

# N. M. OIL CONS. COMMISSION

P. O. BOX 1980

HOBBS, NEW MEXICO 88240

SUBMIT IN TRIPLICATE\*  
(Other instructions on reverse side)

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

Form 3160-3  
(July 1992)

## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

### APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK <b>DRILL</b> <input checked="" type="checkbox"/> <b>DEEPEN</b> <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. LC - 069276	
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR Penwell Energy, Inc.		7. UNIT AGREEMENT NAME	
3. ADDRESS AND TELEPHONE NO. 600 N. Marienfeld, Ste. 1100, Midland, Texas 79701		8. FARM OR LEASE NAME, WELL NO. West Corbin "19" Federal #3	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 1650' FNL & 330' FWL At proposed prod. zone <i>E 2</i>		9. API WELL NO. 30-025-34174	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 32 miles West from Hobbs, New Mexico		10. FIELD AND POOL OR WILDCAT Corbin Gate Spring, South	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT (Also to nearest drg. unit line, if any) 330'		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 19, T18S, R33E	
16. NO. OF ACRES IN LEASE 520		12. COUNTY OR PARISH Lea	
17. NO. OF ACRES ASSIGNED TO THIS WELL 40		13. STATE N.M.	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1040'		20. ROTARY OR CABLE TOOLS Rotary	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3811' GL		22. APPROX. DATE WORK WILL START* 06/20/96	

#### 23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	48#	450'	350 sx Cl. "C" cmt + additives
11"	8 5/8"	40#	2850'	475 sx Lite + 200 sx "C"
7 7/8"	5 1/2"	17#	8900'	300 sx Cl. "H" see stips

1. Drill 17 1/2" hole to 450'. Run and set 450' of 13 3/8", 48#, H-40, ST&C casing. Cement with 350 sx Class "C" cement + additives. Circulate cement to surface.
2. Drill 11" hole to 2,850'. Run and set 2,850' of 8 5/8", 40#, 8-R, ST&C, J-55 casing. Cement with 475 sacks Lite + 200 sacks "C". Circulate cement to surface.
3. Drill 7 7/8" hole to 8,900' run and set casing @ 8,900'. Cement casing with 300 sacks Class "H". Estimated top of cement 5,000'.

OPER. OGRID NO. 142380  
PROPERTY NO. 18972  
POOL CODE 13160  
EFF DATE 10/29/97  
API NO. 30-025-34174

RECEIVED  
1997 SEP 23 A 9:22  
BUREAU OF LAND MGMT  
ROSWELL OFFICE

IN ABOVE SPACE DESCRIBE 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 Coffman TITLE Production Analyst DATE 09/22/97

(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:

APPROVED BY (ORIG. SGD.) JOHN S. SIMITZ TITLE ADM. MINERALS DATE 10-21-97

\*See Instructions On Reverse Side

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 United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

DISTRICT I  
P.O. Box 1880, Hobbs, NM 88240

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

DISTRICT III  
1000 Rio Brazos Rd., Artec, 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 30-025-33509 34174	Pool Code 50510 13160	Well Name Corbin Bone Springs <del>Querecho Plains Lower Bone Springs</del>
Property Code 18922 18972	Property Name West Corbin "19" Federal	Well Number 3
OGRID No. 147380	Operator Name Penwell Energy Inc.	Elevation 3811'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Lot 2	19	18 S	33 E		1650	North	330	West	Lea

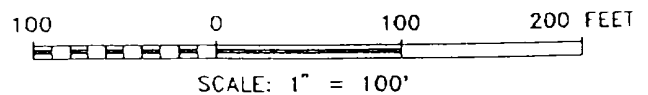
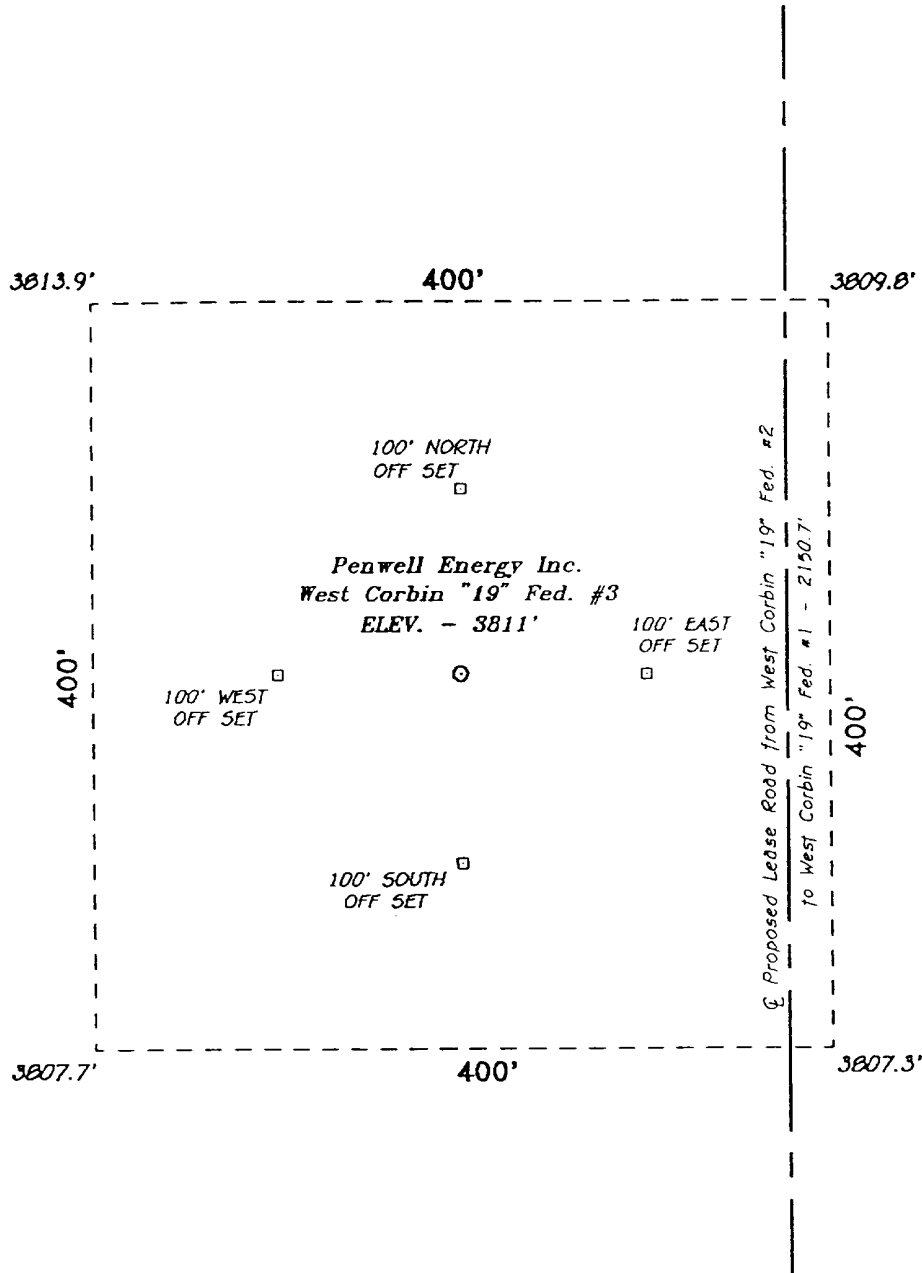
Bottom Hole Location If Different From Surface

UL or lot No. F	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County		
Dedicated Acres 42.26					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

<p>LOT 1 - 42.21 AC</p> <p>LOT 2 - 42.26 AC</p> <p>LOT 3 - 42.32 AC</p> <p>LOT 4 - 42.37 AC</p>	<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Brenda Coffman</i> Signature Brenda Coffman Printed Name Production Analyst Title April 30, 1996 Date</p>
	<p><b>SURVEYOR CERTIFICATION</b></p> <p>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.</p> <p>April 18, 1996 Date Surveyed</p>
	<p>Signature &amp; Seal of Professional Surveyor <i>Gary L. Jones</i> W.O. No. 61546</p>
	<p>Certificate No. Gary L. Jones 7977 BASIN SURVEYS</p>

SECTION 19, TOWNSHIP 18 SOUTH, RANGE 33 EAST, N.M.P.M.,  
LEA COUNTY, NEW MEXICO.



**Penwell Energy Inc.**

REF: West Corbin "19" Federal No. 3 / Well Pad Topo

THE WEST CORBIN "19" FED. #3 LOCATED 1650' FROM THE  
NORTH LINE AND 330' FROM THE WEST LINE OF  
SECTION 19, TOWNSHIP 18 SOUTH, RANGE 33 EAST,  
N.M.P.M., LEA COUNTY, NEW MEXICO.

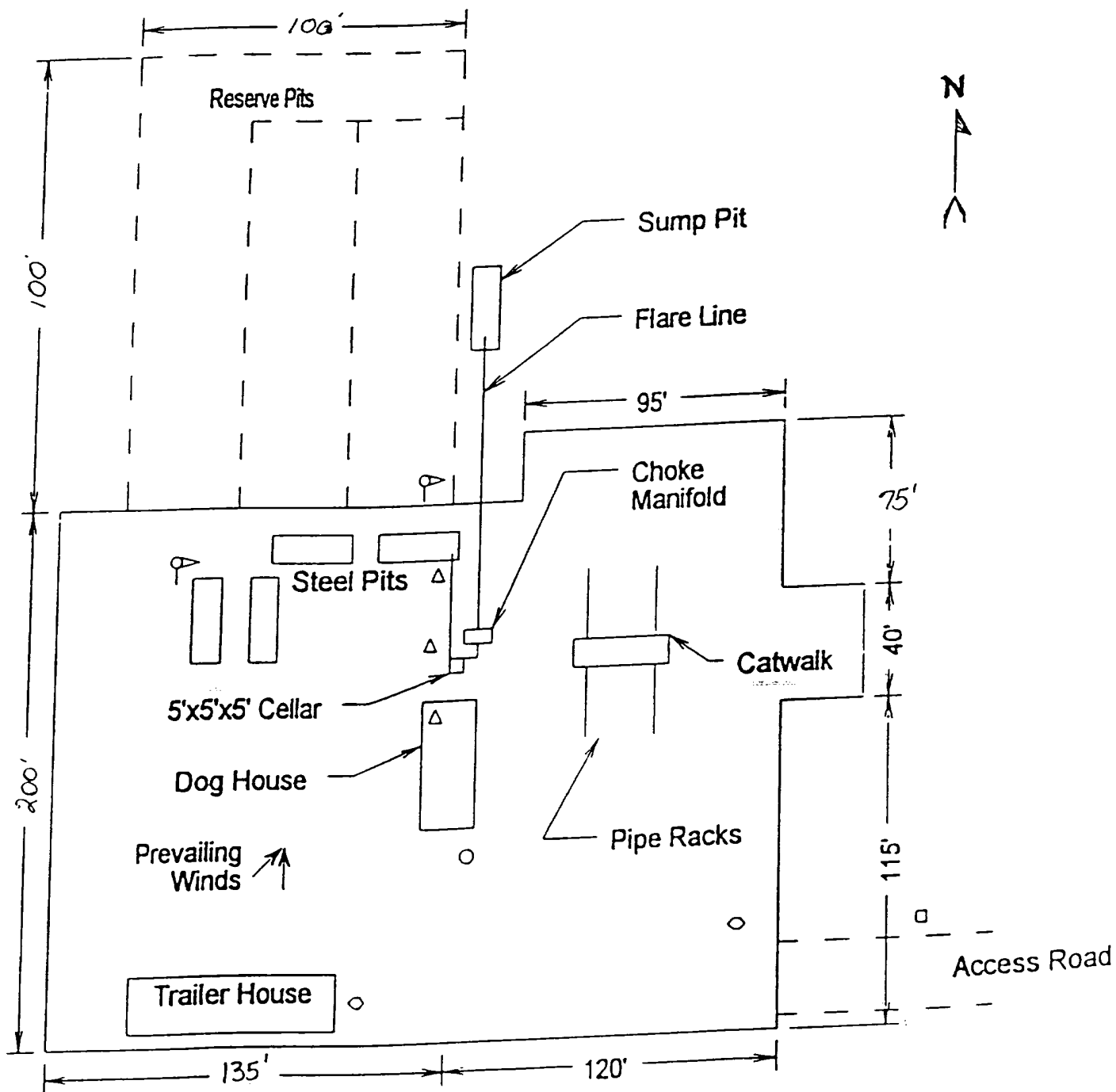
**BASIN SURVEYS** P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 6154

Drawn By: S.C. NICHOLS

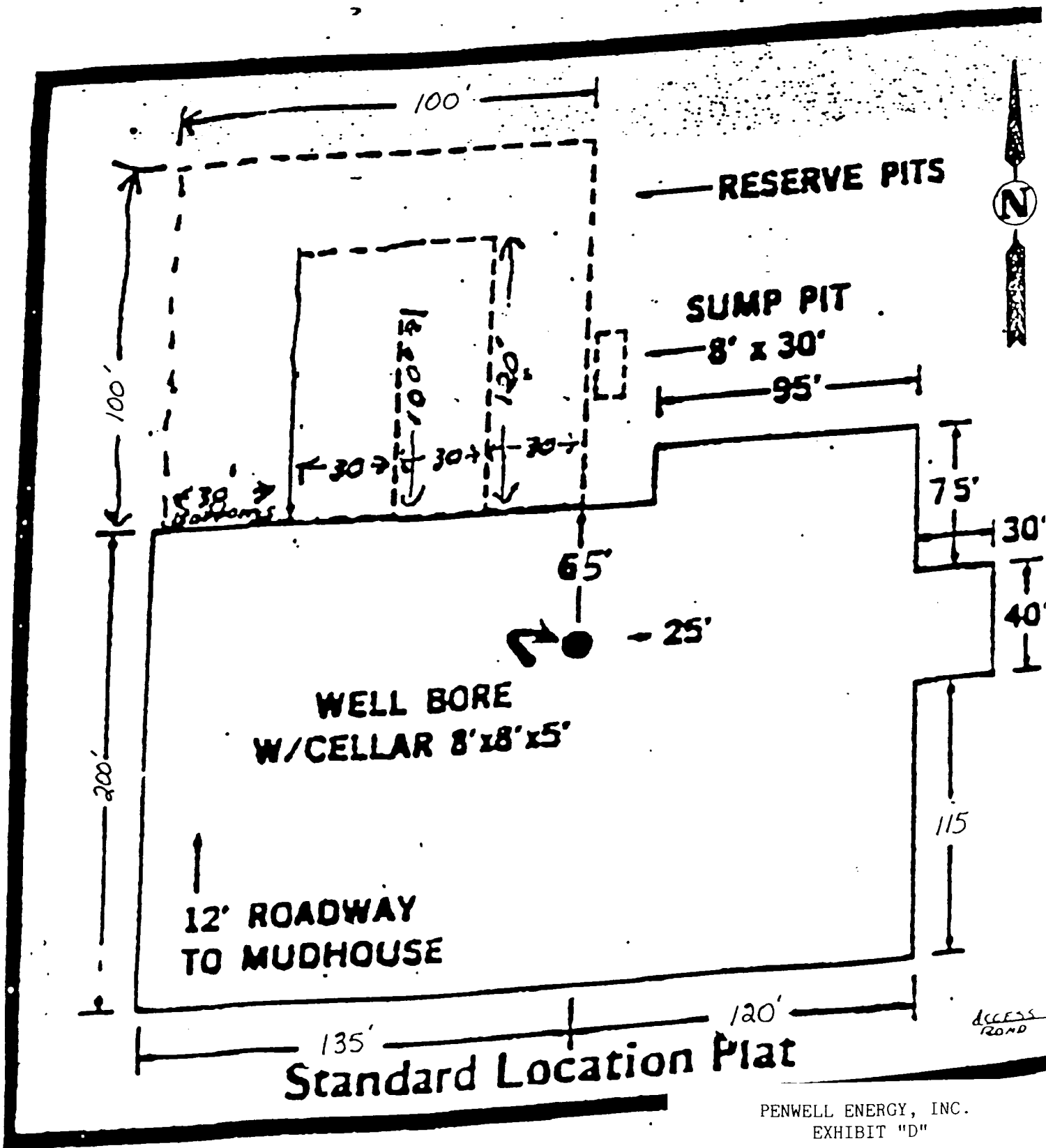
Survey Date: 04-18-96 Sheet 1 of 1 Sheets



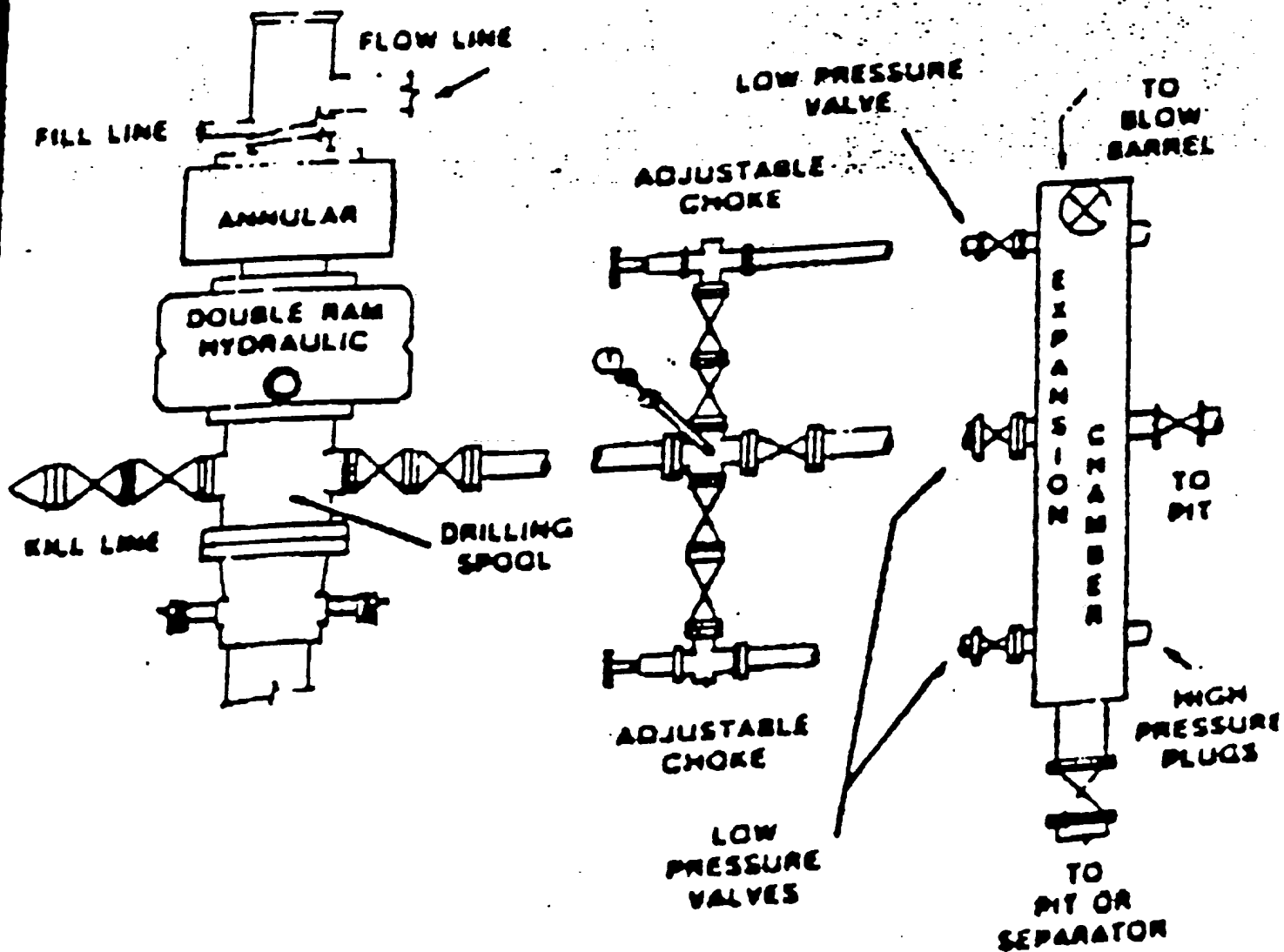


- ⌂ Wind Direction Indicators  
(wind sock or streamers)
- △ H2S Monitors  
(alarms at bell nipple and shale shaker)
- Briefing Areas
- Remote BOP Closing Unit

PENWELL ENERGY, INC.  
EXHIBIT "D"  
RIG LAYOUT PLAT  
WEST CORBIN "19" FEDERAL NO.



PENWELL ENERGY, INC.  
EXHIBIT "D"



## Standard Blowout Preventer Stack

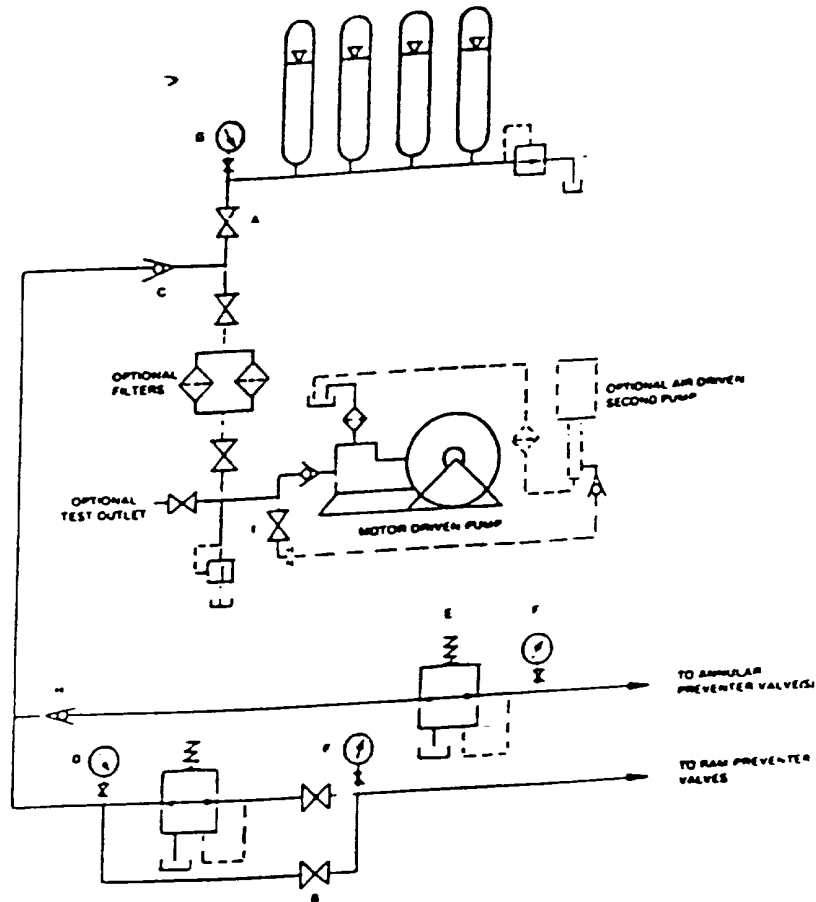


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

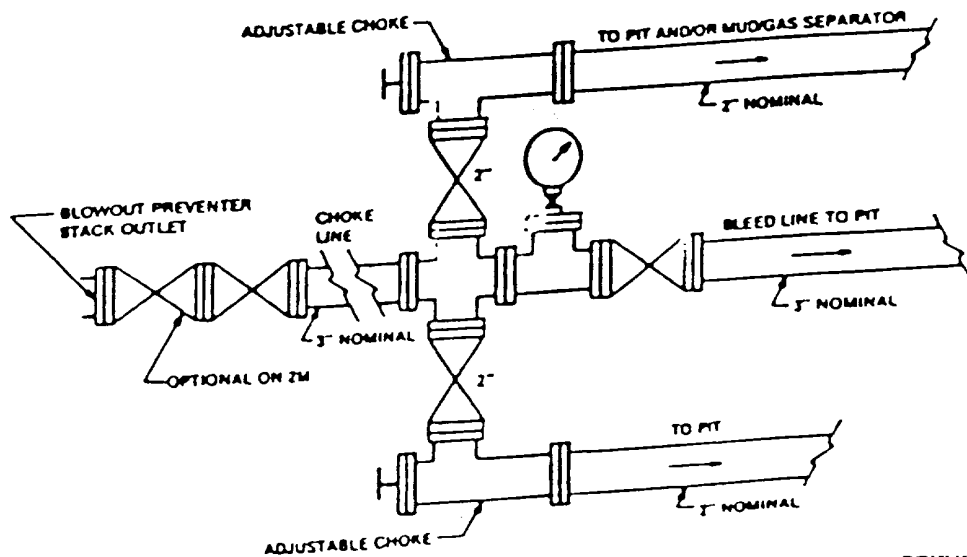


FIGURE K4-1. Typical choke manifold assembly for 2M and JM working pressure service — surface installation.



## APPLICATION TO DRILL

PENWELL ENERGY, INC.  
WEST CORBIN "19" FEDERAL #3  
1650' FNL & 330' FWL  
SECTION 19, T18S, R33E  
LEA COUNTY, NEW MEXICO

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

1. LOCATION: 1650' FNL & 330' FWL, Sec. 19, T18S, R33E, Lea Co. NM.
2. ELEVATION ABOVE SEA LEVEL: 3811'.
3. GEOLOGIC NAME OF SURFACE FORMATION: Kermit soils-Dune Land
- 4.. DRILLING TOOLS AND ASSOCIATED EQUIPMENT: Conventional rotary drilling rig using mud for the circulation medium.
5. PROPOSED DRILLING DEPTH: 8,900'.
6. ESTIMATED GEOLOGICAL MARKER TOPS:

Anhydrite	1252'	Delaware	5360'
Yates	2855'	Bone Springs	8652'
Seven Rivers	3340'	T.D.	8,900'
Queen	3790'		
San Andres	4860'		

7. POSSIBLE MINERAL BEARING FORMATION:

Yates	Oil
Bone Spring	Oil

8. CASING PROGRAM:

Hole Size	Interval	OD Csg	Weight	Thread	Collar	Grade	Cond.
17 1/2"	0-450'	13 3/8"	48#	8-R	ST&C	H-40	New
11"	0-2850'	8 5/8"	40#	8-R	ST&C	J-55	New
7 7/8"	0-8900'	5 1/2"	17#	8-R	LT&C	N-80	New

PENWELL ENERGY, INC.  
WEST CORBIN "19" FEDERAL # 3  
APPLICATION FOR PERMIT TO DRILL

PAGE 2

9. CASING CEMENTING & SETTING DEPTH:

13 3/8"	Surface	Set 450' of 13 3/8" 48# WC-40 ST&C casing. Cement with 350 sacks Class "C" cement + additives. Circulate cement to surface.
8 5/8"	Intermediate	Set 2,850' of 8 5/8" 32# J-55 ST&C casing. Cement with 475 sx Lite + 200 sx "C" Circulate cement to surface.
5 1/2"	Production	Set 8,900' of 5 1/2" 17.0, N-80 casing. Cement with 300 sx Class "H". Estimated top of cement @ 7,000'.

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 1800 PSI and 125° BHT.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD. WT.	MUD VISC.	FLUID LOSS	TYPE MUD
0'-450'	8.3-8.9	28-50	NC	Fresh water spud mud, use paper for seepage control .
450'-2,850'	10	29	NC	Brine water, use paper for seepage control and lime for pH control.
2,850'-7,500'	8.8-9.3	29	NC	Cut brine, Lime for pH control
7,500'-8,900'	9.3-10	34-38	10cc or less	Cut brine use Drispac, starch, soda ash, and gel.

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.  
WEST CORBIN "19" FEDERAL, WELL NO. 3  
APPLICATION FOR PERMIT TO DRILL

PAGE 3

12. TESTING, LOGGING AND CORING PROGRAM:

- A. Gamma Ray - Surface casing to T.D. @ 8,900'.
- B. CNL-LDT,D11-MFL - Below 8 5/8" to T. D.
- C. Coring - None planned.

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 BHP1800 PSI, estimated BHT 125°.

14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Road and location construction will begin after BLM approval of APD. Anticipated spud date is June 20, 1996. Drilling is expected to take 16 - 18 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.

## HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. All Company and Contract personnel admitted on location must be trained by a qualified H<sub>2</sub>S safety instructor to the following:
  - A. Characteristics of H<sub>2</sub>S
  - B. Physical effects and hazards
  - C. Proper use of safety equipment and life support systems.
  - D. Principle and operation of H<sub>2</sub>S detectors, warning system and briefing areas.
  - E. Evacuation procedure, routes and first aid.
  - F. Proper use of 30 minute pressure demand air pack.
2. H<sub>2</sub>S DETECTION AND ALARM SYSTEMS
  - A. H<sub>2</sub>S detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse.
3. WINDSOCK AND/OR WIND STREAMERS
  - A. Windsock at mudpit area should be high enough to be visible.
  - B. Windsock at briefing area should be high enough to be visible.
  - C. There should be a windsock at entrance to location.
4. CONDITION FLAGS AND SIGNS
  - A. Warning sign on access road to location.
  - B. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow H<sub>2</sub>S safety flag indicates potential pressure and danger. Red flag, danger, H<sub>2</sub>S present in dangerous concentration. Only emergency personnel admitted to location.
5. WELL CONTROL EQUIPMENT
  - A. See exhibit "E"
6. COMMUNICATION
  - A. While working under masks chalkboards will be used for communication.
  - B. Hand signals will be used where chalk board is inappropriate.
  - C. Cellular telephones will be used to communicate off location in case emergency help is required.
7. DRILLSTEM TESTING
  - A. Exhausts will be watered
  - B. Flare line will be equipped with an electric ignitor or a propane pilot light in case gas reaches the surface.
  - C. If location is near any dwelling a closed D.S.T. will be performed.
8. Drilling contractor supervisor will be required to be familiar with the effects H<sub>2</sub>S has on tubular goods and other mechanical equipment.

PENWELL ENERGY, INC.  
WEST CORBIN "19" FEDERAL, WELL No. 3  
HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

PAGE 2

9. If  $H_2S$  is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with  $H_2S$  scavengers, if necessary.

SURFACE USE PLAN  
PENWELL ENERGY INC.  
WEST CORBIN "19" FEDERAL #3  
1650' FSL & 330' FWL  
SECTION 19, T-18-S, R-33-E  
LEA COUNTY, NEW MEXICO

1. EXISTING ROADS: Area maps, Exhibit "B" is a reproduction of Lea Co. General Highway Map. Exhibit "C" is a reproduction of a USGS Topographic Map, showing existing roads and proposed roads. All existing roads will be maintained in a condition equal to or better than current conditions. Any new roads will be constructed to BLM specifications.
  - A. Exhibit "A" shows the proposed well site as staked.
  - B. From Hobbs, New Mexico, go West for 12 miles on Hiway 62-180 and West on Hiway 529 for 19 miles then turn South on caliche road for 4 miles, turn East into location for Well Number 1 then go South until find stake for Well Number 3 located in the SW  $\frac{1}{4}$  of the NW  $\frac{1}{4}$ .
2. PLANNED ACCESS ROADS: Approximately 930.1' of new road.
  - A. The access road will be crowned and ditched to a 12' wide travel surface with a 40' right-of-way.
  - B. Gradient on all roads will be less than 5.00%.
  - C. No turnouts will be necessary.
  - D. If needed, road will be surfaced with a minimum of 6" of caliche. This material will be obtained from a local source.
  - E. Centerline for the new access road has been flagged. Earthwork will be as required by field conditions.
  - F. Culverts in the access road will not be used.
3. LOCATION OF EXISTING WELLS IN A ONE-MILE RADIUS EXHIBIT "A-1"
  - A. Water wells - None known
  - B. Disposal wells - None known
  - C. Drilling wells - As shown on Exhibit "A-1"
  - D. Producing wells - As shown on Exhibit "A-1"
  - E. Abandoned wells - As shown on Exhibit "A-1" If, upon completion this well is a producer, Penwell Energy Inc. will furnish maps and/or plats showing on site facilities or off site facilities if needed. This will be accompanied with a Sundry Notice.

PENWELL ENERGY, INC.  
WEST CORBIN "19" FEDERAL No. 3  
SURFACE USE PLAN

PAGE 2

4. LOCATION AND TYPE OF WATER SUPPLY

Water will be purchased locally from a private source and trucked over the access roads or piped in flexible lines laid on top of the ground.

5. SOURCE OF CONSTRUCTION MATERIALS

If needed, construction materials will be obtained from the drill site's excavations or from a local source. These materials will be transported over the access route as shown on Exhibit "A".

METHODS FOR HANDLING WASTE DISPOSAL

- A. 1. Drill cuttings will be disposed of in the reserve pit.
- 2. Trash, waste paper, and garbage will either be contained in a fenced trash trailer or in a trash pit, fenced with mesh wire to prevent wind-scattering and will be buried at least 36" deep within a reasonable period of time.
- 3. Salts remaining after completion of the well will be picked up by the supplier, including broken sacks.
- 4. Sewage from trailer houses will drain into holes with minimum depth of 10'00". These holes will be covered during drilling and backfilled upon completion. A "porta John" will be provided for the rig crews. This will be properly maintained during the drilling operations and removed upon completion of the well.
- B. Remaining drilling fluids will be allowed to evaporate in the reserve pit until the pit is dry enough for backfilling. In the event drilling fluids will not evaporate in a reasonable period of time they will be transported by tank truck to a state approved disposal site.

Water produced during testing of the well will be disposed of in the reserve pit. Oil produced during testing of the well will be stored in test tanks until sold and hauled from the site.

6. ANCILLARY FACILITIES

No camps or airstrips will be constructed.

7. WELL SITE LAYOUT

- A. Exhibit "D" shows the proposed well site layout.
- B. This exhibit indicated proposed location of reserve and sump pits and living facilities.

PENWELL ENERGY, INC.  
WEST CORBIN "19" FEDERAL No.3  
SURFACE USE PLAN

PAGE 3

- C. Mud pits in the active circulating system will be steel pits and the reserve pit is proposed to be unlined unless subsurface condition encountered during pit construction indicate that lining is needed for lateral containment of fluids.
- D. If needed, the reserve pit is to be lined with polyethylene. The pit liner will be 6 mils thick. Pit liner will extend a minimum 2'00" over the reserve pits dikes where the liner will be anchored down.
- E. The reserve pit will be fenced on three sides with four strands of barbed wire during drilling and completion phases. The fourth side will be fenced after all drilling operations have ceased. If the well is a producer, the reserve pit fence will be torn down. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

8. PLANS FOR RESTORATION OF SURFACE

Rehabilitation of the location and reserve pit will start in a timely manner after all drilling operations cease. The type of reclamation will depend on whether the well is a producer or a dry hole.

However, in either event, the reserve pit will be allowed to dry properly, and fluid removed and disposed of in accordance with Article 7.B as previously noted. The pit area will then be leveled and contoured to conform to the original and surrounding area. Drainage systems, if any, will be reshaped to the original configuration with provisions made to alleviate erosion. These may need to be modified in certain circumstances to prevent inundation of the location's pad and surface facilities. After the area has been shaped and contoured, topsoil from the spoil pile will be placed over the disturbed area to the extent possible. Revegetation procedures will comply with BLM standards.

If the well is a dry hole, the pad and road area will be contoured to match the existing terrain. Topsoil will be spread to the extent possible. Revegetation will comply with BLM standards.

Should the well be a producer, the previously noted procedures will apply to those areas which are not required for production facilities.

9. OTHER INFORMATION:

- A. Topography: The proposed well site and access road is in the area of the Querecho Plains that is relatively level with some undulation to the surface, plus several isolated fairly large dunes. The area of the location has an overall slope of 1.2% to the northeast from a level elevation of 3820'.
- B. Soil: The topsoil at the well site is a light colored sand of the Kermit soils and Dune land series.
- C. Flora and Fauna: The vegetation cover is a poor grass cover of three-awn, sand and spike dropseed, bluestem and other misc. native grasses along with plants of mesquite, yucca, shinnery oak brush, sage, javelina bush, cacti and miscellaneous weeds and wildflowers. The wildlife consists of rabbits, coyotes, rattlesnakes, lizards, dove, quail and other wildlife typical of the semi-arid desert land.



PENWELL ENERGY, INC.  
WEST CORBIN "19" FEDERAL NO. 3  
PAGE 4

- D. Ponds and Streams: None in area.
- E. Residences and Other Structures: None in the immediate area, except oil production facilities.
- F. Land Use: Cattle grazing
- G. Surface ownership: BLM, Carlsbad, N.M.
- H. There is no evidence of any archaeological, historical or cultural sites in the area. An archaeological survey has been conducted by Archaeological Services By Larura Michalik and their report is being submitted to the appropriate government agencies.

10. OPERATORS REPRESENTATIVE:

PENWELL ENERGY, INC.  
600 NORTH MARIENFELD, STE. 1100  
MIDLAND, TEXAS 79701

BILL PIERCE PHONE 915 683-2534

11. CERTIFICATION: - I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Penwell Energy Inc., its contractors/subcontractors is in the conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provision of U.S.C. 1001 for the filing of a false statement.

NAME Bill Pierce by R. Coffman  
Bill Pierce

DATE : August 7, 1996

TITLE : Engineer

