

UNITED STATES
DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT 3-17-97 *room*

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. 915-683-2534

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' FSL & 1980' FEL SEC. 15 T23S-R32E LEA CO. NEW MEXICO

At proposed prod. zone SAME

Unit J

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)

660'

16. NO. OF ACRES IN LEASE

360

17. NO. OF ACRES ASSIGNED TO THIS WELL

320

18. DISTANCE FROM PROPOSED LOCATION*

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

NA

19. PROPOSED DEPTH

17,500'

20. ROTARY OR CABLE TOOLS

ROTARY

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

3720' 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
26"	X-56 20"	94	600'	600 Sx. Circu WITNESS surface
17 1/2"	L-80 13 3/8"	72	4700'	2000 Sx. " WITNESS
12 1/4"	P-110 9 5/8"	53.5	12,500'	1700 Sx. " " "
8 1/2"	P-110 7"	29	15,000'	275 Sx.
6 1/2"	P-110 4 1/2"	13.5	17,500'	250 Sx

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

OPER. OGRID NO. 147380

PROPERTY NO. 20204

POOL CODE ✓

EFF. DATE 4/8/97

API NO. 30-025-33909

SEE ATTACHED SHEET

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

[Signature]

TITLE Agent

DATE 03/14/ 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:

APPROVED BY: (ORIG. SGD.) TONY L. FERGUSON

TITLE

ADM, MINERALS

DATE

4/4/97

*See Instructions On Reverse Side

1. Drill 26" hole to 600'. Run and set 600' of X-56 20" 94# casing. Cement with 600 Sx. Class "C" neat + 2% CaCl, circulate cement to surface.
2. Drill 17½" hole to 4700'. Run and set 4700' of 13 3/8" BTC L-80 72# casing. Cement with 1500 Sx. Class "C" Halco Light, tail in with 500 Sx. Class "C" + additives, circulate cement to surface.
3. Drill 12¼" hole to 12,500'. Run and set 12,500' of 9 5/8" 53.5# P-110 LT&C casing. Cement with 1200 Sx. Class "H" Halco Light, tail in with 500 Sx. Class "H" neat, circulate cement to surface.
4. Drill 8½" hole to 15,000'. Run and set 7" 29# 8-R LT&C liner from 12,000' to TD 15,000'. cement liner with 275 Sx. of Class "H" + additives.
5. Drill 6½" hole to 17,500'. Run and set 4½" 13.5# 8-R LT&C P-110 production liner from 14,5000' to TD 17,500' cement with 250 Sx. Class "H" + additives.

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

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 30-025-33909	Pool Code <input checked="" type="checkbox"/>	Pool Name WILDCAT	Well Number 2
Property Code 20204	Property Name TOMCAT "15" FEDERAL		Elevation 3720'
OGRID No. 147380	Operator Name PENWELL ENERGY INC.		

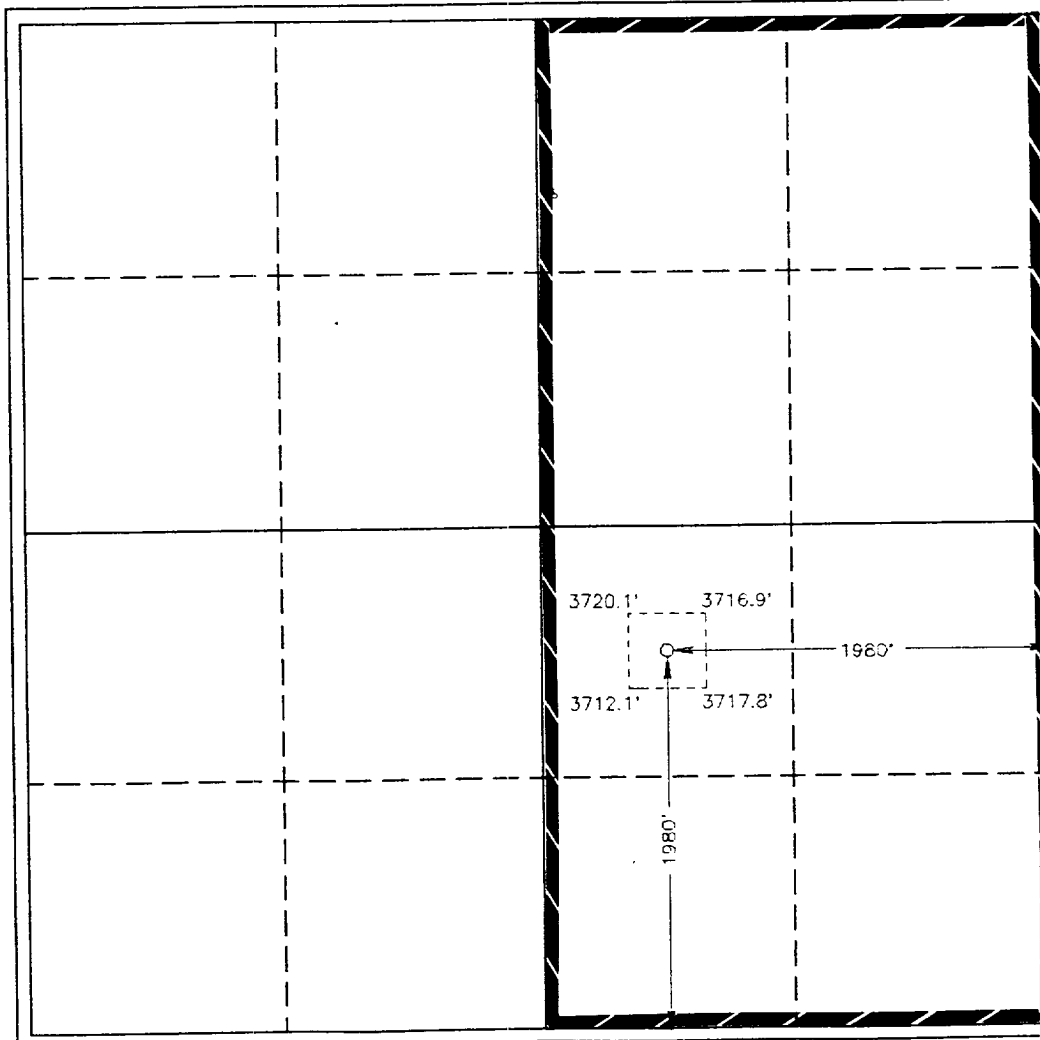
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	15	23 S	32 E		1980	SOUTH	1980'	EAST	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 320		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



OPERATOR CERTIFICATION

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

Joe T. Janica
Signature
Joe T. Janica
Printed Name
Agent
Title
03/14/97
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
supervision, and that the same is true and
correct to the best of my belief.

March 1997
Date Surveyed
Signature of Surveyor
Professional Surveyor
7977
W.O. 7977
Certificate No. 7977

APPLICATION TO DRILL

PENWELL ENERGY, INC.
TOMCAT "15" FEDERAL # 2
UNIT "J" SECTION 15
T23S-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' FSL & 1980' FEL SEC. 15 T23S-R32E LEA CO. NM
2. Elevation above sea level: 3720' 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: 17,500'

6. Estimated tops of geological markers:

DELAWARE	4,900'	STRAWN	13,700'
BONE SPRING	8,700'	ATOKA	13,900'
WOLFCAMP	12,150'	MORROW	15,100'
		DEVONIAN	16,900'

7. Possible mineral bearing formation:

DELAWARE	OIL	STRAWN	GAS
BONE SPRING	OIL	ATOKA	GAS
WOLFCAMP	OIL	MORROW	GAS
		DEVONIAN	GAS

8. Casing program:

Hole size	Interval	OD casing	Weight	Thread	Collar	Grade	Condition
26"	0-600'	20"	94#	8-R	ST&C	X-56	NEW
17½"	0-4700'	13-3/8"	72#	8-R	ST&C	L-80	NEW
12½"	0-12500'	9-5/8"	53.5#	8-R	LT&C	P-110	NEW
8½"	12000-15000'	7"	29#	8-R	LT&C	P-110	NEW
6½"	14500-17,500'	4½"	13.5#	8-R	LT&C	P-110	NEW

APPLICATION TO DRILL

PENWELL ENERGY INC.
 TOMCAR "15" FEDERAL #2
 UNIT "J" SECTION 15
 T23S-R32E LEA CO. NM

9. Cementing and Setting Depth:

20"	Surface	Set 600' of 20" 94# 8-R ST&C casing. Cement with 600 sx Class "C" Neat + 2% CaCl. Circulate cement to surface.
13-3/8"	1st Intermediate	Set 4700' of 13-3/8" 72# BTC L-80 casing. Cement with 1500 sx Class "C" Halco Light. Tail in with 500 sx Class "C" + additives. Circulate cement to surface.
9-5/8"	2nd Intermediate	Set 12,500' of 9-5/8" 53.5# P-110 LT&C casing. Cement with 1200 sx of Class "H" Halco Light, tail in with 500 sx Class "H" neat + additives. Circulate cement to surface.
7"	1st Production Liner	Set 7" 29# *-R LT&C P-110 Liner from 12,000' to 15000' Cement with 275 sx Class "H" + additives.
4 1/2"	2nd Production Liner	Set 4 1/2" 13.5# 8-R LT&C P-110 Liner from 14500' to TD. Cement with 125 sx Class "H" + additives.

10. Pressure Control Equipment: Exhibit "E". A BOP (no less than 2900 Series 10,000 PSI working pressure.) consisting of double ram and bag type preventor. BOP unit will be hydraulically operated. Exhibit "E-1" Choke Manifold and Closing Unit. Blind Rams on top, Pipe Rams on bottom to correspond with the 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 the Choke Manifold. BOP will be worked at least once each day while drilling and Blind Rams will be worked on trips when drill pipe is out of hole. Full opening stabbing valve and upper kelly cock will be utilized.

11. Proposed Mud Circulating System:

Depth	Mud Wt.	Visc,	Fluid Loss	Type Mud
0-600'	8.4-8.6	29-34	NC	Fresh water spud mud add pa to control seepage
600-4700'	10-10.5	29-34	NC	Brine water use paper for s page & Lime for pH control
4700-12500'	9-9.5	29-34	NC	Cut Brine with Drispac, sta soda ash & Lime.
12500-15000'	12-13	38-45	10cc or less	Brine water starch, Barite soda ash & Lime.
15000-17,500'	10-10.5	28-32	NC	Brine water.

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.
TOMCAT "15" FEDERAL # 2
UNIT "J" SECTION 15
T23S-R32E LEA CO. NM

12. Testing, Logging and Coring Program:

- A. Open hole logs: Gamma Ray & Caliper from TD to surface. CNL-LDT Dual Laterolog Micro SFL from TD to casing shoes (logs to be run prior to each string of casing after 13 3/8" casing is set.)
- B. Cores will be taken as shows dictate.
- C. D.S.T.'s will be run as shows dictate.
- D. Mud logger may be rigged up after first intermediate is run.

13. Potential Hazards:

No abnormal pressures or temperatures are expected. Hydrogen Sulfide gas may be encountered, H₂S 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 10,000 PSI, estimated BHT 195° .

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 60 to 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 devonian pay will be perforated and stimulated. The well will be swab tested and potentialled as a Gas well.



DRILLING MANUAL

BLOWOUT PREVENTION
EQUIPMENT
IADC Recommended BOP Stacks

Section K1
Page 3

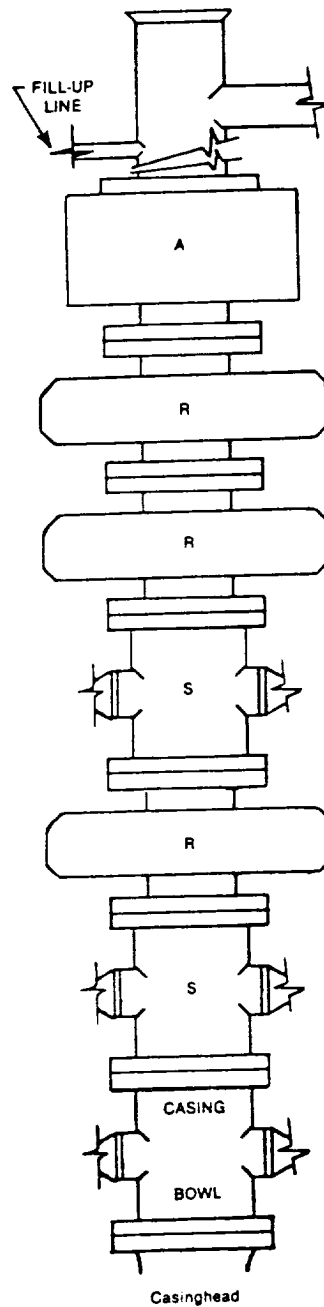


FIGURE K1-3. Recommended IADC Class 10 BOP stack arrangement SRSRRA, 10,000 psi WP. Lower drilling spool is optional with outlets on lower ram. Annular preventers 10,000 psi.

EXHIBIT "E"
B.O.P. SKETCH TO BE USED ON
PENWELL ENERGY, INC.
TOMCAT "15" FEDERAL # 2
UNIT "J" SECTION 15
T23S-R32E LEA CO. NM

ELF

ABOVE DATE DOES NOT
INDICATE WHEN
CONFIDENTIAL LOGS
WILL BE RELEASED