

UNITED STATES  
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  
Cotton Petroleum Corporation

3. ADDRESS OF OPERATOR  
1660 Lincoln Street  
2502 Lincoln Center Building, Denver, Colorado 80264

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
At surface 880° FNL, 990° FEL  
At proposed prod. zone

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

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) None

16. NO. OF ACRES IN LEASE ---

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.

19. PROPOSED DEPTH 7390'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6877 GR

22. APPROX. DATE WORK WILL START\* 12-5-77

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 SXS
7-7/8"	4 1/2	10.50&11.60	7390'	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	2870'	Greenhorn	6970'
Cliff House	4520'	Graneros	7030'
Gallup	6150'	Dakota	7050'

The NE/4 of Section 24 is dedicated to this well. 160 acres. The natural gas to be produced from this well is committed.

For: Cotton Petroleum Corporation

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. City blowout preventer program, if any.

24. President, Walsh Engineering  
& Production Corp. DATE Nov. 4, 1977  
Signed Ewell N. Walsh, P.E.  
(This space for Federal or State office use)

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

OKap

\*See Instructions On Reverse Side

U. S. GEOLOGICAL SURVEY

NOV 7 1977

RECEIVED

NOV 13 1977

**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.

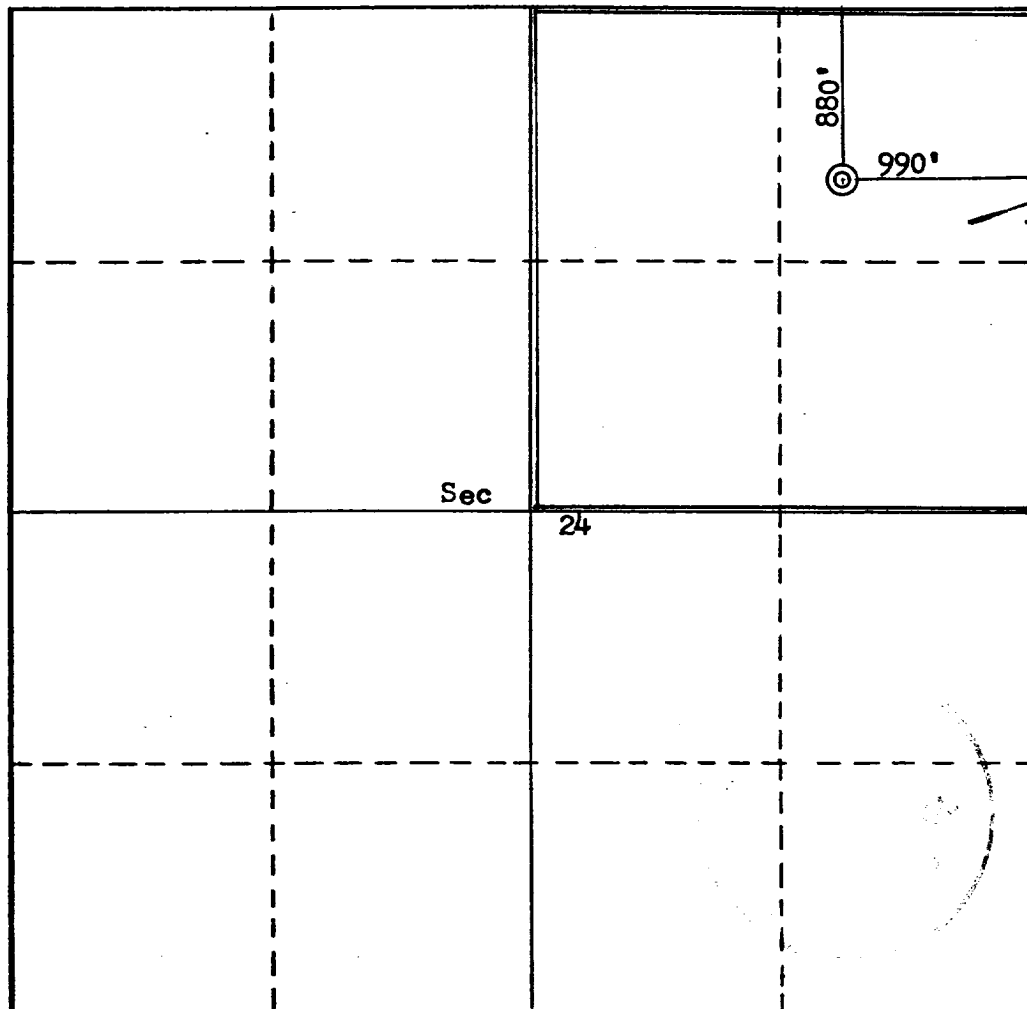
Operator <b>Cotton Petroleum Corporation</b>			Lease <b>Apache</b>		Well No. <b>105</b>
Unit Letter <b>A</b>	Section <b>24</b>	Township <b>24N</b>	Range <b>4W</b>	County <b>Rio Arriba</b>	
Actual Footage Location of Well:					
<b>880</b>		feet from the <b>North</b>	line and	<b>990</b>	feet from the <b>East</b> line
Ground Level Elev. <b>6877</b>	Producing Formation <b>Gallup - Dakota</b>		Pool <b>Lindrieth Gallup-Dakota</b> <b>West - Extension</b>		Dedicated Acreage: <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.

Name \_\_\_\_\_

Position \_\_\_\_\_

**Walsh Engineering &**

Company \_\_\_\_\_

**Production Corporation**

Date \_\_\_\_\_

**November 4, 1977**

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 \_\_\_\_\_

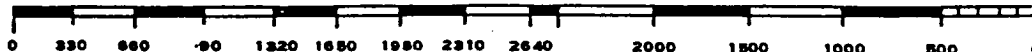
**October 24, 1977**

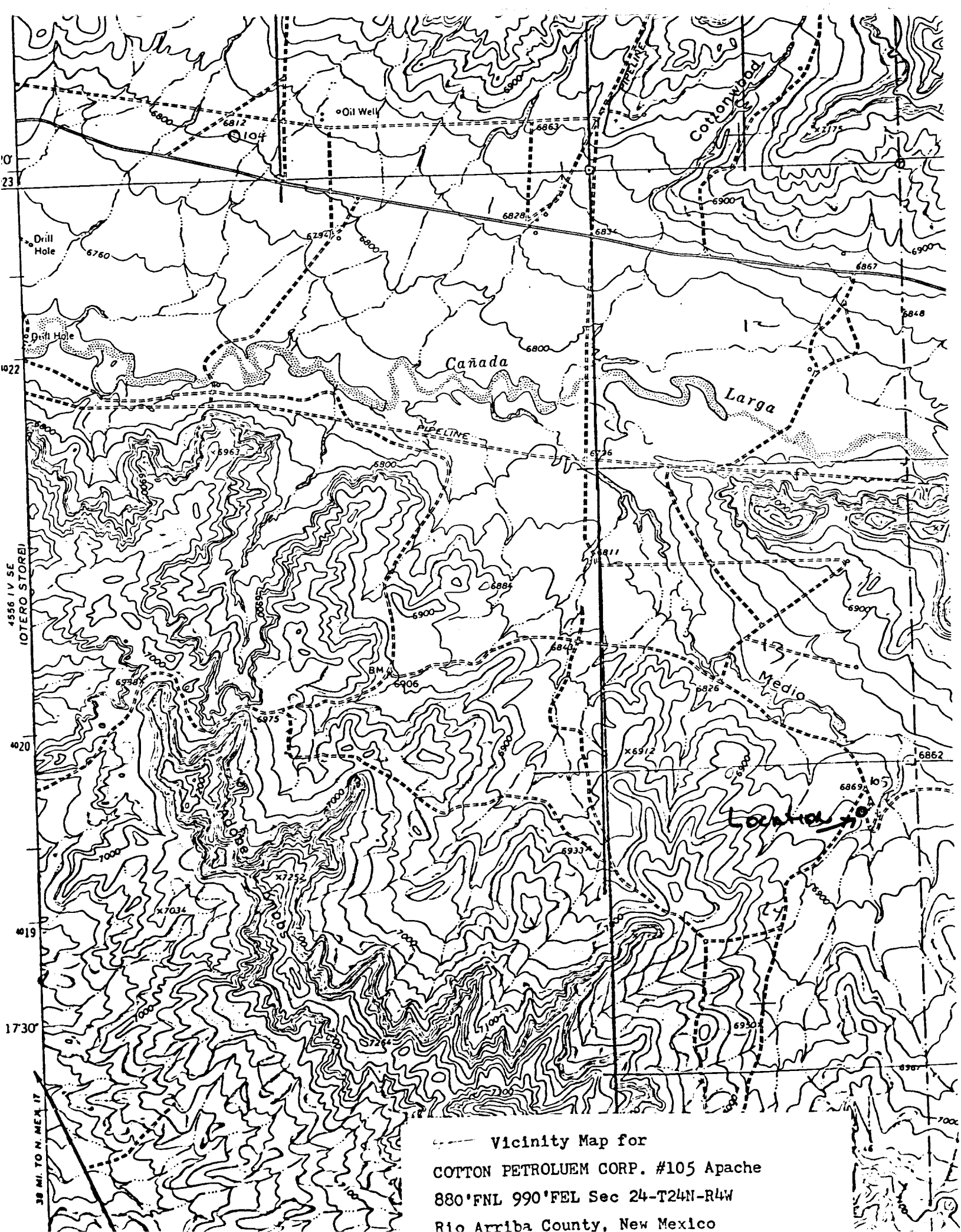
Registered Professional Engineer and/or Land Surveyor

**Fred B. Ketr Jr.**

Certificate No. \_\_\_\_\_

**3950**





Vicinity Map for  
COTTON PETROLEUM CORP. #105 Apache  
880'FNL 990'FEL Sec 24-T24N-R4W  
Rio Arriba County, New Mexico

DEVELOPMENT PLAN

Cotton Petroleum Corporation  
Apache No. 105  
880'FNL, 990'FEL, Sec. 24-T24N-R4W  
Rio Arriba County, New Mexico

1. Existing roads shown on attached plat.
2. Planned access from existing road is approximately 50' to new location.
3. Location -  
  
See Above
4. additional well is planned on this lease at this time.
5. Production equipment or storage facilities proposed for the well will be installed on location.
6. Water to be obtained from water hole in Largo Wash, SW/4 Section 9-T24N-R4W.
7. Waste materials will be buried on location or in reserve pit.
8. No permanent camp is planned. A trailer house will be used on location during drilling process.
9. No airstrip proposed.
10. See attached plat for layout.
11. Pits will be filled, location cleaned up, and area not in use for producing well will be reseeded.

DEVELOPMENT PLAN

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12. Lessee's or operator's representative.

Ewell N. Walsh: 325-8203; Radio Dispatch 325-1873, Car 620.  
Address: P. O. Box 254, Farmington, New Mexico 87401

13. CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by:

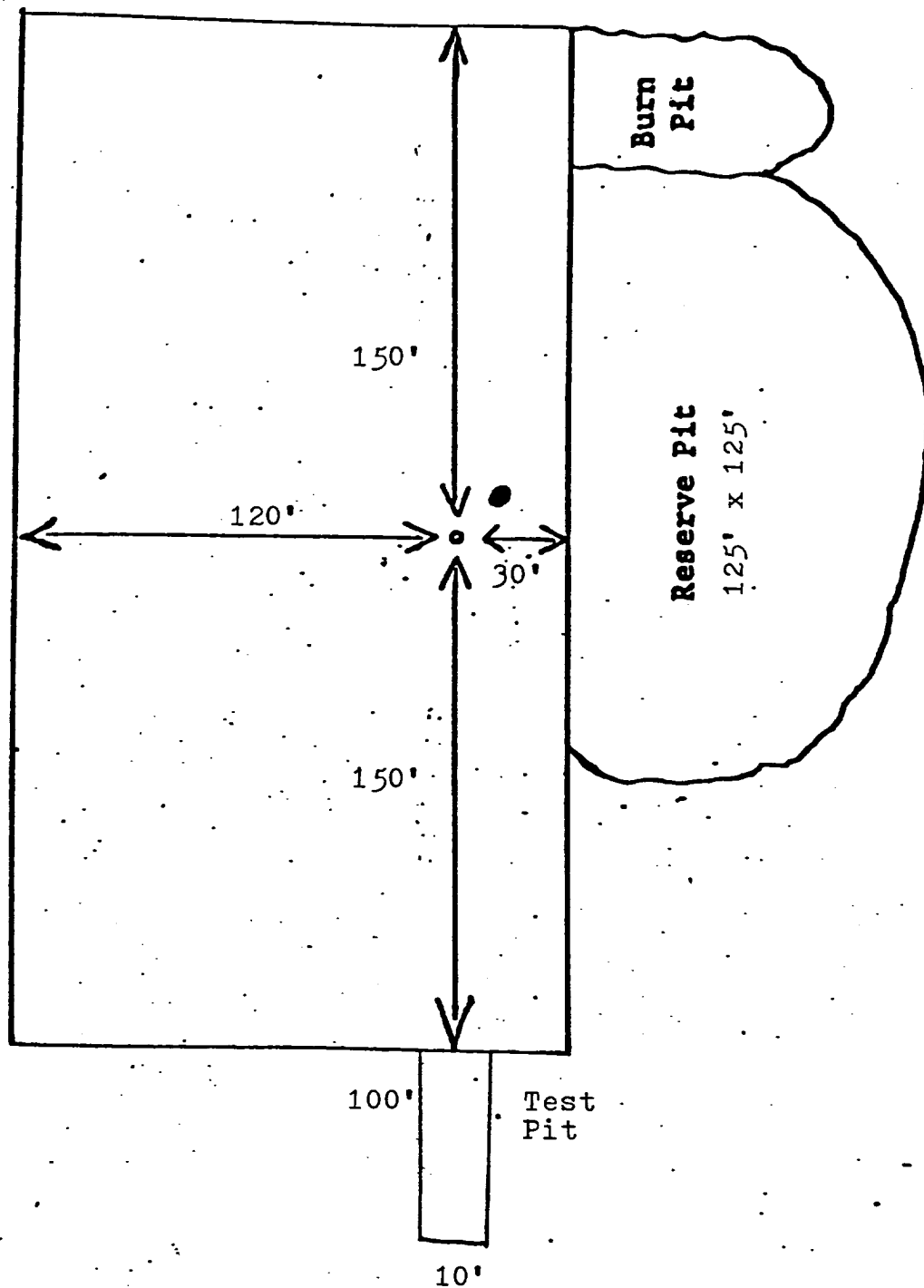
\_\_\_\_\_  
COTTON PETROLEUM CORPORATION

and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.



\_\_\_\_\_  
Ewell N. Walsh, P.E., President,  
Walsh Engineering & Production  
Corporation

COTTON PETROLEUM CORPORATION  
Apache No. 105  
880'FNL, 990'FEL, Sec. 24-T24N-R4W  
Rio Arriba County, New Mexico



COTTON PETROLEUM CORPORATION  
Apache No. 105  
880'FNL, 990'FEL, Sec. 24-T24N-R4W  
Rio Arriba County, New Mexico

Seven Point Well Control Program

1. Surface Casing.  
See Application for Permit to Drill.
2. Spools and Flanges.
  - A. Surface Casing - 10", Series 900, 3000 psi W.P.
  - B. Production, 10", Series 900, 3000 psi W.P.
  - C. Tubing Head - Series 900, 3000 psi. W.P.
3. Intermediate Casing.  
None
4. Blowout Preventers  
Production Hole - 10", 3000 psi  
Fill, kill and choke manifold - 5000 psi. W.P.
5. Additional Equipment (If necessary)
  - A. Kelly Cock
  - B. Bit Float
  - C. Degasser
  - D. Pit Level Indicator
  - E. Sub with Valve for drill pipe.
6. Anticipated Bottom Hole Pressure.  
3100 psi. Current mud program is for 9.2 lb./gal mud with hydrostatic head of 3600 psi at 7390 feet. Mud weight will be increased if necessary for higher pressures.
7. Drilling Fluid.  
Oil Base Mud.