



SECOR
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Rancho Cordova, CA 95870
916-861-0400 TEL
916-861-0430 FAX

March 26, 2004

Mr. Thomas Kosel
ConocoPhillips
76 Broadway
Sacramento, CA 95818

RE: **Quarterly Remedial Performance Summary-Third and Fourth Quarter 2003**
 ConocoPhillips Station No. 4186
 1771 First Street
 Livermore, CA
 SECOR Project No.: 77CP.60004.01.4186

Dear Mr. Kosel:

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. Attachment A presents the remedial performance summary for the third and fourth quarter 2003. Field data sheets are presented as Attachment B and analytical reports are presented as Attachment C. 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 EVALUATION

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 eight minutes per well, 16 cycles per day. The ozone injection system operation was initiated on December 19, 2001. During the third and fourth quarter of 2003, the ozone injection system operated for 21 hours, resulting in 1.2% operation. The system was shutting down due to a problem with the breaker tripping. SECOR is working with the manufacturer to troubleshoot this problem. The system injected approximately 0.22 pounds of ozone during the third and fourth quarter of 2003. Operational data is provided in Table A-1.

Ozone Injection Performance

The performance of the ozone injection system in causing breakdown of contaminants beneath the site 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 A-2. Since monthly remedial system performance sampling was initiated in October 2001, concentrations of dissolved TPHg have increased in U-3 while concentrations of

SECOR

Quarterly Remedial Performance Summary
March 26, 2004
Page 2

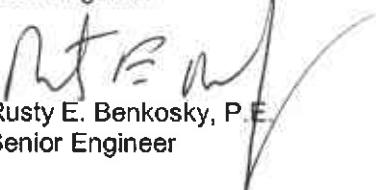
benzene and MtBE remained fairly steady. THPg, benzene, and MtBE concentrations decreased in U-6 until September 2003 when they began increasing. Increases in dissolved constituent concentrations are possibly due to inconsistent functioning of the ozone injection system but are also often caused by desorption of petroleum hydrocarbons from soil caused by the aggressive mechanical scrubbing of the ozone microbubbles. Concentration versus time graphs for dissolved TPHg, benzene, and MtBE in monitoring wells U-3 and U-6 are provided in Figures A-1 and A-2. Certified laboratory analytical reports and chain-of-custody documentation for the groundwater monitoring events conducted during the third and fourth quarter of 2003 are provided in Attachment C.

SECOR will continue to sample monitoring wells U-3 and U-6 on a monthly basis.

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

- Attachment A – Quarterly Remedial Performance Summary – Third and Fourth Quarter 2003
- Attachment B – Field Data Sheets
- Attachment C – 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. Amy Wilson, TRC
Mr. Dan Truzzolino, ConocoPhillips

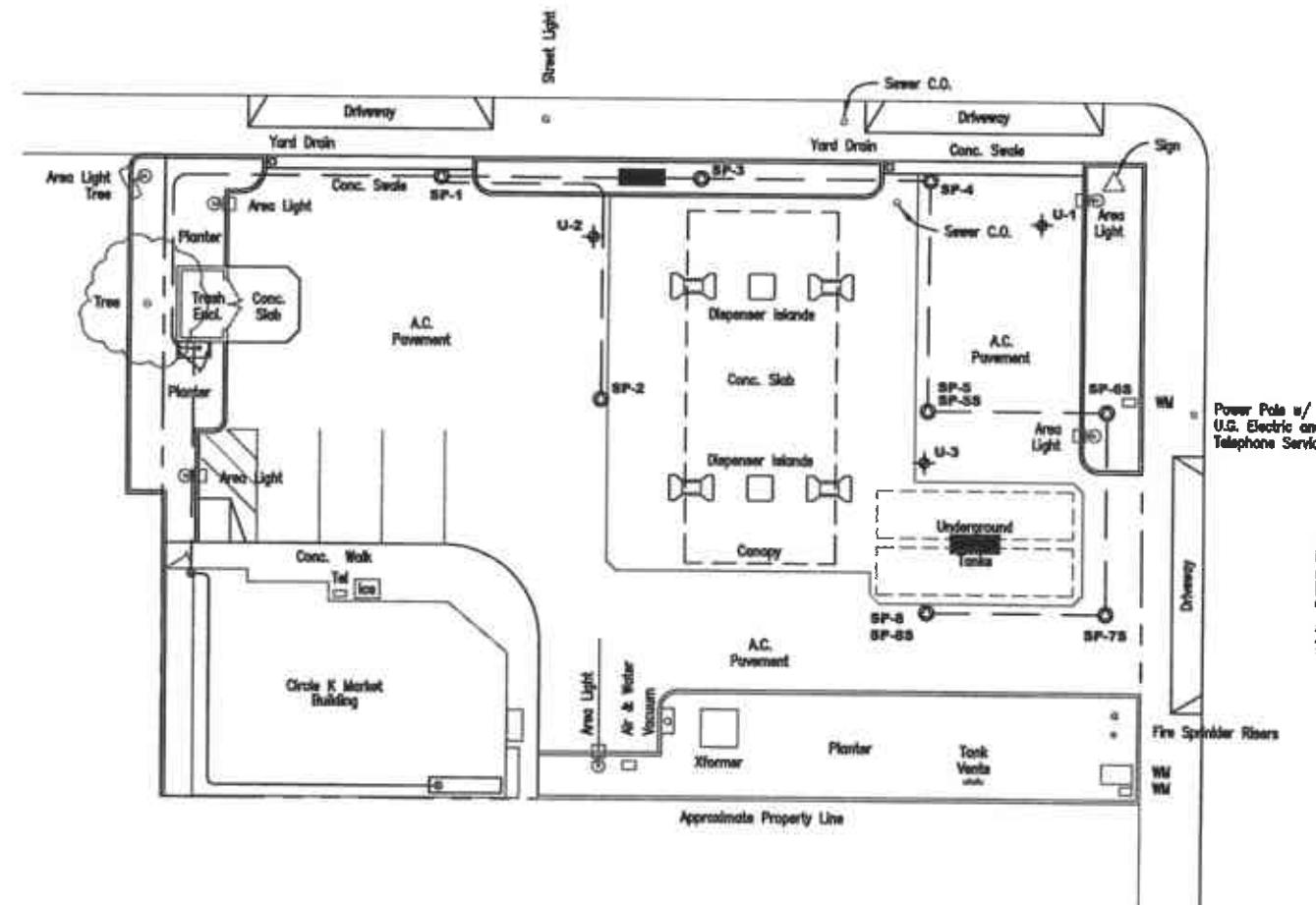
RB/ad

LEGEND

- ◆ GROUNDWATER MONITORING WELL
- ◎ OZONE SPARGE POINT
- UNDERGROUND OZONE SPARGE LINE

U-5 Parking U-4 Red Zone Parking

FIRST STREET



N STREET

0 30 60
APPROXIMATE SCALE FEET

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

M1CONOCOPHILLIPS4186CP-SITEPLAN.dwg

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

**ATTACHMENT A
QUARTERLY REMEDIAL PERFORMANCE SUMMARY–
THIRD AND FOURTH QUARTER 2003**

Quarterly Remedial Performance Summary

ConocoPhillips Station No. 4186

1771 First Street

Livermore, CA

SECOR Project No.: 77CP.60004.01.4186

ATTACHMENT A
REMEDIAL ACTION PERFORMANCE SUMMARY: FOURTH QUARTER 2003
Ozone Sparge System

Site Name: ConocoPhillips Station # 4186
 Site Address: 1771 First St., Livermore

System Start-up Date: 12/19/01
 Estimated Shutdown Date: NA

REMEDIAL OBJECTIVES

OPERATIONAL DATA (Fourth Quarter 2003)

Ozone Sparge Treatment System Data

Operational Status

Mass Ozone Injected (lbs)

	October	November	December	Cumulative
	Operational	Operational	Operational	
	0.13	0.05	0.01	64

TPHg, Benzene and MtBE Summary

U-3 Concentration TPHg ($\mu\text{g/L}$)

Concentration Benzene($\mu\text{g/L}$)

Concentration MtBE ($\mu\text{g/L}$)

U-6 Concentration TPHg ($\mu\text{g/L}$)

Concentration Benzene($\mu\text{g/L}$)

Concentration MtBE ($\mu\text{g/L}$)

	October	November	December
U-3 Concentration TPHg ($\mu\text{g/L}$)	20000	42000	37000
Concentration Benzene($\mu\text{g/L}$)	300	450	460
Concentration MtBE ($\mu\text{g/L}$)	17000	17000	21000
U-6 Concentration TPHg ($\mu\text{g/L}$)	3700	5100	3500
Concentration Benzene($\mu\text{g/L}$)	16	34	<5
Concentration MtBE ($\mu\text{g/L}$)	14	26	35

REMEDIAL ACTION PERFORMANCE EVALUATION

ACTIONS/RECOMMENDATIONS

- o Continue operation of the ozone sparge system

NOTES:

ppmv	= Parts per million by volume
cfm	= Cubic feet per minute
lbs	= Pounds
SVE	= Soil Vapor extraction
ND	= Not detected above the detection limit
TPHg	= Total petroleum hydrocarbons as gasoline
MtBE	= Methyl tert-butyl ether
-	= Not available

Note: When appropriate, tabulated data is followed by graphical presentation.

Table A-1
Ozone Injection Remediation System
System Operation Data
76 Station No. 4186
Page 1 of 1

Date	OZONE SPARGE SYSTEM							OZ-1	OZ-2	OZ-3	OZ-4	OZ-5	OZ-6	OZ-7	OZ-8	OZ-9	OZ-10	Cycling Configuration/Comments
	System Status on Arrival (On/Off)	System Status on Departure (On/Off)	Hourometer Reading	Online Factor	Ozone Injected (lbs)	Pressure (psi)	Flow (scfm)	Pressure (psi)										
8/19/2003	On	On	6997.92	—	—	—	—	30	24	22	28	33	26	30	32	35	29	a
07/30/03	On	On	NM	--	—	—	—	40	35	42	38	38	39	22	20	26	45	a
08/26/03	Off	On	7127.87	0.08	—	—	—	38	48	22	42	37	33	35	40	50	35	a
09/19/03	On	On	7131.66	0.01	0.03	—	—	35.2	36.1	23.7	36.0	34.9	31.1	34.8	38.0	49.3	32.2	a
10/16/2003	On	On	7145.57	0.02	0.13	—	—	35.0	40.0	24.2	38.2	16.5	31.4	35.1	36.6	45.8	34	a
11/18/2003	On	Off	7152.34	0.01	0.05	—	—	37.0	36.5	26.0	36.0	16.0	33.0	38.0	19.0	52.0	35.0	a
12/3/2003	Off	On	7153.15	0.00	0.01	--	--	38.0	38.2	26.5	39.2	40.9	33.8	39.1	40.0	48.2	36.8	a

Reporting Period: December 2003 (11/18/03 to 12/3/03)

Total Hours Operational: 7,153

Total Pounds Ozone Injected: 64

Period Hours Operational: 1

Period Percent Operational: 00%

Period Pounds Ozone Injected: 0.0

Definitions:

psi: Pounds per square inch
 scfm: Standard cubic feet per minute
 --: Data not available
 NA: Not applicable

Notes:

a = System cycles through points 1 through 10 for eight minutes per cycle, 16 cycles per day, for 89% utilization

Table A-2
Ozone Injection - Groundwater Monitoring Data
76 Station # 4186
1771 First Street, Livermore, California

Date	Monitoring Well: U-3							Monitoring Well: U-6						
	ORP (mV)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (total) (µg/L)	MtBE (µg/L)	ORP (mV)	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	6100	500	--	--	22,000	NM	--	--	--	--	--	
1/3/2002	a	NM	9900	700	--	--	12,000	NM	5,000	36	--	--	--	5.0
4/5/2002	a	NM	9800	1100	--	--	30,000	NM	1,300	16	--	--	--	12.5
7/2/2002	a	NM	12500	125	--	--	12,000	NM	1,100	1.4	--	--	--	0.94
10/1/2002	a	NM	12500	125	--	--	12,000	NM	2,000	5.4	--	--	--	2.6
12/30/2002	a	NM	23000	330	--	--	18,000	NM	130	0.25	--	--	--	1.0
5/2/2003	a	NM	19000	280	--	--	15,000	NM	150	0.25	--	--	--	82
6/19/2003	a	NM	13,000	230	<100	220	1,600	20,000	NM	68	<0.50	<0.50	<0.50	<1.0
8/28/2003	a	NM	30,000	300	<100	1,000	1,600	18,000	NM	1,000	15	<1.0	76	11
9/19/2003		NM	14,000	360	120	340	2,400	23,000	NM	1,100	9	<2.5	25	<5.0
10/16/2003		NM	20,000	300	93	250	1,800	17,000	NM	3,700	16	<2.5	90	29
11/18/2003		NM	42,000	450	140	1,500	5,100	17,000	NM	5,100	34	2.8	190	150
12/3/2003		NM	37,000	460	100	1,500	5,800	21,000	NM	3,500	<5.0	<5.0	8.6	<10.0

Definitions:

TPHg = Total petroleum hydrocarbons as gasoline

MtBE = Methyl tert-butyl ether

µg/L = Micrograms per liter

ORP = Oxidation Reduction Potential

Notes:

a Sampled by Gettler-Ryan, Inc.

-- Data not available

Figure A-1
U-3 TPHg, Benzene, and MtBE Groundwater Concentrations
76 Station # 4186
1771 First Street, Livermore, California

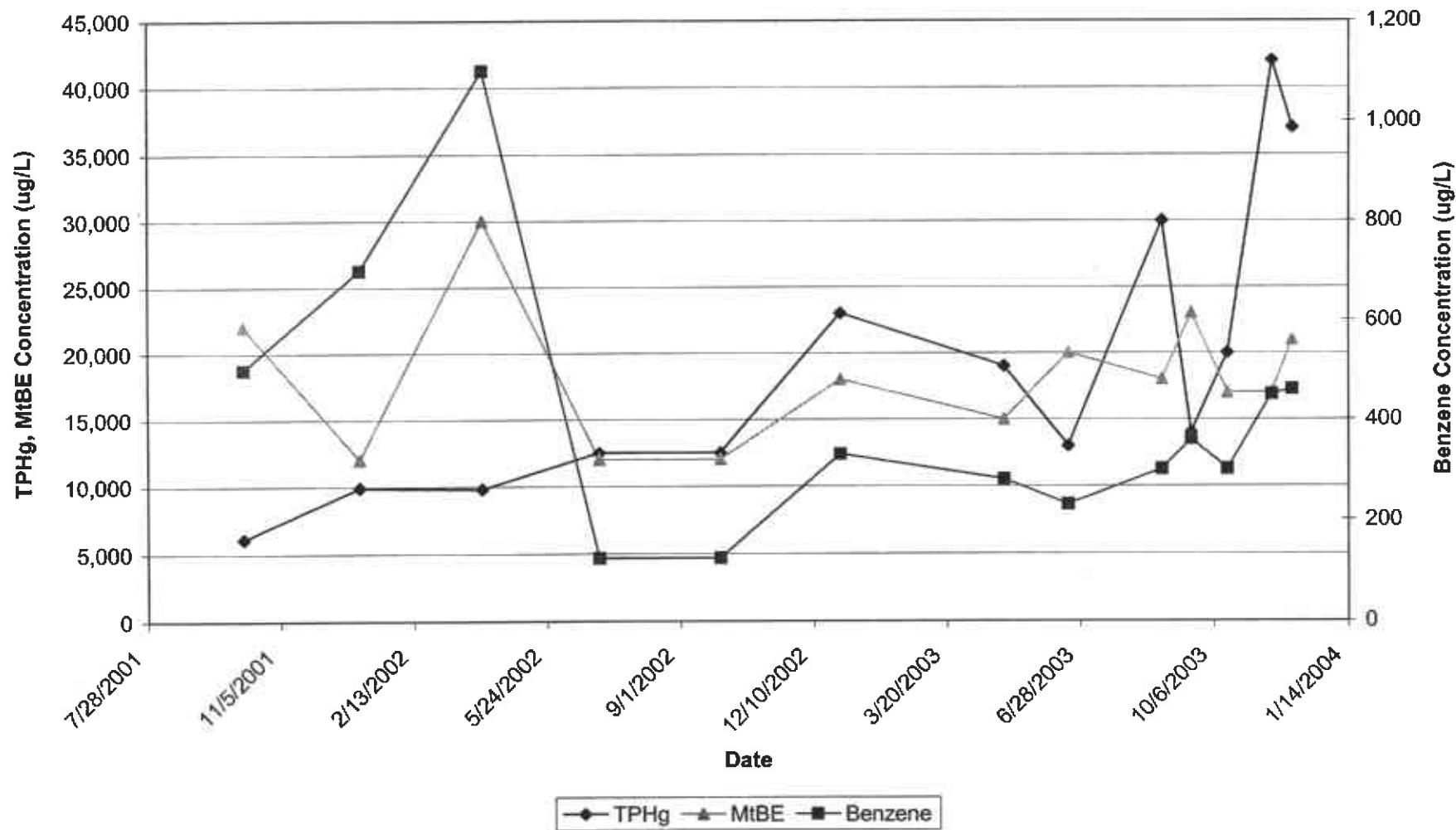
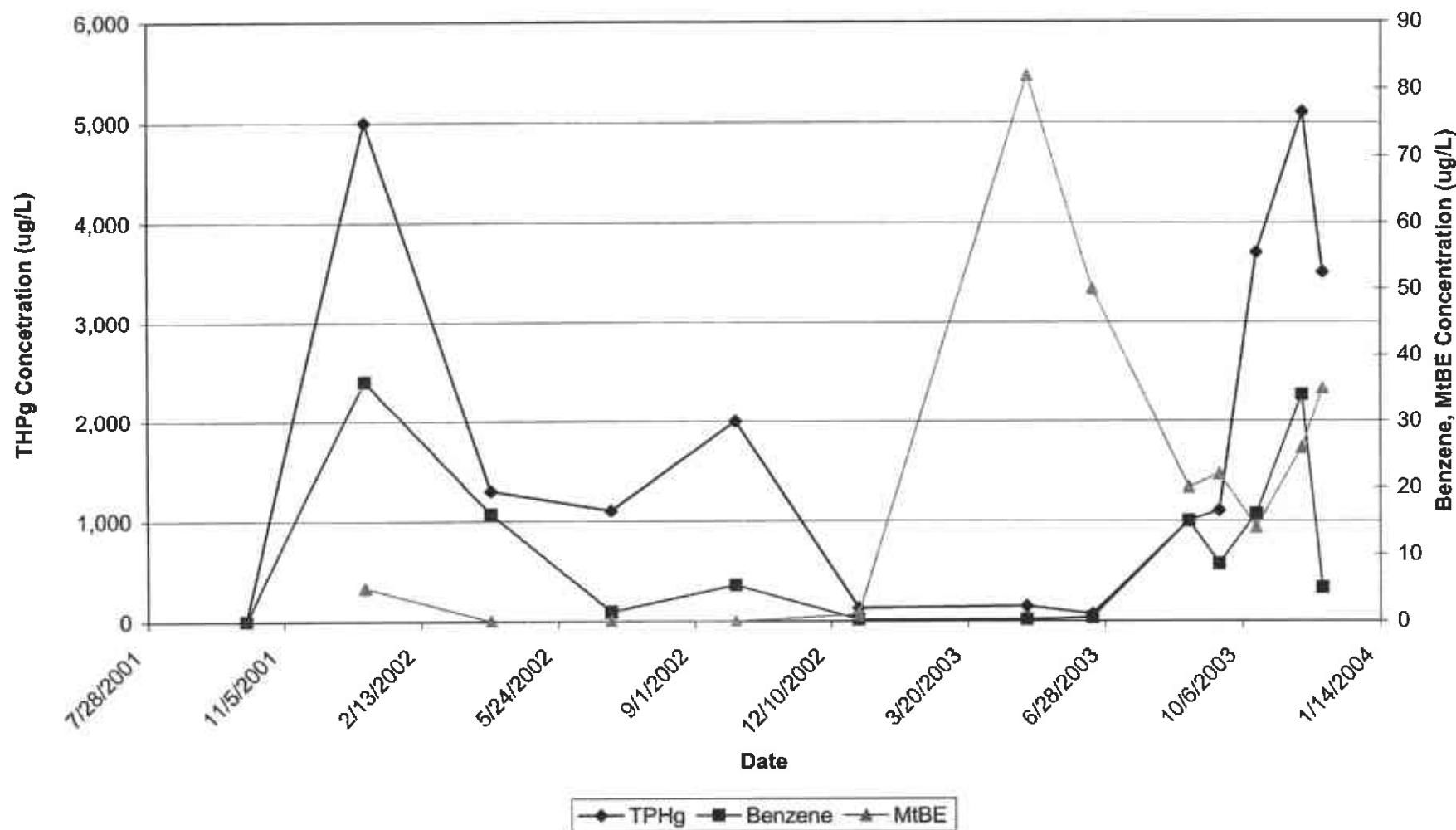


Figure A-2
U-6 TPHg, Benzene, and MtBE Groundwater Concentrations
76 Station # 4186
171 First Street, Livermore, California



**ATTACHMENT B
FIELD DATA SHEETS**

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



Gettler - Ryan, Inc.

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

1926 551 7688

37 15

Client: ConocoPhillips Name: E. Janzen
Site No: 4186 Date: 28 AUG 2002
Address: 1771 First Street
City: Livermore
Job No.: 140175.00

Hour Meter <u>7127.81</u>	Point No.	Cycle Time	Pressure (psig)	Panel Connection	Wellhead Connection
	1	8	340	/	/
	2	8	48	/	/
	3	8	22	/	/
	4	8	42	/	/
	5	8	37	/	/
	6	8	33	/	/
	7	8	35	/	/
	8	8	40	/	/
	9	8	50		
	10	8	35		

System Running on Arrival?

Yes

Tighten Electrical Connections?

No

System Running at Departure?

Observations and Comments:

Replaced Temp Sensors with new unit

Re-Simmed System

Sampled Site

JOB NAME: ConocoPhillips Station #4186Work Conducted By: M. Kean

JOB NUMBER:

DATE: 9-19-03**SITE VISITATION REPORT**Arrival Time: 1010Departure Time: 1145**WASTE AND DRUM INVENTORY** SOIL
 WATER CARBON
 EMPTY TOTAL OPEN TOP
 TOTAL BUNG TOP

Estimated Water Volume Other Waste:

HEALTH AND SAFETY ASSESSMENT**OZONE MONITORING NOTES**Hour Meter: 7131.66

System Pressure:

NO PRESSURE Gauge
or flow rateWind Direction: CALM

System Flow Rate:

Estimated Wind Speed: 0Estimated Air Temp: 85 °FOzone meter Brand: ECOOzone meter sensitivity range: 0.00 - 10.0Ozone Badge on: Yes NoTime Badge Put on: 1015Time Badge Take Off: 1130

Circle Badge Color: White

 Tan BrownEstimate Temp within Ozone Panel or containment shed: 72 °F

JOB NAME: 4186SITE ADDRESS: 1771 First St., LivermoreDATE: 9-19-03

JOB NUMBER: _____

0.00

MONITORED BY: M. Keay

WELL I.D.	Vapor Readings			Field Notes or Comments
	Ozone (ppm)	Odors	Pressure	
Compound and System Readings				
Outside Compound	0.02	NONE	/	
Inside Compound	0.02	/		
Inside Shed or Panel	0.03	↓		
Secondary Containment				
Well Box Ozone Readings				
OZ-1	0.03		35.2	
OZ-2	0.03		36.1	
OZ-3	0.04		23.7	
OZ-4	0.03		38.0	
OZ-5	0.04		34.9	
OZ-6	0.04		31.1	
OZ-7	0.03		34.8	
OZ-8	0.03		38.0	
OZ-9	0.04		49.3	X
OZ-10	0.04		32.2	

JOB NAME: ConocoPhillips Station #4186

JOB NUMBER: _____

Work Conducted By: M. KeanDATE: 9-19-03

DESCRIPTION OF ACTIVITIES ON SITE AND NOTES (cont)

INSIDE C-SPARG PANEL I FOUND
and old dirty filter. I assume it was
from the air intake fan. I replaced
it with a new filter.

I also found A GFCI switch
that was shorted out and had burn
marks on it. Whoever had this site
before me, replaced the switch but
left the old shorted out switch
in the panel.

I checked all tubing, hoses and
fittings. All fittings were tight
and tubing/hoses in place.

JOB NAME: ConocoPhillips Station #4186Work Conducted By: M. Kean

JOB NUMBER:

DATE: 10-16-03**SITE VISITATION REPORT**Arrival Time: 1310

Departure Time: _____

WASTE AND DRUM INVENTORY

SOIL	CARBON	TOTAL OPEN TOP
WATER	EMPTY	TOTAL BUNG TOP
Estimated Water Volume	Other Waste:	<u>0 Drums Present</u>

HEALTH AND SAFETY ASSESSMENT**OZONE MONITORING NOTES**Hour Meter: 7146 57

System Pressure:

Wind Direction: CALM

System Flow Rate:

Estimated Wind Speed: CALMEstimated Air Temp: 75°FOzone meter Brand: ECOOzone meter sensitivity range: 0-10.0Ozone Badge on: Yes NoTime Badge Put on: 1305

Time Badge Take Off:

Circle Badge Color: White Tan BrownEstimate Temp within Ozone Panel or containment shed: 72°F

JOB NAME: 4186

JOB NUMBER: _____

0.00

SITE ADDRESS: 1771 1st St. LivermoreDATE: 10-16-03MONITORED BY: M. KEAN

WELL I.D.	Vapor Readings			Field Notes or Comments
	Ozone (ppm)	Odors	Pressure	
Compound and System Readings				
Outside Compound	0.03	NONE		
Inside Compound				
Inside Shed or Panel				
Secondary Containment				
Well Box Ozone Readings				
OZ-1	0.02			Pressures
OZ-2	0.03			↓
OZ-3	0.03			35.0
OZ-4	0.03			40.0
OZ-5	0.03			24.2
OZ-6	0.02			38.2
OZ-7	0.02			16.5
OZ-8	0.03			31.4
OZ-9	0.03			35.1
OZ-10	0.03			36.6
				45.8
				33.5

JOB NAME: ConocoPhillips Station #4156
Work Conducted By: M REAN

JOB NUMBER: 77CP.60004.00 .4186
DATE: 11-15-03

SITE VISITATION REPORT

Arrival Time: 1115

Departure Time: _____

WASTE AND DRUM INVENTORY

SOIL	CARBON	TOTAL OPEN TOP
WATER	EMPTY	TOTAL BUNG TOP
Estimated Water Volume	Other Waste:	<u>None at this site</u>

HEALTH AND SAFETY ASSESSMENT

OZONE MONITORING NOTES

Hour Meter: 7152, 34

System Pressure: _____

Wind Direction: NE

System Flow Rate: _____

Estimated Wind Speed: 5-7 mphEstimated Air Temp: 62 °FOzone meter Brand: ECOOzone meter sensitivity range: 0 - 10Ozone Badge on: Yes NoTime Badge Put on: 1115Time Badge Take Off: 1240Circle Badge Color: White Tan BrownEstimate Temp within Ozone Panel or containment shed: 60 °F

JOB NAME: 4186JOB NUMBER: 77C-D-60004 0.00SITE ADDRESS: 1721 First St LivermoreDATE: 11-18-03MONITORED BY: M. KEAN

WELL	Vapor Readings			Field Notes or Comments
I.D.	Ozone (ppm)	Odors	Pressure	
Compound and System Readings				
Outside Compound	0.03	NONE	—	
Inside Compound	0.03	NONE	—	
Inside Shed or Panel	0.03	NONE	—	
Secondary Containment	0.03	NONE	—	
Well Box Ozone Readings				
OZ-1	0.03		37.0	
OZ-2	0.03		36.5	
OZ-3	0.03		26.0	
OZ-4	0.03		35.0	
OZ-5	10.0 +	Strong	16.0*	Tubing might BE disconnected OR Broken
OZ-6	0.05		33.0	
OZ-7	0.05		38.0	
OZ-8	10.0 +	STRONG	19.0	
OZ-9	0.05		52.0	
OZ-10	0.05		35.0	

JOB NAME: ConocoPhillips Station #4186JOB NUMBER: 4186Work Conducted By: M. KEANDATE: 11-18-03

DESCRIPTION OF ACTIVITIES ON SITE AND NOTES (cont)

While testing the ozone system I received a high concentration reading on my ECO OZONE SENSOR.

When the manual test opened solenoids #5 and #8 the ozone sensor was at 12.0 plus, the pressure also immediately dropped. I shut the system down. Monthly samples were taken from wells U-3 and U-6.

JOB NAME: ConocoPhillips Station #4186Work Conducted By: M. KeanJOB NUMBER: 4186DATE: 12-03-03**SITE VISITATION REPORT**Arrival Time: 0745

Departure Time: _____

WASTE AND DRUM INVENTORY

SOIL

CARBON

TOTAL OPEN TOP

WATER

EMPTY

TOTAL BUNG TOP

Estimated Water Volume

Other Waste:

HEALTH AND SAFETY ASSESSMENT**OZONE MONITORING NOTES**Hour Meter: 7153.15

System Pressure:

Wind Direction: NE

System Flow Rate:

Estimated Wind Speed: 3-5 mphEstimated Air Temp: 53°FOzone meter Brand: ECDOzone meter sensitivity range: 0-10Ozone Badge on: Yes No

Time Badge Put on:

Time Badge Take Off:

Circle Badge Color: White Tan BrownEstimate Temp within Ozone Panel or containment shed: 55°F

JOB NAME:

SITE ADDRESS: 1771 First St. LivermoreDATE: 12-03-03

JOB NUMBER:

0.004186MONITORED BY: M. Kean

WELL	Vapor Readings			Field Notes or Comments
	I.D.	Ozone (ppm)	Odors	
Compound and System Readings				
Outside Compound		0.02		Ambient
Inside Compound		0.02		
Inside Shed or Panel		0.02		
Secondary Containment		0.02		↓
Well Box Ozone Readings				
OZ-1		0.02		38.0
OZ-2		0.02		38.2
OZ-3		0.02		26.5
OZ-4		0.03		39.2
OZ-5		0.03		40.9
OZ-6		0.03		33.8
OZ-7		0.02		39.1
OZ-8		0.03		40.0
OZ-9		0.03		48.2
OZ-10		0.03		36.8

JOB NAME: ConocoPhillips Station #4186

JOB NUMBER: _____

Work Conducted By: M. Kean

DATE: _____

DESCRIPTION OF ACTIVITIES ON SITE AND NOTES (cont)

Located leaks in 2 different lines
The lines coming from solenoid #5 and Solenoid
#8 both had significant holes in them.
I repaired both lines and connected the
lines back to the solenoids.

I installed the new fuse to the
Rainbird controller.

I sampled U-3 and U-6 and
turned them into the lab.

The feet that holds the compressor
need to be changed out due to the
deterioration of the rubber from the
leaking ozone.

S E C O R

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

Quarterly Remedial Performance Summary

ConocoPhillips Station No. 4186

1771 First Street

Livermore, CA

SECOR Project No.: 77CP.60004.01.4186

SECOR-Sacramento

October 02, 2003

3017 Kilgore Road, Suite 100
Rancho Cordova, CA 95670

Attn.: Amy Draffan
Project: ConocoPhillips #4186
Site: 1771 First St., Livermore, CA

Attached is our report for your samples received on 09/19/2003 12:15

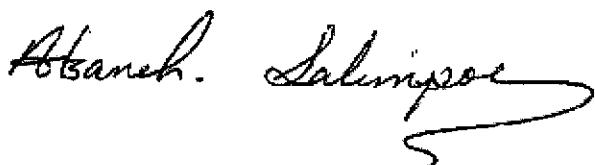
This report has been reviewed and approved for release. Reproduction of this report
is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after
11/03/2003 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

Sincerely,



Afsaneh Salimpour
Project Manager

Fuel Oxygenates 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: ConocoPhillips #4186

Received: 09/19/2003 12:15

Site: 1771 First St., Livermore, CA

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
U-3	09/19/2003 11:03	Water	1
U-6	09/19/2003 11:25	Water	2

Fuel Oxygenates 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: ConocoPhillips #4186

Received: 09/19/2003 12:15

Site: 1771 First St., Livermore, CA

Prep(s): 5030B Test(s): 8260B
Sample ID: U-3 Lab ID: 2003-09-0751 - 1
Sampled: 09/19/2003 11:03 Extracted: 9/30/2003 03:54
Matrix: Water QC Batch#: 2003/09/29-03.64
Analysis Flag: o (See Legend and Note Section.)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	14000	10000	ug/L	200.00	09/30/2003 03:54	
Methyl tert-butyl ether (MTBE)	23000	100	ug/L	200.00	09/30/2003 03:54	
Benzene	360	100	ug/L	200.00	09/30/2003 03:54	
Toluene	120	100	ug/L	200.00	09/30/2003 03:54	
Ethylbenzene	340	100	ug/L	200.00	09/30/2003 03:54	
Total xylenes	2400	200	ug/L	200.00	09/30/2003 03:54	
Surrogate(s)						
1,2-Dichloroethane-d4	96.8	76-114	%	200.00	09/30/2003 03:54	
Toluene-d8	99.2	88-110	%	200.00	09/30/2003 03:54	

Fuel Oxygenates 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: ConocoPhillips #4186

Received: 09/19/2003 12:15

Site: 1771 First St., Livermore, CA

Prep(s): 5030B Test(s): 8260B
Sample ID: U-6 Lab ID: 2003-09-0751 - 2
Sampled: 09/19/2003 11:25 Extracted: 9/25/2003 21:22
Matrix: Water QC Batch#: 2003/09/25-01-62
Analysis Flag: o (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	1100	250	ug/L	5.00	09/25/2003 21:22	
Methyl tert-butyl ether (MTBE)	22	2.5	ug/L	5.00	09/25/2003 21:22	
Benzene	8.6	2.5	ug/L	5.00	09/25/2003 21:22	
Toluene	ND	2.5	ug/L	5.00	09/25/2003 21:22	
Ethylbenzene	25	2.5	ug/L	5.00	09/25/2003 21:22	
Total xylenes	ND	5.0	ug/L	5.00	09/25/2003 21:22	
Surrogate(s)						
1,2-Dichloroethane-d4	96.6	76-114	%	5.00	09/25/2003 21:22	
Toluene-d8	100.4	88-110	%	5.00	09/25/2003 21:22	

Fuel Oxygenates 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: ConocoPhillips #4186

Received: 09/19/2003 12:15

Site: 1771 First St., Livermore, CA

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Method Blank

Water

QC Batch # 2003/09/25-01.62

MB: 2003/09/25-01.62-054

Date Extracted: 09/25/2003 10:54

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	09/25/2003 10:54	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	09/25/2003 10:54	
Benzene	ND	0.5	ug/L	09/25/2003 10:54	
Toluene	ND	0.5	ug/L	09/25/2003 10:54	
Ethylbenzene	ND	0.5	ug/L	09/25/2003 10:54	
Total xylenes	ND	1.0	ug/L	09/25/2003 10:54	
Surrogates(s)					
1,2-Dichloroethane-d4	87.4	76-114	%	09/25/2003 10:54	
Toluene-d8	101.5	88-110	%	09/25/2003 10:54	

Fuel Oxygenates 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: ConocoPhillips #4186

Received: 09/19/2003 12:15

Site: 1771 First St., Livermore, CA

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Method Blank

QC Batch # 2003/09/29-03.64

MB: 2003/09/29-03.64-038

Water

Date Extracted: 09/30/2003 00:38

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	09/30/2003 00:38	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	09/30/2003 00:38	
Benzene	ND	0.5	ug/L	09/30/2003 00:38	
Toluene	ND	0.5	ug/L	09/30/2003 00:38	
Ethylbenzene	ND	0.5	ug/L	09/30/2003 00:38	
Total xylenes	ND	1.0	ug/L	09/30/2003 00:38	
Surrogates(s)					
1,2-Dichloroethane-d4	83.5	76-114	%	09/30/2003 00:38	
Toluene-d8	101.8	88-110	%	09/30/2003 00:38	

Fuel Oxygenates by 8260B

SECOR-Sacramento

Attn.: Amy Drafan

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

Project: ConocoPhillips #4186

Received: 09/19/2003 12:15

Site: 1771 First St., Livermore, CA

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike

Water

QC Batch # 2003/09/25-01.62

LCS 2003/09/25-01.62-009

Extracted: 09/25/2003

Analyzed: 09/25/2003 10:09

LCSD 2003/09/25-01.62-032

Extracted: 09/25/2003

Analyzed: 09/25/2003 10:32

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	26.3	26.6	25.0	105.2	106.4	1.1	65-165	20		
Benzene	25.3	25.4	25.0	101.2	101.6	0.4	69-129	20		
Toluene	24.6	24.7	25.0	98.4	98.8	0.4	70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	464	452	500	92.8	90.4		76-114			
Toluene-d8	496	498	500	99.2	99.6		88-110			

Fuel Oxygenates 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: ConocoPhillips #4186

Received: 09/19/2003 12:15

Site: 1771 First St., Livermore, CA

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike**Water****QC Batch # 2003/09/29-03.64**

LCS 2003/09/29-03.64-054
LCSD 2003/09/29-03.64-016

Extracted: 09/29/2003
Extracted: 09/30/2003

Analyzed: 09/29/2003 23:54
Analyzed: 09/30/2003 00:16

Compound	Conc.	ug/L	Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	20.5	19.4	25.0	82.0	77.6	5.5	65-165	20		
Benzene	23.2	22.2	25.0	92.8	88.8	4.4	69-129	20		
Toluene	25.6	24.8	25.0	102.4	99.2	3.2	70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	392	392	500	78.4	78.4		76-114			
Toluene-d8	510	509	500	102.0	101.8		88-110			

Fuel Oxygenates 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: ConocoPhillips #4186

Received: 09/19/2003 12:15

Site: 1771 First St., Livermore, CA

Legend and Notes

Analysis Flag

o

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

**SEVERAL
TRONT** STL

STL San Francisco

Sample Receipt Checklist

Submission #: 2003- 09 - 0751

Checklist completed by: (initials) DSH Date: 09/22/03

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: 19.1 °C Yes No

Ice Present 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: HNO₃ HCl H₂SO₄ NaOH ZnOAc-Lot #(s) _____

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

Comments: <ATHS FROM SAMPLING: (1) voa rec'd broken for
"4-3"

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

Project Manager: (initials) _____ Date: / /03

Client contacted: Yes No

Summary of discussion:

Corrective Action (per PM/Client):

2003-09-0751

78899
CHAIN OF CUSTODY RECORD

STL Laboratory 1220 Quarry Lane, Pleasanton, CA 94556	Company Contact(s) for Invoice: Technical Services:																				

CONSULTANT: SECOR International	SITE ADDRESS: 1771 First St Livermore CA # 4186
ADDRESS: 3017 Kilgore Road	PROJECT CONTACT: AMY Draffen
CITY: Rancho Cordova, CA 95670	SAMPLER(S) (SIGNATURE) Maureen J Kean
TEL: 916-861-0400	CONSULTANT PROJECT NO.: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
FAX: 916-861-0430	DATE: 9-19-03
E-MAIL:	PAGE: 01 OF 01

TURNAROUND TIME (BUSINESS DAYS)	<input checked="" type="checkbox"/> 10 DAYS <input type="checkbox"/> 5 DAYS <input type="checkbox"/> 72 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 24 HR <input type="checkbox"/> <24 HR
LA-RWQCB REPORT FORMAT	<input type="checkbox"/> UST AGENCY:

MTBE CONFIRMATION: HIGHEST	HIGHEST per BORING	ALL
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SPECIAL INSTRUCTIONS OR NOTES: TEMPERATURE ON RECEIPT (C)	19.1
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Conoco-Phillips
DAN TRUZZOLINO

Field Sample Identification	SAMPLING		MAT- RIX	NO. OF CONT.	TPH - Gasoline (8015cm)	TPH - Diesel (8015cm)	BTEX / MTBE (8021B)	TPHg/BTEX / MTBE + [REDACTED] (8220B)	VOCs Full List + Oxygenates (8220B)	MTBE Confirmation, See Note	Ethanol, Methanol (8015B)	Metals (Specify) _____	TRPH (448.1)	Methane (R8K-176)	Ferrous Iron +2	Sulfate, Nitrate (200.0)	Vapor VOCs Full List (TO-15)	Vapor TPH (ASTM 3416B)	Vapor Fixed Gases (ASTM D1946)	Test for Disposal (4B-1)	Other:	Field PID Reading or Laboratory Notes
	DATE	TIME																				
U-3	9-17-03	1103	W	3		X																
U-6	9-17-03	1225	W	3		X																

Relinquished by: (Signature) Maureen J Kean	Received by: (Signature) Matt Miller STL SF	Date: 9-19-03	Time: 1215
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

SECOR-Sacramento

November 03, 2003

3017 Kilgore Road, Suite 100

Rancho Cordova, CA 95670

Attn.: Amy Draffan

Project: Conoco Phillips# 4186

Site: 1771 1st St. Livermore

Attached is our report for your samples received on 10/16/2003 14:50

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 11/30/2003 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

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: Conoco Phillips# 4186

Received: 10/16/2003 14:50

Site: 1771 1st St. Livermore

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
U-6	10/16/2003 13:40	Water	1
U-3	10/16/2003 14:00	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: Conoco Phillips# 4186

Received: 10/16/2003 14:50

Site: 1771 1st St. Livermore

Prep(s):	5030B	Test(s):	8260FAB
Sample ID:	U-6	Lab ID:	2003-10-0635 - 1
Sampled:	10/16/2003 13:40	Extracted:	10/27/2003 14:22
Matrix:	Water	QC Batch#:	2003/10/27-1A:68
Analysis Flag: o (See Legend and Note Section)			

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	3700	250	ug/L	5.00	10/27/2003 14:22	
Benzene	16	2.5	ug/L	5.00	10/27/2003 14:22	
Toluene	ND	2.5	ug/L	5.00	10/27/2003 14:22	
Ethylbenzene	90	2.5	ug/L	5.00	10/27/2003 14:22	
Total xylenes	29	5.0	ug/L	5.00	10/27/2003 14:22	
Methyl tert-butyl ether (MTBE)	14	2.5	ug/L	5.00	10/27/2003 14:22	
Surrogate(s)						
1,2-Dichloroethane-d4	105.7	76-114	%	5.00	10/27/2003 14:22	
Toluene-d8	98.7	88-110	%	5.00	10/27/2003 14:22	

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: Conoco Phillips# 4186

Received: 10/16/2003 14:50

Site: 1771 1st St. Livermore

Prep(s): 5030B

Test(s): 8260FAB

Sample ID: U-3

Lab ID: 2003-10-0635 - 2

Sampled: 10/16/2003 14:00

Extracted: 10/27/2003 14:43

Matrix: Water

QC Batch#: 2003/10/27-1A.68

Analysis Flag: o (See Legend and Note Section.)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	20000	5000	ug/L	100.00	10/27/2003 14:43	
Benzene	300	50	ug/L	100.00	10/27/2003 14:43	
Toluene	93	50	ug/L	100.00	10/27/2003 14:43	
Ethylbenzene	250	50	ug/L	100.00	10/27/2003 14:43	
Total xylenes	1800	100	ug/L	100.00	10/27/2003 14:43	
Methyl tert-butyl ether (MTBE)	17000	50	ug/L	100.00	10/27/2003 14:43	
Surrogate(s)						
1,2-Dichloroethane-d4	103.1	76-114	%	100.00	10/27/2003 14:43	
Toluene-d8	100.8	88-110	%	100.00	10/27/2003 14:43	

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: Conoco Phillips# 4186

Received: 10/16/2003 14:50

Site: 1771 1st St. Livermore

Batch QC Report

Prep(s): 5030B

Test(s): 8260FAB

Method Blank

QC Batch # 2003/10/27-1A.68

MB: 2003/10/27-1A.68-005

Date Extracted: 10/27/2003 10:05

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	10/27/2003 10:05	
Benzene	ND	0.5	ug/L	10/27/2003 10:05	
Toluene	ND	0.5	ug/L	10/27/2003 10:05	
Ethylbenzene	ND	0.5	ug/L	10/27/2003 10:05	
Total xylenes	ND	1.0	ug/L	10/27/2003 10:05	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	10/27/2003 10:05	
Surrogates(s)					
1,2-Dichloroethane-d4	97.4	76-114	%	10/27/2003 10:05	
Toluene-d8	103.8	88-110	%	10/27/2003 10:05	

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: Conoco Phillips# 4186

Received: 10/16/2003 14:50

Site: 1771 1st St. Livermore

Batch QC Report

Prep(s): 5030B

Test(s): 8260FAB

Laboratory Control Spike

Water

QC Batch # 2003/10/27-1A.68

LCS 2003/10/27-1A.68-022

Extracted: 10/27/2003

Analyzed: 10/27/2003 09:22

LCSD 2003/10/27-1A.68-043

Extracted: 10/27/2003

Analyzed: 10/27/2003 09:43

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		Rec.	RPD	LCS	LCSD
Benzene	20.6	20.5	25	82.4	82.0	0.5	69-129	20		
Toluene	22.5	22.3	25	90.0	89.2	0.9	70-130	20		
Methyl tert-butyl ether (MTBE)	19.0	18.1	25	76.0	72.4	4.9	65-165	20		
<i>Surrogates(s)</i>										
1,2-Dichloroethane-d4	483	467	500	96.6	93.4		76-114			
Toluene-d8	508	508	500	101.6	101.6		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: Conoco Phillips# 4186

Received: 10/16/2003 14:50

Site: 1771 1st St. Livermore

Legend and Notes

Analysis Flag

o

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

78533
2003-10-0635

CHAIN OF CUSTODY RECORD

STL Laboratory 1220 Quarry Lane, Pleasanton, CA 94556		Company Contact(s) for invoice: Technical Services										DATE: 10-16-03																							
CONSULTANT: SECOR International		ADDRESS: 3017 Kilgore Road				SITE ADDRESS: 1771 25th St. Livermore						PAGE: 01 OF 01																							
CITY: Rancho Cordova, CA 95670		TEL: 916-361-0400 FAX: 916-361-0430 EMAIL:				PROJECT CONTACT: Amy Draffan						CONSULTANT PROJECT NO.: #4186																							
TURNAROUND TIME (BUSINESS DAYS)		<input checked="" type="checkbox"/> 10 DAYS <input type="checkbox"/> 5 DAYS <input type="checkbox"/> 72 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 24 HR <input type="checkbox"/> <24 HR				SAMPLER(S) SIGNATURE: Maureen & Kean						PAST USE ONLY																							
LA-RWQCB REPORT FORMAT		UST AGENCY:				REQUESTED ANALYSIS																													
MTBE CONFIRMATION: HIGHEST		HIGHEST per BORING				VOCs Full List + Oxygenates (E650B)																													
SPECIAL INSTRUCTIONS OR NOTES:		TEMPERATURE ON RECEIPT (C)				MTBE Confirmation, See Note																													
Dan Truzzolino						Ethanol, Methanol (E615B)																													
Conoco - Phillips						Metals (Specify)																													
Field Sample Identification		SAMPLING		MAT- RIX	NO. OF CONT.	TPH - Gasoline (E615M)		TPH - Diesel (E615M)		BTX / MTBE (E621B)		TPH/BTEX / MTBE (E626B)		TRPH (418.0)		Methane (RSK-175)		Ferrous Iron +2		Sulfate, Nitrate (S10.0)		Vapor VOCs / BTX / MTBE (TO-15)		Vapor VOCs: Full List (TO-15)		Vapor TPH (ASTM D3418n)		Vapor Fixed Gases (ASTM D1949)		Test for Disposal (4B-1)		Other:		Field PID Reading or Laboratory Notes	
U-6		10-16-03 1340						X		X		X		X		X		X		X		X		X		X		X		X		X		X	
U-3		10-16-03 1400																																	
Relinquished by: (Signature) Maureen & Kean		Received by: (Signature) Denise Harrington / STL-SF		Date: 10-16-03		Time: 1450																													
Relinquished by: (Signature)		Received by: (Signature)		Date:		Time:																													
Relinquished by: (Signature)		Received by: (Signature)		Date:		Time:																													

SECOR-Sacramento

November 26, 2003

3017 Kilgore Road, Suite 100

Rancho Cordova, CA 95670

Attn.: Amy Draffan

Project#: 4186

Site: 1771 First St., Livermore

Attached is our report for your samples received on 11/18/2003 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 01/02/2004 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

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: 4186

Received: 11/18/2003 13:00

Site: 1771 First St., Livermore

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
U-3	11/18/2003 11:40	Water	1
U-6	11/18/2003 12:00	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: 4186

Received: 11/18/2003 13:00

Site: 1771 First St., Livermore

Prep(s):	5030B	Test(s):	8260B
Sample ID:	U-3	Lab ID:	2003-11-0671 - 1
Sampled:	11/18/2003 11:40	Extracted:	11/25/2003 18:56
Matrix:	Water	QC Batch#:	2003/11/25-02.62

Analysis Flag: o (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	42000	13000	ug/L	250.00	11/25/2003 18:56	
Benzene	450	130	ug/L	250.00	11/25/2003 18:56	
Toluene	140	130	ug/L	250.00	11/25/2003 18:56	
Ethylbenzene	1500	130	ug/L	250.00	11/25/2003 18:56	
Total xylenes	5100	250	ug/L	250.00	11/25/2003 18:56	
Methyl tert-butyl ether (MTBE)	17000	130	ug/L	250.00	11/25/2003 18:56	
Surrogate(s)						
1,2-Dichloroethane-d4	101.3	76	%	250.00	11/25/2003 18:56	
Toluene-d8	107.0	88	%	250.00	11/25/2003 18:56	

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: 4186

Received: 11/18/2003 13:00

Site: 1771 First St., Livermore

Prep(s):	5030B	Test(s):	8260B
Sample ID:	U-6	Lab ID:	2003-11-0671 - 2
Sampled:	11/18/2003 12:00	Extracted:	11/25/2003 23:10
Matrix:	Water	QC Batch#:	2003/11/25-1C.64

Analysis Flag: o (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	5100	250	ug/L	5.00	11/25/2003 23:10	
Benzene	34	2.5	ug/L	5.00	11/25/2003 23:10	
Toluene	2.8	2.5	ug/L	5.00	11/25/2003 23:10	
Ethylbenzene	190	2.5	ug/L	5.00	11/25/2003 23:10	
Total xylenes	150	5.0	ug/L	5.00	11/25/2003 23:10	
Methyl tert-butyl ether (MTBE)	26	2.5	ug/L	5.00	11/25/2003 23:10	
Surrogate(s)						
1,2-Dichloroethane-d4	104.8	76	%	5.00	11/25/2003 23:10	
Toluene-d8	92.6	88	%	5.00	11/25/2003 23:10	

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: 4186

Received: 11/18/2003 13:00

Site: 1771 First St., Livermore

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Method Blank

Water

QC Batch # 2003/11/25-02.62

MB: 2003/11/25-02.62-033

Date Extracted: 11/25/2003 18:33

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	11/25/2003 18:33	
Benzene	ND	0.5	ug/L	11/25/2003 18:33	
Toluene	ND	0.5	ug/L	11/25/2003 18:33	
Ethylbenzene	ND	0.5	ug/L	11/25/2003 18:33	
Total xylenes	ND	1.0	ug/L	11/25/2003 18:33	
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	11/25/2003 18:33	
Surrogates(s)					
1,2-Dichloroethane-d4	94.8	76-114	%	11/25/2003 18:33	
Toluene-d8	95.5	88-110	%	11/25/2003 18:33	

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: 4186

Received: 11/18/2003 13:00

Site: 1771 First St., Livermore

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Method Blank

Water

QC Batch # 2003/11/25-1C.64

MB: 2003/11/25-1C.64-009

Date Extracted: 11/25/2003 20:08

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	11/25/2003 20:09	
Benzene	ND	0.5	ug/L	11/25/2003 20:09	
Toluene	ND	0.5	ug/L	11/25/2003 20:09	
Ethylbenzene	ND	0.5	ug/L	11/25/2003 20:09	
Total xylenes	ND	1.0	ug/L	11/25/2003 20:09	
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	11/25/2003 20:09	
Surrogates(s)					
1,2-Dichloroethane-d4	96.1	76-114	%	11/25/2003 20:09	
Toluene-d8	91.0	88-110	%	11/25/2003 20:09	

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: 4186

Received: 11/18/2003 13:00

Site: 1771 First St., Livermore

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike

Water

QC Batch # 2003/11/25-02.62

LCS 2003/11/25-02.62-049

Extracted: 11/25/2003

Analyzed: 11/25/2003 17:49

LCSD 2003/11/25-02.62-011

Extracted: 11/25/2003

Analyzed: 11/25/2003 18:11

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		Rec.	RPD	LCS	LCSD
Benzene	27.3	23.7	25.0	109.2	94.8	14.1	69-129	20		
Toluene	28.5	24.5	25.0	114.0	98.0	15.1	70-130	20		
Methyl tert-butyl ether (MTBE)	25.5	21.4	25.0	102.0	85.6	17.5	65-165	20		
Surrogates(s)										
1,2-Dichloroethane-d4	487	468	500	97.4	93.6		76-114			
Toluene-d8	526	484	500	105.2	96.8		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: 4186

Received: 11/18/2003 13:00

Site: 1771 First St., Livermore

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike

Water

QC Batch # 2003/11/25-1C.64

LCS 2003/11/25-1C.64-058

Extracted: 11/25/2003

Analyzed: 11/25/2003 19:25

LCSD 2003/11/25-1C.64-047

Extracted: 11/25/2003

Analyzed: 11/25/2003 19:47

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		Rec.	RPD	LCS	LCSD
Benzene	23.1	23.7	25	92.4	94.8	2.6	69-129	20		
Toluene	23.0	24.2	25	92.0	96.8	5.1	70-130	20		
Methyl tert-butyl ether (MTBE)	22.8	24.4	25	91.2	97.6	6.8	65-165	20		
<i>Surrogates(s)</i>										
1,2-Dichloroethane-d4	472	481	500	94.4	96.2		76-114			
Toluene-d8	463	463	500	92.6	92.6		88-110			

SEVERN
TRENT

STL

Submission #: 2003-11-0671

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: 4186

Received: 11/18/2003 13:00

Site: 1771 First St., Livermore

Legend and Notes

Analysis Flag

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

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

11/26/2003 16:08

~~SEVERN~~ **STL**

STL San Francisco

Sample Receipt Checklist

Submission #: 2003- 11 - 0671

Checklist completed by: (initials) AK Date: 11, 19 /03

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: 11 °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: HNO₃ HCl H₂SO₄ NaOH ZnOAc - Lot # (s) _____

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

Comments: <11 hrs from Sampling

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

Project Manager: (initials) _____ Date: _____ / _____ /03

Client contacted: Yes No

Summary of discussion:

Corrective Action (per PM/Client):

2003-11-06

00360

ConocoPhillips Chain Of Custody Record

STL-San Francisco 1220 Quarry Lane Pleasanton, CA 94566 (925) 484-1919; (925) 484-1098 fax		ConocoPhillips Site Manager: INVOICE REMITTANCE ADDRESS: CONOCOPHILLIPS Attn: Dee Hutchinson 3611 South Harbor, Suite 200 Santa Ana, CA 92704		DATE: <u>11-18-03</u> PAGE: <u>01</u> of <u>01</u>																																														
SAMPLER COMPANY: <u>SECOR</u>		WHEREAS: <u>3017 Kibore Rd, Rancho Cordova</u> PROJECT CONTACT (Name/Phone/Fax/E-mail): <u>Amy Draffan</u>		CONOCOPHILLIPS SITE NUMBER: <u>4186</u> SITE ADDRESS (City/State/City): <u>1771 First St. Livermore</u> EOF DELIVERABLE TO (IP or Equipment): <u></u> PHONE NO.: <u></u> E-MAIL: <u></u>																																														
TELEPHONE: <u>916-816-0400</u> SAMPLER NAME(S) / TYPE: <u>Maureen Kean</u>		CONSULTANT PROJECT NUMBER: <u></u>		REQUESTED ANALYSES																																														
TURNAROUND TIME (CALENDAR DAYS): <input checked="" type="checkbox"/> 1 DAY <input type="checkbox"/> 7 DAYS <input type="checkbox"/> 24 HOURS <input type="checkbox"/> 48 HOURS <input type="checkbox"/> 24 HOURS <input type="checkbox"/> LESS THAN 24 HOURS		SPECIAL INSTRUCTIONS OR NOTES: <input type="checkbox"/> IF EDD IS NEEDED		FIELD NOTES: <u>Contained Pressure/Gas of PDI Readings</u> <u>Laboratory Notes</u> <u>11.0</u>																																														
<small>* Field Point name only required if different from Sample ID</small>		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Sample Identification / Field Point Name*</th> <th style="text-align: left;">SAMPLING DATE / TIME</th> <th style="text-align: left;">MATRIX</th> <th style="text-align: left;">NO. OF CONT.</th> <th style="text-align: left;">8015M - TPHd Extractable</th> <th style="text-align: left;">8229B - TPHg / TTEX/ME</th> <th style="text-align: left;">8229B - TPHg / TTEX/S</th> <th style="text-align: left;">Gaseous</th> <th style="text-align: left;">8229B - TPHg / STEX/Y/S</th> <th style="text-align: left;">Oxygenated + methanol (8015M)</th> <th style="text-align: left;">8229B - Full Scan VOCs (does not include oxygenates)</th> <th style="text-align: left;">8270C - Semi-Volatiles</th> <th style="text-align: left;">8015N / 8021B - TPHg/STEX/ME</th> <th style="text-align: left;">Lead</th> <th style="text-align: left;">8270C - Total OX/TC CircP</th> </tr> </thead> <tbody> <tr> <td><u>U-3</u></td> <td><u>11/18/03 140</u></td> <td><u>W</u></td> <td><u>3</u></td> <td><u>X</u></td> <td></td> </tr> <tr> <td><u>U-6</u></td> <td><u>11/18/03 1200</u></td> <td><u>W</u></td> <td><u>3</u></td> <td><u>X</u></td> <td></td> </tr> </tbody> </table>		Sample Identification / Field Point Name*	SAMPLING DATE / TIME	MATRIX	NO. OF CONT.	8015M - TPHd Extractable	8229B - TPHg / TTEX/ME	8229B - TPHg / TTEX/S	Gaseous	8229B - TPHg / STEX/Y/S	Oxygenated + methanol (8015M)	8229B - Full Scan VOCs (does not include oxygenates)	8270C - Semi-Volatiles	8015N / 8021B - TPHg/STEX/ME	Lead	8270C - Total OX/TC CircP	<u>U-3</u>	<u>11/18/03 140</u>	<u>W</u>	<u>3</u>	<u>X</u>											<u>U-6</u>	<u>11/18/03 1200</u>	<u>W</u>	<u>3</u>	<u>X</u>											TEMPERATURE ON RECEIPT °C: <u>11.0</u>	
Sample Identification / Field Point Name*	SAMPLING DATE / TIME	MATRIX	NO. OF CONT.	8015M - TPHd Extractable	8229B - TPHg / TTEX/ME	8229B - TPHg / TTEX/S	Gaseous	8229B - TPHg / STEX/Y/S	Oxygenated + methanol (8015M)	8229B - Full Scan VOCs (does not include oxygenates)	8270C - Semi-Volatiles	8015N / 8021B - TPHg/STEX/ME	Lead	8270C - Total OX/TC CircP																																				
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Authenticating by (Signature): <u>Maureen Kean</u>		Received by (Signature): <u>J. Wolf Miller</u>		Date: <u>11-18-03</u> Time: <u>1300</u> Date: _____ Time: _____ Date: _____ Time: _____																																														
Authenticating by (Signature): <u> </u>		Received by (Signature): <u> </u>		Date: _____ Time: _____ Date: _____ Time: _____ Date: _____ Time: _____																																														
Authenticating by (Signature): <u> </u>		Received by (Signature): <u> </u>		Date: _____ Time: _____ Date: _____ Time: _____ Date: _____ Time: _____																																														

SECOR-Sacramento

December 16, 2003

3017 Kilgore Road, Suite 100
Rancho Cordova, CA 95670

Attn.: Amy Draffan
Project: Conoco Phillips #4186
Site: 1771 First St., Livermore

Attached is our report for your samples received on 12/03/2003 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
01/17/2004 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

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: Conoco Phillips #4186

Received: 12/03/2003 13:00

Site: 1771 First St., Livermore

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
U-3	12/03/2003 11:15	Water	1
U-6	12/03/2003 11:30	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: Conoco Phillips #4186

Received: 12/03/2003 13:00

Site: 1771 First St., Livermore

Prep(s): 5030B

Test(s): 8260B

Sample ID: U-3

Lab ID: 2003-12-0084 - 1

Sampled: 12/03/2003 11:15

Extracted: 12/12/2003 18:50

Matrix: Water

QC Batch#: 2003/12/12-2A.64

Analysis Flag: o (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	37000	10000	ug/L	200.00	12/12/2003 18:50	
Benzene	460	100	ug/L	200.00	12/12/2003 18:50	
Toluene	100	100	ug/L	200.00	12/12/2003 18:50	
Ethylbenzene	1500	100	ug/L	200.00	12/12/2003 18:50	
Total xylenes	5800	200	ug/L	200.00	12/12/2003 18:50	
Methyl tert-butyl ether (MTBE)	21000	400	ug/L	200.00	12/12/2003 18:50	
Surrogate(s)						
1,2-Dichloroethane-d4	101.3	76-114	%	200.00	12/12/2003 18:50	
Toluene-d8	96.9	88-110	%	200.00	12/12/2003 18:50	

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: Conoco Phillips #4186

Received: 12/03/2003 13:00

Site: 1771 First St., Livermore

Prep(s): 5030B

Test(s): 8260B

Sample ID: U-6

Lab ID: 2003-12-0084 - 2

Sampled: 12/03/2003 11:30

Extracted: 12/12/2003 19:12

Matrix: Water

QC Batch#: 2003/12/12-2A-64

Analysis Flag: o (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	3500	500	ug/L	10.00	12/12/2003 19:12	
Benzene	ND	5.0	ug/L	10.00	12/12/2003 19:12	
Toluene	ND	5.0	ug/L	10.00	12/12/2003 19:12	
Ethylbenzene	8.6	5.0	ug/L	10.00	12/12/2003 19:12	
Total xylenes	ND	10	ug/L	10.00	12/12/2003 19:12	
Methyl tert-butyl ether (MTBE)	35	20	ug/L	10.00	12/12/2003 19:12	
Surrogate(s)						
1,2-Dichloroethane-d4	98.6	76-114	%	10.00	12/12/2003 19:12	
Toluene-d8	95.7	88-110	%	10.00	12/12/2003 19:12	

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: Conoco Phillips #4186

Received: 12/03/2003 13:00

Site: 1771 First St., Livermore

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Method Blank**Water****QC Batch # 2003/12/12-2A.64**

MB: 2003/12/12-2A.64-022

Date Extracted: 12/12/2003 18:22

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	12/12/2003 18:22	
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	12/12/2003 18:22	
Benzene	ND	0.5	ug/L	12/12/2003 18:22	
Toluene	ND	0.5	ug/L	12/12/2003 18:22	
Ethylbenzene	ND	0.5	ug/L	12/12/2003 18:22	
Total xylenes	ND	1.0	ug/L	12/12/2003 18:22	
Surrogates(s)					
1,2-Dichloroethane-d4	95.8	76-114	%	12/12/2003 18:22	
Toluene-d8	95.0	88-110	%	12/12/2003 18:22	

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: Conoco Phillips #4186

Received: 12/03/2003 13:00

Site: 1771 First St., Livermore

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike

Water

QC Batch # 2003/12/12-2A.64

LCS 2003/12/12-2A.64-038
LCSD 2003/12/12-2A.64-000

Extracted: 12/12/2003
Extracted: 12/12/2003

Analyzed: 12/12/2003 17:38
Analyzed: 12/12/2003 18:00

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD %	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	22.3	22.8	25	89.2	91.2	2.2	65-165	20		
Benzene	22.9	22.7	25	91.6	90.8	0.9	69-129	20		
Toluene	23.5	24.1	25	94.0	96.4	2.5	70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	456	470	500	91.2	94.0		76-114			
Toluene-d8	465	480	500	93.0	96.0		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: Conoco Phillips #4186

Received: 12/03/2003 13:00

Site: 1771 First St., Livermore

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 #:2003- 12 - 0084

Checklist completed by: (initials) NC Date: 12/03/03

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: 8.0^{\circ}\text{C} Yes No _____

Ice Present 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: HNO₃ HCl H₂SO₄ NaOH ZnOAc -Lot #(s) _____

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

Comments: Less than 4 hours of sampling.

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

Project Manager: (initials) _____ Date: _____ / _____ /03

Client contacted: Yes No

Summary of discussion:

Corrective Action (per PM/Client):

STL-San Francisco
1220 Quarry Lane
Pleasanton, CA 94566
(925) 484-1919 (925) 484-1920

2003-12-0084 Sonja Phillips Chain Of Custody Record

80372