

**CASE NO. 10917**  
**FC Fed. Com #8R**

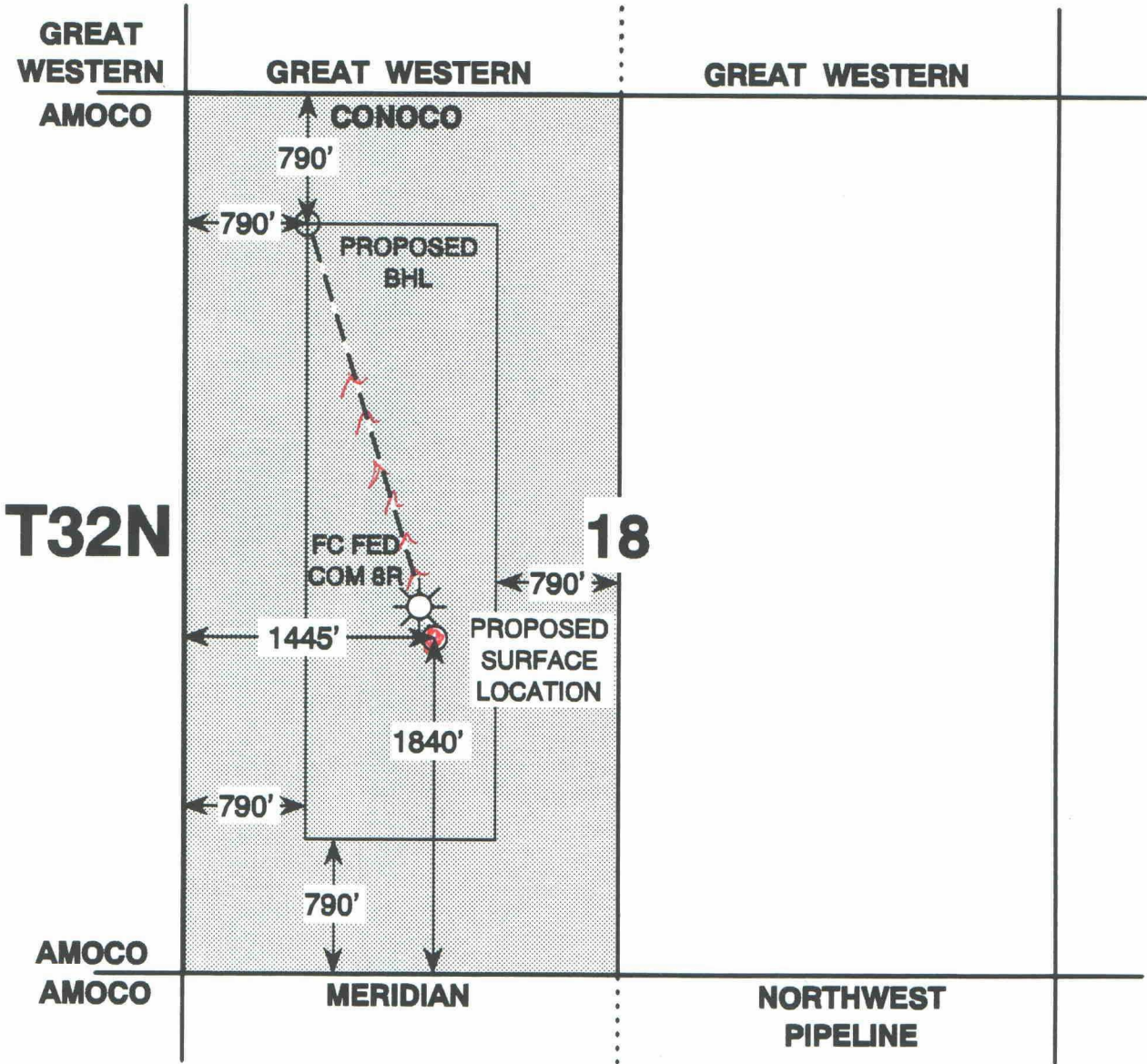
Submitted by: Conoco Inc.  
Hearing Date: Feb 17, 1994

# CONOCO, INC.

PROPOSED HORIZONTAL FRUITLAND COAL WELL

F.C. FEDERAL COM 8R

SURFACE LOCATION : 1840'FSL 1445'FWL  
SECTION 18-T32N-R11W



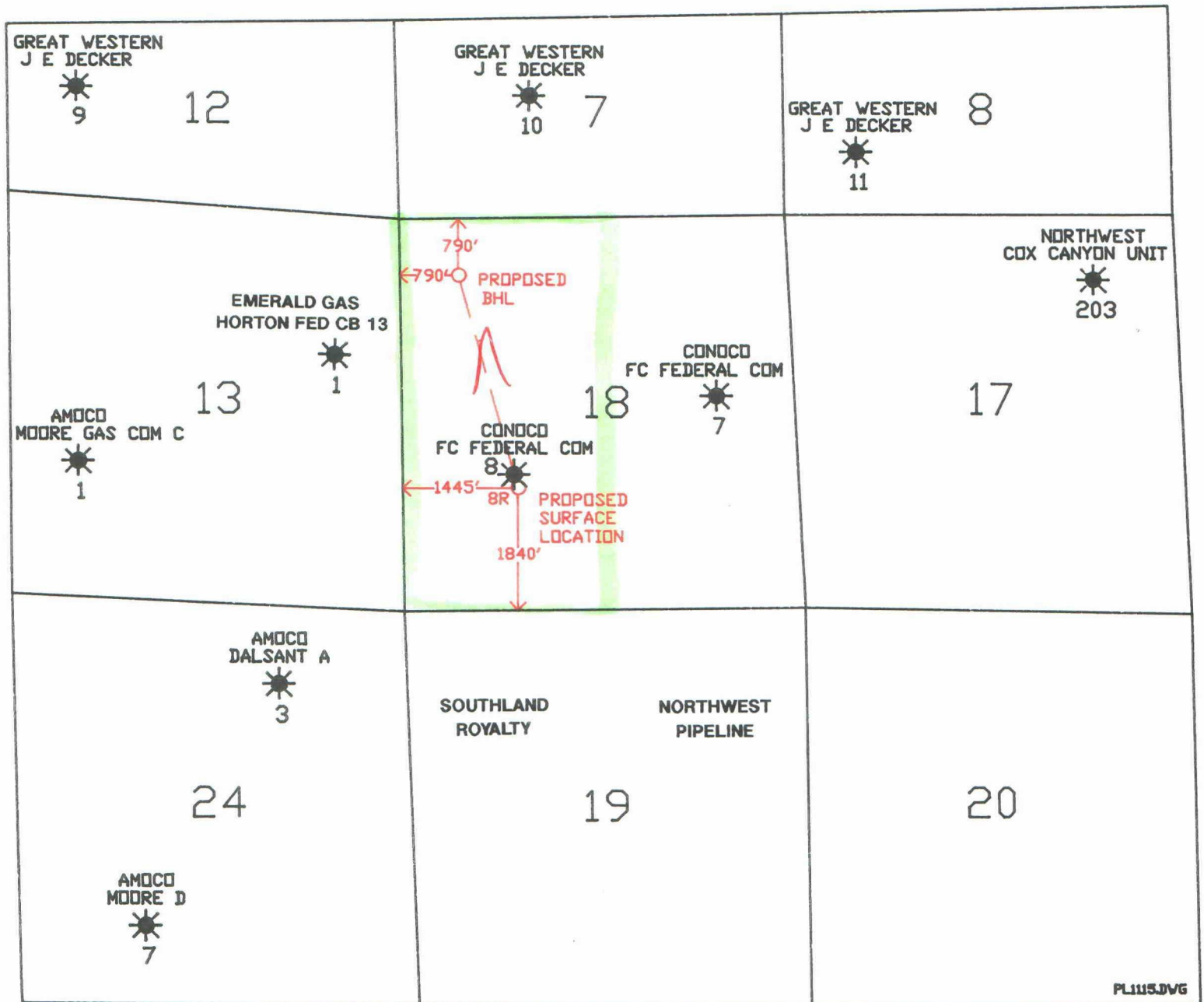
R11W

SAN JUAN CO., N.M.

BEFORE AN EXAMINER OF THE  
OIL CONSERVATION DIVISION

EXHIBIT NO. 1  
CASE NO.: 10917  
Submitted by: Conoco Inc.  
Hearing Date: Feb 17, 1994

T32N R11W



CONOCO  
FC FED COM 8 R  
HORIZONTAL FRUITLAND WELL

BEFORE AN EXAMINER OF THE  
OIL CONSERVATION DIVISION

EXHIBIT NO. 2  
CASE NO.: 10917  
Submitted by: Conoco Inc.  
Hearing Date: Feb 17, 1994

FC Fed. Com #8R - Sec. 18, T32N, R11W

Offset Well Data for Secs. 7, 8, 17, 20, R11W  
Secs. 12, 13, 24, R12W

LEASE	WNUM	OPERATOR	FPDATE	LPDATE	CUMGAS	YTD GAS	MCFD	LOCATION
J E DECKER	000010	GREAT WESTERN DRLG C	9108	9308	70544	14149	56	32N11W07K
J E DECKER	000011	GREAT WESTERN DRLG C	9301	9308	31686	31686	125	32N11W08M
COX CANYON UNIT	000203	NORTHWEST PIPELINE C	9011	9308	165581	39420	156	32N11W17A
FC FEDERAL COM	000007	CONOCO INC	9202	9308	91141	31104	123	32N11W18H
FC FEDERAL COM	000008	CONOCO INC	9202	9308	103348	33449	132	32N11W18K
J E DECKER	000009	GREAT WESTERN DRLG C	9108	9308	24221	6239	25	32N12W12L
MOORE GAS COM C	000001	AMOCO PRODUCTION CO	9201	9308	86501	16679	66	32N12W13L
DALSANT A	000003	AMOCO PRODUCTION CO	9211	9308	33752	22381	88	32N12W24B
MOORE D	000007	AMOCO PRODUCTION CO	9110	9308	19948	3202	13	32N12W24N

BEFORE AN EXAMINER OF THE  
OIL CONSERVATION DIVISION

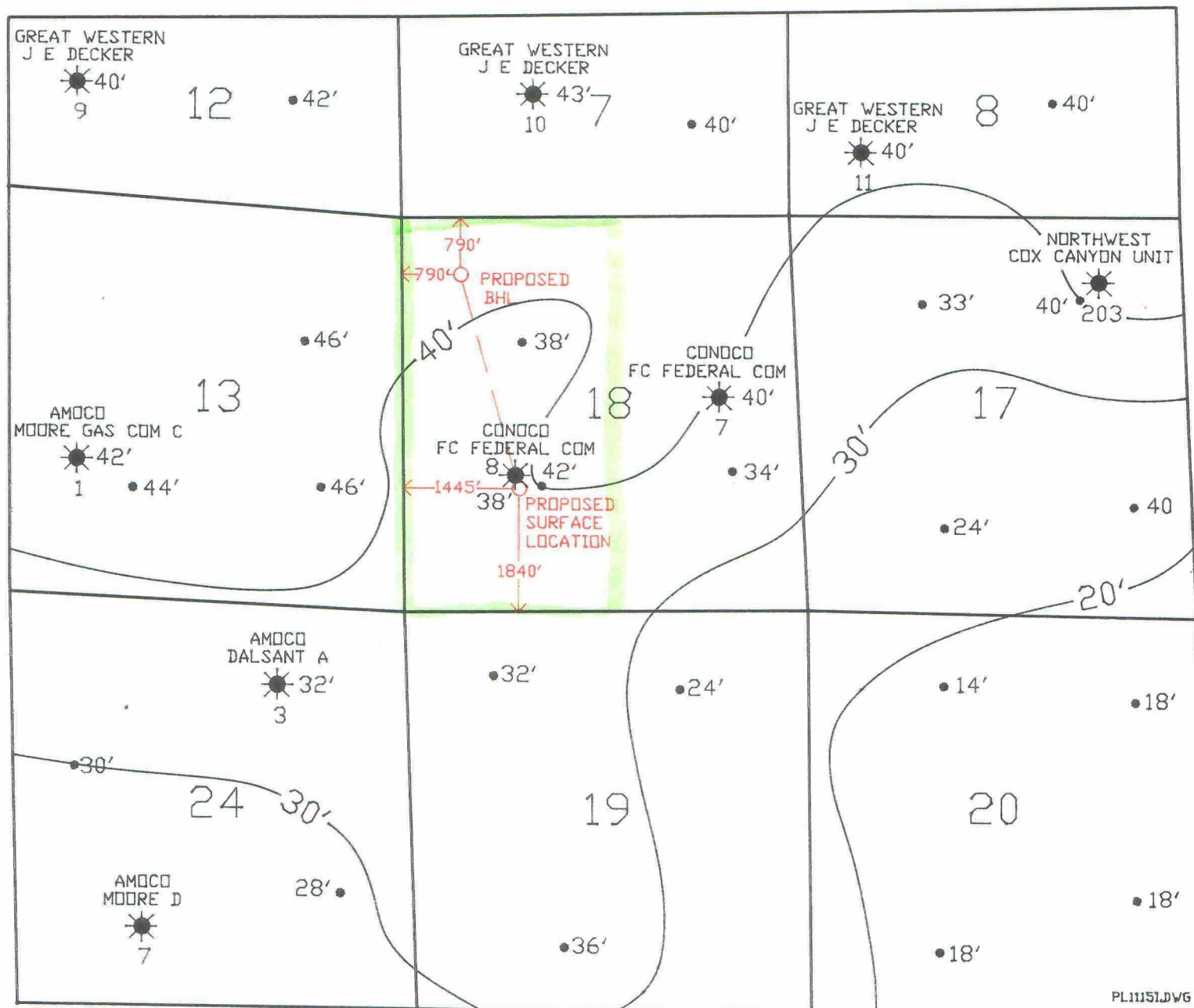
EXHIBIT NO. 3  
CASE NO.: 10917  
Submitted by: Conoco Inc.  
Hearing Date: Feb 17, 1994







T32N R11W



CONOCO  
FC FED COM 8 R  
HORIZONTAL FRUITLAND WELL

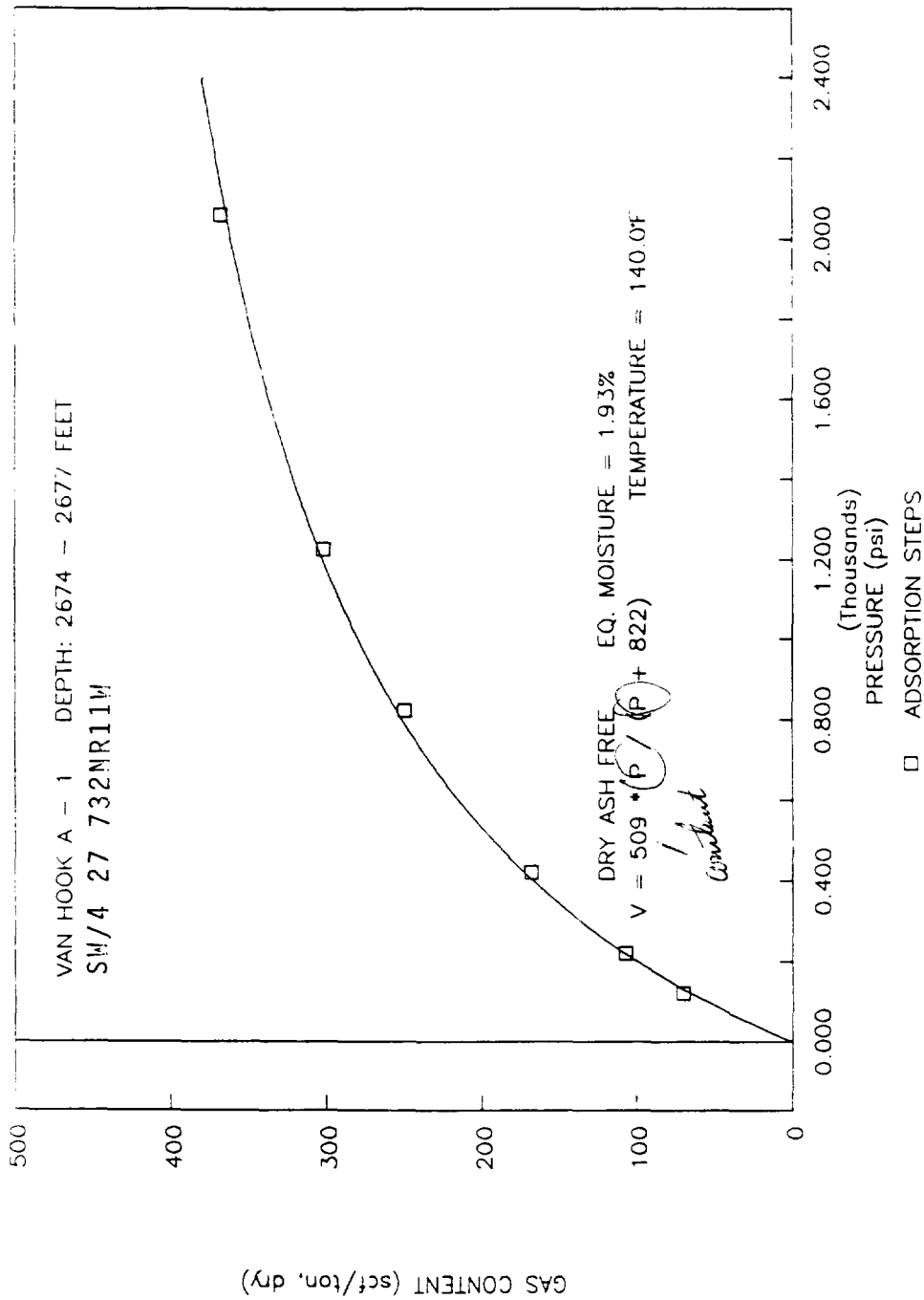
ISOPACH  
MIDDLE COAL SEAM

BEFORE AN EXAMINER OF THE  
OIL CONSERVATION DIVISION

EXHIBIT NO. 5  
CASE NO.: 10917  
Submitted by: Conoco Inc.  
Hearing Date: Feb 17, 1994

# METHANE ADSORPTION ISOTHERM

CONOCO INC.



BEFORE AN EXAMINER OF THE  
OIL CONSERVATION DIVISION

EXHIBIT NO. 6  
CASE NO.: 10917  
Submitted by: Conoco Inc.  
Hearing Date: Feb 17, 1994

# Conventional and Coalbed Gas Storage and Flow Systems



## Processes in the Transport of Coalbed Methane Gas



BEFORE AN EXAMINER OF THE  
OIL CONSERVATION DIVISION

EXHIBIT NO. 7  
CASE NO.: 10917  
Submitted by: Conoco Inc.  
Hearing Date: Feb 17, 1994

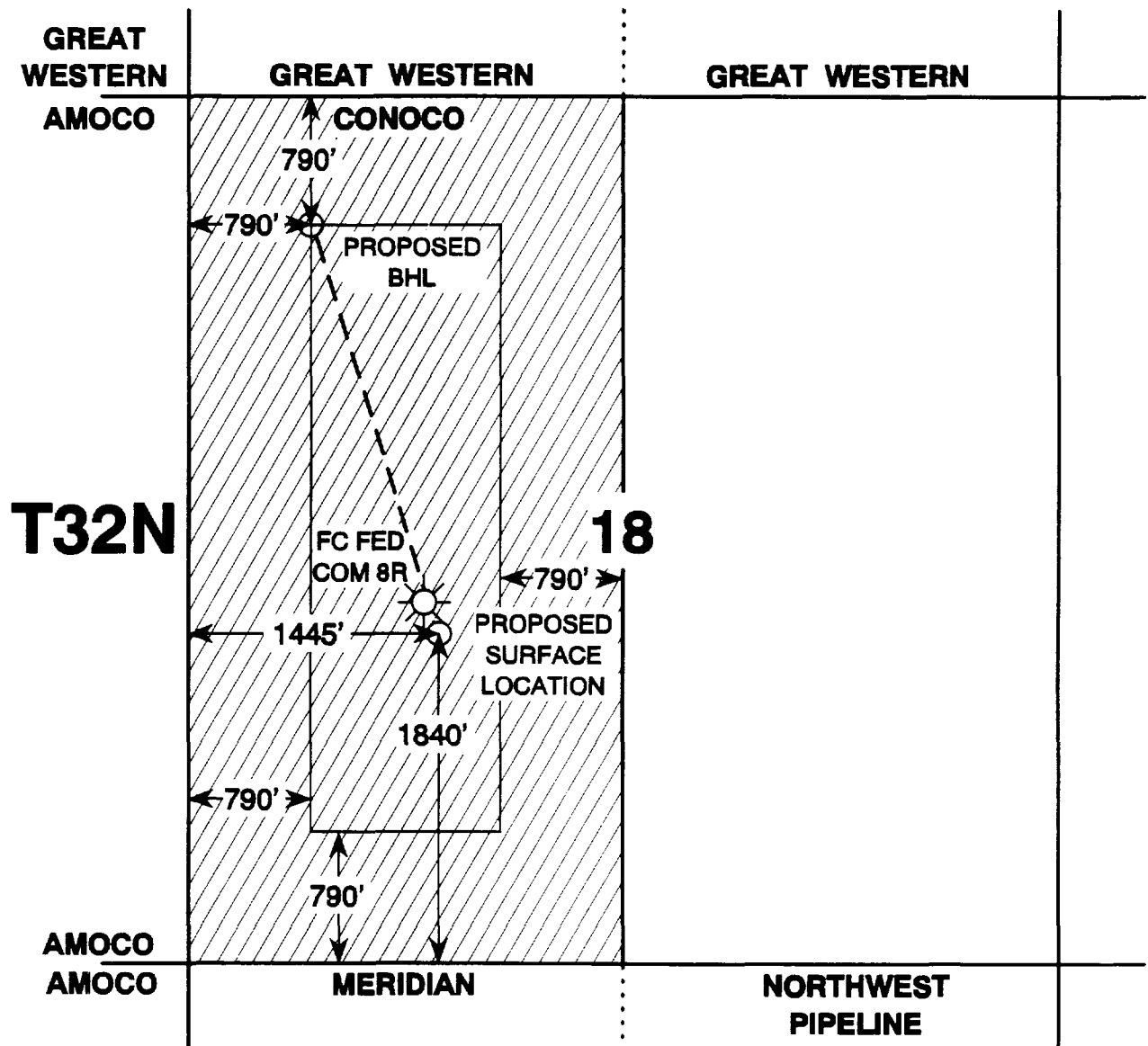


# CONOCO, INC.

PROPOSED HORIZONTAL FRUITLAND COAL WELL

F.C. FEDERAL COM 8R

ANTICIPATED FACE CLEAT ORIENTATION  
FRUITLAND COAL



R11W

SAN JUAN CO., N.M.

BEFORE AN EXAMINER OF THE  
OIL CONSERVATION DIVISION

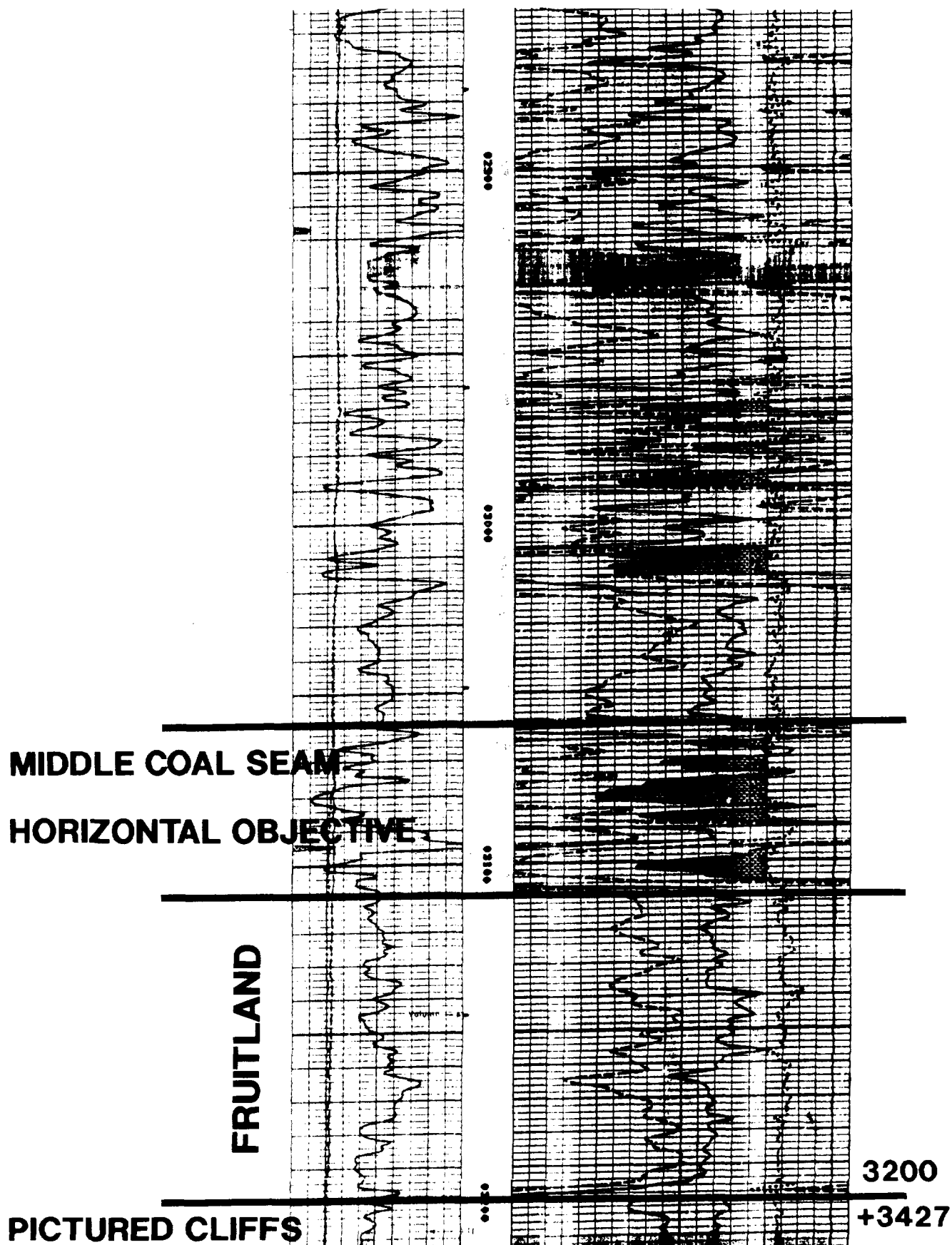
EXHIBIT NO. 8  
CASE NO.: 10917  
Submitted by: Conoco Inc.  
Hearing Date: Feb 17, 1994

[illegible]

STRUCTURE  
TOP TONSTEIN  
MIDDLE COAL

EXHIBIT NO. 9  
CASE NO.: 10917  
Submitted by: Conoco Inc.  
Hearing Date: Feb 17, 1994

**TYPE LOG**  
**F.C.FEDERAL COM #8**  
**T32N R11W SEC.18**  
**1870'FSL 1525'FWL**

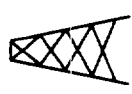


BEFORE AN EXAMINER OF THE  
OIL CONSERVATION DIVISION

EXHIBIT NO. 10  
CASE NO.: 10917  
Submitted by: Conoco Inc.  
Hearing Date: Feb 17, 1994



1840' FSL & 1445' FWL



2304' FSL & 1330' FWL

790' FNL (4490' FSL) & 790' FWL

FC FED COM 8R  
HORIZONTAL PROSPECT  
SECTION VIEW

13 3/8 @ 250'

KICK-OFF POINT  
@ 2585'

BUILD ANGLE @ 12 DEG/100 FT

8 5/8" SET IN TARGET ZONE

7-7/8" LATERAL @ 90.0 DEGREES

TOP OF FRUITLAND FORMATION  
@ 2630'

TOP OF MIDDLE SEAM @ 3080'

BOTTOM OF MIDDLE SEAM  
@ 3108'

END OF BUILD  
@ 3082' (3335' M.D.)

PL1118

TOP FC @ 2632'

TOP MS @ 3082'

BOTTOM MS @ 3108'

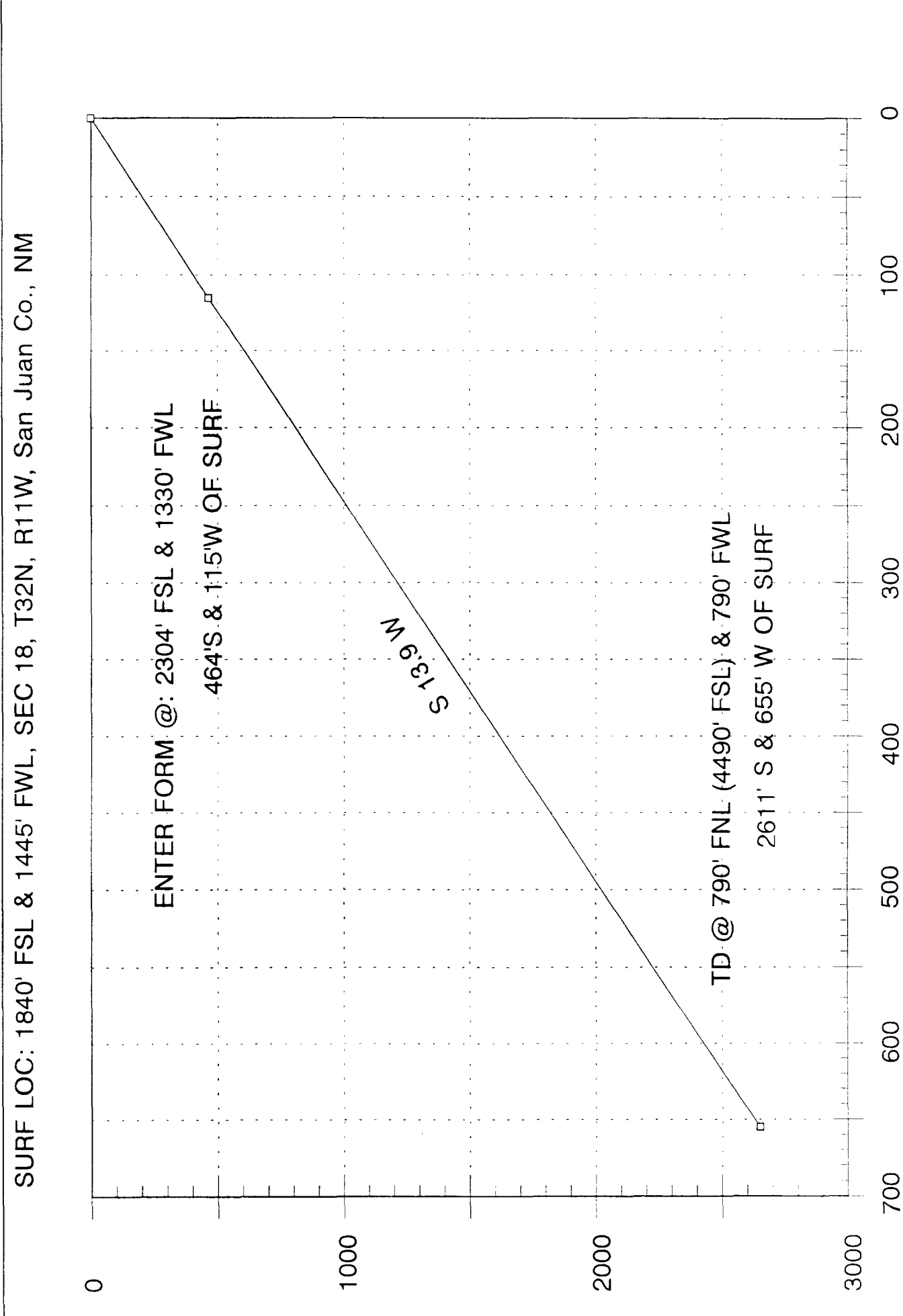
TOTAL DEPTH  
@ 3082' (5549' M.D.)

NOT TO SCALE

BEFORE AN EXAMINER OF THE  
OIL CONSERVATION DIVISION

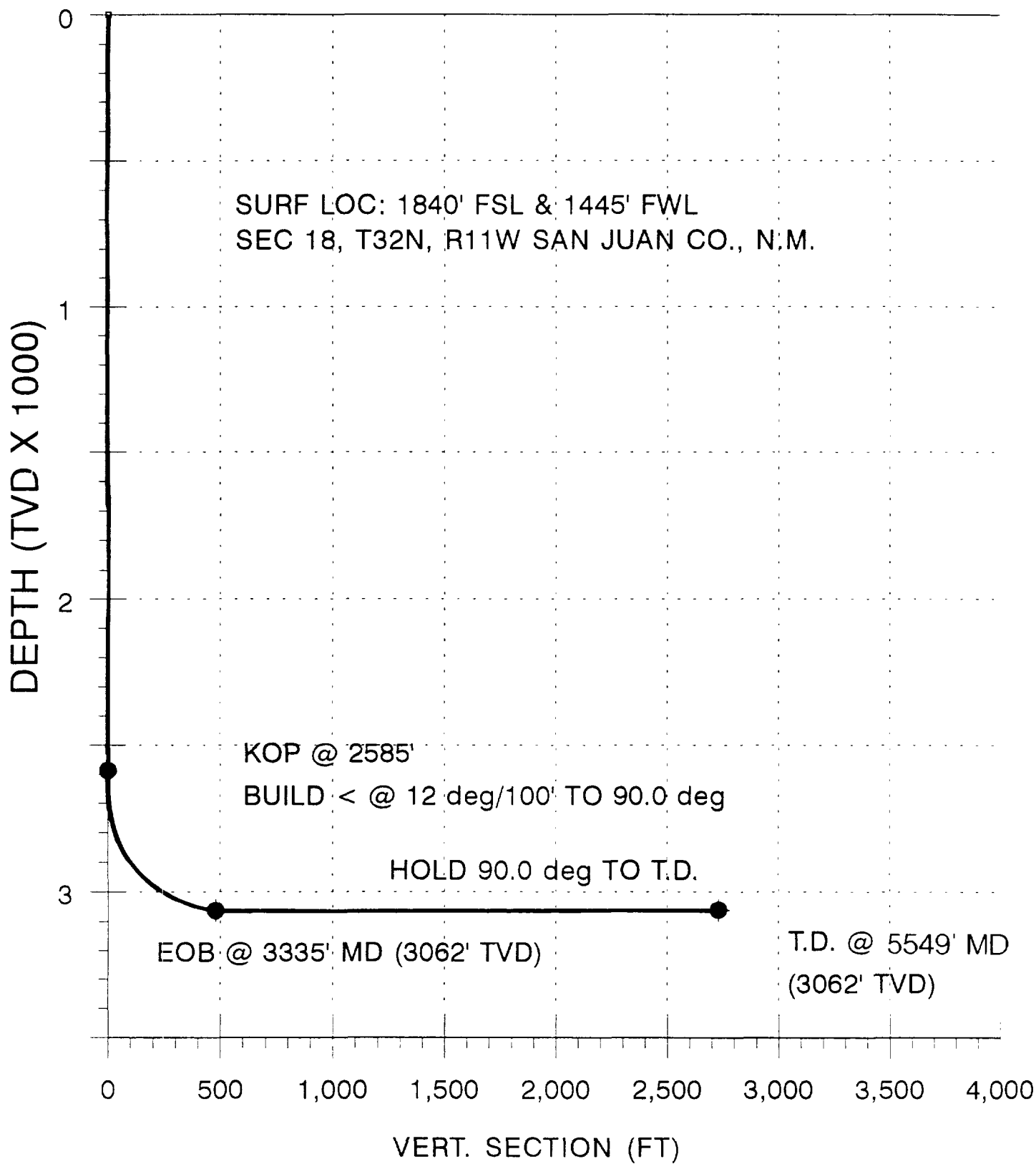
EXHIBIT NO. 11  
CASE NO.: 10917  
Submitted by: Conoco Inc.  
Hearing Date: Feb 17, 1994

# FC FED COM No. 8R HORIZONTAL PLAN



# FC FED COM No 8R

## VERTICAL SECTION



BEFORE AN EXAMINER OF THE  
OIL CONSERVATION DIVISION

EXHIBIT NO. 13  
CASE NO.: 10917  
Submitted by: Conoco Inc.  
Hearing Date: Feb 17, 1994



PROPOSED WELL PLAN OUTLINE

WELL NAME: FC FED COM 8R

LOCATION: 1840' FSL & 1445' FWL, SEC 18, T32N, R11W, SAN JUAN CO., N.M.

EST. KB = +6627'

TVD IN 1000'	MD	FORMATION TOPS & TYPE	DRILLING PROBLEMS	TYPE OF FORMATION EVALUATION	HOLE SIZE	CASING SIZE DEPTH	FRAC GRAD	FORMATION PRESSURE GRADIENT	MUD WT TYPE	DAYS
0					17-1/2"	13-3/8" 545# K-55 ST&C @ 25'		NORMAL	8.4 - 8.8# STUD MUD	
1				MUDLOGGERS ON @ 500'	11"			8.4 - 9.5#	8.4 - 10.0# LIND/POLYMER	
2		SAN JOSE SANDS @ 907' (+ 5727') GLAM @ 1370' (+ 5857') KIRTLAND @ 1742' (+ 4886')	POSSIBLE LOFT CIRC  KOP @ 2585' BUILD < @ 12 deg/100' TO 90.0 deg BOB @ 3335' MD (3062' TVD)							
3		FILD @ 2880' (+ 3997')	POSSIBLE OVERPRESSURE IN FILD			8-5/8" 320# K-55 ST&C @ 3325'				
4		TOP FILD MIDDLE SEAM TARGET @ 3060' (+ 3547')	HOLD 90.0 deg TO T.D. @ 3587' MD (3062' TVD)	MUDLOGGERS	7-7/8"	OPEN - HOLE COMPL T.D. @ 5549' MD (3062' TVD)		8.4 - 9.5#	AIR DRILL	
5										
6										
7										
8										

DATE: JANUARY 1994

PREPARED BY: \_\_\_\_\_

BEFORE AN EXAMINER OF THE OIL CONSERVATION DIVISION

EXHIBIT NO. 14

CASE NO.: 10917

Submitted by: Conoco Inc.

Hearing Date: Feb 17, 1994

# OFFSET OPERATORS

## Notified by Certified Mail

Meridian Oil Inc.  
P.O. Box 4289  
Farmington, New Mexico 87499

McKenzie Methane Company,  
now operated by :  
Quintana Petroleum Corporation  
P.O. Box 3331  
Houston, Texas 77253

Northwest Pipeline  
C/O Williams Production Company  
P.O. Box 58900  
Salt Lake City, Utah 84158-0900

Southland Royalty Company  
C/O Meridian Oil Inc.  
P.O. Box 4289  
Farmington, New Mexico 87499

Amoco Production Company  
P.O. Box 800  
Denver, Colorado 80201

Emerald Gas Operating Company  
501 West 1-44 Service Road, # 310  
Oklahoma City, Oklahoma 73118-6054

Great Western Drilling Company  
P.O. Box 1659  
Midland, Texas 79701

BEFORE AN EXAMINER OF THE  
OIL CONSERVATION DIVISION

EXHIBIT NO. 15  
CASE NO.: 10917  
Submitted by: Conoco Inc.  
Hearing Date: Feb 17, 1994

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED  
BY THE OIL CONSERVATION DIVISION  
FOR THE PURPOSE OF CONSIDERING:

CASE NO. 10917

APPLICATION OF CONOCO INC.  
FOR A HIGH ANGLE/HORIZONTAL  
DIRECTIONAL DRILLING PILOT PROJECT,  
SPECIAL OPERATING RULES THEREFOR,  
AND AND UNORTHODOX PRODUCING INTERVAL,  
SAN JUAN COUNTY, NEW MEXICO.

CERTIFICATE OF MAILING

AND

COMPLIANCE WITH ORDER R-8054

W. THOMAS KELLAHIN, attorney in fact and authorized representative of Conoco Inc., states that the notice provisions of Division Rule 1207 (Order R-8054) have been complied with, that Applicant has caused to be conducted a good faith diligent effort to find the correct addresses of all interested parties entitled to receive notice, that on the 25th day of January 1994, I caused to be mailed by certified mail return-receipt requested notice of this hearing and a copy of the application for the above referenced case along with the cover letter, at least twenty days prior to the hearing set for February 17, 1994, to the parties shown in the application as evidenced by the attached copies of return receipt cards, and that pursuant to Division Rule 1207, notice has been given at the correct addresses provided by such rule.

*Witnessed and signed by*  
*W. Thomas Kellahin*

W. Thomas Kellahin

SUBSCRIBED AND SWORN to before me this 16th day of FEBRUARY,  
1994.

*Michael Madagnoli*  
Notary Public

My Commission Expires:

Feb 16, 1994



P 321 001 115



**Receipt for  
Certified Mail**

No Insurance Coverage Provided  
Do not use for International Mail  
(See Reverse)

**Southland Royalty Company  
C/O Merician Oil Inc.  
P.O. Box 4269  
Farmington, New Mexico 7499**

1800, June 1991

Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

**Conoco Fed # 8  
1/25/94**

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

**Conoco Fed # 8  
1/25/94**

so that we can

does not permit.

- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

**3. Article Addressed to:**

**Southland Royalty Company  
C/O Merician Oil Inc.  
P.O. Box 4269 4289  
Farmington, New Mexico  
87499**

I also wish to receive the following services (for an extra fee):

- ☐ Addressee's Address
- ☐ Restricted Delivery

Consult postmaster for fee.

**4a. Article Number**

**321 001 115**

**4b. Service Type**

- ☒ Registered ☐ Insured  
☐ Certified ☐ COD  
☐ Express Mail ☒ Return Receipt for Merchandise

**7. Date of Delivery**

**1-27-94**

**5. Signature (Addressee)**

*[Signature]*

**6. Signature (Agent)**

**8. Addressee's Address (Only if requested and fee is paid)**

PS Form 3811, December 1991

★U.S. GPO: 1992-323-402

**DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

**SENDER:**  
Conoco Fed # 8  
1/25/94

Article Addressed to:  
Northwest Pipeline  
C/o Williams Production  
P.O. Box 58900  
Salt Lake City, Utah 84158-0900

4a. Article Number  
321 001 114

4b. Service Type  
☒ Registered ☐ Insured  
☐ Certified ☐ COD  
☐ Express Mail ☒ Return Receipt for Merchandise

5. Signature (Addressee)  
JAN 27 1994

6. Signature (Agent)  
K McLoey

7. Date of Delivery

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991 ★U.S. GPO: 1992-323-402 **DOMESTIC RETURN RECEIPT**

P 321 001 114



**Receipt for Certified Mail**

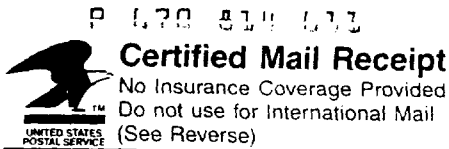
No Insurance Coverage Provided  
Do not use for International Mail  
See Reverse

Northwest Pipeline  
C/o Williams Production  
P.O. Box 58900  
Salt Lake City, Utah 84158-0900

Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, June 1991

Conoco Fed # 8  
1/25/94



Great Western Drilling  
 P.O. Box 1659  
 Midland, Texas 79701

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	\$
Postmark or Date	

Conoco Fed # 8  
 1/25/94

is your RETURN ADDRESS completed on the reverse side?

<b>SENDER:</b> Conoco Fed # 8 1/25/94 does not permit. • Write "Return Receipt Requested" on the mailpiece below the article number. • The Return Receipt will show to whom the article was delivered and the date delivered.		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.	
3. Article Addressed to:  Great Western Drilling P.O. Box 1659 Midland, Texas 79701		4a. Article Number 170 814 631	
5. Signature (Addressee) [Signature]		4b. Service Type <input checked="" type="checkbox"/> Registered <input type="checkbox"/> Insured <input type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
6. Signature (Agent) [Signature]		7. Date of Delivery 1-31-94	
		8. Addressee's Address (Only if requested and fee is paid)	

Thank you for using Return Receipt Service.

PS Form 3811, December 1991



# Receipt for Certified Mail

No Insurance Coverage Provided  
Do not use for International Mail  
(See Reverse)

**Emerald Gas Operating 501  
West 1-44 Service Road # 310  
Oklahoma City, Oklahoma  
73118-6054**

PS Form 3811, June 1991

Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmaster's Data	

**Conoco Fed # 8  
1/25/94**

top of envelope to the

<p><b>SENDER</b></p> <p><b>Conoco Fed # 8 1/25/94</b></p> <p>so that we can back if space</p>		<p>I also wish to receive the following services (for an extra fee):</p> <p>1. <input type="checkbox"/> Addressee's Address</p> <p>2. <input type="checkbox"/> Restricted Delivery</p> <p>Consult postmaster for fee.</p>	
<p>3. Article Addressed to:</p> <p><b>Emerald Gas Operating 501 West 1-44 Service Road # 310 Oklahoma City, Oklahoma 73118-6054</b></p>		<p>4a. Article Number <b>321 001 116</b></p>	
<p>4b. Service Type</p> <p><input checked="" type="checkbox"/> Registered <input type="checkbox"/> Insured</p> <p><input type="checkbox"/> Certified <input type="checkbox"/> COD</p> <p><input type="checkbox"/> Express Mail <input checked="" type="checkbox"/> Return Receipt for Merchandise</p>		<p>5. Signature (Addressee)</p> <p><i>[Signature]</i></p>	
<p>6. Signature (Agent)</p> <p><i>[Signature]</i></p>		<p>7. Date of Delivery <b>1-28-94</b></p>	
<p>8. Addressee's Address (Only if requested and fee is paid)</p>		<p>Thank you for using Return Receipt Service.</p>	

PS Form 3811, December 1991

★U.S. GPO: 1992-323-402

**DOMESTIC RETURN RECEIPT**



P 321 001 113



**Receipt for  
Certified Mail**

No Insurance Coverage Provided  
Do not use for International Mail  
(See Reverse)

Amoco Production Company  
P.O. Box 800  
Denver, Co 80201

3800, June 1991

Continued Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

Conoco Fed # 8  
1/25/94

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for address
- Complete items 3 and/or 4 for return receipt

Conoco Fed # 8  
1/25/94

n so that we can  
a back if space

- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Amoco Production Company  
P.O. Box 800  
Denver, Co 80201

4a. Article Number

321 001 113

4b. Service Type

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Registered | <input type="checkbox"/> Insured                        |
| <input type="checkbox"/> Certified             | <input type="checkbox"/> COD                            |
| <input type="checkbox"/> Express Mail          | <input type="checkbox"/> Return Receipt for Merchandise |

7. Date of Delivery

8. Addressee's Address (Only if requested and fee is paid)

5. Signature (Addressee)

6. Signature (Agent)

PS Form 3811, December 1991

U.S. GPO: 1992-323-402

**DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.