

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

|  |  |   |  |
|--|--|---|--|
| 1a. TYPE OF WORK<br>DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>   |  | 5. LEASE DESIGNATION AND SERIAL NO.<br>Contract No. 126   |  |
| b. TYPE OF WELL<br>OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/> |  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME<br>Jicarilla Apache  |  |
| 2. NAME OF OPERATOR<br>COTTON PETROLEUM CORPORATION  |  | 7. UNIT AGREEMENT NAME  |  |
| 3. ADDRESS OF OPERATOR<br>2502 Lincoln Center Bldg., 1660 Lincoln, Denver, Colo. 80264   |  | 8. FARM OR LEASE NAME<br>Apache   |  |
| 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*<br>At surface 1970' FSL, 1780' FEL<br>At proposed prod. zone   |  | 9. WELL NO.<br>107  |  |
| 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*  |  | 10. FIELD AND POOL OR WILDCAT<br>Lindrich Gallup<br>Dakota West   |  |
| 15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 1780'  |  | 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA<br>Sec. 2-T24N-R4W<br>N.M.P.M.                                     |  |
| 16. NO. OF ACRES IN LEASE -  |  | 12. COUNTY OR PARISH 13. STATE<br>Rio Arriba New Mexico   |  |
| 17. NO. OF ACRES ASSIGNED TO THIS WELL 160 acres   |  | 18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 7700' |  |
| 19. PROPOSED DEPTH 7700'   |  | 20. ROTARY OR CABLE TOOLS<br>Rotary   |  |
| 21. ELEVATIONS (Show whether DF, RT, GR, etc.)<br>6933' GR   |  | 22. APPROX. DATE WORK WILL START*<br>6-13-78  |  |

## 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            | 300'          | 300 sacks          |
| 7-7/8"       | 4-1/2"         | 10.50 & 11.60   | 7700'         | To be determined   |

It is proposed to drill this well with rotary tools, and drilling mud as a circulation medium, through the Dakota Formation. Possible production zones in the Gallup and Dakota Formation will be completed and downhole commingled. Production casing will be cemented in such a manner as to protect the Pictured Cliffs Formation.

## Estimated Formation Tops

|                 |       |           |       |
|-----------------|-------|-----------|-------|
| Pictured Cliffs | 3115' | Greenhorn | 7265' |
| Cliff House     | 4755' | Graneros  | 7320' |
| Gallup          | 6425' | Dakota    | 7340' |

The SE/4 of Section 2 is dedicated to this well. 160 acres. The natural gas to be produced from this well is committed.

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. D. E. Wood Division Production Manager May 4, 1978  
SIGNED D. E. Wood TITLE DATE  
(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:  
ok E. ash

RECEIVED

MAY 8 1978

U. S. GEOLOGICAL SURVEY  
DURANGO, COLO.

\*See Instructions On Reverse Side

**NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

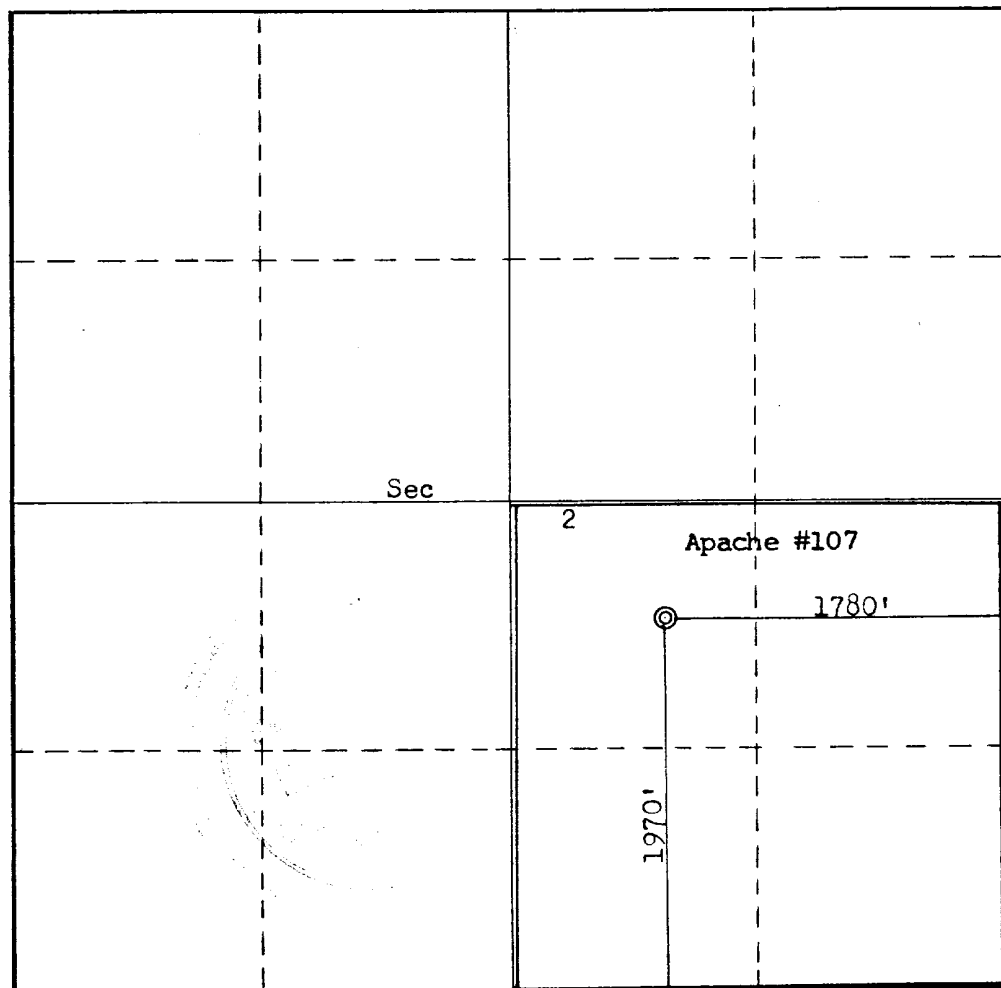
|  |                                      |  |                        |  |                        |
|--|--------------------------------------|--|------------------------|--|------------------------|
| Operator<br><b>COTTON PETROLEUM CORPORATION</b>  |                                      |  | Lease<br><b>Apache</b> |  | Well No.<br><b>107</b> |
| Unit Letter<br><b>J</b>  | Section<br><b>2</b>                  | Township<br><b>24N</b>                     | Range<br><b>4W</b>     | County<br><b>Rio Arriba</b>            |                        |
| Actual Footage Location of Well:<br><b>1970</b> feet from the <b>South</b> line and <b>1780</b> feet from the <b>East</b> line |                                      |  |                        |  |                        |
| Ground Level Elev.<br><b>6933</b>  | Producing Formation<br><b>Dakota</b> | Pool<br><b>Lindrith Gallup-Dakota West</b> |                        | Dedicated Acreage:<br><b>160</b> Acres |                        |

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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 interests 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 interests, has been approved by the Commission.



**CERTIFICATION**

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

*D. E. Wood*  
Name

**D. E. Wood**

Position  
**Division Production Manager**

Company  
**Cotton Petroleum Corporation**

Date  
**May 4, 1978**

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

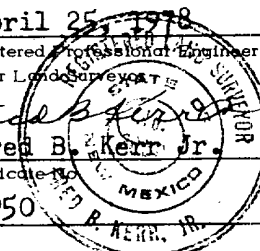
**April 25, 1978**

Registered Professional Engineer and/or Land Surveyor

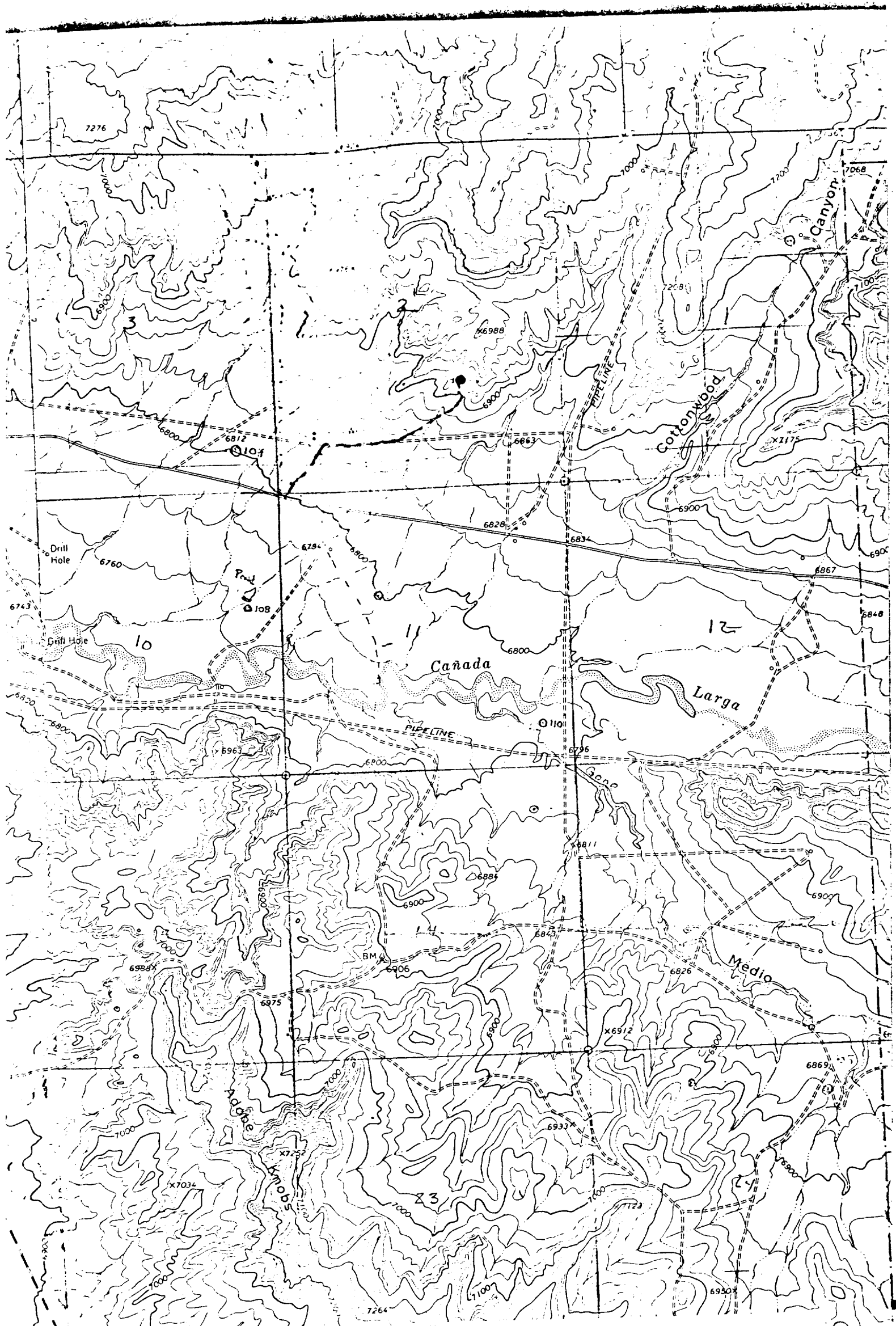
*Fred B. Kerr Jr.*  
**Fred B. Kerr Jr.**

Certificate No.

**3950**



0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0



Vicinity Map for  
COTTON PETROLEUM CORP. #107 Apache  
1970'FSL 1780'FEL Sec 2-T2LN-RLW  
Rio Arriba County, New Mexico

*[Handwritten signature]*