



20436  
SECOR  
INTERNATIONAL  
INCORPORATED

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Rancho Cordova, CA 95670  
916-861-0400 TEL  
916-861-0430 FAX

July 26, 2004

Ms. Shelby Lathrop  
ConocoPhillips  
76 Broadway  
Sacramento, CA 95818

RE: **Quarterly Remedial Performance Summary-Second Quarter 2004**  
76 Service Station No. 4186  
1771 First Street  
Livermore, CA  
SECOR Project No.: 77CP.60004.01.4186



Dear Ms. Lathrop:

This letter, prepared by SECOR International Incorporated (SECOR) on behalf of ConocoPhillips, presents a remedial action performance summary for the ozone injection system operating at the site referenced above. Included in this report are tables and figures summarizing the system operation during the current quarter. Field data sheets and laboratory reports are included as Attachments A and B, respectively. A brief site background and the status of recent remedial activities are presented below.

### SITE BACKGROUND

The site is an operating 76 service station located at First Street between N and O Streets in Livermore, California. The current station configuration consists of a service station building, four product dispenser islands, and two underground storage tanks (USTs). There is an ozone injection remediation system on the sites that injects a mixture of ozone and air to ten sparge points. The system was put into operation on December 19, 2001. SECOR took over operation of the system in September 2003.

### REMEDIAL PERFORMANCE SUMMARY

#### Ozone Injection Operation

The ozone injection system consists of a panel mounted KVA C-Sparge™ System that produces 4 grams per hour (0.009 pounds per hour) of ozone. The system supplies ozone to ten sparge points in eight wells for seven minutes per well, 18 cycles per day. The ozone injection system operation was initiated on December 19, 2001. During the current quarter, the ozone injection system operated for 568 hours, resulting in 32% operation. The system was shutting down due to a problem causing a circuit breaker to trip. SECOR replaced the ozone generator on April 21, 2004, however the system is still not running consistently. SECOR is working with KVA to resolve problems with the system. The system injected approximately 5.1 pounds of ozone during the second quarter of 2004. Operational data is provided in Table 1.

#### Ozone Injection Performance

The performance of the ozone injection system is evaluated based on the results of regular groundwater sampling. Monthly groundwater samples are collected from monitoring wells U-3 and U-6 and analyzed for total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and total xylenes (BTEX compounds), and methyl tert-butyl ether (MtBE). Results of monthly groundwater sampling events are summarized in Table 2. Concentration versus time graphs for dissolved TPHg, benzene, and MtBE in monitoring wells U-3 and U-6 are provided in Figures 2

# SECOR

Quarterly Remedial Performance Summary  
July 26, 2004  
Page 2

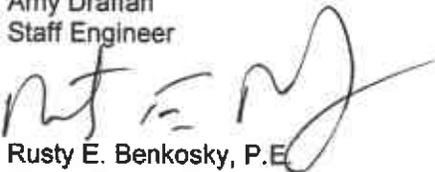
and 3. Field data sheets are presented in Attachment A. Certified laboratory analytical reports and chain-of-custody documentation for the groundwater monitoring events conducted during the first quarter of 2004 are provided in Attachment B.

If you have any questions, please contact us at (916) 861-0400.

Sincerely,  
**SECOR International Incorporated**



Amy Draffan  
Staff Engineer



Rusty E. Benkosky, P.E.  
Senior Engineer



Attachments: Figure 1 – Site Plan  
Figure 2 – U-3 TPHg, Benzene, and MtBE Groundwater Concentrations  
Figure 3 – U-6 TPHg, Benzene, and MtBE Groundwater Concentrations  
  
Table 1 – System Operation Data  
Table 2 – Groundwater Analytical Data  
  
Attachment A – Field Data Sheets  
Attachment B – Certified Laboratory Analytical Reports and Chain of Custody Documentation

cc: Ms. Eva Chu, Alameda County Environmental Health Services  
Ms. Carol Mahoney, Zone 7 Water Agency  
Ms. Barbara Moed, TRC

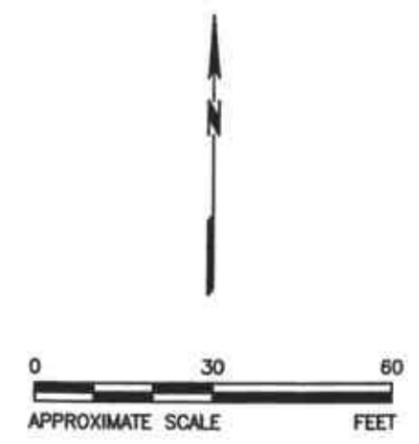
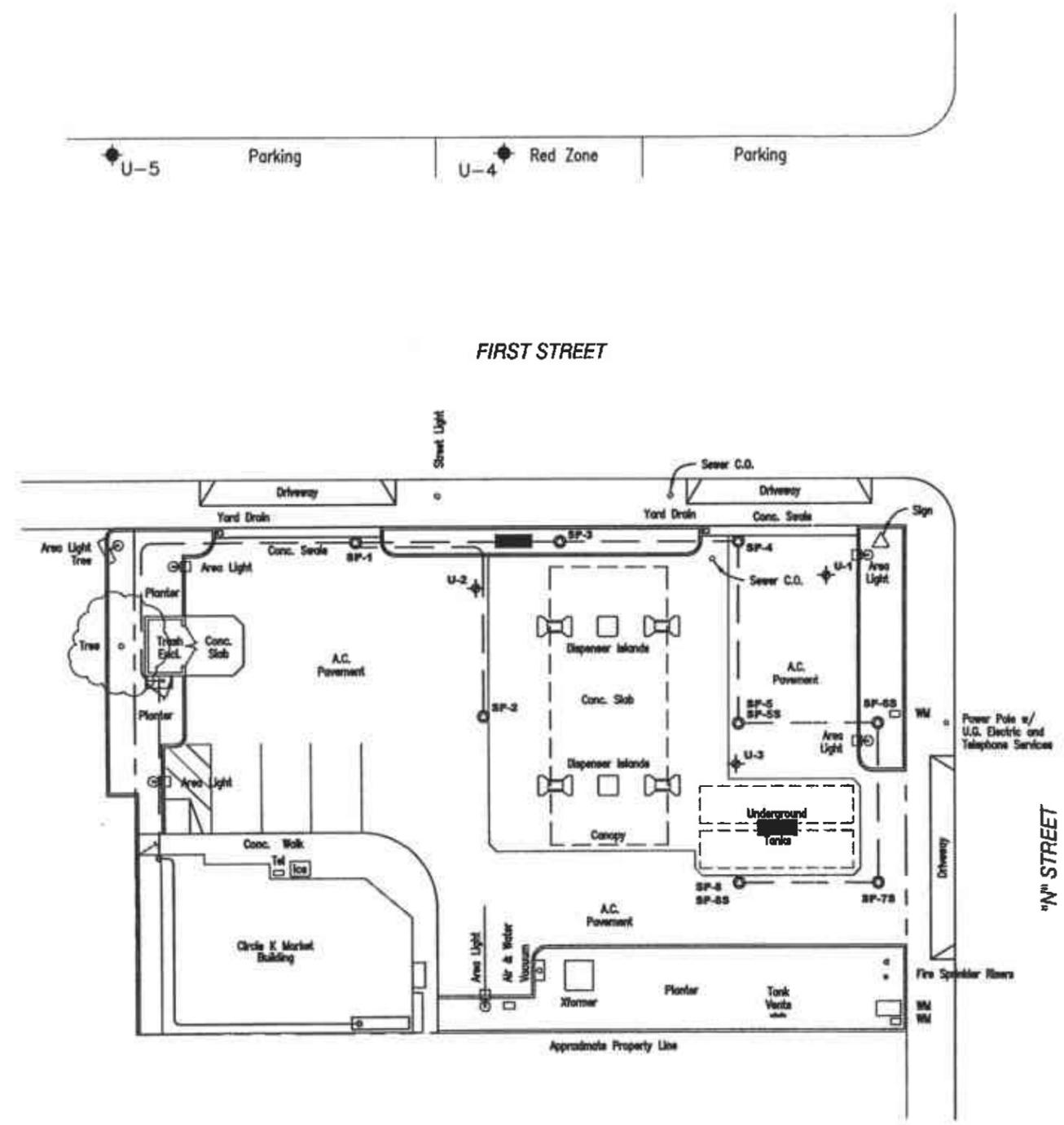
RB/ad

**LEGEND**

⊕ GROUNDWATER MONITORING WELL

⊙ OZONE SPARGE POINT

— UNDERGROUND OZONE SPARGE LINE



REFERENCE: THIS FIGURE IS BASED ON A 'SITE PLAN' PROVIDED BY GETTLER-RYAN INC., DATED JULY 2001, AND IS INTENDED FOR ILLUSTRATION ONLY.

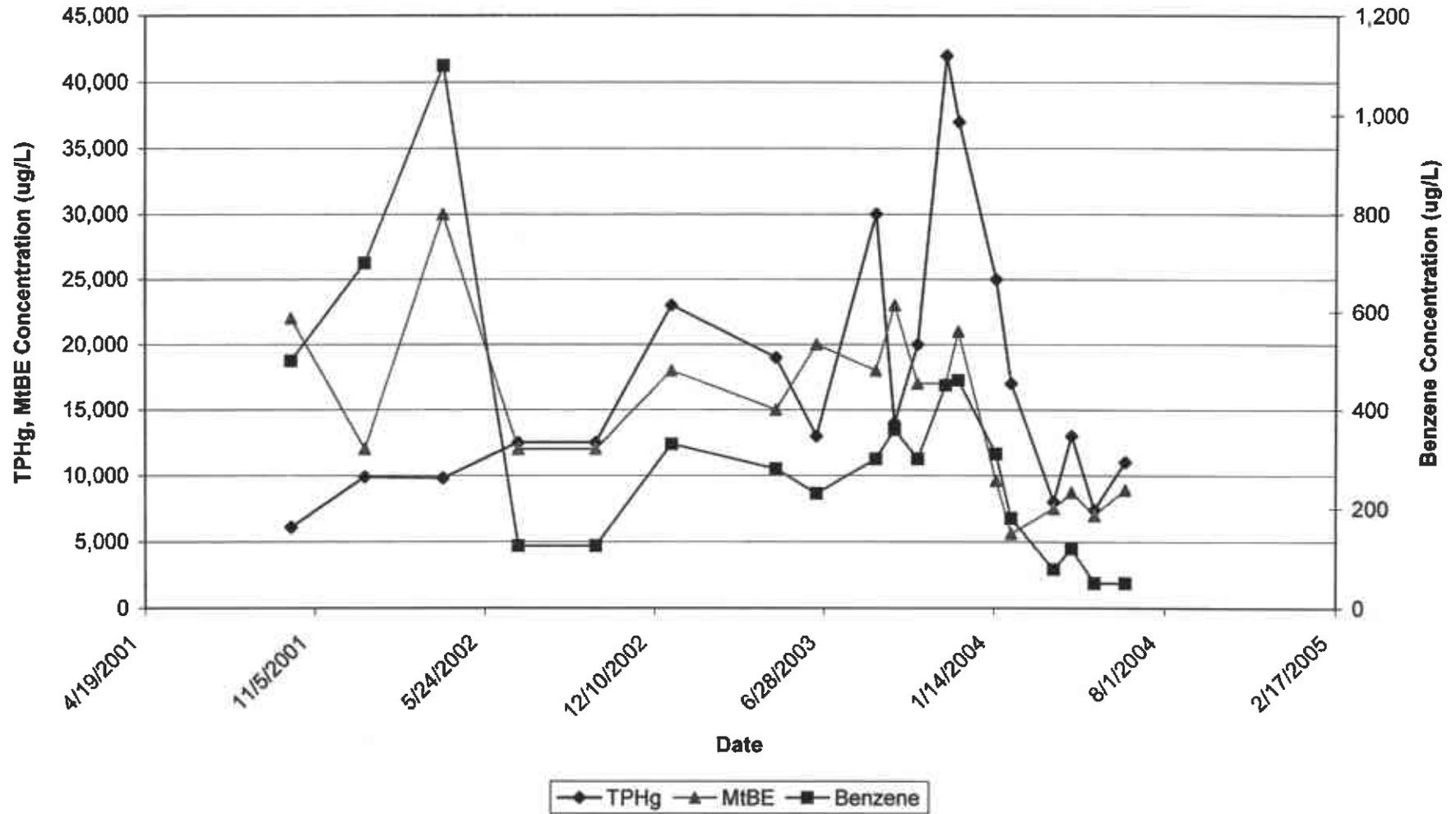
DRAWN BY: DWR  
 CHECKED: AD  
 APPROVED: AD  
 DATE: 4/2/04  
 JOB NO.: 77CP.60004.01.4186  
 CAD FILE: CP-SITEPLAN

PREPARED BY:  
  
**SECOR**  
 3017 KILGORE ROAD, SUITE 100  
 RANCHO CORDOVA, CA 95870

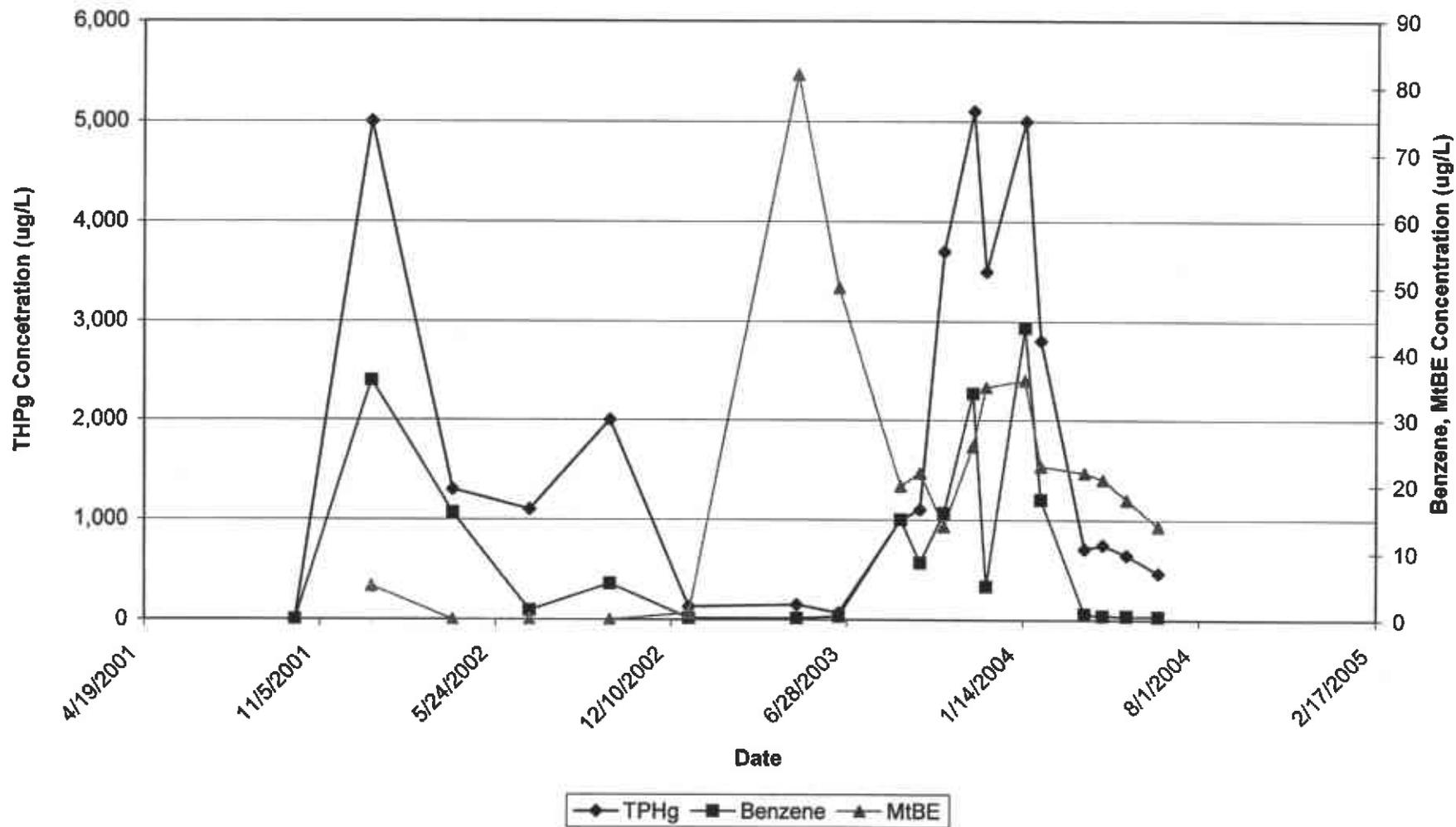
PREPARED FOR:  
**CONOCOPHILLIPS**  
 STATION NO. 4186  
 1771 FIRST STREET  
 LIVERMORE, CALIFORNIA

FIGURE 1  
 SITE PLAN

**Figure 2**  
**U-3 TPHg, Benzene, and MtBE Groundwater Concentrations**  
 76 Service Station No. 4186  
 1771 First Street, Livermore, California



**Figure 3**  
**U-6 TPHg, Benzene, and MtBE Groundwater Concentrations**  
 76 Service Station No. 4186  
 171 First Street, Livermore, California





**Table 2**  
**Ozone Injection - Groundwater Monitoring Data**  
 76 Service Station No. 4186  
 1771 First Street, Livermore, California

Date		Monitoring Well: U-3							Monitoring Well: U-6								
		ORP (mV)	DO	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (total) (µg/L)	MtBE (µg/L)	ORP (mV)	DO	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (total) (µg/L)	MtBE (µg/L)
10/8/2001	a	NM	NM	6100	500	--	--	--	22,000	NM	NM	--	--	--	--	--	--
1/3/2002	a	NM	NM	9900	700	--	--	--	12,000	NM	NM	5,000	36	--	--	--	5.0
4/5/2002	a	NM	NM	9800	1100	--	--	--	30,000	NM	NM	1,300	16	--	--	--	12.5
7/2/2002	a	NM	NM	12500	125	--	--	--	12,000	NM	NM	1,100	1.4	--	--	--	0.94
10/1/2002	a	NM	NM	12500	125	--	--	--	12,000	NM	NM	2,000	5.4	--	--	--	2.6
12/30/2002	a	NM	NM	23000	330	--	--	--	18,000	NM	NM	130	0.25	--	--	--	1.0
5/2/2003	a	NM	NM	19000	280	--	--	--	15,000	NM	NM	150	0.25	--	--	--	82
6/19/2003	a	NM	NM	13,000	230	<100	220	1,600	20,000	NM	NM	68	<0.50	<0.50	<0.50	<1.0	50
8/28/2003	a	NM	NM	30,000	300	<100	1,000	1,600	18,000	NM	NM	1,000	15	<1.0	76	11	20
9/19/2003		NM	NM	14,000	360	120	340	2,400	23,000	NM	NM	1,100	9	<2.5	25	<5.0	22
10/16/2003		NM	NM	20,000	300	93	250	1,800	17,000	NM	NM	3,700	16	<2.5	90	29	14
11/18/2003		NM	NM	42,000	450	140	1,500	5,100	17,000	NM	NM	5,100	34	2.8	190	150	26
12/3/2003		NM	NM	37,000	460	100	1,500	5,800	21,000	NM	NM	3,500	<5.0	<5.0	8.6	<10.0	35
1/16/2004		NM	NM	25,000	310	<100	110	2,900	9,600	NM	NM	5,000	44	5.6	100	52	36
2/3/2004		NM	NM	17,000	180	<20	670	1,900	5,800	NM	NM	2,800	18	<5.0	49	12	23
3/24/2004	b	-58	NM	8,000	78	<25	340	1,200	7,500	78	NM	710	0.92	<0.50	0.83	<1.0	22
4/14/2004		-4	NM	13,000	120	<50	470	1,400	8,700	37	NM	750	0.64	<0.50	<0.50	<1.0	21
5/11/2004		-79	NM	7,400	<50	<50	170	450	7,000	-40	NM	650	0.58	<0.50	0.95	<1.0	18
6/16/2004		-81	1.42	11,000	<50	<50	190	450	8,900	-51	1.35	470	<0.50	<0.50	<0.50	<1.0	14

**Definitions:**

TPHg = Total petroleum hydrocarbons as gasoline  
 MtBE = Methyl tert-butyl ether  
 µg/L = Micrograms per liter  
 ORP = Oxidation Reduction Potential  
 DO = Dissolved Oxygen

**Notes:**

- a Sampled by Gettler-Ryan, Inc.
- b Hydrocarbon in gasoline range does not match laboratory gasoline standard.
- Data not available

**ATTACHMENT A  
FIELD DATA SHEETS**

Quarterly Remedial Performance Summary  
76 Service Station No. 4186  
1771 First Street  
Livermore, CA  
SECOR Project No.: 77CP.60004.01.4186

Field Data Sheet  
Ozone Sparge System

ConocoPhillips Site # 4186  
1771 First Street  
Livermore, California

Requested By: Amy Draffan  
Lab: STL

009

Initials	Date	Time	System Status on Arrival On/Off	Electrical Meter Reading	Ozone Meter		Hourmeter	Ozone Readings			
					Brand	Range		Outside Compound (ppm)	Inside Compound (ppm)	Inside Shed/Panel (ppm)	Secondary Containment (ppm)
MSK	2-6/04	12:00	OFF	—	ECO	1-10	7541.66	0.03	0.03	0.03	0.03
MSK	2/17/04	11:00	OFF	—	ECO	1-10	7542.14	0.03	0.03	0.03	0.03
MSK	3-24-04	11:30	OFF	—	ECO	1-10	7937.07	0.02	0.02	0.02	0.03

KINKOS # 5160 SF

Initials	Date	Well Data																			
		1		2		3		4		5		6		7		8		9		10	
		Press	O <sub>3</sub>	Press	O <sub>3</sub>	Press	O <sub>3</sub>	Press	O <sub>3</sub>	Press	O <sub>3</sub>	Press	O <sub>3</sub>	Press	O <sub>3</sub>	Press	O <sub>3</sub>	Press	O <sub>3</sub>	Press	O <sub>3</sub>
MSK	2/6/04	40.0	0.03	38.5		SEE NOTES															
MSK	2/17/04	39.0	0.03	38.5	0.03	26.5	0.03	38.5	0.03	38.0	0.03	37.0	0.03	39.2	0.03	40.0	0.03	53.0	0.03	35.8	0.03
MSK	3-24-04	42.5	0.03	38.2	0.03	27.5	0.03	42.0	0.03	38.0	0.03	38.0	0.03	39.7	0.03	41.5	0.03	60.0	0.03	36.0	0.03

Units:      psi    ppm    psi    ppm

03/29/04 07:57 FAX 415 750 1295

Initials	Date	Weather Conditions (estimated)			Temp in Ozone Panel	Monthly Sampling		System Status on Departure On/Off	Ozone Badge Color (White/Tan/ Brown)
		Wind Dir.	Wind Speed	U-3 ORP (mV)		U-6 ORP (mV)			
MSK	2/6/04	NE	3 mph	55°	—	—	OFF	TAN	
MSK	2/17/04	NW	5 mph	50°	—	—	ON	TAN	
MSK	3-24-04	NW	5-7 mph	63°	-58	78	ON	TAN	

010

System Maintenance	Frequency	Date Performed		
Check Integrity of All Hoses, Fittings, Piping, Valves	Monthly	2/6/04	2-17-04	3-24-04
Measure Blower Running Amperage	Monthly	—	—	—
Air Filter-Visually Inspect	Monthly	2-6-04	2-17-04	3-24-04
Sparge Blower-Check V-belt Tension and Condition	Monthly	—	—	—
Sparge Blower-Grease Bearings	Monthly	—	—	—
Check/Test All Safety Override systems	Monthly	—	—	—
Sample Monitoring Wells	Monthly	2-3-04	—	3-24-04
Sparge Blower-Replace Oil	Bimonthly	—	—	—
Sparge Blower-Adjust or Replace as Necessary	As-Needed	—	—	—
Air Filter-Replace as Necessary	As-Needed	—	—	—

NOTES AND DESCRIPTION OF ACTIVITIES ON SITE

\* Power was off upon arrival, I reset the GFI and it began running. While running through the pressure  $\approx 0^3$  checks the power shut off and the GFI switch would not reset. I will get a new gfi for the panel.  
 2-17-04 Replaced GFI. We need to replace the COMPRESSOR Feet.  
 3-24-04 system's Kamp breaker was thrown - The breaker was just replaced by Bill M. The probable cause of shutting the system down is the Ozone Generator.

KINKOS # 5160 SF

03/29/04 07:57 FAX 415 750 1295

Field Data Sheet  
Ozone Sparge System

ConocoPhillips Site # 4186  
1771 First Street  
Livermore, California

Requested By: Amy Draffan  
Lab: STL

Initials	Date	Time	System Status on Arrival On/Off	Electrical Meter Reading	Ozone Meter		Hourmeter	Ozone Readings			
					Brand	Range		Outside Compound (ppm)	Inside Compound (ppm)	Inside Shed/Panel (ppm)	Secondary Containment (ppm)
MSK	4-7-04	1200	OFF	—	ECO	1-16	8008.40	0	0	0	0
MSK	4-9-04	1200	ON	—	ECO	1-10	8047.53	0.02	0.03	0.02	0.03
MSK	4-14-04	1300	OFF	—	ECO	1-10	8053.53	0.02	0.02	0.02	0.02
MSK	4-16-04	0900	ON	—	ECO	1-10	8088.36	0.02	0.02	0.02	0.02
MSK	4-20-04	1330	ON	—	ECO	1-10	8167.64	0.02	0.02	0.02	0.02
MSK	4-21-04	1115	OFF	—	ECO	1-10	8167.78	0.02	0.02	0.02	0.03

Initials	Date	Well Data																			
		1		2		3		4		5		6		7		8		9		10	
		Press	O <sub>3</sub>	Press	O <sub>3</sub>	Press	O <sub>3</sub>	Press	O <sub>3</sub>	Press	O <sub>3</sub>	Press	O <sub>3</sub>	Press	O <sub>3</sub>	Press	O <sub>3</sub>	Press	O <sub>3</sub>	Press	O <sub>3</sub>
MSK	4-7-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MSK	4-9-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MSK	4-14-04	40.8	0.03	38.3	0.03	27.2	0.03	41.2	0.03	37.8	0.03	37.0	0.03	37.1	0.03	40.4	0.03	60 <sup>+</sup>	0.03	36.1	0.03
MSK	4-16-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MSK	4-21-04	38.6	0.03	35.9	0.03	27.2	0.03	41.2	0.03	37.6	0.03	36.1	0.03	37.1	0.03	40.7	0.03	60 <sup>+</sup>	0.03	36.2	0.03
Units:		psi	ppm	psi	ppm	psi	ppm	psi	ppm	psi	ppm	psi	ppm	psi	ppm	psi	ppm	psi	ppm	psi	ppm

Initials	Date	Weather Conditions (estimated)		Temp in Ozone Panel	Monthly Sampling		System Status on Departure On/Off	Ozone Badge Color (White/Tan/Brown)
		Wind Dir.	Wind Speed		U-3 ORP (mV)	U-6 ORP (mV)		
MSK	4-7-04	—	—	—	—	—	ON	—
MSK	4-9-04	—	—	62°F	—	—	ON	TAN
MSK	4-14-04	NW	5 mph	60°F	-4	37	ON	TAN
MSK	4-16-04	NE	5 mph	55°	—	—	ON	TAN
MSK	4-20-04	NW	7 mph	62°F	—	—	OFF	—
MSK	4-21-04	NW	7-10 mph	60°F	—	—	ON	TAN



Field Data Sheet  
Ozone Sparge System

ConocoPhillips Site # 4186  
1771 First Street  
Livermore, California

Requested By: Amy Draffan  
Lab: STL

Initials	Date	Time	System Status on Arrival On/Off	Electrical Meter Reading	Ozone Meter		Hourmeter	Ozone Readings			
					Brand	Range		Outside Compound (ppm)	Inside Compound (ppm)	Inside Shed/Panel (ppm)	Secondary Containment (ppm)
					MSK	4-23-04		1330	ON	—	ECO
MSK	5-11-04	1500	OFF	—	ECO	0-10	8253.45	0.02	0.02	0.03	0.04
MSK	5-13-04	1430	ON	—	ECO	0-10	8291.64	0.02	0.02	0.03	0.23
MSK	5-21-04	1345	ON	—	ECO	0-10	8441.19	0.03	0.03	0.03	0.23
MSK	6/16/04	1000	OFF	—	ECO	0-10	8505.37	0.03	0.03	0.03	0.03

Initials	Date	1		2		3		4		5 Well Data		6		7		8		9		10	
		Press	O <sub>3</sub>	Press	O <sub>3</sub>	Press	O <sub>3</sub>	Press	O <sub>3</sub>	Press	O <sub>3</sub>	Press	O <sub>3</sub>	Press	O <sub>3</sub>						
MSK	4-23-04	37.9	0.03	34.0	0.03	29.1	0.03	34.9	0.03	35.2	0.03	35.2	0.03	36.3	0.03	25.8	0.03	60+	0.03	34.5	0.03
MSK	5-11-04	40.8	0.04	45.3	0.04	27.0	0.03	40.2	0.03	24.8	0.03	36.2	0.04	25.0	0.04	23.0	0.03	56.3	0.04	35.8	0.04
MSK	5-13-04																				
MSK	5-21-04	37.7	0.03	35.2	0.03	27.5	0.03	35.0	0.03	25.2	0.03	34.9	0.04	24.8	0.03	23.6	0.03	60+	0.03	35.8	0.04
MSK	6/16/04	41.2	0.03	41.5	0.03	27.8	0.03	43.0	0.03	24.8	0.03	37.2	0.03	25.8	0.03	24.5	0.03	60+	0.03	37.6	0.03
Units:		psi	ppm	psi	ppm	psi	ppm	psi	ppm	psi	ppm	psi	ppm	psi	ppm	psi	ppm	psi	ppm	psi	ppm

Initials	Date	Weather Conditions (estimated)			Temp in Ozone Panel	Monthly Sampling		System Status on Departure On/Off	Ozone Badge Color (White/Tan/Brown)
		Wind Dir.	Wind Speed	U-3 ORP (mV)		U-6 ORP (mV)			
		MSK	4-23-04	NE		3-5	60°F		
MSK	5-11-04	NE	8-10	60°F	-79	-40	ON	TAN	
MSK	5-13-04	NE	3-5	68°F	—	—	ON	TAN	
MSK	5-21-04	NW	5-8 mph	65°F	—	—	ON	TAN	
MSK	6/16/04	NW	1-3	70°F	-81	-51	ON	TAN	

u-3 DO	u-6 DO
1.42	1.35

System Maintenance	Frequency	Date Performed				
		4-23-04	5-11-04	5-13-04	5-21-04	6/16/04
Check Integrity of All Hoses, Fittings, Piping, Valves	Monthly	4-23-04	5-11-04	5-13-04	5-21-04	6/16/04
Measure Blower Running Amperage	Monthly	4-23-04	5-11-04	/	5-21-04	6/16/04
Air Filter-Visually Inspect	Monthly	4-23-04	5-11-04		5-21-04	6/16/04
Sparge Blower-Check V-belt Tension and Condition	Monthly	N/A	N/A		N/A	N/A
Sparge Blower-Grease Bearings	Monthly	N/A	N/A		N/A	N/A
Check/Test All Safety Override systems	Monthly	4-23-04	5-11-04		5-21-04	6-16-04
Sample Monitoring Wells	Monthly	N/A	5-11-04		6-16-04	
Sparge Blower-Replace Oil	Bimonthly	N/A	N/A		N/A	
Sparge Blower-Adjust or Replace as Necessary	As-Needed	N/A	N/A			
Air Filter-Replace as Necessary	As-Needed	N/A	N/A			

**NOTES AND DESCRIPTION OF ACTIVITIES ON SITE**

4-23-04 - checked on New generator. operations going well. still bypassing Solenoid #9

5-11-04 16a Breaker was tripped. I will call KVA tomorrow for assistance - closed at this time

5-13-04 - system was still running - None of the electrical components were pulling excess Ampage. could not contact KVA. will continue to try.

5-21-04 Recheck generator - to see if system is up. still up - still bypassing #9.

We need to order new Feet for the compressor. The Feet that are in now are barely holding.

**ATTACHMENT B**  
**CERTIFIED LABORATORY ANALYTICAL REPORTS AND**  
**CHAIN-OF-CUSTODY DOCUMENTATION**

Quarterly Remedial Performance Summary

76 Service Station No. 4186

1771 First Street

Livermore, CA

SECOR Project No.: 77CP.60004.01.4186

**SECOR-Sacramento**

April 28, 2004

3017 Kilgore Road, Suite 100  
Rancho Cordova, CA 95670

Attn.: Amy Draffan

Project#: 77CP.60004.00.4186

Project: Conoco Phillips Site #4186

Site: 1771 First Street, Livermore, CA

Attached is our report for your samples received on 04/14/2004 13:35

This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 05/29/2004 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.

You can also contact me via email. My email address is: [asalimpour@stl-inc.com](mailto:asalimpour@stl-inc.com)

Sincerely,



Afsaneh Salimpour  
Project Manager

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* [www.stl-inc.com](http://www.stl-inc.com) \* CA DHS ELAP# 2496

**Gas/BTEX/MTBE by 8260B**

SECOR-Sacramento

Attn.: Amy Draffan

3017 Kilgore Road, Suite 100  
Rancho Cordova, CA 95670  
Phone: (916) 861-0400 Fax: (916) 861-0430Project: 77CP.60004.00.4186  
Conoco Philips Site #4186

Received: 04/14/2004 13:35

Site: 1771 First Street, Livermore, CA

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
U-3	04/14/2004 12:30	Water	1
U-6	04/14/2004 12:45	Water	2

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

04/27/2004 16:59

Page 1 of 8

**Gas/BTEX/MTBE by 8260B**

SECOR-Sacramento

Attn.: Amy Draffan

 3017 Kilgore Road, Suite 100  
 Rancho Cordova, CA 95670  
 Phone: (916) 861-0400 Fax: (916) 861-0430

 Project: 77CP.60004.00.4186  
 Conoco Phillips Site #4186

Received: 04/14/2004 13:35

Site: 1771 First Street, Livermore, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	U-3	Lab ID:	2004-04-0482 - 1
Sampled:	04/14/2004 12:30	Extracted:	4/27/2004 14:21
Matrix:	Water	QC Batch#:	2004/04/27-1A.65
Analysis Flag: o ( See Legend and Note Section )			

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	13000	5000	ug/L	100.00	04/27/2004 14:21	
Benzene	120	50	ug/L	100.00	04/27/2004 14:21	
Toluene	ND	50	ug/L	100.00	04/27/2004 14:21	
Ethylbenzene	470	50	ug/L	100.00	04/27/2004 14:21	
Total xylenes	1400	100	ug/L	100.00	04/27/2004 14:21	
Methyl tert-butyl ether (MTBE)	8700	50	ug/L	100.00	04/27/2004 14:21	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	101.6	76-114	%	100.00	04/27/2004 14:21	
Toluene-d8	91.1	88-110	%	100.00	04/27/2004 14:21	

**Gas/BTEX/MTBE by 8260B**

SECOR-Sacramento

Attn.: Amy Draffan

3017 Kilgore Road, Suite 100  
Rancho Cordova, CA 95670  
Phone: (916) 861-0400 Fax: (916) 861-0430

Project: 77CP.60004.00.4186  
Conoco Philips Site #4186

Received: 04/14/2004 13:35

Site: 1771 First Street, Livermore, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	U-6	Lab ID:	2004-04-0482 - 2
Sampled:	04/14/2004 12:45	Extracted:	4/27/2004 03:40
Matrix:	Water	QC Batch#:	2004/04/26-2A.66

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	750	50	ug/L	1.00	04/27/2004 03:40	
Benzene	0.64	0.50	ug/L	1.00	04/27/2004 03:40	
Toluene	ND	0.50	ug/L	1.00	04/27/2004 03:40	
Ethylbenzene	ND	0.50	ug/L	1.00	04/27/2004 03:40	
Total xylenes	ND	1.0	ug/L	1.00	04/27/2004 03:40	
Methyl tert-butyl ether (MTBE)	21	0.50	ug/L	1.00	04/27/2004 03:40	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	107.7	76-114	%	1.00	04/27/2004 03:40	
Toluene-d8	100.2	88-110	%	1.00	04/27/2004 03:40	

**Gas/BTEX/MTBE by 8260B**

SECOR-Sacramento

Attn.: Amy Draffan

3017 Kilgore Road, Suite 100  
Rancho Cordova, CA 95670  
Phone: (916) 861-0400 Fax: (916) 861-0430

Project: 77CP.60004.00.4186  
Conoco Philips Site #4186

Received: 04/14/2004 13:35

Site: 1771 First Street, Livermore, CA

**Batch QC Report**

Prep(s): 5030B

Method Blank

MB: 2004/04/26-2A.66-008

Water

Test(s): 8260B

QC Batch # 2004/04/26-2A.66

Date Extracted: 04/26/2004 19:08

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	04/26/2004 19:08	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	04/26/2004 19:08	
Benzene	ND	0.5	ug/L	04/26/2004 19:08	
Toluene	ND	0.5	ug/L	04/26/2004 19:08	
Ethylbenzene	ND	0.5	ug/L	04/26/2004 19:08	
Total xylenes	ND	1.0	ug/L	04/26/2004 19:08	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	103.6	76-114	%	04/26/2004 19:08	
Toluene-d8	102.0	88-110	%	04/26/2004 19:08	

**Gas/BTEX/MTBE by 8260B**

SECOR-Sacramento

Attn.: Amy Draffan

3017 Kilgore Road, Suite 100  
Rancho Cordova, CA 95670  
Phone: (916) 861-0400 Fax: (916) 861-0430

Project: 77CP.60004.00.4186  
Conoco Philips Site #4186

Received: 04/14/2004 13:35

Site: 1771 First Street, Livermore, CA

**Batch QC Report**

Prep(s): 5030B

Method: Blank

MB: 2004/04/27-1A.65-018

Water

Test(s): 8260B

QC Batch # 2004/04/27-1A.65

Date Extracted: 04/27/2004 08:18

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	04/27/2004 08:18	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	04/27/2004 08:18	
Benzene	ND	0.5	ug/L	04/27/2004 08:18	
Toluene	ND	0.5	ug/L	04/27/2004 08:18	
Ethylbenzene	ND	0.5	ug/L	04/27/2004 08:18	
Total xylenes	ND	1.0	ug/L	04/27/2004 08:18	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	100.0	76-114	%	04/27/2004 08:18	
Toluene-d8	91.4	88-110	%	04/27/2004 08:18	

**Gas/BTEX/MTBE by 8260B**

SECOR-Sacramento

Attn.: Amy Draffan

3017 Kilgore Road, Suite 100  
Rancho Cordova, CA 95670  
Phone: (916) 861-0400 Fax: (916) 861-0430

Project: 77CP.60004.00.4186  
Conoco Philips Site #4186

Received: 04/14/2004 13:35

Site: 1771 First Street, Livermore, CA

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Laboratory Control Spike**

**Water**

**QC Batch # 2004/04/26-2A.66**

LCS 2004/04/26-2A.66-020

Extracted: 04/26/2004

Analyzed: 04/26/2004 18:20

LCSD 2004/04/26-2A.66-044

Extracted: 04/26/2004

Analyzed: 04/26/2004 18:44

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	26.2	26.1	25	104.8	104.4	0.4	65-165	20		
Benzene	26.9	27.7	25	107.6	110.8	2.9	69-129	20		
Toluene	25.9	25.5	25	103.6	102.0	1.6	70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	519	504	500	103.8	100.8		76-114			
Toluene-d8	510	519	500	102.0	103.8		88-110			

**Gas/BTEX/MTBE by 8260B**

SECOR-Sacramento

Attn.: Amy Draffan

3017 Kilgore Road, Suite 100  
Rancho Cordova, CA 95670  
Phone: (916) 861-0400 Fax: (916) 861-0430

Project: 77CP.60004.00.4186  
Conoco Phillips Site #4186

Received: 04/14/2004 13:35

Site: 1771 First Street, Livermore, CA

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike

Water

QC Batch # 2004/04/27-1A.65

LCS 2004/04/27-1A.65-030

Extracted: 04/27/2004

Analyzed: 04/27/2004 07:30

LCSD 2004/04/27-1A.65-054

Extracted: 04/27/2004

Analyzed: 04/27/2004 07:54

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	21.4	21.6	25	85.6	86.4	0.9	65-165	20		
Benzene	22.1	23.1	25	88.4	92.4	4.4	69-129	20		
Toluene	22.6	21.3	25	90.4	85.2	5.9	70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	441	443	500	88.2	88.6		76-114			
Toluene-d8	494	482	500	98.8	96.4		88-110			

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

04/27/2004 16:59

**Gas/BTEX/MTBE by 8260B**

SECOR-Sacramento

Attn.: Amy Draffan

3017 Kilgore Road, Suite 100  
Rancho Cordova, CA 95670  
Phone: (916) 861-0400 Fax: (916) 861-0430

Project: 77CP.60004.00.4186  
Conoco Philips Site #4186

Received: 04/14/2004 13:35

Site: 1771 First Street, Livermore, CA

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**Legend and Notes**

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**Analysis Flag**

o

Reporting limits were raised due to high level of analyte present in the sample.

**STL**

**STL San Francisco**

**Sample Receipt Checklist**

Submission #: 2004-04-0482

Checklist completed by: (initials) RSW Date: 04/16/04

Courier name:  STL San Francisco  Client

Custody seals intact on shipping container/samples

Yes \_\_\_ No \_\_\_ Not Present

Chain of custody present?

Yes  No \_\_\_

Chain of custody signed when relinquished and received?

Yes  No \_\_\_

Chain of custody agrees with sample labels?

Yes  No \_\_\_

Samples in proper container/bottle?

Yes  No \_\_\_

Sample containers intact?

Yes  No \_\_\_

Sufficient sample volume for indicated test?

Yes  No \_\_\_

All samples received within holding time?

Yes  No \_\_\_

Container/Temp Blank temperature in compliance ( $4^{\circ}C \pm 2$ )?

Temp. 6.0°C Yes  No \_\_\_

Water - VOA vials have zero headspace?

No VOA vials submitted Yes  No \_\_\_

(if bubble is present, refer to approximate bubble size and itemize in comments as S (small - O), M (medium - O) or L (large - O))

Water - pH acceptable upon receipt?  Yes  No

pH adjusted - Preservative used:  HNO<sub>3</sub>  HCl  H<sub>2</sub>SO<sub>4</sub>  NaOH  ZnOAc - Lot #(s)

For any item check-listed "No", provided detail of discrepancy in comment section below:

**Comments:**

**Project Management [Routing for instruction of indicated discrepancy(ies)]**

Project Manager: (initials) \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/04

Client contacted:  Yes  No

Summary of discussion:

Corrective Action (per PM/Client):

STL-San Francisco

2004-04-0482

ConocoPhillips Chain Of Custody Record

84812

1220 Quarry Lane  
Pleasanton, CA 94566  
(925) 484-1919 (925) 484-1096 fax

ConocoPhillips Site Manager:  
INVOICE REMITTANCE ADDRESS:  
CONOCOPHILLIPS  
Attn: Dee Hutchinson  
3811 South Harbor, Suite 200  
Santa Ana, CA: 92704

12375EC 550 1561

DATE: 4-14-04  
PAGE: 01 of 01

SAMPLING COMPANY: SECOR International Inc		WMS Value ID:	CONOCOPHILLIPS SITE NUMBER: 4188	GLOBAL ID NO.: 70600101493
ADDRESS: 3017 Kilgore Rd Suite 100, Rancho Cordova, CA 95670		SITE ADDRESS (SUN and ORD): 1771 First Street, Livermore, California		CONOCOPHILLIPS SITE NAME/ID: Dave DeWitt
PROJECT CONTACT (Hardcopy or PDF Report to): Amy Draffan		EDF DELIVERABLE TO (SUN or Designee): Amy Draffan	PHONE NO.: (916) 861-0400 ext 296	EMAIL: adraffan@secor.com
TELEPHONE: (916) 861-0400 x 235	FAX: (916) 861-0430	EMAIL: adraffan@secor.com		

CONTRACT NUMBER (SUN): Mikroon Kean	COMPLIANT PROJECT NUMBER: 77CP-00004.00-4188	REQUESTED ANALYSES:		
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TURNAROUND TIME (CALENDAR DAYS):  
 14 DAYS  7 DAYS  72 HOURS  48 HOURS  24 HOURS  LESS THAN 24 HOURS

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EDD IS NEEDED

Sample ID	Matrix	No. of Cont.	9015m - TPHd Extractable	9200B - TPHg/BTEX/MIBE	9200B - TPHg/BTEX/S Oxygenates	9200B - TPHg/BTEX/S Oxygenates + methanol (9015m)	9200B - Full Scan VOCs (does not include oxygenates)	9270C - Semi-Volatiles	9015M / 9221B - TPHg/BTEX/MIBE	Lead ETOTAL DSTLC DTCLP
U-3	Water	3	X							
U-6	Water	3	X							

FIELD NOTES:  
 Contains Preservative or PID Readings or Laboratory Notes  
 6.0°C  
 TEMPERATURE ON RECEIPT (C)

\* Field Point name only required if different from Sample ID

Sample Identification/Field Point Name*	SAMPLING		MATRIX	NO. OF CONT.	9015m - TPHd Extractable	9200B - TPHg/BTEX/MIBE	9200B - TPHg/BTEX/S Oxygenates	9200B - TPHg/BTEX/S Oxygenates + methanol (9015m)	9200B - Full Scan VOCs (does not include oxygenates)	9270C - Semi-Volatiles	9015M / 9221B - TPHg/BTEX/MIBE	Lead ETOTAL DSTLC DTCLP
	DATE	TIME										
U-3	4/14	1230	Water	3	X							
U-6	4/14	1245	Water	3	X							

Requested by: (Signature) Mikroon A Kean	Received by: (Signature) [Signature]	Date: 4-14-04	Time: 1335
Requested by: (Signature)	Received by: (Signature)	Date:	Time:
Requested by: (Signature)	Received by: (Signature)	Date:	Time:

**SECOR-Sacramento**

May 24, 2004

3017 Kilgore Road, Suite 100  
Rancho Cordova, CA 95670

Attn.: Amy Draffan

Project#: 77CP.60004.00.4186

Project: Conoco Philips Site # 4186

Site: 1771 First Street, Livermore, California

Attached is our report for your samples received on 05/11/2004 16:30

This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 06/25/2004 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.

You can also contact me via email. My email address is: [asalimpour@stl-inc.com](mailto:asalimpour@stl-inc.com)

Sincerely,



Afsaneh Salimpour  
Project Manager

**Gas/BTEX/MTBE by 8260B**

SECOR-Sacramento

Attn.: Amy Draffan

3017 Kilgore Road, Suite 100  
Rancho Cordova, CA 95670  
Phone: (916) 861-0400 Fax: (916) 861-0430

Project: 77CP.60004.00.4186  
Conoco Philips Site # 4186

Received: 05/11/2004 16:30

Site: 1771 First Street, Livermore, California

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
U-3	05/11/2004 15:00	Water	1
U-6	05/11/2004 15:15	Water	2

**Gas/BTEX/MTBE by 8260B**

SECOR-Sacramento

Attn.: Amy Draffan

3017 Kilgore Road, Suite 100  
Rancho Cordova, CA 95670  
Phone: (916) 861-0400 Fax: (916) 861-0430

Project: 77CP.60004.00.4186  
Conoco Philips Site # 4186

Received: 05/11/2004 16:30

Site: 1771 First Street, Livermore, California

Prep(s): 5030B Test(s): 8260B  
Sample ID: U-3 Lab ID: 2004-05-0387 - 1  
Sampled: 05/11/2004 15:00 Extracted: 5/22/2004 00:35  
Matrix: Water QC Batch#: 2004/05/21-2B.68  
Analysis Flag: o ( See Legend and Note Section )

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	7400	5000	ug/L	100.00	05/22/2004 00:35	
Benzene	ND	50	ug/L	100.00	05/22/2004 00:35	
Toluene	ND	50	ug/L	100.00	05/22/2004 00:35	
Ethylbenzene	170	50	ug/L	100.00	05/22/2004 00:35	
Total xylenes	450	100	ug/L	100.00	05/22/2004 00:35	
Methyl tert-butyl ether (MTBE)	7000	50	ug/L	100.00	05/22/2004 00:35	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	110.4	76-114	%	100.00	05/22/2004 00:35	
Toluene-d8	96.4	88-110	%	100.00	05/22/2004 00:35	

**Gas/BTEX/MTBE by 8260B**

SECOR-Sacramento

Attn.: Amy Draffan

3017 Kilgore Road, Suite 100  
Rancho Cordova, CA 95670  
Phone: (916) 861-0400 Fax: (916) 861-0430

Project: 77CP.60004.00.4186  
Conoco Phillips Site # 4186

Received: 05/11/2004 16:30

Site: 1771 First Street, Livermore, California

Prep(s):	5030B	Test(s):	8260B
Sample ID:	U-6	Lab ID:	2004-05-0387 - 2
Sampled:	05/11/2004 15:15	Extracted:	5/22/2004 00:54
Matrix:	Water	QC Batch#:	2004/05/21-2B.68

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	650	50	ug/L	1.00	05/22/2004 00:54	
Benzene	0.58	0.50	ug/L	1.00	05/22/2004 00:54	
Toluene	ND	0.50	ug/L	1.00	05/22/2004 00:54	
Ethylbenzene	0.95	0.50	ug/L	1.00	05/22/2004 00:54	
Total xylenes	ND	1.0	ug/L	1.00	05/22/2004 00:54	
Methyl tert-butyl ether (MTBE)	18	0.50	ug/L	1.00	05/22/2004 00:54	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	102.2	76-114	%	1.00	05/22/2004 00:54	
Toluene-d8	98.2	88-110	%	1.00	05/22/2004 00:54	

**Gas/BTEX/MTBE by 8260B**

SECOR-Sacramento

Attn.: Amy Draffan

3017 Kilgore Road, Suite 100  
Rancho Cordova, CA 95670  
Phone: (916) 861-0400 Fax: (916) 861-0430

Project: 77CP.60004.00.4186  
Conoco Philips Site # 4186

Received: 05/11/2004 16:30

Site: 1771 First Street, Livermore, California

**Batch QC Report**

Prep(s): 5030B

Method Blank

MB: 2004/05/21-2B.68-043

Water

Test(s): 8260B

QC Batch # 2004/05/21-2B.68

Date Extracted: 05/21/2004 18:43

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	05/21/2004 18:43	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	05/21/2004 18:43	
Benzene	ND	0.5	ug/L	05/21/2004 18:43	
Toluene	ND	0.5	ug/L	05/21/2004 18:43	
Ethylbenzene	ND	0.5	ug/L	05/21/2004 18:43	
Total xylenes	ND	1.0	ug/L	05/21/2004 18:43	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	102.0	72-128	%	05/21/2004 18:43	
Toluene-d8	98.4	80-113	%	05/21/2004 18:43	

**Gas/BTEX/MTBE by 8260B**

SECOR-Sacramento

Attn.: Amy Draffan

3017 Kilgore Road, Suite 100  
Rancho Cordova, CA 95670  
Phone: (916) 861-0400 Fax: (916) 861-0430

Project: 77CP.60004.00.4186  
Conoco Phillips Site # 4186

Received: 05/11/2004 16:30

Site: 1771 First Street, Livermore, California

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Laboratory Control Spike**

**Water**

**QC Batch # 2004/05/21-2B.68**

LCS 2004/05/21-2B.68-005

Extracted: 05/21/2004

Analyzed: 05/21/2004 18:05

LCSD 2004/05/21-2B.68-024

Extracted: 05/21/2004

Analyzed: 05/21/2004 18:24

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	21.8	20.3	25	87.2	81.2	7.1	65-165	20		
Benzene	19.8	18.9	25	79.2	75.6	4.7	69-129	20		
Toluene	22.0	20.3	25	88.0	81.2	8.0	70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	480	491	500	96.0	98.2		72-128			
Toluene-d8	508	510	500	101.6	102.0		80-113			

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

05/24/2004 12:33

**Gas/BTEX/MTBE by 8260B**

SECOR-Sacramento

Attn.: Amy Draffan

3017 Kilgore Road, Suite 100  
Rancho Cordova, CA 95670  
Phone: (916) 861-0400 Fax: (916) 861-0430

Project: 77CP.60004.00.4186  
Conoco Philips Site # 4186

Received: 05/11/2004 16:30

Site: 1771 First Street, Livermore, California

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**Legend and Notes**

---

**Analysis Flag**

o

Reporting limits were raised due to high level of analyte present in the sample.

**STL**

**STL San Francisco**

### Sample Receipt Checklist

Submission #: 2004-05-0387

Checklist completed by: (Initials) JM Date: 05/12/04

Courier name:  STL San Francisco  Client \_\_\_\_\_

Custody seals intact on shipping container/samples

Yes \_\_\_\_\_ No \_\_\_\_\_ Not Present

Chain of custody present?

Yes  No \_\_\_\_\_

Chain of custody signed when relinquished and received?

Yes  No \_\_\_\_\_

Chain of custody agrees with sample labels?

Yes \_\_\_\_\_ No

Samples in proper container/bottle?

Yes  No \_\_\_\_\_

Sample containers intact?

Yes  No \_\_\_\_\_

Sufficient sample volume for indicated test?

Yes  No \_\_\_\_\_

All samples received within holding time?

Yes  No \_\_\_\_\_

Container/Temp Blank temperature in compliance ( $4^{\circ}\text{C} \pm 2$ )?

Temp: 3 °C Yes  No \_\_\_\_\_

Water - VOA vials have zero headspace?

Ice Present Yes  No \_\_\_\_\_

No VOA vials submitted Yes  No \_\_\_\_\_

(if bubble is present, refer to approximate bubble size and itemize in comments as S (small - O), M (medium - O) or L (large - O))

Water - pH acceptable upon receipt?  Yes  No

pH adjusted - Preservative used:  HNO<sub>3</sub>  HCl  H<sub>2</sub>SO<sub>4</sub>  NaOH  ZnOAc - Lot #(s) \_\_\_\_\_

For any item check-listed "No", provided detail of discrepancy in comment section below:

Comments: ID on chain say U3 + U6; Sample bottles say MW3 + MW6 - logged in per eoc - DSU

#### Project Management [Routing for instruction of indicated discrepancy(ies)]

Project Manager: (Initials) \_\_\_\_\_ Date: 1 / \_\_\_\_\_ /04

Client contacted:  Yes  No

Summary of discussion:

Corrective Action (per PM/Client):

STL-San Francisco

# ConocoPhillips Chain Of Custody Record

85725

1220 Quarry Lane

Pleasanton, CA 94566

(925) 484-1819 (925) 484-1896 fax

ConocoPhillips Site Manager:

INVOICE REMITTANCE ADDRESS:

## 2004-05-0387

CONOCOPHILLIPS  
Attn: Dee Hutchinson  
3811 South Harbor, Suite 200  
Santa Ana, CA 92704

DATE: 5-11-04

PAGE: 01 of 01

SECOF International Inc		Valid Value ID:	CONOCOPHILLIPS SITE NUMBER 4166	GLOBAL ID NO.:
ADDRESS: 3617 Kilgore Rd Suite 100, Rancho Cordova, CA 95670		SITE ADDRESS (Street and City): 1771 First Street, Livermore, California		CONOCOPHILLIPS SITE MANAGER: Dave DeWitt
PROJECT CONTACT (Name/Title or PO# Request to): Amy Draffan		EDF DELIVERABLE TO (PP or Designee): Amy Draffan	PHONE NO.:	EMAIL:
TELEPHONE: (916) 861-0400 x 235	FAX: (916) 861-0430	EMAIL: adraffan@secof.com	(916) 861-0400 ext 235	adraffan@secof.com
SAMPLER NAME(S) (Print): Maureen Ryan	CONSULTANT PROJECT NUMBER: 77CP-60004.00-4166	REQUESTED ANALYSES:		

TURNAROUND TIME (CALENDAR DAYS):  
 14 DAYS  7 DAYS  72 HOURS  48 HOURS  24 HOURS  LESS THAN 24 HOURS

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EDB IS NEEDED

8015M - TPH/d Extractable	8200B - TPH/g/BTEX/MBE	8200B - TPH/g/BTEX/MBE + Oxygenated	8200B - TPH/g/BTEX/MBE + methanol (8015M)	8200B - Full Scan VOCs (does not include oxygenates)	8270C - Semi-Volatiles	9015M/8021B - TPH/g/BTEX/MBE	Lead	Total Dstic	OTCLP
	X								
	X								

FIELD NOTES:  
 Contains/Preservative or PID Readings or Laboratory Notes  
 3°C  
 TEMPERATURE ON RECEIPT (°C)

\* Field Point name only required if different from Sample ID

Sample Identification/Field Point Name	SAMPLING		MATRIX	NO. OF POINTS
	DATE	TIME		
U-9	5/11	1500	Water	3
U-8	5/11	1515	Water	3

Requested by (Signature): <i>Maureen Ryan</i>	Received by (Signature): <i>[Signature]</i>	Date: 5-11-04	Time: 1630
Requested by (Signature):	Received by (Signature):	Date:	Time:
Requested by (Signature):	Received by (Signature):	Date:	Time:

**SECOR-Sacramento**

June 29, 2004

3017 Kilgore Road, Suite 100  
Rancho Cordova, CA 95670

Attn.: Amy Draffan

Project#: 77CP.60004.00.4186

Project: 4186

Site: 1771 First Street, Livermore, California

Attached is our report for your samples received on 06/16/2004 13:00

This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 07/31/2004 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.

You can also contact me via email. My email address is: [asalimpour@stl-inc.com](mailto:asalimpour@stl-inc.com)

Sincerely,



Afsaneh Salimpour  
Project Manager

**Gas/BTEX/MTBE by 8260B**

SECOR-Sacramento

Attn.: Amy Draffan

3017 Kilgore Road, Suite 100  
Rancho Cordova, CA 95670  
Phone: (916) 861-0400 Fax: (916) 861-0430Project: 77CP.60004.00.4186  
4186

Received: 06/16/2004 13:00

Site: 1771 First Street, Livermore, California

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
U-3	06/16/2004 11:00	Water	1
U-6	06/16/2004 11:15	Water	2



**Gas/BTEX/MTBE by 8260B**

SECOR-Sacramento

Attn.: Amy Draffan

3017 Kilgore Road, Suite 100  
Rancho Cordova, CA 95670  
Phone: (916) 861-0400 Fax: (916) 861-0430

Project: 77CP.60004.00.4186  
4186

Received: 06/16/2004 13:00

Site: 1771 First Street, Livermore, California

Prep(s):	5030B	Test(s):	8260B
Sample ID:	U-6	Lab ID:	2004-06-0575 - 2
Sampled:	06/16/2004 11:15	Extracted:	6/24/2004 23:50
Matrix:	Water	QC Batch#:	2004/06/24-2A.66

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	470	50	ug/L	1.00	06/24/2004 23:50	g
Benzene	ND	0.50	ug/L	1.00	06/24/2004 23:50	
Toluene	ND	0.50	ug/L	1.00	06/24/2004 23:50	
Ethylbenzene	ND	0.50	ug/L	1.00	06/24/2004 23:50	
Total xylenes	ND	1.0	ug/L	1.00	06/24/2004 23:50	
Methyl tert-butyl ether (MTBE)	14	0.50	ug/L	1.00	06/24/2004 23:50	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	98.3	72-128	%	1.00	06/24/2004 23:50	
Toluene-d8	99.0	80-113	%	1.00	06/24/2004 23:50	

**Gas/BTEX/MTBE by 8260B**

SECOR-Sacramento

Attn.: Amy Draffan

3017 Kilgore Road, Suite 100  
Rancho Cordova, CA 95670  
Phone: (916) 861-0400 Fax: (916) 861-0430

Project: 77CP.60004.00.4186  
4186

Received: 06/16/2004 13:00

Site: 1771 First Street, Livermore, California

**Batch QC Report**

Prep(s): 5030B

Method Blank

MB: 2004/06/24-2A.66-025

Water

Test(s): 8260B

QC Batch # 2004/06/24-2A.66

Date Extracted: 06/24/2004 21:25

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	06/24/2004 21:25	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	06/24/2004 21:25	
Benzene	ND	0.5	ug/L	06/24/2004 21:25	
Toluene	ND	0.5	ug/L	06/24/2004 21:25	
Ethylbenzene	ND	0.5	ug/L	06/24/2004 21:25	
Total xylenes	ND	1.0	ug/L	06/24/2004 21:25	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	101.0	72-128	%	06/24/2004 21:25	
Toluene-d8	93.6	80-113	%	06/24/2004 21:25	

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

06/29/2004 10:52

**Gas/BTEX/MTBE by 8260B**

SECOR-Sacramento

Attn.: Amy Draffan

3017 Kilgore Road, Suite 100  
Rancho Cordova, CA 95670  
Phone: (916) 861-0400 Fax: (916) 861-0430

Project: 77CP.60004.00.4186  
4186

Received: 06/16/2004 13:00

Site: 1771 First Street, Livermore, California

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Laboratory Control Spike**

**Water**

**QC Batch # 2004/06/24-2A.66**

LCS 2004/06/24-2A.66-037

Extracted: 06/24/2004

Analyzed: 06/24/2004 20:37

LCSD 2004/06/24-2A.66-001

Extracted: 06/24/2004

Analyzed: 06/24/2004 21:01

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	30.3	28.7	25	121.2	106.8	12.6	65-165	20		
Benzene	30.3	26.4	25	121.2	105.6	13.8	69-129	20		
Toluene	27.8	23.7	25	111.2	94.8	15.9	70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	470	446	500	94.0	89.2		72-128			
Toluene-d8	477	473	500	95.4	94.6		80-113			

**Gas/BTEX/MTBE by 8260B**

SECOR-Sacramento

Attn.: Amy Draffan

3017 Kilgore Road, Suite 100  
Rancho Cordova, CA 95670  
Phone: (916) 861-0400 Fax: (916) 861-0430

Project: 77CP.60004.00.4186  
4186

Received: 06/16/2004 13:00

Site: 1771 First Street, Livermore, California

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**Legend and Notes**

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**Analysis Flag**

o

Reporting limits were raised due to high level of analyte present in the sample.

**Result Flag**

g

Hydrocarbon reported in the gasoline range does not match our gasoline standard.

STL San Francisco

Sample Receipt Checklist

Submission #: 2004-06-0575

Checklist completed by: (initials) JWM Date: 06/17/04

Courier name:  STL San Francisco  Client

Custody seals intact on shipping container/samples

Yes \_\_\_ No \_\_\_ Not Present

Chain of custody present?

Yes  No \_\_\_

Chain of custody signed when relinquished and received?

Yes  No \_\_\_

Chain of custody agrees with sample labels?

Yes  No \_\_\_

Samples in proper container/bottle?

Yes  No \_\_\_

Sample containers intact?

Yes  No \_\_\_

Sufficient sample volume for indicated test?

Yes  No \_\_\_

All samples received within holding time?

Yes  No \_\_\_

Container/Temp Blank temperature in compliance ( $4^{\circ}C \pm 2$ )?

Temp: 10 °C Yes  No \_\_\_

Water - VOA vials have zero headspace?

Ice Present Yes \_\_\_ No

No VOA vials submitted Yes  No \_\_\_

(if bubble is present, refer to approximate bubble size and itemize in comments as S (small - O), M (medium - O) or L (large - O))

Water - pH acceptable upon receipt?  Yes  No

pH adjusted- Preservative used:  HNO3  HCl  H2SO4  NaOH  ZnOAc - Lot #(s) \_\_\_\_\_

For any item check-listed "No", provided detail of discrepancy in comment section below:

Comments: < 4hrs from sampling

Project Management [Routing for instruction of indicated discrepancy(ies)]

Project Manager: (initials) \_\_\_\_\_ Date: 1 / /04

Client contacted:  Yes  No

Summary of discussion:

Corrective Action (per PM/Client):

STL-San Francisco

# ConocoPhillips Chain Of Custody Record

86940

1220 Quarry Lane  
Pleasanton, CA 94566

ConocoPhillips Site Manager:

INVOICE REMITTANCE ADDRESS:

CONOCOPHILLIPS  
Attn: Dee Hutchinson  
2811 South Harbor, Suite 200  
Santa Ana, CA. 92704

**2004-06-0575**

DATE: 06/16/04  
PAGE: 01 of 01

(925) 484-1919 (925) 484-1096 fax

SAMPLER COMPANY: <b>SECOR International Inc</b>		Field Value ID:	CONOCOPHILLIPS SITE NUMBER: <b>4185</b>	GLOBAL ID NO.:
ADDRESS: <b>3017 Kilgore Rd Suite 100, Rancho Cordova, CA 95870</b>		SITE ADDRESS (Street and City): <b>1771 First Street, Livermore, California</b>		CONOCOPHILLIPS SITE MANAGER: <b>Dave DeWitt</b>
PROJECT CONTACT (Hardcopy or PDF Report to): <b>Amy Draffan</b>		EDP DELIVERABLE TO (RP or Designee): <b>Amy Draffan</b>		PHONE NO.:
TELEPHONE: <b>(916) 861-0400 x 236</b>	FAX: <b>(916) 861-0430</b>	E-MAIL: <b>adraffan@secor.com</b>	PHONE NO.:	E-MAIL: <b>adraffan@secor.com</b>
SAMPLER NAME(S) (Print): <b>Maureen Kean</b>		CONSULTANT PROJECT NUMBER: <b>77CP.80004.00.4185</b>		

**REQUESTED ANALYSES**

TURNAROUND TIME (CALENDAR DAYS):  
 14 DAYS  
 7 DAYS  
 72 HOURS  
 48 HOURS  
 24 HOURS  
 LESS THAN 24 HOURS

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EDD IS NEEDED  *X*

8015m - TPH/d Extractable	8260B - TPH/BTEX/MBE	8280B - TPHg/ BTEX/ 8 Oxygenates	8280B - TPHg/ BTEX/ 8 oxygenates + methanol (8015M)	8280B - Full Scan VOCs (does not include oxygenates)	8270C - Semi-Volatiles	8015M/ 8021B - TPHg/BTEX/MBE	Lead DT/d Total DTCLP DTCLP
	X						
	X						

**FIELD NOTES:**  
Contains Preservative or PID Residue or Laboratory Notes

TEMPERATURE ON RECEIPT: 10

\* Field Point name only required if different from Sample ID

ONLY	Sample Identification/Field Point Name*	SAMPLING		MATRIX	NO. OF CONT.	8015m - TPH/d Extractable	8260B - TPH/BTEX/MBE	8280B - TPHg/ BTEX/ 8 Oxygenates	8280B - TPHg/ BTEX/ 8 oxygenates + methanol (8015M)	8280B - Full Scan VOCs (does not include oxygenates)	8270C - Semi-Volatiles	8015M/ 8021B - TPHg/BTEX/MBE	Lead DT/d Total DTCLP DTCLP
		DATE	TIME										
	U-3	6/16	1100	Water	3		X						
	U-3	6/16	1115	Water	3		X						

Released by: (Signature) <i>Maureen Kean</i>	Received by: (Signature) <i>[Signature]</i>	Date: <u>6/16/04</u>	Time: <u>1300</u>
Released by: (Signature)	Received by: (Signature)	Date:	Time:
Released by: (Signature)	Received by: (Signature)	Date:	Time: