

DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
HONOLULU, HAWAII 96820

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. NM-40452	
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <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 500 W. Illinois, Suite 500, Midland, TX 79701			8. FARM OR LEASE NAME Shinnery 14 Federal	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 2310' FNL & 660' FEL of Sec. 14, 18S, 32E At proposed prod. zone			9. WELL NO. 5	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 25 miles NE of Carlsbad, New Mexico			10. FIELD AND POOL, OR WILDCAT Undesignated Bone Spring	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 660'		16. NO. OF ACRES IN LEASE 40	17. NO. OF ACRES ASSIGNED TO THIS WELL 40	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1320'		19. PROPOSED DEPTH 10,200'	20. ROTARY OR CABLE TOOLS Rotary	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3818.9'			22. APPROX. DATE WORK WILL START* ASAP	

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+	475 sx CIRCULATE
12 1/4	8 5/8	24.0	2680+	See below CIRCULATE
7 7/8	5 1/2	17.0	10200	See below

Move in drilling rig. Drill 17 1/2" hole to 400'. Run 13 3/8" casing and cement to surface with 475 sx "C" cement w/2% CaCl2. WOC 6 hours. Nipple up BOP and test BOP and casing to 600 psi. Drill 12 1/4" hole to 2680' (200' below base of salt). Run 8 5/8" casing and cement with sufficient C1 "C" poz cement w/6% gel, 10% NaCl and 1 lb/sk celloflake followed by 360 sx of "C" cement w/2% CaCl2 to circulate. Install BOP and test rams and choke to 3000 psi, annular to 1500 psi. Drill 7 7/8" hole to core point in Queen (+3850'). Cut 60' core. Drill 7 7/8" hole to core point in Penrose (+4120'). Cut 40' core. Drill 7 7/8" hole to TD. Run logs. Run 5 1/2" casing and cement with 50/50 poz/"H" cement, 2% gel, 6 lbs/sk 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 Michael R. Burton TITLE District Drilling Engineer DATE 9-12-89  
(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
APPROVED BY Sumner Prent TITLE AREA MANAGER  
CONDITIONS OF APPROVAL, IF ANY: \_\_\_\_\_ CARLSBAD RESOURCE AREA DATE 10-23-89

\*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.

**RECEIVED**

**OCT 24 1989**

**OCD  
HOBBS OFFICE**

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

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

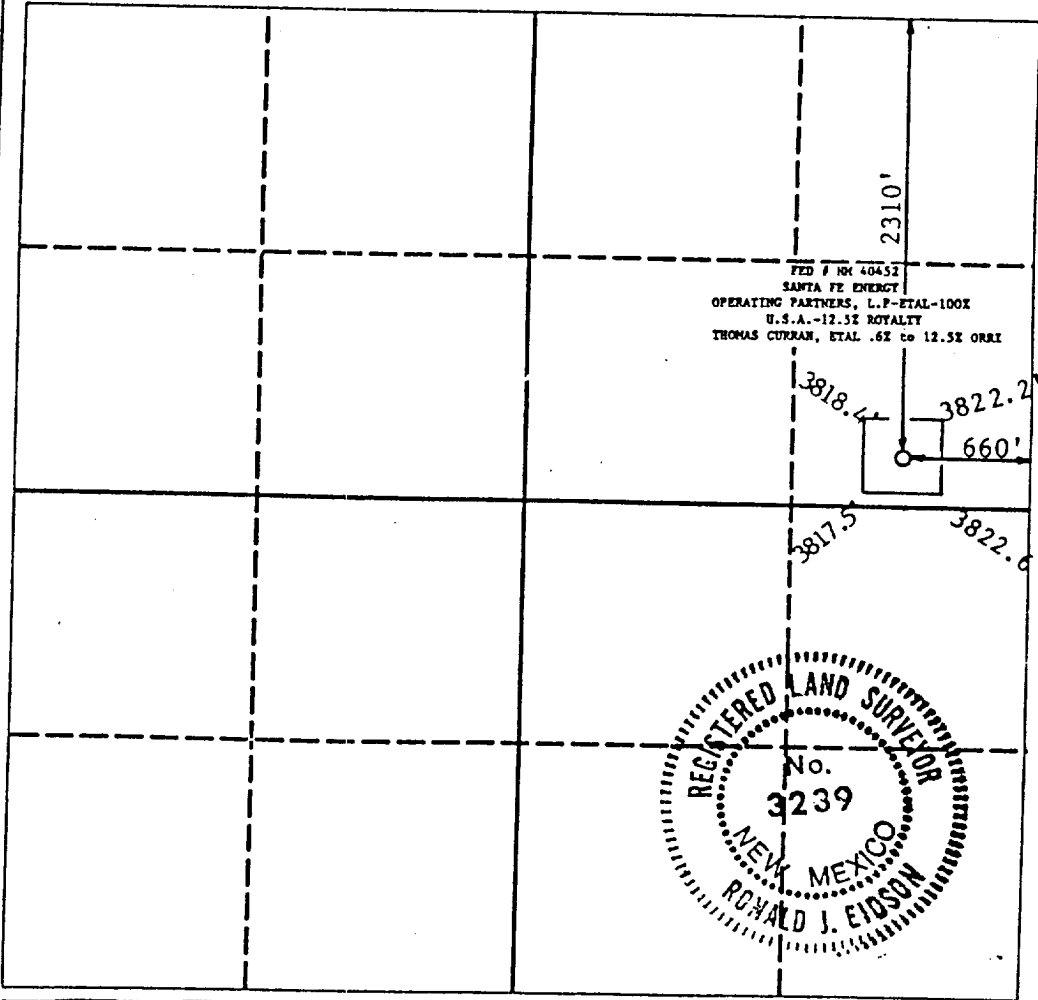
DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

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 SHINNERY 14 FEDERAL		Well No. 5
Unit Letter H	Section 14	Township 18 SOUTH	Range 32 EAST	County NMPM LEA	
Actual Footage Location of Well: 2310 feet from the NORTH line and 660 feet from the EAST line					
Ground level Elev. 3818.9'		Producing Formation BONE SPRING		Pool QUECHERO PLAINS	Dedicated Acreage: 40 Acres

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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 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  
*Michael R. Burton*  
Printed Name  
Michael R. Burton  
Position  
District Drilling Engineer  
Company Santa Fe Energy  
Operating Partners, L.P.  
Date  
9-14-89

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  
AUGUST 30, 1989  
Signature & Seal of Professional Surveyor  
*Ronald J. Eidson*  
Certificate No. JOHN W. WEST, 676  
RONALD J. EIDSON, 3239

OCT 24 1989  
GCD  
JOBS OFFICE

APPLICATION FOR DRILLING  
SANTA FE ENERGY COMPANY  
Shinnery 14 Federal No. 5

In conjunction with form 9-331C, Application to Drill subject well, Santa Fe Energy Company 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	550
Base Salt	2480
Yates	2680
Seven Rivers	3040
Queen	3850
Penrose	4120
Grayburg	4320
Delaware	5250
Bone Spring	6740
TD	10200

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	Yates 2680' - TD

4. Proposed casing program: See Form 9-331C and Exhibit A.
5. Pressure control Equipment: See Form 9-331C and Exhibit B.
6. Drilling Fluid Program: See Exhibit C.
7. Auxilliary Equipment: See Exhibit D.
8. Testing, Logging and Coring Programs:

Logging:

Logging from 2700' - TD:  
Dual Laterolog with Gamma Ray  
Neutron-Density with Gamma Ray  
Computer Process Log over selected intervals

Logging from 2700' - TD:  
Sonic

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PROPOSED BOPE AND CHOKE ARRANGEMENT

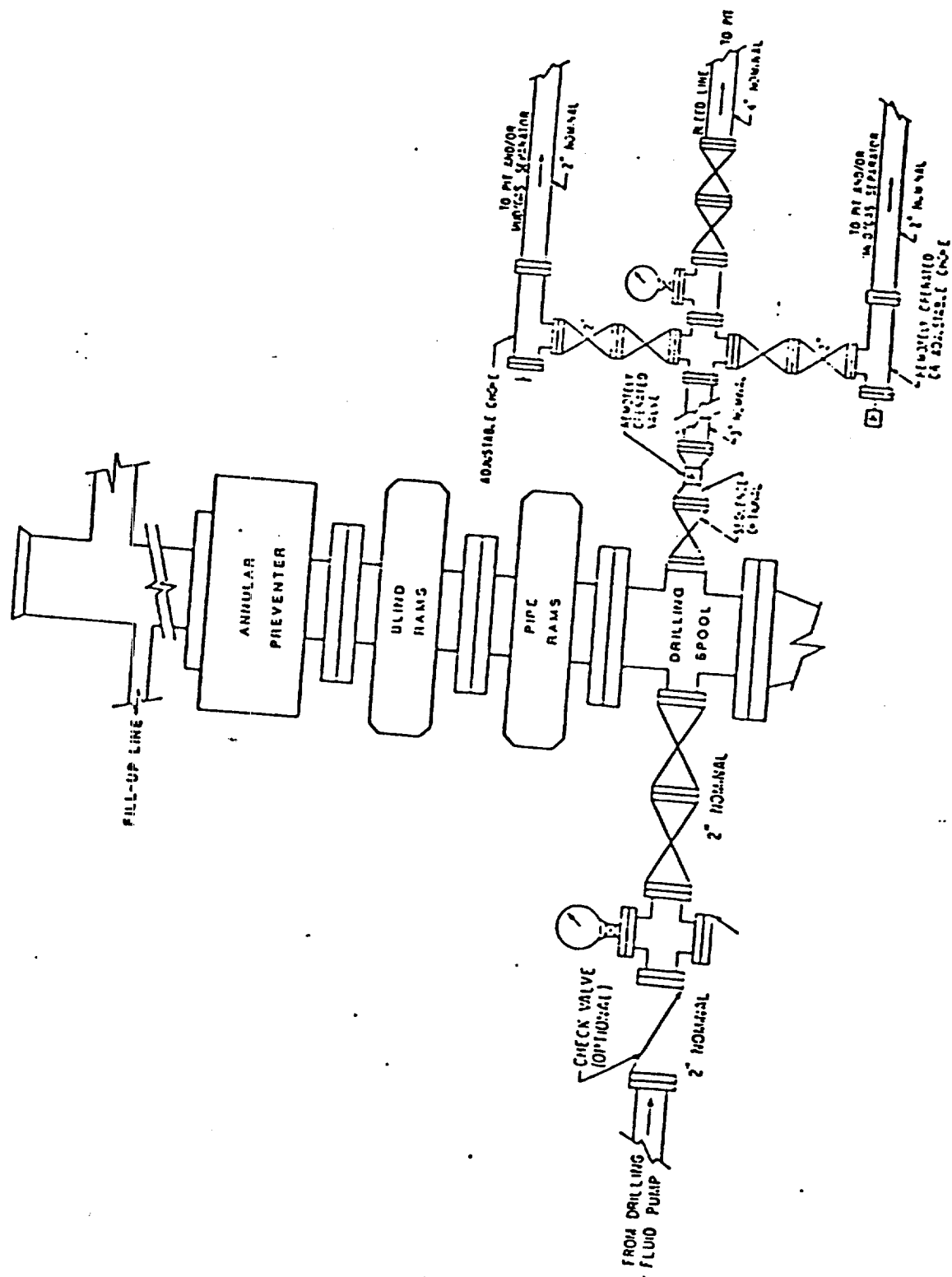


EXHIBIT B

SANTA FE ENERGY OPERATING PARTNERS, LP.  
SHINERY 14 FED No. 5  
SEC 14, T 18 S, R 32 E

Glacier Avenue  
Run 6-12-91

Rec'd  
DL-M-SFL  
12/21/89  
B.C. Smith  
C.N. 1-0



OCT 24 1991

MOBILE ALA