



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

WASTEWATER TREATMENT PLANT (UNIT 100) OPERATORS:

This form below, if approved, serves as an acceptance document to process the wastewater at the San Francisco Refinery Wastewater Treatment Plant, Unit 100. The Requester is required to supply all of the necessary analytical and completely fill out the following table:

Requester's Name/Signature:	Name: David DeWitt	Signature: <i>David B. DeWitt</i>
Company:	Tosco Corporation <i>2-18-02</i>	
Address:	2000 Crow Canyon Pl., Suite 400, San Ramon, CA	
Telephone/Fax:	Phone: 925-277-2384	FAX: 925-277-2361
Station No. and Location:	Tosco Unit # 6419, 6401 Dublin Blvd., Dublin, CA	
Description of Water Source:	Tank pit purge water	
Volume of Water/Solids Expected:	Water: 5,000 gallons	Solids: <u>minimal</u>
Total Expected Volume/Frequency	Volume: 250,000/ yearly maximum	Frequency: Weekly
Pesticides/Fish Toxicity Expected:	Pesticides: Yes <input type="checkbox"/> <u>No</u>	Fish Tox: Yes <input type="checkbox"/> <u>No</u>
Maximum Rate of Disposal (ESD)	<u>5000</u> Gallons per Week	

The remediation wastewater described above has been reviewed for Federal and California Hazardous Waste characteristics.

This water is (circle one): recommended / not recommended for processing at the WWTP.

This form is valid until: 2/22/03
 ESD Signature: *[Signature]*
 Operations Signature: *[Signature]*

Date Recommended: 2/22/02
 Date Approved: 2/26/02

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

Date and time of delivery:

Delivered on: ____/____/____	@ ____ AM / PM
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Volume delivered:

_____ gallons or _____ bbl.	pH _____
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COMMENTS: No free product accepted. Gravity off-load only.

WESTERN REGION BOX:

#9512

Any questions? Call (510) 245-4403, (510); 245-4465 or FAX (510) 245-4476.
 ONYX/Mark Laliberte: FAX: (707) 745-0510; DIRECT: (707) 748-3722; CELL: (510) 715-6532

Store # <u>2705748</u>	Date: <u>2-26-02</u>
Unit # <u>6419</u>	Code: <u>LAB</u> Color <input type="checkbox"/>
Description: <u>R149 9 LAB RESULTS</u>	

ENVIRONMENTAL REVIEW ON WASTE WATER TO UNIT 100

Process / Wastewater For Disposal to Unit 100

Unit 100 Feed Rate (MGD) = 2.00				Who	David DeWitt
Marketing fills in yellow cells for each request				Site	Tosco Unit # 6419, 6401 Dublin Blvd.
Enter test date or leave blank (generator knowledge)				Loc.	Dublin, CA
Grey cell data by SFR request or agreement				Date of request:	2/18/02
Green cells autocalculate				Gallons total request	250,000
Completed by ESD				Max gallons delivered per week	5,000
Water Description:				Weeks required	50
Remediation volume (MGD, million gallons per day):				Solids expected?	minimal
Tank pit purge water				Conc	0.00500
	Eff. Limit [mg/L]	Limit [kg/day]	HW [mg/L]	Loading [kg/day]	U100 [mg/L]
Arsenic	0.2		5	< 1	0.000
Cadmium	0.03		1	< 0.1	0.000
Chromium	0.110	0.21	5	< 0.1	0.000
Copper	0.037	0.176	25	< 0.1	0.000
Lead	0.053		5	< 0.75	0.000
Mercury	0.0002		0.2	< 0.0002	0.00000
Nickel	0.065		20	< 0.3	0.000
Selenium	0.4		1	< 1	0.000
Silver	0.023		5	< 0.07	0.000
Vanadium	1		24	< 0.1	0.000
Zinc	0.58		250	< 0.2	0.000
MTBE	none	453.7205082		0.19	0.000
Benzene *	0.21	n/a	0.5*	< 0.01	0.00
Bioassay [LC-50]			>500 ppm	2/1/95	
Pesticides	0.00046	n/a	n/a	passed 2-15-02	
pH (corrosivity)	6 - 8		2.1 <pH> 12.4	7.4	
Reactive Sulfide			500	50	
Flash point			>60 C (>140 F)	> 60 C	
Reactive CN			250	10	
TPH				0.00	0.00
Sulfide	0.31	2		NR	#VALUE!
Cyanides	0.025			NR	#VALUE!
O&G	8	115			0.00
PCBs					0.00
Phenol	10				0.00
TCDD	1.4E-10				0.00
PAH	0.00049				0.00

* Previous data contained 8240/8260 analytical results

ESD recommended on:
 Authorization approved thru:

* 0.5 ppm benzene criteria does not apply to remediation waste water (such waste is exempt). See correspondence in WCR Files. However, off-site non-remediation waste water are subject to the criteria (e.g., contaminated rainwater, tank draws, etc).



15 February, 2002

Clyde Galantine
Gettler - Ryan Inc.
1364 North Mc Dowell Blvd., Suite B2
Petaluma, CA 94954-1116

RE: TOSCO/PHILLIPS
Sequoia Work Order: P201503

Enclosed are the results of analyses for samples received by the laboratory on 01/30/02 17:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Michelle M. Wiita For Angelee Cari
Client Services Representative

CA ELAP Certificate #2374

6419

8260B - OK

Pesticides - OK

Dublin, CA



Gettler - Ryan Inc.
1364 North Mc Dowell Blvd., Suite B2
Petaluma CA, 94954-1116

Project: TOSCO/PHILLIPS
Project Number: 6419/Dublin, Ca.
Project Manager: Clyde Galantine

Reported:
02/15/02 13:34

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TPW-1	P201503-01	Water	01/30/02 08:30	01/30/02 17:45

Sequoia Analytical - Petaluma

Michelle M. Wiita For Angelee Cari, Client Services Representa

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



Gettler - Ryan Inc.
 1364 North Mc Dowell Blvd., Suite B2
 Petaluma CA, 94954-1116

Project: TOSCO/PHILLIPS
 Project Number: 6419/Dublin, Ca.
 Project Manager: Clyde Galantine

Reported:
 02/15/02 13:34

Total Metals by EPA 6000/7000 Series Methods
Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TPW-1 (P201503-01) Water Sampled: 01/30/02 08:30 Received: 01/30/02 17:45									
Mercury	ND	0.20	ug/l		2010635	02/04/02	02/05/02	EPA 7470A	
Antimony	ND	600	"	10	2010633	02/05/02	02/09/02	EPA 6010B	R-01
Arsenic	ND	1000	"	"	"	"	"	"	R-01
Barium	ND	100	"	"	"	"	"	"	R-01
Beryllium	ND	10	"	"	"	"	"	"	R-01
Cadmium	ND	100	"	"	"	"	"	"	R-01
Chromium	ND	100	"	"	"	"	"	"	R-01
Cobalt	ND	70	"	"	"	"	"	"	R-01
Copper	ND	100	"	"	"	"	"	"	R-01
Lead	ND	750	"	"	"	"	"	"	R-01
Molybdenum	ND	200	"	"	"	"	"	"	R-01
Nickel	ND	300	"	"	"	"	"	"	R-01
Selenium	ND	1000	"	"	"	"	"	"	R-01
Silver	ND	70	"	"	"	"	"	"	R-01
Thallium	ND	1000	"	"	"	"	"	"	R-01
Vanadium	ND	100	"	"	"	"	"	"	R-01
Zinc	ND	200	"	"	"	"	"	"	R-01

1000 ug = 1mg



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Petaluma CA, 94954-1116

Project: TOSCO/PHILLIPS
Project Number: 6419/Dublin, Ca.
Project Manager: Clyde Galantine

Reported:
02/15/02 13:34

**Organochlorine Pesticides by EPA Method 8081A
Sequoia Analytical - Petaluma**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TPW-1 (P201503-01) Water Sampled: 01/30/02 08:30 Received: 01/30/02 17:45									
Aldrin	ND	0.050	ug/l	1	2010654	01/31/02	02/12/02	EPA 8081A	
alpha-BHC	ND	0.050	"	"	"	"	"	"	
beta-BHC	ND	0.050	"	"	"	"	"	"	
delta-BHC	ND	0.050	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	0.050	"	"	"	"	"	"	
Chlordane (tech)	ND	1.0	"	"	"	"	"	"	
4,4'-DDD	ND	0.050	"	"	"	"	"	"	
4,4'-DDE	ND	0.050	"	"	"	"	"	"	
4,4'-DDT	ND	0.050	"	"	"	"	"	"	
Dieldrin	ND	0.050	"	"	"	"	"	"	
Endosulfan I	ND	0.050	"	"	"	"	"	"	
Endosulfan II	ND	0.050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.050	"	"	"	"	"	"	
Endrin	ND	0.050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.10	"	"	"	"	"	"	
Heptachlor	ND	0.050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.050	"	"	"	"	"	"	
Methoxychlor	ND	0.10	"	"	"	"	"	"	
Toxaphene	ND	1.0	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		73 %		10-119	"	"	"	"	
Surrogate: Decachlorobiphenyl		104 %		10-139	"	"	"	"	



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Project: TOSCO/PHILLIPS
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Reported:
02/15/02 13:34

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TPW-1 (P201503-01) Water Sampled: 01/30/02 08:30 Received: 01/30/02 17:45									
Acetone	ND	100	ug/l	10	2020073	02/04/02	02/04/02	EPA 8260B	
Benzene	ND	10	"	"	"	"	"	"	
Bromobenzenc	ND	10	"	"	"	"	"	"	
Bromochloromethane	ND	10	"	"	"	"	"	"	
Bromodichloromethane	ND	10	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
n-Butylbenzene	ND	10	"	"	"	"	"	"	
sec-Butylbenzene	ND	10	"	"	"	"	"	"	
tert-Butylbenzene	ND	10	"	"	"	"	"	"	
Carbon disulfide	ND	100	"	"	"	"	"	"	
Carbon tetrachloride	ND	10	"	"	"	"	"	"	
Chlorobenzene	ND	10	"	"	"	"	"	"	
Chloroethane	ND	10	"	"	"	"	"	"	
2-Chloroethylvinyl ether	ND	100	"	"	"	"	"	"	
Chloroform	ND	10	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
2-Chlorotoluene	ND	10	"	"	"	"	"	"	
4-Chlorotoluene	ND	10	"	"	"	"	"	"	
Dibromochloromethane	ND	10	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	10	"	"	"	"	"	"	
Dibromomethane	ND	10	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	10	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	10	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	10	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	10	"	"	"	"	"	"	
1,1-Dichloroethane	ND	10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	10	"	"	"	"	"	"	
1,1-Dichloroethene	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	10	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	10	"	"	"	"	"	"	
1,2-Dichloropropane	ND	10	"	"	"	"	"	"	
1,3-Dichloropropane	ND	10	"	"	"	"	"	"	
2,2-Dichloropropane	ND	10	"	"	"	"	"	"	
1,1-Dichloropropene	ND	10	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	10	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	10	"	"	"	"	"	"	



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Reported:
 02/15/02 13:34

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TPW-1 (P201503-01) Water Sampled: 01/30/02 08:30 Received: 01/30/02 17:45									
Freon 113	ND	10	ug/l	10	2020073	02/04/02	02/04/02	EPA 8260B	
Hexachlorobutadiene	ND	10	"	"	"	"	"	"	
2-Hexanone	ND	100	"	"	"	"	"	"	
Isopropylbenzene	ND	10	"	"	"	"	"	"	
p-Isopropyltoluene	ND	10	"	"	"	"	"	"	
Methylene chloride	ND	10	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	100	"	"	"	"	"	"	
Methyl tert-butyl ether	190	10	"	"	"	"	"	"	
Naphthalene	ND	10	"	"	"	"	"	"	
n-Propylbenzene	ND	10	"	"	"	"	"	"	
Styrene	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	10	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	10	"	"	"	"	"	"	
Tetrachloroethene	ND	10	"	"	"	"	"	"	
Toluene	ND	10	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	10	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	10	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	10	"	"	"	"	"	"	
Trichloroethene	ND	10	"	"	"	"	"	"	
Trichlorofluoromethane	ND	10	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	10	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	10	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	10	"	"	"	"	"	"	
Vinyl acetate	ND	200	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	10	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		105 %		84-122	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %		74-135	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		110 %		84-119	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		99 %		86-119	"	"	"	"	



Gettler - Ryan Inc.
1364 North Mc Dowell Blvd., Suite B2
Petaluma CA, 94954-1116

Project: TOSCO/PHILLIPS
Project Number: 6419/Dublin, Ca.
Project Manager: Clyde Galantine

Reported:
02/15/02 13:34

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TPW-1 (P201503-01) Water Sampled: 01/30/02 08:30 Received: 01/30/02 17:45									
Corrosivity	7.4	2.0	pH Units	1	2020069	01/30/02	01/30/02	EPA 9045B	
Ignitability by Flashpoint	ND	20	°C	"	2020239	02/11/02	02/11/02	EPA 1010	F-01
Reactivity in Water	ND	1.0	N/A	"	2010643	01/31/02	01/31/02	EPA Chapter 7	
Reactive Cyanide	ND	10000	ug/l	"	"	"	01/31/02	SW846 Ch. 7.3	
Reactive Sulfide	ND	50000	"	"	"	"	01/31/02	SW846 Ch 7.3	



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Reported:
 02/15/02 13:34

Total Metals by EPA 6000/7000 Series Methods - 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 2010633 - EPA 3010A

Blank (2010633-BLK1)

Prepared: 02/05/02 Analyzed: 02/08/02

Antimony	ND	60	ug/l							
Arsenic	ND	100	"							
Barium	ND	10	"							
Beryllium	ND	1.0	"							
Cadmium	ND	10	"							
Chromium	ND	10	"							
Cobalt	ND	7.0	"							
Copper	ND	10	"							
Lead	ND	75	"							
Molybdenum	ND	20	"							
Nickel	ND	30	"							
Selenium	ND	100	"							
Silver	ND	7.0	"							
Thallium	ND	100	"							
Vanadium	ND	10	"							
Zinc	ND	20	"							

LCS (2010633-BS1)

Prepared: 02/05/02 Analyzed: 02/08/02

Antimony	521	60	ug/l	500		104	80-120			
Arsenic	560	100	"	500		112	80-120			
Barium	553	10	"	500		111	80-120			
Beryllium	55.2	1.0	"	50.0		110	80-120			
Cadmium	55.1	10	"	50.0		110	80-120			
Chromium	556	10	"	500		111	80-120			
Cobalt	545	7.0	"	500		109	80-120			
Copper	544	10	"	500		109	80-120			
Lead	555	75	"	500		111	80-120			
Molybdenum	541	20	"	500		108	80-120			
Nickel	554	30	"	500		111	80-120			
Selenium	560	100	"	500		112	80-120			
Silver	53.7	7.0	"	50.0		107	80-120			
Thallium	554	100	"	500		111	80-120			
Vanadium	552	10	"	500		110	80-120			
Zinc	517	20	"	500		103	80-120			



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Reported:
 02/15/02 13:34

Total Metals by EPA 6000/7000 Series Methods - 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 2010633 - EPA 3010A

Matrix Spike (2010633-MS1)		Source: P201474-01		Prepared: 02/05/02		Analyzed: 02/08/02				
Antimony	522	60	ug/l	500	ND	104	75-125			
Arsenic	566	100	"	500	ND	113	75-125			
Barium	776	10	"	500	240	107	75-125			
Beryllium	54.8	1.0	"	50.0	ND	109	75-125			
Cadmium	51.3	10	"	50.0	ND	103	75-125			
Chromium	540	10	"	500	ND	107	75-125			
Cobalt	526	7.0	"	500	ND	105	75-125			
Copper	547	10	"	500	13	107	75-125			
Lead	540	75	"	500	ND	108	75-125			
Molybdenum	536	20	"	500	ND	107	75-125			
Nickel	544	30	"	500	ND	109	75-125			
Selenium	552	100	"	500	ND	110	75-125			
Silver	50.3	7.0	"	50.0	ND	101	75-125			
Thallium	542	100	"	500	ND	108	75-125			
Vanadium	541	10	"	500	ND	108	75-125			
Zinc	544	20	"	500	38	101	75-125			

Matrix Spike Dup (2010633-MSD1)		Source: P201474-01		Prepared: 02/05/02		Analyzed: 02/08/02				
Antimony	528	60	ug/l	500	ND	106	75-125	1	20	
Arsenic	578	100	"	500	ND	116	75-125	2	20	
Barium	774	10	"	500	240	107	75-125	0.3	20	
Beryllium	54.6	1.0	"	50.0	ND	109	75-125	0.4	20	
Cadmium	53.8	10	"	50.0	ND	108	75-125	5	20	
Chromium	538	10	"	500	ND	107	75-125	0.4	20	
Cobalt	521	7.0	"	500	ND	104	75-125	1	20	
Copper	545	10	"	500	13	106	75-125	0.4	20	
Lead	554	75	"	500	ND	111	75-125	3	20	
Molybdenum	530	20	"	500	ND	106	75-125	1	20	
Nickel	539	30	"	500	ND	108	75-125	0.9	20	
Selenium	552	100	"	500	ND	110	75-125	0	20	
Silver	51.5	7.0	"	50.0	ND	103	75-125	2	20	
Thallium	537	100	"	500	ND	107	75-125	0.9	20	
Vanadium	540	10	"	500	ND	108	75-125	0.2	20	
Zinc	545	20	"	500	38	101	75-125	0.2	20	



Gettler - Ryan Inc: 1364 North Mc Dowell Blvd., Suite B2 Petaluma CA, 94954-1116	Project: TOSCO/PHILLIPS Project Number: 6419/Dublin, Ca. Project Manager: Clyde Galantine	Reported: 02/15/02 13:34
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Total Metals by EPA 6000/7000 Series Methods - Quality Control
Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2010635 - EPA 7470A										
Blank (2010635-BLK1) Prepared: 02/04/02 Analyzed: 02/05/02										
Mercury	ND	0.20	ug/l							
LCS (2010635-BS1) Prepared: 02/04/02 Analyzed: 02/05/02										
Mercury	1.60	0.20	ug/l	1.60		100	80-120			
Matrix Spike (2010635-MS1) Source: P201503-01 Prepared: 02/04/02 Analyzed: 02/05/02										
Mercury	1.18	0.20	ug/l	1.60	ND	74	75-125			QM-07
Matrix Spike Dup (2010635-MSD1) Source: P201503-01 Prepared: 02/04/02 Analyzed: 02/05/02										
Mercury	1.17	0.20	ug/l	1.60	ND	73	75-125	0.9	20	QM-07



Gettler - Ryan Inc.
1364 North Mc Dowell Blvd., Suite B2
Petaluma CA, 94954-1116

Project: TOSCO/PHILLIPS
Project Number: 6419/Dublin, Ca.
Project Manager: Clyde Galantine

Reported:
02/15/02 13:34

Organochlorine Pesticides by EPA Method 8081A - 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 2010654 - EPA 3510C

Blank (2010654-BLK1)

Prepared: 01/31/02 Analyzed: 02/12/02

Aldrin	ND	0.050	ug/l							
alpha-BHC	ND	0.050	"							
beta-BHC	ND	0.050	"							
delta-BHC	ND	0.050	"							
gamma-BHC (Lindane)	ND	0.050	"							
Chlordane (tech)	ND	1.0	"							
4,4'-DDD	ND	0.050	"							
4,4'-DDE	ND	0.050	"							
4,4'-DDT	ND	0.050	"							
Dieldrin	ND	0.050	"							
Endosulfan I	ND	0.050	"							
Endosulfan II	ND	0.050	"							
Endosulfan sulfate	ND	0.050	"							
Endrin	ND	0.050	"							
Endrin aldehyde	ND	0.10	"							
Heptachlor	ND	0.050	"							
Heptachlor epoxide	ND	0.050	"							
Methoxychlor	ND	0.10	"							
Toxaphene	ND	1.0	"							
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Surrogate: Tetrachloro-meta-xylene	1.27		"	2.00		64	10-119			
Surrogate: Decachlorobiphenyl	0.706		"	2.00		35	10-139			

LCS (2010654-BS1)

Prepared: 01/31/02 Analyzed: 02/12/02

Aldrin	0.636	0.050	ug/l	1.00		64	44-120			
gamma-BHC (Lindane)	1.00	0.050	"	1.00		100	64-132			
4,4'-DDT	1.04	0.050	"	1.00		104	66-143			
Dieldrin	0.990	0.050	"	1.00		99	71-122			
Endrin	1.16	0.050	"	1.00		116	75-120			
Heptachlor	0.855	0.050	"	1.00		86	44-115			
<hr/>										
Surrogate: Tetrachloro-meta-xylene	1.45		"	2.00		72	10-119			
Surrogate: Decachlorobiphenyl	0.935		"	2.00		47	10-139			



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Reported:
02/15/02 13:34

Organochlorine Pesticides by EPA Method 8081A - 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 2010654 - EPA 3510C

LCS Dup (2010654-BSD1)

Prepared: 01/31/02 Analyzed: 02/12/02

Aldrin	0.672	0.050	ug/l	1.00		67	44-120	6	35	
gamma-BHC (Lindane)	0.930	0.050	"	1.00		93	64-132	7	35	
4,4'-DDT	1.04	0.050	"	1.00		104	66-143	0	35	
Dieldrin	0.959	0.050	"	1.00		96	71-122	3	35	
Endrin	1.13	0.050	"	1.00		113	75-120	3	35	
Heptachlor	0.828	0.050	"	1.00		83	44-115	3	35	
<i>Surrogate: Tetrachloro-meta-xylene</i>	<i>1.40</i>		<i>"</i>	<i>2.00</i>		<i>70</i>	<i>10-119</i>			
<i>Surrogate: Decachlorobiphenyl</i>	<i>0.788</i>		<i>"</i>	<i>2.00</i>		<i>39</i>	<i>10-139</i>			



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Project: TOSCO/PHILLIPS
 Project Number: 6419/Dublin, Ca.
 Project Manager: Clyde Galantine

Reported:
 02/15/02 13:34

Volatile Organic Compounds by EPA Method 8260B - 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 2020073 - EPA 5030 waters

Blank (2020073-BLK1)

Prepared & Analyzed: 02/04/02

Acetone	ND	10	ug/l
Benzene	ND	1.0	"
Bromobenzene	ND	1.0	"
Bromochloromethane	ND	1.0	"
Bromodichloromethane	ND	1.0	"
Bromoform	ND	1.0	"
Bromomethane	ND	1.0	"
2-Butanone	ND	10	"
n-Butylbenzene	ND	1.0	"
sec-Butylbenzene	ND	1.0	"
tert-Butylbenzene	ND	1.0	"
Carbon disulfide	ND	10	"
Carbon tetrachloride	ND	1.0	"
Chlorobenzene	ND	1.0	"
Chloroethane	ND	1.0	"
2-Chloroethylvinyl ether	ND	10	"
Chloroform	ND	1.0	"
Chloromethane	ND	1.0	"
2-Chlorotoluene	ND	1.0	"
4-Chlorotoluene	ND	1.0	"
Dibromochloromethane	ND	1.0	"
1,2-Dibromo-3-chloropropane	ND	1.0	"
1,2-Dibromoethane (EDB)	ND	1.0	"
Dibromomethane	ND	1.0	"
1,2-Dichlorobenzene	ND	1.0	"
1,3-Dichlorobenzene	ND	1.0	"
1,4-Dichlorobenzene	ND	1.0	"
Dichlorodifluoromethane	ND	1.0	"
1,1-Dichloroethane	ND	1.0	"
1,2-Dichloroethane	ND	1.0	"
1,1-Dichloroethene	ND	1.0	"
cis-1,2-Dichloroethene	ND	1.0	"
trans-1,2-Dichloroethene	ND	1.0	"
1,2-Dichloropropane	ND	1.0	"
1,3-Dichloropropane	ND	1.0	"
2,2-Dichloropropane	ND	1.0	"



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Reported:
02/15/02 13:34

Volatile Organic Compounds by EPA Method 8260B - 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 2020073 - EPA 5030 waters

Blank (2020073-BLK1)

Prepared & Analyzed: 02/04/02

1,1-Dichloropropene	ND	1.0	ug/l							
cis-1,3-Dichloropropene	ND	1.0	"							
trans-1,3-Dichloropropene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Freon 113	ND	1.0	"							
Hexachlorobutadiene	ND	1.0	"							
2-Hexanone	ND	10	"							
Isopropylbenzene	ND	1.0	"							
p-Isopropyltoluene	ND	1.0	"							
Methylene chloride	ND	1.0	"							
4-Methyl-2-pentanone	ND	10	"							
Methyl tert-butyl ether	ND	1.0	"							
Naphthalene	ND	1.0	"							
n-Propylbenzene	ND	1.0	"							
Styrene	ND	1.0	"							
1,1,2,2-Tetrachloroethane	ND	1.0	"							
1,1,1,2-Tetrachloroethane	ND	1.0	"							
Tetrachloroethene	ND	1.0	"							
Toluene	ND	1.0	"							
1,2,3-Trichlorobenzene	ND	1.0	"							
1,2,4-Trichlorobenzene	ND	1.0	"							
1,1,2-Trichloroethane	ND	1.0	"							
1,1,1-Trichloroethane	ND	1.0	"							
Trichloroethene	ND	1.0	"							
Trichlorofluoromethane	ND	1.0	"							
1,2,3-Trichloropropane	ND	1.0	"							
1,3,5-Trimethylbenzene	ND	1.0	"							
1,2,4-Trimethylbenzene	ND	1.0	"							
Vinyl acetate	ND	20	"							
Vinyl chloride	ND	1.0	"							
m,p-Xylenc	ND	1.0	"							
o-Xylene	ND	1.0	"							
<hr/>										
Surrogate: Dibromofluoromethane	5.26		"	5.00		105	84-122			
Surrogate: 1,2-Dichloroethane-d4	5.24		"	5.00		105	74-135			
Surrogate: Toluene-d8	4.99		"	5.00		100	84-119			



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Reported:
 02/15/02 13:34

Volatile Organic Compounds by EPA Method 8260B - 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 2020073 - EPA 5030 waters

Blank (2020073-BLK1)

Prepared & Analyzed: 02/04/02

Surrogate: 4-Bromofluorobenzene	4.72		ug/l	5.00		94	86-119			
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LCS (2020073-BS1)

Prepared & Analyzed: 02/04/02

Benzene	4.96	1.0	ug/l	5.00		99	81-118			
Chlorobenzene	5.01	1.0	"	5.00		100	88-119			
1,1-Dichloroethene	4.34	1.0	"	5.00		87	77-121			
Toluene	4.73	1.0	"	5.00		95	84-119			
Trichloroethene	5.48	1.0	"	5.00		110	83-126			

Surrogate: Dibromofluoromethane	5.25		"	5.00		105	84-122			
Surrogate: 1,2-Dichloroethane-d4	5.30		"	5.00		106	74-135			
Surrogate: Toluene-d8	5.10		"	5.00		102	84-119			
Surrogate: 4-Bromofluorobenzene	4.79		"	5.00		96	86-119			

Matrix Spike (2020073-MS1)

Source: P201499-01

Prepared & Analyzed: 02/04/02

Benzene	4.89	1.0	ug/l	5.00	ND	97	81-118			
Chlorobenzene	5.00	1.0	"	5.00	ND	100	88-119			
1,1-Dichloroethene	4.64	1.0	"	5.00	ND	93	77-121			
Toluene	4.66	1.0	"	5.00	ND	92	84-119			
Trichloroethene	5.47	1.0	"	5.00	ND	109	83-126			

Surrogate: Dibromofluoromethane	5.35		"	5.00		107	84-122			
Surrogate: 1,2-Dichloroethane-d4	5.28		"	5.00		106	74-135			
Surrogate: Toluene-d8	4.87		"	5.00		97	84-119			
Surrogate: 4-Bromofluorobenzene	4.77		"	5.00		95	86-119			

Matrix Spike Dup (2020073-MSD1)

Source: P201499-01

Prepared & Analyzed: 02/04/02

Benzene	5.14	1.0	ug/l	5.00	ND	102	81-118	5	20	
Chlorobenzene	5.13	1.0	"	5.00	ND	103	88-119	3	20	
1,1-Dichloroethene	4.68	1.0	"	5.00	ND	94	77-121	0.9	20	
Toluene	4.99	1.0	"	5.00	ND	98	84-119	7	20	
Trichloroethene	5.51	1.0	"	5.00	ND	110	83-126	0.7	20	

Surrogate: Dibromofluoromethane	5.28		"	5.00		106	84-122			
Surrogate: 1,2-Dichloroethane-d4	5.28		"	5.00		106	74-135			



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Reported:
02/15/02 13:34

**Volatile Organic Compounds by EPA Method 8260B - 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 2020073 - EPA 5030 waters

Matrix Spike Dup (2020073-MSD1)

Source: P201499-01

Prepared & Analyzed: 02/04/02

Surrogate: Toluene-d8	5.08		ug/l	5.00		102	84-119			
Surrogate: 4-Bromofluorobenzene	4.67		"	5.00		93	86-119			



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Petaluma CA, 94954-1116

Project: TOSCO/PHILLIPS
Project Number: 6419/Dublin, Ca.
Project Manager: Clydc Galantine

Reported:
02/15/02 13:34

**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
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Batch 2010643 - General Preparation

Blank (2010643-BLK1)

Prepared & Analyzed: 01/31/02

Reactive Cyanide	ND	10000	ug/l							
Reactive Sulfide	ND	50000	"							
Reactivity in Water	ND	1.0	N/A							

LCS (2010643-BS1)

Prepared & Analyzed: 01/31/02

Reactive Cyanide	259000	10000	ug/l	500000		52	5-120			
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LCS (2010643-BS2)

Prepared & Analyzed: 01/31/02

Reactive Sulfide	375000	50000	ug/l	750000		50	5-120			
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Batch 2020069 - General Preparation

Duplicate (2020069-DUP1)

Source: P201503-01

Prepared & Analyzed: 01/30/02

Corrosivity	7.52	2.0	pH Units		7.4			2	20	
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Petaluma CA, 94954-1116

Project: TOSCO/PHILLIPS
Project Number: 6419/Dublin, Ca.
Project Manager: Clyde Galantine

Reported:
02/15/02 13:34

Notes and Definitions

- F-01 The sample flash point is greater than 60 °C (140 °F).
- QM-07 The spike recovery was outside control limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- R-01 The Reporting Limit for this analyte has been raised to account for matrix interference.
- 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

N# 008142

TOSCO

Consultant Company: Getflec-Ryan

Address: 1364 Al McDowell Suite B2

City: Petaluma State: CA Zip Code: 94954

Telephone: (707) 789-3255 Fax #: (707) 789-3218

Report To: Clyde Galantini Sampler: Clyde Galantini

Turnaround Time: 10 Work Days 5 Work Days 3 Work Days 2 Work Days 1 Work Day 2-8 Hours

Project Coding: 140101.03

Tosco Engineer: Dave DeWitt

Site #: 6419

Site Address: 6401 Dublin Blvd

City, State: Dublin CA

QC Data: Level D (Standard) Level C Level B Level A

Drinking Water
 Waste Water
 Other

Analyses Requested

TPH/BTEX/MIBT
TPH Diesel (8015)
BOST (8015)
BOST (8015)
Oxygens (6) + EDB
L2 DCA (8260)
GAM 17 mtk
PCT

Comments

Sequoia's Sample #

Cont. Type

of Cont.

Date/Time Sampled

Client Sample I.D.

1. TPW-1 1/30/02 8:30 H2O 9 9257420150301 X X X

2. X

3. X

4. X

5. X

6. X

7. X

8. COOLER CUSTODY SAMPLES INTACT NOT INTACT

9. COOLER TEMPERATURE 3.1 °C

10.

Relinquished By: Clyde Galantini Date: 1/30/02 Time: 17:50 Received By: [Signature] Date: 1-30-02 Time: 17:45

Relinquished By: _____ Date: _____ Time: _____

Relinquished By: _____ Date: _____ Time: _____

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: _____

- 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

Pink - Client Yellow - Sequoia White - Sequoia