

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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.

3 ADDRESS AND TELEPHONE NO

600 N. Marienfeld, Ste. 1100, Midland, Texas 79705

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

At surface

1980' FSL & 330' FWL

At proposed prod zone

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

Unit L  
32 mi W of Jal NM

15 DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

330'

16 NO. OF ACRES IN LEASE

320

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.

19 PROPOSED DEPTH

9,000'

20 ROTARY OR CABLE TOOLS

Rotary

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

3568' GR

22 APPROX. DATE WORK WILL START\*

August 5, 1996

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	H-40 13 3/8	48#	500' 600'	350 sx. Cl.C+ CaCl <sub>2</sub> CIRCULATE
11"	J-55 8 5/8"	32#	4800'	1100 sx "C" Lite + 250 sx C
7 7/8"	L-80 5 1/2	17#	9000'	600 sx Cl. H (Est TOC 4800')

OPEN. LOG NO. 147380

PROPERTY NO. 19201

POOL CODE 53800

EFF. DATE 7/16/96

API NO. 3D-025-33518

General Requirements and  
Special Stipulations  
Attached

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

Brenda Offner

TITLE Production Analyst

DATE May 31, 1996

(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.) RICHARD L. MANUS

APPROVED BY

TITLE

DATE

\*See Instructions On Reverse Side

DISTRICT I  
P.O. Box 1080, 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

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

OIL CONSERVATION DIVISION

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number <b>30-025-33518</b>		Pool Code <b>53805 53800</b>	Pool Name <b>Sand Dunes Bone Springs S.E.</b>
Property Code <b>NM-36924</b>	Property Name <b>Tomcat 8 Federal</b>		Well Number <b>2</b>
OGRID No. <b>147380</b>	Operator Name <b>Penwell Energy Inc.</b>		Elevation <b>3568'</b>

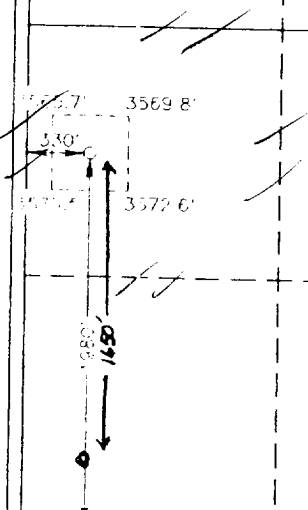
Surface Location

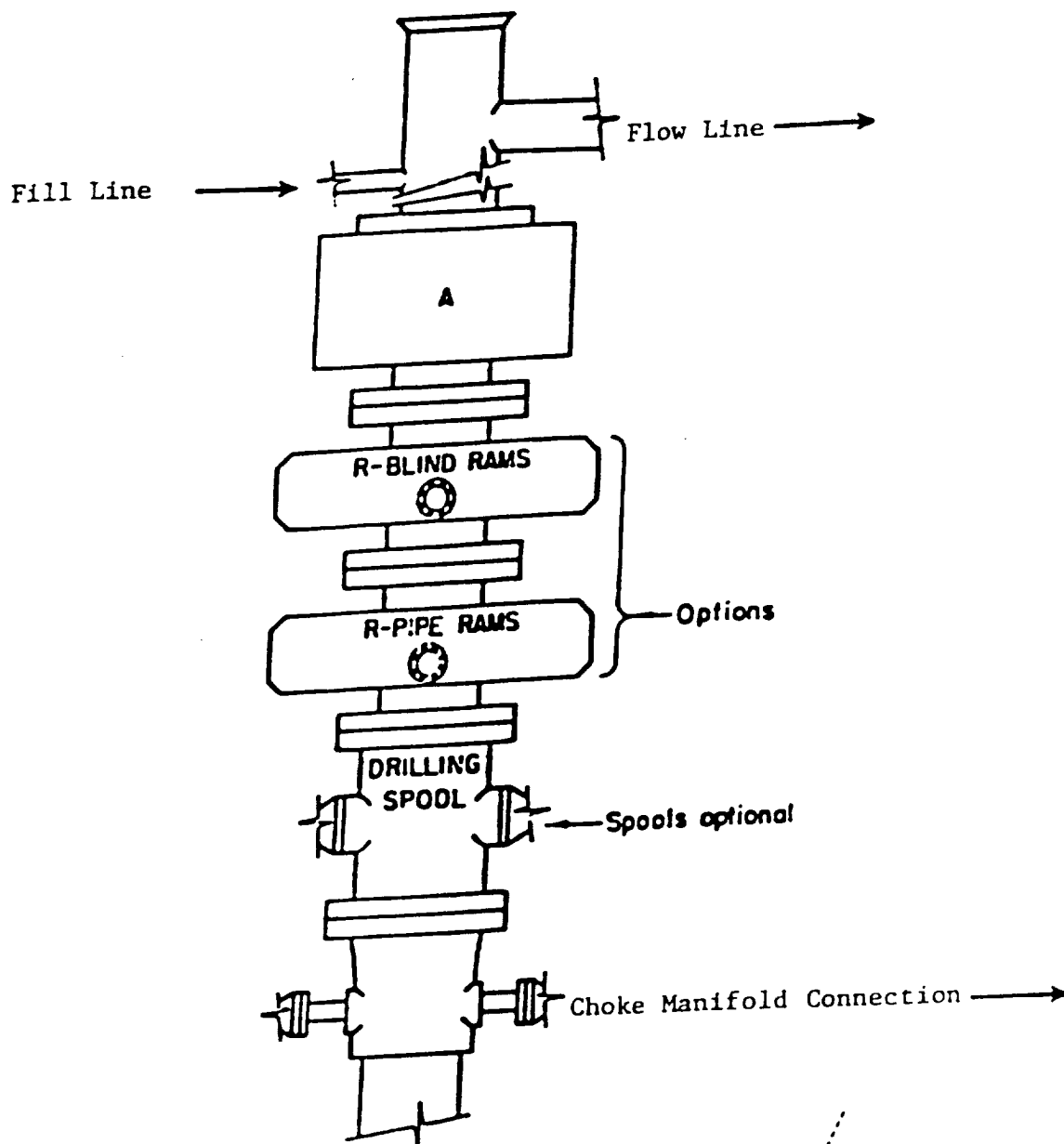
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	8	23 S	32 E		1980	South	330	West	LEA

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 <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 that the information contained herein is true and complete to the best of my knowledge and belief.	
					<u>Brenda Coffman</u> Signature	
					<u>Brenda Coffman</u> Printed Name	
				<u>Production Analyst</u> Title		
				<u>May 31, 1996</u> 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.		
				<u>May 9, 1996</u> Date Surveyed		
				Signature & Seal of Professional Surveyor <u>Gary E. Jones</u>		
				<u>W.O. No. 6192b</u>		
				Certificate No. <u>Gary E. Jones</u> 7977		
				BASIN SURVEYS		



# **ARRANGEMENT SRRA**

900 Series  
3000 PSI WP

APPLICATION TO DRILL

PENWELL ENERGY, INC.  
TOMCAT "8" FEDERAL #2  
1980' FSL & 330' FWL  
SECTION 8, T23S, R32E  
LEA COUNTY, NEW MEXICO

1. LOCATION: 1980' FSL & 330' FWL, Sec. 8, T23S, R32E, Lea Co. NM.
2. ELEVATION ABOVE SEA LEVEL: 3568'.
3. GEOLOGIC NAME OF SURFACE FORMATION:
4. DRILLING TOOLS AND ASSOCIATED EQUIPMENT: Conventional rotary drilling rig using mud for the circulation medium.
5. PROPOSED DRILLING DEPTH:
6. ESTIMATED GEOLOGICAL MARKER TOPS:

Lamar	4800'	Bone Spring	8700'
Bell Canyon	4900'		
Cherry Canyon	5900'		
Brushy Canyon	7300'		

7. POSSIBLE MINERAL BEARING FORMATION:

OIL

Lamar	4800'	Bone Spring	8700'
Bell Canyon	4900'		
Cherry Canyon	5900'		
Brushy Canyon	7300'		

CASING PROGRAM:

Hole Size	Interval	OD Csg	Weight	Thread	Collar	Grade	Cond.
17 1/2"	<del>0-500'</del> <sup>600'</sup>	13 3/8"	48#	8-R	ST&C	H-40	New
11"	<del>500-4800'</del> <sup>0'</sup>	8 5/8"	32#	8-R	ST&C	J-55	New
7 7/8"	<del>4800-9000'</del> <sup>0'</sup>	5 1/2"	17#	8-R	LT&C	L-80	New

PENWELL ENERGY, INC.  
TOMCAT "8" FEDERAL #2  
APPLICATION FOR PERMIT TO DRILL

PAGE 2

9. CASING CEMENTING & SETTING DEPTH:

*600'*

13 3/8"	Surface	Set <del>500'</del> <i>600'</i> of 13 3/8" 48#, 8rd, ST&C, H-40 new casing. Cement with 350 sacks Class "C" + CaCl <sub>2</sub> . Circulate cement to surface.
8 5/8"	Intermediate	Set 4800' of 8 5/8" 32#, J-55 ST&C casing. Cement with 1100 sx "C" Lite + 250 sx "C" Neet. Cement circulate to surface.
5 1/2"	Production	Set 5 1/2", 17#, 8rd, LT&C, L-80 casing at 9,000'. Cement with 600 sx Class "H". Estimated top of cement @ 4,800'.

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E". A Blow-out Preventer (no less than 900 Series 3000 PSI working pressure) consisting of double ram type preventer with bag type preventer. Units will be hydraulically operated. Exhibit "E-1" Choke Manifold and Closing Unit. Blind rams on top, pipe rams on bottom to correspond with size of drill pipe in use. BOP will be nipped up on 13 3/8" casing and remain on well until casing is run and cemented. BOP will be tested as well as choke manifold. BOP will be worked at least once each day while drilling & blind ram will be worked on trips when no drill pipe is in hole. Full opening stabbing valve and upper kelley cock will be utilized. Anticipated BHP 2000 PSI and 110° BHT.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD. WT.	MUD VISC.	FLUID LOSS	TYPE MUD
<i>600'</i> <del>0' - 500'</del>	8.4	28	NC	Fresh water spud mud, use paper for seepage control.
<i>600'</i> <del>500' - 4800'</del>	10	29	NC	Brine water, use paper for seepage control and lime for pH control.
4800 - 9000'	9.0 - 10.0#	29 - 38	10 cc's or less	Cut brine w/Drispac, starch, soda ash & lime.

Sufficient mud materials to maintain mud properties, meet lost circulation and weight increase requirements will be kept at wellsite at all times. In order to run casing and log well viscosity may have to be raised and water loss may have to be lowered.

PENWELL ENERGY, INC.  
TOMCAT "8" FEDERAL #2  
APPLICATION FOR PERMIT TO DRILL

PAGE 3

12. TESTING, LOGGING AND CORING PROGRAM:

- A. Gamma Ray - Surface casing to T.D. @ 9,000'.
- B. CNL-LDT, D11-MFL - Below 8 5/8" to T. D.
- C. Coring - None anticipated.
- D. DST'S - None anticipated.

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 1600 PSI, estimated BHT 100°.

14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Road and location construction will begin after BLM approval of APD. Anticipated spud date is July 15, 1996. Drilling is expected to take 24 days. If production casing is run an additional 10 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 Springs pay will be perforated and stimulated. The well will be swab tested and potentialized as an oil well.