	Form 3160-3 (July 1992)		OPER. OGF PROPERTY	'NO	5. 1473 1568	<u></u>	-PLICATE ions on _e)	FORM APF OMB NO. 1 Expires: Febru	004-0136	
- 1	11 35 11 50		POOL CODI EFF. DATE		12/2	<u> </u>	-	5. LEASE DEBIGNATION NM-90539	AND BERIAL NO.	
IE HAL		ICATION FOR P			125-3	2 3520	·	6. IF INDIAN, ALLOTTE	OR TRIBE NAME	
CALL ARE	1a. TYPE OF WORK		DEEPEN					7. UNIT AGREEMENT M	AND	
		WELL WELL OTHER BORE CA SOND							"22" Federal#:	
	PENWELL ENERG	Y INC.	(GORDO	N BAH				9. API WELL NO.		
	8. ADDRESS AND TELEPHONE NO		3-2534							
	1100 ARCO BUI	, TEXAS 79701			10. FIELD AND FOOL, OF WILDCAT Bilbrey - Morrow					
	4. LOCATION OF WELL () At surface	Report location clearly and	In accordance wi	ന്നെ പ്രതം	21 <b>S-</b> R32E	FDDV	со. мм	11. BBC., T., B., M., OB		
	1980' FSL &	660' FWL SEC.	14				Sec. 22 T21S- $R^{3}$ E			
	At proposed prod. so		/·,	11 L 277 -			~			
	14. DISTANCE IN MILES	AND DIBECTION FROM NEAL	12. COUNTY OR PARISH							
	Approximately	26 miles West <b>of</b>	011 Cente					Lea Co.	NM	
	15. DISTANCE FROM PROI	PUBED*		16. NO				OF ACRES ABSIGNED HIS WELL		
	LOCATION TO NEARES PROPERTY OR LEASE (Also to nearest dr	LINE, FT. 6	60'	1	640			320		
	18 DISTANCE FROM PRO	POSED LOCATION*		19. PROPOSED DEPTH 20. ROT			20. ROTAL	RY OR CABLE TOULS		
	TO NEAREST WELL, OR APPLIED POR, ON TI	DRILLING, COMPLETED,	NA		15,000 Ro			tary		
	21. ELEVATIONS (Show W			22. APPROL. DATE WO	BE WILL START*					
				As soon as a	oproved					
	23.		r R	-111-P Potash						
	SIZE OF BOLE	00T	SETTING DE	іртн		QUANTITY OF CEMENT				
	175"	J-55 13 3/8	54.5		650		700 S	<u>Circulate</u> ce	ment to surface	
	121/2"	N-80 9 5/8	40 5	<u>5</u>	4750		810 S	x. Circulate t	o_surface	
	<u></u>	N-80 7	26		12000		640 S	. (FEBACK	2	
	6"	P-110 5	23		11800-150	00	400 S	Χ.	-	
	Q									

1. Drill 17<sup>1</sup>/<sub>2</sub>" hole to 650'. Run and set 650' of 13 3/8" J-55 54.5# ST&C casing. Cement with 700 Sx. Class "C" + 2% CaCl + <sup>1</sup>/<sub>4</sub># flocele/Sx. Circulate cement to surface.

- 2. Drill 12¼" hole to 4750'. Run and set 4750' of 9 5/8" N-80 4♥# Buttress casing. Cement with 510 Sx. Halco Light + 2% CaCl + ½# flocele/Sx. tail in with 300 Sx. Class "C" + 1% CaCl + 5% salt. Circulate cement to surface.
- 3. Drill 8½" hole to 12000'. Run and set 12000' of 7" N-80 26# LT&C casing. Cement with 140 Sx. Halco Light + ½# flocele/Sx. = .27% retarder, tail in with 200 Sx. 50/50 POZ + 3% salt + .2% retarder.
- 4. Drill 6" hole to 15000'. Run and set 3200' of 5" Pll0 23# STL liner. Cement with 400 Sx. Class "H" + .2% retarder.

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 Partinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. BIGNED OF FORCE TITLE	Agent DATE01/29/96
(This spree for Federal or State office use) PERMIT NO	APPROVAL DATE GENERAL REQUIREMENTS AND

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 holds legal or equitable title to those rights in the subject lease which would entitle the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant holds legal or equitable title to those rights in the subject lease which would entit holds legal or equitable the applicant holds legal or equitable title to those rights in the subject lease which would entit holds legal or equitable the appl

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APPROVED BY		
	*See Instructions On Reverse Side	$\sim$

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  $\binom{1}{1}$ 

DISTRICT I " P.O. Box 1960, Hobbs, NM 86241-1980 State of New Mexico

Energy, Minerals and Natural Resources Departn.

Form C-102 Revised February 10, 1994 Submit to Appropriate District Office State Lease - 4 Copies

Fee Lease - 3 Copies

DISTRICT I

P.O. Drawer DD, Artesia, NM 88211-0719

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			Pool Code Pool N			Pool Name	Name			
<u> 10 1000 - 1000 ()</u>		72124								
Property Code			Property Name BILBREY NORTH "22" FEDERAL						Well Num	nber
OGRID No				Operato				Elevation		
147380				PEN	WELL EN	-	······································		371	1
Surface Location										
UL or lot No.	Section	Township	Range 32 E	Lot Idn	Feet from		North/South line SOUTH	Feet from the	East/West line	County
L	22	21 S			1980		,,,	660	WEST	LEA
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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 o	r Infill Co	nsolidation (	Code Or	ler No.				<u> </u>	
320			-							
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EXHIBIT "A"

DISTRICT IV P.O. BOX 2088, SANTA FE, N.M. 87504-2088

# APPLICATION TO DRILL

PENWELL ENERGY, INC. BILBREY NORTH "22" FEDERAL # 1 1980' FSL & 660' FWL SEC. 22 LEA CO. NM T21S-R32E

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

- 1980' FSL & 660' FWL SEC. 22 T21S-R32E LEA CO. NM 1. Location: New Mexico
- 3711' GR 2. Elevation Above Sea Level:
- 3. Geologic Name of Surface Formation: Quaternery Aeolian Deposits
- 4. Drilling Tools and Associated Equipment: Conventional rotary drilling rig using mud for the circulation medium.
- 15,000' 5. Proposed Drilling Depth:

# 6. Estimated Geological Marker Tops:

Lamar Delaware	4750 <b>'</b> 4850 <b>'</b>	Strawn Atoka	13150' 13300'
Bone Spring	8750	Morrow	13800'
Wolfcamp	11800'	Barnett	14800'

# 7. Possible Mineral Bearing Formation:

Bone Spring	011	Atoka	Gas
Dèlaware	011	Morrow	Gas

## 8. Casing Program:

						Curda	Cond.
Hole Siz	ze Intreval	OD Csg	Weight	Thread	Collar	Grade	cond.
26"	0-40	20"	NA	NA	NA	NA	New
20 17⁵"	40-650	13 3/8"	54.5	8-R	ST&C	J-55	New
12½"	650-4750 <b>'</b>	9 5/8"	40 575	Buttress	LT&C	N-80	New
8 <sup>1</sup> <sub>2</sub> ''	4750-12000 <b>'</b>	7"	26	Buttress	LT&C	N-80	New
6"	12000-15000'	5"	23	STL	STL	P-110	New

### APPLICATION TO DRILL

# PENWELL ENERGY INC, INC.

BILBREY NORTH "22" FEDERAL # 1 1980' FSL & 660' FWL SEC. 22 T21S-R32E LEA CO. NM

9. Casing:

#### Setting Depth & Cementing:

20''	Conductor	Set 40' of 20" conductor cement to surface with Redi-mix.
13 3/8"	Surface	Set 650' Of 13 3/8" 54.5# J-55 ST&C Casing. Cement 700 Sx Class "C" +2% CaCl + ½# flocele/Sx. Circulate cement to surface.
9 5/8"	Intermediate	Set 4750' of 9 5/8" 40# N-80 Buttress casing. Cement With 510 Sx. Halco Light + Additives Tail in with 300 Sx Class "C" + Additives. circulate cement TS.
7"	Liner	Set 7500' of 7" 26# N-30 LT&C <del>liner</del> . Cement 1 stage 140 Sx. + additives, tail in with 200 Sx. 50/50 POZ +
5"	Production	top of cement 4500' from surface 3200' Set 15000' of 5" 23# P-110 STL easing: Cement with 400 Sx. Class "H" + additives.

10. Pressure Control Equipment: Exhibits "E", "E-1", "E-2", "E-3", show skematics of BOP equipment to be used. A series 1500 5000 PSI WP BOP consisting of double ram type and annular preventor will be nippled up on 13 3/8" casing. Change BOP to 10,000 PSI WP after 9 5/8" casing is run and cemented. Test BOP, casing, and choke manifold to API specs. BOP pipe ram should be worked once each 24 hours and blind rams to be worked when drill pipe is out of hole on trips. Flow sensor, PVT, full opening stabbing valve and upper kelley cock will be utilized. No abnormal pressure or temperature is expected. Estimated BHP 6500 PSI and 190° BHT.

DEPTH	MUD WEIGHT	MUD VISC.	FLUID LOSS	TYPE MUD
40-650'	8.6-9	32-34	NC	Fresh water Spud mud
40-830 650-4750'	9-9.4	28-30	NC	Brine water add paper to control seepage.
4750-12000 <b>'</b>	8.4-10	28-29	NC	Fresh water going to brine add paper to control seepage.
12000-15000'	10 -10.6	28-40	NC to 6CC	Brine Polymer

11. Proposed Mud Circulating System:

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

### APPLICATION TO DRILL

PENWELL ENERGY, INC. BILBREY NORTH "22" FEDERAL # 1 1980' FSL & 660' FWL SEC. 22 T21S-R32E LEA CO. NM

### 12. Testing, Logging and Coring Program:

A. Rig up mud logger on hole at 4600'.

- B. Sidewall cores in Delaware (4850'-8750'.
- C.Open hole logs: AIT/Dual Laterolog-MSFL, CNL-FDC, BHC-SONIC from TD.to surface casing shoe. Run Gamma Ray - Caliper - Neutron from TD. to surface.
  - D. DST'S May be run 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 7500 PSI, estimated BHT 190° . Possible high pressures in the

Wolfcamp and/or Atoka. Lost circulation in the Capitan Reef (3700-4700).

# 14. Anticipated Starting Date and Duration of Operation:

### 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 <u>Morrow</u> pay will be perforated and stimulated. The well will be swab tested and potentialed as a gas well.

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1500 Series 5000 PSI WP

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EXHIBIT "E" B.O.P. SKETCH TO BE USED ON PENWELL ENERGY, INC. BILBREY NORTH "22" FEDERAL #1 1980' FSL & 660' FWL SEC. 22 T21S-R32E LEA CO. NM