

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

1980' FNL & 1980' FEL, Sec. 5, T-18S, R-33E

At proposed prod. zone

Same

unit G

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

10 miles southeast of Maljamar, New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

1980'

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.

1867'

19. PROPOSED DEPTH

11,500'

20. ROTARY OR CABLE TOOLS

Rotary

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

4009.0' GR

22. APPROX. DATE WORK WILL START*

August 25, 1992

23.

PROPOSED CASING AND CEMENTING PROGRAM

Capitan Controlled Water Basin

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8"	48.0	450'	450 sx CIRCULATE
12-1/4"	8-5/8"	32.0	3,100'	1,450 sx CIRCULATE
7-7/8"	5-1/2"	15.5 & 17.0	11,500'	See Below / SEE STIPS.

Move in drilling rig. Drill 17-1/2" hole to 450'. Run 13-3/8" casing and cement to surface with 450 sx "C" cement w/2% CaCl₂ and 1/4 pps celloflake. WOC 6 hours. Nipple up flow nipple and test 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 3000 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.

600' ABOVE

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

Daniel Roberts

TITLE Sr. Drilling Engineer

DATE 7-21-92

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

Gary Brown

TITLE

AREA MANAGER

CARLSBAD RESOURCE AREA

DATE

8-17-92

CONDITIONS OF APPROVAL, IF ANY:

APPROVAL SUBJECT TO

GENERAL REQUIREMENTS AND

SPECIAL STIPULATIONS

*See Instructions On Reverse Side

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OCD HOBBS OFFICE

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., Artec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator SANTA FE ENERGY RESOURCES, INC.			Lease KACHINA 5 FEDERAL		Well No. 4
Unit Letter G	Section 5	Township 18 SOUTH	Range 33 EAST	NMPM	County LEA
Actual Footage Location of Well: 1980 feet from the NORTH line and 1980 feet from the EAST line					
Ground Level Elev. 4009.0'	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 _____

If answer is "no" list of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary.) _____

No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, forced-pooling, otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.

Federal Lease No. LC-062391
Santa Fe Energy Operating Partners, L.P. - 100%
USA - 12.5% Royalty
Oxy - 12.5% ORRI

1980'
4011.5' 4015.0'
4002.5' 4010.2'
1980'

*see revised C-102
for correct dedicated
acreage*

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

Sr. Drilling Engineer

Company Santa Fe Energy
Operating Partners, L.P.

Date

7-21-92

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

JULY 1, 1992

Signature & Seal of
Professional Surveyor

REGISTERED PROFESSIONAL SURVEYOR
NEW MEXICO
Certificate No. JOHN W. WEST, 676
RONALD A. EIDSON, 3239
SARA L. JONES, 7977
JOHN W. WEST, 92-111-0894

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OGD MORRIS OFFICE

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other	5. Lease Designation and Serial No. LC-062391
2. Name of Operator Santa Fe Energy Operating Partners, L.P.	6. If Indian, Allottee or Tribe Name
3. Address and Telephone No. 550 W. Texas, Suite 1330, Midland, TX 79701 (915) 687-3551	7. If Unit or CA, Agreement Designation
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 1980' FNL & 1980' FEL, Sec. 5, T-18S, R-33E	8. Well Name and No. Kachina 5 Federal #4
	9. API Well No.
	10. Field and Pool, or Exploratory Area South Corbin (Wolfcamp)
	11. County or Parish, State Sec. 5, T-18S, R-33E

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other <u>Change Drilling Plan</u>	<input type="checkbox"/> Dispose Water
		(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Request for variance waiver for PVT Equipment

Due to the fact that our experience in Sections 5 and 8 of T-18S, R-33E, has shown that the Wolfcamp is not over-pressured in this area, we respectfully request a variance waiver to BLM requirements to install pit monitoring equipment when drilling below the Wolfcamp. In our opinion the equipment serves no purpose on these type wells and only adds to the cost of drilling.

Also included is data to support the following statements regarding our APD to drill this well:

Bottom Hole Pressure: Wolfcamp - 2769 psi after 72 hr buildup or 4.8 ppg equivalent mud weight

Bottom Hole Temperature: 143 - 146° F

Drilling Duration: 35 days

No H₂S present during drilling of well: See attached reservoir fluid analysis.

We will bring cement at least 600' above any productive horizon during production string cmt.

14. I hereby certify that the foregoing is true and correct.		
Signed <u>Adam Salameh</u>	Title <u>Sr. Production Clerk</u>	Date <u>Aug. 12, 1992</u>
(This space for Federal or State office use)		
Approved by <u>Adam Salameh</u>	Title <u>PETROLEUM ENGINEER</u>	Date <u>8/14/92</u>
Conditions of approval, if any:		

VARIANCE APPROVAL IS FOR THIS WELL ONLY.

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.

APPLICATION FOR DRILLING
SANTA FE ENERGY OPERATING PARTNERS, L.P.
Kachina "5" Federal No. 4

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'

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3 M - PROPOSED BOPE AND CHOKE ARRANGEMENT

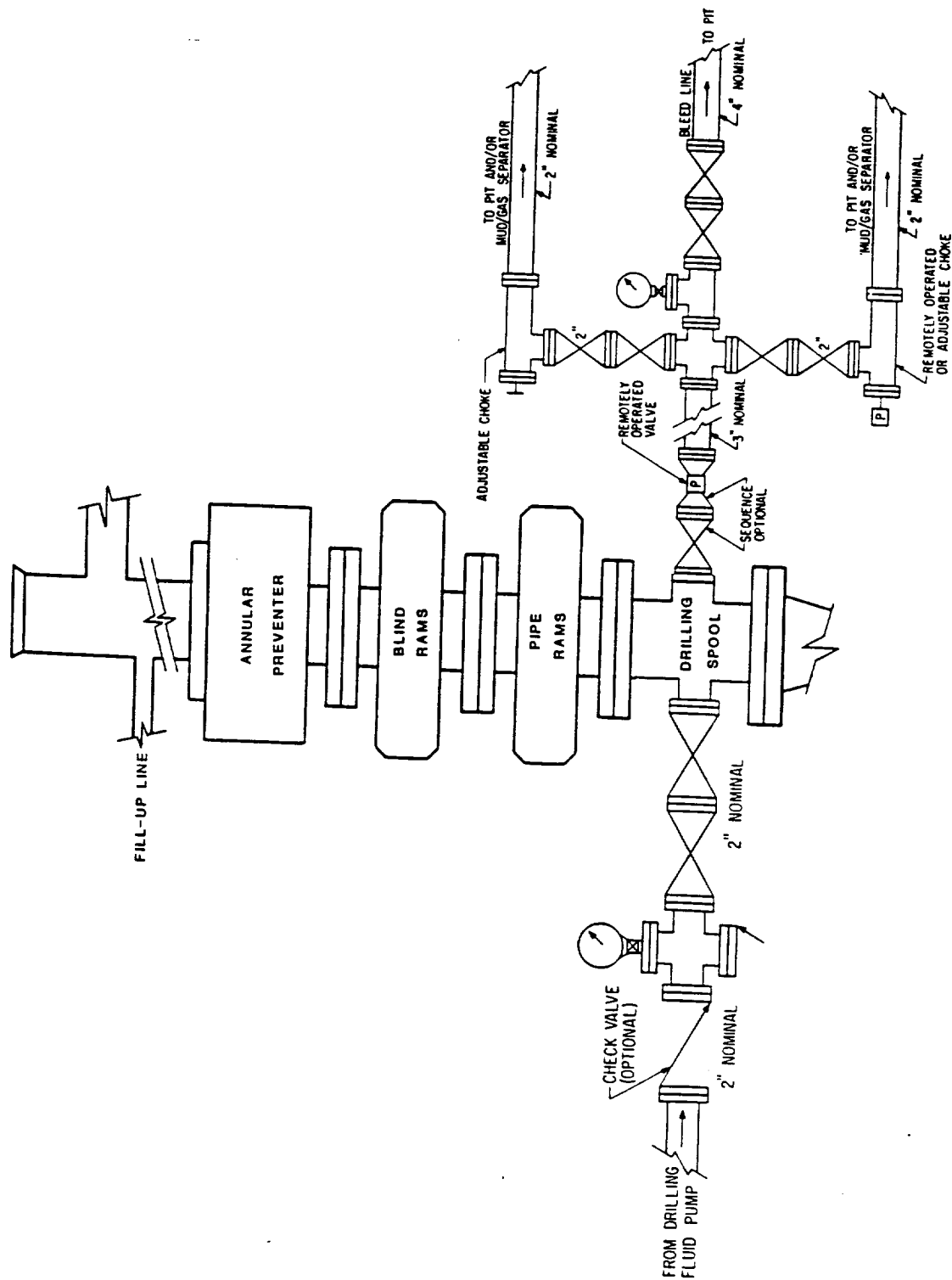


EXHIBIT B

SANTA FE ENERGY OPERATING PARTNERS, L.P.
 KACHINA "5" FED No. 4
 1980' FNL & 1980' FEL
 SEC 5, T18S, R33E
 LEA CO., NEW MEXICO

hcd 1-8-93

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