

OPEN. OSHD NO. 141344

PROPERTY NO.

ATE

OR

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

UNITED STATES  
DEPARTMENT OF  
BUREAU OF LAND

POOL CODE 51683

EFF. DATE 6/16/97

API NO. 30-025-34023

APPLICATION FOR PERM

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. 915-683-2534

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' FEL & 760' FSL SEC. 24 T22S-R32E LEA CO. NM

At proposed prod. zone SAME

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

Approximately 30 miles East of Carlsbad, New Mexico.

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

660'

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

1320'

16. NO. OF ACRES IN LEASE

17. NO. OF ACRES ASSIGNED TO THIS WELL

40

19. PROPOSED DEPTH

9000'

20. ROTARY OR CABLE TOOLS

ROTARY

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

3749' GR.

22. APPROX. DATE WORK WILL START\*

As soon as approved

23.

PROPOSED CASING AND CEMENTING PROGRAM

CARLSBAD CONTROLLED WATER BASIN

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
25"	Conductor	NA	40'	Cement to surface with Redi-mix
17 1/2"	H-40 13 3/8"	48	850'	600 Sx. circulate to surface
11"	J-55 8 5/8"	32	4600'	900 Sx. circulate to surface
7 7/8"	L-80 5 1/2"	17	9000'	700 Sx. estimate top of cement 4500'

1. Drill 25" hole to 40'. Set 40' of 20" conductor and cement to surface with Redi-mix.
2. Drill 17 1/2" hole to 850'. Run and set 850' of 13 3/8" H-40 48# ST&C casing. Cement with 600 Sx. Class "C" + 2% CaCl, circulate cement to surface.
3. Drill 11" hole to 4600'. Run and set 4600' of 8 5/8" J-55 32# ST&C casing. Cement with 700 Sx. Class "C" Halco Light, tail in with 200 Sx. Class "C" + 2% CaCl, circulate cement to surface.
4. Drill 7 7/8" hole to 9000'. Run and set 9000' of 5 1/2" L-80 17# LT&C casing. Cement with 500 Sx. Class "H" Halco Light, tail in with 200 Sx. Class "H" with additives. Estimate top of cement 4500'.

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or drill in 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

TITLE

Agent

DATE

5-22-97

(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

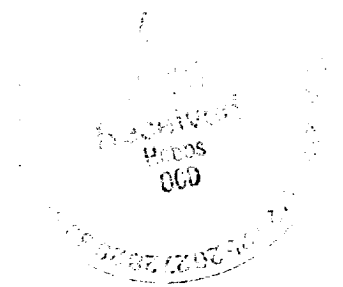
TITLE

DATE

6-10-97

\*See Instructions On Reverse Side

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.



DISTRICT I  
P.O. Box 1880, 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

OIL CONSERVATION DIVISION

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

|                                   |                                             |                                          |
|-----------------------------------|---------------------------------------------|------------------------------------------|
| API Number<br><b>30-025-34023</b> | Pool Code<br><b>51683</b>                   | Pool Name<br><b>RED TANK BONE SPRING</b> |
| Property Code<br><b>20022</b>     | Property Name<br><b>Checkers 24 Federal</b> | Well Number<br><b>7</b>                  |
| OGRID No.<br><b>147380</b>        | Operator Name<br><b>Penwell Energy Inc.</b> | Elevation<br><b>3749'</b>                |

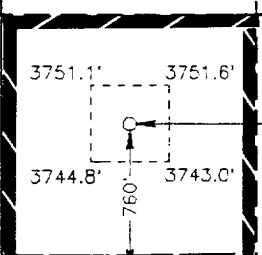
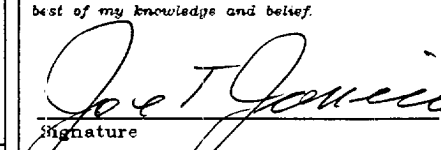
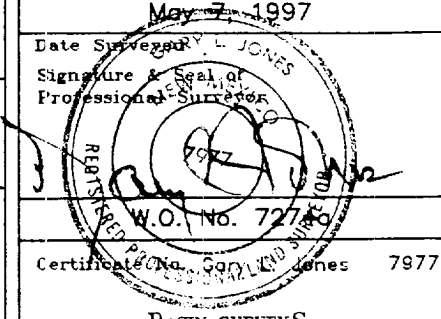
Surface Location

|               |           |             |             |         |               |                  |               |                |            |
|---------------|-----------|-------------|-------------|---------|---------------|------------------|---------------|----------------|------------|
| UL or lot No. | Section   | Township    | Range       | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County     |
| <b>0</b>      | <b>24</b> | <b>22 S</b> | <b>32 E</b> |         | <b>760</b>    | <b>South</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<br><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><br><br>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.<br><br><br>Signature<br><b>Joe T. Janica</b><br>Printed Name<br>Agent<br>Title<br>Date<br><b>5-22-97</b>                                                                                                                              |
|                                                                                     | <b>SURVEYOR CERTIFICATION</b><br><br>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.<br><br>Date Surveyed<br><b>May 7, 1997</b><br>Signature & Seal of Professional Surveyor<br><br>Certificate No. <b>7977</b><br>BASIN SURVEYS |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |



APPLICATION TO DRILL  
PENWELL ENERGY, INC.  
CHECKERS "24" FEDERAL # 7  
UNIT "O" SECTION 24  
T22S-R32E 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' FEL & 760' FSL SEC. 24 T22S-R32E LEA CO. NEW MEXICO.
2. Elevation above sea level:
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: 9000'
6. Estimated tops of geological markers:

|                   |       |               |       |
|-------------------|-------|---------------|-------|
| Rustler Anhydrite | 980'  | Brushy Canyon | 7485' |
| Lamar Lime        | 4890' | Bone Spring   | 8750' |
| Bell Canyon       | 4950' |               |       |
7. Possible mineral bearing formation:

|               |     |
|---------------|-----|
| Bell Canyon   | Oil |
| Brushy Canyon | Oil |
| Bone Spring   | Oil |
8. Casing program:

| Hole size | Interval | OD casing | Weight | Thread | Collar | Grade     | Condition |
|-----------|----------|-----------|--------|--------|--------|-----------|-----------|
| 25"       | 0-40'    | 20"       | NA     | NA     | NA     | Conductor | New       |
| 17½"      | 0-850'   | 13 3/8"   | 48#    | 8-R    | ST&C   | H-40      | New       |
| 11"       | 0-4600'  | 8 5/8"    | 32#    | 8-R    | ST&C   | J-55      | New       |
| 7 7/8"    | 0-9000'  | 5½"       | 17#    | 8-R    | LT&C   | L-80      | New       |



## APPLICATION TO DRILL

PENWELL ENERGY, INC.

CHECKERS "24" FEDERAL # 7

UNIT "O" SECTION 24

T22S-R32E LEA CO. NM

9. Cementing and Setting Depth:

|         |              |                                                                                                                                                                        |
|---------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 20"     | Conductor    | Set 40' of 20" conductor and cement to surface with Redi-mix.                                                                                                          |
| 13 3/8" | Surface      | Set 850' of 13 3/8" H-40 48# ST&C casing. Cement with 600 Sx. Class "C" + 2% CaCl, circulate cement to surface.                                                        |
| 8 5/8"  | Intermediate | Set 4600' of 8 5/8" J-55 32# ST&C casing. Cement with 700 Sx. Class "C" Light + additives, tail in with 200 Sx. Class "C" neat + 2% CaCl, circulate cement to surface. |
| 5 1/2"  | Production   | Set 9000' of 5 1/2" L-80 17# LT&C casing. Cement with 500 Sx. Class "H" Halco Light + additives, tail in with 200 Sx. Class "H" Premium. Estimate top of cement 4500'  |

10. Pressure Control Equipment: Exhibit "E". A 900 Series 3000 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                                                                                                 |
|------------|----------|-------|---------------|----------------------------------------------------------------------------------------------------------|
| 40-850'    | 8.4-8.6  | 29-34 | NC            | Fresh water Spud mud use paper to control seepage.                                                       |
| 850-4600'  | 10-10.5  | 29-32 | NC            | Brine water use Lime to control pH and paper to control seepage.                                         |
| 4600-8500' | 9.2-10   | 29-32 | NC            | Cut Brine with paper to control seepage and Lime to control pH.                                          |
| 8500-9000' | 9.2-10.5 | 32-38 | 10 cc or less | Cut Brine, Drispac system use Gel for viscosity starch to control water loss and soda ash to control pH. |

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  
PENWELL ENERGY, INC.  
CHECKERS "24" FEDERAL # 7  
UNIT "O" SECTION 24  
T22S-R32E LEA CO. NM

12. Testing, Logging and Coring Program:

- A. Caliper from TD to 4600', Gamma Ray from TD to surface of ground.
- B. Dual Laterlog, Micro SFL, CNL LDT from TD to 4600'
- C. Side wall cores where shows dictate.
- D. No DST's are planned but will be run if deemed necessary.

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 3000 PSI, estimated BHT 140° .

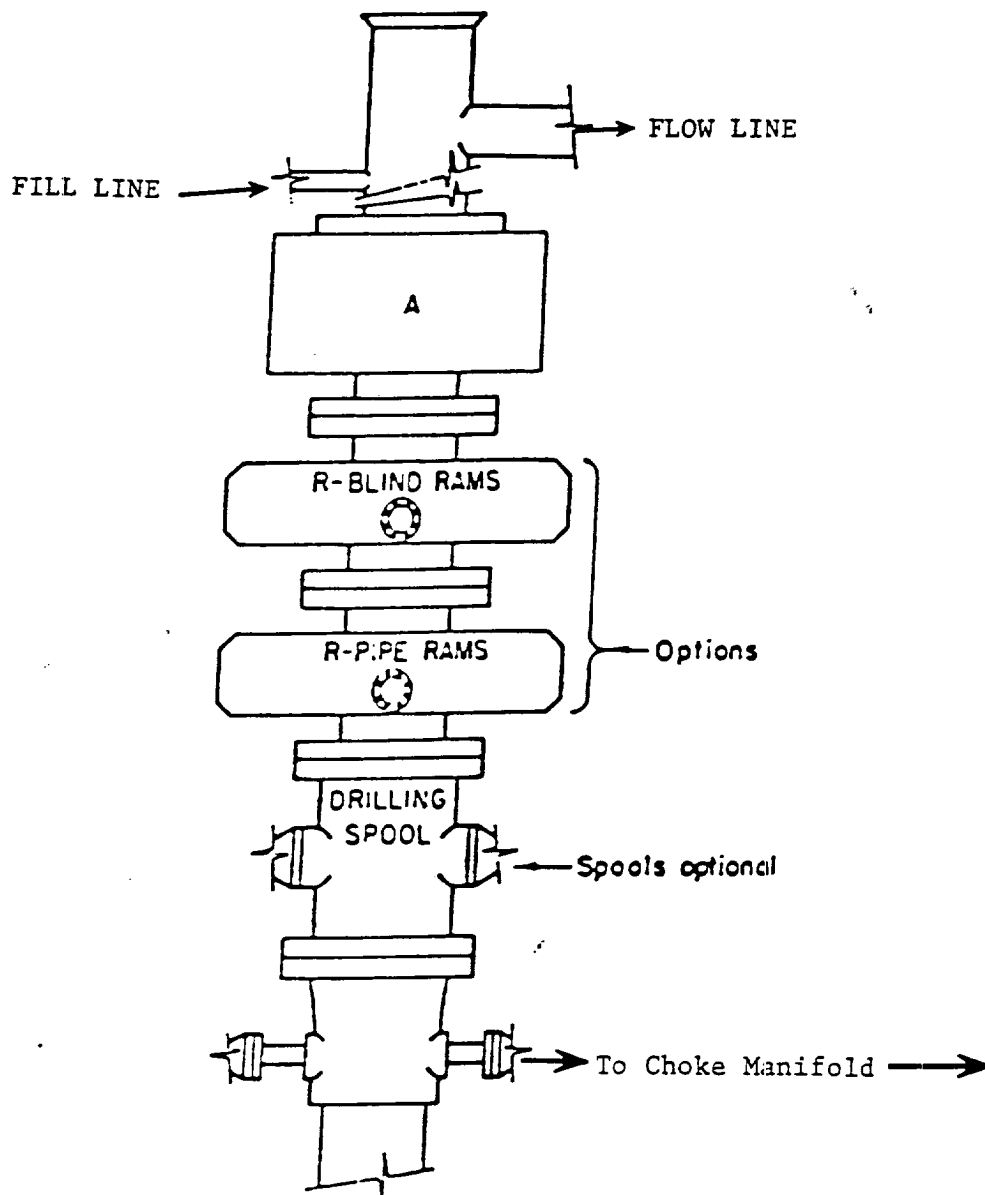
14. Anticipated Starting Date and Duration of Operation:

Road and location construction will begin after BLM approval of APD. Anticipated spud date as soon as approved. Drilling expected to take 16-20 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 Bone Spring pay will be perforated and stimulated. The well will be swab tested and potentialized as an oil well.





# **ARRANGEMENT SRRA**

900 Series  
3000 PSI WP

EXHIBIT "E"  
B.O.P. SKETCH TO BE USED ON  
PENWELL ENERGY, INC.  
CHECKERS "24" FEDERAL # 7  
UNIT "O" SECTION 24  
T22S-R32E LEA CO. NM