

## N. M. Oil Cons. Division

811 S. 4TH ST.

ARTESIA, NM 88003

SUBMIT IN TRIPLICATE\*

(OTHER INSTRUCTIONS ON  
REVERSE SIDE)FORM 3160-3  
(JULY 1992)UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB NO. 1004-0136  
EXPIRES FEBRUARY 28, 1995

## 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

Pogo Producing Company

## 3. ADDRESS AND TELEPHONE NO.

P.O. Box 10340, Midland, Texas 79702

## 4. LOCATION OF WELL (REPORT LOCATION CLEARLY AND IN ACCORDANCE WITH ANY STATE REQUIREMENTS.)

AT SURFACE

720' FNL &amp; 720' FEL of Section 17

AT PROPOSED PROD. ZONE

Same

UNIT A

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

20 miles southeast of Loving, New Mexico

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE FT.  
(ALSO TO NEAREST DRILL UNIT LINE, IF ANY)

990'

## 16. NO. OF ACRES IN LEASE

640

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.

1320'

## 19. PROPOSED DEPTH

8350'

## 20. ROTARY OR CABLE TOOLS

Rotary

## 21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.)

3550' Ground Level

## 22. APPROX. DATE WORK WILL START\*

Upon Approval

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
14-3/4"	10-3/4" H-40	32.75#	650' 810'	550 sx Class "C" <b>WITNESS</b>
9-7/8"	7-5/8" J-55	26.40#	4250'	1000 sx Class "C"
6-3/4"	4-1/2" J-55	11.60#	8350'	1000 sx Class "H"

The Operator proposes to drill to a depth sufficient to test the Delaware and Bone Springs for oil. Specific programs are outlined in the following attachments:

DRILLING PROGRAM  
SURFACE USE AND OPERATING PLAN

Secretary's Potash

EXHIBIT "A" - ROAD MAP  
EXHIBIT "B" - EXISTING WELL MAP  
EXHIBIT "C" - LOCATION AND DEDICATION PLAT  
EXHIBIT "C-1" - TOPO MAP  
EXHIBIT "D" - DRILLING RIG LAYOUT  
EXHIBIT "E" - 3M BOP EQUIPMENT

**APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED**

Previously submitted 1-28-98

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

TITLE

Agent

DATE

3/30/01

(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 /s/ LESLIE A. THEISS <sup>ACTING</sup> STATE DIRECTOR

DATE MAY 31 2001

\*SEE INSTRUCTIONS ON REVERSE SIDE

APPROVAL FOR 1 YEAR

RECEIVED  
APR 05 2007  
BLM  
BONNELL TMS

DISTRICT I  
P.O. Box 1080, Hobbs, NM 88241-1080

State of New Mexico

Energy, Minerals and Natural Resources Department

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

DISTRICT II  
P.O. Drawer 420, Artesia, NM 88211-0719

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

OIL CONSERVATION DIVISION

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

DISTRICT IV  
P.O. Box 2088, Santa Fe, NM 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 96650	Pool Name COTTON DRAW BONE SPRINGS, SW
Property Code 20010	Property Name PATTON "17" FEDERAL	Well Number 11
OGRID No. 017891	Operator Name POGO PRODUCING COMPANY	Elevation 3550

Surface Location

UL or lot No. A	Section 17	Township 24 S	Range 31 E	Lot Idn	Feet from the 720	North/South line NORTH	Feet from the 720	East/West line EAST	County EDDY
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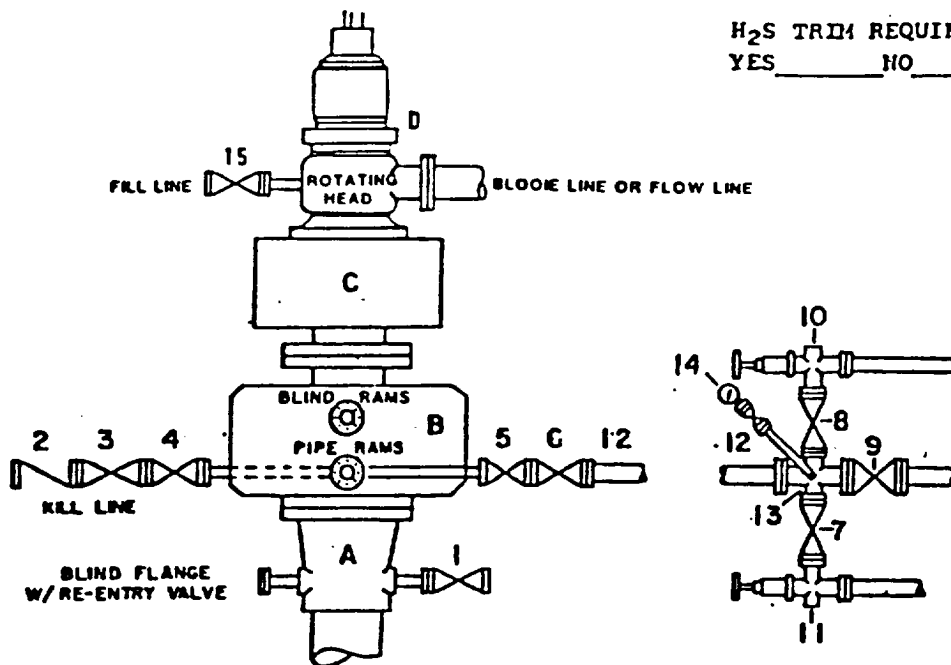
Bottom Hole Location If Different From Surface

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

EXHIBIT "C"				<b>OPERATOR CERTIFICATION</b> I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  Signature: <u>James M.C. Ritchie Jr.</u> Printed Name: <u>JAMES M.C. Ritchie Jr.</u> Title: <u>AGENT</u> Date: <u>JAN. 28, 1998</u>	
		<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.  JANUARY 21, 1998 Date Surveyed: <u>1/21/98</u> Signature: <u>[Signature]</u> Professional Surveyor NEW MEXICO W.O. Num 97-12106 Certificate No. RONALD E. EIDSON, 3239 GARY S. EIDSON, 12841 WACON McDONALD, 12185			

# **DRILLING CONTROL** **CONDITION III-B 3000 PSI WP**



H<sub>2</sub>S TRIM REQUIRED  
 YES \_\_\_\_\_ NO \_\_\_\_\_

## DRILLING CONTROL

### MATERIAL LIST - CONDITION III - B

- |                |   |
|----------------|---|
| A              | Wellhead  |
| B              | 3000# W.P. Dual ram type preventer, hydraulic operated with 1" steel, 3000# W.P. control lines (where sub-structure height is adequate, 2 - 3000# W.P. single ram preventers may be utilized with 3000# W.P. drilling spool with 2" minimum flanged outlet for kill line and 3" minimum flanged outlet for choke line. The drilling spool is to be installed below the single ram type preventers). |
| C              | 3000# W.P. Annular Preventer with 1" steel, 3000# W.P. control lines.   |
| D              | Rotating Head with fill up outlet and extended Bore line.   |
| 1,3,4,<br>7,8, | 2" minimum 3000# W.P. flanged full opening steel gate valve, or Halliburton Lo Torc Plug valve.   |
| 2              | 2" minimum 3000# W.P. back pressure valve.  |
| 5,6,9          | 3" minimum 3000# W.P. flanged full opening steel gate valve, or Halliburton Lo Torc Plug valve.   |
| 12             | 3" minimum Schedule 80, Grade B, seamless line pipe.  |
| 13             | 2" minimum x 3" minimum 3000# W.P. flanged cross.   |
| 10,11          | 2" minimum 3000# W.P. adjustable choke bodies.  |
| 14             | Cameron Mud Gauge or equivalent (location optional in Choke line).  |
| 15             | 2" minimum 3000# W.P. flanged or threaded full opening steel gate valve, or Halliburton Lo Torc Plug valve.   |

SCALE	DATE	EST. NO	DRG NO
DRAWN BY			
CHECKED BY			
APPROVED BY			

**EXHIBIT E**

## DRILLING PROGRAM

Attached to Form 3160-3

Pogo Producing Company

Patton "17" Federal No. 11  
720' FNL & 720' FEL  
Unit Letter A, NE/NE  
Section 17, T24S, R31E  
Eddy County, New Mexico

1. Geologic Name of Surface Formation: Permian
2. Estimated Tops of Important Geologic Markers and
3. Estimated Depths of Fresh Water, Oil, and Gas:

<u>Formation</u>	<u>Depth</u>	<u>Fluid Content</u>
Permian	Surface	Fresh water at +250'
Rustler Anhydrite	500'	-----
Top of Salt	900'	-----
Base of Salt	2800'	-----
Lamar Lime	4360'	-----
Delaware Sands	4390'	-----
Bone Spring	8204'	Oil
Total Depth	8350'	

No other formations are expected to give up oil, gas, or fresh water in measurable quantities. The surface fresh water sands will be protected by setting 10-3/4" casing at 650' into the Rustler anhydrite and circulating cement to surface. Potash will be protected by setting 7-5/8" intermediate casing at 4250' and circulating cement to surface. 4-1/2" production casing will be set at TD, and cement will be brought back to at least 3000', thus ensuring that all zones are adequately isolated. The pore pressure gradient is normal (+8.4 ppg) down through the Bone Springs. No abnormal pressures are anticipated.

4. Casing and Cementing Program

<u>Hole Size</u>	<u>Casing</u>		<u>Casing OD</u>	<u>Weight, Grade, Coupling, Cond,</u>
	<u>From</u>	<u>To</u>		
14-3/4"	0'	650'	10-3/4"	32.75# H-40 STC used
9-7/8"	0'	4,250'	7-5/8"	11.60# J-55 LTC used
6-3/4"	0	8,350'	4-1/2"	11.60# J-55, N-80 LTC new

All used casing will be drifted and hydrostatically tested to at least 90% of new pipe rating.

Minimum Design Factors: Collapse 1.125, Burst 1.1, Tension 1.7

**10-3/4" surface casing set at 650'**

The surface casing will be set into the Rustler anhydrite to protect all fresh water formations.

Centralize the bottom 3 joints and every 4th joint to surface.

Cement to surface with 550 sx of Class C cement.

**7-5/8" intermediate casing set at 4250'**

The intermediate casing will be set within 160' of the top of the Delaware to isolate all salt stringers.

Centralize the bottom 3 joints.

Cement to surface with 1000 sx of Class C cement.

**4-1/2" production casing set at TD'**

Centralize bottom 6 jts. Plus all potential producing intervals.

Top of cement to be at  $\pm 3200'$ .

A 2-stage cement job will be required with a DV tool at  $\pm 5500'$ .

**Stage 1:** 350sx Class H

**Stage 2:** 650 sx Class H.

5. Minimum Specifications for Pressure Control:

9-7/8" hole

The following BOP equipment will be nipped up on the 10-3/4" casing and used continuously until TD is reached for the 9-7/8" hole.

The blowout preventer equipment (BOP) shown in Exhibit E will consist of a 3000 psi WP double ram type preventer and a 3M annular (bag type) preventer with rotating head. Both BOP's will be hydraulically operated. At the drilling contractor's option, 5M BOP's may be substituted. H<sup>2</sup>S trim will not be required.

Before drilling out from under the 13-3/8" casing, all BOP's and accessory equipment will be tested to 1300 psi. Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

BLM method to calculate minimum BOP requirements:  
 $(.052)(10 \text{ ppg})(4250') - (0.22 \text{ psi/ft})(4250') = 1275 \text{ psi}$   
Minimum BOP requirements: 2M BOP stack and manifold system

6-3/4" hole

The following BOP equipment will be nipped up on the 7-5/8" casing and used continuously until TD is reached for the 6-3/4" hole.

The blowout preventer equipment (BOP) shown in Exhibit E will consist of a 3000 psi WP double ram type preventer and a 3M annular (bag type) preventer with rotating head. Both BOP's will be hydraulically operated. At the drilling contractor's option, 5M BOP's may be substituted. H<sup>2</sup>S trim will not be required.

Before drilling out from under the 7-5/8" intermediate casing, all BOP's and accessory equipment will be tested to 2500 psi. Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

BLM method to calculate minimum BOP requirements:  
 $(.052)(8.4 \text{ ppg})(8350') - (0.22 \text{ psi/ft})(8350') = 1810 \text{ psi}$   
Minimum BOP requirements: 5M BOP stack and manifold system

6. **Proposed Mud System:**

The well will be drilled to TD with a combination of fresh water and 10# brine. The applicable depths and properties of this system are as follows:

<u>Depth</u>	<u>Type</u>	<u>Weight (ppg)</u>	<u>Viscosity (sec)</u>	<u>Water Loss (cc)</u>
0-650'	Fresh water	8.4	28	NC
650-4250'	Brine	10.0	29	NC
4250-TD	Fresh	8.4	28-32	16

Sufficient mud materials to maintain mud properties and meet minimum lost circulation requirements will be kept at the wellsite at all times.

7. **Auxiliary Well Control and Monitoring Equipment:**

- a) A kelly cock will be kept in the string at all times.
- b) A full opening drill pipe stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.
- c) An electronic pit volume totalizer system will not be used.  
The drilling fluids system will be visually monitored at all times.
- d) A mudlogging unit might be monitoring drilling penetration rate and hydrocarbon shows from 4250' to TD.

8. **Logging, Testing, and Coring Program:**

- a) Drillstem tests will be run at operators discretion.
- b) The electric logging program will consist of:
  - 1) 6-3/4" hole - Gamma ray, dual induction log, compensated neutron and litho-density logs. Additional logs may be run.
- c) No conventional cores are planned. Selected intervals may be sidewall cored based upon operators discretion.
- d) Further testing procedures will be determined after the 4-1/2" production casing has been cemented at TD.



9. Abnormal Conditions, Pressures, Temperatures, and Potential Hazards:

No abnormal pressures, temperatures, or other potential hazard are anticipated.

No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported, or are known to exist at this depth in this area. No major lost circulation zones have been reported in offsetting wells.

The maximum anticipated bottom hole pressure is approximately 3615 psi. (8350' x .433 psi/ft = 3615 psi.)

The maximum anticipated bottom hole temperature is 127° F.

10. Anticipated Starting Date and Duration of Operations:

Road and location work will not begin until approval has been received from the BLM. The anticipated spud date is second quarter, 2001. Once commenced, the drilling operation should be complete in 15 days. If the well is productive, an additional 30 days will be required for completion, testing, and installation of permanent facilities.

**SURFACE USE AND OPERATING PLAN**

Attached to Form 3160-3

Pogo Producing Company

Patton "17" Federal No. 11  
720' FNL & 720' FEL  
Unit Letter A, NE/NE  
Section 17, T24S, R31E  
Eddy County, New Mexico

Located: 20 miles east southeast of Loving, New Mexico

Federal Lease Number: NM-89172

Lease Issued: N/A

Acres in Lease: 640 acres

Record Lessee: Burlington Resources

Surface Ownership: U.S.A.

Grazing Permittee: Richardson Cattle  
P.O. Box 487  
Carlsbad, New Mexico 88220

Pool: Poker Lake, Delaware

Pool Rules: The 40 acre oil well spacing rules apply to this location, being 330' to the nearest side boundary or 1/4-1/4 section line, nor closer than 330' to the nearest well capable of producing from the same Formation.

Exhibits:

- A. Road Map
- B. Existing Wells Map
- C. Well Location and Acreage Dedication Plat
- C-1. Topo Map
- D. Drilling Rig Layout Diagram
- E. BOP Equipment

1. **Existing Roads:**

- a) The well site and elevation plat for the proposed well is shown in Exhibit C. It was staked by John West Engineering, Hobbs, N.M.
- b) All roads to the location are shown on Exhibit C-1. The existing roads are illustrated in black and are adequate for travel during drilling and production operations. Upgrading of the road prior to drilling will be done where necessary as determined during the onsite inspection.
- c) Directions to Location: Go east of Carlsbad, New Mexico on Highway 128 to mile marker 19.2. Take Buck Jackson Road southwest 4.3 miles to existing caliche road on right. Go northwest 1.2 miles, turn right and go approximately 1000' to beginning of access road.
- d) Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

2. **Proposed Access Road:**

Exhibit C-1 shows the new access road to be constructed and is illustrated in green. The proposed access road as shown in Exhibit C-1 has been centerline flagged by John West Engineering, Hobbs, N.M. The road will be constructed as follows:

- a) Length and Width: The access road will be 10' long and 15' wide.
- b) Surfacing Material: Caliche material will be used to surface the proposed road. It will be watered, compacted, and graded. Caliche will be obtained from either the reserve pit or a borrow pit on the proposed location as described in Item 6 of the Surface Use and Operating Plan.
- c) Maximum Grade: 1% grade expected
- d) Turnouts: No turnouts are planned.
- e) Drainage Design: The new road will be crowned at the center to direct drainage to ditches on both sides of the roadway with turnout ditches to be constructed as required. Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns. BLM may specify any additions or changes during the onsite inspections.
- f) Culverts: None required.
- g) Cuts and Fills: No leveling will be necessary on access road to this location.
- h) Gates and Cattle Guards: There will be no gates or cattleguards needed at this location.

3. **Location of Existing Wells:**

Exhibit No. B shows all existing wells within a one-mile radius of this well.

4. **Location of Existing and/or Proposed Facilities:**

- a) Pogo Producing Company operates a production facility on the Patton "17" Federal lease. It is located on the well pad for well # 1.
- b) If the well is productive, contemplated facilities will be as follows:  
A 3" poly-line will be laid along approved access roads to battery.
- c) An electric power line will be constructed as shown on Exhibit C-1.

5. **Location and Type of Water Supply:**

The well will be drilled with a combination of brine and fresh water mud system as outlined in the drilling program.

The water necessary for drilling operations will be purchased and trucked to the wellsite, or will be moved to the wellsite by way of a temporary pipeline laid on the ground alongside existing and proposed roads.

6. **Source of Construction Materials:**

Caliche needed for the road and well pad will be taken from the proposed reserve pit. An alternate plan will be to obtain caliche from a borrow pit located within the 400' x 400' archaeologically cleared tract at the proposed well site. If sufficient quality or quantity of caliche is not available, it will be transported to the proposed road and well site from an existing BLM approved caliche pit. The BLM will be notified and consulted if caliche must be obtained off location.

7. **Method of Handling Waste Disposal:**

- a) Drill cuttings will be disposed into the reserve pit.
- b) Drilling fluids will be contained in the reserve pit. The reserve pit will be an earthen pit, approximately 150' x 150' x 6' deep and fenced on three sides prior to drilling. The fourth side will be fenced immediately following rig removal. The reserve pit will be lined with plastic (5-7 mil thickness) to minimize loss of drilling fluids.
- c) Water produced from the well during completion may be disposed into the reserve pit or a steel tank (depending upon rates).

- d) Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.
- e) Oil produced during testing will be stored in steel test tanks until sold.
- f) Trash, waste paper, garbage, and junk will be placed in a trash bin located on the drill site pad. It will be transported to an approved landfill for disposal within 30 days after completion of drilling and/or completion of operations. All waste material will be contained to prevent scattering by the wind.
- g) A portable chemical toilet will be provided on the location for human waste during the drilling and completion operations.

8. **Ancillary Facilities:**

No other facilities will be built as a result of the operations on this well.

9. **Well Site Layout:**

- a) Exhibit D shows the relative location and dimensions of the well pad, mud pits, reserve pit, location of the major rig components, and location of parking areas.
- b) Cut and fill requirements will be minor, but clearing and leveling of the well site will be necessary. Topsoil, if available, will be stockpiled per BLM specifications as determined at the on-site inspection.
- c) The reserve pit will be lined with a high quality plastic sheeting (5-7 mil thickness).
- d) The pad and pit area are staked and flagged.

10. Plans for Reclamation of the Surface:

- a) After completion of drilling and/or completion of operations, all equipment and other material not needed for operations will be removed. The pit area will be allowed to dry before reclamation. If the borrow pit is constructed, the cuttings in the reserve pit will be deep buried in the borrow pit, and the reserve pit and borrow pit will be broken out, filled, and leveled. The location will be cleaned of all trash and junk to leave the well site in an as aesthetically pleasing condition as possible.
- b) Three sides of the reserve pit will be fenced prior to and during drilling operations. The borrow pit will be fenced on all four sides after the location is built. At the time the rig is removed, the reserve pit will be fenced on the fourth side to prevent livestock or wildlife from being entrapped in the pits. The fencing will remain in place until the pits are cleaned up and leveled.
- c) After abandonment, all equipment, trash, and junk will be removed and the well site will be cleaned.
- d) Topsoil removed from the drill site will be used to re-contour the pit area to the original natural level. The disturbed area will be revegetated by reseeding during the proper growing season with a seed mixture of native grasses as recommended by the BLM.

11. Other Information:

- a) Topography: The land surface in the area is undulating with small sand dunes. In the immediate area of the well site, the land slope is to the southwest.
- b) Soil: Topsoil at the well site is loamy sand.
- c) Flora and Fauna: The vegetation cover is moderate. It includes range grasses, weeds, scrub oak bushes, and mesquite bushes. Wildlife in the area is that typical of a semi-arid desert land and includes coyotes, rabbits, rodents, reptiles, hawks, dove, quail, and other small birds.
- d) Ponds and Streams: There are no ponds or streams in the immediate area of the proposed location.
- e) Residences and Other Structures: There are no occupied dwellings or other structures within a mile of the proposed well site.
- f) Archaeological, Historical, or other Cultural Sites: None are known of in the area. An Archaeological survey has been conducted.

g) Land Use: Grazing, oil and gas production, and wildlife habitat.

h) Surface Ownership: U.S.A.

12. **Operator's Representative:**

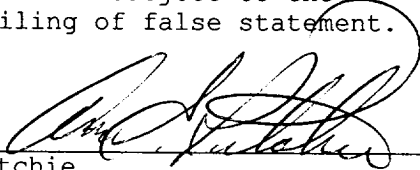
Richard L. Wright  
Division Operations Supervisor  
Pogo Producing Company  
P.O. Box 10340  
Midland, Texas 79702  
(915) 68

13. **Certification:**

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; 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 Pogo Producing Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U. S. C. 1001 for the filing of false statement.

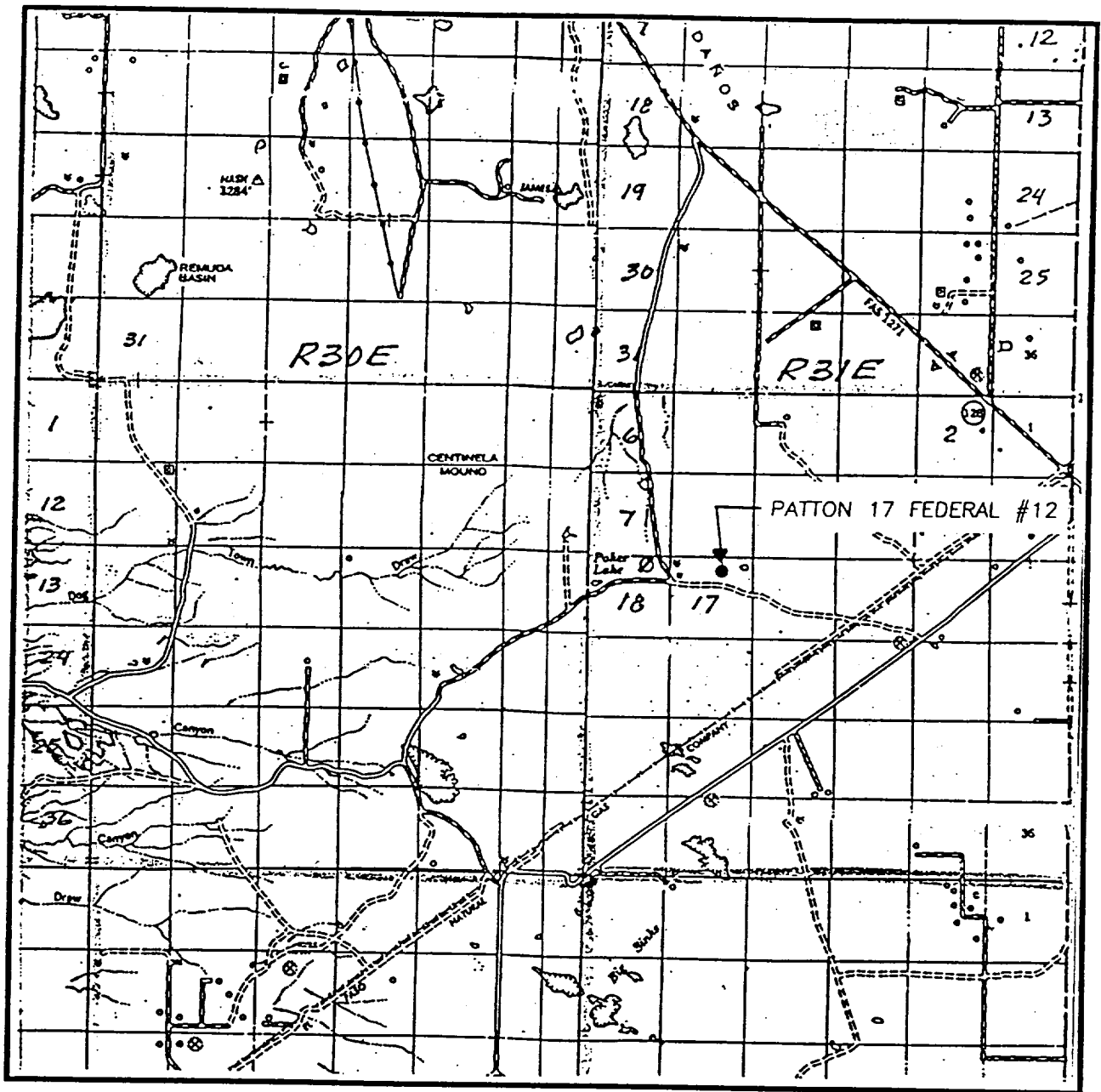
Date

3-30-01

  
Ann E. Ritchie  
Agent

Enclosures

# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 17 TWP. 24-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 990' FNL & 1980' FEL

ELEVATION 3539

OPERATOR POGO PRODUCING COMPANY

LEASE PATTON 17 FEDERAL

Exhibit "A"  
**JOHN WEST ENGINEERING**  
**HOBBS, NEW MEXICO**  
**(505) 393-3117**



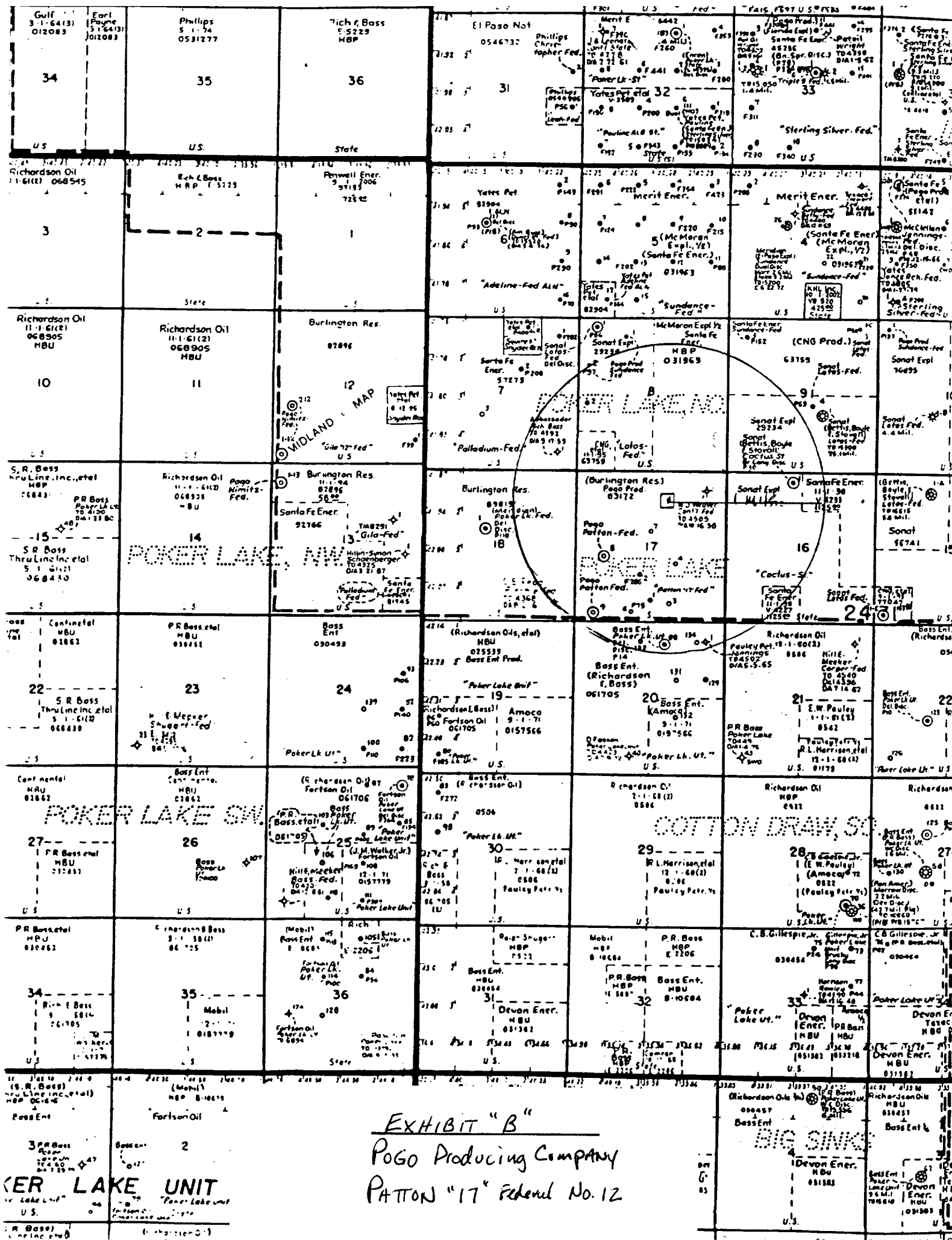
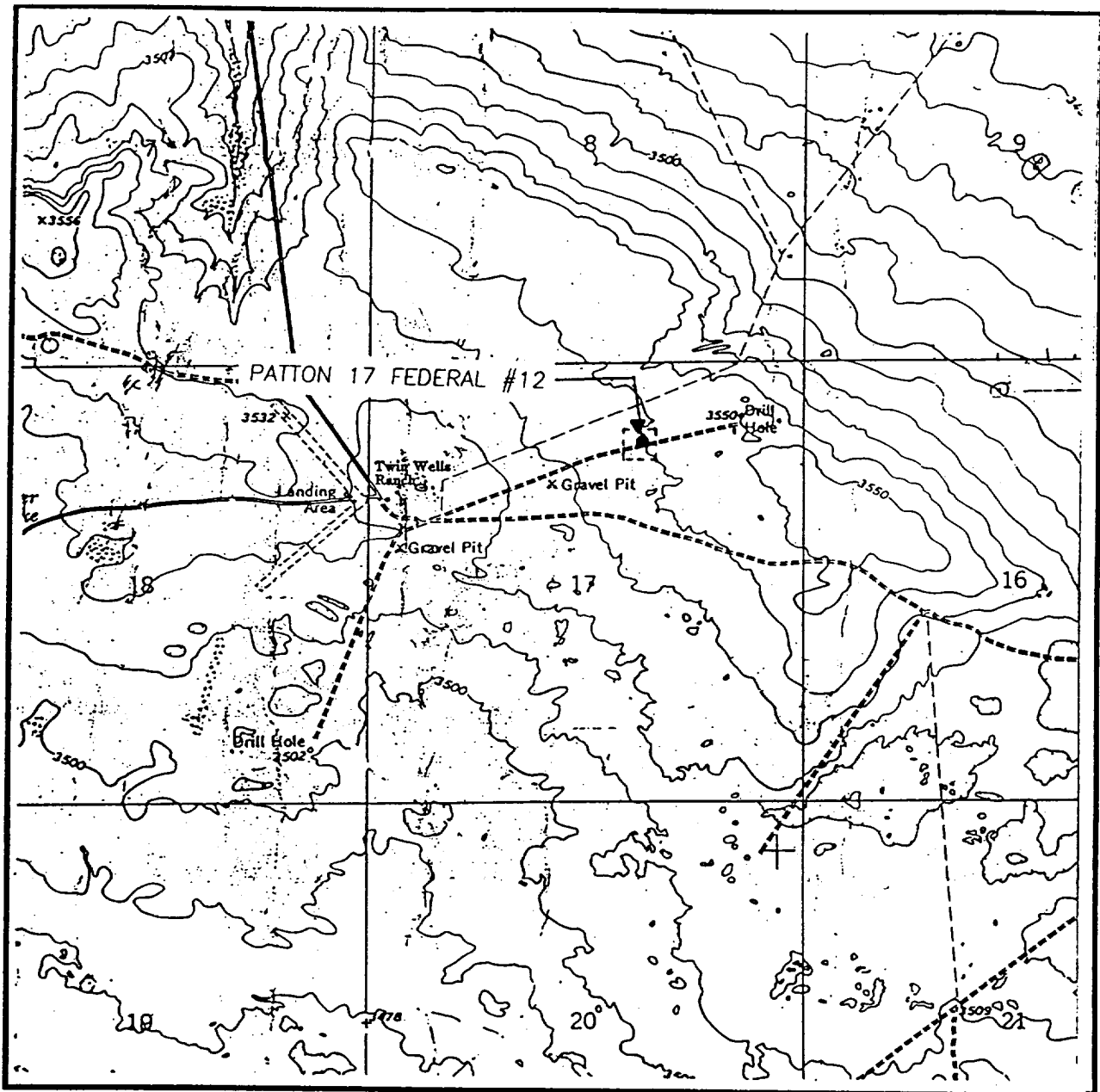


EXHIBIT "B"  
POGO Producing Company  
PATTON "17" Federal No. 12

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:  
BIG SINKS - 10'

SEC. 17 TWP. 24-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 990' FNL & 1980' FEL

ELEVATION 3539

OPERATOR POGO PRODUCING COMPANY

LEASE PATTON 17 FEDERAL

U.S.G.S. TOPOGRAPHIC MAP

BIG SINKS, N.M.

EXHIBIT "C-1"  
**JOHN WEST ENGINEERING**  
**HOBBS, NEW MEXICO**  
**(505) 393-3117**

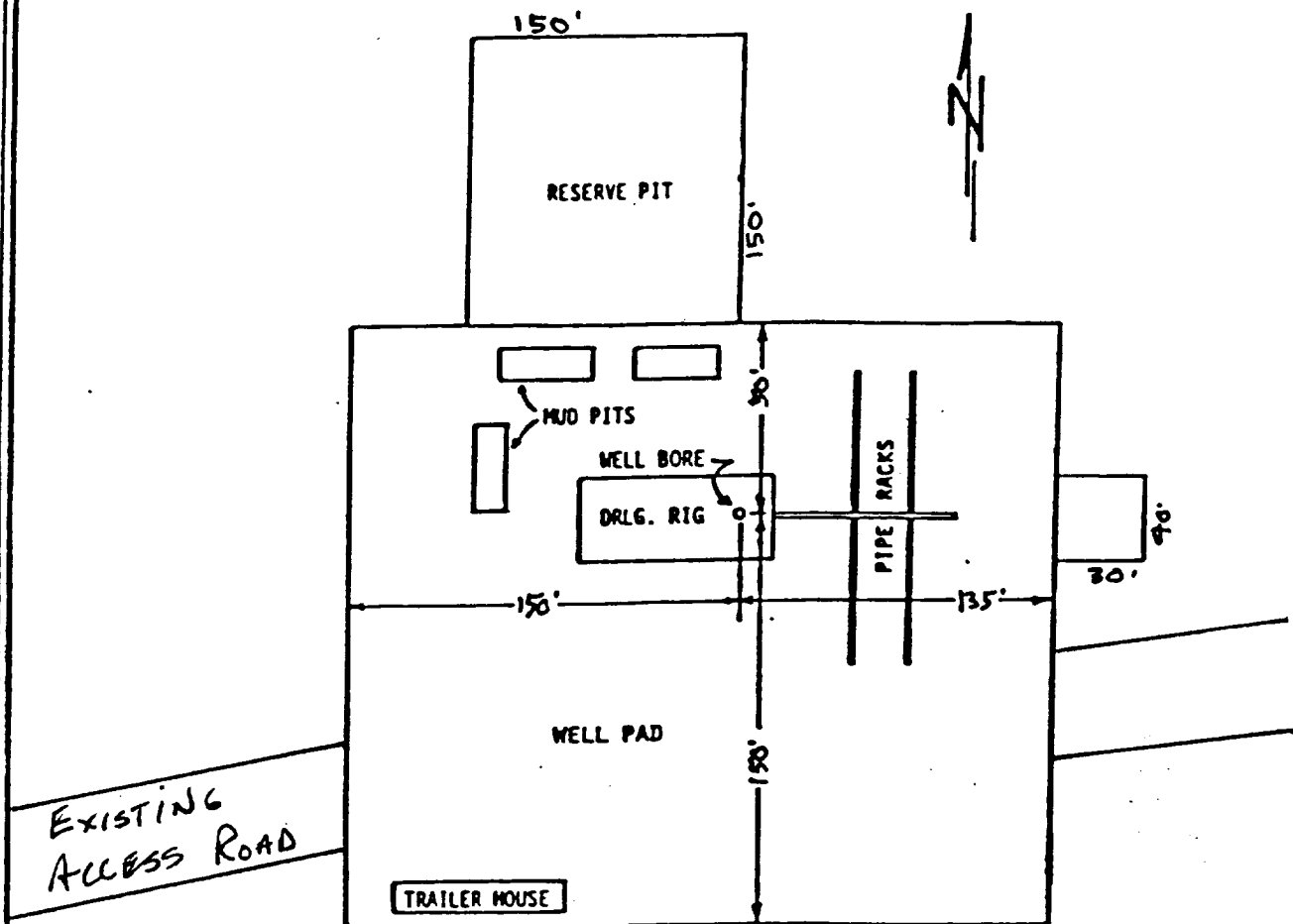


EXHIBIT "D"

Pogo Producing Company  
 PATTON "17" Fed. No. 12

DRILLING RIG LAYOUT  
 SCALE: None

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

Operators Name Pogo Producing Company  
Street or Box P.O. Box 10340  
City, State Midland, Texas  
Zip Code 79702

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

Lease No. NM- 89172

Legal Description of Land: NW/NE of Section 17, T-24S, R-31E

Formation(s) (if applicable): Delaware / Bone Springs

Bond Coverage: (State if individual bonded or another's bond) Individual

BLM Bond file No. 0405

Authorized Signature:

*Richard L. Wright*

Title: Division Operations Supr.

Date: 1-28-98

RECEIVED  
1998 FEB -2 A 9 34  
BUREAU OF LAND MGMT.  
ROSWELL OFFICE

## SPECIAL DRILLING STIPULATIONS

### THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

OPERATOR'S NAME POGO PRODUCING COMPANY WELL NO. & NAME #11 PATTON "17" FEDERAL  
LOCATION 720' F N L & 720' F E L SEC. 17, T. 24S., R. 31E.  
LEASE NO. NM-89172 COUNTY EDDY STATE NEW MEXICO

The special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CFR 3165.3 and 3165.4.

This permit is valid for a period of one year from the date of approval or until lease expiration or termination whichever is shorter.

#### I. SPECIAL ENVIRONMENT REQUIREMENTS

- ( ) Lesser Prairie Chicken (Stips attached)  
( ) San Simon Swale (Stips attached)  
( ) Floodplain (Stips attached)  
(x) Other *See attached archaeological stipulations.*

#### II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

(x) The BLM will monitor construction of this drill site. Notify the (x) Carlsbad Resource Area Office at (505) 887-6544 ( ) Hobbs Office at (505) 393-3612, at least 3 working days prior to commencing construction.

(x) Roads and the drill pad for this well must be surfaced with 6 inches of compacted caliche.

( ) All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately \_\_\_\_\_ inches in depth. Approximately \_\_\_\_\_ cubic yards of topsoil material will be stockpiled for reclamation.

( ) Other

#### III. WELL COMPLETION REQUIREMENTS

( ) A Communitization Agreement covering the acreage dedicated to the well must be filed for approval with the BLM. The effective date of the agreement must be prior to any sales.

(x) Surface Restoration: If the well is a producer, the reserve pit(s) will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at a depth of 1/2 inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre.

( ) A. Seed Mixture 1 (Loamy Site)  
Lehmans Lovegrass (*Eragrostis lehmanniana*) 1.0  
Side Oats Grass (*Bouteloua curtipendula*) 5.0  
Sand Dropseed (*Sporobolus cryptandrus*) 1.0

( ) B. Seed Mixture 2 (Sandy Sites)  
Sand Dropseed (*Sporobolus cryptandrus*) 1.0  
Sand Lovegrass (*Eragrostis trichodes*) 1.0  
Plains Bristlegrass (*Setaria magrostachya*) 2.0

( ) C. Seed Mixture 3 (Shallow Sites)  
Sideoats Grama (*Bouteloua curtipendula*) 1.0  
Lehmans Lovegrass (*Eragrostis lehmanniana*) 1.0  
or Boar Lovegrass (*E. chloromalas*)

(x) D. Seed Mixture 4 ("Gyp" Sites)  
Alkali Sacaton (*Sporobolus airoides*) 1.0  
Four-Wing Saltbush (*Atriplex canescens*) 5.0

Seeding should be done either late in the fall (September 15 - November 15, before freeze up) or early as possible the following spring to take advantage of available ground moisture.

( ) Other

#### RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6 mil plastic.

Mineral material extracted during construction of the reserve pit may be used for development of the pad and access road as needed. Removal of any additional material on location must be purchased from BLM.

Reclamation: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.

The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

#### OPTIONAL PIT CONSTRUCTION STANDARDS

The reserve pit may be constructed in predominantly fill material if:

- 1) Lined as specified above and,
- 2) A borrow/caliche/gravel pit can be constructed immediately adjacent to the reserve pit and is capable of containing all reserve pit contents. The mineral material removed in the process can be used for pad and access road construction. However, a material sales contract must be purchased from BLM prior to removal of the material.

Reclamation of the reserve pit consists of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be recontoured, all trash removed, and reseeded as specified in this permit.

#### CULTURAL

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to proceed by BLM.

#### TRASH PIT STIPS

All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

CULTURAL RESOURCES STIPULATIONS  
CARLSBAD RESOURCE AREA

SNMAS-98-NM-125

PROJECT: Pogo's Patton "17" #11

REPORT No 98-NM-067-347

X 1. SITE PROTECTION AND EMPLOYEE EDUCATION: All employees of the project will be informed that cultural sites are to be avoided by ALL PERSONNEL, PERSONAL VEHICLES AND COMPANY EQUIPMENT. They will also be notified that it is illegal to collect, damage or disturb cultural resources.

X 2. MONITORING IS REQUIRED:

X a. A copy of these stipulations to the archaeological monitor at least TWO (2) WORKING DAYS prior to the start of construction activities.

X b. No construction activities, including vegetation removal, may begin before the arrival of the archaeological monitor.

X c. The archaeological monitor will:

X 1. Ensure that the site protection barrier is located as indicated on the attached map(s)

X 2. Observe all surface disturbing activities within 100' feet of cultural site LA 121046

3. Other: \_\_\_\_\_

X 4. Submit a report of the monitoring activities within THIRTY (30) DAYS OF MONITORING unless other arrangements are made with the BLM. these stipulations must be attached to the report

X 3. THE GRANTEE MUST SELECT ONE OF THE FOLLOWING ALTERNATIVES:

\_\_\_\_\_ a. Controlled test excavations to determine if cultural resources are present:

X b. Reduction of the project size to avoid all significant cultural materials: location size reduced by 50' from north edge

X c. Relocation of the project: to 720' FNL + 720' FEL

\_\_\_\_\_ d. Preparation and implementation of a data recovery plan for cultural sites(s).

X 4. SITE BARRIER / FENCING:

X a. A temporary site protection barrier(s) will be erected prior to any + all construction. The barrier(s) will, at a minimum, consist of upright wooden survey lath spaced no more than TEN (10) FEET apart and MARKED WITH BLUE RIBBON FLAGGING OR BLUE PAINT. THERE WILL BE NO CONSTRUCTION ACTIVITIES OR VEHICULAR TRAFFIC PAST THE BARRIER(S) The barrier(s) will remain in place through reclamation and reseeding.

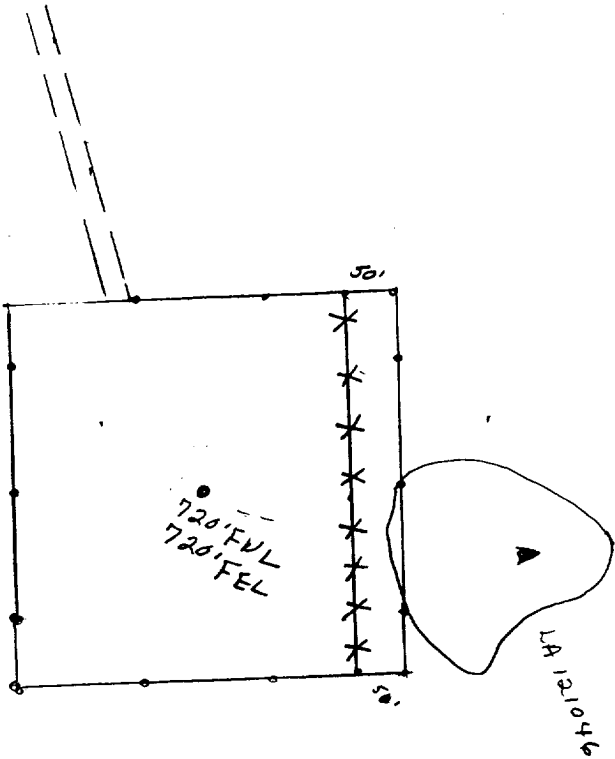
\_\_\_\_\_ b. A permanent fence(s) will be erected prior to \_\_\_\_\_ construction. THERE WILL BE NO CONSTRUCTION ACTIVES OR VEHICLE TRAFFIC PAST THE FENCE(S).

X c. The barrier(s)/fence(s) will be placed as indicated on the attached Map(s).

\_\_\_\_\_ 5. CONSTRUCTION ZONES: There will be a no construction zone \_\_\_\_\_

\_\_\_\_\_ 6. OTHER:

1"=200'



XXXXX  
Temporary Barrier fence

↑ N



## CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Pogo Producing Company  
Well Name & No. Patton 17 Federal #11  
Location: 990' FNL, 1980' FEL, Section 17, T. 24 S., R. 31 E., Eddy County, New Mexico  
Lease: NM-89172

### I. DRILLING OPERATIONS REQUIREMENTS:

The Bureau of Land Management (BLM) is to be notified at the Carlsbad Resource Area Office, 620 East Greene St., Carlsbad, NM 88220, (505) 887-6544 for wells in Eddy County in sufficient time for a representative to witness:

1. Spudding
2. Cementing casing: 10-3/4 inch 7-5/8 inch 4-1/2 inch
3. BOP tests
4. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.
6. Gamma-Ray/Neutron logs shall be run from the base of the Salado formation to the surface; cable speed not to exceed 30 feet per minute.

### II. CASING:

1. The 10-3/4 inch surface casing shall be set at 650 feet and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.
2. The minimum required fill of cement behind the 7-5/8 inch intermediate casing is to be circulated to the surface.
3. The minimum required fill of cement behind the 4-1/2 inch production casing is to tie back at least 200 feet into the intermediate casing.
4. Whenever a casing string is cemented in the R-111-P Potash Area, cement shall be allowed to stand a minimum of twelve (12) hours under pressure and a total of twenty-four (24) hours before drilling the plug or initiating tests.

### III. PRESSURE CONTROL:

The BOPE shall be installed before drilling below the 10-3/4 inch casing and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced. Before drilling below the 10-3/4 inch surface casing shoe, the blowout preventer assembly shall consist of a minimum of: One Annular Preventer and/or Two Ram-Type Preventers and a Kelly Cock/Stabbing Valve

Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 2000 psi.

The appropriate BLM<sup>2</sup> office shall be notified in sufficient time for a representative to witness the tests.

02/25/98  
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