



Settler - Ryan Inc.  
64 North Mc Dowell Blvd., Suite B2  
Petaluma CA, 94954-1116

Project: TOSCO/PHILLIPS  
Project Number: 5325/Oakland, Ca.  
Project Manager: Clyde Galantine

Reported:  
02/15/02 16:32

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CC-1	P201507-01	Water	01/30/02 07:30	01/30/02 17:45

**RECEIVED**

10:45 am, Apr 02, 2009

Alameda County  
Environmental Health

WESTERN REGION BOX:

#9513

2-SIDED

Store #	255325	Date:	2-15-02
Unit #	5325	Code:	LAB Color <input type="checkbox"/>
Description:	R.149 DATA		

Sequoia Analytical - Petaluma

*Michelle M. Wiita*

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.  
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Petaluma CA, 94954-1116

Project: TOSCO/PHILLIPS  
Project Number: 5325/Oakland, Ca.  
Project Manager: Clyde Galantine

**Reported:**  
02/15/02 16:32

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>CC-1 (P201507-01) Water Sampled: 01/30/02 07:30 Received: 01/30/02 17:45</b>									
Mercury	ND	0.20	ug/l	1	2010635	02/04/02	02/05/02	EPA 7470A	
Antimony	ND	60	"	"	2010633	02/05/02	02/09/02	EPA 6010B	
Arsenic	ND	100	"	"	"	"	"	"	
<b>Barium</b>	<b>250</b>	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	"	"	"	"	"	"	
<b>Zinc</b>	<b>33</b>	20	"	"	"	"	"	"	



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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>CC-1 (P201507-01) Water. Sampled: 01/30/02 07:30 Received: 01/30/02 17:45</b>									
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		75 %		10-119	"	"	"	"	
Surrogate: Decachlorobiphenyl		92 %		10-139	"	"	"	"	



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**Reported:**  
 02/15/02 16:32

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>CC-1 (P201507-01) Water Sampled: 01/30/02 07:30 Received: 01/30/02 17:45</b>									
Acetone	ND	5000	ug/l	500	2020073	02/04/02	02/05/02	EPA 8260B	
Benzene	ND	500	"	"	"	"	"	"	
Bromobenzene	ND	500	"	"	"	"	"	"	
Bromochloromethane	ND	500	"	"	"	"	"	"	
Bromodichloromethane	ND	500	"	"	"	"	"	"	
Bromoform	ND	500	"	"	"	"	"	"	
Bromomethane	ND	500	"	"	"	"	"	"	
2-Butanone	ND	5000	"	"	"	"	"	"	
n-Butylbenzene	ND	500	"	"	"	"	"	"	
sec-Butylbenzene	ND	500	"	"	"	"	"	"	
tert-Butylbenzene	ND	500	"	"	"	"	"	"	
Carbon disulfide	ND	5000	"	"	"	"	"	"	
Carbon tetrachloride	ND	500	"	"	"	"	"	"	
Chlorobenzene	ND	500	"	"	"	"	"	"	
Chloroethane	ND	500	"	"	"	"	"	"	
2-Chloroethylvinyl ether	ND	5000	"	"	"	"	"	"	
Chloroform	ND	500	"	"	"	"	"	"	
Chloromethane	ND	500	"	"	"	"	"	"	
2-Chlorotoluene	ND	500	"	"	"	"	"	"	
4-Chlorotoluene	ND	500	"	"	"	"	"	"	
Dibromochloromethane	ND	500	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	500	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	500	"	"	"	"	"	"	
Dibromomethane	ND	500	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	500	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	500	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	500	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	500	"	"	"	"	"	"	
1,1-Dichloroethane	ND	500	"	"	"	"	"	"	
1,2-Dichloroethane	ND	500	"	"	"	"	"	"	
1,1-Dichloroethene	ND	500	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	500	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	500	"	"	"	"	"	"	
1,2-Dichloropropane	ND	500	"	"	"	"	"	"	
1,3-Dichloropropane	ND	500	"	"	"	"	"	"	
2,2-Dichloropropane	ND	500	"	"	"	"	"	"	
1,1-Dichloropropene	ND	500	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	500	"	"	"	"	"	"	



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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>CC-1 (P201507-01) Water. Sampled: 01/30/02 07:30 Received: 01/30/02 17:45</b>									
trans-1,3-Dichloropropene	ND	500	ug/l	500	2020073	02/04/02	02/05/02	EPA 8260B	
Ethylbenzene	ND	500	"	"	"	"	"	"	
Freon 113	ND	500	"	"	"	"	"	"	
Hexachlorobutadiene	ND	500	"	"	"	"	"	"	
2-Hexanone	ND	5000	"	"	"	"	"	"	
Isopropylbenzene	ND	500	"	"	"	"	"	"	
p-Isopropyltoluene	ND	500	"	"	"	"	"	"	
Methylene chloride	ND	500	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5000	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>3800</b>	500	"	"	"	"	"	"	
Naphthalene	ND	500	"	"	"	"	"	"	
n-Propylbenzene	ND	500	"	"	"	"	"	"	
Styrene	ND	500	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	500	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	500	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	500	"	"	"	"	"	"	
Toluene	ND	500	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	500	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	500	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	500	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	500	"	"	"	"	"	"	
Trichloroethene	ND	500	"	"	"	"	"	"	
Trichlorofluoromethane	ND	500	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	500	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	500	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	500	"	"	"	"	"	"	
Vinyl acetate	ND	10000	"	"	"	"	"	"	
Vinyl chloride	ND	500	"	"	"	"	"	"	
m,p-Xylene	ND	500	"	"	"	"	"	"	
o-Xylene	ND	500	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		114 %		84-122	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		118 %		74-135	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		108 %		84-119	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		99 %		86-119	"	"	"	"	



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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>CC-1 (P201507-01) Water - Sampled: 01/30/02 07:30 Received: 01/30/02 17:45</b>									
Cyanide (total)	ND	10	ug/l	1	2020257	02/13/02	02/13/02	EPA 335.2	
Sulfide	ND	100	"	"	2020061	02/04/02	02/04/02	EPA 376.2	



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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>CC-1 (P201507-01) Water</b> <b>Sampled: 01/30/02 07:30</b> <b>Received: 01/30/02 17:45</b>									
Corrosivity	6.8	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	"	2020046	02/04/02	02/04/02	EPA Chapter 7	
Reactive Cyanide	ND	10000	ug/l	"	"	"	"	SW846 Ch. 7.3	
Reactive Sulfide	ND	50000	"	"	"	"	"	SW846 Ch 7.3	



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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
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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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**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	



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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
<b>Batch 2010635 - EPA 7470A</b>										
<b>Blank (2010635-BLK1)</b> Prepared: 02/04/02 Analyzed: 02/05/02										
Mercury	ND	0.20	ug/l							
<b>LCS (2010635-BS1)</b> Prepared: 02/04/02 Analyzed: 02/05/02										
Mercury	1.60	0.20	ug/l	1.60		100	80-120			
<b>Matrix Spike (2010635-MS1)</b> 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
<b>Matrix Spike Dup (2010635-MSD1)</b> 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



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**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	"							

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			

Surrogate: Tetrachloro-meta-xylene

1.45

"

2.00

72

10-119

Surrogate: Decachlorobiphenyl

0.935

"

2.00

47

10-139



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**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
<b>Batch 2010654 - EPA 3510C</b>										
<b>LCS Dup (2010654-BSD1)</b>										
					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>			



Settler - Ryan Inc.  
54 North Mc Dowell Blvd., Suite B2  
Petaluma CA, 94954-1116

Project: TOSCO/PHILLIPS  
Project Number: 5325/Oakland, Ca.  
Project Manager: Clyde Galantine

**Reported:**  
02/15/02 16:32

**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	"							



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

Project: TOSCO/PHILLIPS  
Project Number: 5325/Oakland, Ca.  
Project Manager: Clyde Galantine

**Reported:**  
02/15/02 16:32

**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-Xylene	ND	1.0	"
o-Xylene	ND	1.0	"

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

Sequoia Analytical - Petaluma

*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.*



Settler - Ryan Inc.  
 64 North Mc Dowell Blvd., Suite B2  
 Petaluma CA, 94954-1116

Project: TOSCO/PHILLIPS  
 Project Number: 5325/Oakland, Ca.  
 Project Manager: Clyde Galantine

**Reported:**  
 02/15/02 16:32

**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

**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



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

Project: TOSCO/PHILLIPS  
Project Number: 5325/Oakland, Ca.  
Project Manager: Clyde Galantine

**Reported:**  
02/15/02 16:32

**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			





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

Project: TOSCO/PHILLIPS  
Project Number: 5325/Oakland, Ca.  
Project Manager: Clyde Galantine

**Reported:**  
02/15/02 16:32

**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
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**Batch 2020061 - General Preparation**

**Blank (2020061-BLK1)**

Prepared & Analyzed: 02/04/02

Sulfide	ND	100	ug/l							
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**LCS (2020061-BS1)**

Prepared & Analyzed: 02/04/02

Sulfide	1000	100	ug/l	989		101	80-120			
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**Duplicate (2020061-DUP1)**

Source: P201474-01

Prepared & Analyzed: 02/04/02

Sulfide	200	100	ug/l		200			0	20	
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**Batch 2020257 - General Preparation**

**Blank (2020257-BLK1)**

Prepared: 02/12/02 Analyzed: 02/13/02

Cyanide (total)	ND	10	ug/l							
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**LCS (2020257-BS1)**

Prepared: 02/12/02 Analyzed: 02/13/02

Cyanide (total)	177	10	ug/l	200		88	80-120			
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**Matrix Spike (2020257-MS1)**

Source: P202214-02

Prepared: 02/12/02 Analyzed: 02/13/02

Cyanide (total)	192	10	ug/l	204	ND	92	75-125			
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**Matrix Spike Dup (2020257-MSD1)**

Source: P202214-02

Prepared: 02/12/02 Analyzed: 02/13/02

Cyanide (total)	203	10	ug/l	204	ND	97	75-125	6	20	
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Gettler - Ryan Inc.  
1364 North Mc Dowell Blvd., Suite B2  
Petaluma CA, 94954-1116

Project: TOSCO/PHILLIPS  
Project Number: 5325/Oakland, Ca.  
Project Manager: Clyde Galantine

**Reported:**  
02/15/02 16:32

**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
<b>Batch 2020046 - None</b>										
<b>Blank (2020046-BLK1)</b> Prepared & Analyzed: 02/04/02										
Reactive Cyanide	ND	10000	ug/l							
Reactive Sulfide	ND	50000	"							
Reactivity in Water	ND	1.0	N/A							
<b>LCS (2020046-BS1)</b> Prepared & Analyzed: 02/04/02										
Reactive Cyanide	431000	10000	ug/l	1000000		43	5-120			
<b>LCS (2020046-BS2)</b> Prepared & Analyzed: 02/04/02										
Reactive Sulfide	473000	50000	ug/l	780000		61	5-120			
<b>Batch 2020069 - General Preparation</b>										
<b>Duplicate (2020069-DUP1)</b> Source: P201503-01 Prepared & Analyzed: 01/30/02										
Corrosivity	7.52	2.0	pH Units		7.4			2	20	



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

Project: TOSCO/PHILLIPS  
Project Number: 5325/Oakland, Ca.  
Project Manager: Clyde Galantine

**Reported:**  
02/15/02 16:32

### 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.
- 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<sup>o</sup> 008140  
**TOSCO**

- 885 Jarvis Drive • San Hill, CA 95037 • (408) 776-9600 • FAX (408) 782-6308
- 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: <u>Gettler-Ryan</u>		Tosco Engineer: <u>Dave DeWitt</u>	
Address: <u>1364 N McDowell Blvd Suite B2</u>		Site #: <u>S325</u> <span style="float: right;"><u>355325 / 5325</u></span>	
City: <u>Petaluma</u> State: <u>CA</u> Zip Code: <u>94954</u>		Site Address: <u>3200 Lakeside Dr Lakeshore Ave</u>	
Telephone: <u>(707) 781-3255</u> Fax #: <u>707 789-3218</u>		City, State: <u>Oakland CA</u>	
Report To: <u>Clyde Galantine</u>	Sampler: <u>Clyde Galantine</u>	QC Data: <input type="checkbox"/> Level D (Standard) <input type="checkbox"/> Level C <input type="checkbox"/> Level B <input type="checkbox"/> Level A	

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

Analyses Requested

<input type="checkbox"/> Drinking Water
<input type="checkbox"/> Waste Water
<input type="checkbox"/> Other

Project Coding: 140123.01

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	TPH/G/BTEX/MTBE	TPH Diesel (8015)	80/100 (440-1)	Distillate (440-2)	Oxygenates (81+ EDB 1-2 PCA (8580))	CHW 17 MARK	RCI	Total Cumulative Total by 3/26/02	Comments
1. <u>CC-1</u>	<u>1/30/02 7:30</u>	<u>#20</u>	<u>9</u>	<u>non-bcc plastic</u>	<u>P20150701</u>			<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	
2.														
3.														
4.														
5.														
6.														
7.														
8.														
9.														
10.														

**2-SIDED**

Store # 255325 Date: 1-30-02  
 Unit # 5325 Code: \_\_\_\_\_ Color   
 Description: \_\_\_\_\_

COOLER CUSTODY SEALS INTACT   
 NOT INTACT   
 COOLER TEMPERATURE 4.2 °C

Relinquished By: <u>Clyde Galantine</u>	Date: <u>1/30/02</u>	Time: <u>17:50</u>	Received By: <u>[Signature]</u>	Date: <u>1-30-02</u>	Time: <u>1745</u>
Relinquished By: _____	Date: _____	Time: _____	Received By: _____	Date: _____	Time: _____
Relinquished By: _____	Date: _____	Time: _____	Received 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: \_\_\_\_\_

Pink - Client  
Yellow - Sequoia  
White - Sequoia



**Sequoia**

1455 McDowell Blvd, North Ste D  
Petaluma, CA 94954  
(707) 792-1865  
FAX (707) 792-0342  
[www.sequoialabs.com](http://www.sequoialabs.com)

S325  
Oakland  
R-149

1001 North Mc Dowell Blvd., Suite B2  
Petaluma, CA 94954-1116

RE: TOSCO/PHILLIPS  
Sequoia Work Order: P201507

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