3R - 087

QUARTERLY REPORTS

09/10/2008

TETRA TECH, INC.

6121 Indian School Rd. NE Suite 200
Albuquerque, NM 87110
(505) 237-8440

November 14, 2008

Mr. Glen von Gonten
State of New Mexico Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

RE: (1) ConocoPhillips Federal #15 2008 Quarterly Report
Farmington, New Mexico
(2) ConocoPhillips B Com #1E 2008 Quarterly Report
Farmington, New Mexico

Dear Mr. von Gonten:

Enclosed please find a copy of the above-referenced documents as compiled by Tetra Tech, Inc. for these Farmington area ConocoPhillips sites. We are currently working to incorporate the additional elements we discussed during our April 2, 2008 meeting at your office into the next set of reports.

Please do not hesitate to contact me at (505) 237-8440 if you have any questions or require additional information.

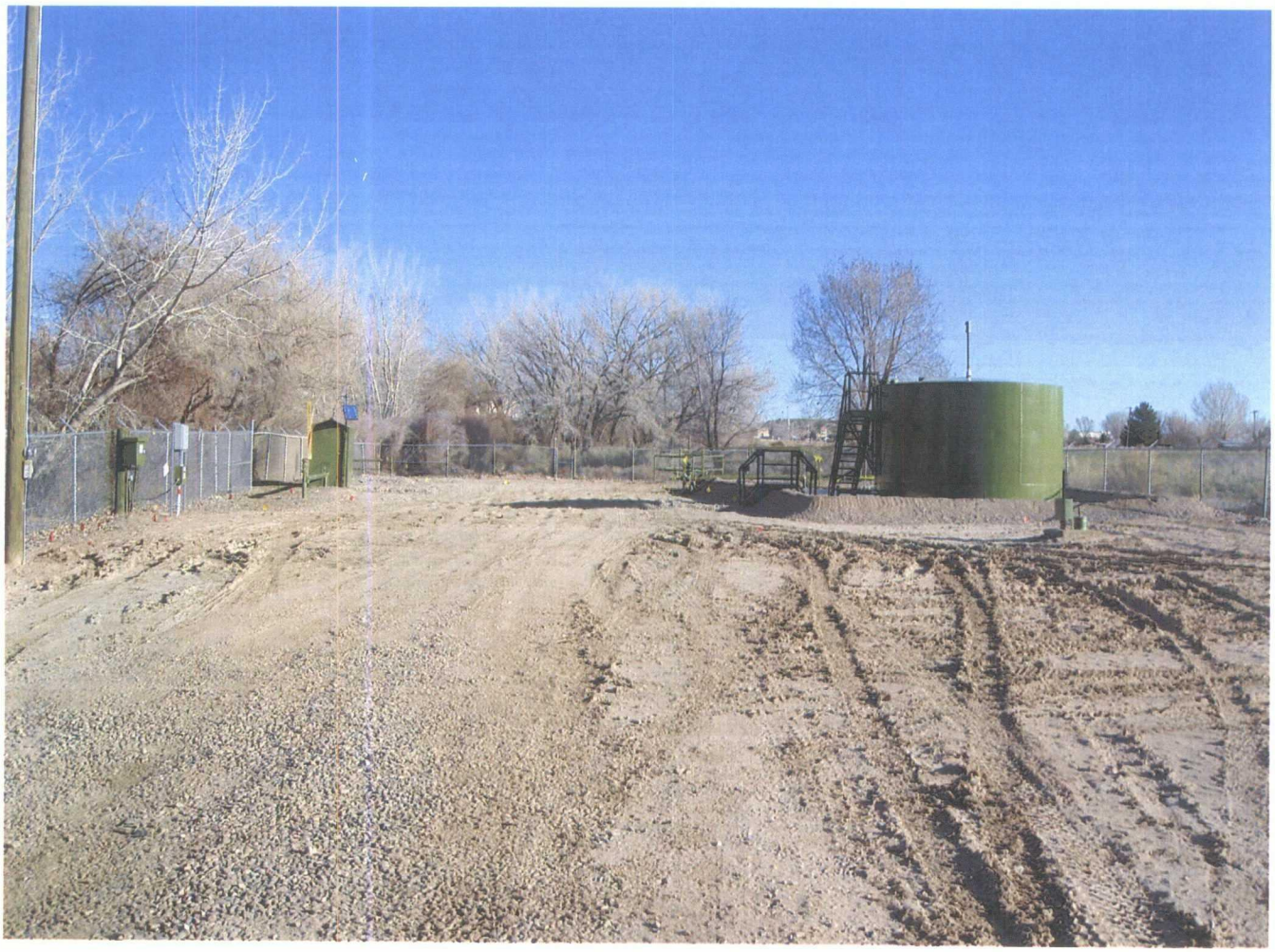
Sincerely,

Kelly E. Blanchard

Kelly E. Blanchard
Project Manager/Geologist

Enclosures (2)

QUARTERLY GROUNDWATER MONITORING REPORT
JULY 2008 SAMPLING EVENT
CONOCOPHILLIPS
FEDERAL #15
FARMINGTON, NM
OCD #3R087



ConocoPhillips

TETRA TECH, INC.

September 2008

QUARTERLY GROUNDWATER MONITORING REPORT JULY 2008 SAMPLING EVENT

CONOCOPHILLIPS FEDERAL #15 FARMINGTON, NEW MEXICO

OCD # 3R087

Prepared for:

ConocoPhillips

420 South Keeler Avenue
Bartlesville, OK 74004

Prepared by:

TETRA TECH, INC.

6121 Indian School Rd. NE Suite 200
Albuquerque, NM 87110
Tetra Tech Project No. 8690066.100

September 10, 2008

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QUARTERLY GROUNDWATER MONITORING REPORT CONOCOPHILLIPS FEDERAL #15, FARMINGTON, NEW MEXICO

1.0 INTRODUCTION

This report presents the results of quarterly groundwater monitoring completed by Tetra Tech, Inc. (Tetra Tech) on July 21, 2008, at the ConocoPhillips Federal #15 Site in Farmington, New Mexico. This event represents the third consecutive quarter of groundwater sampling at the site.

The site is located on the north side of Gila Street. The closest cross street is Main Street, located approximately 0.5 miles to the west of the site. The site consists of gas production well and associated equipment and installations. The location and general features of the Federal #15 site are shown on Figures 1 and 2, respectively.

1.1 Site History

The history of the ConocoPhillips Federal #15 Site is outlined on Table 1 and discussed in more detail in the following paragraphs.

On October 23, 2004, a release was discovered at the site. It was estimated that up to 15 barrels of condensate were unaccounted for. Approximately 1,500 cubic yards of affected soil were excavated and replaced with clean fill during the week of October 25, 2004.

Following soil remediation activities, four, 2-inch PVC groundwater monitoring wells (MW-1 through MW-4) were installed on November 16 and 17, 2004 by Biosphere Environmental Sciences and Technologies, LLC to depths of approximately 20 feet below ground surface (bgs). An additional, downgradient monitoring well (MW-5) was installed to a depth of approximately 17.5 feet bgs on the property south of the site on October 19, 2005 by Spectrum Drilling under the supervision of Tetra Tech.

Monitor wells MW-1 through MW-4 were initially sampled on January 18, 2005 and again on October 18 and 19, 2005. Monitor well MW-5 was initially sampled on October 19, 2005

Beginning in July 2005, Tetra Tech conducted quarterly groundwater removal events at monitor well MW-2 using a vacuum truck. A total of 4343 gallons have been pumped from this well between July 2005 and January 2008. The pumped water was disposed of in the onsite waste water tank (Figure 2). Individual quarterly groundwater removal events are listed on Table 1.

Tetra Tech conducted annual groundwater sampling of monitor wells MW-1 through MW-5 in November of 2006 and 2007. The details of each sampling event are summarized in the 2006 and 2007 Annual Groundwater Monitoring and Site Activities Reports, dated January 2, 2007 and January 30, 2008, respectively.

The most current sampling event, conducted on July 21, 2008, marks the second quarterly groundwater monitoring at the Federal #15 site.

2.0 METHODOLOGY AND RESULTS

The following subsections describe the groundwater monitoring methodology and sampling analytical results.

2.1 Groundwater Monitoring Methodology

Groundwater Elevation Measurements

On July 21, 2008, groundwater elevation measurements were recorded in monitor wells MW-1, MW-2, MW-3, MW-4, and MW-5. Table 2 presents the monitor well specifications and groundwater level data. A groundwater elevation contour map is presented on Figure 3 that illustrates groundwater at the site flows to the south south-west toward the Animas River, which is located approximately 1 mile from the site.

Groundwater sampling

Monitor wells MW-1, MW-2, MW-3, MW-4, and MW-5 were sampled during this event to initiate the second round of quarterly groundwater monitoring at the site. Approximately 6 gallons of water, or three well volumes, were purged from each monitoring well before sampling was performed. The purged water was disposed of in the waste water tank located on site (Figure 2). A 1.5-inch dedicated, clear, poly-vinyl, disposable bailer was used in each well to purge and collect groundwater samples. The samples were placed in laboratory prepared bottles, packed on ice, and shipped with chain of custody documentation to Southern Petroleum Laboratory located in Houston, Texas. The samples were analyzed for presence of benzene, toluene, ethyl-benzene, and xylenes (BTEX) by Environmental Protection Agency (EPA) Method 8260B. Samples were also analyzed for semivolatile organics by EPA Method 8270C and chloride by EPA Method 300.0.

2.2 Groundwater Sampling Analytical Results

The July 2008 analysis of the collected groundwater samples indicates that all contaminants of concern are below the NMWQCC standards. Historical laboratory analytical data, including the July 2008 data, are summarized on Table 3. The field groundwater sampling forms are presented in Appendix A and the laboratory analytical report is presented in Appendix B.

3.0 CONCLUSIONS

Tetra Tech has conducted quarterly pumping events in monitor well MW-2 since July 2005. The concentrations of BTEX measured in this well have decreased steadily from October 2005 to July 2008 and are summarized below.

- Benzene concentrations decreased from 1300 µg/L to below the laboratory detection limit.
- Toluene concentrations decreased from 3300 µg/L (above the NMWQCC standard of 750 µg/L) to less than the laboratory reporting limit (5 µg/L).
- Ethylbenzene concentrations decreased from 380 µg/L to 13 µg/L (below the NMWQCC standard of 750 µg/L).

- Xylene concentrations decreased from 3500 µg/L (above the NMWQCC standard of 620 µg/L) to 27 µg/L.

The decrease in BTEX concentrations indicates that the pumping events have been effective. Tetra Tech will discontinue the pumping of monitor well MW-2 and continue monitoring all wells quarterly in order to move toward closure of the site.

FIGURES

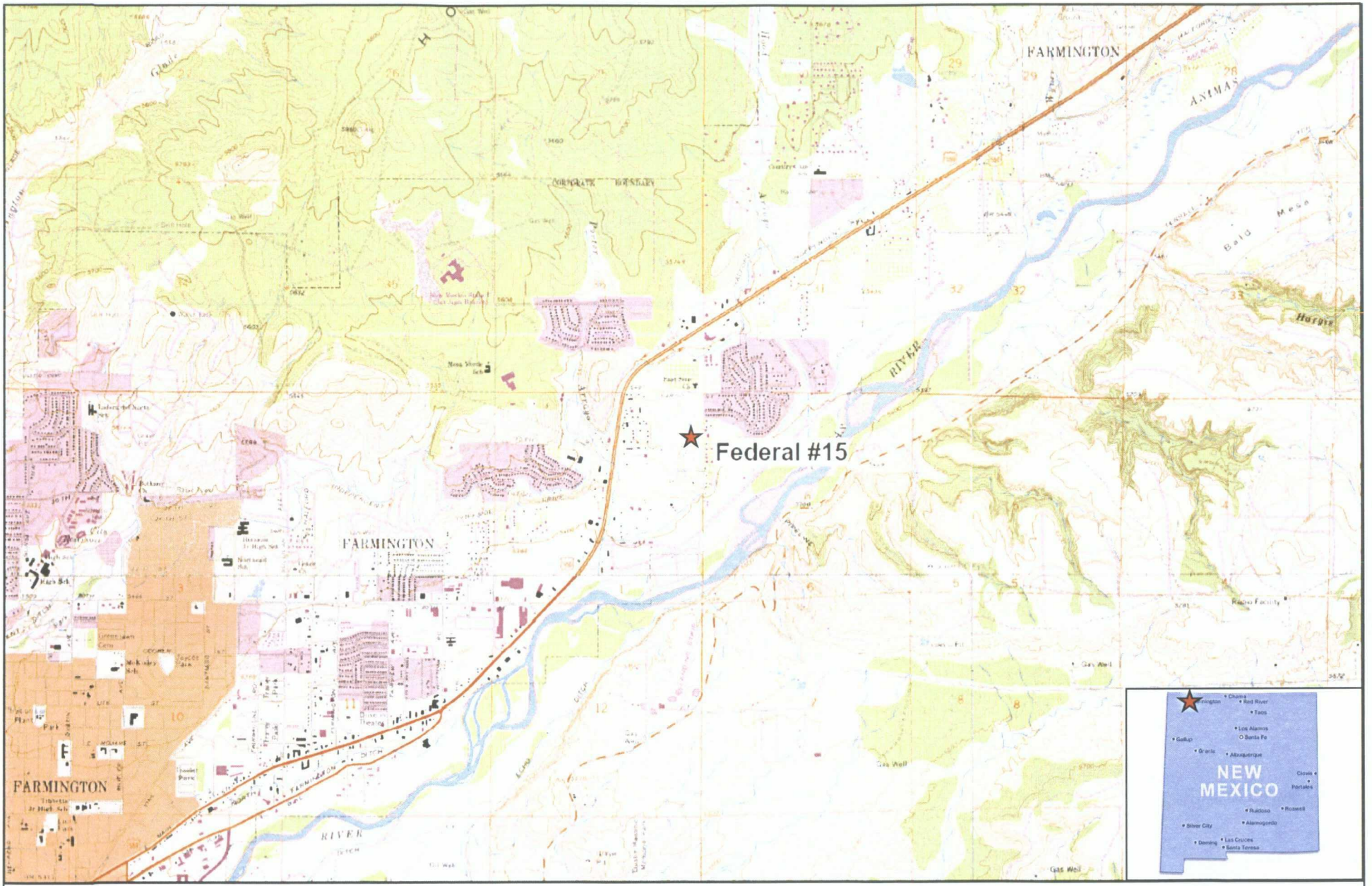

Figure 1. Site Location Map
ConocoPhillips
Federal #15
Farmington, New Mexico 87401

TETRA TECH, INC.

=Approximate ConocoPhillips Federal #15 Site Location

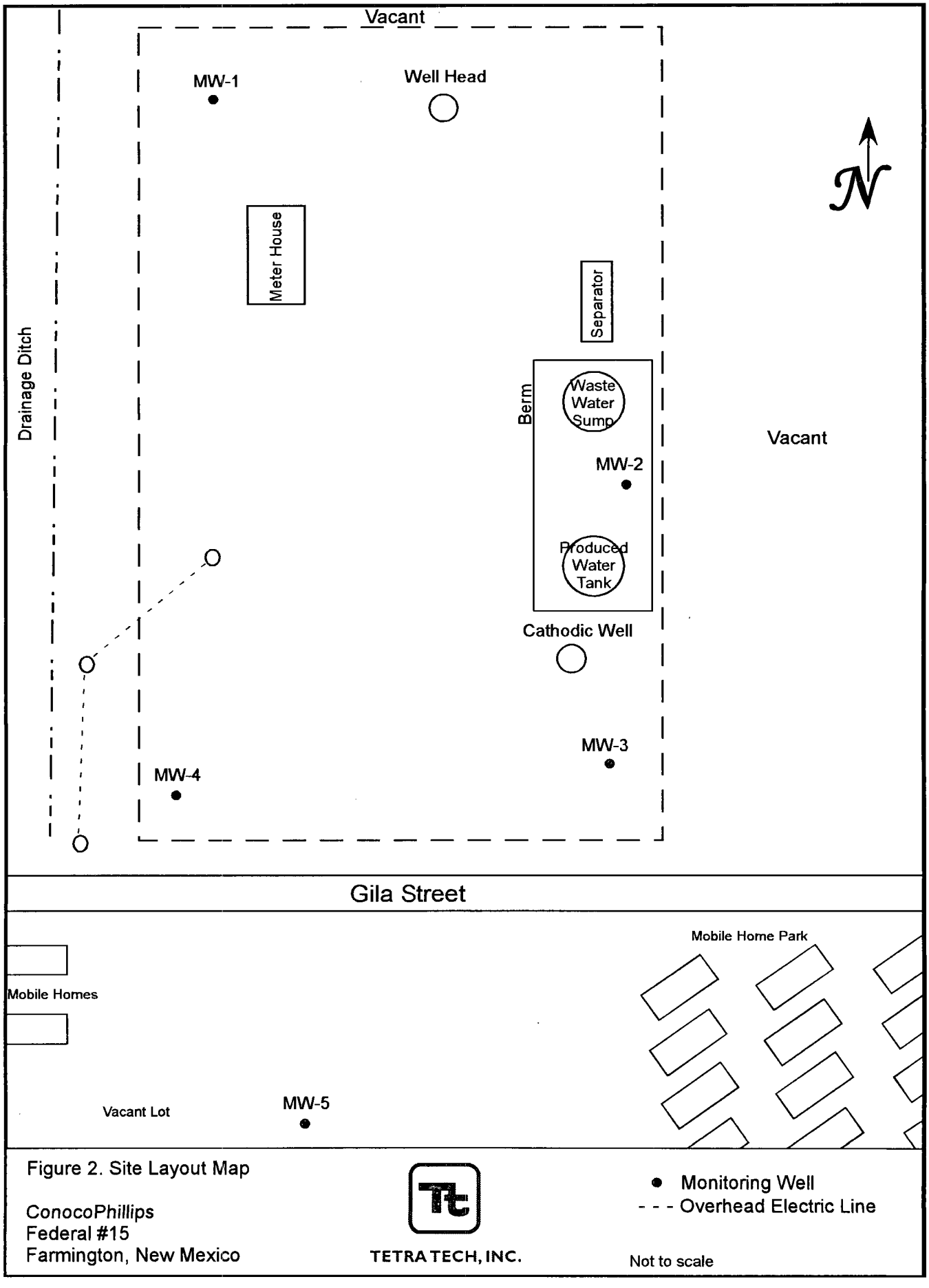

Figure 2. Site Layout Map

ConocoPhillips
Federal #15
Farmington, New Mexico

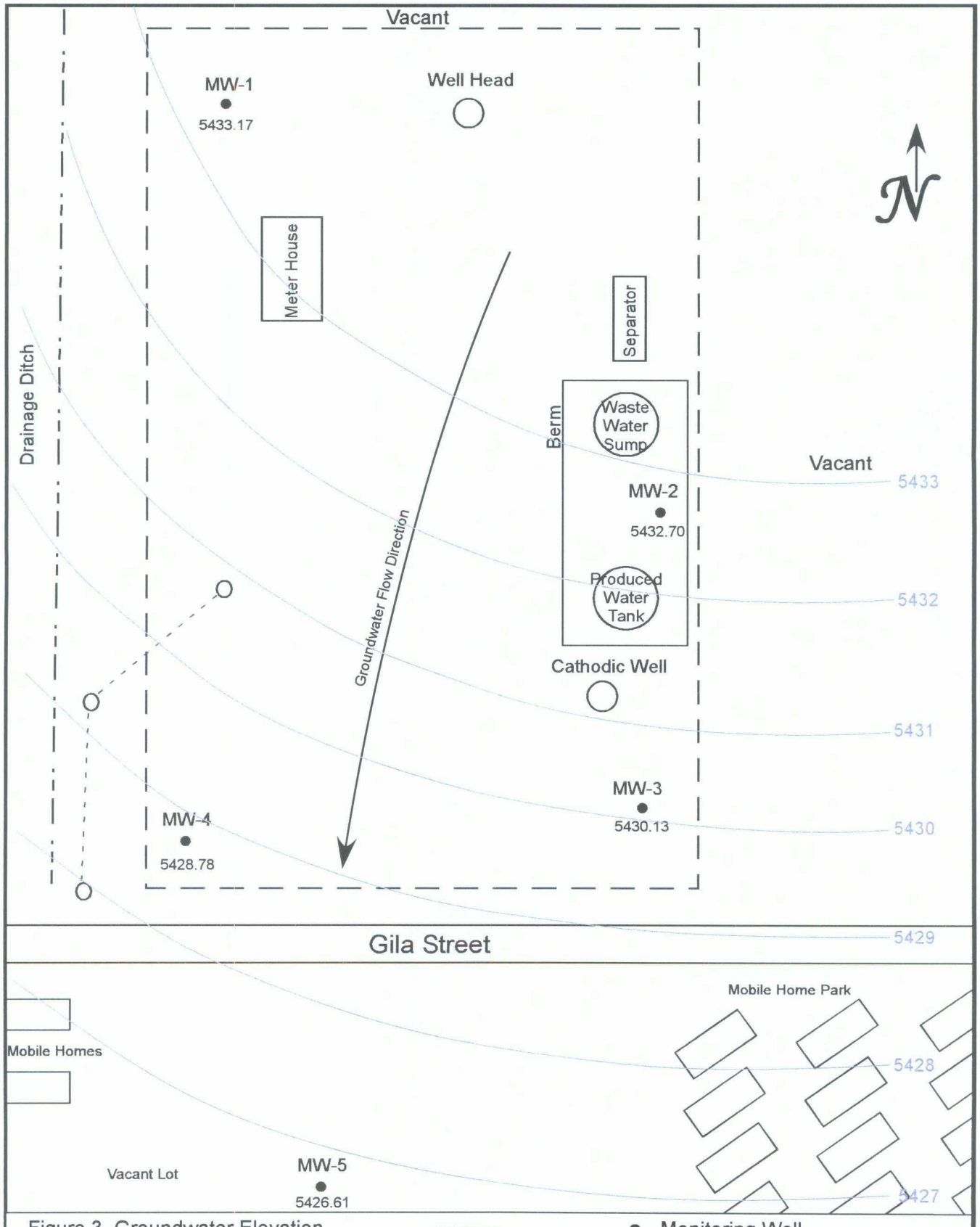

Figure 3. Groundwater Elevation Contour Map - July 2008

ConocoPhillips
Federal #15
Farmington, New Mexico

TETRA TECH, INC.

TABLES

Table 1. Site History Timeline - ConocoPhillips Federal #15

Date/Time Period	Event/Action	Description
October 23, 2004	Release Discovered	Estimated that 15 barrels of condensate was released to the subsurface soil and groundwater
October 25-29, 2004	Soil Excavation	Approximately 1500 cubic yards of affected soil excavated and replaced with clean fill
November 16-17, 2004	Monitor Well Installation	Monitor wells MW-1, MW-2, MW-3, and MW-4 installed to depths of approximately 20 ft BGS
January 18, 2005	Monitor Well Sampling	Initial sampling of monitor wells MW-1, MW-2, MW-3, and MW-4
July 7, 2005	Groundwater Removal from Monitor Well MW-2	First removal of groundwater - 145 gallons removed
October 18-19, 2005	Monitor Well Sampling	Second sampling of monitor wells MW-1, MW-2, MW-3, and MW-4
October 19, 2005	Monitor Well Installation	Monitor well MW-5 installed to a depth of 17.5 ft BGS
October 19, 2005	Groundwater Removal from Monitor Well MW-2	558 gallons removed
October 20, 2005	Monitor Well Sampling	Initial sampling of monitor well MW-5
February 16, 2006	Groundwater Removal from Monitor Well MW-2	236 gallons removed
May 15, 2006		296 gallons removed
August 2, 2006		380 gallons removed
November 14, 2006		440 gallons removed
November 14-15, 2006	Monitor Well Sampling	Third sampling of monitor wells MW-1, MW-2, MW-3, and MW-4; second sampling of monitor well MW-5
February 20, 2007	Groundwater Removal from Monitor Well MW-2	346 gallons removed
May 15, 2007		474 gallons removed
August 21, 2007		528 gallons removed
November 7, 2007		575 gallons removed
November 7, 2007	Monitor Well Sampling	Fourth sampling of monitor wells MW-1, MW-2, MW-3, and MW-4; third sampling of monitor well MW-5
January 16, 2008	Groundwater Removal from Monitor Well MW-2	365 gallons removed
March 18, 2008	Groundwater Removal from Monitor Well MW-2	278 gallons removed
March 18, 2008	Groundwater Removal from Monitor Well MW-4	288 gallons removed
March 18, 2008	Monitor Well Sampling	Initiation of quarterly sampling for monitor wells MW-1, MW-2, MW-3, MW-4, and MW-5
July 21, 2008	Monitor Well Sampling	Continuation of quarterly sampling for monitor wells MW-1, MW-2, MW-3, MW-4, and MW-5

Table 2. Groundwater Elevation Summary (January 2005 - July 2008) - ConocoPhillips Federal #15

Well ID	Date Installed	Total Depth (ft bgs)	Screen Interval (ft)	Date Measured	Groundwater Level (ft TOC)	Elevation (ft msl) (TOC)	Groundwater Elevation (ft msl)
MW-1	11/17/2004	20	5 - 20	1/18/2005	8.92	5437.99	5429.07
				7/7/2005	9.33		5428.66
				10/19/2005	8.03		5429.96
				2/16/2006	8.84		5429.15
				5/15/2006	8.96		5429.03
				8/2/2006	8.35		5429.64
				11/14/2006	8.10		5429.89
				2/20/2007	8.76		5429.23
				5/15/2007	9.67[1]		5428.32
				8/21/2007	NM		NM
				11/7/2007	AM		AM
				1/16/2008	7.10		5430.89
				3/18/2008	7.61		5430.38
				7/21/2008	4.82		5433.17
MW-2	11/17/2004	20	5 - 20	1/18/2005	9.49	5437.33	5427.84
				7/7/2005	9.55		5427.78
				10/19/2005	8.66		5428.67
				2/16/2006	9.01		5428.32
				5/15/2006	9.00		5428.33
				8/2/2006	8.52		5428.81
				11/14/2006	8.28		5429.05
				2/20/2007	8.87		5428.46
				5/15/2007	8.59		5428.74
				8/21/2007	6.67		5430.66
				11/7/2007	AM		AM
				1/16/2008	7.41		5429.92
				3/18/2008	8.00		5429.33
				7/21/2008	4.63		5432.70
MW-3	11/22/2004	20	5 - 20	1/18/2005	8.54	5435.13	5426.59
				7/7/2005	8.51		5426.62
				10/19/2005	7.75		5427.38
				2/16/2006	NM		NM
				5/15/2006	8.42		5426.71
				8/2/2006	7.99		5427.14
				11/14/2006	7.72		5427.41
				2/20/2007	8.23		5426.90
				5/15/2007	7.90		5427.23
				8/21/2007	NM		NM
				11/7/2007	AM		AM
				1/16/2008	7.20		5427.93
				3/18/2008	7.73		5427.40
				7/21/2008	5.00		5430.13

Table 2. Groundwater Elevation Summary (January 2005 - July 2008) - ConocoPhillips Federal #15

Well ID	Date Installed	Total Depth (ft bgs)	Screen Interval (ft)	Date Measured	Groundwater Level (ft TOC)	Elevation (ft msl) (TOC)	Groundwater Elevation (ft msl)
MW-4	11/22/2004	20	5 - 20	1/18/2005	8.65	5434.68	5426.03
				7/7/2005	8.50		5426.18
				10/19/2005	7.72		5426.96
				2/16/2006	8.35		5426.33
				5/15/2006	8.40		5426.28
				8/2/2006	7.96		5426.72
				11/14/2006	7.74		5426.94
				2/20/2007	8.18		5426.50
				5/15/2007	7.91		5426.77
				8/21/2007	NM		NM
				11/7/2007	AM		AM
				1/16/2008	7.37		5427.31
				3/18/2008	7.73		5426.95
				7/21/2008	5.90		5428.78
MW-5	10/19/2005	17.5	3.5-17.5	10/20/2005	9.11	5434.16	5425.05
				2/16/2006	10.62		5423.54
				5/15/2006	10.47		5423.69
				8/2/2006	9.42		5424.74
				11/14/2006	9.05		5425.11
				2/20/2007	9.84		5424.32
				5/15/2007	8.93		5425.23
				8/21/2007	NM		NM
				11/7/2007	AM		AM
				1/16/2008	NM		NM
				3/18/2008	10.21		5423.95
				7/21/2008	7.55		5426.61

Explanation

(1) = Water level near bottom of monitor well
AM = Anomolous measurement due to meter malfunction - reading not recorded
bgs = Below ground surface
ft = Feet
msl = Mean sea level
NM = Not measured
TOC = Top of casing

Table 3. Groundwater Laboratory Analytical Results Summary (January 2005 - July 2008) - ConocoPhillips Federal #15

Well ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	2-Methylnaphthalene (µg/L)	1-Methylnaphthalene (µg/L)	Naphthalene (µg/L)	Total Naphthalene (µg/L)	Chloride (mg/L)
MW-1	1/18/2005	<1.0	<1.0	<1.0	<2.0	<10	<10	<10	<10	85
	10/18/2005	<1.0	<1.0	<1.0	<2.0	<10	<10	<10	<10	39
	11/15/2006	<1.0	<1.0	<1.0	<2.0	<10	<10	<10	<10	36
	11/7/2007	<1.0	<1.0	<1.0	<2.0	<10	<10	<10	<10	44
	3/18/2008	<5.0	<5.0	<5.0	<5.0	--	--	--	--	--
	7/21/2008	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--	54
MW-2	1/18/2005	**1200**	**3300**	380	**3500**	72	34	51	**157**	41
	Duplicate	**1300**	**3700**	410	**3800**	--	--	--	--	--
	10/19/2005	**1100**	410	160	470	18	11	15	**44**	60
	Duplicate	**1100**	500	150	610	--	--	--	--	--
	11/14/2006	23	29	6.6	120	<10	<10	<10	<10	50
	Duplicate	45	57	12	220	--	--	--	--	--
	11/7/2007	4.2	8.8	24	74	<10	<10	<10	<10	35
	Duplicate	3.9	7.9	22	69	--	--	--	--	--
	3/18/2008	5	<5.0	<5.0	9	--	--	--	--	--
	7/21/2008	<5.0	<5.0	13	27	<5.0	<5.0	<5.0	--	42.7
	Duplicate	<5.0	<5.0	13	27	--	--	--	--	--
MW-3	1/18/2005	**190**	<5.0	<5.0	<10	<10	<10	<10	<10	34
	10/19/2005	<1.0	<1.0	<1.0	<2.0	<10	<10	<10	<10	42
	11/14/2006	<1.0	<1.0	<1.0	<2.0	<10	<10	<10	<10	39
	11/7/2007	<1.0	<1.0	<1.0	<2.0	<10	<10	<10	<10	34
	3/18/2008	<5.0	<5.0	<5.0	<5.0	--	--	--	--	--
	7/21/2008	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--	22
MW-4	1/18/2005	2.8	<1.0	<1.0	<2.0	<10	<10	<10	<10	37
	10/19/2005	**23**	2.2	<1.0	4.3	<10	<10	<10	<10	51
	11/14/2006	1.1	<1.0	<1.0	<2.0	<10	<10	<10	<10	44
	11/7/2007	**36**	<1.0	22	<2.0	<10	<10	<10	<10	24
	3/18/2008	<5.0	<5.0	<5.0	<5.0	--	--	--	--	--
	7/21/2008	**35**	<5.0	18	<5.0	<5.0	<5.0	<5.0	--	22
MW-5	10/20/2005	<1.0	<1.0	<1.0	<2.0	<10	<10	<10	<10	73
	11/14/2006	<1.0	<1.0	<1.0	<2.0	<10	<10	<10	<10	79
	11/7/2007	<1.0	<1.0	<1.0	<2.0	<10	<10	<10	<10	58
	3/18/2008	<5.0	<5.0	<5.0	<5.0	--	--	--	--	--
	7/21/2008	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--	27.6
NMWQCC Standards		**10 (µg/L)**	**750 (µg/L)**	**750 (µg/L)**	**620 (µg/L)**	**NE**	**NE**	**NE**	**30 (µg/L)**	**250 mg/L**

Explanation

mg/L = milligrams per liter (parts per million)
µg/L = micrograms per liter (parts per billion)
NE=Not established
NMWQCC = New Mexico Water Quality Control Commission
-- = Not analyzed
<1.0 = Not detected at the reporting limit

APPENDIX A

GROUNDWATER SAMPLING FIELD FORMS

TETRA TECH, INC.

WATER SAMPLING FIELD FORM

Project Name: Federal # 15 — Page 1 of 5

Project No.: 1158690066

Site Location: Farmington, NM

Site/Well No.: MW-1 — Coded/ Replicate No.: — Date: 7/21/2008

Weather: Sunny — Time Sampling Began: 1405 — Time Sampling Completed: 1435

EVACUATION DATA

Description of Measuring Point (MP): Top of Casing

Height of MP Above/Below Land Surface: — MP Elevation: 5437.99 feet AMSL

Total Sounded Depth of Well Below MP: 18.9 — Water-Level Elevation: 5430.38 feet AMSL

Held: — Depth to Water Below MP: 4.82 feet — Diameter of Casing: 2"

Wet: — Water Column in Well: 14.08 feet — Gallons Pumped/Bailed Prior to Sampling: 6.75

Gallons per Foot: 0.16

Gallons in Well: 2.25 — Sampling Pump Intake Setting (feet below land surface): N/A

Purging Equipment: Disposable polyethylene bailer

SAMPLING DATA/FIELD PARAMETERS

Time	Temperature (C°)	pH	Conductivity	TDS in g/L	ORP (mV)
1433		**6.38**	**1572**	**816**	
1435	**62.3**	**6.5**	**1559**	**813**	
1437	**61**	**6.55**	**1551**	**811**	

Sampling Equipment: Disposable polyethylene bailer

Constituents Sampled	Container Description	Preservative
BTEX	3 - 40 mL glass VOAs	HCL

Remarks: Water has sediment in it

Sampling Personnel: Kelly Blanchard, Christine Mathews

Well Casing Volumes

Gal./ft.	1 ¼" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1 ½" = 0.10	2 ½" = 0.24	3" ½ = 0.50	6" = 1.46

TETRA TECH, INC.

WATER SAMPLING FIELD FORM

Project Name: Federal # 15 — Page 2 of 5

Project No.: 1158690066

Site Location: Farmington, NM

Site/Well No.: MW-2 — Coded/ Replicate No.: — Date: 7/21/2008

Weather: Sunny — Time Sampling Began: 1420 — Time Sampling Completed: 1435

EVACUATION DATA

Description of Measuring Point (MP): Top of Casing

Height of MP Above/Below Land Surface: — MP Elevation: 5437.33 feet AMSL

Total Sounded Depth of Well Below MP: 19.13 feet — Water-Level Elevation: 5429.33 feet AMSL

Held: — Depth to Water Below MP: 4.63 feet — Diameter of Casing: 2"

Wet: — Water Column in Well: 14.5 feet — Gallons Pumped/Bailed Prior to Sampling: 6.96

Gallons per Foot: 0.16

Gallons in Well: 2.32 — Sampling Pump Intake Setting (feet below land surface):

Purging Equipment: Pumped by truck for 3.5 hours

SAMPLING DATA/FIELD PARAMETERS

Time	Temperature (C°)	pH	Conductivity	TDS (g/L)	ORP (mV)
1425	**64.5**	**7.35**	**1862**	**978**	
1430	**63**	**7.35**	**1938**	**1010**	
1432	**62.1**	**7.35**	**1913**	**991**	

Sampling Equipment: Disposable polyethylene bailer

Constituents Sampled	Container Description	Preservative
BTEX	3 - 40ml glass VOAs	HCL

Remarks: white organic matter floating in waste bucket/one small streak of sheen

Sampling Personnel: Kelly Blanchard, Christine Mathews

Well Casing Volumes

Gal./ft.	1 ¼" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1 ½" = 0.10	2 ½" = 0.24	3" ½ = 0.50	6" = 1.46

TETRA TECH, INC.

WATER SAMPLING FIELD FORM

Project Name: Federal # 15

Project No.: 1158690066

Site Location: Farmington, NM

Site/Well No.: MW-3

Coded/ Replicate No.:

Date: 7/21/2008

Weather: Sunny

Time Sampling Began: 1530

Time Sampling Completed: 1540

EVACUATION DATA

Description of Measuring Point (MP): Top of Casing

Height of MP Above/Below Land Surface:

MP Elevation: 5435.13 feet AMSL

Total Sounded Depth of Well Below MP: 19.25 feet

Water-Level Elevation: 5427.4 feet AMSL

Held:

Depth to Water Below MP: 5.0 feet

Diameter of Casing: 2"

Wet:

Water Column in Well: 14.25 feet

Gallons Pumped/Bailed Prior to Sampling: 3

Gallons per Foot: 0.16

Gallons in Well: 2.28

Sampling Pump Intake Setting (feet below land surface):

Purging Equipment: Disposable polyethylene bailer

SAMPLING DATA/FIELD PARAMETERS

Time	Temperature (C°)	pH	Conductivity	TDS (g/L)	ORP (mV)
1335	**66.2**	**7.35**	**1210**	**627**	
1337	**60.9**	**7.35**	**1220**	**633**	
1338	**60.8**	**7.35**	**1227**	**637**	

Sampling Equipment: Disposable polyethylene bailer

Constituents Sampled	Container Description	Preservative
BTEX	3 - 40 ml glass VOAs	HCL

Remarks: obstruction or blockage at 9.25 feet; fibrous white material

Sampling Personnel: Kelly Blanchard, Christine Mathews

Well Casing Volumes

Gal./ft.	1 ¼" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1 ½" = 0.10	2 ½" = 0.24	3" ½ = 0.50	6" = 1.46

TETRA TECH, INC.

WATER SAMPLING FIELD FORM

Project Name: Federal # 15 — Page 4 of 5

Project No.: 1158690066

Site Location: Farmington, NM

Site/Well No.: MW-4 — Coded/ Replicate No.: — Date: 7/21/2008

Weather: Sunny — Time Sampling Began: 1600 — Time Sampling Completed: 1620

EVACUATION DATA

Description of Measuring Point (MP): Top of Casing

Height of MP Above/Below Land Surface: — MP Elevation: 5434.68 feet AMSL

Total Sounded Depth of Well Below MP: 18.59 feet — Water-Level Elevation: 5426.95 feet AMSL

Held: — Depth to Water Below MP: 5.9 feet — Diameter of Casing: 2"

Wet: — Water Column in Well: 12.69 feet — Gallons Pumped/Bailed Prior to Sampling: 6

Gallons per Foot: 0.16

Gallons in Well: 2.03 — Sampling Pump Intake Setting (feet below land surface):

Purging Equipment: Disposable polyethylene bailer

SAMPLING DATA/FIELD PARAMETERS

Time	Temperature (F°)	pH	Conductivity	TDS (g/L)	ORP (mV)
1603	**67.9**	**6.55**	**1421**	**738**	
1605	**62.9**	**6.74**	**1341**	**697**	
1608	**61.9**	**6.81**	**1332**	**695**	

Sampling Equipment: Disposable polyethylene bailer

Constituents Sampled	Container Description	Preservative
BTEX	3 - 40 ml glass VOAs	HCL

Remarks: silt in bottom

Sampling Personnel: Kelly Blanchard, Christine Mathews

Well Casing Volumes

Gal./ft.	1 ¼" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1 ½" = 0.10	2 ½" = 0.24	3" ½ = 0.50	6" = 1.46

TETRA TECH, INC.

WATER SAMPLING FIELD FORM

Project Name: Federal # 15

Project No.: 1158690066

Site Location: Farmington, NM

Site/Well No.: MW-5

Coded/ Replicate No.:

Date: 7/21/2008

Weather: Sunny

Time Sampling Began: 1600

Time Sampling Completed: 1610

EVACUATION DATA

Description of Measuring Point (MP): Top of Casing

Height of MP Above/Below Land Surface:

MP Elevation: 5434.16 feet AMSL

Total Sounded Depth of Well Below MP: 17.2 feet

Water-Level Elevation: 5423.95 feet AMSL

Held:

Depth to Water Below MP: 7.55 feet

Diameter of Casing: 2"

Wet:

Water Column in Well: 9.65 feet

Gallons Pumped/Bailed Prior to Sampling: 4.63

Gallons per Foot: 0.16

Gallons in Well: 1.54

Sampling Pump Intake Setting (feet below land surface):

Purging Equipment: Disposable polyethylene bailer

SAMPLING DATA/FIELD PARAMETERS

Time	Temperature (F°)	pH	Conductivity	TDS (g/L)	ORP (mV)
1555	**65.4**		**1358**	**706**	
1558	**63.8**	**7.34**	**1374**	**713**	
1600	**63.1**	**7.35**	**1436**	**746**	

Sampling Equipment: Disposable polyethylene bailer

Constituents Sampled	Container Description	Preservative
BTEX	3 - 40 ml glass VOAs	HCL

Remarks: sediment in bailed water

Sampling Personnel: Kelly Blanchard, Christine Mathews

Well Casing Volumes

Gal./ft.	1 ¼" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1 ½" = 0.10	2 ½" = 0.24	3" ½ = 0.50	6" = 1.46

APPENDIX B

LABORATORY ANALYTICAL REPORT

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Conoco Phillips

Certificate of Analysis Number:

08071461

Report To:		Project Name:	COP Federal Com #15
Tetra Tech EM, Inc.		Site:	Albuquerque, NM
Kelly Blanchard		Site Address:	
6121 Indian School Road, N.E.			
Suite 200		PO Number:	4509596743
Albuquerque		State:	New Mexico
NM		State Cert. No.:	
87110-		Date Reported:	8/7/2008
ph: (505) 881-3188	fax:		

This Report Contains A Total Of 21 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

8/7/2008

Date

Test results meet all requirements of NELAC, unless specified in the narrative.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Case Narrative for:

Conoco Phillips

Certificate of Analysis Number:

08071461

Report To:		Project Name:	COP Federal Com #15
Tetra Tech EM, Inc. Kelly Blanchard 6121 Indian School Road, N.E. Suite 200 Albuquerque NM 87110- ph: (505) 881-3188 fax:		Site:	Albuquerque, NM
		Site Address:	
		PO Number:	4509596743
		State:	New Mexico
		State Cert. No.:	
		Date Reported:	8/7/2008

A trip blank was received with the samples, but was not listed on the chain of custody. Per our email on July 28, 2008 SPL, Inc. analyzed the trip blank.

Per the Conoco Phillips TSM Revision 0, a copy of the internal chain of custody is to be included in final data package. However, due to LIMS limitations, this cannot be provided at this time.

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Your sample ID "MW-1" (SPL ID:08071461-01) was randomly selected for use in SPL's quality control program for the Ion Chromatography analysis by EPA Method 300.0. The Matrix Spike (MS) recovery was outside of the advisable quality control limits for Chloride (Batch ID:R246534S) due to matrix interference. A Laboratory Control Sample (LCS) was analyzed as a quality control check for the analytical batch and all recoveries were within acceptable limits.

Some of the percent recoveries and RPD's on the QC report for the MS/MSD may be different than the calculated recoveries and RPD's using the sample result and the MS/MSD results that appear on the report because, the actual raw result is used to perform the calculations for percent recovery and RPD.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Bethany Agarwal

Bethany A. Agarwal
Senior Project Manager

Date

Test results meet all requirements of NELAC, unless specified in the narrative.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Conoco Phillips

Certificate of Analysis Number:

08071461

Report To: Tetra Tech EM, Inc.
Kelly Blanchard
6121 Indian School Road, N.E.
Suite 200
Albuquerque
NM
87110-
ph: (505) 881-3188 fax: (505) 881-3283

Fax To:

Project Name: COP Federal Com #15
Site: Albuquerque, NM
Site Address:

PO Number: 4509596743
State: New Mexico
State Cert. No.:
Date Reported: 8/7/2008

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
MW-1	08071461-01	Water	7/21/2008 2:35:00 PM	7/24/2008 9:30:00 AM		☐
MW-4	08071461-02	Water	7/21/2008 3:20:00 PM	7/24/2008 9:30:00 AM		☐
MW-3	08071461-03	Water	7/21/2008 3:35:00 PM	7/24/2008 9:30:00 AM		☐
MW-5	08071461-04	Water	7/21/2008 4:00:00 PM	7/24/2008 9:30:00 AM		☐
MW-2	08071461-05	Water	7/21/2008 4:30:00 PM	7/24/2008 9:30:00 AM		☐
DUPLICATE	08071461-06	Water	7/21/2008 4:35:00 PM	7/24/2008 9:30:00 AM		☐
Trip Blank	08071461-07	Water	7/21/2008	7/24/2008 9:30:00 AM		☐

Bethany Agarwal 8/7/2008

Bethany A. Agarwal
Senior Project Manager

Date

Richard R. Reed
Laboratory Director

Ted Yen
Quality Assurance Officer

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MW-1 **Collected:** 07/21/2008 14:35 **SPL Sample ID:** 08071461-01

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit		Dil. Factor	Date Analyzed	Analyst	Seq. #
ION CHROMATOGRAPHY				**MCL**		**E300.0**	**Units: mg/L**	
Chloride	54		2		4	07/28/08 20:45	A_E	4596417
SEMIVOLATILES ORGANICS BY METHOD 8270C				**MCL**		**SW8270C**	**Units: ug/L**	
1-Methylnaphthalene	ND		5		1	08/01/08 12:45	S_G	4605444
2-Methylnaphthalene	ND		5		1	08/01/08 12:45	S_G	4605444
Acenaphthene	ND		5		1	08/01/08 12:45	S_G	4605444
Acenaphthylene	ND		5		1	08/01/08 12:45	S_G	4605444
Anthracene	ND		5		1	08/01/08 12:45	S_G	4605444
Benz(a)anthracene	ND		5		1	08/01/08 12:45	S_G	4605444
Benzo(a)pyrene	ND		5		1	08/01/08 12:45	S_G	4605444
Benzo(b)fluoranthene	ND		5		1	08/01/08 12:45	S_G	4605444
Benzo(g,h,i)perylene	ND		5		1	08/01/08 12:45	S_G	4605444
Benzo(k)fluoranthene	ND		5		1	08/01/08 12:45	S_G	4605444
Chrysene	ND		5		1	08/01/08 12:45	S_G	4605444
Dibenz(a,h)anthracene	ND		5		1	08/01/08 12:45	S_G	4605444
Dibenzofuran	ND		5		1	08/01/08 12:45	S_G	4605444
Fluoranthene	ND		5		1	08/01/08 12:45	S_G	4605444
Fluorene	ND		5		1	08/01/08 12:45	S_G	4605444
Indeno(1,2,3-cd)pyrene	ND		5		1	08/01/08 12:45	S_G	4605444
Naphthalene	ND		5		1	08/01/08 12:45	S_G	4605444
Phenanthrene	ND		5		1	08/01/08 12:45	S_G	4605444
Pyrene	ND		5		1	08/01/08 12:45	S_G	4605444
Surr: 2-Fluorobiphenyl	88.0		% 23-116		1	08/01/08 12:45	S_G	4605444
Surr: Nitrobenzene-d5	72.0		% 21-114		1	08/01/08 12:45	S_G	4605444
Surr: Terphenyl-d14	64.0		% 22-141		1	08/01/08 12:45	S_G	4605444

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	07/28/2008 18:03	N_M	1.00

VOLATILE ORGANICS BY METHOD 8260B				**MCL**		**SW8260B**	**Units: ug/L**	
Benzene	ND		5		1	08/01/08 2:30	JC	4605066
Ethylbenzene	ND		5		1	08/01/08 2:30	JC	4605066
Toluene	ND		5		1	08/01/08 2:30	JC	4605066
m,p-Xylene	ND		5		1	08/01/08 2:30	JC	4605066
o-Xylene	ND		5		1	08/01/08 2:30	JC	4605066
Xylenes,Total	ND		5		1	08/01/08 2:30	JC	4605066
Surr: 1,2-Dichloroethane-d4	102		% 62-130		1	08/01/08 2:30	JC	4605066
Surr: 4-Bromofluorobenzene	100		% 70-130		1	08/01/08 2:30	JC	4605066
Surr: Toluene-d8	106		% 74-122		1	08/01/08 2:30	JC	4605066

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MW-4 **Collected:** 07/21/2008 15:20 **SPL Sample ID:** 08071461-02

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit		Dil. Factor	Date Analyzed	Analyst	Seq. #
ION CHROMATOGRAPHY				**MCL**	**E300.0**	**Units: mg/L**		
Chloride	22		2		4	07/28/08 21:35	A_E	4596420
SEMIVOLATILES ORGANICS BY METHOD 8270C				**MCL**	**SW8270C**	**Units: ug/L**		
1-Methylnaphthalene	ND		5		1	08/01/08 13:19	S_G	4605445
2-Methylnaphthalene	ND		5		1	08/01/08 13:19	S_G	4605445
Acenaphthene	ND		5		1	08/01/08 13:19	S_G	4605445
Acenaphthylene	ND		5		1	08/01/08 13:19	S_G	4605445
Anthracene	ND		5		1	08/01/08 13:19	S_G	4605445
Benz(a)anthracene	ND		5		1	08/01/08 13:19	S_G	4605445
Benzo(a)pyrene	ND		5		1	08/01/08 13:19	S_G	4605445
Benzo(b)fluoranthene	ND		5		1	08/01/08 13:19	S_G	4605445
Benzo(g,h,i)perylene	ND		5		1	08/01/08 13:19	S_G	4605445
Benzo(k)fluoranthene	ND		5		1	08/01/08 13:19	S_G	4605445
Chrysene	ND		5		1	08/01/08 13:19	S_G	4605445
Dibenz(a,h)anthracene	ND		5		1	08/01/08 13:19	S_G	4605445
Dibenzofuran	ND		5		1	08/01/08 13:19	S_G	4605445
Fluoranthene	ND		5		1	08/01/08 13:19	S_G	4605445
Fluorene	ND		5		1	08/01/08 13:19	S_G	4605445
Indeno(1,2,3-cd)pyrene	ND		5		1	08/01/08 13:19	S_G	4605445
Naphthalene	ND		5		1	08/01/08 13:19	S_G	4605445
Phenanthrene	ND		5		1	08/01/08 13:19	S_G	4605445
Pyrene	ND		5		1	08/01/08 13:19	S_G	4605445
Surr: 2-Fluorobiphenyl	80.0		% 23-116		1	08/01/08 13:19	S_G	4605445
Surr: Nitrobenzene-d5	70.0		% 21-114		1	08/01/08 13:19	S_G	4605445
Surr: Terphenyl-d14	52.0		% 22-141		1	08/01/08 13:19	S_G	4605445

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	07/28/2008 18:03	N_M	1.00

VOLATILE ORGANICS BY METHOD 8260B				**MCL**	**SW8260B**	**Units: ug/L**		
Benzene	35		5		1	08/01/08 2:59	JC	4605067
Ethylbenzene	18		5		1	08/01/08 2:59	JC	4605067
Toluene	ND		5		1	08/01/08 2:59	JC	4605067
m,p-Xylene	ND		5		1	08/01/08 2:59	JC	4605067
o-Xylene	ND		5		1	08/01/08 2:59	JC	4605067
Xylenes,Total	ND		5		1	08/01/08 2:59	JC	4605067
Surr: 1,2-Dichloroethane-d4	102		% 62-130		1	08/01/08 2:59	JC	4605067
Surr: 4-Bromofluorobenzene	100		% 70-130		1	08/01/08 2:59	JC	4605067
Surr: Toluene-d8	100		% 74-122		1	08/01/08 2:59	JC	4605067

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MW-3 **Collected:** 07/21/2008 15:35 **SPL Sample ID:** 08071461-03

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
ION CHROMATOGRAPHY			**MCL**	**E300.0**	**Units: mg/L**		
Chloride	22		2	4	07/29/08 17:31	A_E	4598990
SEMIVOLATILES ORGANICS BY METHOD 8270C			**MCL**	**SW8270C**	**Units: ug/L**		
1-Methylnaphthalene	ND		5	1	08/01/08 13:53	S_G	4605446
2-Methylnaphthalene	ND		5	1	08/01/08 13:53	S_G	4605446
Acenaphthene	ND		5	1	08/01/08 13:53	S_G	4605446
Acenaphthylene	ND		5	1	08/01/08 13:53	S_G	4605446
Anthracene	ND		5	1	08/01/08 13:53	S_G	4605446
Benz(a)anthracene	ND		5	1	08/01/08 13:53	S_G	4605446
Benzo(a)pyrene	ND		5	1	08/01/08 13:53	S_G	4605446
Benzo(b)fluoranthene	ND		5	1	08/01/08 13:53	S_G	4605446
Benzo(g,h,i)perylene	ND		5	1	08/01/08 13:53	S_G	4605446
Benzo(k)fluoranthene	ND		5	1	08/01/08 13:53	S_G	4605446
Chrysene	ND		5	1	08/01/08 13:53	S_G	4605446
Dibenz(a,h)anthracene	ND		5	1	08/01/08 13:53	S_G	4605446
Dibenzofuran	ND		5	1	08/01/08 13:53	S_G	4605446
Fluoranthene	ND		5	1	08/01/08 13:53	S_G	4605446
Fluorene	ND		5	1	08/01/08 13:53	S_G	4605446
Indeno(1,2,3-cd)pyrene	ND		5	1	08/01/08 13:53	S_G	4605446
Naphthalene	ND		5	1	08/01/08 13:53	S_G	4605446
Phenanthrene	ND		5	1	08/01/08 13:53	S_G	4605446
Pyrene	ND		5	1	08/01/08 13:53	S_G	4605446
Surr: 2-Fluorobiphenyl	96.0		% 23-116	1	08/01/08 13:53	S_G	4605446
Surr: Nitrobenzene-d5	80.0		% 21-114	1	08/01/08 13:53	S_G	4605446
Surr: Terphenyl-d14	60.0		% 22-141	1	08/01/08 13:53	S_G	4605446

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	07/28/2008 18:03	N_M	1.00

VOLATILE ORGANICS BY METHOD 8260B			MCL	SW8260B	Units: ug/L		
Benzene	ND		5	1	08/01/08 3:27	JC	4605068
Ethylbenzene	ND		5	1	08/01/08 3:27	JC	4605068
Toluene	ND		5	1	08/01/08 3:27	JC	4605068
m,p-Xylene	ND		5	1	08/01/08 3:27	JC	4605068
o-Xylene	ND		5	1	08/01/08 3:27	JC	4605068
Xylenes,Total	ND		5	1	08/01/08 3:27	JC	4605068
Surr: 1,2-Dichloroethane-d4	102		% 62-130	1	08/01/08 3:27	JC	4605068
Surr: 4-Bromofluorobenzene	100		% 70-130	1	08/01/08 3:27	JC	4605068
Surr: Toluene-d8	104		% 74-122	1	08/01/08 3:27	JC	4605068

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MW-5 **Collected:** 07/21/2008 16:00 **SPL Sample ID:** 08071461-04

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
ION CHROMATOGRAPHY			**MCL**	**E300.0**	**Units: mg/L**		
Chloride	27.6		2	4	07/28/08 22:24	A_E	4596423
SEMIVOLATILES ORGANICS BY METHOD 8270C			**MCL**	**SW8270C**	**Units: ug/L**		
1-Methylnaphthalene	ND		5	1	08/01/08 14:26	S_G	4605447
2-Methylnaphthalene	ND		5	1	08/01/08 14:26	S_G	4605447
Acenaphthene	ND		5	1	08/01/08 14:26	S_G	4605447
Acenaphthylene	ND		5	1	08/01/08 14:26	S_G	4605447
Anthracene	ND		5	1	08/01/08 14:26	S_G	4605447
Benz(a)anthracene	ND		5	1	08/01/08 14:26	S_G	4605447
Benzo(a)pyrene	ND		5	1	08/01/08 14:26	S_G	4605447
Benzo(b)fluoranthene	ND		5	1	08/01/08 14:26	S_G	4605447
Benzo(g,h,i)perylene	ND		5	1	08/01/08 14:26	S_G	4605447
Benzo(k)fluoranthene	ND		5	1	08/01/08 14:26	S_G	4605447
Chrysene	ND		5	1	08/01/08 14:26	S_G	4605447
Dibenz(a,h)anthracene	ND		5	1	08/01/08 14:26	S_G	4605447
Dibenzofuran	ND		5	1	08/01/08 14:26	S_G	4605447
Fluoranthene	ND		5	1	08/01/08 14:26	S_G	4605447
Fluorene	ND		5	1	08/01/08 14:26	S_G	4605447
Indeno(1,2,3-cd)pyrene	ND		5	1	08/01/08 14:26	S_G	4605447
Naphthalene	ND		5	1	08/01/08 14:26	S_G	4605447
Phenanthrene	ND		5	1	08/01/08 14:26	S_G	4605447
Pyrene	ND		5	1	08/01/08 14:26	S_G	4605447
Surr: 2-Fluorobiphenyl	70.0		% 23-116	1	08/01/08 14:26	S_G	4605447
Surr: Nitrobenzene-d5	58.0		% 21-114	1	08/01/08 14:26	S_G	4605447
Surr: Terphenyl-d14	42.0		% 22-141	1	08/01/08 14:26	S_G	4605447

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	07/28/2008 18:03	N_M	1.00

VOLATILE ORGANICS BY METHOD 8260B			MCL	SW8260B	Units: ug/L		
Benzene	ND		5	1	08/01/08 3:55	JC	4605069
Ethylbenzene	ND		5	1	08/01/08 3:55	JC	4605069
Toluene	ND		5	1	08/01/08 3:55	JC	4605069
m,p-Xylene	ND		5	1	08/01/08 3:55	JC	4605069
o-Xylene	ND		5	1	08/01/08 3:55	JC	4605069
Xylenes,Total	ND		5	1	08/01/08 3:55	JC	4605069
Surr: 1,2-Dichloroethane-d4	104		% 62-130	1	08/01/08 3:55	JC	4605069
Surr: 4-Bromofluorobenzene	98.0		% 70-130	1	08/01/08 3:55	JC	4605069
Surr: Toluene-d8	100		% 74-122	1	08/01/08 3:55	JC	4605069

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MW-2 **Collected:** 07/21/2008 16:30 **SPL Sample ID:** 08071461-05

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
ION CHROMATOGRAPHY			**MCL**	**E300.0**	**Units: mg/L**		
Chloride	42.7		2	4	07/28/08 22:40	A_E	4596424
SEMIVOLATILES ORGANICS BY METHOD 8270C			**MCL**	**SW8270C**	**Units: ug/L**		
1-Methylnaphthalene	ND		5	1	08/01/08 15:00	S_G	4605448
2-Methylnaphthalene	ND		5	1	08/01/08 15:00	S_G	4605448
Acenaphthene	ND		5	1	08/01/08 15:00	S_G	4605448
Acenaphthylene	ND		5	1	08/01/08 15:00	S_G	4605448
Anthracene	ND		5	1	08/01/08 15:00	S_G	4605448
Benz(a)anthracene	ND		5	1	08/01/08 15:00	S_G	4605448
Benzo(a)pyrene	ND		5	1	08/01/08 15:00	S_G	4605448
Benzo(b)fluoranthene	ND		5	1	08/01/08 15:00	S_G	4605448
Benzo(g,h,i)perylene	ND		5	1	08/01/08 15:00	S_G	4605448
Benzo(k)fluoranthene	ND		5	1	08/01/08 15:00	S_G	4605448
Chrysene	ND		5	1	08/01/08 15:00	S_G	4605448
Dibenz(a,h)anthracene	ND		5	1	08/01/08 15:00	S_G	4605448
Dibenzofuran	ND		5	1	08/01/08 15:00	S_G	4605448
Fluoranthene	ND		5	1	08/01/08 15:00	S_G	4605448
Fluorene	ND		5	1	08/01/08 15:00	S_G	4605448
Indeno(1,2,3-cd)pyrene	ND		5	1	08/01/08 15:00	S_G	4605448
Naphthalene	ND		5	1	08/01/08 15:00	S_G	4605448
Phenanthrene	ND		5	1	08/01/08 15:00	S_G	4605448
Pyrene	ND		5	1	08/01/08 15:00	S_G	4605448
Surr: 2-Fluorobiphenyl	76.0		% 23-116	1	08/01/08 15:00	S_G	4605448
Surr: Nitrobenzene-d5	62.0		% 21-114	1	08/01/08 15:00	S_G	4605448
Surr: Terphenyl-d14	48.0		% 22-141	1	08/01/08 15:00	S_G	4605448

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	07/28/2008 18:03	N_M	1.00

VOLATILE ORGANICS BY METHOD 8260B			**MCL**	**SW8260B**	**Units: ug/L**		
Benzene	ND		5	1	08/01/08 4:23	JC	4605070
Ethylbenzene	13		5	1	08/01/08 4:23	JC	4605070
Toluene	ND		5	1	08/01/08 4:23	JC	4605070
m,p-Xylene	27		5	1	08/01/08 4:23	JC	4605070
o-Xylene	ND		5	1	08/01/08 4:23	JC	4605070
Xylenes,Total	27		5	1	08/01/08 4:23	JC	4605070
Surr: 1,2-Dichloroethane-d4	104		% 62-130	1	08/01/08 4:23	JC	4605070
Surr: 4-Bromofluorobenzene	100		% 70-130	1	08/01/08 4:23	JC	4605070
Surr: Toluene-d8	104		% 74-122	1	08/01/08 4:23	JC	4605070

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

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Client Sample ID: DUPLICATE **Collected:** 07/21/2008 16:35 **SPL Sample ID:** 08071461-06

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit		Dil. Factor	Date Analyzed	Analyst	Seq. #
VOLATILE ORGANICS BY METHOD 8260B			**MCL**	**SW8260B**	**Units: ug/L**			
Benzene	ND		5		1	08/01/08 4:51	JC	4605071
Ethylbenzene	13		5		1	08/01/08 4:51	JC	4605071
Toluene	ND		5		1	08/01/08 4:51	JC	4605071
m,p-Xylene	27		5		1	08/01/08 4:51	JC	4605071
o-Xylene	ND		5		1	08/01/08 4:51	JC	4605071
Xylenes,Total	27		5		1	08/01/08 4:51	JC	4605071
Surr: 1,2-Dichloroethane-d4	102		%	62-130	1	08/01/08 4:51	JC	4605071
Surr: 4-Bromofluorobenzene	100		%	70-130	1	08/01/08 4:51	JC	4605071
Surr: Toluene-d8	106		%	74-122	1	08/01/08 4:51	JC	4605071

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

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Client Sample ID: Trip Blank **Collected:** 07/21/2008 0:00 **SPL Sample ID:** 08071461-07

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
VOLATILE ORGANICS BY METHOD 8260B			**MCL**	**SW8260B**	**Units: ug/L**		
Benzene	ND		5	1	08/04/08 17:25	E_G	4608900
Ethylbenzene	ND		5	1	08/04/08 17:25	E_G	4608900
Toluene	ND		5	1	08/04/08 17:25	E_G	4608900
m,p-Xylene	ND		5	1	08/04/08 17:25	E_G	4608900
o-Xylene	ND		5	1	08/04/08 17:25	E_G	4608900
Xylenes,Total	ND		5	1	08/04/08 17:25	E_G	4608900
Surr: 1,2-Dichloroethane-d4	102		% 62-130	1	08/04/08 17:25	E_G	4608900
Surr: 4-Bromofluorobenzene	104		% 70-130	1	08/04/08 17:25	E_G	4608900
Surr: Toluene-d8	98.0		% 74-122	1	08/04/08 17:25	E_G	4608900

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

Quality Control Documentation

HOUSTON LABORATORY
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Quality Control Report

Conoco Phillips

COP Federal Com #15

Analysis: Semivolatiles Organics by Method 8270C
Method: SW8270C

WorkOrder: 08071461
Lab Batch ID: 82165

Method Blank

RunID: J_080801A-4605439 Units: ug/L
Analysis Date: 08/01/2008 9:59 Analyst: S_G
Preparation Date: 07/28/2008 18:03 Prep By: N_M Method SW3510C

Analyte	Result	Rep Limit
1-Methylnaphthalene	ND	5.0
2-Methylnaphthalene	ND	5.0
Acenaphthene	ND	5.0
Acenaphthylene	ND	5.0
Anthracene	ND	5.0
Benz(a)anthracene	ND	5.0
Benzo(a)pyrene	ND	5.0
Benzo(b)fluoranthene	ND	5.0
Benzo(g,h,i)perylene	ND	5.0
Benzo(k)fluoranthene	ND	5.0
Chrysene	ND	5.0
Dibenz(a,h)anthracene	ND	5.0
Dibenzofuran	ND	5.0
Fluoranthene	ND	5.0
Fluorene	ND	5.0
Indeno(1,2,3-cd)pyrene	ND	5.0
Naphthalene	ND	5.0
Phenanthrene	ND	5.0
Pyrene	ND	5.0
Surr: 2-Fluorobiphenyl	92.0	23-116
Surr: Nitrobenzene-d5	84.0	21-114
Surr: Terphenyl-d14	96.0	22-141

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
08071461-01A	MW-1
08071461-02A	MW-4
08071461-03A	MW-3
08071461-04A	MW-5
08071461-05A	MW-2

Laboratory Control Sample (LCS)

RunID: J_080801A-4605440 Units: ug/L
Analysis Date: 08/01/2008 10:33 Analyst: S_G
Preparation Date: 07/28/2008 18:03 Prep By: N_M Method SW3510C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1-Methylnaphthalene	50.0	30.0	60.0	30	120
2-Methylnaphthalene	50.0	31.0	62.0	20	170
Acenaphthene	50.0	35.0	70.0	30	150
Acenaphthylene	50.0	36.0	72.0	33	250
Anthracene	50.0	28.0	56.0	27	133
Benz(a)anthracene	50.0	34.0	68.0	33	143
Benzo(a)pyrene	50.0	38.0	76.0	17	163
Benzo(b)fluoranthene	50.0	37.0	74.0	24	159

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Quality Control Report

Conoco Phillips
COP Federal Com #15

Analysis: Semivolatiles Organics by Method 8270C
Method: SW8270C
WorkOrder: 08071461
Lab Batch ID: 82165

Laboratory Control Sample (LCS)

RunID: J_080801A-4605440 Units: ug/L
Analysis Date: 08/01/2008 10:33 Analyst: S_G
Preparation Date: 07/28/2008 18:03 Prep By: N_M Method SW3510C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzo(g,h,i)perylene	50.0	36.0	72.0	30	160
Benzo(k)fluoranthene	50.0	36.0	72.0	11	162
Chrysene	50.0	36.0	72.0	17	168
Dibenz(a,h)anthracene	50.0	36.0	72.0	30	160
Dibenzofuran	50.0	35.0	70.0	30	150
Fluoranthene	50.0	32.0	64.0	26	137
Fluorene	50.0	34.0	68.0	30	150
Indeno(1,2,3-cd)pyrene	50.0	31.0	62.0	30	160
Naphthalene	50.0	31.0	62.0	21	133
Phenanthrene	50.0	34.0	68.0	10	140
Pyrene	50.0	38.0	76.0	30	150
Surr: 2-Fluorobiphenyl	50.0	38	76.0	23	116
Surr: Nitrobenzene-d5	50.0	30	60.0	21	114
Surr: Terphenyl-d14	50.0	36	72.0	22	141

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08071348-02
RunID: J_080801A-4605442 Units: ug/L
Analysis Date: 08/01/2008 11:39 Analyst: S_G
Preparation Date: 07/28/2008 18:03 Prep By: N_M Method SW3510C

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
1-Methylnaphthalene	ND	50	40.0	80.0	50	32.0	64.0	22.2	50	30	130
2-Methylnaphthalene	ND	50	42.0	84.0	50	33.0	66.0	24.0	50	20	170
Acenaphthene	ND	50	47.0	94.0	50	38.0	76.0	21.2	31	30	150
Acenaphthylene	ND	50	49.0	98.0	50	40.0	80.0	20.2	50	33	250
Anthracene	ND	50	38.0	76.0	50	32.0	64.0	17.1	50	27	133
Benz(a)anthracene	ND	50	50.0	100	50	40.0	80.0	22.2	50	33	143
Benzo(a)pyrene	ND	50	53.0	106	50	43.0	86.0	20.8	50	17	163
Benzo(b)fluoranthene	ND	50	48.0	96.0	50	39.0	78.0	20.7	50	24	159

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Quality Control Report

Conoco Phillips

COP Federal Com #15

Analysis: Semivolatiles Organics by Method 8270C **WorkOrder:** 08071461
Method: SW8270C **Lab Batch ID:** 82165

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08071348-02
RunID: J_080801A-4605442 Units: ug/L
Analysis Date: 08/01/2008 11:39 Analyst: S_G
Preparation Date: 07/28/2008 18:03 Prep By: N_M Method SW3510C

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzo(g,h,i)perylene	ND	50	51.0	102	50	39.0	78.0	26.7	50	30	160
Benzo(k)fluoranthene	ND	50	51.0	102	50	41.0	82.0	21.7	50	11	162
Chrysene	ND	50	50.0	100	50	41.0	82.0	19.8	50	17	168
Dibenz(a,h)anthracene	ND	50	49.0	98.0	50	36.0	72.0	30.6	50	30	160
Dibenzofuran	ND	50	48.0	96.0	50	39.0	78.0	20.7	50	30	150
Fluoranthene	ND	50	45.0	90.0	50	38.0	76.0	16.9	50	26	137
Fluorene	ND	50	49.0	98.0	50	40.0	80.0	20.2	50	30	150
Indeno(1,2,3-cd)pyrene	ND	50	42.0	84.0	50	31.0	62.0	30.1	50	30	160
Naphthalene	ND	50	42.0	84.0	50	32.0	64.0	27.0	50	21	133
Phenanthrene	ND	50	47.0	94.0	50	39.0	78.0	18.6	50	10	140
Pyrene	ND	50	56.0	112	50	45.0	90.0	21.8	38	30	150
Surr: 2-Fluorobiphenyl	ND	50	52	104	50	40.0	80.0	26.1	30	23	116
Surr: Nitrobenzene-d5	ND	50	42	84.0	50	30.0	60.0	33.3 *	30	21	114
Surr: Terphenyl-d14	ND	50	48	96.0	50	34.0	68.0	34.1 *	30	22	141

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Quality Control Report

Conoco Phillips

COP Federal Com #15

Analysis: Volatile Organics by Method 8260B **WorkOrder:** 08071461
Method: SW8260B **Lab Batch ID:** R247026

Method Blank

RunID: Q_080801A-4605065 Units: ug/L
Analysis Date: 08/01/2008 2:02 Analyst: JC
Preparation Date: 08/01/2008 2:02 Prep By: Method

Analyte	Result	Rep Limit
Benzene	ND	5.0
Ethylbenzene	ND	5.0
Toluene	ND	5.0
m,p-Xylene	ND	5.0
o-Xylene	ND	5.0
Xylenes,Total	ND	5.0
Surr: 1,2-Dichloroethane-d4	102.0	62-130
Surr: 4-Bromofluorobenzene	98.0	70-130
Surr: Toluene-d8	106.0	74-122

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
08071461-01B	MW-1
08071461-02B	MW-4
08071461-03B	MW-3
08071461-04B	MW-5
08071461-05B	MW-2
08071461-06A	DUPLICATE

Laboratory Control Sample (LCS)

RunID: Q_080801A-4605064 Units: ug/L
Analysis Date: 08/01/2008 1:34 Analyst: JC
Preparation Date: 08/01/2008 1:34 Prep By: Method

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	20.0	19.0	95.0	76	126
Ethylbenzene	20.0	21.0	105	67	122
Toluene	20.0	20.0	100	70	131
m,p-Xylene	40.0	42.0	105	72	150
o-Xylene	20.0	21.0	105	78	141
Xylenes,Total	60	63	100	72	150
Surr: 1,2-Dichloroethane-d4	50.0	54	108	62	130
Surr: 4-Bromofluorobenzene	50.0	51	102	70	130
Surr: Toluene-d8	50.0	53	106	74	122

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08071348-02
RunID: Q_080801A-4605077 Units: ug/L
Analysis Date: 08/01/2008 8:36 Analyst: JC

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Quality Control Report

Conoco Phillips

COP Federal Com #15

Analysis: Volatile Organics by Method 8260B **WorkOrder:** 08071461
Method: SW8260B **Lab Batch ID:** R247026

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene	ND	20	20.0	100	20	20.0	100	0	22	76	127
Ethylbenzene	ND	20	21.0	105	20	19.0	95.0	10.0	20	35	175
Toluene	ND	20	20.0	95.0	20	19.0	90.0	5.13	24	70	131
m,p-Xylene	8.00	40	41.0	82.5	40	37.0	72.5	10.3	20	35	175
o-Xylene	ND	20	20.0	90.0	20	18.0	80.0	10.5	20	35	175
Xylenes,Total	10	60	61	85	60	55	75	10	20	35	175
Surr: 1,2-Dichloroethane-d4	ND	50	52	104	50	54.0	108	3.77	30	62	130
Surr: 4-Bromofluorobenzene	ND	50	51	102	50	51.0	102	0	30	70	130
Surr: Toluene-d8	ND	50	53	106	50	52.0	104	1.90	30	74	122

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Quality Control Report

Conoco Phillips

COP Federal Com #15

Analysis: Volatile Organics by Method 8260B **WorkOrder:** 08071461
Method: SW8260B **Lab Batch ID:** R247261

Method Blank

RunID: L_080804C-4608895 Units: ug/L
Analysis Date: 08/04/2008 12:48 Analyst: E_G
Preparation Date: 08/04/2008 12:48 Prep By: Method

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
08071461-07A	Trip Blank

Analyte	Result	Rep Limit
Benzene	ND	5.0
Ethylbenzene	ND	5.0
Toluene	ND	5.0
m,p-Xylene	ND	5.0
o-Xylene	ND	5.0
Xylenes,Total	ND	5.0
Surr: 1,2-Dichloroethane-d4	104.0	62-130
Surr: 4-Bromofluorobenzene	104.0	70-130
Surr: Toluene-d8	98.0	74-122

Laboratory Control Sample (LCS)

RunID: L_080804C-4608894 Units: ug/L
Analysis Date: 08/04/2008 12:08 Analyst: E_G
Preparation Date: 08/04/2008 12:08 Prep By: Method

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	20.0	18.0	90.0	76	126
Ethylbenzene	20.0	19.0	95.0	67	122
Toluene	20.0	19.0	95.0	70	131
m,p-Xylene	40.0	39.0	97.5	72	150
o-Xylene	20.0	19.0	95.0	78	141
Xylenes,Total	60	58	97	72	150
Surr: 1,2-Dichloroethane-d4	50.0	51	102	62	130
Surr: 4-Bromofluorobenzene	50.0	53	106	70	130
Surr: Toluene-d8	50.0	49	98.0	74	122

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08080099-01
RunID: L_080804C-4608897 Units: ug/L
Analysis Date: 08/04/2008 14:27 Analyst: E_G

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Quality Control Report

Conoco Phillips

COP Federal Com #15

Analysis: ***Volatile Organics by Method 8260B*** ***WorkOrder:*** ***08071461***

Method: **SW8260B** **Lab Batch ID:** **R247261**

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene	ND	20	18.0	90.0	20	18.0	90.0	0	22	76	127
Ethylbenzene	ND	20	19.0	95.0	20	19.0	95.0	0	20	35	175
Toluene	ND	20	18.0	90.0	20	18.0	90.0	0	24	70	131
m,p-Xylene	ND	40	37.0	92.5	40	38.0	95.0	2.67	20	35	175
o-Xylene	ND	20	19.0	95.0	20	19.0	95.0	0	20	35	175
Xylenes,Total	ND	60	56	93	60	57	95	1.8	20	35	175
Surr: 1,2-Dichloroethane-d4	ND	50	50	100	50	51.0	102	1.98	30	62	130
Surr: 4-Bromofluorobenzene	ND	50	53	106	50	53.0	106	0	30	70	130
Surr: Toluene-d8	ND	50	49	98.0	50	49.0	98.0	0	30	74	122

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Quality Control Report

Conoco Phillips

COP Federal Com #15

Analysis: Ion Chromatography
Method: E300.0

WorkOrder: 08071461
Lab Batch ID: R246534S

Method Blank

RunID: IC1_080728C-4596415 Units: mg/L
Analysis Date: 07/28/2008 20:12 Analyst: A_E

Analyte	Result	Rep Limit
Chloride	ND	0.50

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
08071461-01C	MW-1
08071461-02C	MW-4
08071461-04C	MW-5
08071461-05C	MW-2

Laboratory Control Sample (LCS)

RunID: IC1_080728C-4596416 Units: mg/L
Analysis Date: 07/28/2008 20:29 Analyst: A_E

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Chloride	10.00	9.637	96.37	85	115

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08071461-01
RunID: IC1_080728C-4596418 Units: mg/L
Analysis Date: 07/28/2008 21:02 Analyst: A_E

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Chloride	54.02	40	102.1	120.2 *	40	102.0	120.0	0.1039	20	80	120

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

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HOUSTON, TX 77054
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Quality Control Report

Conoco Phillips

COP Federal Com #15

Analysis: Ion Chromatography
Method: E300.0
WorkOrder: 08071461
Lab Batch ID: R246695S

Method Blank

RunID: IC1_080729A-4598988 Units: mg/L
Analysis Date: 07/29/2008 16:58 Analyst: A_E

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
08071461-03C	MW-3

Analyte	Result	Rep Limit
Chloride	ND	0.50

Laboratory Control Sample (LCS)

RunID: IC1_080729A-4598989 Units: mg/L
Analysis Date: 07/29/2008 17:15 Analyst: A_E

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Chloride	10.00	9.621	96.21	85	115

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08071461-03
RunID: IC1_080729A-4598991 Units: mg/L
Analysis Date: 07/29/2008 17:48 Analyst: A_E

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Chloride	22.02	40	55.07	82.60	40	55.17	82.86	0.1814	20	80	120

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

Sample Receipt Checklist

And

Chain of Custody

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Sample Receipt Checklist

Workorder:	08071461	Received By:	L_C
Date and Time Received:	7/24/2008 9:30:00 AM	Carrier name:	Fedex-Priority
Temperature:	3.5°C	Chilled by:	Water Ice

1.	Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2.	Custody seals intact on shippping container/cooler?	Yes ☑	No ☐	Not Present ☐
3.	Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4.	Chain of custody present?	Yes ☑	No ☐	
5.	Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
6.	Chain of custody agrees with sample labels?	Yes ☐	No ☑	
	1. Received Trip Blank not listed on the Chain of custody.			
7.	Samples in proper container/bottle?	Yes ☑	No ☐	
8.	Sample containers intact?	Yes ☑	No ☐	
9.	Sufficient sample volume for indicated test?	Yes ☑	No ☐	
10.	All samples received within holding time?	Yes ☑	No ☐	
11.	Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
12.	Water - VOA vials have zero headspace?	Yes ☑	No ☐	VOA Vials Not Present ☐
13.	Water - Preservation checked upon receipt (except VOA*)?	Yes ☐	No ☐	Not Applicable ☑

*VOA Preservation Checked After Sample Analysis

SPL Representative: Rodriguez, Alisha Christine
Contact Date & Time: 7/28/2008 5:24:00 PM
Client Name Contacted: Kelly Blanchard w/Tetra Tech

Non Conformance Issues:

Client Instructions: Per client email, analyze the trip blank.

Chain of Custody Record

Client: Tetra Tech/ Conoco Phillips

SPL Workorder Number: 08071461

Attention: Kelly Blanchard/Tetra Tech

Phone: 505-237-3440 | email: kelly.blanchard@tetratech.c

Address: 6121 Indian School Road, NE Ste. 200

City: Albuquerque | State: NM | Zip Code: 87110

Project Name: ~~Sherard Fed #15~~ Federal #15

P.O. Number:

Sampled By: Christine Matthews

Signature: Kelly Blanchard

Sample ID	Collected Date	Collected Time	Sample Type Comp	Sample Type Grab	Matrix Water	Matrix Soil	Bottle Type	Preservative Type	# of Containers	8260-BTEX	8015-GRO	~~DRO~~ Chlorides	8260-VOC	8270-SVOC	Tot.Metals&Hg-6010/7470	Tot.Metals-6020/7471	Anions	PAHs
MW-1	7/21	2:35 pm		X	X		4	1	2									X
MW-1	7/21	2:35 pm		X	X		1	3	3	X								
MW-1	7/21	2:35 pm		X	X		3	1	1			X						
MW-4	7/21	3:20 pm		X	X		4	1	2									X
MW-4	7/21	3:20 pm		X	X		1	3	3	X								
MW-4	7/21	3:20 pm		X	X		3	1	1			X						
MW-3	7/21	3:35 pm		X	X		4	1	2									X
MW-3	7/21	3:35 pm		X	X		1	3	3	X								
MW-3	7/21	3:35 pm		X	X		3	1	1			X						
MW-5	7/21	4:00 pm		X	X		4	1	2									X

Turnaround Time Requirements

24 hr ( ) 48 hr ( )

72 hr ( ) 5 wday ( )

10 wday - Standard (X)

Remarks: Anions=Fl, Cl, N, PO4, SO4

Intact? Y or N

Temperature: _____

Bottle Types: 1: 3/40ml Vials 2. 1L Glass 3. 1L Plastic 4. 1L Amber Glass 5. 8oz Plastic

Preservative Types: 1: NONE 2. HNO3 3. HCL 4. H2SO4

PA

AR

Relinquished by Sampler:	Date	Time	Received by:
Kelly Blanchard	7-23-08	15:30	
Relinquished by:	Date	Time	Received by:
Relinquished by:	Date	Time	Received by SPL, Inc.
	7/24/08	9:30	