

UNITED STATES  
DEPARTMENT OF  
BUREAU OF LANDOFFER NUMBER 147380  
PROPERTY NO. 21 25  
POOL CODE ✓  
EFFECT DATE 4/8/97  
APPROVAL NO. 30-025-33912

E\*

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

## APPLICATION FOR PERMIT TO DRILL OR DEEPEN

## 1a. TYPE OF WORK

DRILL ☒DEEPEN ☐

## b. TYPE OF WELL

OIL  
WELL ☒GAS  
WELL ☐OTHER ☐SINGLE  
ZONE ☒MULTIPLE  
ZONE ☐

## 2. NAME OF OPERATOR

PENWELL ENERGY INC. (BILL PIERCE)

Ph 505-683-2534

## 3. ADDRESS AND TELEPHONE NO.

600 NORTH MARIENFELD SUITE 1100 MIDLAND, TEXAS 79701

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

At surface

1980' FNL &amp; 1980' FEL SEC. 21 T23S-R32E

At proposed prod. zone Same

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

Approximately 30 miles West of Jal New Mexico

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

1980'

## 16. NO. OF ACRES IN LEASE

1020

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40

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

990'

## 19. PROPOSED DEPTH

12,350'

## 20. ROTARY OR CABLE TOOLS

ROTARY

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

3680' GR.

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

As soon as approved

## 23.

## PROPOSED CASING AND CEMENT

CARLSBAD CONTROLLED WATER BASIN

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
25"	Conductor 20"	NA	40'	Cement to surface/Redi-mix
17 1/2"	H-40 13 3/8"	48	600'	600 Sx. circular surface
12 1/4"	J-55 8 5/8"	24 & 32	4800'	1400 Sx. "WITNESS"
7 7/8"	P-110 5 1/2"	17	12,350'	1000 Sx. Estimated top cement 8000

1. Drill 25" hole to 40'. Set 40' of conductor cement to surface with Redi-mix.
2. Drill 17 1/2" hole to 600'. Run and set 600' of 13 3/8" H-40 48# ST&C casing. Cement with 400 Sx. Class "C" Light tail in with 200 Sx. Class "C" + 2% CaCl circulate cement to surface.
3. Drill 12 1/4" hole to 4800'. Run and set 4800' of 8 5/8" J-55 24 & 32# ST&C casing as follows: 2300' of 32#, 2000' of 24#, 500' of 32#. Cement with 1000 Sx. Class "C" Light cement tail in with 400 Sx. Class "C" + 2% CaCl circulate cement to surface.
4. Drill 7 7/8" hole to 12,350'. Run and set 12,350' of 5 1/2" P-110 17# LT&C casing. Cement with 600 Sx. Class "H" Light tail in with 400 Sx. Class "H" + additives estimated top of cement 8000'.

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or extend an existing 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 Agent

DATE 03/17/97

(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:

(ORIG. SGD.) TONY L. FERGUSON

ADM, MINERALS

APPROVED BY

TITLE

DATE

4-4-97

\*See Instructions On Reverse Side

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

State of New Mexico

Energy, Minerals and Natural Resources Department

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

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

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

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number <b>30-025-33912</b>	Pool Code <input checked="" type="checkbox"/>	Pool Name <b>WILDCAT Wolfcamp</b>
Property Code <b>20725</b>	Property Name <b>TOMCAT "21" FEDERAL</b>	Well Number <b>7</b>
OGRID No. <b>147380</b>	Operator Name <b>PENWELL ENERGY INC.</b>	Elevation <b>3680'</b>

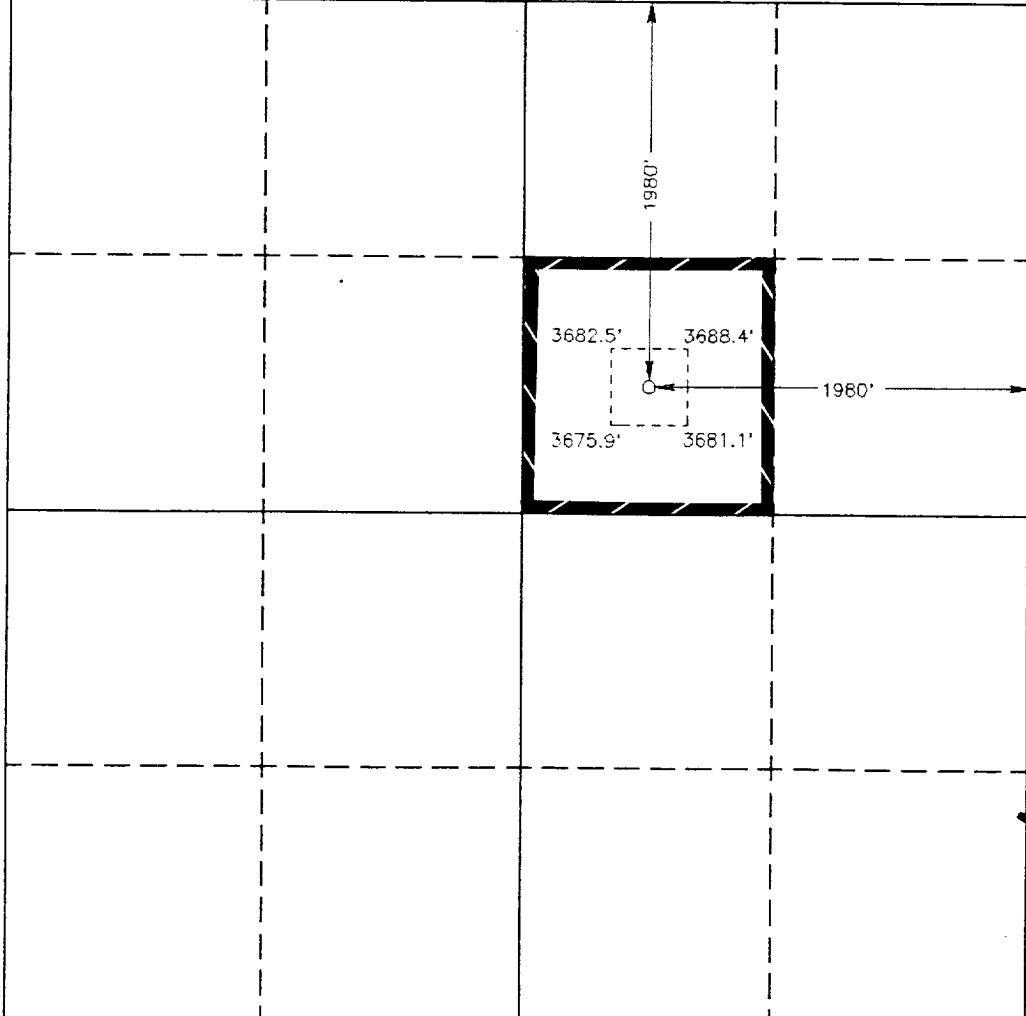
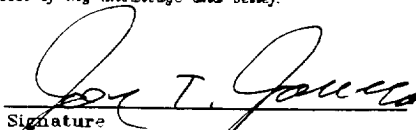
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<b>G</b>	<b>21</b>	<b>23 S</b>	<b>32 E</b>		<b>1980</b>	<b>NORTH</b>	<b>1980'</b>	<b>EAST</b>	<b>LEA</b>

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 <b>40</b>	Joint or Infill	Consolidation Code	Order No.						

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

	<b>OPERATOR CERTIFICATION</b>  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.   Signature <b>Joe T. Janica</b> Printed Name Agent Title <b>03/17/97</b> Date
	<b>SURVEYOR CERTIFICATION</b>  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 belief.  <b>March 8, 1997</b> Date Surveyed <b>GARY L. JONES</b> Signature <b>GARY L. JONES</b> Professional Surveyor No. <b>1137</b>
	<b>3 Jan 29 1997</b> O. Num.
	Certificate PROFESSIONAL LAND SURVEYOR, 7977

# APPLICATION TO DRILL

PENWELL ENERGY, INC.  
TOMCAT "21" FEDERAL #7  
SEC. 21 UNIT "G"  
T23S-R32E LEA CO., N.M.

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' FEL SEC. 21 T23S-R32E LEA CO. NM
2. Elevation above sea level: 3680' GR.
3. Geologic name of surface formation: Quaternary Aeolian Deposits.
4. Drilling tools and associated equipment: Conventional rotary drilling rig using fluid as a circulating medium for solids removal.
5. Proposed drilling depth: 12,350'
6. Estimated tops of geological markers:

Bone Spring	8700'
Wolfcamp	12,150'

Delaware	4900'
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7. Possible mineral bearing formation:

Delaware	Oil
Bone Spring	Oil
Wolfcamp	Oil

8. Casing program:

Hole size	Interval	OD casing	Weight	Thread	Collar	Grade	Condition
25"	0-40	20"	Conductor	NA	NA	NA	New
17½"	0-600	13 3/8"	48	8-R	ST&C	H-40	New
12½"	600-4800'	8 5/8"	32-24	8-R	ST&C	J-55	New
7 7/8"	4800-12,350'	5½"	17	8-R	LT&C	p-110	New

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TOMCAT "21" FEDERAL #7  
SEC. 21 UNIT "G"  
T23S-R32E LEA CO., N.M.

### 9. Cementing and Setting Depth:

20"	Conductor	Drill 25" hole to 40'. Set 40' of 20" conductor Cement to surface with Redi-mix.
13 3/8"	Surface	Drill 17 1/2" hole to 600'. Run and set 600' of 13 3/8" 48# H-40 ST&C casing. Cement with 400 Sx. Class "C" Light, tail in with 200 Sx. Class "C" + 2% CaCl circulate cement to surface.
8 5/8"	Intermediate	Drill 12 1/2" hole to 4800'. Run and set 4800' of 8 5/8" J-55 32 & 24# ST&C casing. Cement with 1000 Sx. Class "C" Light, tail in with 400 Sx. Class "C" + 2% CaCl Circulate cement to surface.
5 1/2"	Production	Drill 7 7/8" hole to 12,350'. Run and set 12,350' of 5 1/2" 17# P-110 LT&C casing. Cement with 600 Sx. Class "H" Light, tail in with 400 Sx. Class "H" + additives estimate top of cement 8000'.

10. Pressure Control Equipment: Exhibit "E". A 1580 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 nipped 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
40-600'	8.6-9	29-36	NC	Fresh water Spud mud add paper for seepage control.
600-11750'	10-10.7	29-32	NC	Brine water add Lime for pH control and paper for seepage.
11,750-12,350'	9-9.6	30-38	10 CC or less	Cut Brine Soda Ash Drispac & Starch for water loss control.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, unexpected kicks. 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

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TOMCAT "21" FEDERAL #7  
SEC. 21 UNIT "G"  
T23S-R32E LEA CO., N.M.

12. Testing, Logging and Coring Program:

- A. Gamma Ray from TD to surface, Caliper from TD to 8 5/8" casing shoe.
- B. CNL-LDT, DUAL Laterlog, MSFL Caliper from TD to 8 5/8" casing shoe.
- C. Mud logger on from 4800' to TD.
- D. DST'S and cores will be taken as shows dictate.

13. Potential Hazards:

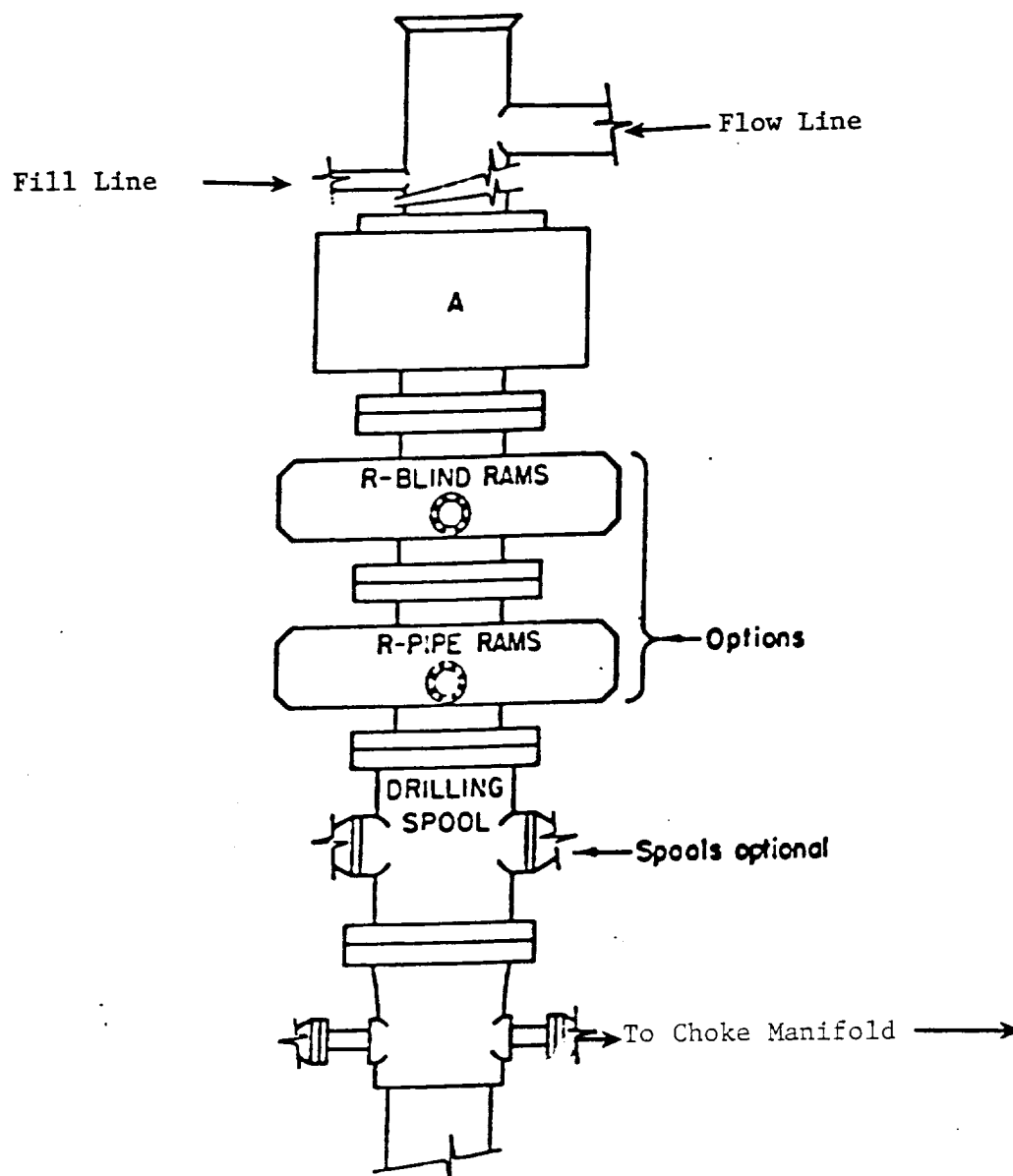
No abnormal pressures or temperatures are expected. Hydrogen Sulfide gas may be encountered, H<sub>2</sub>S detectors will be in place to detect any presence. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used. Estimated BHP 7000 PSI, estimated BHT 185° .

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 50-65 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 Wolfcamp pay will be perforated and stimulated. The well will be swab tested and potentialized as an Oil well.



# **ARRANGEMENT SRRA**

1500 Series  
5000# Working Pressure

EXHIBIT "E"  
B.O.P. SKETCH TO BE USED ON  
PENWELL ENERGY, INC.  
TOMCAT "21" FEDERAL # 7  
UNIT G" SECTION 21  
T23S-R32E LEA CO. NY