3R - 090

QUARTERLY MONITORING REPORT

11/28/2007



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

RECEIVED 2007 NOV 30 PM 2 19

November 28, 2007

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

(I) ConocoPhillips Nell Hall #I 2007 Quarterly Report 3 1004 0 RE: Flora Vista, New Mexico

(2) ConocoPhillips Shephard & Kelsey #1 2007 Quarterly Report **Bloomfield, New Mexico**

Dear Mr. von Gonten:

Enclosed please find a copy of the above-referenced documents as compiled by Tetra Tech, Inc., formerly Maxim Technologies, for these Farmington area sites.

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

Sincerely,

Kelly E. Blanchard

Project Manager/Geologist

Enclosures (2)

GROUNDWATER MONITORING REPORT

CONOCOPHILLIPS NELL HALL #I FLORA VISTA, NEW MEXICO

OCD # 3R0090

Prepared for:



600 North Dairy Ashford Houston, TX 77079

Prepared by:



6121 Indian School Rd. NE, Suite 200 Albuquerque, NM 87110 Tetra Tech Project No. 7690022.100

November 28, 2007

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GROUNDWATER MONITORING REPORT NELL HALL #I, FLORA VISTA, NEW MEXICO

1.0 INTRODUCTION

This report presents the results of the annual groundwater monitoring event conducted on August 22, 2007 at the ConocoPhillips Nell Hall #1 Site in Flora Vista, New Mexico, by Tetra Tech, Inc. (Tetra Tech).

The site is located northeast of Farmington, New Mexico on Flora Vista Road in Flora Vista, New Mexico approximately 2 miles west of Aztec, New Mexico. The site consists of a gas production well and associated equipment and installations. The location and general features of the Nell Hall #1 site are shown on Figures 1 and 2, respectively.

The environmental investigation at this site began with the attempted closure of an unlined dehydrator discharge pit in the early 1990's. Soil and groundwater impacts were discovered and three monitoring wells were installed. Due to an ongoing drought, the wells became dry. Souder Miller and Associates installed three additional monitoring wells to greater depths on February 17 and 18, 2004. MW-4 and MW-6 were installed to 35 feet below ground surface (bgs) with 30 feet of slotted screen and MW-5 was installed to 39 feet bgs with 35 feet of slotted screen.

On August 22, 2007 Tetra Tech was onsite to conduct a groundwater sampling event. Groundwater samples from MW-4, MW-5, and MW-6 were collected and shipped to Lancaster Laboratories in Lancaster, Pennsylvania to be analyzed for the presence of benzene, toluene, ethylbenezene, and xylenes (BTEX), sulfate, nitrate, phosphate, and ferrous iron.

2.0 METHODOLOGY AND RESULTS

The following describes the groundwater monitoring methodology and results:

2.1 Groundwater Monitoring Methodology

On August 22, 2007 monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, and MW-6 were checked for the presence of water. Monitoring wells MW-4, MW-5, and MW-6 were purged of three volumes of water and sampled. A 1.5-inch dedicated, clear, poly-vinyl, disposable bailer was used to purge each well and to collect the groundwater sample. The purge water generated during the event was disposed of in the waste water tank located on site (Figure 2). The groundwater samples were placed in laboratory prepared bottles, packed on ice, and shipped with chain-of-custody documentation to Lancaster Laboratories located in Lancaster, Pennsylvania. The samples were analyzed for the presence of BTEX by Environmental Protection

Agency (EPA) Method 8260B, sulfate and nitrate by EPA Method 300.0, phosphate by EPA Method 365.1, and ferrous iron by Standard Method (SM) 20, 3500-Fe B Modified.

A groundwater elevation contour map was created using the August 22, 2007 groundwater elevation data (Figure 3). Table I presents the well specifications, historical groundwater levels, and the top of casing survey results used to calculate the groundwater elevations at the site.

2.2 Groundwater Sampling Analytical Results

During the August 22, 2007 sampling event, the samples collected from MW-4, MW-5, and MW-6 were below laboratory detection limits and New Mexico Water Quality Control Commission (NMWQCC) standards for BTEX and phosphate. All other constituents of concern (COCs) were below the NMWQCC standards. Table 2 summarizes historical laboratory analytical results for groundwater sampling events. The August 2007 laboratory analytical results report is included as Appendix A.

3.0 CONCLUSIONS

Tetra Tech will conduct the next groundwater sampling event during November 2007. During 2008, Tetra Tech plans to conduct semi-annual groundwater sampling at the site during months when the water levels have historically been low. Recently, COCs have been detected in groundwater samples exclusively during these times. Please contact Kelly Blanchard at 505-237-8440 or kelly.blanchard@tetratech.com if you have any questions or require additional information.

FIGURES

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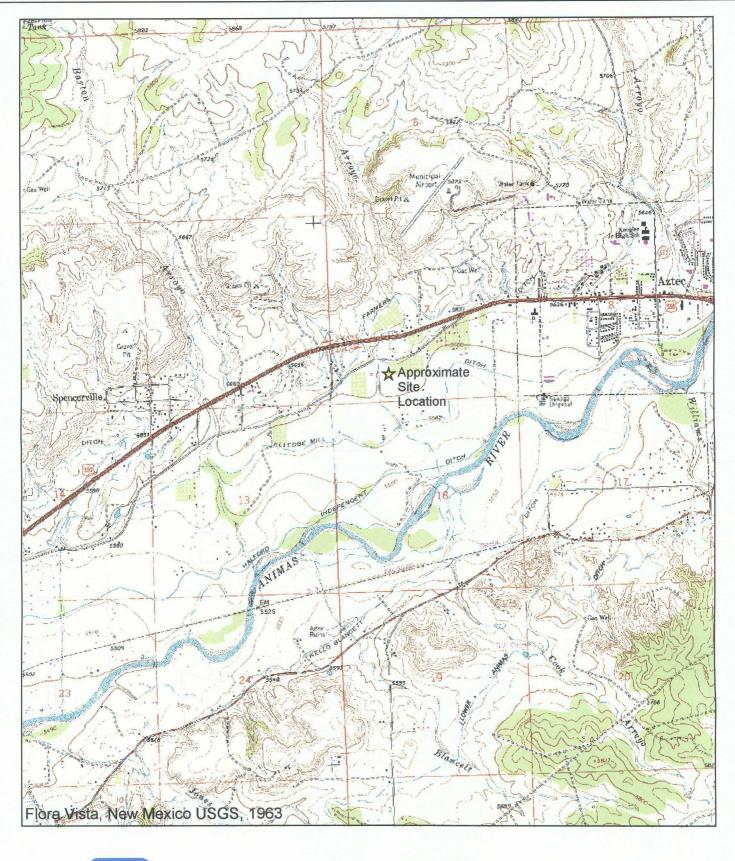
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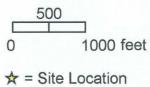
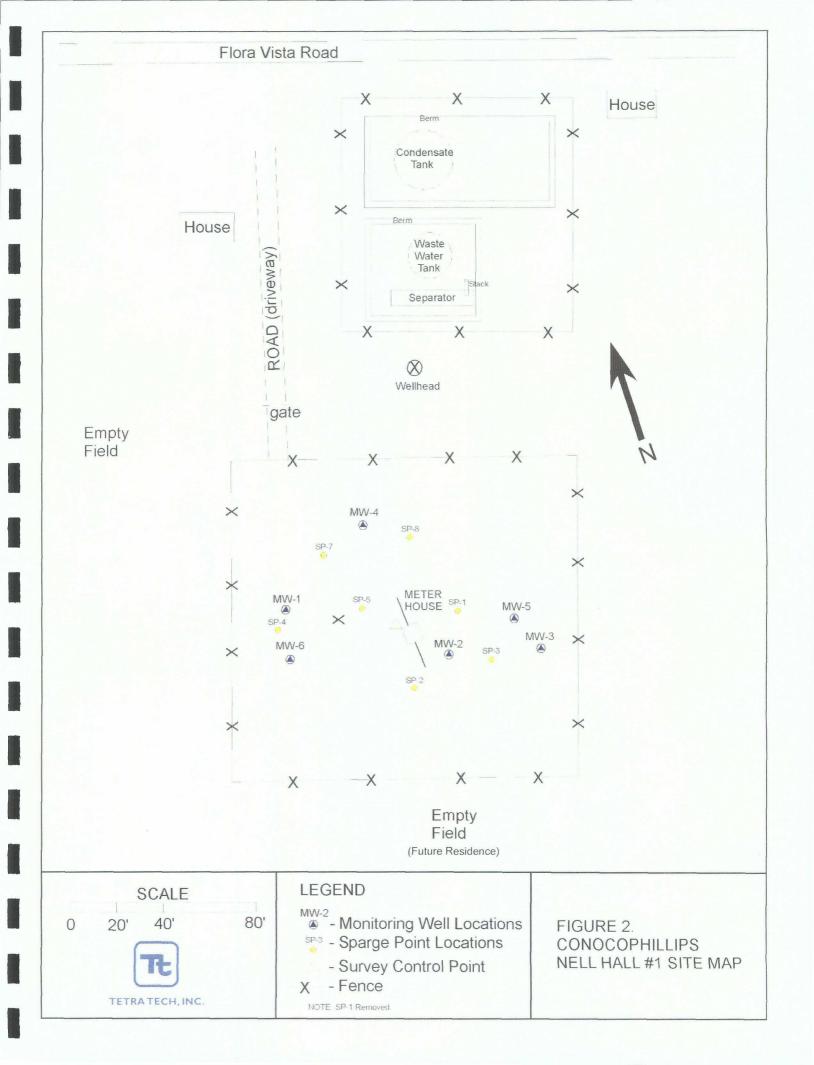
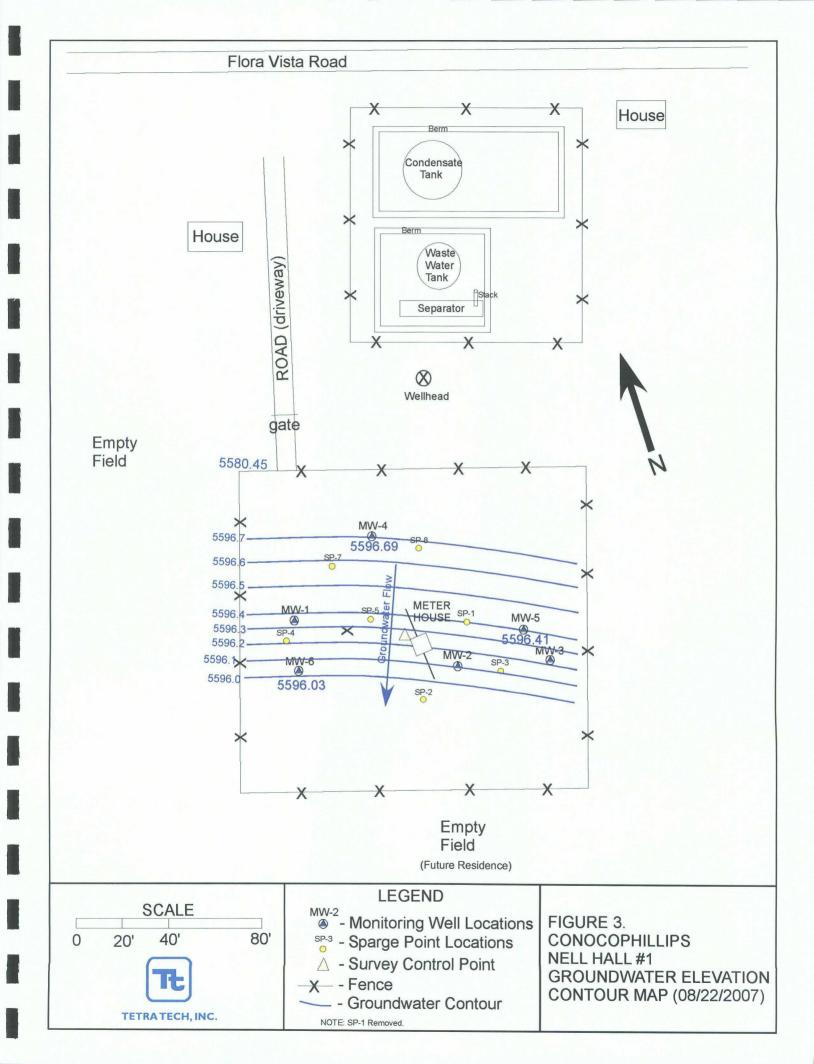


Figure 1. Site Location Map ConocoPhillips Nell Hall #1 Site Flora Vista, New Mexico





TABLES

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Table 1. ConocoPhillps Nell Hall #1 Monitoring Well Specifications and Groundwater Elevation Table

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Well ID	Date Installed	Total Depth (ft. bgs)	Screen Interval (ft)	Elevation (ft. msl) (TOC)	Date Measured	Groundwater Level (ft TOC)	Groundwater Elevation (ft msl)
					3/8/2004	36.04	5578.83
					7/19/2004	8.44	5606.43
					10/27/2004	19.69	5595.18
					12/27/2004	27.58	5587.29
MW-4	2/18/2004	35	5-35	5614.87	5/10/2005		dry
					11/22/2005	23.93	5590.94
					11/15/2006	21.02	5593.85
					2/19/2007	34.40	5580.47
					8/22/2007	18.18	5596.69
					3/8/2004	37.19	5578.67
					7/19/2004	9.38	5606.48
					10/27/2004	21.07	5594.79
				-	12/27/2004	28.99	5586.87
MW-5	2/17/2004	39	4-39	5615.86	5/10/2005	39.79	5576.07
					11/22/2005	25.23	5590.63
					11/15/2006	22.51	5593.35
					2/19/2007	35.31	5580.55
					8/22/2007	19.45	5596.41
					3/8/2004	36.27	5579.17
					7/19/2004	9.43	5606.01
					10/27/2004	19.33	5596.11
					12/27/2004	28.62	5586.82
9-MM	2/18/2004	35	5-35	5615.44	5/10/2005		dry
					11/22/2005	25.02	5590.42
					11/15/2006	21.12	5594.32
					2/19/2007	34.82	5580.62
					8/22/2007	19.41	5596.03

msl = Mean sea level TOC = Top of casing bgs = below ground surface

Table 2. ConocoPhillips Nell Hall #1 Groundwater Analytical Results Summary

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MWV-6 13 12 64 1400 NA NA <t< th=""><th>Well ID</th><th>Date</th><th>Benzene (μg/L)</th><th>Benzene (μg/L) Toluene (μg/L)</th><th>Ethylbenzene (μg/L)</th><th>Xylenes (μg/L)</th><th>Nitrate (mg/L)</th><th>Sulfate (mg/L)</th><th>Ferrous Iron (mg/L)</th><th>Phosphate (mg/L)</th></t<>	Well ID	Date	Benzene (μg/L)	Benzene (μg/L) Toluene (μg/L)	Ethylbenzene (μg/L)	Xylenes (μg/L)	Nitrate (mg/L)	Sulfate (mg/L)	Ferrous Iron (mg/L)	Phosphate (mg/L)
44 <u.5< th=""> <0.5</u.5<>		3/8/2004	13	12	64	1,400	NA	NA	NA	NA
04 11 8 21 130 NA NA NA NA 04 <2.5		7/19/2004	<0.5	9.0>	<0.5	<0.5	NA	NA	NA	NA
64 <2.5		10/27/2004	11	8	21	130	NA	NA	ΑN	NA
55 cly 56 < c0.5		12/27/2004	<2.5	<2.5	<2.5	<0.5	AN	NA	Ϋ́	AN
05 <0.5	MW-4	5/11/2005				P	ک			
06 < 0.5		11/22/2005	<0.5	<0.7	<0.8	<0.8	<0.40	105	2.7	<0.25
77 <0.5		11/15/2006	<0.5	<0.7	<0.8	<0.8	<0.25	110	0.083	<0.25
4 -0.5 -0.7 -0.8 -0.25 96.5 0.04 4 -1.1 -0.5 -0.5 1 -17 NA NA NA 94 -0.5 -0.5 -0.5 -0.5 -0.5 -0.72 NA NA NA 94 -0.5 -0.5 -0.5 -0.7 NA NA NA 94 -0.5 -0.5 -0.5 -0.7 NA NA NA 95 -0.5 -0.5 -0.5 -0.7 NA NA NA 96 -0.5 -0.7 -0.8 -0.8 -0.40 38 -0.0080 97 -0.5 -0.7 -0.8 -0.8 -0.40 38 -0.0080 96 -0.5 -0.7 -0.8 -0.8 -0.40 38 -0.0080 97 -0.5 -0.7 -0.8 -0.8 -0.8 -0.40 NA NA 94 -0.5 -0.7		2/21/2007	<0.5	<0.7	<0.8	<0.8	<0.25	59.6	1.6	0.28
4 1.1 <0.5		8/22/2007	<0.5	<0.7	<0.8	<0.8	<0.25	96.5	0.04	<0.25
94 < 0.5		3/8/2004	1.1	<0.5	-	17	ΑN	ΝΑ	ΝΑ	ΑN
04 < 0.5		7/19/2004	<0.5	0.55	<0.5	0.72	AN	ΑN	Ϋ́Z	AN
04 < 0.5		10/27/2004	<0.5	<0.5	<0.5	<1.0	ΝΑ	ΝΑ	ΑN	NA
55 < 0.5		12/27/2004	2.0>	5.0>	<0.5	<1.0	NA	AN	ΑN	ΝΑ
05 < 0.5	MW-5	5/11/2005	<0.5	2.0>	<0.8	<0.8	2.3	139	<0.0080	1.2
06 <0.5		11/22/2005	<0.5	<0.7	<0.8	<0.8	<0.40	38	<0.0080	0.43
77 <0.5		11/15/2006	<0.5	2.0>	<0.8	<0.8	2.3	6.77	<0.0080	<0.25
4 2,500 14 1,600 21,031 NA		2/21/2007	<0.5	2.0>	<0.8	<0.8	1.3	83.3	<0.0080	0.28
4 2,500 14 1,600 21,031 NA NA NA NA 04 <0.5		8/22/2007	<0.5	2.0>	<0.8	<0.8	5.6	125	<0.0080	<0.25
04 <0.5		3/8/2004	2,500	14	1,600	21,031	NA	ΝA	NA	ΑN
04 0.4 0.3 0.5 2.1 NA NA NA NA 04 45 6.8 14 71.7 NA NA NA NA 05 6.8 14 71.7 NA NA NA NA 05 10 0.7 16 150 <0.40		7/19/2004	<0.5	9.0>	0.98	2.6	. VN	ΑN	AN	ΑN
04 45 6.8 14 71.7 NA NA NA NA D5		10/27/2004	0.4	0.3	0.5	2.1	NA	NA	NA	NA
05 10 0.7 16 150 <0.40		12/27/2004	45	8.9	14	2.17	NA	AN	ďΖ	AN
05 10 0.7 16 150 <0.40	MW-6	5/11/2005				P	>			
06 <0.5		11/22/2005	10	2.0	16	150	<0.40	3.4	7.7	2.8
540 <1		11/15/2006	5.0>	2.0>	<0.8	8.0>	<0.25	41.3	0.19	<0.25
37 <0.5		2/21/2007	240	1>	76	810	<0.25	1.8	6.4	0.6
10 (μg/L) 750 (μg/L) 750 (μg/L) 620 (μg/L) 10 (mg/L) 600 (mg/L) 1 (mg/L)		8/22/2007	<0.5	<0.7	<0.8	<0.8	<0.25	12.6	0.95	<0.25
	NMWQCC	Standards	10 (µg/L)	750 (µg/L)	750 (µg/L)	620 (µg/L)	10 (mg/L)	(mg/L)	1 (mg/L)	NE

NMWQCC = New Mexico Water Quality Control Commission mg/L = milligrams per liter (parts per million)
itg/L = micrograms per liter (parts per billion)
NE=Not Established
NA = Not Analyzed

APPENDIX A

LABORATORY REPORT

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2425 New Holkind Pike, PO Box 12425 Langaster PA 17805-2425 • 717-656-2300 Fax 717-656-2681 • www.famoasterlabs.com

ANALYTICAL RESULTS

Prepared for:

ConocoPhillips PO Box 2200 Bartlesville OK 74005

Prepared by:

Laneaster Laboratories 2425 New Holland Pike Laneaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 1052846. Samples arrived at the laboratory on Thursday, August 23, 2007. The PO# for this group is 4506560640 and the release number is LAUCK.

Client Description	<u>Lancaster Labs Number</u>
MW-4 Grab Water Sample	5136032
MW-5 Grab Water Sample	5136033
MW-6 Grab Water Sample	5136034
Duplicate Grab Water Sample	5136035
Trip Blank Water Sample	5136036

ELECTRONIC COPY TO

Tetra Tech

Attn: Kelly Blanchard



Questions? Contact your Client Services Representative Barbara A Weyandt at (717) 656-2300

Respectfully Submitted,

Robert Heisey

Senior Specialist



2425 New Holland Pike. PO Box 12425. Lancaster. PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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Lancaster Laboratories Sample No. WW 5136032

MW-4 Grab Water Sample Site# 6084 Nell Hall #1, NM

Collected: 08/22/2007 09:00

by KB

Account Number: 11288

Submitted: 08/23/2007 09:30 Reported: 09/04/2007 at 07:57

ConocoPhillips PO Box 2200

Discard: 10/05/2007

Bartlesville OK 74005

FNMW4

				As Received	As Received		
CAT			As Received	Method	Limit of		Dilutíon
No.	Analysis Name	CAS Number	Result	Detection Limit*	Quantitation	Units	Factor
00228	Sulfate	14808-79-8	96.5	3.0	10.0	${\sf mg/1}$	10
00345	Total Phosphorus as PO4 water	14265-44-2	N.D.	0.25	0.31	mg/l	1
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.25	0.50	mg/l	5
08344	Ferrous Iron	n.a.	0.040	0.0080	0.10	mg/1	1
02300	GC/MS Volatiles						
05401	Benzene	71-43-2	N.D.	0.5	5.	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	5.	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	5.	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	5.	ug/l	1

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			_	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00228	Sulfate	EPA 300.0	1	08/24/2007 14:07	Ashley M Heckman	10
00345	Total Phosphorus as PO4 water	EPA 365.1	1	08/27/2007 17:52	Venia B McFadden	1
00368	Nitrate Nitrogen	EPA 300.0	1	08/24/2007 03:15	Ashley M Heckman	5
08344	Ferrous Iron	SM20 3500-Fe B modified	1	08/23/2007 22:10	Daniel S Smith	1
02300	GC/MS Volatiles	SW-846 8260B	1	08/28/2007 16:54	Matthew F Regan	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	08/28/2007 16:54	Matthew F Regan	1
08264	Total Phos as PO4 Prep	EPA 365.1	1	08/27/2007 11:50	Nancy J Shoop	1

^{*=}This limit was used in the evaluation of the final result



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Page 1 of 1

Lancaster Laboratories Sample No. WW 5136033

MW-5 Grab Water Sample Site# 6084 Nell Hall #1, NM

Collected:08/22/2007 09:25 by KB Account Number: 11288

 Submitted:
 08/23/2007 09:30
 ConocoPhillips

 Reported:
 09/04/2007 at 07:57
 PO Box 2200

Discard: 10/05/2007 Bartlesville OK 74005

FNMW5

CAT			As Received	As Received Method	As Received Limit of		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit*	Quantitation	Units	Factor
00228	Sulfate	14808-79-8	125.	3.0	10.0	mg/l	10
00345	Total Phosphorus as PO4 water	14265-44-2	N.D.	0.25	0.31	mg/1	1
00368	Nitrate Nitrogen	14797-55-8	5.6	0.25	0.50	mg/1	5
08344	Ferrous Iron	n.a.	N.D.	0.0080	0.10	mg/1	1
02300	GC/MS Volatiles						
05401	Benzene	71-43-2	N.D.	0.5	5.	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	5.	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	5.	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	5.	ug/l	1

 $\mbox{All QC}$ is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			1	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00228	Sulfate	EPA 300.0	1	08/24/2007 14:20	Ashley M Heckman	10
00345	Total Phosphorus as PO4 water	EPA 365.1	1	08/27/2007 17:53	Venia B McFadden	1
00368	Nitrate Nitrogen	EPA 300.0	1	08/24/2007 03:30	Ashley M Heckman	5
08344	Ferrous Iron	SM20 3500-Fe B modified	1	08/23/2007 22:10	Daniel S Smith	1
02300	GC/MS Volatiles	SW-846 8260B	1	08/28/2007 17:18	Matthew F Regan	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	08/28/2007 17:18	Matthew F Regan	1
08264	Total Phos as PO4 Prep (water)	EPA 365.1	1	08/27/2007 11:50	Nancy J Shoop	1

^{*=}This limit was used in the evaluation of the final result



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Lancaster Laboratories Sample No. WW 5136034

MW-6 Grab Water Sample Site# 6084 Nell Hall #1, NM

Collected: 08/22/2007 09:45

by KB

Account Number: 11288

Submitted: 08/23/2007 09:30 Reported: 09/04/2007 at 07:57 ConocoPhillips PO Box 2200

Bartlesville OK 74005

Discard: 10/05/2007

FNMW6

				As Received	As Received		
CAT			As Received	Method	Limit of		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit*	Quantitation	Units	Factor
00228	Sulfate	14808-79-8	12.6	1.5	5.0	${ m mg}/1$	5
00345	Total Phosphorus as PO4 water	14265-44-2	N.D.	0.25	0.31	mg/l	1
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.25	0.50	mg/1	5
08344	Ferrous Iron	n.a.	0.95	0.040	0.50	mg/1	5
02300	GC/MS Volatiles						
05401	Benzene	71-43-2	N.D.	0.5	5.	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	5.	ug/1	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	5.	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	5.	ug/l	1

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			4	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00228	Sulfate	EPA 300.0	1	08/24/2007 08:09	Ashley M Heckman	5
00345	Total Phosphorus as PO4 water	EPA 365.1	1	08/27/2007 17:54	Venia B McFadden	1
00368	Nitrate Nitrogen	EPA 300,0	1	08/24/2007 08:09	Ashley M Heckman	5
08344	Ferrous Iron	SM20 3500-Fe B modified	1	08/23/2007 22:10	Daniel S Smith	5
02300	GC/MS Volatiles	SW-846 8260B	1	08/28/2007 17:42	Matthew F Regan	1
01163	GC/MS VOA Water Prep	SW-846 5030B	. 1	08/28/2007 17:42	Matthew F Regan	1
08264	Total Phos as PO4 Prep (water)	EPA 365.1	1	08/27/2007 11:50	Nancy J Shoop	1

^{*=}This limit was used in the evaluation of the final result



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Lancaster Laboratories Sample No. WW 5136035

Duplicate Grab Water Sample Site# 6084 Nell Hall #1, NM

Collected: 08/22/2007 10:00 by KB Account Number: 11288

 Submitted: 08/23/2007 09:30
 ConocoPhillips

 Reported: 09/04/2007 at 07:57
 PO Box 2200

Discard: 10/05/2007 Bartlesville OK 74005

FNDUP

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Units	Dilution Factor
02300	GC/MS Volatiles						
05401	Benzene	71-43-2	N.D.	0.5	5.	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	5.	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	5.	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	5.	ug/l	1

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			1	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
02300	GC/MS Volatiles	SW-846 8260B	1	08/28/2007 18:05	Matthew F Regan	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	08/28/2007 18:05	Matthew F Regan	1

^{*=}This limit was used in the evaluation of the final result



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Lancaster Laboratories Sample No. WW 5136036

Trip Blank Water Sample Site# 6084 Nell Hall #1, NM

Collected: 08/22/2007 Account Number: 11288

 Submitted:
 08/23/2007 09:30
 ConocoPhillips

 Reported:
 09/04/2007 at 07:58
 PO Box 2200

Discard: 10/05/2007 Bartlesville OK 74005

FNMTB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Units	Dilution Factor
02300	GC/MS Volatiles						
05401	Benzene	71-43-2	N.D.	0.5	5.	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	5.	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	5.	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	5.	ug/l	1

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
02300	GC/MS Volatiles	SW-846 8260B	1	08/28/2007 18:29	Matthew F Regan	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	08/28/2007 18:29	Matthew F Regan	1

^{*=}This limit was used in the evaluation of the final result



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Quality Control Summary

Client Name: ConocoPhillips Group Number: 1052846

Reported: 09/04/07 at 07:58 AM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the mathed

Laboratory Compliance Quality Control

Analysis Name	Blank <u>Result</u>	Blank MDL**	Blank <u>LOQ</u>	Report <u>Units</u>	LCS %REC	LCSD %REC	LCS/LCSD <u>Limits</u>	RPD	RPD Max
Batch number: 07235196102A	Sample numb				0.0		00 110		
Sulfate Nitrate Nitrogen	N.D. N.D.	0.30 0.050	1.0 0.10	mg/l mg/l	99 105		89-110 90-110		
Batch number: 07235834404A	Sample numb	per(s): 51	36032-513	6034					
Ferrous Iron	N.D.	0.0080	0.10	mg/l	102		95-105		
Batch number: 07239110101A	Sample numb	per(s): 51	36032-513	6034					
Total Phosphorus as PO4 water	N.D.	0.25	0.31	mg/1	104		90-110		
Batch number: T072401AA	Sample numb	per(s): 51	36032-513	6036					
Benzene	N.D.	0.5	5.	ug/l	106	105	78-119	1	30
Toluene	N.D.	0.7	5.	ug/l	94	96	85-115	2	30
Ethylbenzene	N.D.	0.8	5.	ug/l	86	86	82-119	0 /	30
Xylene (Total)	N.D.	0.8	5.	ug/l	88	89	83-113	1	30

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 07235196102A Sulfate Nitrate Nitrogen	Sample r 109 116*	number(s)	: 5136032 90-110 90-110	-513603	4 UNSP	K: P136054 3.2 N.D.	BKG: P136054 3.4 N.D.	6* (1) 0 (1)	3 2
Batch number: 07235834404A Ferrous Iron	Sample r 96	number(s) 97		-513603 1	4 UNSP	K: P136042 2.5	BKG: P136042 2.5	0 (1)	8
Batch number: 07239110101A Total Phosphorus as PO4 water	Sample r 98	number(s)	: 5136032 90-110	-513603	4 UNSP	K: P136991 N.D.	BKG: P136991 N.D.	172* (1)	3
Batch number: T072401AA Benzene Toluene Ethylbenzene Xylene (Total)	Sample r 106 92 85 86	number(s)	: 5136032 83-128 83-127 82-129 82-130	-513603	6 UNSP	K: P138575	·		

Surrogate Quality Control

- *- Outside of specification
- **-This limit was used in the evaluation of the final result for the blank
- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.



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Quality Control Summary

Client Name: ConocoPhillips

Reported: 09/04/07 at 07:58 AM

Group Number: 1052846

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: GC/MS Volatiles Batch number: T072401AA

Batth num	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5136032	111	98	96	101
5136033	110	100	94	101
5136034	108	97	100	107
5136035	107	96	98	106
5136036	110	99	96	102
Blank	108	97	95	101
LCS	106	101	98	103
LCSD	103	99	98	104
MS	106	100	97	105
Limits:	80-116	77-113	80-113	78-113

^{*-} Outside of specification

^{**-}This limit was used in the evaluation of the final result for the blank

⁽¹⁾ The result for one or both determinations was less than five times the LOQ.

⁽²⁾ The background result was more than four times the spike added.

Group # 1052846 Sample#5/36032 SCR#:

88011

For Lancaster Labs Use ONLY Acct #: _

1000

Laboratories C	005428		List total number	List total number of containers in the		
			Analyses Requested box under each analysis.	analysis.		
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Lancaster Laboratories Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	BMQL	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	MPN	Most Probable Number
IU	International Units	CP Units	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	NTU	nephelometric turbidity units
С	degrees Celsius	F	degrees Fahrenheit
Cal	(diet) calories	lb.	pound(s)
meq	milliequivalents	kg	kilogram(s)
g	gram(s)	mg	milligram(s)
ug	microgram(s)	1	liter(s)
ml	milliliter(s)	ul	microliter(s)
m3	cubic meter(s)	fib >5 um/ml	fibers greater than 5 microns in length per ml

- < less than The number following the sign is the <u>limit of quantitation</u>, the smallest amount of analyte which can be reliably determined using this specific test.
- > greater than
- ppm parts per million One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.
- ppb parts per billion
- Dry weight Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

Α

В

D

Ε

J

Organic Qualifiers

Pesticide result confirmed by GC/MS

Compound quatitated on a diluted sample

Concentration exceeds the calibration range of

TIC is a possible aldol-condensation product Analyte was also detected in the blank

В	Value is <crdl, but="" th="" ≥idl<=""></crdl,>
Ε	Estimated due to interference
M	Duplicate injection precision not met
N	Spike amount not within control limits
S	Method of standard additions (MSA) used
	for calculation
	O

Inorganic Qualifiers

- Estimated value

 Presumptive evidence of a compound (TICs only)

 U

 Compound was not detected
 Post digestion spike out of control limits
- Presumptive evidence of a compound (TICs only)
 Concentration difference between primary and confirmation columns >25%
 Post digestion spike out of control limits
 Duplicate analysis not within control limits
 Correlation coefficient for MSA <0.995
- U Compound was not detected
- X,Y,Z Defined in case narrative

the instrument

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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