

Form R-149: Acceptance Authorization for Remediation Wastewater to Tosco's San Francisco Area Refinery at Rodeo

WASTEWATER TREATMENT PLANT (UNIT 100) OPERATORS:

This form, if approved below, serves as an acceptance document to process the wastewater at the San Francisco Area Refinery at Rodeo Wastewater Treatment Plant, Unit 100.

Requester's Name/Signature:	David De Witt	<i>David D. De Witt</i>
Company:	Tosco Marketing Company	
Address:	2000 Crow Canyon Place, Suite 400, San Ramon, CA	
Telephone/Fax:	925-277-2384	925-277-2361
Station No. and Location:	Tosco Site #6419, Dublin Blvd., Dublin CA	
Description of Water Source:	Tank pit	
Volume of Water/Solids Expected:	4500 gallons/visit, 2 visits/month	None
Volume of Water Expected:	25,000 gallons for 1999	
Pesticides/Fish Toxicity Expected:	Yes <input type="radio"/> No <input checked="" type="radio"/>	Yes <input type="radio"/> No <input checked="" type="radio"/>
Maximum Rate of Disposal (EAD):	5,000 gallons/week	

The remediation wastewater described above has been reviewed for Federal and California Hazardous Waste characteristics. The wastewater is (circle one) recommended / not recommended for processing at the WWTP.

This form is valid until: 11/30/99
 EAD Personnel: M. Zalcala Recommended Date: 10/31/99
 Operations Personnel: S. C. [Signature] Approval Date: 11/1/99

Truck drivers: Please provide a copy of this R-149 form upon delivery of wastewater to Unit 100.

Driver's info:

Truck No. _____	pH at site _____
-----------------	------------------

UNIT 100 OPERATORS: Please fill out the portion below and forward this completed form to EAD in Room 110 of the Administration Building.

Date and time of delivery: Delivered on: ___/___/___ @ ___ AM/PM
 Volume delivered: _____ gallons or _____ bbl. pH _____

COMMENTS: No free product accepted. Gravity oil-trad only.

WESTERN REGION BOX:
#9512

Any questions? Call (510) 245-4465, (510) 245-4403 or Fax (510) 245-4476.

Store # <u>2705748</u>	Date: <u>11-1-99</u>
Unit # <u>6419</u>	Code: <u>LAB</u> Color <input type="checkbox"/>
Description: <u>R1499 FISH BIOASSAY</u>	

SENT BY: SEQUOIA-Concord.

2-23-95 12:37

5105869699-

510 609 1910:#13



Sequoia Analytical

680 Cherapeke Drive
1900 Bates Avenue, Suite L
819 Striker Avenue, Suite B

Redwood City, CA 94063
Concord, CA 94520
Sacramento, CA 95834

(415) 364-9600
(510) 686-9600
(916) 921-9600

FAX (415) 364-9233
FAX (510) 686-9689
FAX (916) 921-0100

MPDS Services

2401 Stanwell Dr., Ste. 300
Concord, CA 94520

Attention: Sarkis Karkarian

Client Project ID: Unocal #8419, 6401 Dublin Blvd.,

Sample Descript: Water, Comp Dublin

Analysis Method: See below

Lab Number: 502-0623

Sampled: Feb 9, 1995

Received: Feb 9, 1995

Reported: Feb 27, 1995

STATIC HAZARDOUS ABBREVIATED SCREEN BIOASSAY

Species: Pimephales promelas

Common Name: Fathead Minnow

Organisms/Tank: 10

Organisms/Conc.: 20

Tank Depth: 13 cm

Tank Volume: 10 L

Acclimation Temp.: 20 °C

Supplier: Sticklebacks Unlimited

Mean length: 30 mm
Min. length: 27 mm
Max. length: 34 mm
Mean weight: 0.31 g
Min. weight: 0.18 g
Max. weight: 0.54 g

Dilution Water: Synthetic Softwater
Hardness 40-48

	Alkalinity, mg/L		Hardness, mg/L	
	Initial	Final	Initial	Final
Control	35	-	42	-
750 ppm	34	-	44	-
Duplicate 750 ppm	32	-	46	-

DATE	Initial	24 Hr	48 Hr	72 Hr	96 Hr
	2/13/95	2/14/95	2/15/95	2/16/95	2/17/95

	DO	C	pH	DO	C	pH	# M	DO	C	pH	# M	DO	C	pH	# M	DO	C	pH	# M	Total Dead
	mg/L	Temp	Units	mg/L	Temp	Units	Dead	mg/L	Temp	Units	Dead	mg/L	Temp	Units	Dead	mg/L	Temp	Units	Dead	
Control	8.6	20	7.9	6.8	19	7.3	0	8.0	19	7.3	0	5.3	19	7.3	0	6.7	20	7.2	1	1
750 ppm	8.9	19	7.8	5.7	19	7.1	1	4.8	19	7.1	2	4.4	19	7.2	2	4.9	20	7.1	2	2
250 ppm	8.5	20	7.8	5.6	19	7.1	0	4.9	19	7.1	0	4.8	19	7.1	0	5.0	20	7.0	0	0
Duplicate																				
750 ppm	9.1	20	7.8	5.2	19	7.1	2	5.1	19	7.2	2	4.6	19	7.2	2	4.6	20	7.1	2	2
250 ppm	8.8	20	7.8	5.7	19	7.1	0	4.8	19	7.0	2	4.8	19	7.0	3	5.1	20	7.0	3	3

Pass X Fail

Remarks: The screen fails if > 40% of the fish die in the 750 ppm concentration.

Analyst: K. Anderson/
D. Newcomb

Method Reference: Static Acute Bioassay Procedures for Hazardous Waste Samples,
November 1988, California Department of Fish and Game WPCL.

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

M P L S Services, Inc.
2401 Blinnard Drive, Suite 400, Concord, CA 94620
Tel: (510) 602-8120 Fax: (510) 689-1918

CHAIN OF CUSTODY

SAMPLER		UNOCAL						ANALYSES REQUESTED					TURN AROUND TIME:		
STEVE BALLIAN		S/S # 6419		CITY: DUBLIN				TPH-GAS BTEX	TPH-DIESEL	TOO	BOD	BIODASSAY			REGULAR
WITNESSING AGENCY		ADDRESS: 6401 DUBLIN BLVD.													
SAMPLE ID NO.	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION								
Comp	2-9-95	4:15	X	X	X	1	WELLS					X		5020623	

THE FOLLOWING MUST BE COMPLETED BY THE LABORATORY ACCEPTING SAMPLES FOR ANALYSIS:

RELINQUISHED BY: STEVE BALLIAN	DATE/TIME: 2-9-95 18:15	RECEIVED BY: <i>[Signature]</i>	1. HAVE ALL SAMPLES RECEIVED FOR ANALYSIS BEEN STORED ON ICE? Yes
(SIGNATURE)		(SIGNATURE)	2. WERE SAMPLES KEPT REFRIGERATED UNTIL ANALYZED? Yes
(SIGNATURE)		(SIGNATURE)	3. DID ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACE?
(SIGNATURE)		(SIGNATURE)	4. WERE SAMPLES IN APPROPRIATE CONTAINERS AND PROPERLY PACKAGED?
(SIGNATURE)		(SIGNATURE)	SIGNATURE: TITLE: DATE:

TOSCO REFINING COMPANY
SAN FRANCISCO AREA REFINERY
RODEO

FAX

DATE: 11-1-99 FAX NO. 925-277-2361 / 707-745-0570

TO: DAVE CAMILLE / DAVE DEWITT (TMC)
MARK CALIBENTE (ONYX)

FROM: STEVE MITCHELL PHONE NO. 510-245-4553

NO. OF PAGES BEING SENT 3
(INCLUDING THE COVER SHEET)

URGENT _____

PER YOUR REQUEST _____

ORIGINAL WILL BE MAILED _____

PLEASE RESPOND _____

MESSAGE: APPROVED R-149'S FOR S.S. NO. 11231 & 6419

1380 San Pablo Avenue, Rodeo, California 94572
Telephone No. (510) 245-4620
FAX No. (510) 245-4586

TOSCO MARKETING COMPANY

FAX



ENVIRONMENTAL REMEDIATION
and COMPLIANCE

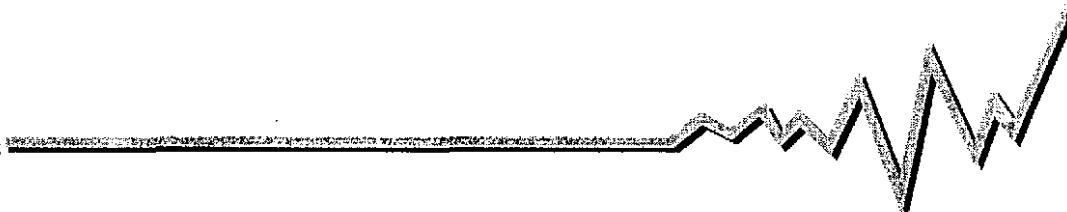
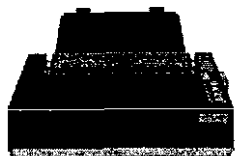
2000 Crow Canyon Place, Suite 400
San Ramon, CA 94583
fax (925) 277-2361

TO : MERLIZA ALCALA
COMPANY : TRC
FAX NO : 372-3179
DATE: 11-8-99 PAGES SENT: (including cover)

This message is intended only for the use of the individual or entity to which it is addressed, and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, or the employee or agent responsible for delivering the message to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify the sender immediately by telephone and return the original message to the sender at the above address via the US Postal Service. Thank you.

FROM: Dave Dewitt
PHONE: 925-277-2384
COMMENTS:

Merliza
Attached are the analytical for "Patch B"
of the monitoring and sampling water from Gettler-Ryan.
Please call with questions.



TOSCO MARKETING COMPANY

FAX



ENVIRONMENTAL REMEDIATION
and COMPLIANCE

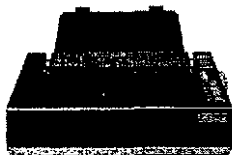
2000 Crow Canyon Place, Suite 400
San Ramon, CA 94583
fax (925) 277-2361

TO: MERLIZA ALCALA
COMPANY: TOSCO REFINING
FAX NO: 372-3179
DATE: 10-27-99 PAGES SENT: 16 (including cover)

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FROM: Dave Dewitt
PHONE: 925-277-2384
COMMENTS: Merliza -

This should be a complete package for site 6419 in Dublin. we even got tributyltin! I would like to be able to bring about 2 loads a month into the refinery. Please call with questions. Thanks!





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite B
1455 McDowell Blvd. North, Ste. D
1551 Industrial Road

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954
San Carlos, CA 94070-4111

(650) 364-9600
(925) 988-9600
(916) 921-9600
(707) 792-1865
(650) 232-9600

FAX (650) 364-9233
FAX (925) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342
FAX (650) 232-9612

Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Deanna Harding

Client Project ID: Unocal SS#6419, Dublin
Sample Matrix: Water
Analysis Method: EPA 5030/8015 Mod./8020
First Sample #: W908068-01

Sampled: Aug 2, 1999
Received: Aug 2, 1999
Reported: Aug 20, 1999

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX / MTBE

Analyte	Reporting Limit µg/L	Sample I.D. W908068-01 TB-LB	Sample I.D. 02 MW-1	Sample I.D. 03 MW-2	Sample I.D. 04 MW-3	Sample I.D. 05 MW-4	Sample I.D. 06 MW-5
Purgeable Hydrocarbons	50	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Benzene	0.50	N.D.	N.D.	N.D.	N.D.	10	N.D.
Toluene	0.50	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.50	N.D.	N.D.	N.D.	N.D.	13	N.D.
Total Xylenes	0.50	N.D.	N.D.	N.D.	N.D.	11	N.D.
MTBE	2.5	N.D.	91,000	120	140	N.D.	230
Chromatogram Pattern:		--	--	--	--	--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	100	1.0	1.0	1.0	1.0
Date Analyzed:	8/10/99	8/10/99	8/10/99	8/10/99	8/10/99	8/10/99
Instrument Identification:	-	-	-	-	-	-
Surrogate Recovery, %: (QC Limits = 70-130%)	94	100	100	97	100	93

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Please Note:

* Report revised 9/9/99 due to omission of results in original data.

Julianne Fegley
Julianne Fegley
Project Manager



Form R-149: Acceptance Authorization for Remediation Wastewater to Tosco's San Francisco Area Refinery at Rodeo

WASTEWATER TREATMENT PLANT (UNIT 100) OPERATORS:

This form, if approved below, serves as an acceptance document to process the wastewater at the San Francisco Area Refinery at Rodeo Wastewater Treatment Plant, Unit 100.

Requester's Name/Signature:	David De Witt	<i>David B. De Witt</i>
Company:	Tosco Marketing Company	
Address:	2000 Crow Canyon Place, Suite 400, San Ramon, CA	
Telephone/Fax:	925-277-2384	925-277-2361
Station No. and Location:	Tosco Site #6419, Dublin Blvd., Dublin CA	
Description of Water Source:	Tank pit	
Volume of Water/Solids Expected:	4500 gallons/visit, 2 visits/month	None
Volume of Water Expected:	25,000 gallons for 1999	
Pesticides/Fish Toxicity Expected:	Yes <input type="radio"/> No <input checked="" type="radio"/>	Yes <input type="radio"/> No <input checked="" type="radio"/>
Maximum Rate of Disposal (EAD):		

The remediation wastewater described above has been reviewed for Federal and California Hazardous Waste characteristics. The wastewater is (circle one) recommend / not recommended for processing at the WWTP.

This form is valid until: _____
 EAD Personnel: _____ Recommended Date: _____
 Operations Personnel: _____ Approval Date: _____

Truck drivers: Please provide a copy of this R-149 form upon delivery of wastewater to Unit 100.

Driver's info:

Truck No. _____	pH at site _____
-----------------	------------------

UNIT 100 OPERATORS: Please fill out the portion below and forward this completed form to EAD in Room 110 of the Administration Building.

Date and time of delivery:

Delivered on: _____ / _____ / _____	@ _____ AM / PM
Volume delivered: _____ gallons or _____ bbl.	pH _____

COMMENTS: No free product accepted. Gravity off-load only.

Any questions? Call (510) 245-4465, (510) 245-4403 or Fax (510) 245-4476.



Sequoia Analytical

680 Chesapeake Drive
404 N. Wlget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D
1551 Industrial Road

Redwood City, CA 94063
Walnut Creek, CA 94598
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Petaluma, CA 94954
San Carlos, CA 94070-4111

(650) 364-9600
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(707) 792-1865
(650) 232-9600

FAX (650) 364-9233
FAX (925) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342
FAX (650) 232-9612

Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Deanna Harding

Client Project ID: Unocal SS#6419, Dublin
Sample Descript: Water, MW-1
Analysis Method: EPA 8260
Lab Number: W908068-02

Sampled: Aug 2, 1999
Received: Aug 2, 1999
Analyzed: Sep 8, 1999
Reported: Sep 20, 1999

MTBE by EPA 8260

Analyte	Detection Limit µg/L	Sample Results µg/L
Methyl t-Butyl Ether (MTBE).....	1,000	140000

Surrogates	Control Limit %	% Recovery
Dibromofluoromethane.....	50 150	118

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Julianne Fegley
Julianne Fegley
Project Manager

Please Note:
* Analyzed past the EPA recommended holding time.





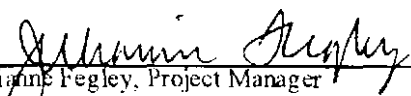
Gettler Ryan, Inc. - Dublin
6747 Sierra Court Suite J
Dublin CA, 94568

Project: Tosco
Project Number: Tosco # 6419
Project Manager: Doug Lee

Reported:
18-Oct-99 17:51

**Total Metals by EPA 6000/7000 Series Methods
Sequoia Analytical - Walnut Creek**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
W-MW1 (W910020-01) Water Sampled: 01-Oct-99 00:00 Received: 01-Oct-99 17:07									
Mercury	ND	0.00020	mg/l	1	9J04004	04-Oct-99	05-Oct-99	EPA 7470A	
Antimony	ND	0.20	"	2	9J12028	12-Oct-99	13-Oct-99	EPA 6010A	
Arsenic	ND	0.20	"	"	"	"	"	"	
Barium	0.46	0.020	"	"	"	"	"	"	
Beryllium	ND	0.020	"	"	"	"	"	"	
Cadmium	ND	0.020	"	"	"	"	"	"	
Chromium	0.16	0.020	"	"	"	"	"	"	
Cobalt	0.026	0.020	"	"	"	"	"	"	
Copper	0.082	0.020	"	"	"	"	"	"	
Lead	0.060	0.040	"	"	"	"	"	"	
Molybdenum	0.14	0.020	"	"	"	"	"	"	
Nickel	0.22	0.020	"	"	"	"	"	"	
Selenium	ND	0.20	"	"	"	"	"	"	
Silver	ND	0.020	"	"	"	"	"	"	
Thallium	ND	0.20	"	"	"	"	"	"	
Vanadium	0.13	0.020	"	"	"	"	"	"	
Zinc	0.54	0.040	"	"	"	"	"	"	


Julianne Regley, Project Manager



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

Project: Tosco
Project Number: Tosco # 6419
Project Manager: Doug Lee

Reported:
18-Oct-99 17:51

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

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Limit							
W-MW1 (W910020-01) Water Sampled: 01-Oct-99 00:00 Received: 01-Oct-99 17:07 A-01										
Dichlorodifluoromethane	ND	10	ug/l	5	9J08009	08-Oct-99	08-Oct-99	EPA 8260A		
Chloromethane	ND	10	"	"	"	"	"	"		
Vinyl chloride	ND	10	"	"	"	"	"	"		
Bromomethane	ND	10	"	"	"	"	"	"		
Chloroethane	ND	10	"	"	"	"	"	"		
Trichlorofluoromethane	ND	10	"	"	"	"	"	"		
1,1-Dichloroethene	ND	10	"	"	"	"	"	"		
Methylene chloride	ND	50	"	"	"	"	"	"		
trans-1,2-Dichloroethene	ND	10	"	"	"	"	"	"		
1,1-Dichloroethane	ND	10	"	"	"	"	"	"		
2,2-Dichloropropane	ND	10	"	"	"	"	"	"		
cis-1,2-Dichloroethene	ND	10	"	"	"	"	"	"		
Bromochloromethane	ND	10	"	"	"	"	"	"		
Chloroform	ND	10	"	"	"	"	"	"		
1,1,1-Trichloroethane	ND	10	"	"	"	"	"	"		
Carbon tetrachloride	ND	10	"	"	"	"	"	"		
1,1-Dichloropropene	ND	10	"	"	"	"	"	"		
Benzene	ND	10	"	"	"	"	"	"		
1,2-Dichloroethane	ND	10	"	"	"	"	"	"		
Trichloroethene	ND	10	"	"	"	"	"	"		
1,2-Dichloropropane	ND	10	"	"	"	"	"	"		
Dibromomethane	ND	10	"	"	"	"	"	"		
Bromodichloromethane	ND	10	"	"	"	"	"	"		
Toluene	ND	10	"	"	"	"	"	"		
1,1,2-Trichloroethane	ND	10	"	"	"	"	"	"		
Tetrachloroethene	ND	10	"	"	"	"	"	"		
1,3-Dichloropropane	ND	10	"	"	"	"	"	"		
Dibromochloromethane	ND	10	"	"	"	"	"	"		
1,2-Dibromoethane	ND	10	"	"	"	"	"	"		
Chlorobenzene	ND	10	"	"	"	"	"	"		
Ethylbenzene	ND	10	"	"	"	"	"	"		
Total Xylenes	ND	10	"	"	"	"	"	"		
1,1,1,2-Tetrachloroethane	ND	10	"	"	"	"	"	"		
Styrene	ND	10	"	"	"	"	"	"		
Bromoform	ND	10	"	"	"	"	"	"		
Isopropylbenzene	ND	10	"	"	"	"	"	"		
1,1,2,2-Tetrachloroethane	ND	10	"	"	"	"	"	"		
Bromobenzene	ND	10	"	"	"	"	"	"		
n-Propylbenzene	ND	10	"	"	"	"	"	"		

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.

Julianne Pegley, Project Manager






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

Project: Tosco
Project Number: Tosco # 6419
Project Manager: Doug Lee

Reported:
18-Oct-99 17:51

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
W-MW1 (W910020-01) Water Sampled: 01-Oct-99 00:00 Received: 01-Oct-99 17:07									
1,2,3-Trichloropropane	ND	10	ug/l	5	9J08009	08-Oct-99	08-Oct-99	EPA 8260A	
2-Chlorotoluene	ND	10	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	10	"	"	"	"	"	"	
4-Chlorotoluene	ND	10	"	"	"	"	"	"	
tert-Butylbenzene	ND	10	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	10	"	"	"	"	"	"	
sec-Butylbenzene	ND	10	"	"	"	"	"	"	
p-Isopropyltoluene	ND	10	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	10	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	10	"	"	"	"	"	"	
n-Butylbenzene	ND	10	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	10	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	25	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	10	"	"	"	"	"	"	
Naphthalene	ND	50	"	"	"	"	"	"	
Hexachlorobutadiene	ND	50	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	10	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		94.0 %	50-150	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		96.0 %	50-150	"	"	"	"	"	
Surrogate: Toluene-d8		106 %	50-150	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		106 %	50-150	"	"	"	"	"	


Julianne Regley, Project Manager





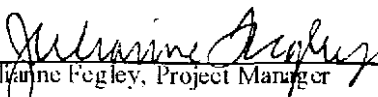
Gettler Ryan, Inc. - Dublin
6747 Sierra Court Suite J
Dublin CA, 94568

Project: Tosco
Project Number: Tosco # 6419
Project Manager: Doug Lee

Reported:
18-Oct-99 17:51

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
W-MW1 (W910020-01) Water Sampled: 01-Oct-99 00:00 Received: 01-Oct-99 17:07									
pH	7.3	0	pH Units	1	9107007	05-Oct-99	05-Oct-99	EPA 150.1	


Julianne Fogley, Project Manager





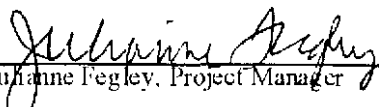
Gettler Ryan, Inc. - Dublin
6747 Sierra Court Suite J
Dublin CA, 94568

Project: Tosco
Project Number: Tosco # 6419
Project Manager: Doug Lee

Reported:
18-Oct-99 17:51

**Physical Parameters by APHA/ASTM/EPA Methods
Sequoia Analytical - Walnut Creek**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
W-MW1 (W910020-01) Water Sampled: 01-Oct-99 00:00 Received: 01-Oct-99 17:07									
Ignitability by Flashpoint	ND	10	°C	1	9J11005	11-Oct-99	11-Oct-99	EPA 1010	F-01


Julianne Fegley, Project Manager





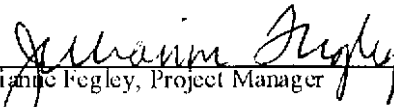
Gettler Ryan, Inc. - Dublin
.6747 Sierra Court Suite J
Dublin CA, 94568

Project: Tosco
Project Number: Tosco # 6419
Project Manager: Doug Lee

Reported:
18-Oct-99 17:51

Polynuclear Aromatic Hydrocarbons by EPA Method 610 (HPLC)
Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
W-MW1 (W910020-01/W-MW) Water Sampled: 01-Oct-99 00:00 Received: 01-Oct-99 17:07									
Acenaphthene	ND	0.500	ug/l	1	9100096	06-Oct-99	12-Oct-99	EPA 610	
Acenaphthylene	ND	1.00	"	"	"	"	"	"	
Anthracene	ND	0.0500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.0500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.0500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.0500	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	0.100	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.0500	"	"	"	"	"	"	
Chrysene	ND	0.0500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.200	"	"	"	"	"	"	
Fluoranthene	ND	0.0500	"	"	"	"	"	"	
Fluorene	ND	0.100	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.0500	"	"	"	"	"	"	
Naphthalene	ND	0.500	"	"	"	"	"	"	
Phenanthrene	ND	0.0500	"	"	"	"	"	"	
Pyrene	ND	0.0500	"	"	"	"	"	"	
Surrogate: Carbazole		90.3 %	42.0-144		"	"	"	"	
Surrogate: Terphenyl-d14		50.5 %	2.00-146		"	"	"	"	


Julianne Fegley, Project Manager





Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Dublin CA, 94568	Project: Tosco Project Number: Tosco # 6419 Project Manager: Doug Lee	Reported: 18-Oct-99 17:51
--	---	-------------------------------------

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
W-MW1 (W910020-01/W-MW) Water Sampled: 01-Oct-99 00:00 Received: 01-Oct-99 17:07									
Cyanide (total)	ND	0.0100	mg/l	1	9100178	08-Oct-99	08-Oct-99	EPA 335.2	
Sulfide	2.60	0.100	"	"	9100180	"	"	EPA 376.2	


Julianne Fegley, Project Manager





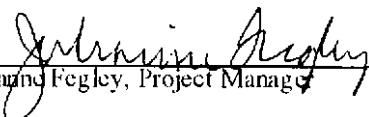
Gettler Ryan, Inc. - Dublin
6747 Sierra Court Suite J
Dublin CA, 94568

Project: Tosco
Project Number: Tosco # 6419
Project Manager: Doug Lee

Reported:
18-Oct-99 17:51

**Physical Parameters by APHA/ASTM/EPA Methods
Sequoia Analytical - Petaluma**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
W-MW1 (W910020-01/W-MW) Water Sampled: 01-Oct-99 00:00 Received: 01-Oct-99 17:07									
Reactivity in Water	ND		N/A	1	9100077	05-Oct-99	05-Oct-99	EPA Chapter	
Reactive Cyanide	ND	10.0	mg/l	"	"	"	"	SW846 Ch.	
Reactive Sulfide	ND	50.0	"	"	"	"	"	SW846 Ch 7.3	AF-M


Julianne Fegley, Project Manager



SEQUOIA ANALYTICAL

☎ 925 988 9673

10/22/99 14:25 ☐ :02/05 NO:915



42 Hangar Way • Watsonville, CA 95076-2404 • (831) 724-4522 • FAX (831) 724-3188

October 20, 1999

ToxScan Number: T-17767

Sequoia Analytical
404 N. Wiget Lane
Walnut Creek, CA 94598

Attn: Julianne Fogley

Project Name: None
Project Number: W910020
Date Sampled: October 01, 1999
Date Received: October 05, 1999
Matrix: Water

Please find the enclosed test results for the parameters requested for analysis. The sample was analyzed within holding time using the following method:

Tributyltin in water by Gas Chromatography with a Flame Photometric Detector, (GC/FPD).

The sample was received intact and was handled with the proper chain-of-custody procedures. Appropriate QA/QC guidelines were employed during the analyses on a minimum of a 5% basis. QC results were within limits and are reported with or following the data for each analysis.

If you have any questions or require any additional information, please feel free to call.

Sincerely,

A handwritten signature in cursive script that reads "Philip D. Carpenter".

Philip D. Carpenter, Ph.D.
President

Enclosures

This cover letter is an integral part of the report.

SEQUOIA ANALYTICAL

☎ 925 988 9673

10/22/99 14:25 ☐ :03/05 NO:915

Client: Sequoia Analytical
 Method: EPA Method(s) GC/FPD
 Date Completed: 10/18/99
 Matrix: Water
 Units: ng/L

ToxScan Number: T-17767

<u>Client</u> <u>Sample ID</u>	<u>ToxScan</u> <u>Lab ID</u>	<u>Analyte</u>	<u>Sample</u> <u>Value</u>	<u>Reporting</u> <u>Limit</u>
W910020-01	17767-01	Tributyltin	ND	2

TOSCO

6015 Sutter Ave., Suite 8 Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
 X 404 N. Wiget Lane • Walnut Creek, CA 94598 • (925) 988-9600 FAX (925) 988-9673
 □ 1455 McDowell Blvd. North, Suite D • Petaluma, CA 94954 • (707) 792-1865 FAX (707) 792-0342
 □ 1551 Industrial Road • San Carlos, CA 94070 • (650) 232-9600 FAX (650) 232-9612

Consultant Company: **GETTLER-RYAN INC.** Project Name: **TOSCO #6419- DUBLIN**
 Address: **6747 Sierra City Suite J** TOSCO Engineer (required) **DAVID DE WITT**
 City: **DUBLIN** State: **CA** Zip Code: **94568** **W910020**
 Telephone: **(925) 551-7555** FAX #: **551-7888** Site #, City, State: **6401 DUBLIN BOULEVARD**
 Report To: **DOUG LEE** Sampler: **HAIG KEVORK** QC Data: Level D (Standard) Level C Level B Level A

Turnaround Time: 10 Work Days 5 Work Days 3 Work Days 2-8 Hours
 2 Work Days 1 Work Day
 CODE: Misc. Detect. Eval. Remed. Demol. Closure Other

Analyses Requested
 TPH (PAH 1015) (see 661)
 BTEX (PAH 1022)
 MTBE (PAH 1026)
 TPH (PAH 1015) (see 661)
 WTLG Confirmation (PAH 1028)
 ACT CLAMM 10/10/99
 CLOUANT 10/10/99
 TRIBUTYL TIN

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	TPH (PAH 1015) (see 661)	BTEX (PAH 1022)	MTBE (PAH 1026)	TPH (PAH 1015) (see 661)	WTLG Confirmation (PAH 1028)	ACT CLAMM 10/10/99	CLOUANT 10/10/99	TRIBUTYL TIN	Comments
1. W-MW1	10/1/99	Water	10	4 Amber 3 VOA's 3 Plastic	OIA-J									
2.														
3.														
4.														
5.														
6.														
7.														
8.														
9.														
10.														

Relinquished By: *[Signature]* Date: **10/1/99** Time: _____ Received By: _____ Date: _____ Time: _____
 Relinquished By: _____ Date: _____ Time: _____ Received By: _____ Date: _____ Time: _____
 Relinquished By: _____ Date: _____ Time: _____ Received By: *[Signature]* Date: **10/1/99** Time: **17:07**

Were Samples Received in Good Condition? Yes No Samples on Ice? Yes No Method of Shipment: _____ Page ____ of ____

To be completed upon receipt of report:
 1) Were the analyses requested on the Chain of Custody reported? Yes No If no, what analyses are still needed? _____
 2) Was the report issued within the requested turnaround time? Yes No If no, what was the turnaround time? _____
 Approved by: _____ Signature: _____ Company: _____ Date: _____

OCT 25 '99 10:17 FROM GETTLER-RYAN INC. TO 2772361
 10/22/99 14:25 :05/05 NO:915
 925 988 9673
 SEQOIA ANALYTICAL

Pink - Client 925 988 9673 PAGE.005
 Yellow - Sequoia
 White - Sequoia
 OCT 22 '99 14:34
 ** TOTAL PAGE.005 **



MPDS Services
 2401 Stanwell Dr., Ste. 300
 Concord, CA 94520
 Attention: Sarkis Karkarian

Client Project ID: Unocal #6419, 6401 Dublin Blvd.,
 Sample Descript: Water, Comp Dublin
 Analysis Method: See below
 Lab Number: 502-0623

Sampled: Feb 9, 1995
 Received: Feb 9, 1995
 Reported: Feb 27, 1995

STATIC HAZARDOUS ABBREVIATED SCREEN BIOASSAY

Species: Pimephales promelas

Common Name: Fathead Minnow

Mean length: 30 mm Min. length: 27 mm
 Max. length: 34 mm
 Mean weight: 0.31 g Min. weight: 0.18 g
 Max. weight: 0.54 g

Organisms/Tank: 10
 Organisms/Conc.: 20
 Tank Depth: 13 cm
 Tank Volume: 10 L
 Acclimation Temp.: 20 °C
 Supplier: Sticklebacks Unlimited

Dilution Water: Synthetic Softwater
 Hardness 40-48

	Alkalinity, mg/L		Hardness, mg/L	
	Initial	Final	Initial	Final
Control	35	-	42	-
750 ppm	34	-	44	-
Duplicate 750 ppm	32	-	46	-

DATE	Initial	24 Hr	48 Hr	72 Hr	96 Hr
	2/13/95	2/14/95	2/15/95	2/16/95	2/17/95

	DO	C	pH	DO	C	pH	# M	DO	C	pH	# M	DO	C	pH	# M	DO	C	pH	# M	Total Dead
	mg/L	Temp	Units	mg/L	Temp	Units	Dead	mg/L	Temp	Units	Dead	mg/L	Temp	Units	Dead	mg/L	Temp	Units	Dead	
Control	8.6	20	7.9	6.8	19	7.3	0	6.0	19	7.3	0	5.3	19	7.3	0	5.7	20	7.2	1	1
750 ppm	8.9	19	7.8	5.7	19	7.1	1	4.8	19	7.1	2	4.4	19	7.2	2	4.9	20	7.1	2	2
250 ppm	8.5	20	7.8	5.6	19	7.1	0	4.9	19	7.1	0	4.8	19	7.1	0	5.0	20	7.0	0	0
Duplicate																				
750 ppm	9.1	20	7.8	6.2	19	7.1	2	5.1	19	7.2	2	4.6	19	7.2	2	4.6	20	7.1	2	2
250 ppm	8.8	20	7.8	5.7	19	7.1	0	4.8	19	7.0	2	4.8	19	7.0	3	5.1	20	7.0	3	3

Pass X Fail

Remarks: The screen fails if > 40% of the fish die in the 750 ppm concentration.

Analyst: K. Anderson/
D. Newcomb

Method Reference: Static Acute Bioassay Procedures for Hazardous Waste Samples,
November 1988, California Department of Fish and Game WPCL.

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

Douglas Lee

From: Camille, David: [dcamille@tosco.com]
Sent: Wednesday, September 29, 1999 9:55 PM
To: 'Vossler, Dave (Gettler-Ryan)'; 'Ripp, Tim (IT/PEG)'; 'Lee, Doug (Gettler-Ryan)'
Cc: Ralston, Ed C.; DeWitt, David; 'Hooton, Scott (BP Oil)'
Subject: Groundwater Purging and Transportation to SFR

Gentlemen,

In order to resume water shipments into SFR, the following must be done

- 1) Collect a representative water sample and have it analyzed for MtBE and the constituents found on Table 3-3. This should be done as soon as possible so we can expedite moving water again. Sample turn-around time should be 10 days and I urge you to communicate up front with the lab to ensure on-time deliverables. I anticipate that we will get all the analytical results and final approval by October 20th.
- 2) Once I receive the data from you, I will complete a new R-149 and submit it to SFR for approval. The new R-149 will be good for one month : October 20 through November 20.
- 3) Repeat steps 1 & 2 one more time so we can get new R-149 approved for November 20 through December 20.
- 4) Beginning January 1, 2000, we will revert back to the quarterly sampling, review and approval process.

The sites to be sampled are :

11231 - Sunnyvale
11228 - San Jose
5368 - Milpitas
5550 - San Jose
5925 - San Jose

11229 - San Jose (BP RESPONSIBILITY)
11139 - Orinda (BP RESPONSIBILITY)

11195 - Lathrop (ED - PLEASE COORDINATE THIS ACTIVITY WITH YOUR CONSULTANT)

6419 - Dublin (DAVE D - PLEASE COORDINATE THIS ACTIVITY WITH YOUR CONSULTANT)

4818 - Santa Cruz, 3741 - Watsonville & 2452 - Soquel (DAVE V - PER OUR CONVERSATION REGARDING 4818, LET'S SEEK ALTERNATIVES FOR THESE)

Dave De Witt : Please fax Table 3-3 to Ripp, Vossler, Lee and Hooton if you get a chance today.

Questions? Please call.

Thanks

David Camille
Environmental Compliance Manager Phone: (925) 277-2335
North Coast Region Fax: (925)
277-2361

DAVE:
GAS/BTEX/MtBE IS FROM
8/99 GMR.
FISH BIO IS FROM 1995

M P D S Services, Inc.
 2401 Stanwell Drive, Suite 400, Concord, CA 94520
 Tel: (510) 602-6120 Fax: (510) 689-1918

CHAIN OF CUSTODY

SAMPLER				UNOCAL			ANALYSES REQUESTED						TURN AROUND TIME					
STEVE BALIAN				SIS #	CITY:		SAMPLING LOCATION	NO. OF CONT.	COMP	GRAB	WATER	TIME	TPH-GAS	TPH-DIESEL	TOG	8010	BIOASSAY	REMARKS
				ADDRESS:									TPH-GAS	TPH-DIESEL	TOG	8010	BIOASSAY	
WITNESSING AGENCY				ADDRESS: 6401 DUBLIN AVE.									5020623					
SAMPLE ID NO.	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION					TPH-GAS	TPH-DIESEL	TOG	8010	BIOASSAY		
Comp	2-9-95	4:15	X	X	X	1	WELLS									X		

THE FOLLOWING MUST BE COMPLETED BY THE LABORATORY ACCEPTING SAMPLES FOR ANALYSES:

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
STEVE BALIAN (SIGNATURE)	2-9-95 18:15	M. B. [Signature] (SIGNATURE)
(SIGNATURE)		(SIGNATURE)
(SIGNATURE)		(SIGNATURE)
(SIGNATURE)		(SIGNATURE)
(SIGNATURE)		(SIGNATURE)

1. HAVE ALL SAMPLES RECEIVED FOR ANALYSIS BEEN STORED ON ICE? Yes

2. WILL SAMPLES REMAIN REFRIGERATED UNTIL ANALYZED? Yes

3. DID ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACE? Yes

4. WERE SAMPLES IN APPROPRIATE CONTAINERS AND PROPERLY PACKAGED? Yes

SIGNATURE: _____ TITLE: _____ DATE: _____



Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D
1551 Industrial Road

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954
San Carlos, CA 94070-4111

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(916) 921-9600
(707) 792-1865
(650) 232-9600

FAX (650) 364-9233
FAX (925) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342
FAX (650) 232-9612

Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Deanna Harding

Client Project ID: Unocal SS#6419, Dublin
Sample Matrix: Water
Analysis Method: EPA 5030/8015 Mod./8020
First Sample #: W908068-07

Sampled: Aug 2, 1999
Received: Aug 2, 1999
Reported: Aug 20, 1999

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX / MTBE

Analyte	Reporting Limit µg/L	Sample I.D. W908068-07 MW-6	Sample I.D. 08 MW-7
Purgeable Hydrocarbons	50	N.D.	N.D.
Benzene	0.50	N.D.	N.D.
Toluene	0.50	N.D.	N.D.
Ethyl Benzene	0.50	N.D.	N.D.
Total Xylenes	0.50	N.D.	N.D.
MTBE	2.5	N.D.	31
Chromatogram Pattern:		--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0
Date Analyzed:	8/11/99	8/12/99
Instrument Identification:	-	-
Surrogate Recovery, %: (QC Limits = 70-130%)	97	97

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Julianne Fegley
Project Manager





Sequoia Analytical

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FAX (650) 232-9612

Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Deanna Harding

Client Project ID: Unocal SS#6419, Dublin
Matrix: Liquid

QC Sample Group: W908068

Reported: Aug 20, 1999

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8260
Analyst:	Walnut Creek	Walnut Creek	Walnut Creek	Walnut Creek	Walnut Creek

MS/MSD	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE
Batch#:	W908170-05	W908170-05	W908170-05	W908170-05	W908523-08
Date Prepared:	8/11/99	8/11/99	8/11/99	8/11/99	9/8/99
Date Analyzed:	8/11/99	8/11/99	8/11/99	8/11/99	9/8/99
Instrument I.D.#:	-	-	-	-	-
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	50 µg/L
Matrix Spike % Recovery:	92	84	93	95	104
Matrix Spike Duplicate % Recovery:	99	89	90	102	104
Relative % Difference:	6.8	6.8	5.8	3.8	0.0

LCS Batch#:	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE
Date Prepared:	8/11/99	8/11/99	8/11/99	8/11/99	9/8/99
Date Analyzed:	8/11/99	8/11/99	8/11/99	8/11/99	9/8/99
Instrument I.D.#:	-	-	-	-	-
LCS % Recovery:	103	94	96	107	102

% Recovery Control Limits:	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE
	60-140	60-140	60-140	60-140	70-130

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL, #1271

Julianne Fegley
Julianne Fegley
Project Manager





Sequoia Analytical

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404 N. Wiget Lane
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FAX (707) 792-0342
FAX (650) 232-9612

Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Deanna Harding

Client Project ID: Unocal SS#6419, Dublin
Matrix: Liquid

QC Sample Group: W908068

Reported: Aug 20, 1999

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	Walnut Creek	Walnut Creek	Walnut Creek	Walnut Creek

MS/MSD Batch#:	W908169-10	W908169-10	W908169-10	W908169-10
Date Prepared:	8/10/99	8/10/99	8/10/99	8/10/99
Date Analyzed:	8/10/99	8/10/99	8/10/99	8/10/99
Instrument I.D.#:	-	-	-	-
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	96	87	88	100
Matrix Spike Duplicate % Recovery:	98	89	89	101
Relative % Difference:	3.5	1.6	2.3	1.0

LCS Batch#:	LCS081099	LCS081099	LCS081099	LCS081099
Date Prepared:	8/10/99	8/10/99	8/10/99	8/10/99
Date Analyzed:	8/10/99	8/10/99	8/10/99	8/10/99
Instrument I.D.#:	-	-	-	-
LCS % Recovery:	98	90	89	102

% Recovery Control Limits:	70-130	70-130	70-130	70-130

Please Note:

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL, #1271

Julianne Fegley
Julianne Fegley
Project Manager





Sequoia Analytical

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Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Deanna Harding

Client Project ID: Unocal SS#6419, Dublin
Matrix: Liquid

QC Sample Group: W908068

Reported: Aug 20, 1999

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	Walnut Creek	Walnut Creek	Walnut Creek	Walnut Creek

MS/MSD

Batch#: 0 0 0

Date Prepared: 8/12/99 8/12/99 8/12/99 8/12/99

Date Analyzed: 8/12/99 8/12/99 8/12/99 8/12/99

Instrument I.D.#: - - - -

Conc. Spiked: 20 µg/L 20 µg/L 20 µg/L 60 µg/L

Matrix Spike

% Recovery: 109 92 96 109

Matrix Spike Duplicate %

Recovery: 104 89 95 108

Relative %

Difference: 5.6 3.9 1.6 1.0

LCS Batch#: - - - -

Date Prepared: - - - -

Date Analyzed: - - - -

Instrument I.D.#: - - - -

LCS %

Recovery: - - - -

% Recovery Control Limits:	70-130	70-130	70-130	70-130
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SEQUOIA ANALYTICAL, #1271

Juwanne Fegley
Juwanne Fegley
Project Manager

Please Note:

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.





Facility Number: UNOCAL SS# 6419
 Facility Address: 6401 Dublin Blvd., Dublin, CA
 Consultant Project Number: 180021.85
 Consultant Name: Gettler-Ryan Inc. (G-R Inc.)
 Address: 6747 Sierra Court, Suite J, Dublin, CA 94568
 Project Contact (Name): Deanna L. Harding
 (Phone) 510-551-7555 (Fax Number) 510-551-7888

Contact (Name): Mr. David Dewitt
 (Phone): (925) 277-2384
 Laboratory Name: Sequoia Analytical
 Laboratory Release Number:
 Samples Collected by (Name): Vazhkes Tashjian
 Collection Date: 8/2/99
 Signature: *North Oake* WAD8068

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed											DO NOT BILL TB-LB ANALYSIS	Remarks
								TPH Gas + BTEX w/MTBE (8020)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)					
B-LB	-01	1	W	G		Hcl	Y	X											* CONFIRM	
MW-1	-02	5	W	C	11:00 PM		Y	X											mtbe Hit on	
MW-2	-03	3	W	C	11:43 AM		Y	X											MW-1 only	
MW-3	-04	3	W	C	11:10 AM		Y	X											by MTBE lab	
MW-4	-05	3	W	C	12:00 PM		Y	X											8260	
MW-5	-06	3	W	C	10:55 AM		Y	X												
MW-6	-07	3	W	C	12:50 PM		Y	X												
MW-7	-08	3	W	C	10:10 AM		Y	X												

Relinquished By (Signature): <i>North Oake</i>	Organization: G-R Inc.	Date/Time: 8/2/99 1:30	Received By (Signature): <i>John Weber</i>	Organization: G-R INC	Date/Time: 8/2/99 1:30	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. 5 Days 10 Days As Contracted
Relinquished By (Signature): <i>John Weber</i>	Organization: G-R INC.	Date/Time: 8/3/99 0800	Received By (Signature): <i>[Signature]</i>	Organization: SEQ.	Date/Time: 8/3 9:29	
Relinquished By (Signature): <i>[Signature]</i>	Organization: SEQ.	Date/Time: 8/11/99 12:07	Received For Laboratory By (Signature): <i>[Signature]</i>		Date/Time: 8/3/99 13:07	



18 October, 1999

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

RE: Tosco

Enclosed are the results of analyses for samples received by the laboratory on 01-Oct-99 17:07. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Julianne Fegley
Project Manager

Still needs
Tributyl tin
report from
Toxician



Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Dublin CA, 94568	Project: Tosco Project Number: Tosco # 6419 Project Manager: Doug Lee	Reported: 18-Oct-99 17:51
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ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
W-MW1	W910020-01	Water	01-Oct-99 00:00	01-Oct-99 17:07
W-MW1	W910020-01	Water	01-Oct-99 00:00	01-Oct-99 17:07


 Julianne Fegley, Project Manager





Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Dublin CA, 94568	Project: Tosco Project Number: Tosco # 6419 Project Manager: Doug Lee	Reported: 18-Oct-99 17:51
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Total Metals by EPA 6000/7000 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 9J04004: Prepared 04-Oct-99 Using EPA 200 Series

Blank (9J04004-BLK1)

Mercury	ND	0.00020	mg/l							
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LCS (9J04004-BS1)

Mercury	0.00206	0.00020	mg/l	0.00200		103	75-125			
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LCS Dup (9J04004-BSD1)

Mercury	0.00204	0.00020	mg/l	0.00200		102	75-125	0.976	20	
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Matrix Spike (9J04004-MS1)

Source: W910006-01

Mercury	0.00199	0.00020	mg/l	0.00200	ND	99.5	75-125			
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Matrix Spike Dup (9J04004-MSD1)

Source: W910006-01

Mercury	0.00205	0.00020	mg/l	0.00200	ND	102	75-125	2.97	20	
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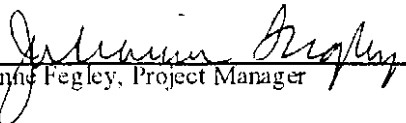
Batch 9J12028: Prepared 12-Oct-99 Using 200.7

Blank (9J12028-BLK1)

Cadmium	ND	0.010	mg/l							
Chromium	ND	0.010	"							
Copper	ND	0.010	"							
Lead	ND	0.020	"							
Nickel	ND	0.010	"							
Zinc	ND	0.020	"							

LCS (9J12028-BS1)

Cadmium	1.00	0.010	mg/l	1.00		100	80-120			
Chromium	1.00	0.010	"	1.00		100	80-120			
Copper	0.990	0.010	"	1.00		99.0	80-120			
Lead	1.00	0.020	"	1.00		100	80-120			
Nickel	1.00	0.010	"	1.00		100	80-120			
Zinc	1.00	0.020	"	1.00		100	80-120			


Julianne Fegley, Project Manager





Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Dublin CA, 94568	Project: Tosco Project Number: Tosco # 6419 Project Manager: Doug Lee	Reported: 18-Oct-99 17:51
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**Total Metals by EPA 6000/7000 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 9J12028: Prepared 12-Oct-99 Using 200.7

LCS Dup (9J12028-BSD1)

Cadmium	1.00	0.010	mg/l	1.00		100	80-120	0	20	
Chromium	1.00	0.010	"	1.00		100	80-120	0	20	
Copper	1.00	0.010	"	1.00		100	80-120	1.01	20	
Lead	1.00	0.020	"	1.00		100	80-120	0	20	
Nickel	1.00	0.010	"	1.00		100	80-120	0	20	
Zinc	1.10	0.020	"	1.00		110	80-120	9.52	20	

Matrix Spike (9J12028-MS1)

Source: W910056-01

Cadmium	0.970	0.010	mg/l	1.00	ND	97.0	80-120			
Chromium	0.970	0.010	"	1.00	0.030	94.0	80-120			
Copper	0.940	0.010	"	1.00	ND	94.0	80-120			
Lead	0.940	0.020	"	1.00	ND	94.0	80-120			
Nickel	0.940	0.010	"	1.00	0.027	91.3	80-120			
Zinc	1.00	0.020	"	1.00	0.038	96.2	80-120			

Matrix Spike Dup (9J12028-MSD1)

Source: W910056-01

Cadmium	0.990	0.010	mg/l	1.00	ND	99.0	80-120	2.04	20	
Chromium	0.990	0.010	"	1.00	0.030	96.0	80-120	2.04	20	
Copper	0.960	0.010	"	1.00	ND	96.0	80-120	2.11	20	
Lead	0.960	0.020	"	1.00	ND	96.0	80-120	2.11	20	
Nickel	0.960	0.010	"	1.00	0.027	93.3	80-120	2.11	20	
Zinc	1.00	0.020	"	1.00	0.038	96.2	80-120	0	20	


 Julianne Fogley, Project Manager





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

Project: Tosco
Project Number: Tosco # 6419
Project Manager: Doug Lee

Reported:
18-Oct-99 17:51

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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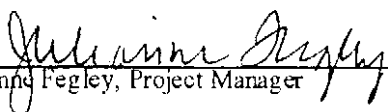
Batch 9J08009: Prepared 08-Oct-99 Using EPA 5030B [P/T]

Blank (9J08009-BLK1)

Dichlorodifluoromethane	ND	2.0	ug/l							
Chloromethane	ND	2.0	"							
Vinyl chloride	ND	2.0	"							
Bromomethane	ND	2.0	"							
Chloroethane	ND	2.0	"							
Trichlorofluoromethane	ND	2.0	"							
1,1-Dichloroethene	ND	2.0	"							
Methylene chloride	ND	10	"							
trans-1,2-Dichloroethene	ND	2.0	"							
1,1-Dichloroethane	ND	2.0	"							
2,2-Dichloropropane	ND	2.0	"							
cis-1,2-Dichloroethene	ND	2.0	"							
Bromochloromethane	ND	2.0	"							
Chloroform	ND	2.0	"							
1,1,1-Trichloroethane	ND	2.0	"							
Carbon tetrachloride	ND	2.0	"							
1,1-Dichloropropene	ND	2.0	"							
Benzene	ND	2.0	"							
1,2-Dichloroethane	ND	2.0	"							
Trichloroethene	ND	2.0	"							
1,2-Dichloropropane	ND	2.0	"							
Dibromomethane	ND	2.0	"							
Bromodichloromethane	ND	2.0	"							
Toluene	ND	2.0	"							
1,1,2-Trichloroethane	ND	2.0	"							
Tetrachloroethene	ND	2.0	"							
1,3-Dichloropropane	ND	2.0	"							
Dibromochloromethane	ND	2.0	"							
1,2-Dibromoethane	ND	2.0	"							
Chlorobenzene	ND	2.0	"							
Ethylbenzene	ND	2.0	"							
Total Xylenes	ND	2.0	"							

Sequoia Analytical - Walnut Creek

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


Julianne Fegley, Project Manager





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

Project: Tosco
Project Number: Tosco # 6419
Project Manager: Doug Lee

Reported:
18-Oct-99 17:51

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 9J08009: Prepared 08-Oct-99 Using EPA 5030B [P/T]

Blank (9J08009-BLK1)

1,1,1,2-Tetrachloroethane	ND	2.0	ug/l							
Styrene	ND	2.0	"							
Bromoforn	ND	2.0	"							
Isopropylbenzene	ND	2.0	"							
1,1,2,2-Tetrachloroethane	ND	2.0	"							
Bromobenzene	ND	2.0	"							
n-Propylbenzene	ND	2.0	"							
1,2,3-Trichloropropane	ND	2.0	"							
2-Chlorotoluene	ND	2.0	"							
1,3,5-Trimethylbenzene	ND	2.0	"							
4-Chlorotoluene	ND	2.0	"							
tert-Butylbenzene	ND	2.0	"							
1,2,4-Trimethylbenzene	ND	2.0	"							
sec-Butylbenzene	ND	2.0	"							
p-Isopropyltoluene	ND	2.0	"							
1,3-Dichlorobenzene	ND	2.0	"							
1,4-Dichlorobenzene	ND	2.0	"							
n-Butylbenzene	ND	2.0	"							
1,2-Dichlorobenzene	ND	2.0	"							
1,2-Dibromo-3-chloropropane	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	2.0	"							
Naphthalene	ND	10	"							
Hexachlorobutadiene	ND	10	"							
1,2,3-Trichlorobenzene	ND	2.0	"							
Surrogate: Dibromofluoromethane	53.0		"	50.0		106	50-150			
Surrogate: 1,2-Dichloroethane-d4	62.0		"	50.0		124	50-150			
Surrogate: Toluene-d8	53.0		"	50.0		106	50-150			
Surrogate: 4-Bromofluorobenzene	56.0		"	50.0		112	50-150			

Julianne Fegley, Project Manager





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

Project: Tosco
Project Number: Tosco # 6419
Project Manager: Doug Lee

Reported:
18-Oct-99 17:51

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 9J08009: Prepared 08-Oct-99 Using EPA 5030B [P/T]

LCS (9J08009-BS1)

1,1-Dichloroethene	43.3	2.0	ug/l	50.0		86.6	65-135			
Benzene	48.8	2.0	"	50.0		97.6	70-130			
Trichloroethene	47.9	2.0	"	50.0		95.8	70-130			
Toluene	47.4	2.0	"	50.0		94.8	70-130			
Chlorobenzene	49.1	2.0	"	50.0		98.2	70-130			
Surrogate: Dibromofluoromethane	52.0		"	50.0		104	50-150			
Surrogate: 1,2-Dichloroethane-d4	59.0		"	50.0		118	50-150			
Surrogate: Toluene-d8	54.0		"	50.0		108	50-150			
Surrogate: 4-Bromofluorobenzene	55.0		"	50.0		110	50-150			

Matrix Spike (9J08009-MS1)

Source: W909572-05

1,1-Dichloroethene	47.1	2.0	ug/l	50.0	ND	94.2	60-140			
Benzene	54.9	2.0	"	50.0	ND	110	60-140			
Trichloroethene	51.4	2.0	"	50.0	ND	103	60-140			
Toluene	48.1	2.0	"	50.0	ND	96.2	60-140			
Chlorobenzene	46.9	2.0	"	50.0	ND	93.8	60-140			
Surrogate: Dibromofluoromethane	56.0		"	50.0		112	50-150			
Surrogate: 1,2-Dichloroethane-d4	58.0		"	50.0		116	50-150			
Surrogate: Toluene-d8	50.0		"	50.0		100	50-150			
Surrogate: 4-Bromofluorobenzene	56.0		"	50.0		112	50-150			

Matrix Spike Dup (9J08009-MSD1)

Source: W909572-05

1,1-Dichloroethene	42.4	2.0	ug/l	50.0	ND	84.8	60-140	10.5	25	
Benzene	52.1	2.0	"	50.0	ND	104	60-140	5.23	25	
Trichloroethene	46.3	2.0	"	50.0	ND	92.6	60-140	10.4	25	
Toluene	45.2	2.0	"	50.0	ND	90.4	60-140	6.22	25	
Chlorobenzene	43.6	2.0	"	50.0	ND	87.2	60-140	7.29	25	
Surrogate: Dibromofluoromethane	58.0		"	50.0		116	50-150			
Surrogate: 1,2-Dichloroethane-d4	64.0		"	50.0		128	50-150			
Surrogate: Toluene-d8	51.0		"	50.0		102	50-150			
Surrogate: 4-Bromofluorobenzene	58.0		"	50.0		116	50-150			

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.

Julianne Fegley, Project Manager





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

Project: Tosco
Project Number: Tosco # 6419
Project Manager: Doug Lee

Reported:
18-Oct-99 17:51

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
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Batch 9J07007: Prepared 05-Oct-99 Using General Preparation

Duplicate (9J07007-DUP1)

Source: W910058-01

pH	8.0	0	pH Units		8.0			0	20	
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Julianne Fegley, Project Manager





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

Project: Tosco
Project Number: Tosco # 6419
Project Manager: Doug Lee

Reported:
18-Oct-99 17:51

**Physical Parameters by APHA/ASTM/EPA Methods - Quality Control
Sequoia Analytical - Walnut Creek**

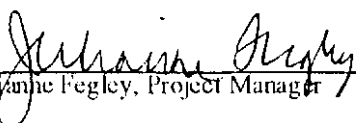
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch 9J11005: Prepared 11-Oct-99 Using General Preparation

Duplicate (9J11005-DUP1)

Source: W910020-01

Ignitability by Flashpoint	ND	10	°C		ND			30	F-01
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Julianne Pegley, Project Manager





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

Project: Tosco
Project Number: Tosco # 6419
Project Manager: Doug Lee

Reported:
18-Oct-99 17:51

Polynuclear Aromatic Hydrocarbons by EPA Method 610 (HPLC) - Quality Control
Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 9100096: Prepared 06-Oct-99 Using EPA 3520B

Blank (9100096-BLK1)

Acenaphthene	ND	0.500	ug/l							
Acenaphthylene	ND	1.00	"							
Anthracene	ND	0.0500	"							
Benzo (a) anthracene	ND	0.0500	"							
Benzo (b) fluoranthene	ND	0.0500	"							
Benzo (k) fluoranthene	ND	0.0500	"							
Benzo (g,h,i) perylene	ND	0.100	"							
Benzo (a) pyrene	ND	0.0500	"							
Chrysene	ND	0.0500	"							
Dibenz (a,h) anthracene	ND	0.200	"							
Fluoranthene	ND	0.0500	"							
Fluorene	ND	0.100	"							
Indeno (1,2,3-cd) pyrene	ND	0.0500	"							
Naphthalene	ND	0.500	"							
Phenanthrene	ND	0.0500	"							
Pyrene	ND	0.0500	"							
<i>Surrogate: Carbazole</i>	<i>0.807</i>		"	<i>1.00</i>		<i>80.7</i>	<i>42.0-144</i>			
<i>Surrogate: Terphenyl-d14</i>	<i>1.84</i>		"	<i>2.00</i>		<i>92.0</i>	<i>2.00-146</i>			

LCS (9100096-BS1)

Acenaphthene	5.94	0.500	ug/l	10.0		59.4	1.30-124			
Acenaphthylene	2.33	1.00	"	5.00		46.6	1.70-139			
Anthracene	0.0864	0.0500	"	0.200		43.2	1.00-126			
Benzo (a) anthracene	0.382	0.0500	"	0.500		76.4	1.00-135			
Benzo (b) fluoranthene	0.167	0.0500	"	0.200		83.5	1.00-150			
Benzo (k) fluoranthene	0.174	0.0500	"	0.200		87.0	1.00-159			
Benzo (g,h,i) perylene	0.684	0.100	"	0.800		85.5	1.00-116			
Benzo (a) pyrene	0.246	0.0500	"	0.500		49.2	1.00-128			
Chrysene	0.427	0.0500	"	0.500		85.4	1.00-199			
Dibenz (a,h) anthracene	1.34	0.200	"	2.00		67.0	2.00-110			
Fluoranthene	0.379	0.0500	"	0.500		75.8	1.50-123			
Fluorene	0.645	0.100	"	1.00		64.5	2.50-142			

Sequoia Analytical - Walnut Creek

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Julianne Fegley, Project Manager





Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Dublin CA, 94568	Project: Tosco Project Number: Tosco # 6419 Project Manager: Doug Lee	Reported: 18-Oct-99 17:51
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Polynuclear Aromatic Hydrocarbons by EPA Method 610 (HPLC) - Quality Control
Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 9100096: Prepared 06-Oct-99 Using EPA 3520B

LCS (9100096-BS1)

Indeno (1,2,3-cd) pyrene	0.417	0.0500	ug/l	0.500		83.4	1.00-116			
Naphthalene	2.41	0.500	"	5.00		48.2	1.30-122			
Phenanthrene	0.286	0.0500	"	0.400		71.5	1.00-155			
Pyrene	0.662	0.0500	"	1.00		66.2	1.00-140			
<i>Surrogate: Carbazole</i>	<i>0.783</i>		"	<i>1.00</i>		<i>78.3</i>	<i>42.0-144</i>			
<i>Surrogate: Terphenyl-d14</i>	<i>1.81</i>		"	<i>2.00</i>		<i>90.5</i>	<i>2.00-146</i>			

LCS Dup (9100096-BSD1)

Acenaphthene	4.99	0.500	ug/l	10.0		49.9	1.30-124	17.4	35.0	
Acenaphthylene	2.14	1.00	"	5.00		42.8	1.70-139	8.50	35.0	
Anthracene	0.0730	0.0500	"	0.200		36.5	1.00-126	16.8	35.0	
Benzo (a) anthracene	0.386	0.0500	"	0.500		77.2	1.00-135	1.04	35.0	
Benzo (b) fluoranthene	0.155	0.0500	"	0.200		77.5	1.00-150	7.45	35.0	
Benzo (k) fluoranthene	0.172	0.0500	"	0.200		86.0	1.00-159	1.16	35.0	
Benzo (g,h,i) perylene	0.676	0.100	"	0.800		84.5	1.00-116	1.18	35.0	
Benzo (a) pyrene	0.236	0.0500	"	0.500		47.2	1.00-128	4.15	35.0	
Chrysene	0.434	0.0500	"	0.500		86.8	1.00-199	1.63	35.0	
Dibenz (a,h) anthracene	1.26	0.200	"	2.00		63.0	2.00-110	6.15	35.0	
Fluoranthene	0.315	0.0500	"	0.500		63.0	1.50-123	18.4	35.0	
Fluorene	0.541	0.100	"	1.00		54.1	2.50-142	17.5	35.0	
Indeno (1,2,3-cd) pyrene	0.400	0.0500	"	0.500		80.0	1.00-116	4.16	35.0	
Naphthalene	2.15	0.500	"	5.00		43.0	1.30-122	11.4	35.0	
Phenanthrene	0.218	0.0500	"	0.400		54.5	1.00-155	27.0	35.0	
Pyrene	0.612	0.0500	"	1.00		61.2	1.00-140	7.85	35.0	
<i>Surrogate: Carbazole</i>	<i>0.745</i>		"	<i>1.00</i>		<i>74.5</i>	<i>42.0-144</i>			
<i>Surrogate: Terphenyl-d14</i>	<i>1.85</i>		"	<i>2.00</i>		<i>92.5</i>	<i>2.00-146</i>			

Julianne Fegley
Julianne Fegley, Project Manager





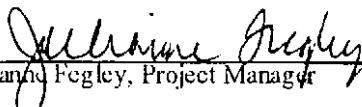
Gettler Ryan, Inc. - Dublin
6747 Sierra Court Suite J
Dublin CA, 94568

Project: Tosco
Project Number: Tosco # 6419
Project Manager: Doug Lee

Reported:
18-Oct-99 17:51

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9100178: Prepared 08-Oct-99 Using General Preparation										
Blank (9100178-BLK1)										
Cyanide (total)	ND	0.0100	mg/l							
LCS (9100178-BS1)										
Cyanide (total)	0.201	0.0100	mg/l	0.200		101	80.0-120			
Matrix Spike (9100178-MS1) Source: P910100-01										
Cyanide (total)	0.182	0.0100	mg/l	0.200	ND	91.0	75.0-125			
Matrix Spike Dup (9100178-MSD1) Source: P910100-01										
Cyanide (total)	0.178	0.0100	mg/l	0.200	ND	89.0	75.0-125	2.22	20.0	
Batch 9100180: Prepared 08-Oct-99 Using General Preparation										
Blank (9100180-BLK1)										
Sulfide	ND	0.100	mg/l							
LCS (9100180-BS1)										
Sulfide	1.00	0.100	mg/l	1.00		100	80.0-120			
Duplicate (9100180-DUP1) Source: P910157-01										
Sulfide	0.100	0.100	mg/l		0.100			0	20.0	


Julianne Pegley, Project Manager





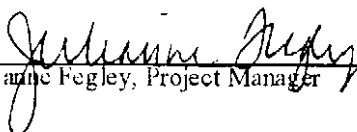
Gettler Ryan, Inc. - Dublin
6747 Sierra Court Suite J
Dublin CA, 94568

Project: Tosco
Project Number: Tosco # 6419
Project Manager: Doug Lee

Reported:
18-Oct-99 17:51

**Physical Parameters by APHA/ASTM/EPA Methods - Quality Control
Sequoia Analytical - Petaluma**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9100077: Prepared 05-Oct-99 Using General Preparation										
Blank (9100077-BLK1)										
Reactive Cyanide	ND	10.0	mg/l							
Reactive Sulfide	ND	50.0	"							
LCS (9100077-BS1)										
Reactive Sulfide	1190	50.0	mg/l	1170		102	10.0-120			
LCS (9100077-BS2)										
Reactive Cyanide	35.0	10.0	mg/l	500		7.00	5.00-120			


Julianne Fegley, Project Manager





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

Project: Tosco
Project Number: Tosco # 6419
Project Manager: Doug Lee

Reported:
18-Oct-99 17:51

Notes and Definitions

AF-M A matrix effect was present.
A-01 Sample was diluted due to extremely high amounts of MTBE and t-butanol in matrix.
F-01 No flash detected up to 95 °C
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



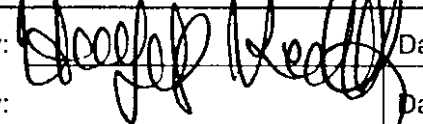
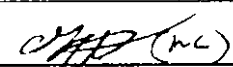
№ 000381

TOSCO

1000 Jarvis Drive • Morgan Hill, CA 95037 • (408) 776-9600 • FAX (408) 782-0308
 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
 404 N. Wiget Lane • Walnut Creek, CA 94598 • (925) 988-9600 FAX (925) 988-9673
 1455 McDowell Blvd. North, Suite D • Petaluma, CA 94954 • (707) 792-1865 FAX (707) 792-0342
 1551 Industrial Road • San Carlos, CA 94070 • (650) 232-9600 FAX (650) 232-9612

Consultant Company: GETTLER-RYAN INC.		Project Name: TOSCO #6419- DUBLIN	
Address: 6747 Sierra City Suite J		TOSCO Engineer (required) DAVID DE WITT	
City: DUBLIN	State: CA	Zip Code: 94568	W910020
Telephone: (925) 551-7555		FAX #: 551-7888	
Report To: DOUG LEE		Sampler: HAIG KEVORK	
Turnaround Time: <input checked="" type="checkbox"/> 10 Work Days		<input type="checkbox"/> 5 Work Days <input type="checkbox"/> 3 Work Days <input type="checkbox"/> 2 Work Days <input type="checkbox"/> 1 Work Day <input type="checkbox"/> 2-8 Hours	
CODE: <input type="checkbox"/> Misc. <input type="checkbox"/> Detect. <input type="checkbox"/> Eval. <input type="checkbox"/> Remed. <input type="checkbox"/> Demol. <input type="checkbox"/> Closure		QC Data: <input checked="" type="checkbox"/> Level D (Standard) <input type="checkbox"/> Level C <input type="checkbox"/> Level B <input type="checkbox"/> Level A	

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	Analyses Requested										Comments									
						TPH (EPA 8015 Mod. Gas)	BTEX (EPA 8020)	MTBE (EPA 8020)	TPH (EPA 8015 Mod. Diesel)	Full Screen Volatile Organics (EPA 8150)	MTBE Confirmation (EPA 8020)	PCB/Metals	SEM/ANALYSIS	SULFIDE	PERMETHANOL		TRIBUTYL TIN								
1. W-MW1	10/1/99	water	10	4 Ambers	OIA-J																				
2.				3 VOAs																					
3.				3 plastic																					
4.																									
5.																									
6.																									
7.																									
8.																									
9.																									
10.																									

Relinquished By: 	Date: 10/1/99	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By: 	Date: 10/1/99	Time: 17:07

Were Samples Received in Good Condition? Yes No Samples on Ice? Yes No Method of Shipment _____ Page ___ of ___

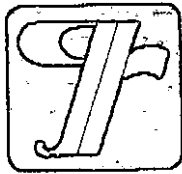
To be completed upon receipt of report:

1) Were the analyses requested on the Chain of Custody reported? Yes No If no, what analyses are still needed? _____

2) Was the report issued within the requested turnaround time? Yes No If no, what was the turnaround time? _____

Approved by: _____ Signature: _____ Company: _____ Date: _____

Pink - Client
Yellow - Sequoia
White - Sequoia



Gettler-Ryan Inc.
6747 Sierra Court, Suite J
Dublin, CA 94568-2611

FACSIMILE COVER SHEET

DATE: 10-25-99
(GR #)

TO: DAVE De WITT FAX: 925-277-2361

COMPANY: TOSCO

RE: SS #6419 6401 DUBLIN BLVD. DUBLIN

FROM: DOUG LEE

PHONE: (925) 551-7555

FAX: (925) 551-7888

COMMENTS:

TRIANTHLEN RESULTS FOR R-149

5 ~~4~~ pages including cover

If there are any problems with this transmission, please call (925) 551-7555

 Hardcopy to follow

EXPLANATION OF ACRONYMS FOR PROJECT # T-17767

The following is a glossary for acronyms that may be used in this report.

<u>Abbreviation</u>	<u>Definition</u>
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
NA	Not Applicable
ND	None Detected
REP	Replicate
RPD	Relative Percent Difference
SRM	Standard Reference Material
TOC	Total Organic Carbon