

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☒

GAS
WELL ☐

OTHER

SINGLE
ZONE ☐

MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Santa Fe Energy Operating Partners, L.P.

3. ADDRESS OF OPERATOR

550 W. Texas, Suite 1330, Midland, Texas 79701

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

1830' FNL & 660' FWL, Sec. 8, T-18S, R-33E

At proposed prod. zone

Same

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

10 miles southeast of Malimar, New Mexico

15. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

660'

16. NO. OF ACRES IN LEASE

320

17. NO. OF ACRES ASSIGNED
TO THIS WELL

80

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

None

19. PROPOSED DEPTH

11,500'

20. ROTARY OR CABLE TOOLS

Rotary

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

3904.3' GR

22. APPROX. DATE WORK WILL START*

September 6, 1991

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8"	48.0	400'	400 sx <u>CIRCULATE</u>
12-1/4"	8-5/8"	28.0	3,100'	1,450 sx <u>SEE SLIPS.</u>
7-7/8"	5-1/2"	15.5 & 17.0	11,500'	See below

Move in drilling rig. Drill 17-1/2" hole to 400'. Run 13-3/8" casing and cement to surface with 400 sx "C" cement w/2% CaCl₂ and 1/4 pps celloflake. VOC 6 hours. Nipple up BOP and test BOP and casing to 600 psi. Drill 12-1/4" hole to 3100'. Run 8-5/8" casing and cement with 1200 sx 35/65 Poz/"C" cement w/6% gel, 10% NaCl and 1 pps celloflake followed by 250 sx of "C" cement w/2% CaCl₂. Install BOP and test rams and choke to 5000 psi, annular to 1000 psi. Drill 7-7/8" hole to 11,500'. Run logs. Run 5-1/2" casing and cement with 50/50 Poz/"H" cement, 2% gel, 6 pps NaCl and 0.75% fluid loss additive. Sufficient cement will be used to cover all potentially productive zones.

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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.

24.

SIGNED

Danell Roberts

TITLE

Sr. Drilling Engineer

DATE

8-6-91

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

8-29-91

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

OIL CONSERVATION DIVISION

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

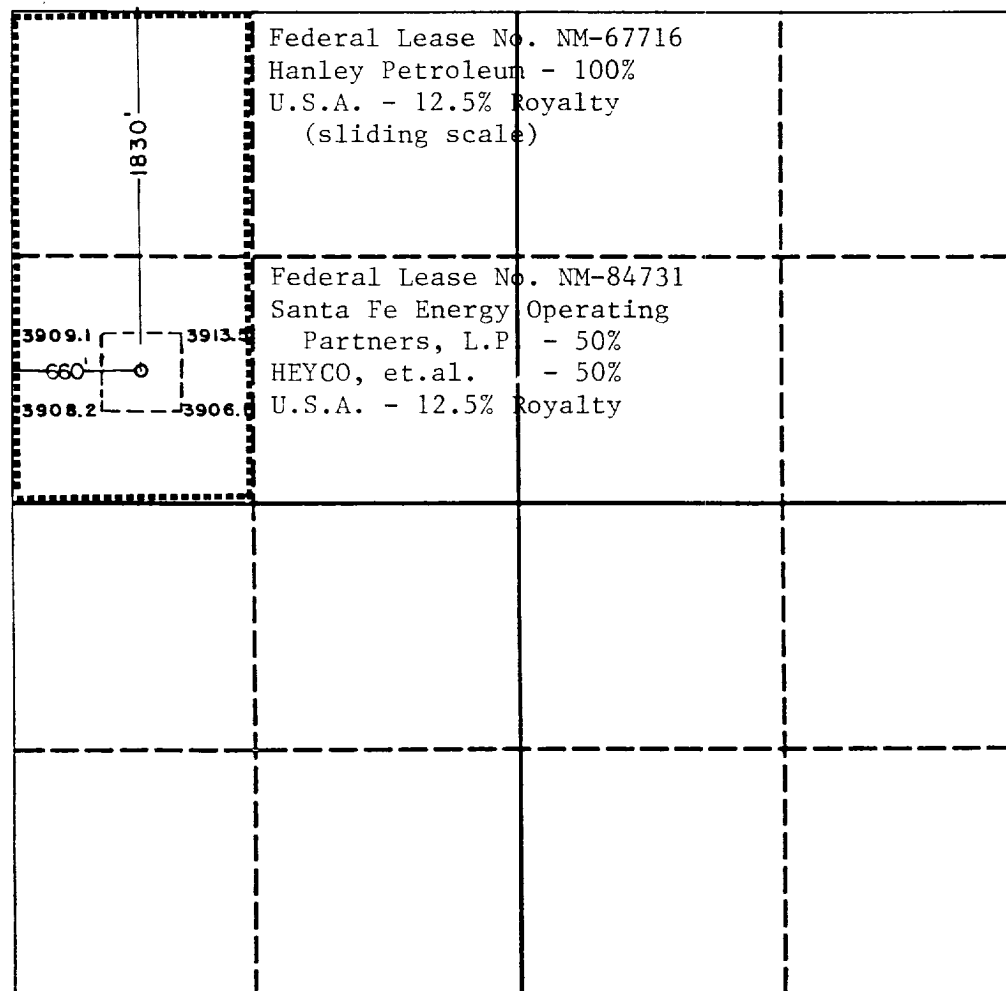
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator SANTA FE ENERGY OPERATING PARTNERS LP			Lease KACHINA 8 FEDERAL		Well No. 2
Unit Letter E	Section 8	Township 18 SOUTH	Range 33 EAST	County LEA	
Actual Footage Location of Well: 1830 feet from the NORTH line and 660 feet from the WEST line					
Ground level Elev. 3904.3	Producing Formation Wolfcamp		Pool South Corbin (Wolfcamp)	Dedicated Acreage: 80 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?
☒ Yes ☐ No If answer is "yes" type of consolidation Compulsory Pooling Order No. R-9480-B
If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)
No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature

Darrell Roberts

Printed Name

Darrell Roberts

Position

Senior Drilling Engineer
Company Santa Fe Energy
Operating Partners, L.P.

Date

8-5-91

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

7-30-91

Signature & Seal of
Professional Surveyor

John W. West
Professional Surveyor
676
3239
JOHN W. WEST

APPLICATION FOR DRILLING
SANTA FE ENERGY OPERATING PARTNERS, L.P.
Kachina "8" Federal No. 2

In conjunction with Form 3160-3, Application to Drill subject well, Santa Fe Energy Operating Partner, L.P., submits the following ten items of pertinent information in accordance with BLM requirements.

1. The geologic surface formation is sand.
2. The estimated tops of geologic markers are as follows:

Rustler	1,440'
Base Salt	2,870'
Yates	3,100'
Seven Rivers	3,360'
Queen	4,190'
Penrose	4,500'
Delaware	5,580'
Bone Spring	6,500'
First Bone Spring Sand	8,230'
First Carbonate	8,480'
2nd Sand	8,830'
2nd Carbonate	9,330'
3rd Sand	9,540'
Wolfcamp	9,870'
Total Depth	11,500'

3. The estimated depth at which water, oil, or gas formations are expected to be encountered:

Water	Water is not expected to be encountered	
Oil or Gas	Wolfcamp	10,000' - TD

4. Proposed Casing Program: See Form 3160-3 and Exhibit A.
5. Pressure Control Equipment: See Form 3160-3 and Exhibit B.
6. Drilling Fluid Program: See Exhibit C.
7. Auxiliary Equipment: See Exhibit D.
8. Testing, Logging and Coring Programs:

Drill Stem Tests (all DST's to be justified by a valid show of oil or gas):

Bone Spring	8,600 - 8,800'
Wolfcamp	11,000 - 11,300'

PROPOSED BOPE AND CHOKE ARRANGEMENT

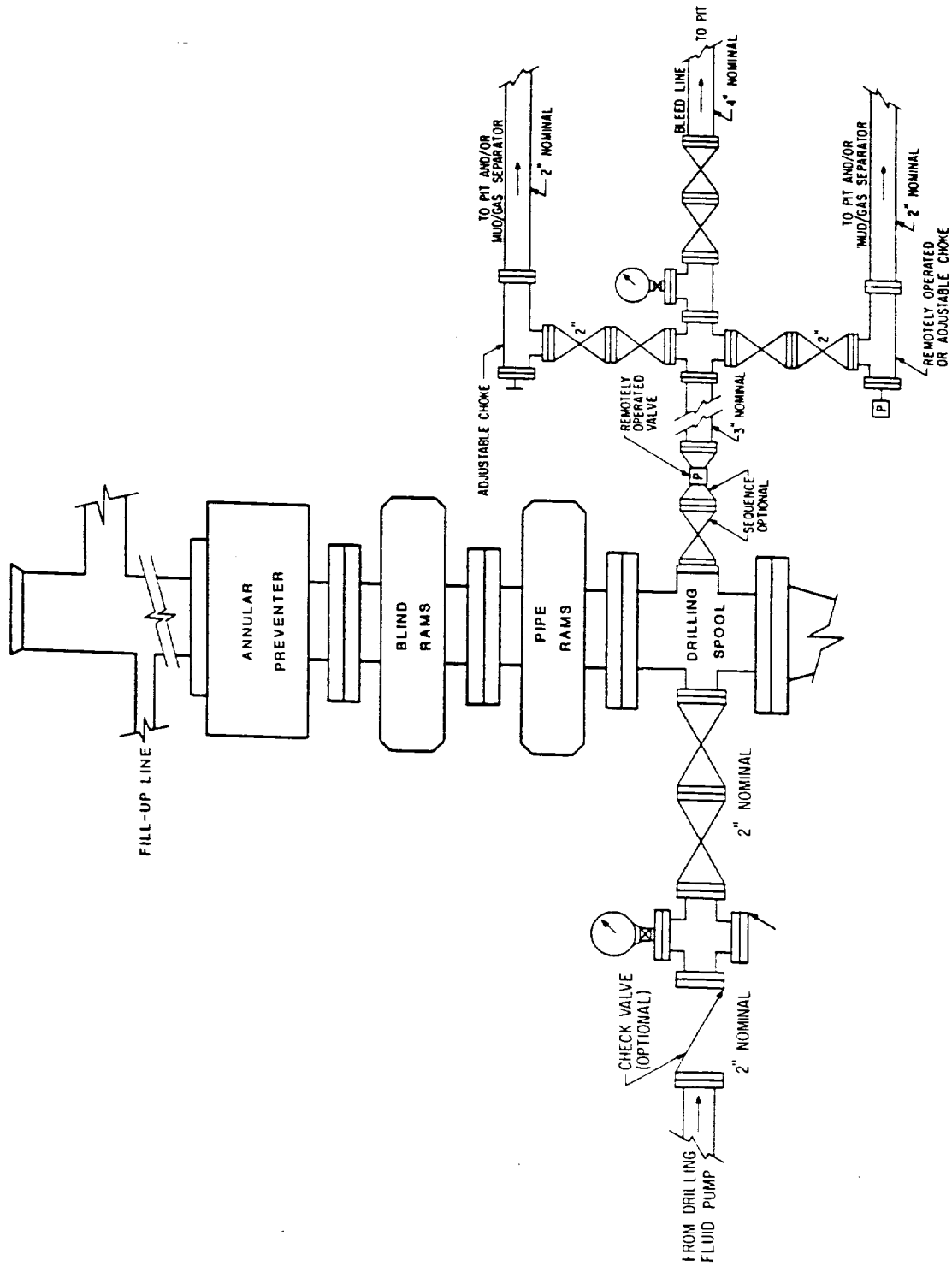


EXHIBIT B

SANTA FE ENERGY OPERATING PARTNERS, LP.
 KACHINA "8" FED. No.2,
 1830' FNL & 660' FWL, SEC.8 T 18 S, R 3 E
 LEA CO., NEW MEXICO

76-21-2 8224

173

76-21-2 8224

173

173