Form 3160-3
(July 1992)

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rse side)

FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

DEPARTM
BUREAU

APPLICATION FO EN

5. LEASE DESIGNATION AND SERIAL NO.
NM-97902

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
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1a. TYPE OF WORK
DRILL [X] DEEPEN [ ]

7. UNIT AGREEMENT NAME
---

b. TYPE OF WELL
OIL WELL [ ] GAS WELL [X] OTHER SINGLE ZONE [X] MULTIPLE ZONE [ ]

8. FARM OR LEASE NAME, WELL NO.
GILA "6" FEDERAL # 1

2. NAME OF OPERATOR
PENWELL ENERGY, INC. (BILL PIERCE) 915-683-2534

9. API WELL NO.

3. ADDRESS AND TELEPHONE NO.
600 NORTH MARIENFELD SUITE 1100 MIDLAND, TEXAS 79701

10. FIELD AND POOL, OR WILDCAT
WILDCAT-MORROW

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
1980' FNL & 1980' FWL SEC. 6 T25S-R33E LEA CO. NM
At proposed prod. zone SAME

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
SECTION 6 T25S-R33E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
Approximately 25 miles West of Jal New Mexico

12. COUNTY OR PARISH
LEA CO.

13. STATE
NM

| 15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) | 16. NO. OF ACRES IN LEASE | 17. NO. OF ACRES ASSIGNED TO THIS WELL |
|---|---|---|
| 1980' | 599 | 320 |
| **18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.** | **19. PROPOSED DEPTH** | **20. ROTARY OR CABLE TOOLS** |
| NA | 16,000' | ROTARY |

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3494' GR.

22. APPROX. DATE WORK WILL START*
WHEN APPROVED

23.
PROPOSED CASING AND CEMENTING PROGRAM

CONTROLLED WATER BASIN

| SIZE OF HOLE | GRADE, SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT |
|---|---|---|---|---|
| 26" | X-56 20" | 94 | 600' | 600 Sx. Circulate to surface |
| 17½" | L-80 13 3/8" | 72 | 4700' | 2000 Sx. Circulate to surface |
| 12¼" | P-110 9 5/8" | 53.5 | 12,500' | 1400 Sx. TC 4500' |
| 8½" | P-110 7" | 29 | 15000'-12250' | 275 Sx. Overlap liner 250' |
| 6½" | P-110 4½" | 13.5 | 16000-14750' | 175 Sx. Overlap liner 250' |

1. Drill 26" hole to 600'. Run and set 600' of 20" X-56 94# ST&C casing. Cement with 600 Sx. of Class "C" Cement + 2% CaCl, circulate cement to surface.
2. Drill 17½" hole to 4700'. Run and set 4700' of 13 3/8" L-80 72# butress thread casing. Cement with 1500 Sx. of Class "C" Halco Light, tail in with 500 Sx. of Class "C" + 2% CaCl, circulate cement to surface.
3. Drill 12¼" hole to 12500'. Run and set 12500' of 9 5/8" 53.5# P-110 LT&C casing. Cement with 1100 Sx. of Class "H" Halco Light, tail in with 300 Sx. of Class "H" Premium cement + additives, estimate top of cement 4500'.
4. Drill 8½" hole to 15000'. Run and set a 7" 29# P-110 ST&C liner from 15000' to 12250'. Cement with 250 Sx of Class "H" premium cement.
5. Drill 6½" hole to 16000'. Run and set a 4½" 13.5# P-110 ST&C liner. Cement with 175 Sx. of Class "H" Premium cement.

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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 Joe T Janica TITLE Agent DATE 02/18/98

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY _____ TITLE _____ DATE _____

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

# OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-102
Revised February 10, 1994
Instruction on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

| API Number | Pool Code | Pool Name |
|---|---|---|
| 30-025-34350 | | WILDCAT-MORROW |

| Property Code | Property Name | Well Number |
|---|---|---|
| 23101 | GILA "6" FEDERAL | 1 |

| OGRID No. | Operator Name | Elevation |
|---|---|---|
| 147380 | PENWELL ENERGY INC. | 3494' |

### Surface Location

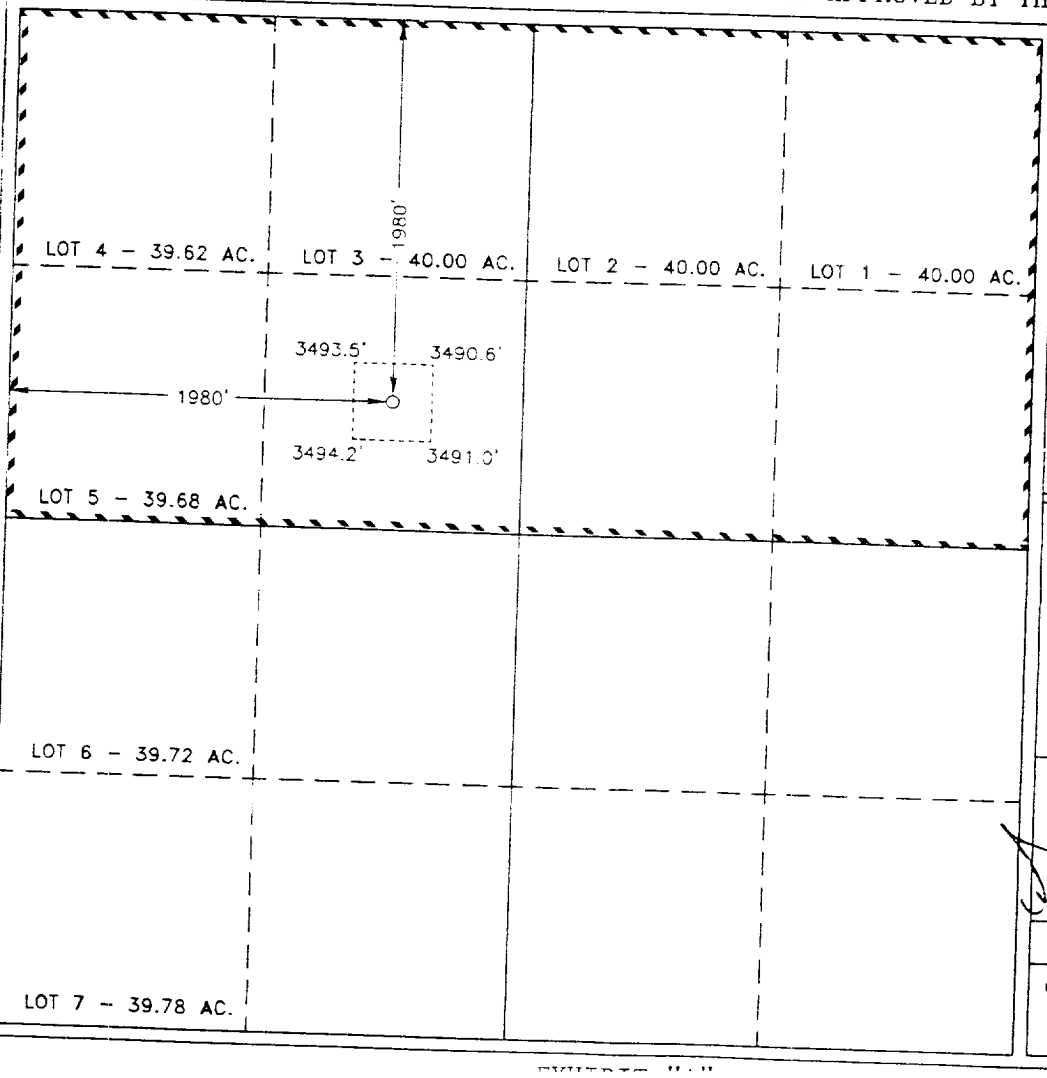
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| F | 6 | 25 S | 33 E | | 1980 | NORTH | 1980 | WEST | LEA |

### Bottom Hole Location If Different From Surface

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

| Dedicated Acres | Joint or Infill | Consolidation Code | Order No. |
|---|---|---|---|
| 320 | | | |

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION




### OPERATOR CERTIFICATION

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

Signature

Joe T. Janica
Printed Name

Agent
Title

02/18/98
Date

### SURVEYOR CERTIFICATION

*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 supervison, and that the same is true and correct to the best of my belief.*

February 10, 1998
Date Surveyed

Signature & Seal of Professional Surveyor

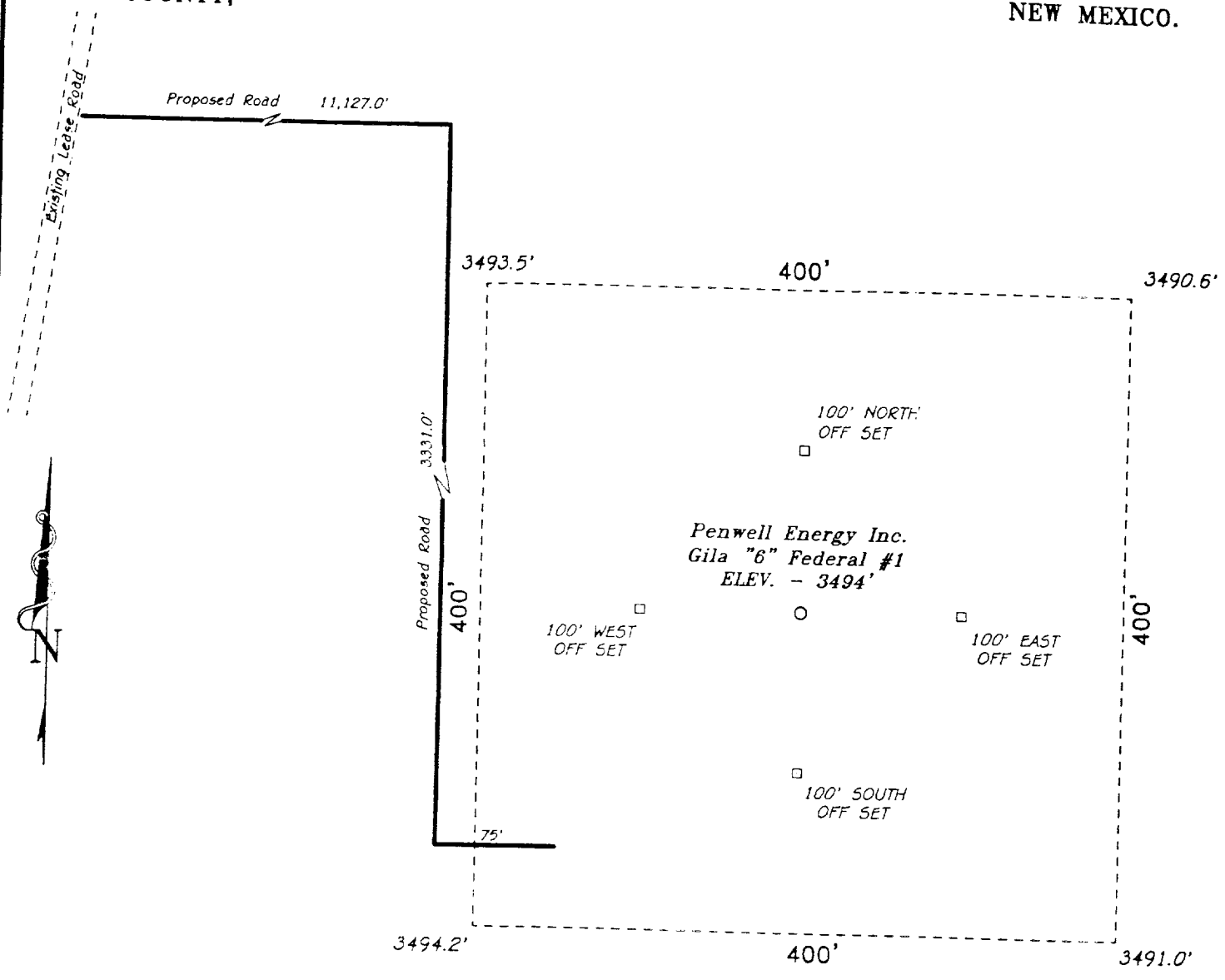
7977

W.O. No 8039a

Certificate No. Gary L. Jones 7977

BASIN SURVEYS

# SECTION 6, TOWNSHIP 25 SOUTH, RANGE 33 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.




100 0 100 200 FEET

SCALE: 1" = 100'

## Penwell Energy Inc.

REF: Gila "6" Federal No. 1 / Well Pad Topo

THE GILA "6" FEDERAL No. 1 LOCATED 1980' FROM THE NORTH LINE AND 1980' FROM THE WEST LINE OF SECTION 6, TOWNSHIP 25 SOUTH, RANGE 33 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.

**BASIN SURVEYS** P.O. BOX 1786 - HOBBS, NEW MEXICO

| | | | |
|---|---|---|---|
| W.O. Number: 8039 | Drawn By: K. GOAD | | |
| Date: 02-11-98 | Disk: KJG #89 - 8039A.DWG | Survey Date: 02-10-98 | Sheet 1 of 1 Sheets |

APPLICATION TO DRILL

PENWELL ENERGY, INC.
GILA "6" FEDERAL # 1
UNIT "F" SECTION 6
T25S-R33E LEA CO. NM

In response to questions asked under Section II B of Bulletin NTL-6 the following information is provided for your consideration:

1. Location: 1980' FNL & 1980' FWL SEC. 6 T25S-R33E LEA CO. NM

2. Elevation above sea level: 3494' GR.

3. Geologic name of surface formation: Aeolian Quaternary Deposits

4. Drilling tools and associated equipment: Conventional rotary drilling rig using fluid as a circulating medium for solids removal.

5. Proposed drilling depth: 16,000'

6. Estimated tops of geological markers:

| | | | |
|---|---|---|---|
| Rustler Anhydrite | 1175' | Strawn | 13800' |
| Delaware | 4960' | Atoka | 14075' |
| Bone Spring | 9090' | Morrow | 15250' |
| Wolfcamp | 12250' | | |

7. Possible mineral bearing formation:

| | | | |
|---|---|---|---|
| Delaware | Oil | Strawn | Gas |
| Bone Spring | Oil | Atoka | Gas |
| Wolfcamp | Oil | Morrow | Gas |

8. Casing program:

| Hole size | Interval | OD casing | Weight | Thread | Collar | Grade |
|---|---|---|---|---|---|---|
| 26" | 0-600' | 20" | 94 | 8-R | ST&C | X-56 |
| 17½" | 0-4700' | 13 3/8" | 72 | 8-R | ST&C | L-80 |
| 12¼" | 0-12500' | 9 5/8" | 53.5 | 8-R | LT&C | P-110 |
| 8½" | 12,250-15000' | 7" | 29 | 8-R | LT&C | P-110 |
| 6½" | 14,750-16000' | 4½" | 13,5 | 8-R | LT&C | P-110 |

APPLICATION TO DRILL

PENWELL ENERGY, INC.
GILA "6" FEDERAL # 1
UNIT "F" SECTION 6
T25S-R33E LEA CO. NM

9. Cementing and Setting Depth:

| | | |
|---|---|---|
| 20" | Surface | Set 600' of 20" 94# X-56 ST&C casing. Cement with 600 Sx. of Class "C" + 2% CaCl. Circulate cement to surface. |
| 13 3/8" | Intermediate 1st | Set 4700' of 13 3/8" L-80 72# Buttress casing. Cement with 1500 Sx. of Class "C" Halco Light, tail in with 500 Sx. of Class "C" cement + additives. Circulate cement. |
| 9 5/8" | Intermediate 2nd | Set 12500' of 9 5/8" 53.5# P-110 LT&C casing. Cement with 1100 Sx.of Class "H" Halco Light + additives, tail in with 300 Sx. of Class "H" + additives, estimate top of cement 4500'. |
| 7" | 1st Production Liner | Set a 2750' 7" 29# P-110 ST&C Liner from 15000-12250'. Cement with 250 Sx. of Class "H' Premium cement + additives. |
| 4½" | 2nd Production Liner | Set a 1250' 4½" 13.5# P-110 ST&C Liner fron 16000-14750'. Cement with 175 Sx. of Class "H" Premium cement + additives. |

10. Pressure Control Equipment: Exhibit "E". A 1500 Series 5000 PSI working pressure B.O.P. consisting of a double ram type preventor with a bag type annular preventor. BOP unit will be hydraulically operated. Exhibit "E-1". Choke manifold and closing unit. BOP will be nipplied up on 13 3/8" casing and will be operated at least once each 24 Hr. period while drilling and blind rams will be operated when out of hole during trips. Flow sensor, PVT, full opening stabbing valve and upper kelly cock will be utilized. No abnormal pressure or temperature is expected while drilling.

11. Proposed Mud Circulating System:

| Depth | Mud Wt. | Visc, | Fluid Loss | Type Mud |
|---|---|---|---|---|
| 0-600- | 8.4-8.7 | 29-34 | NC | Fresh water spud mud add paper to control seepage. |
| 600-4700' | 10-10.5 | 29-32 | NC | Brine water use paper to control seepage & lime to control pH. |
| 4700-12250' | 9-9.6 | 29-36 | NC | Cut brine with a Dris-pac system use paper to control seepage & soda ash for pH control. |
| 12250-15000' | 11-13 | 32-40 | 10 cc or less | Brine water, Salt water Gel, Soda Ash, Barite, and Starch for water loss control |
| 15000-16000' | 10-10.5 | 28-34 | 10 cc or less | Brine water Salt water Gel, starch & Soda Ash for pH control. |

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, unexpected kiks. In order to run DST'S, open hole logs, and casing the viscosity and water loss may have to be adjusted to meet these needs.

APPLICATION TO DRILL

PENWELL ENERGY, INC.
GILA "6" FEDERAL # 1
UNIT "F" SECTION 6
T25S-R33E LEA CO. NM

12. Testing, Logging and Coring Program:

A. Gamma Ray from TD to surface.

B. Dual Laterolog, CNL-LDT, MSFL, Gamma Ray & Caliper from TD. to 13 3/8" casing shoe.

C. Mud logger will be placed on hole at 4700' and remain on hole to TD.

D. Cores and DST's will be taken as shows dictate.

13. Potential Hazards:

No abnormal pressures or temperatures are expected. Hydrogen Sulfide gas may be encountered, $H_2S$ detectors will be in place to detect any presence. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used. Estimated BHP 9000 PSI, estimated BHT 190° .

14. Anticipated Starting Date and Duration of Operation:

Road and location construction will begin after BLM approval of APD. Anticipated spud date as soon as approved. Drilling expected to take 65-80 days. If production casing is run an additional 30 days will be required to complete and construct surface facilities.

15. Other Facets of Operations:

After running casing, cased hole gamma ray neutron collar logs will be run from total depth over possible pay intervals. The Morrow pay will be perforated and stimulated. The well will be swab tested and potentialed as a gas well.

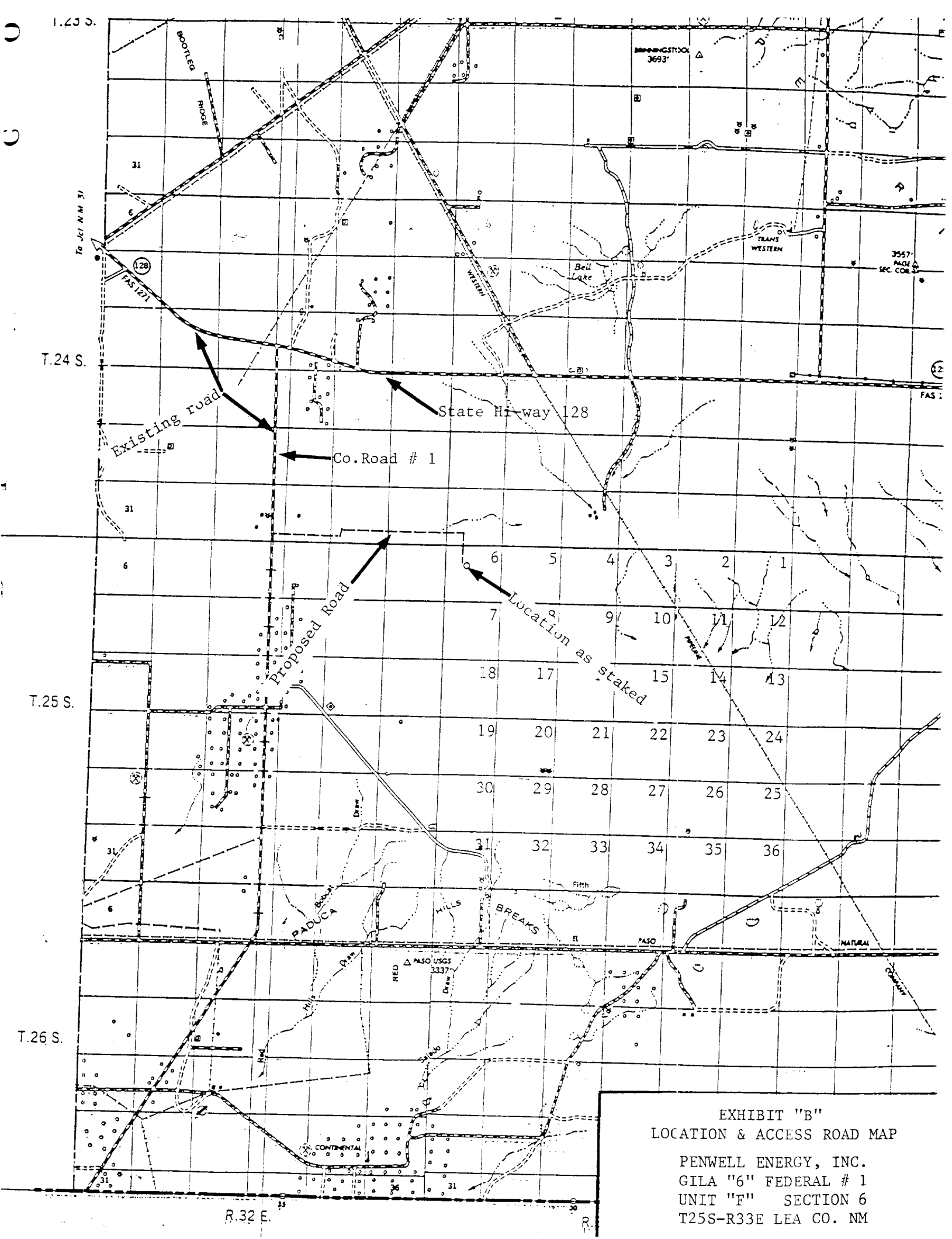
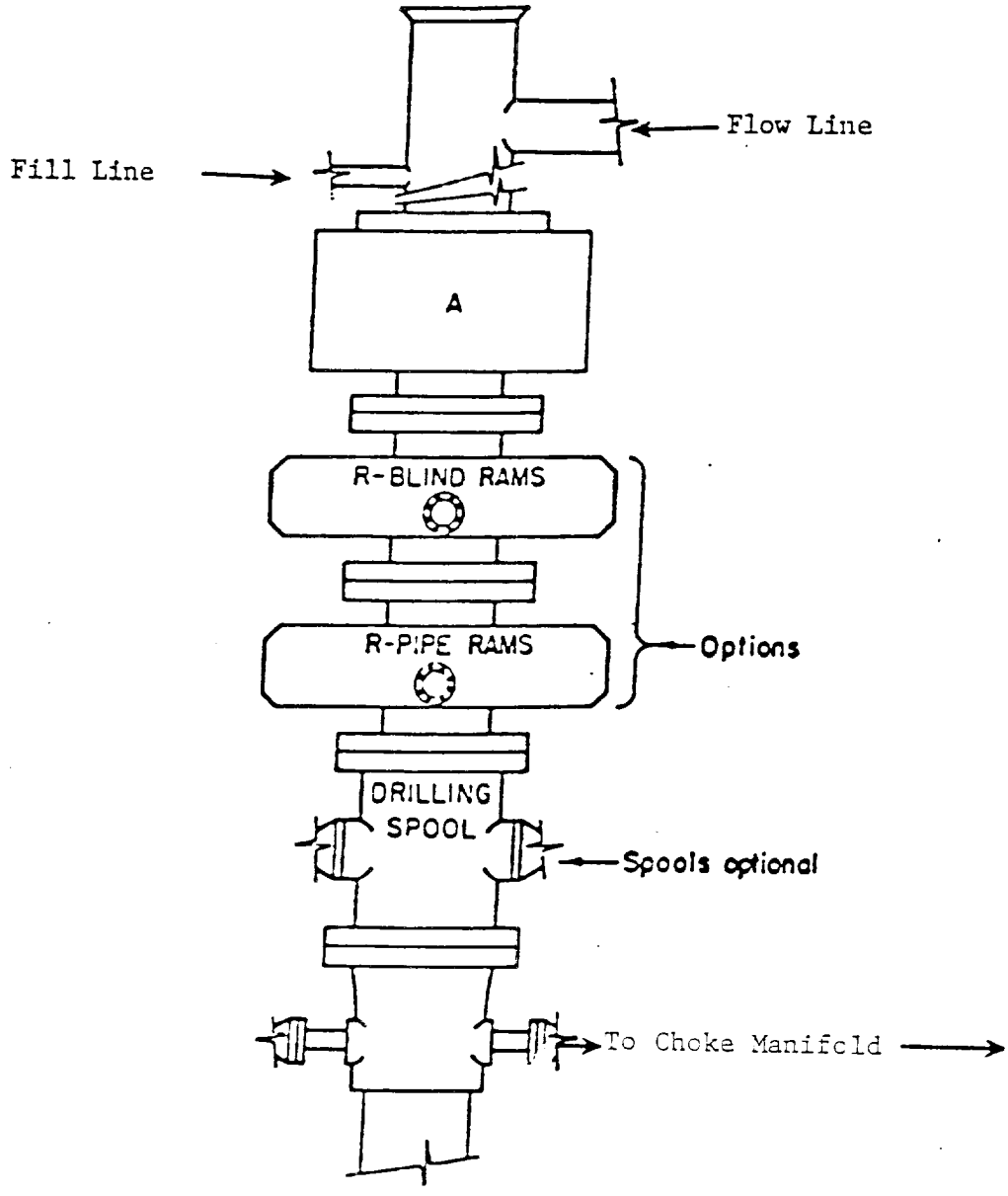



EXHIBIT "B"
LOCATION & ACCESS ROAD MAP

PENWELL ENERGY, INC.
GILA "6" FEDERAL # 1
UNIT "F" SECTION 6
T25S-R33E LEA CO. NM




**ARRANGEMENT SRRA**

1500 Series

5000# Working Pressure

EXHIBIT "E"
B.O.P. SKETCH TO BE USED ON

PENWELL ENERGY, INC.
GILA "6" FEDERAL # 1
UNIT "F" SECTION 6
T25S-R33E LEA CO. NM