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# **REPORTS**

**DATE:**

**2/18/2003**



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FEB 28 2003

ENVIRONMENTAL BUREAU  
OIL CONSERVATION DIVISION

ConocoPhillips  
Attn.: Mr. Neal Goates, RM&R Site Manager  
Threadneedle Office.  
PO Box 2197  
Houston, TX 77252-2197

RE: 2002 Annual Groundwater Monitoring Report  
ConocoPhillips Location: Farmington B Com #1E  
Unit 0, Sec. 15, T29N, R13W, NMPM, San Juan Co., NM

Project: 4-1374

Dear Mr. Goates,

The following report summarizes the ground water remediation and monitoring activities conducted by Souder Miller and Associates (SMA) on behalf of ConocoPhillips, at the referenced oil and gas location. This report covers the calendar year of 2002, and follows the format outlined in the *Comprehensive Ground Water Remediation and Long-Term Monitoring Plan for Conoco Locations in the San Juan Basin, New Mexico* (hereafter known as the monitoring plan), submitted to the New Mexico Oil Conservation Division on October 15, 1997.

**SUMMARY OF 2002 ACTIVITIES:**

Ground water sampling events were conducted during March, June, and September of 2002, and January 2003, due to inclement weather. Free product is still present in monitoring well 1 (MW #1). MW#1 has not been sampled during the past year.

NMOCD has accepted the recommendations from the 1999 Annual Ground Water report. Sampling of the site has been discontinued until a more aggressive action can be taken to recover the free product in MW#1.

SMA has submitted proposals for a more aggressive MW-1 Free Product Recovery system to ConocoPhillips for their consideration.

**SAMPLING:**

Table 1, summarizes the amount of free product recovered during each sampling event and the cumulative amount to date.

**SUMMARY AND CONCLUSIONS:**

The following conclusions are based on the 2002 ground water monitoring results and trends associated with Farmington B Com 1E well location:

Free product remains a problem in MW #1.

**Recommendations:**

1. More aggressive recovery techniques need to be implemented.
2. When the free product recovery has been completed, begin ground water monitoring of MW#1 until four (4) quarters of water quality at or below NMWQCC standards.
3. Final sampling of all monitoring wells at the location to be done prior to closure.
4. When ground water monitoring has been complete, Final Pit Closure form to be submitted to NMOCD for approval.
5. Plug and abandon all monitoring wells at this location in accordance with current regulations.

**LIMITATIONS AND CLOSURE:**

This 2002 groundwater report documents the results of ground water monitoring for the referenced ConocoPhillips well location. This report follows the Comprehensive Ground Water Remediation and Long-Term Monitoring Plan for Conoco Locations in the San Juan Basin, New Mexico, dated October 15, 1997, and approved by NMOCD on February 16, 1998.

The scope of SMA's services consisted of project management, periodic Free Product measurement and recovery, and preparation of this initial report. All work has been performed in accordance with generally accepted professional practices in petroleum and environmental engineering, and hydrogeology.

This document has been prepared by Souder Miller and Associates for the exclusive use of ConocoPhillips Inc. as it pertains to the referenced well location operated by ConocoPhillips.

If there are any questions regarding this status report, please contact either John Hagstrom or Larry Trujillo at Souder Miller and Associates, (505) 325-5667. Thank you for your consideration.

Respectfully submitted,

  
John Hagstrom  
Environmental technician

Reviewed by:

  
Lawrence "Larry" Trujillo, CHMM  
Environmental Specialist

**SOUDER MILLER AND ASSOCIATES**

Attachments: Figure 1: Site Sketch  
Table 1: Free Product Recovery

Conoco, Inc.: Farmington B Com #1E  
Souder Miller and Associates  
2002 Annual Ground Water Report

February 2003  
Project 4-1374

Acknowledgment:  
CONOCOPHILLIPS, Inc.

Neal Aozatz / Site Manager  
(Name/Title)

2-21-03  
(Date)

**REFERENCE:**

*On Site Technologies, Ltd., April 16, 1997, Letter to Mr. W. L. Brignon, Senior Council Conoco, Inc. Midland Division, regarding: Remediation Summary, Conoco Location, Farmington B Com #1E, Unit 0, Sec. 15, T29N, R13W, NMPM, San Juan Co., NM.*

*On Site Technologies, Ltd., February 1, 1998, Report to Ms. Shirley Ebert, Field SHEAR Specialist, Conoco, Inc. Mid-Continent Region, regarding: Annual Ground Water Report for 1997, Conoco Location, Farmington B Com #1E, Unit 0, Sec. 15, T29N, R13W, NMPM, San Juan Co., NM*

*On Site Technologies, Ltd., February 8, 1999, Report to Ms. Shirley Ebert, Field SHEAR Specialist, Conoco, Inc. Mid-Continent Region, regarding: Annual Ground Water Report for 1998, Conoco Location, Farmington B Com #1E, Unit 0, Sec. 15, T29N, R13W, NMPM, San Juan Co., NM*

*On Site Technologies, Ltd., January 7, 2000 Report to Ms. Shirley Ebert, Field SHEAR Specialist, Conoco, Inc. Mid-Continent Region, regarding: Annual Ground Water Report for 2000, Conoco Location, Farmington B Com #1E, Unit 0, Sec. 15, T29N, R13W, NMPM, San Juan Co., NM*

Table 1

BGS - approximate measurements taken as Below Ground Surface  
 BTOC - Below Top of Casing  
 NM - Not Measured



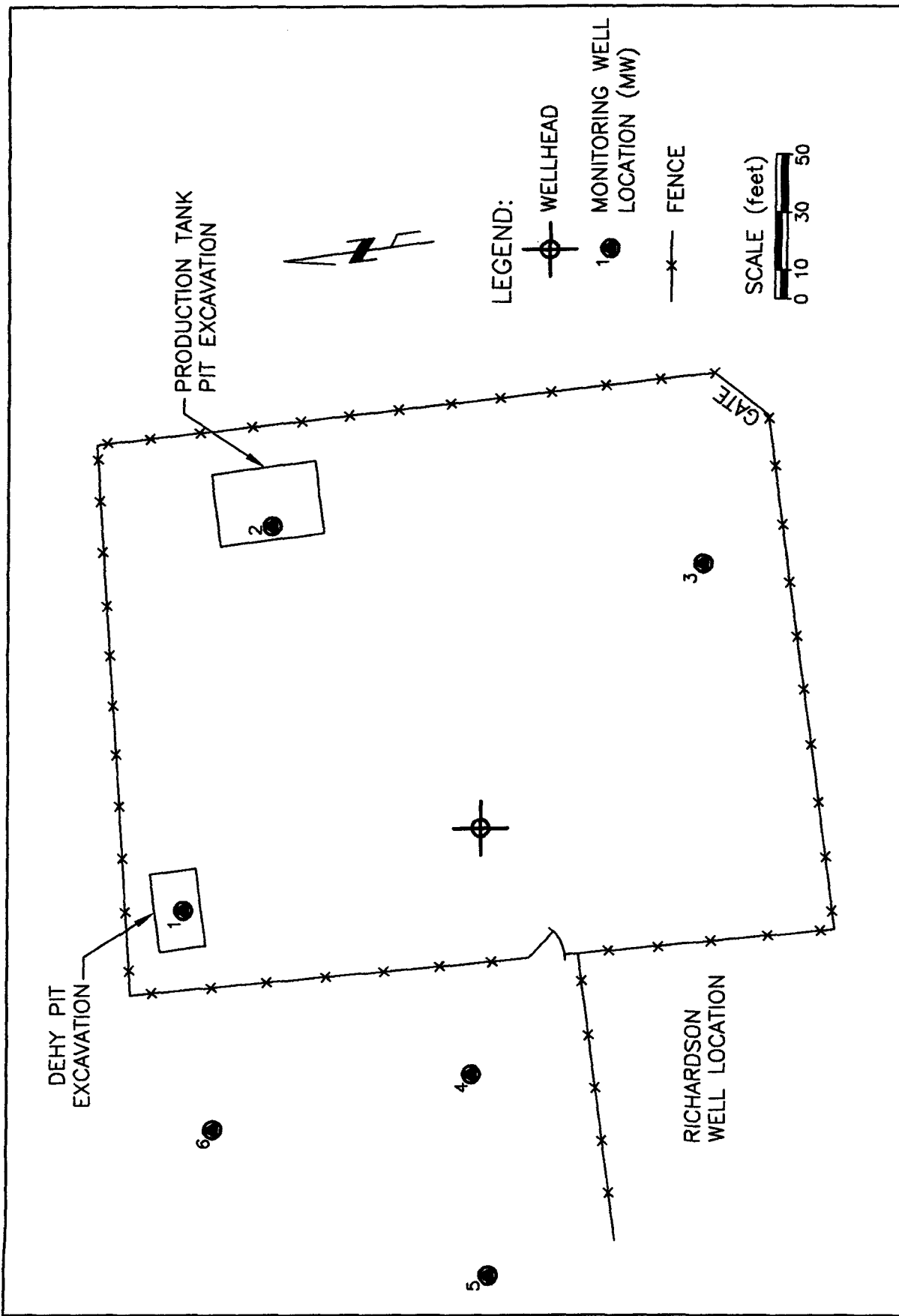
Table 2  
BTEX Ground Water Analytical Summary  
Farmington B Com 1E  
Unit O, Sec. 15 T29N, R13W


Sample Date	Sample ID#	Monitor Well	Remarks	BTEX per EPA 8020 (ppb)				
				Benzene	Toluene	Ethylbenzene	Total-Xylene	
2/19/98	9802020-01A	MW#1	On Site Lab.	210.0	34.0	370.0	2044.0	
6/12/98	3" of free product	in the bailer						
9/15/98	Not Sampled	free product	in well					
12/29/98	9812053-04A			350.0	BDL	420	2800.0	
No	Water	Samples	Taken	in	1999			
2/19/98	9802020-02A	MW#2	On Site Lab.	2.4	5.3	16.0	470.0	
6/12/98	9806055-02A			0.8	2.7	32.0	171.0	
9/15/98	9809035-01A			1.3	2.5	39.0	33.3	
12/29/98	9812053-05A			BDL	0.6	2.1	35.0	
3/3/99	9903012-05A			BDL	BDL	64	119.0	
6/15/99	9906055-05A			BDL	BDL	BDL	BDL	
9/15/99	9909054-05A			BDL	BDL	4.1	68.1	
12/14/99	9912018-05A			BDL	BDL	1.8	36.4	
2/19/98	9802020-03A	MW#3	On Site Lab.	0.9	1.2	1.6	5.3	
06/12/98	9806055-01A			BDL	BDL	0.5	2.0	
9/15/98	9809035-02A			BDL	BDL	BDL	BDL	
12/29/98	9812053-06A			BDL	BDL	BDL	BDL	
3/3/99	9903012-04A			BDL	BDL	BDL	BDL	
6/15/99	9906055-04A			BDL	0.9	3.1	56.0	
9/15/99	9909054-04A			BDL	0.6	BDL	BDL	
12/14/99	9912018-04A			BDL	BDL	BDL	BDL	
WQCC	Action	Levels		10.0	750.0	750.0	620.0	



Table 2  
BTEX Ground Water Analytical Summary  
Farmington B Com 1E  
Unit O, Sec. 15 T29N, R13W

Sample Date	Sample ID#	Monitor Well	Remarks	BTEX per EPA 8020 (ppb)				
9/15/98	9809035-03A	MW#4	On Site Lab.	BDL	BDL	BDL	BDL	BDL
12/29/98	9812053-03A			BDL	BDL	0.6	BDL	BDL
3/3/99	9903012-03A			BDL	BDL	BDL	BDL	BDL
6/15/99	9906055-03A			BDL	BDL	BDL	BDL	BDL
9/15/99	9909054-03A			BDL	BDL	BDL	BDL	BDL
12/14/99	9912018-03A			BDL	0.7	BDL	BDL	BDL
3/27/00	0003041-01A			BDL	BDL	BDL	BDL	BDL
6/5/00	0006009-02A			BDL	BDL	BDL	BDL	BDL
9/11/00	0009020*01A			BDL	BDL	BDL	BDL	BDL
9/15/98	9809035-04A	MW#5	On Site Lab.	BDL	BDL	BDL	BDL	BDL
12/29/98	9812053-02A			BDL	BDL	BDL	BDL	BDL
3/3/99	9903012-02A			BDL	BDL	BDL	BDL	BDL
6/15/99	9906055-02A			BDL	BDL	BDL	BDL	BDL
9/15/99	9909054-02A			BDL	0.8	BDL	BDL	BDL
12/14/99	9912018-02A			BDL	BDL	BDL	BDL	BDL
3/27/00	0003041-02A			BDL	BDL	BDL	BDL	BDL
6/5/00	0006009-01A			BDL	BDL	BDL	BDL	BDL
9/11/00	0009020-02A			BDL	BDL	BDL	BDL	BDL
9/15/98	9809035-05A	MW#6	On Site Lab.	BDL	BDL	BDL	BDL	BDL
12/29/98	9812053-01A			BDL	BDL	BDL	BDL	BDL
3/3/99	9903012-01A			BDL	BDL	BDL	BDL	BDL
6/15/99	9906055-01A			BDL	BDL	BDL	BDL	BDL
9/15/99	9909054-01A			BDL	0.7	1.1	BDL	BDL
12/14/99	9912018-01A			BDL	1.8	0.7	1.9	BDL
WQCC	Action	Levels		10.0	750.0	750.0		620.0



<div><p><i>Civil / Environmental Scientists &amp; Engineers</i></p><p>618 E. MURRAY DR. PH. (806) 888-8697 FARMINGTON, NM 87401 FAX (806) 887-1496</p></div>	APPROVED:			SITE PLAN CONOCO B COM #18 FARMINGTON, NM	
	DRWN BY: JNAKAI		DATE:		
	CHK'D BY:		DATE:		
	PROJECT NO: 4-1374		SHEET: 1 OF 1		

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