

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

Form C-101
Revised 10-1-78

| | |
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SANTA FE, NEW MEXICO 87501
MAY 08 1986
O. C. D.

5A. Indicate Type of Lease
STATE ☐ FEE ☒
5. State Oil & Gas Lease No.

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"/> | | 7. Unit Agreement Name |
| b. Type of Well OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> | | 8. Farm or Lease Name Johnson |
| 2. Name of Operator Santa Fe Energy Company | | 9. Well No. 1 |
| 3. Address of Operator 500 W. Illinois, Suite 500, Midland, TX 79701 | | 10. Field and Pool, or Wildcat Undes. Morrow |
| 4. Location of Well UNIT LETTER E LOCATED 1980 FEET FROM THE North LINE AND 660 FEET FROM THE West LINE OF SEC. 24 TWP. 22S RGE. 27E NMPM | | 12. County Eddy |
| 19. Proposed Depth 12,300' | | 19A. Formation Morrow |
| 20. Rotary or C.T. Rotary | | |
| 21. Elevations (show whether DT, KT, etc.) 3081' | 21A. Kind & Status Plug. Bond Blanket - Current | 21B. Drilling Contractor To be determined |
| 22. Approx. Date Work will start ASAP | | |

23.

PROPOSED CASING AND CEMENT PROGRAM

| SIZE OF HOLE | SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | SACKS OF CEMENT | EST. TOP |
|--------------|----------------|-----------------|---------------|-----------------|----------|
| 17 1/2" | 13 3/8" | 48.0 | 200 | 210 | Surface |
| 12 1/4" | 9 5/8" | 36.0 | 2200 | 950 | Surface |
| 8 1/2" | 5 1/2" | 17.0 | 12300 | 1075 | 8500' |

Move in and rig up drilling rig. Drill a 17 1/2" hole to 200'. Run and cement 13 3/8" casing with 210 sacks Class "C" cement containing 2% CaCl₂ (278 cu.ft.). Twelve hour compressive strength = 1210 psi. WOC 12 hours. Drill 12 1/4" hole to 2200'. Run and cement 9 5/8" casing with 590 sacks cement containing 65% C cement, 35% pozzalin, 3% gel, 3% salt, and 1# celloflakes per sack followed by 360 sacks Class "C" Neat (1641 cu.ft.). Twelve hour compressive strength of lead cement = 150 psi. Twelve hour compressive strength tail cement = 1210 psi. Test casing to 1700 psi. Nipple up double ram BOP with hydrill. Test BOP to 5000 psi. Drill 8 1/2" hole to T.D. Prior to drilling into Wolfcamp, install choke manifold and test to 5000 psi. Run logs and drill stem tests. Either run and cement 5 1/2" casing with 500 sacks cement containing 50% Class H, 50% pozzalin, 2% gel, and 0.8% fluid loss additive followed by 575 sacks cement containing Class H, 1.25% Flo-lock, 0.2% de-foamer, and 2% KCl or P&A as per NMOCC Rules.

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. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

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

Signed Mike Burton Mike Burton Title Sr. Drilling Engineer Date 5/6/86

(This space for State Use)

Original Signed By
Mike Williams

APPROVED BY Oil & Gas Inspector TITLE Oil & Gas Inspector

DATE MAY 16 1986