

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			5. LEASE DESIGNATION AND SERIAL NO. 66-062391	
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR Santa Fe Energy Operating Partners, L.P.			7. UNIT AGREEMENT NAME	
3. ADDRESS OF OPERATOR 550 W. Texas, Suite 1330, Midland, TX 79701			8. FARM OR LEASE NAME Kachina "5" Federal	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 330' FSL & 1980' FEL, Sec. 5, T-18S, R-33E At proposed prod. zone Same			9. WELL NO. 1	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 10 miles southeast of Maljamar, New Mexico			10. FIELD AND POOL, OR WILDCAT South Corbin (Wolfcamp)	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 330'			11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 5, T-18S, R-33E	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. None			12. COUNTY OR PARISH Lea	
16. NO. OF ACRES IN LEASE 320			13. STATE NM	
19. PROPOSED DEPTH 11,500'			17. NO. OF ACRES ASSIGNED TO THIS WELL 80	
20. ROTARY OR CABLE TOOLS Rotary			21. APPROX. DATE WORK WILL START* January 5, 1991	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3961.4' GR				

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	350'	400 sx CIRCULATE
12 1/4"	8 5/8"	28.0	3,100'	1,450 sx CIRCULATE
7 7/8"	5 1/2"	15.5 & 17.0	11,500'	See below

Move in drilling rig. Drill 17 1/2" hole to 350'. Run 13 3/8" casing and cement to surface with 400 sx "C" cement w/2% CaCl₂ and 1/4 pps celloflake. WOC 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.

UNORTHODOX LOCATION...

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

Subject to
Like Approval
by State

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.

SIGNED Danell Roberts TITLE Sr. Drilling Engineer DATE 11-19-90

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE 12-20-90

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

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 5 Federal		Well No. 1
Unit Letter 0	Section 5	Township 18 South	Range 33 East	County Lea	
Actual Footage Location of Well: 330 feet from the South line and 1980 feet from the East line					
Ground level Elev. 3961.4	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.

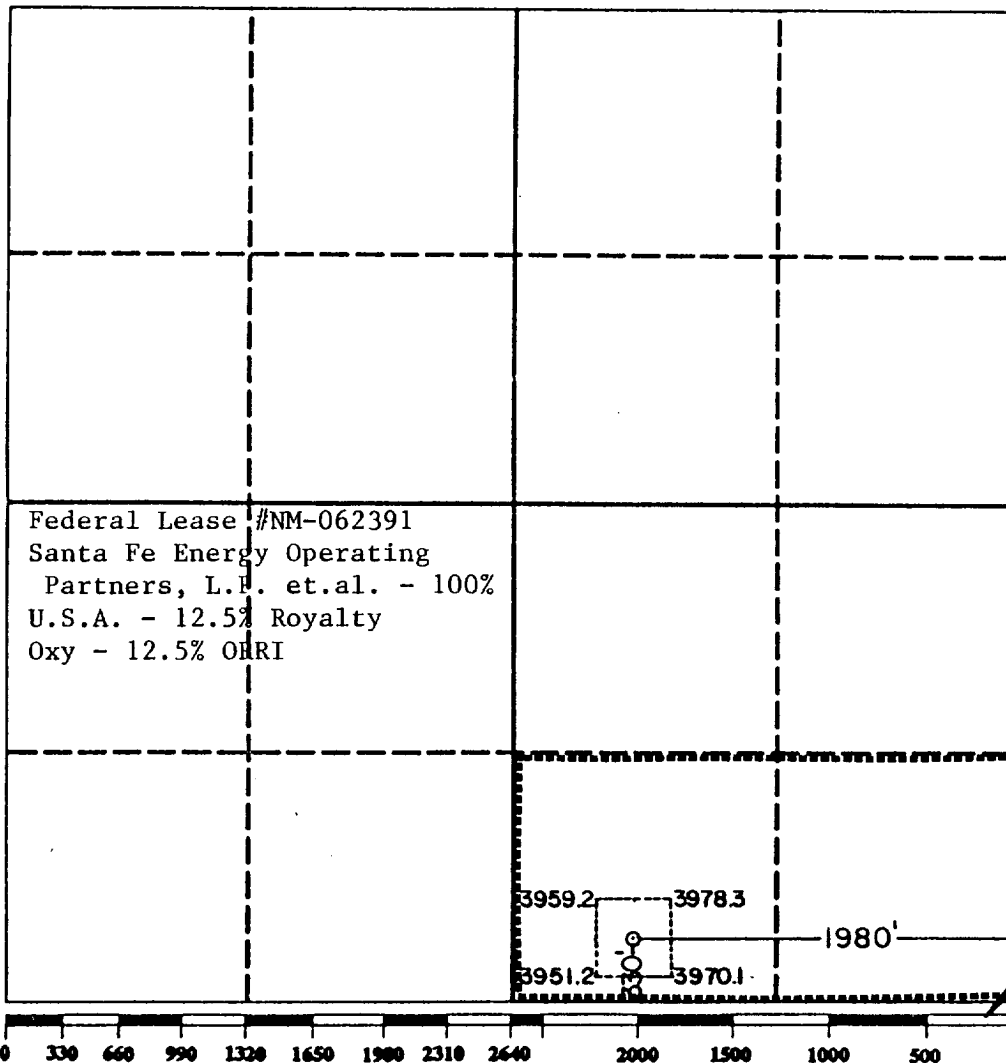
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 One lease

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

11-19-90

SURVEY PROFESSIONAL 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 **NOV 19, 1990**

Signature & Seal of
Professional Surveyor

John W. West
Certificate No. **JOHN W. WEST, 676**
RONALD J. EIDSON, 3239

APPLICATION FOR DRILLING
SANTA FE ENERGY OPERATING PARTNERS, L.P.
Kachina "5" Federal No. 1

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	1,400'
Base Salt	2,830'
Yates	3,070'
Seven Rivers	3,320'
Queen	4,150'
Penrose	4,500'
Delaware	5,540'
Bone Spring	6,460'
First Bone Spring Sand	8,190'
First Carbonate	8,440'
2nd Sand	8,790'
2nd Carbonate	9,290'
3rd Sand	9,500'
Wolfcamp	9,830'
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	10,000 - 11,000'

PROPOSED BOPE AND CHOKE ARRANGEMENT

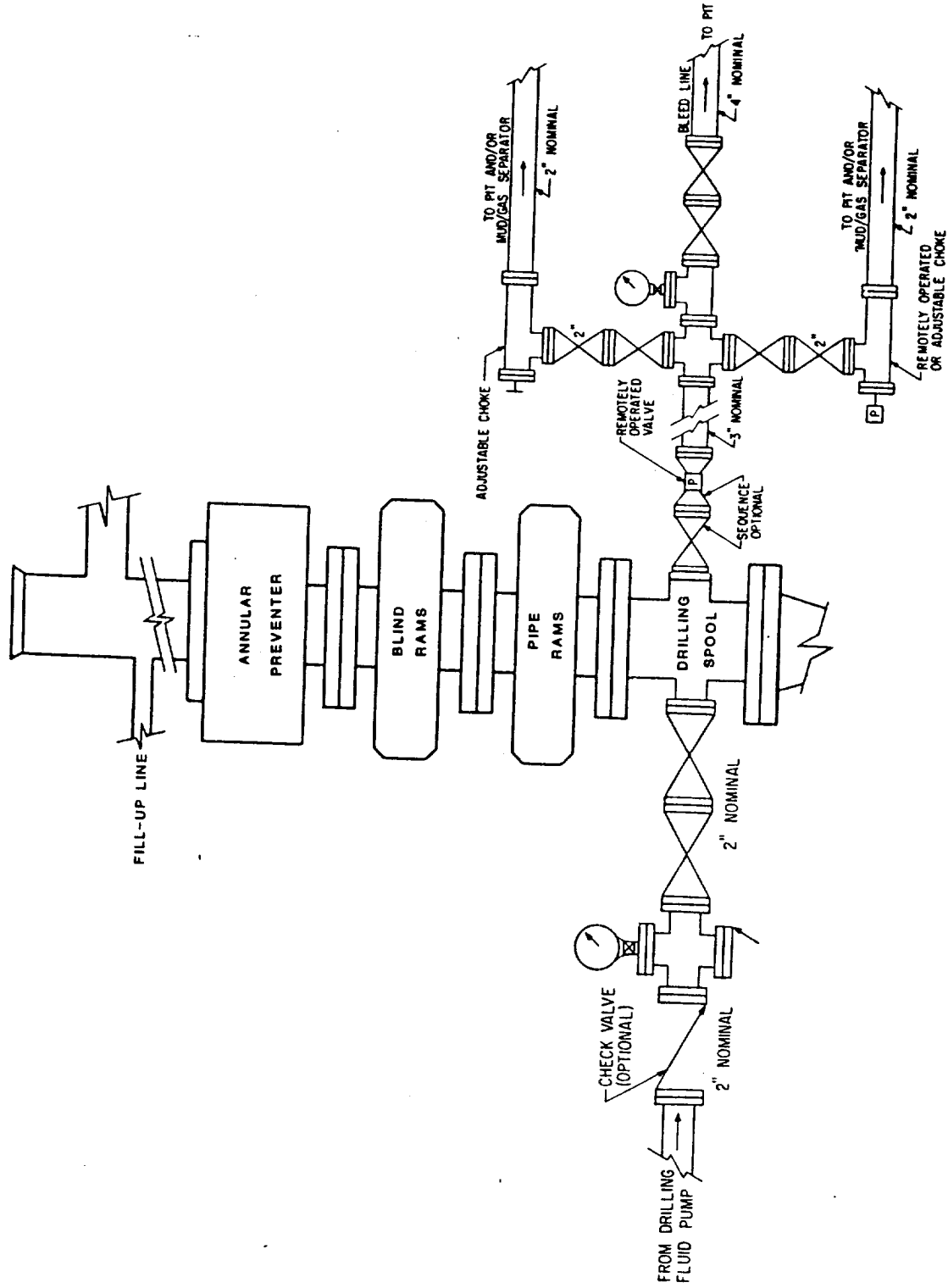


EXHIBIT B

SANTA FE ENERGY OPERATING PARTNERS, L.P.
 KACHINA "5" FED NO.1
 SEC. 5, T.18S, R.33E
 330' FSL & 1980' FEL
 LEA COUNTY, NEW MEXICO

held 4-29-91

ELF

DEC 2 1991

NOV 1 1991