	"	"	"	"	"	
Bromomethane	ND	1.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.50	"	"	"	"	"	"	
Chlorobenzene	ND	0.50	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.50	"	"	"	"	"	"	
Chloromethane	ND	0.50	"	"	"	"	"	"	
Dibromochloromethane	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.50	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"	
Tetrachloroethene	ND	0.50	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Trichloroethene	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4		118 %		70-130	"	"	"	"	
Surrogate: Toluene-d8		114 %		70-130	"	"	"	"	
Surrogate: 4-BFB		99 %		70-130	"	"	"	"	

Gettler-Ryan - Dublin 6747 Sierra Court, Ste. J Dublin CA, 94568	Project: Tosco 5781, Oakland, CA Project Number: N/A Project Manager: Deanna L. Harding	S302579 Reported: 03/11/03 12:55
--	---	--

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-A (S302579-02) Water Sampled: 02/22/03 00:00 Received: 02/24/03 15:30									
Tert-butyl alcohol	ND	100	ug/l	1	3030099	03/06/03	03/07/03	EPA 8260B	
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	"	"	"	"	"	"	
Ethanol	ND	500	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	2.0	"	"	"	"	"	"	
<i>Surrogate: 1,2-DCA-d4</i>		118 %		60-140	"	"	"	"	

Gettler-Ryan - Dublin 6747 Sierra Court, Ste. J Dublin CA, 94568	Project: Tosco 5781, Oakland, CA Project Number: N/A Project Manager: Deanna L. Harding	S302579 Reported: 03/11/03 12:55
--	---	--

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-A (S302579-02) Water Sampled: 02/22/03 00:00 Received: 02/24/03 15:30									
Oil & Grease	5900	5000	ug/l	1	3030021	03/03/03	03/03/03	SM 5520B	

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

 Project: Tosco 5781, Oakland, CA
 Project Number: N/A
 Project Manager: Deanna L. Harding

 S302579
 Reported:
 03/11/03 12:55

Gasoline (2-Methylpentane to 1,2,4-Trimethylbenzene) and BTEX by EPA 8015M and 8021B - Quality Contr
Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3030038 - EPA 5030B (P/T)										
Blank (3030038-BLK1) Prepared & Analyzed: 03/04/03										
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	2.0	"							
<i>Surrogate: a,a,a-Trifluorotoluene</i>	8.69		"	10.0		87	60-140			
Blank (3030038-BLK2) Prepared & Analyzed: 03/05/03										
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	2.0	"							
<i>Surrogate: a,a,a-Trifluorotoluene</i>	9.43		"	10.0		94	60-140			
Blank (3030038-BLK3) Prepared & Analyzed: 03/06/03										
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	2.0	"							
<i>Surrogate: a,a,a-Trifluorotoluene</i>	9.35		"	10.0		94	60-140			
Laboratory Control Sample (3030038-BS1) Prepared & Analyzed: 03/04/03										
Benzene	10.6	0.50	ug/l	10.0		106	70-130			
Toluene	11.1	0.50	"	10.0		111	70-130			
Ethylbenzene	10.3	0.50	"	10.0		103	70-130			
Xylenes (total)	31.8	0.50	"	30.0		106	70-130			
Methyl tert-butyl ether	11.3	2.0	"	10.0		113	70-130			

Sequoia Analytical - Sacramento

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.

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

 Project: Tosco 5781, Oakland, CA
 Project Number: N/A
 Project Manager: Deanna L. Harding

 S302579
 Reported:
 03/11/03 12:55

Gasoline (2-Methylpentane to 1,2,4-Trimethylbenzene) and BTEX by EPA 8015M and 8021B - Quality Contr
Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 3030038 - EPA 5030B (P/T)
Laboratory Control Sample (3030038-BS1)

Prepared & Analyzed: 03/04/03

<i>Surrogate: a,a,a-Trifluorotoluene</i>	10.5		ug/l	10.0		105	60-140			
--	------	--	------	------	--	-----	--------	--	--	--

Laboratory Control Sample (3030038-BS2)

Prepared & Analyzed: 03/05/03

Benzene	10.6	0.50	ug/l	10.0		106	70-130			
Toluene	10.5	0.50	"	10.0		105	70-130			
Ethylbenzene	10.3	0.50	"	10.0		103	70-130			
Xylenes (total)	31.5	0.50	"	30.0		105	70-130			
Methyl tert-butyl ether	10.1	2.0	"	10.0		101	70-130			

<i>Surrogate: a,a,a-Trifluorotoluene</i>	10.5		"	10.0		105	60-140			
--	------	--	---	------	--	-----	--------	--	--	--

Laboratory Control Sample (3030038-BS3)

Prepared & Analyzed: 03/06/03

Benzene	10.3	0.50	ug/l	10.0		103	70-130			
Toluene	10.2	0.50	"	10.0		102	70-130			
Ethylbenzene	9.99	0.50	"	10.0		100	70-130			
Xylenes (total)	30.4	0.50	"	30.0		101	70-130			
Methyl tert-butyl ether	9.68	2.0	"	10.0		97	70-130			

<i>Surrogate: a,a,a-Trifluorotoluene</i>	10.2		"	10.0		102	60-140			
--	------	--	---	------	--	-----	--------	--	--	--

Matrix Spike (3030038-MS1)

Source: S302579-02

Prepared & Analyzed: 03/05/03

Benzene	10.7	0.50	ug/l	10.0	ND	107	60-140			
Toluene	10.6	0.50	"	10.0	ND	106	60-140			
Ethylbenzene	10.4	0.50	"	10.0	ND	104	60-140			
Xylenes (total)	31.6	0.50	"	30.0	ND	105	60-140			
Methyl tert-butyl ether	10.7	2.0	"	10.0	0.65	100	60-140			

<i>Surrogate: a,a,a-Trifluorotoluene</i>	10.5		"	10.0		105	60-140			
--	------	--	---	------	--	-----	--------	--	--	--

Matrix Spike Dup (3030038-MSD1)

Source: S302579-02

Prepared & Analyzed: 03/05/03

Benzene	10.7	0.50	ug/l	10.0	ND	107	60-140	0	25	
Toluene	10.4	0.50	"	10.0	ND	104	60-140	2	25	
Ethylbenzene	10.4	0.50	"	10.0	ND	104	60-140	0	25	
Xylenes (total)	31.8	0.50	"	30.0	ND	106	60-140	0.6	25	

Sequoia Analytical - Sacramento

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.

Gettler-Ryan - Dublin 6747 Sierra Court, Ste. J Dublin CA, 94568	Project: Tosco 5781, Oakland, CA Project Number: N/A Project Manager: Deanna L. Harding	S302579 Reported: 03/11/03 12:55
--	---	--

Gasoline (2-Methylpentane to 1,2,4-Trimethylbenzene) and BTEX by EPA 8015M and 8021B - Quality Contr
Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3030038 - EPA 5030B (P/T)										
Matrix Spike Dup (3030038-MSD1) Source: S302579-02 Prepared & Analyzed: 03/05/03										
Methyl tert-butyl ether	10.9	2.0	ug/l	10.0	0.65	102	60-140	2	25	
Surrogate: a,a,a-Trifluorotoluene	10.5		"	10.0		105	60-140			

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

 Project: Tosco 5781, Oakland, CA
 Project Number: N/A
 Project Manager: Deanna L. Harding

 S302579
 Reported:
 03/11/03 12:55

Diesel Hydrocarbons by DHS LUFT - Quality Control
Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3030095 - EPA 3510C										
Blank (3030095-BLK1) Prepared: 03/06/03 Analyzed: 03/07/03										
Diesel Range Organics (C10-C28)	ND	50	ug/l							
<i>Surrogate: Octacosane</i>	28.6		"	20.0		143	50-150			
Laboratory Control Sample (3030095-BS1) Prepared: 03/06/03 Analyzed: 03/07/03										
Diesel Range Organics (C10-C28)	432	50	ug/l	500		86	60-140			
<i>Surrogate: Octacosane</i>	22.3		"	20.0		112	50-150			
Laboratory Control Sample Dup (3030095-BSD1) Prepared: 03/06/03 Analyzed: 03/07/03										
Diesel Range Organics (C10-C28)	415	50	ug/l	500		83	60-140	4	50	
<i>Surrogate: Octacosane</i>	21.0		"	20.0		105	50-150			

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

 Project: Tosco 5781, Oakland, CA
 Project Number: N/A
 Project Manager: Deanna L. Harding

 S302579
 Reported:
 03/11/03 12:55

Volatile Organic Compounds 8021B list by EPA Method 8260B - Quality Control
Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 3030099 - EPA 5030B [P/T]
Blank (3030099-BLK1)

Prepared: 03/06/03 Analyzed: 03/07/03

Freon 113	ND	1.0	ug/l
Bromodichloromethane	ND	0.50	"
Bromoform	ND	0.50	"
Bromomethane	ND	1.0	"
Carbon tetrachloride	ND	0.50	"
Chlorobenzene	ND	0.50	"
Chloroethane	ND	0.50	"
Chloroform	ND	0.50	"
Chloromethane	ND	0.50	"
Dibromochloromethane	ND	0.50	"
1,2-Dibromoethane (EDB)	ND	0.50	"
1,2-Dichlorobenzene	ND	0.50	"
1,3-Dichlorobenzene	ND	0.50	"
1,4-Dichlorobenzene	ND	0.50	"
Dichlorodifluoromethane	ND	0.50	"
1,1-Dichloroethane	ND	0.50	"
1,2-Dichloroethane	ND	0.50	"
1,1-Dichloroethene	ND	0.50	"
cis-1,2-Dichloroethene	ND	0.50	"
trans-1,2-Dichloroethene	ND	0.50	"
1,2-Dichloropropane	ND	0.50	"
cis-1,3-Dichloropropene	ND	0.50	"
trans-1,3-Dichloropropene	ND	0.50	"
Methylene chloride	ND	5.0	"
1,1,2,2-Tetrachloroethane	ND	1.0	"
Tetrachloroethene	ND	0.50	"
1,1,1-Trichloroethane	ND	0.50	"
1,1,2-Trichloroethane	ND	0.50	"
Trichloroethene	ND	0.50	"
Trichlorofluoromethane	ND	0.50	"
Vinyl chloride	ND	0.50	"
Benzene	ND	0.50	"
Ethylbenzene	ND	0.50	"
Toluene	ND	0.50	"
Xylenes (total)	ND	1.0	"

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

 Project: Tosco 5781, Oakland, CA
 Project Number: N/A
 Project Manager: Deanna L. Harding

 S302579
 Reported:
 03/11/03 12:55

Volatile Organic Compounds 8021B list by EPA Method 8260B - Quality Control

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch 3030099 - EPA 5030B [P/T]
Blank (3030099-BLK1)

Prepared: 03/06/03 Analyzed: 03/07/03

Surrogate: 1,2-DCA-d4	31.4		ug/l	25.0		126	70-130			
Surrogate: Toluene-d8	27.9		"	25.0		112	70-130			
Surrogate: 4-BFB	24.9		"	25.0		100	70-130			

Laboratory Control Sample (3030099-BS1)

Prepared: 03/06/03 Analyzed: 03/07/03

Chlorobenzene	25.1	0.50	ug/l	25.0		100	70-130			
1,1-Dichloroethene	23.0	0.50	"	25.0		92	70-130			
Trichloroethene	21.0	0.50	"	25.0		84	70-130			
Benzene	24.8	0.50	"	25.0		99	70-130			
Toluene	26.2	0.50	"	25.0		105	70-130			

Surrogate: 1,2-DCA-d4	28.7		"	25.0		115	70-130			
Surrogate: Toluene-d8	28.5		"	25.0		114	70-130			
Surrogate: 4-BFB	25.8		"	25.0		103	70-130			

Matrix Spike (3030099-MS1)

Source: S302592-31

Prepared: 03/06/03 Analyzed: 03/07/03

Chlorobenzene	22.5	0.50	ug/l	25.0	ND	90	60-140			
1,1-Dichloroethene	23.4	0.50	"	25.0	ND	94	60-140			
Trichloroethene	19.9	0.50	"	25.0	ND	80	60-140			
Benzene	25.8	0.50	"	25.0	1.9	96	60-140			
Toluene	23.6	0.50	"	25.0	ND	94	60-140			

Surrogate: 1,2-DCA-d4	28.4		"	25.0		114	70-130			
Surrogate: Toluene-d8	26.8		"	25.0		107	70-130			
Surrogate: 4-BFB	25.1		"	25.0		100	70-130			

Matrix Spike Dup (3030099-MSD1)

Source: S302592-31

Prepared: 03/06/03 Analyzed: 03/07/03

Chlorobenzene	21.2	0.50	ug/l	25.0	ND	85	60-140	6	25	
1,1-Dichloroethene	24.2	0.50	"	25.0	ND	97	60-140	3	25	
Trichloroethene	19.6	0.50	"	25.0	ND	78	60-140	2	25	
Benzene	26.6	0.50	"	25.0	1.9	99	60-140	3	25	
Toluene	22.4	0.50	"	25.0	ND	90	60-140	5	25	

Surrogate: 1,2-DCA-d4	30.8		"	25.0		123	70-130			
Surrogate: Toluene-d8	27.7		"	25.0		111	70-130			

Sequoia Analytical - Sacramento

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.



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

Project: Tosco 5781, Oakland, CA
Project Number: N/A
Project Manager: Deanna L. Harding

S302579
Reported:
03/11/03 12:55

**Volatile Organic Compounds 8021B list by EPA Method 8260B - Quality Control
Sequoia Analytical - Sacramento**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch 3030099 - EPA 5030B [P/T]

Matrix Spike Dup (3030099-MSD1) **Source: S302592-31** **Prepared: 03/06/03** **Analyzed: 03/07/03**

Surrogate: 4-BFB	25.0		ug/l	25.0		100	70-130			
------------------	------	--	------	------	--	-----	--------	--	--	--

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

 Project: Tosco 5781, Oakland, CA
 Project Number: N/A
 Project Manager: Deanna L. Harding

 S302579
 Reported:
 03/11/03 12:55

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch 3030099 - EPA 5030B [P/T]
Blank (3030099-BLK1)

Prepared: 03/06/03 Analyzed: 03/07/03

Tert-butyl alcohol	ND	100	ug/l							
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	"							
Ethanol	ND	500	"							
1,2-Dichloroethane	ND	2.0	"							
1,2-Dibromoethane (EDB)	ND	2.0	"							

Surrogate: 1,2-DCA-d4

31.4

"

25.0

126

60-140

Laboratory Control Sample (3030099-BS1)

Prepared: 03/06/03 Analyzed: 03/07/03

Methyl tert-butyl ether	26.2	2.0	ug/l	25.0		105	60-140			
-------------------------	------	-----	------	------	--	-----	--------	--	--	--

Surrogate: 1,2-DCA-d4

28.7

"

25.0

115

60-140

Matrix Spike (3030099-MS1)

Source: S302592-31

Prepared: 03/06/03 Analyzed: 03/07/03

Methyl tert-butyl ether	24.3	2.0	ug/l	25.0	ND	97	60-140			
-------------------------	------	-----	------	------	----	----	--------	--	--	--

Surrogate: 1,2-DCA-d4

28.4

"

25.0

114

60-140

Matrix Spike Dup (3030099-MSD1)

Source: S302592-31

Prepared: 03/06/03 Analyzed: 03/07/03

Methyl tert-butyl ether	26.9	2.0	ug/l	25.0	ND	108	60-140	10	25	
-------------------------	------	-----	------	------	----	-----	--------	----	----	--

Surrogate: 1,2-DCA-d4

30.8

"

25.0

123

60-140

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

Project: Tosco 5781, Oakland, CA
Project Number: N/A
Project Manager: Deanna L. Harding

S302579
Reported:
03/11/03 12:55

**Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control
Sequoia Analytical - Sacramento**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Notes
Batch 3030021 - EPA 3510C.										
Blank (3030021-BLK1) Prepared & Analyzed: 03/03/03										
Oil & Grease	ND	5000	ug/l							
Laboratory Control Sample (3030021-BS1) Prepared & Analyzed: 03/03/03										
Oil & Grease	46000	5000	ug/l	50000		92	70-130			
Laboratory Control Sample Dup (3030021-BSD1) Prepared & Analyzed: 03/03/03										
Oil & Grease	48000	5000	ug/l	50000		96	70-130	4	30	

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

Project: Tosco 5781, Oakland, CA
Project Number: N/A
Project Manager: Deanna L. Harding

S302579
Reported:
03/11/03 12:55

Notes and Definitions

- HC-12 Hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.
- 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