

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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 Company ✓

3. ADDRESS OF OPERATOR

500 W. Illinois, Suite 500, Midland, TX 79701

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

At surface

510' FWL, 1980' FNL, Sec. 22, T-19S, R-31E

At proposed prod. zone

Same

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

22 miles east of Carlsbad, NM

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)510'
460'18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

1533'

16. NO. OF ACRES IN LEASE

500'

19. PROPOSED DEPTH

2400'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

20. ROTARY OR CABLE TOOLS

Rotary

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

3533.0' GR 3529.3' GL

22. APPROX. DATE WORK WILL START*

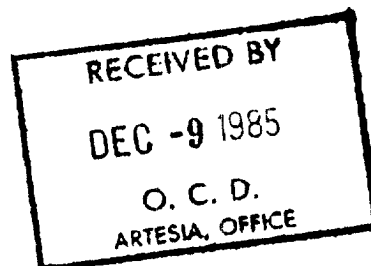
ASAP

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24.0	450'	300 sx
7 7/8"	4 1/2"	10.5	2400'	850 sx

Move on location and rig up. Drill 12 1/4" hole to 450'+. Run 8 5/8" casing. Cement with 300 sx Cl C, 2% CaCl₂, 1/4# celloflake per sack. WOC till 500 psi compressive obtained. Cement to be circulated to surface. Nipple up BOP. Test BOP to 600 psi. Drill 7 7/8" hole to TD. Run logs and/or core as needed. Run 4 1/2" casing. Cement with sufficient amount of Cl C containing 8% gel, 2% CaCl₂, 10#/sk salt, 1/4#/sk celloflake followed by 200 sx Cl C w/1% CaCl₂ to circulate cement to surface.

Posted IDI
RPI, NL
12-13-85

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 Mike Burton Mike Burton TITLE Sr. Drilling Engineer DATE 11/14/85

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY Mark [Signature] TITLEDATE 12-6-85

CONDITIONS OF APPROVAL, IF ANY:

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED