

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

717 17th St., Suite 2200, Denver, Colorado 80202

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

At surface

1845' FWL, 1550' FSL, Section 13

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)

795'

## 18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

## 19. PROPOSED DEPTH

3200'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

160

## 20. ROTARY OR CABLE TOOLS

Rotary

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

6838' GR

## 22. APPROX. DATE WORK WILL START\*

April, 1980

## 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#	100'	150 sx
7-7/8"	4-1/2"	10.5#	3200'	To be determined

It is proposed to drill this well with rotary tools using drilling mud for circulation through the Pictured Cliffs formation. All possible productive intervals in the Pictured Cliffs will be completed.

Estimated formation tops:

Ojo Alamo	2500'	Fruitland	2920'
Kirtland	2700'	Pictured Cliffs	3040'

The SW $\frac{1}{4}$  of Section 13 is dedicated to this well. The gas produced from this well will be sold to Northwest Pipeline Co.

LIVE

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

D.E. Wood / SAS

TITLE Division Production Manager DATE October 23, 1979

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

ok

\*See Instructions On Reverse Side

## OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088  
SANTA FE, NEW MEXICO 87501Form C-102  
Revised 10-1-78

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

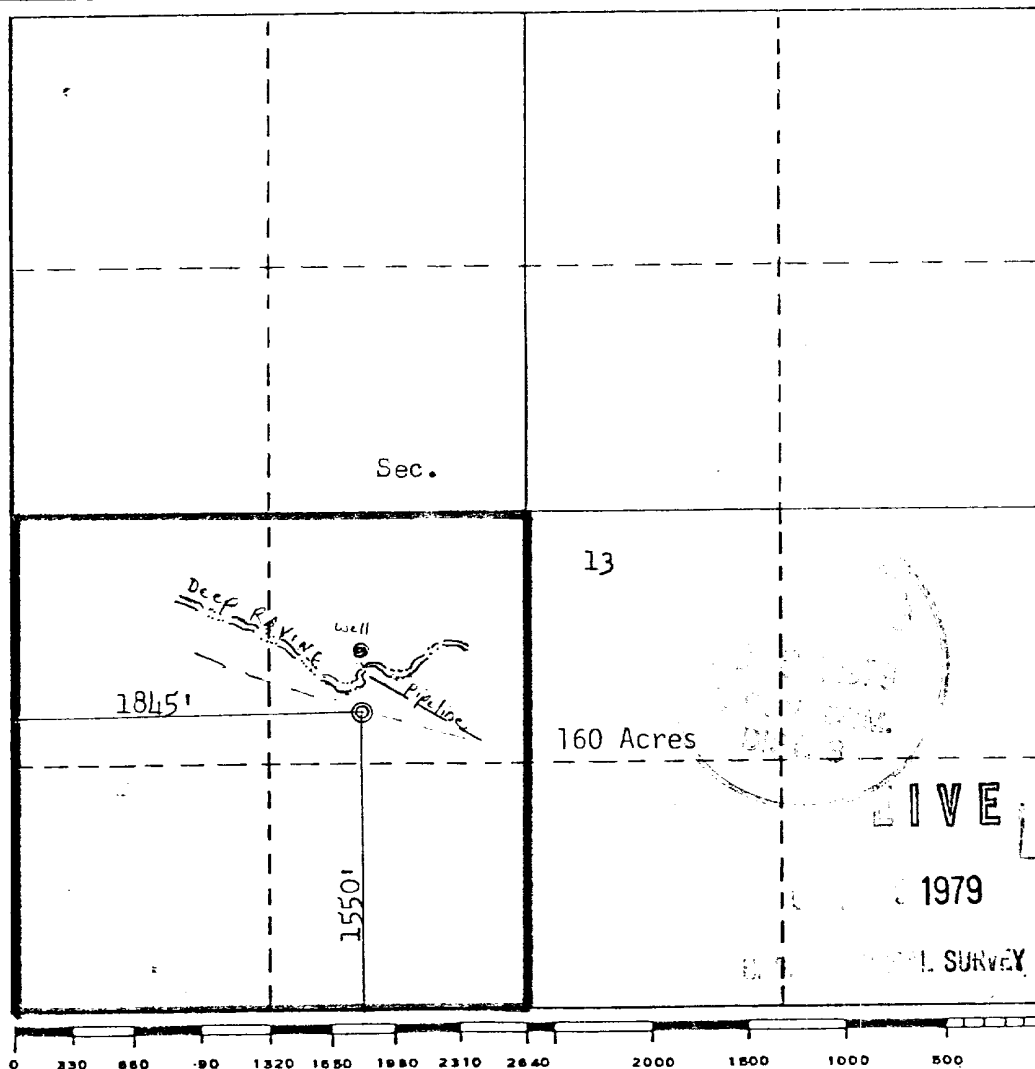
Operator COTTON PETROLEUM CORPORATION			Lease APACHE		Well No. 26
Unit Letter K	Section 13	Township 24N	Range 4W	County Rio Arriba	
Actual Footage Location of Well: 1550 feet from the South line and 1850 feet from the West line					
Ground Level Elev. 6838	Producing Formation Pictured Cliffs		Pool So. Blanco Pictured Cliffs		Dedicated Acreage: 160 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 Mgr.  
Company

Cotton Petroleum Corp.  
Date

October 23, 1979

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, 1979  
Registered Professional Engineer  
and/or Land Surveyor

*Fred B. Kead Jr.*  
Fred B. Kead Jr.  
Certificate No. 3950

3950  
B. KEAD JR.

COTTON PETROLEUM CORPORATION  
APACHE NO. 26

Multi-Point Surface Use Plan

1. Existing Road - Please refer to Map No. 1 which shows the existing roads. New roads which will be required have been marked on this map. All existing and new roads will be properly maintained during the duration of this project.
2. Planned Access Roads - Please refer to Map No. 1. The grade of the access roads will be consistent with that of the local terrain. The road surface will not exceed twenty feet (20') in width. Upon completion of the project, the access road will be adequately drained to control soil erosion. Drainage facilities may include ditches, water bars, culverts or any other measure deemed necessary by trained Company personnel to insure proper drainage. Gates and/or cattleguards will be installed if necessary.
3. Location of Existing Wells - Please refer to Attachment No. 2.
4. Location of Tank Batteries - Production facilities will be installed on location.
5. Location and Type of Water Supply - Water for the proposed project will be obtained from a water hole located at Largo Wash, SW/4, Sec. 9, T24N, R4W.
6. Source of Construction Materials - No additional materials will be required to build either the access road or the proposed location.
7. Methods of Handling Waste Materials - All garbage and trash materials will be put into a burn pit shown on Attachment No. 3. When clean-up operations are begun on the proposed project, the burn pit with its refuse will be buried to a depth of at least three feet (3'). If large amounts of liquids are left in the reserve pit after completion of the project, the pit will be fenced until the liquids have had adequate time to dry. The location clean-up will not take place until such time as the reserve pit can be properly covered over to prevent run-off from carrying any of these materials into the watershed. No earthen pit will be located

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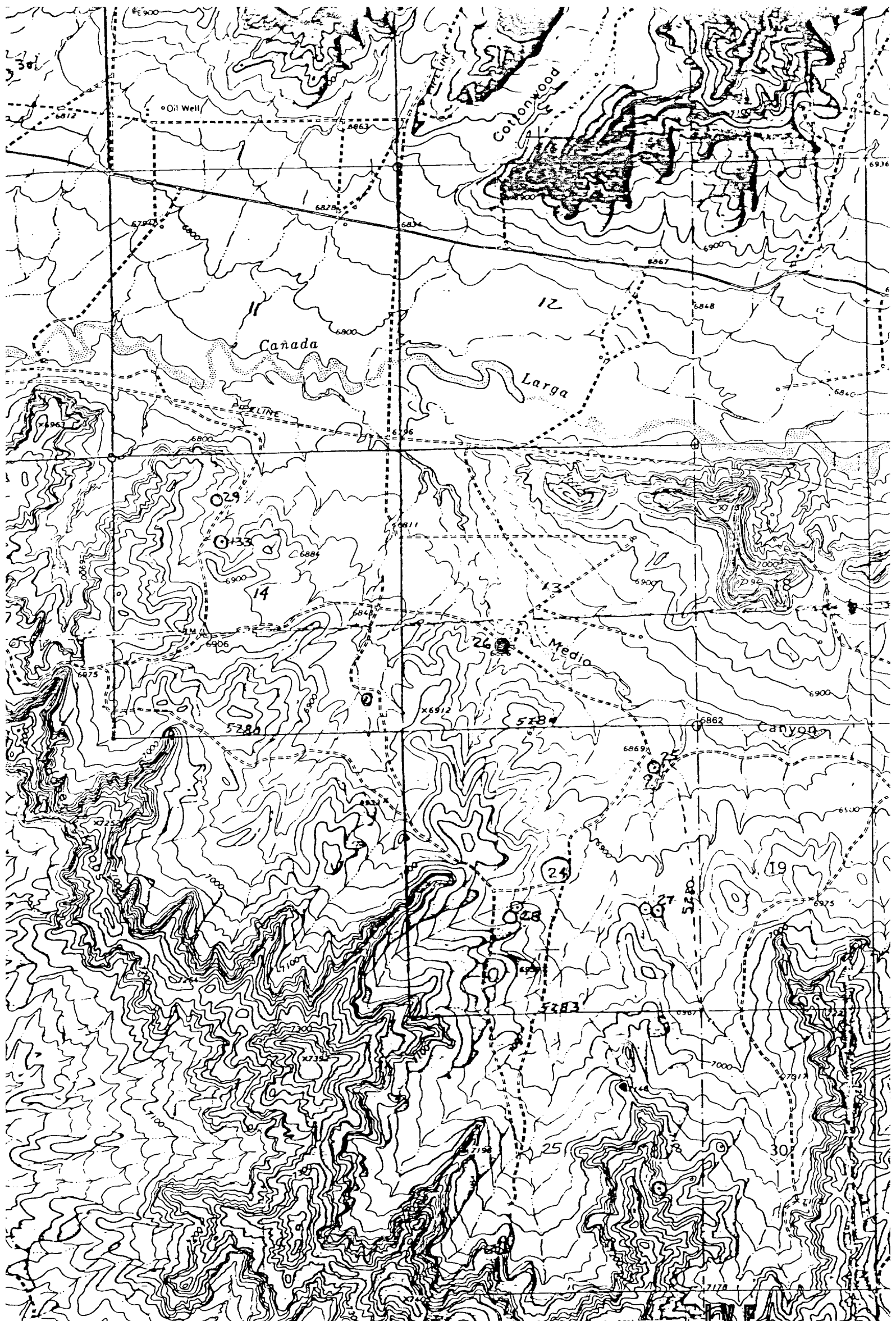
AL SURVEY

on natural drainages; all earthen pits will be so constructed as to prevent leakage from occurring.

8. Ancillary Facilities - No camps or airstrips will be associated with this project.
9. Wellsite Layout - Please refer to Attachment No. 3.
10. Plans for Restoration of the Surface - After completion of the proposed project, the location will be left in such a condition that will enable reseeding operation to be carried out. The reseeding operation will be performed during the time period set forth by the regulatory body. The location production equipment will be painted.
11. Other Information - The terrain is high sandstone ledges and sagebrush flats with pinon and cedar growing. Cattle graze the proposed project site.
12. Operator's Representatives - Howard Davis  
Farmington, New Mexico  
Phone: (505) 325-2409 (Office)  
(505) 327-6443 (Home)  
Steve Zamets  
Denver, Colorado  
Phone: (303) 893-2233 (Office)  
(303) 794-0494 (Home)  
D. E. Wood  
Denver, Colorado  
Phone: (303) 893-2233 (Office)  
(303) 773-2722 (Home)
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.

D. E. Wood *MAJ* **DIVE**  
D. E. Wood, Division Production Manager

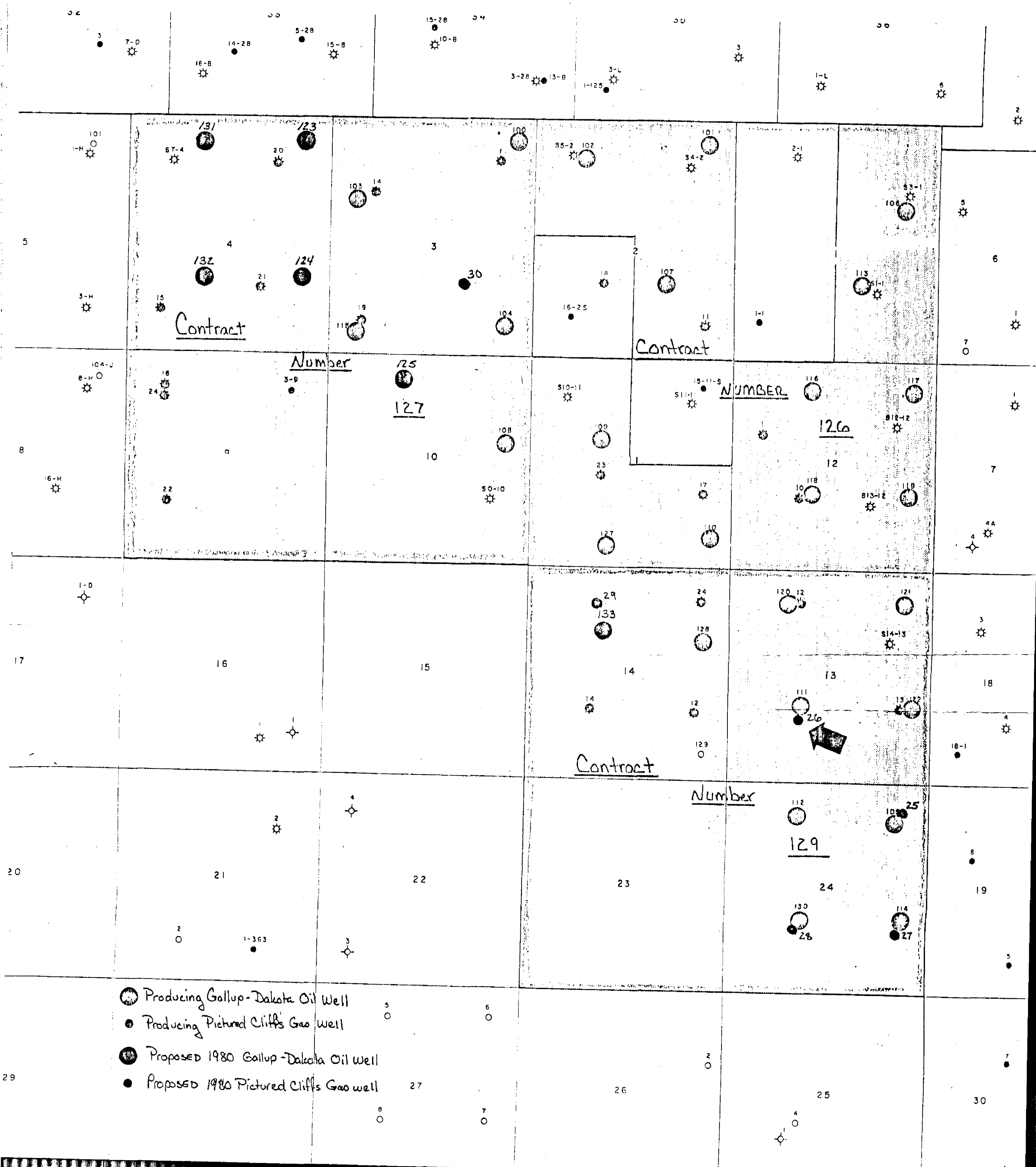
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Vicinity Map for  
COTTON PETROLEUM CORPORATION #26 APACHE  
1550' FSL 1845' FWL Sec 13-T24N-RLW  
RIO ARriba COUNTY, NEW MEXICO

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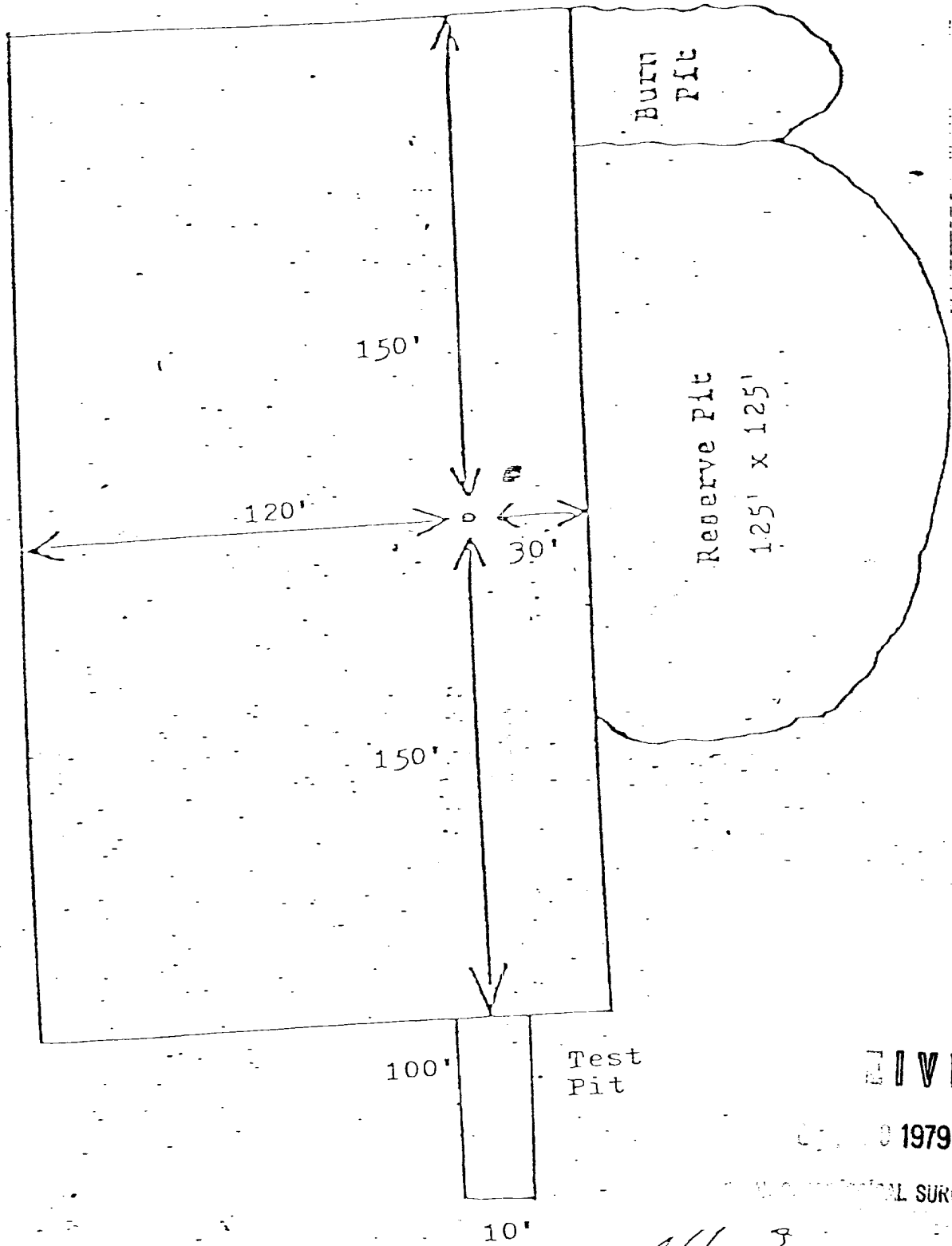


● Producing Gallup-Dakota Oil Well

● Producing Pictured Cliffs Gas Well

● Proposed 1980 Gallup-Dakota Oil Well

● Proposed 1980 Pictured Cliffs Gas Well



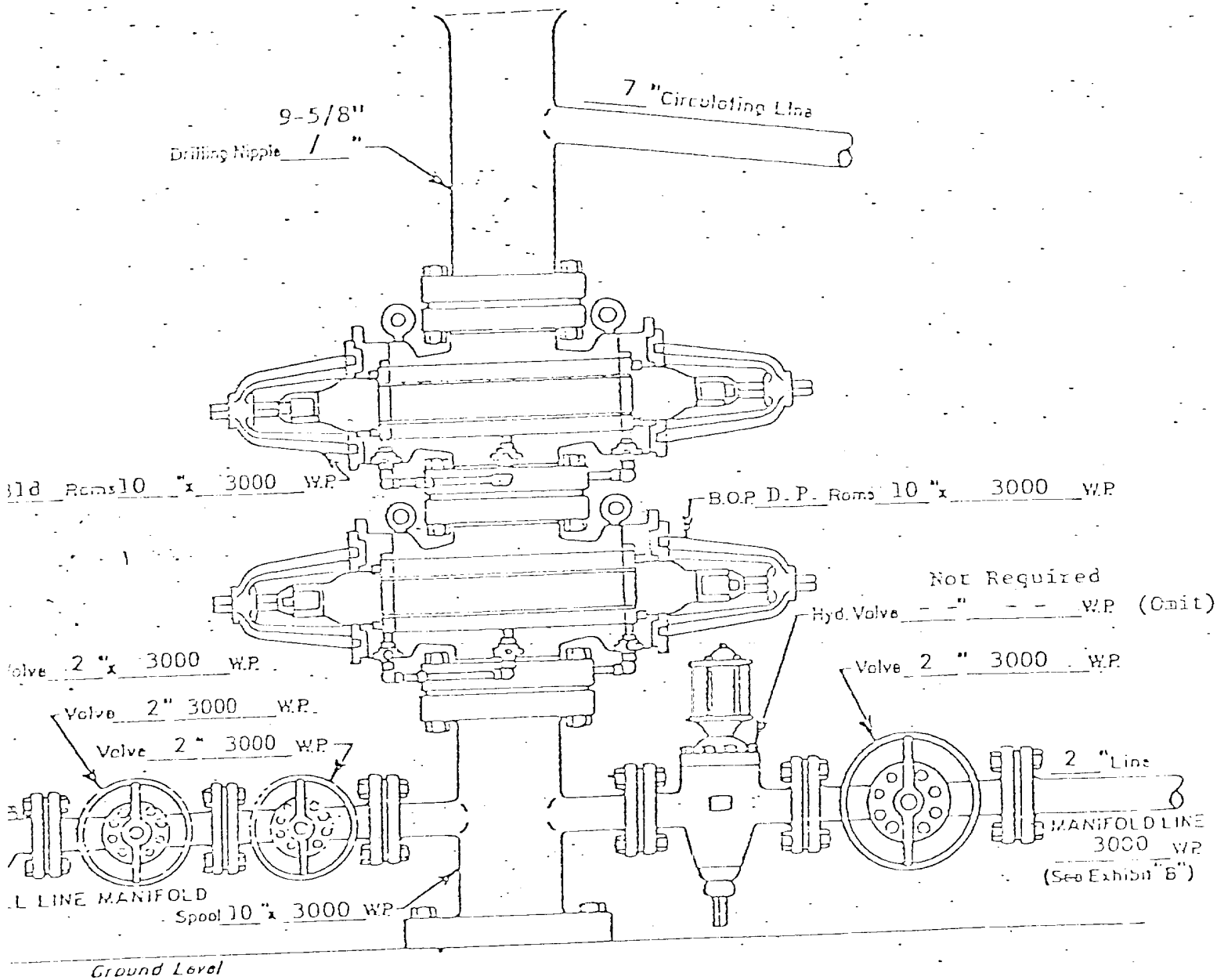
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Attachment 3

WELL NAME: Apache No. 26  
 LOCATION: 1845' FWL, 1550' FSL  
 Sec. 13-T24N-R4W  
 Rio Arriba Co., N.M.



WELL HEAD B.O.P.  
 3000 W.P.

☒ Hydraulic

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1979

WELL SURVEY



COTTON PETROLEUM CORPORATION  
APACHE NO. 26 -  
1845' FWL, 1550' FSL  
Sec: 13-T24N-R4W  
Rio Arriba Co., N.M.

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.

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WELL SURVEY

COLEMAN DRILLING CO.

P. O. BOX 1515

FARMINGTON, N. M. 87401

PHONE 505 / 325-4892

## DRILLING RIG INVENTORY

RIG # 2

RATED DEPTH CAPACITY 8,000 FEET WITH 4 1/2" DRILL PIPE

TERRICK: 127' LEE C. MOORE W/440,000 HOOK LOAD CAPACITY

SUBSTRUCTURE: LEE C. MOORE - 13' K.B.

DRAWWORKS: H-40 D IDECO

ENGINES: 2 EACH V-8 DETROIT DIESEL

MUD PUMPS: IDECO MM600 W/CATERPILLER D-379TA  
555 MAX. HP AT 1100 RPM  
500 INT. HP AT 1100 RPM  
420 CONT. HP AT 1100 RPM

AUXILIARY MUD PUMP  
GARDNER-DENVER F X Z  
W/343TAC CATERPILLER

DESILTER: PIONEER 8 CONE CAPACITY 400 GPM

MUD TANK: 1 EACH 500 BBL. (42 GAL PER BBL.) WORKING CAPACITY

WATER STORAGE: 1 EACH 480 BBL. (42 GAL PER BBL.)

GENERATORS: 1 EACH 90 KW AC AND 1 EACH 30 KW AC

ROTARY TABLE: 23" IDECO

TRAVELING BLOCK: NATIONAL 430 - 150 TONS W/COMB. HOOK

SWIVEL: OILWELL PC 225

BLOW OUT PREVENTER: 10" SHAFFER LWS 3000 WP HYDRAULIC

SPECIAL: CROWN-O-MATIC  
SATELITE AUTOMATIC DRILLER  
TONG TORQUE GAUGE  
RATE OF PENETRATION RECORDER  
SHALE SHAKER  
TRAILER HOUSE  
TWO-WAY RADIO

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