



# WORKING INTEREST OWNERSHIP

**E/2 SECTION 29, T-23-S, R-26-E, NMPM, EDDY CO., NM**

CoEnergy Central Exploration, Inc.	36.1250%
Penwell Energy, Inc.	8.2500%
S & P Co.	5.6250%
Santa Fe Energy Resources, Inc.	<u>50.0000%</u>
	100.0000%

*160 - Ace SE 1/4*  
*Same as E/2*  
*interest breakdown*

**BEFORE THE  
OIL CONSERVATION DIVISION**  
Santa Fe, New Mexico

Case No. 11667 Exhibit No. 2  
Submitted by: Penwell Energy, Inc.  
Consolidated with Case No. 11660 : Application  
of Santa Fe Resources, Inc.

Hearing Date: November 21, 1996

**PENWELL ENERGY, INC.**  
**AUTHORITY FOR EXPENDITURE**

WELL NAME: FH "29" Federal Com. #1  
LOCATION: 1980' FSL & 660' FEL  
Sec. 29 - T23S - R26E

PROSPECT NAME: Frontier Hills  
COUNTY & STATE: Eddy, New Mexico  
OBJECTIVE: 12,000' Morrow Gas Well

**INTANGIBLE COSTS**

	BCP	ACP	TOTAL
APD & ARCHAEOLOGICAL	500	300	800
TITLE OPINION & CURATIVE	2,000		2,000
SURVEYING / STAKE LOCATION	400	2,000	2,400
DAMAGES & R-O-W'S	1,000	3,000	4,000
ROADS, LOCATION, PITS, LINERS, ETC.	14,000	3,000	17,000
DRILLING - FOOTAGE	231,000	0	231,000
DRILLING - DAYWORK	33,000	0	33,000
DRILLING MUD & CHEMICALS	25,000	0	25,000
WATER	20,000	1,000	21,000
BITS, REAMERS, ETC.	8,000	500	8,500
FUEL	0	0	0
CEMENTING SURFACE	3,000	0	3,000
CEMENTING INTERMEDIATE	22,000	0	22,000
CEMENTING PRODUCTION	0	8,000	8,000
TUBULAR SERVICES AND TOOLS	3,000	650	3,650
CASING CREWS / PU LD MACHINE	5,000	1,500	6,500
FLOAT EQUIPMENT - Liner Hanger	5,000	8,000	13,000
TESTING; DST & COMPLETION	3,000	0	3,000
OPEN HOLE LOGGING / CORES	18,000	0	18,000
MUD LOGGING	6,000	0	6,000
WELDING & HOURLY LABOR	1,000	6,000	7,000
EQUIPMENT RENTAL	7,000	3,000	10,000
TRUCKING, TRANSPORTATION, FORKLIFT	1,500	2,000	3,500
COMPLETION UNIT	0	12,000	12,000
FORMATION STIMULATION	0	15,000	15,000
WIRELINE SERVICES	500	1,500	2,000
GEOLOGIC / ENGINEERING	7,000	3,500	10,500
CONTRACT LABOR	10,800	6,000	16,800
DRILLING WELL RATE (A/O)	6,000	3,000	9,000
INSURANCE	7,000	0	7,000
MISCELLANEOUS	500	500	1,000
CONTINGENCY (5%)	22,060	4,023	26,083
TOTAL INTANGIBLES	483,260	84,473	547,733

**TANGIBLE COSTS**

CONDUCTOR CASING	0	0	0
SURFACE CASING		0	0
13 3/8", 48#, @ 600' +/-	10,700	0	10,700
INTERMEDIATE CASING		0	0
8 5/8", 36#, @ 1,700' +/-	21,800	0	21,800
DEEP INTERMEDIATE CASING		0	0
7", 23 & 26#, @ 10,700'	120,000	0	120,000
PRODUCTION CASING / LINER			0
4 1/2", 13.50#, 1,500' +/-		10,275	10,275
TUBING 2 3/8", 4.70#, L-80 AB Mod, 11900'	0	32,000	32,000
WELLHEAD EQUIPMENT	3,000	4,000	7,000
SURFACE LIFT & ELECTRICITY	0	0	0
RODS AND PUMP	0	0	0
PACKERS, BPS, DOWNHOLE EQUIPMENT	0	5,000	5,000
GAS PRODUCTION EQUIPMENT	0	10,000	10,000
SEPARATOR, TREATER	0	2,500	2,500
FLOWLINES, VALVES, CONNECTIONS	0	6,000	6,000
TANKS (Water and Production)	0	6,000	6,000
MISCELLANEOUS	0	500	500
CONTINGENCY (5%)	7,775	3,789	11,564
TOTAL TANGIBLES	183,275	80,064	243,339
TOTAL WELL COSTS	626,535	164,536	791,071

PLUGGING COST

TOTAL DRY HOLE

7,485

634,000

Penwell Energy, Inc.

By:

Bill Pierce, Engineer

We approve / disapprove:

~~10.500% Before Tanks / 38.125% After Tanks~~

Company: CoEnergy Central Exploration, Inc.

By:

Printed Name: Douglass Schroeder

Title: Director

Date:

11/20/96

**BEFORE THE**  
**OIL CONSERVATION DIVISION**  
Santa Fe, New Mexico

Case No. 11667 Exhibit No. 3Submitted by: Penwell Energy, Inc.Consolidated with Case No. 11660 : Application  
of Santa Fe Resources, Inc.Hearing Date: November 21, 1996

**PENWELL ENERGY, INC.**  
**AUTHORITY FOR EXPENDITURE**

WELL NAME: FH "29" Federal Com. #1  
LOCATION: 1980' FSL & 660' FEL  
Sec. 29 - T23S - R26E

PROSPECT NAME: Frontier Hills  
COUNTY & STATE: Eddy, New Mexico  
OBJECTIVE: 12,000' Morrow Gas Well

**INTANGIBLE COSTS**

	<u>BCP</u>	<u>ACP</u>	<u>TOTAL</u>
APD & ARCHAEOLOGICAL	500	300	800
TITLE OPINION & CURATIVE	2,000		2,000
SURVEYING / STAKE LOCATION	400	2,000	2,400
DAMAGES & R-O-W'S	1,000	3,000	4,000
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DRILLING - FOOTAGE	231,000	0	231,000
DRILLING - DAYWORK	33,000	0	33,000
DRILLING MUD & CHEMICALS	25,000	0	25,000
WATER	20,000	1,000	21,000
BITS, REAMERS, ETC.	8,000	500	8,500
FUEL	0	0	0
CEMENTING SURFACE	3,000	0	3,000
CEMENTING INTERMEDIATE	22,000	0	22,000
CEMENTING PRODUCTION	0	8,000	8,000
TUBULAR SERVICES AND TOOLS	3,000	650	3,650
CASING CREWS / PU LD MACHINE	5,000	1,500	6,500
FLOAT EQUIPMENT - Liner Hanger	5,000	8,000	13,000
TESTING; DST & COMPLETION	3,000	0	3,000
OPEN HOLE LOGGING / CORES	18,000	0	18,000
MUD LOGGING	6,000	0	6,000
WELDING & HOURLY LABOR	1,000	6,000	7,000
EQUIPMENT RENTAL	7,000	3,000	10,000
TRUCKING, TRANSPORTATION, FORKLIFT	1,500	2,000	3,500
COMPLETION UNIT	0	12,000	12,000
FORMATION STIMULATION	0	15,000	15,000
WIRELINE SERVICES	500	1,500	2,000
GEOLOGIC / ENGINEERING	7,000	3,500	10,500
CONTRACT LABOR	10,800	6,000	16,800
DRILLING WELL RATE (A/O)	6,000	3,000	9,000
INSURANCE	7,000	0	7,000
MISCELLANEOUS	500	500	1,000
CONTINGENCY (5%)	22,060	4,023	26,083
TOTAL INTANGIBLES	463,260	84,473	547,733

**TANGIBLE COSTS**

CONDUCTOR CASING	0	0	0
SURFACE CASING		0	0
13 3/8", 48#, @ 600' +/-	10,700	0	10,700
INTERMEDIATE CASING		0	0
9 5/8", 36#, @ 1,700' +/-	21,800	0	21,800
DEEP INTERMEDIATE CASING		0	0
7", 23 & 26#, @ 10,700'	120,000	0	120,000
PRODUCTION CASING / LINER			0
4 1/2", 13.50#, 1,500' +/-		10,275	10,275
TUBING 2 3/8", 4.70#, L-80 AB Mod, 11900'	0	32,000	32,000
WELLHEAD EQUIPMENT	3,000	4,000	7,000
SURFACE LIFT & ELECTRICITY	0	0	0
RODS AND PUMP	0	0	0
PACKERS, BP'S, DOWNHOLE EQUIPMENT	0	5,000	5,000
GAS PRODUCTION EQUIPMENT	0	10,000	10,000
SEPARATOR, TREATER	0	2,500	2,500
FLOWLINES, VALVES, CONNECTIONS	0	6,000	6,000
TANKS (Water and Production)	0	6,000	6,000
MISCELLANEOUS	0	500	500
CONTINGENCY (5%)	7,775	3,789	11,564
TOTAL TANGIBLES	163,275	80,064	243,339
TOTAL WELL COSTS	626,535	164,536	791,071

PLUGGING COST	7,465
TOTAL DRY HOLE	634,000

Penwell Energy, Inc.

By: Bill Pierce

Bill Pierce, Engineer

We approve / disapprove:

5.625% Before Casing Point / 5.625% After Casing Point

Company: S & P Co.

By: Robert G. Merrill

Printed Name: Robert G. Merrill

Title: Operations Manager

Date: 10/30/96

# PENWELL ENERGY, INC.

1100 ARCO BUILDING  
600 N. MARIENFELD  
MIDLAND, TEXAS 79701

OFF: (915) 683-2534  
FAX: (915) 683-4514

*Hand Delivery & Certified Mail Delivery*

October 1, 1996

Ms. Meg Muhlinghouse  
Santa Fe Energy Resources, Inc.  
550 West Texas, Suite 1330  
Midland, Texas 79701

**FH "29" Federal Com #1 Well**  
**Frontier Hills Prospect (NM 008)**  
**1980' FSL & 660' FEL Section 29**  
**T-23-S, R-26-E**  
**Eddy County, New Mexico**

Dear Meg:

Penwell Energy, Inc. hereby proposes the drilling of the FH "29" Federal Com #1 Well at the captioned location for a 12,000' test of the Morrow formation. We have enclosed for your review and signature our Operating Agreement along with an additional signature page. Also enclosed are two copies of the AFE covering the FH "29" Federal Com #1 Well. Please execute and return to our office, one additional signature page and AFE.

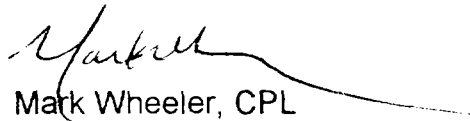
Please feel free to call our office if you should have any questions regarding this matter. Thank you for your assistance.

**BEFORE THE**  
**OIL CONSERVATION DIVISION**  
Santa Fe, New Mexico

Yours truly,

PENWELL ENERGY, INC.

Case No. 11667 Exhibit No. 4  
Submitted by: Penwell Energy, Inc.  
Consolidated with Case No. 11660 : Application  
of Santa Fe Resources, Inc.

  
Mark Wheeler, CPL  
Land Manager - Permian Basin

Hearing Date: November 21, 1996

PENWELL ENERGY, INC.  
AUTHORITY FOR EXPENDITURE

WELL NAME: FH "29" Federal Com. #1	PROSPECT NAME: Frontier Hills
LOCATION: 1980' FSL & 660' FEL	COUNTY & STATE: Eddy, New Mexico
Sec. 29 - T23S - R26E	OBJECTIVE: 12,000' Morrow Gas Well

INTANGIBLE COSTS	BCP	ACP	TOTAL
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TANGIBLE COSTS			
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PLUGGING COST	7,465
TOTAL DRY HOLE	634,000

Penwell Energy, Inc.  
By:   
Bill Pierce, Engineer

We approve / disapprove:  
50% W.I.

Company: Santa Fe Energy Resources, Inc.

By: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

Form 3160-3  
(July 1992)

## OPERATOR'S COPY

SUBMIT IN TRIPLICATE\*

(Other instructions on  
reverse side)FORM APPROVED  
OMB NO. 1004-0136  
Expires: February 28, 1995UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL OR DEEPEN

## 1a. TYPE OF WORK

DRILL ☒DEEPEN ☐

## b. TYPE OF WELL

OIL  
WELL ☐GAS  
WELL ☒

OTHER

SINGLE  
ZONE ☐MULTIPLE  
ZONE ☐

## 2. NAME OF OPERATOR

Penwell Energy, Inc. (915) 683-2534

## 3. ADDRESS AND TELEPHONE NO.

600 N. Marienfeld, Ste. 1100, Midland, Texas 79701

## 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)

At surface

1980' FSL &amp; 660' FEL

At proposed prod zone

1980' FSL &amp; 660' FEL

## 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

9 miles South from Carlsbad, New Mexico

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drilg. unit line, if any)

660'

## 16. NO. OF ACRES IN LEASE

160 (320 in Com)

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

320

18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL DRILLING COMPLETED  
OR APPLIED FOR, ON THIS LEASE, FT.

## 19. PROPOSED DEPTH

12000'

## 20. ROTARY OR CABLE TOOLS

Rotary

## 21. ELEVATIONS (Show whether DF, RT, GR, etc.)

3378' GR

## 22. APPROX. DATE WORK WILL START\*

Nov. 1, 1996

## 23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2	H-40 13 3/8	48#	600'	400 sx. Cl. C Neet + 2% CaCl
12 1/4	J-55 9 5/8"	36#	1700'	800 sx Cl. C Lite Circ to Su
8 3/4	L-80 & S-95 7"	23# & 26#	10700	600 sx Cl. H Lite
6 1/8" (Liner)	4 1/2"	13.50#	12000'	200 sx. Cl. H cmt.

BEFORE THE  
OIL CONSERVATION DIVISION  
Santa Fe, New MexicoCase No. 11667 Exhibit No. 5Submitted by: Penwell Energy, Inc.Consolidated with Case No. 11660 : Application  
of Santa Fe Resources, Inc.Hearing Date: November 21, 1996

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

SIGNED Brenda Callma TITLE Production AnalystDATE Oct. 3, 1996

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_

APPROVAL DATE: \_\_\_\_\_

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY

TITLE Asst. Dir. ADM, Minerals

DATE

11/08/96

23S/26E 17

16 369 MMCFG

739 MMCFG  
191 BO

5.1 BCFG  
47 MBO

5.5 BCFG  
49 MBO

3.1 BCFG  
22 MBO

195 MMCFG

3 BCFG  
154 BO

SFER  
SHEEP DIP 29 FED COM #1

PRODUCTION TESTED  
2.1 MMCFGPD

PENWELL  
FH 29 FED COM #1

PENWELL  
FH 28 STATE COM #2

*Morrow*  
*Morrow produce - Abundant  
to mmCFG  
Com Prod.*  
*will spud in 10-15 days.*

# LEGEND

- STRAWN PRODUCER
- STRAWN SHOW
- ▲ PROPOSED PENWELL FH 29 FED COM #1
- PENWELL FH 28 STATE COM #2
- MORROW PRODUCER
- PENWELL LEASEHOLD



PENWELL ENERGY

FRONTIER HILLS PROSPECT  
EDDY COUNTY, N.M.  
PRODUCTION & LEASE MAP

JLT

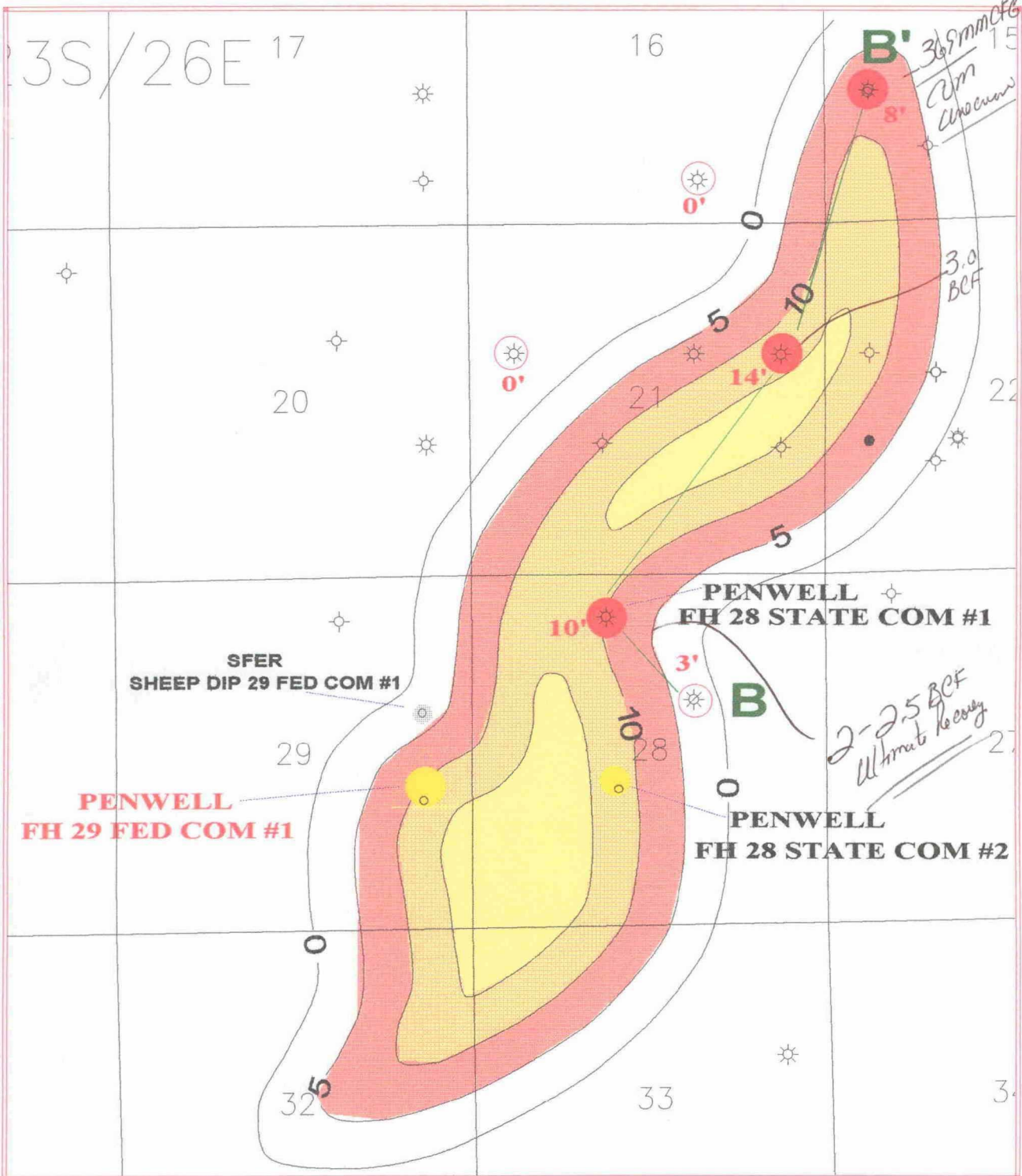
1° 22' 91"

10-18-96

**BEFORE THE  
OIL CONSERVATION DIVISION**  
Santa Fe, New Mexico

Case No. 11667 Exhibit No. 6  
Submitted by: Penwell Energy, Inc.  
Consolidated with Case No. 11660 : Application  
of Santa Fe Resources, Inc.

Hearing Date: November 21, 1996



# LEGEND

- LMB PRODUCER
- PROPOSED PENWELL FH 29 FED COM #1
- PENWELL FH 28 STATE COM #2



PENWELL ENERGY

FRONTIER HILLS PROSPECT  
EDDY COUNTY, N.M.  
LOWER MORROW 'LMB' ISOPACH MAP

JLT

Cl: 5'  
1:2000'

10-18-96

**BEFORE THE  
OIL CONSERVATION DIVISION**  
Santa Fe, New Mexico

Case No. 11667 Exhibit No. 7  
Submitted by: Penwell Energy, Inc.  
Consolidated with Case No. 11660 : Application  
of Santa Fe Resources, Inc.

Hearing Date: November 21, 1996

LARGE FORMAT  
EXHIBIT HAS  
BEEN REMOVED  
AND IS LOCATED  
IN THE NEXT FILE

18 23S/26E 17

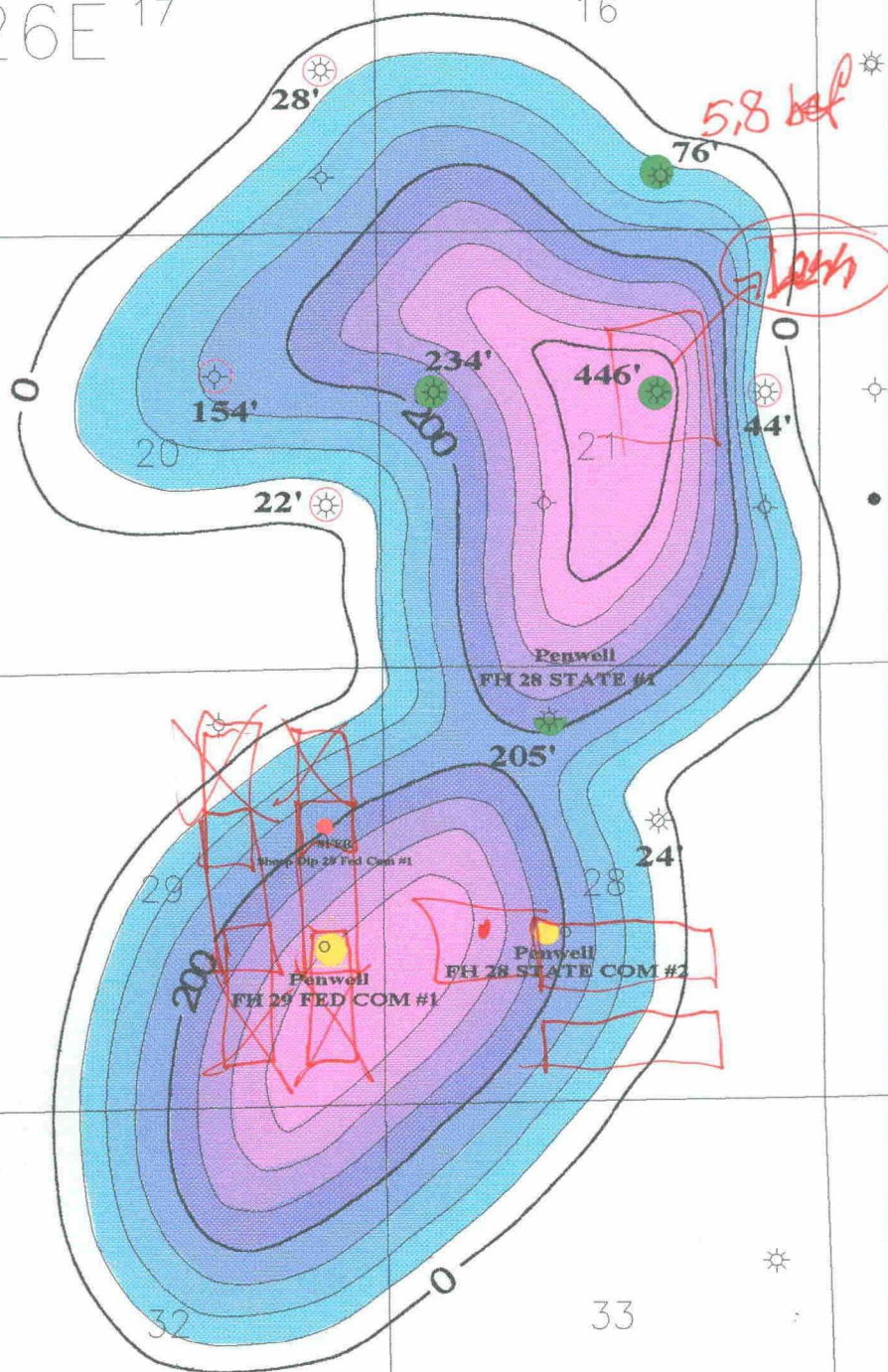
16

19

0'

30

31



# LEGEND

- STRAWN PRODUCER
- STRAWN SHOW
- PROPOSED PENWELL FH 29 FED COM #1
- PENWELL FH 28 STATE COM #2



PENWELL ENERGY

FRONTIER HILLS PROSPECT  
EDDY COUNTY, N.M.  
STRAWN CARBONATE ISOPACH MAP

JLT

Cl: 50'

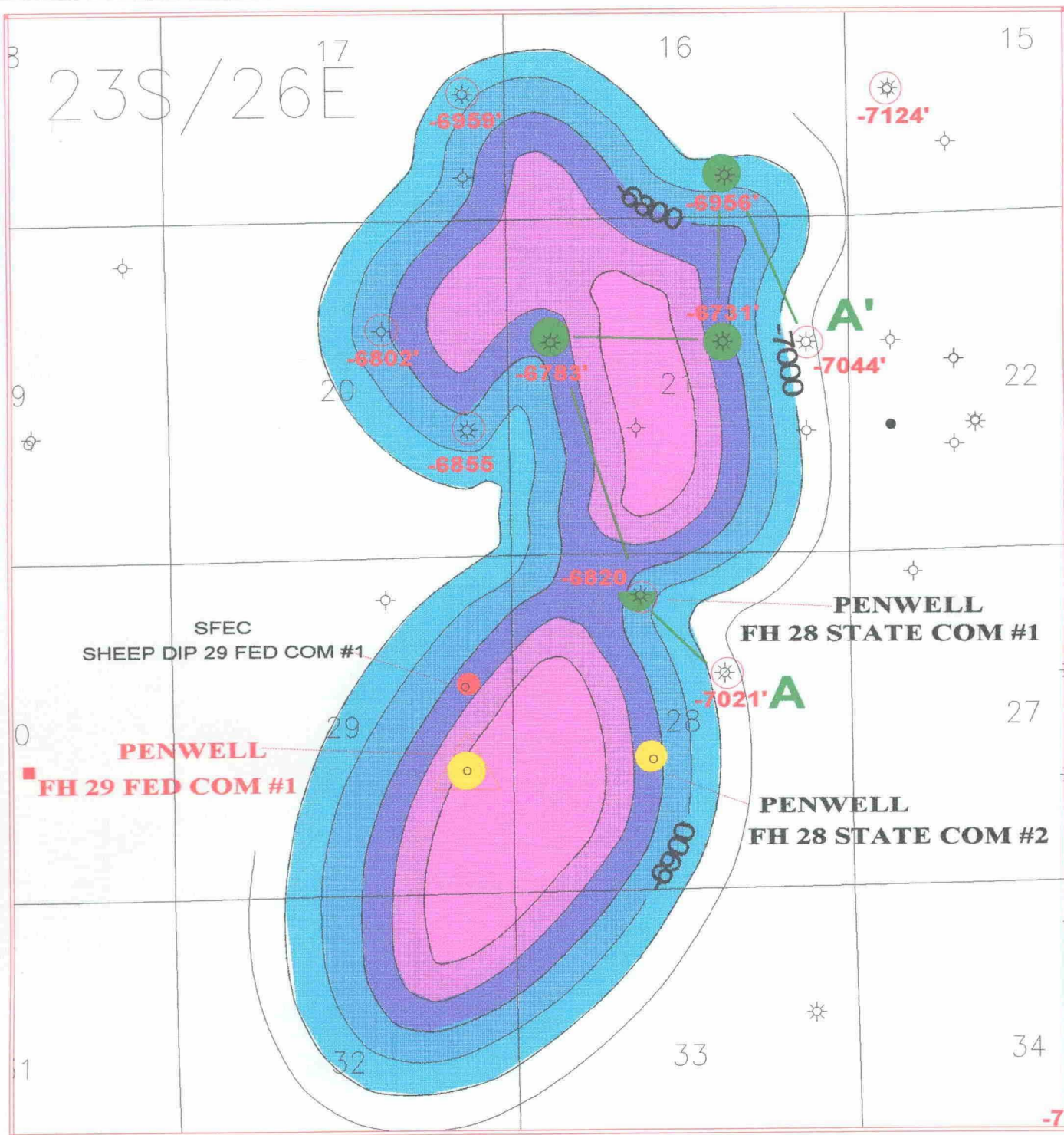
10-18-96

1:2291'

**BEFORE THE  
OIL CONSERVATION DIVISION**  
Santa Fe, New Mexico

Case No. 11667 Exhibit No. 9  
Submitted by: Penwell Energy, Inc.  
Consolidated with Case No. 11660: Application  
of Santa Fe Resources, Inc.

Hearing Date: November 21, 1996



# LEGEND

- STRAWN PRODUCER
- STRAWN SHOW
- PROPOSED PENWELL FH 29 FED COM #1
- PENWELL FH 28 STATE COM #2



PENWELL ENERGY

FRONTIER HILLS PROSPECT  
EDDY COUNTY, N.M.  
STRAWN CARBONATE STRUCTURE MAP

JLT

Cl: 100'  
1:2291'

10-18-96

**BEFORE THE  
OIL CONSERVATION DIVISION**  
Santa Fe, New Mexico

Case No. 11667 Exhibit No. 10

Submitted by: Penwell Energy, Inc.

Consolidated with Case No. 11660 : Application  
of Santa Fe Resources, Inc.

Hearing Date: November 21, 1996

LARGE FORMAT  
EXHIBIT HAS  
BEEN REMOVED  
AND IS LOCATED  
IN THE NEXT FILE