

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

NM OIL & GAS COMMISSION  
Drawer DD  
Artesia, NM 88210

SF/FILE

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  
 COOK OIL AND GAS PRODUCTION Joe D. Cook

3. ADDRESS OF OPERATOR  
 P.O. BOX 159, ROSWELL, NEW MEXICO 88201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
 At surface  
 330 FWL, 2110 FSL, 19S, 31E, Sect. 1, Lots 3,4, S $\frac{1}{2}$ N $\frac{1}{2}$ ,  
 At proposed prod. zone SW $\frac{1}{4}$ , W $\frac{1}{2}$ SE $\frac{1}{4}$ , SE $\frac{1}{4}$ SE $\frac{1}{4}$ , 519.91 acres  
 2804-2840

5. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 12 MILES SE LOCO HILLS

6. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. 330 FWL  
 (Also to nearest drlg. unit line, if any)

7. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1190'

8. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 3617. GL

9. NO. OF ACRES IN LEASE  
 519.19 More or Less 40

10. NO. OF ACRES ASSIGNED TO THIS WELL  
 40

11. PROPOSED DEPTH  
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12. ROTARY OR CABLE TOOLS  
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13. APPROX. DATE WORK WILL START\*  
 FEBRUARY 14, 1981

5. LEASE DESIGNATION AND SERIAL NO.  
 NM 3620

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
 RECEIVED

7. UNIT AGREEMENT NAME  
 NOV 2 1981

8. NAME OR LEASE NAME  
 D.L. HANNIFIN

9. WELL NO.  
 #1 ARTESIA, OFFICE

10. FIELD AND POOL, OR WILDCAT  
 SHUGART

11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA

12. COUNTY OR PARISH  
 EDDY

13. STATE  
 NM

23. PROPOSED CASING AND CEMENTING PROGRAM

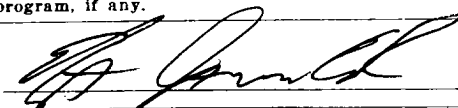
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT

PROPOSE TO:  
 SET WIRELINE PLUG AT 3000'  
 RAN GAMMA COLLAR PER. RECORD LOG  
 PERF. 2930, 31, 32, 34, 35, 36  
 TREAT 500 GAL NE15% ACID  
 PERF. 2840, 41, 42, 43, 2828, 2814, 15, 16, 17, 2804, 05, 07, 08, 09, 10, 11  
 TOTAL 22 HOLES  
 TREAT 3000 GAL NE 15% ACID  
 FRAC. 50,000 GAL. 50% CO<sub>2</sub>, 50% GEL WATER

THE QUEEN ZONE ONLY PRODUCES APPROXIMATELY 1/8 BBL PER DAY

RECEIVED  
 NOV 2 1981

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  TITLE \_\_\_\_\_ DATE \_\_\_\_\_

(This space for Federal or State office use)

PERMIT NO. APPROVED APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:  
 NOV 9 1981

JAMES A. GILMAN  
 DISTRICT SUPERVISOR

See Instructions On Reverse Side