RESUBMITTAL

N.M. Oil Cons. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

Form 3160-3
(April 2004)

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: NM-89172

6. If Indian, Allotee or Tribe Name:

1a. Type of work: [XX] DRILL [ ] REENTER — SECRETARY'S POTASH

7. If Unit or CA Agreement, Name and No.:

1b. Type of Well: [XX] Oil Well [ ] Gas Well [ ] Other [XX] Single Zone [ ] Multiple Zone

8. Lease Name and Well No.: Patton 17 Federal #11

2. Name of Operator: Pogo Producing Company

9. API Well No.: 30-015-33891

3a. Address: P.O. Box 10340, Midland, TX

3b. Phone No. *(include area code)*: 432-685-8100

10. Field and Pool, or Exploratory: Poker Lake Delaware

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface: 720' FNL & 720' FEL
At proposed prod. zone: same

11. Sec., T. R. M. or Blk. and Survey or Area: Sec 17, T24S, R31E

14. Distance in miles and direction from nearest town or post office*: 20 miles SE of Loving New Mexico

12. County or Parish: Eddy County

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any)	16. No. of acres in lease	17. Spacing Unit dedicated to this well
990'	640	40

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. on file
1320'	8350	29771

RECEIVED
JAN 10 2005
OCD-ARTESIA

21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
3550' GR	When Approved	

24. Attachments — CARLSBAD CONTROLLED WATER BASIN

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature	Name *(Printed/Typed)*	Date
Cathy Wright	Cathy Wright	11/03/04

Title: Sr. Eng. Tech

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
/s/ Linda S. C. Rundell	/s/ Linda S. C. Rundell	22 DEC 2004

Title	Office
STATE DIRECTOR	NM STATE OFFICE

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, are attached. APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

**(Instructions on page 2)*

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

Witness Surface &
Intermediate Casing

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:**

Formation	Depth	Fluid Content
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**

Hole Size	Casing From	To	Casing OD	Weight, Grade, Coupling, Cond,
14-3/4"	0'	~~650'~~ 950'	10-3/4"	32.75# H-40 STC used WITNESS
9-7/8"	0'	4,250'	7-5/8"	26.40 ~~11.60#~~ J-55 LTC used WITNESS
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'~~ 950'
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 ±3200'.
A 2-stage cement job will be required with a DV tool at ±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^2S trim will not be required.

Before drilling out from under the ~~13-3/8~~ 10-3/4" 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 ppg)(4250') - (0.22 psi/ft)(4250') = 1275 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^2S 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 ppg)(8350') - (0.22 psi/ft)(8350') = 1810 psi
Minimum BOP requirements: ~~5M~~ 2M 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:

Depth	Type	Weight (ppg)	Viscosity (sec)	Water Loss (cc)
0-~~650~~ 950'	Fresh water	8.4	28	NC
950' ~~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 first quarter, 2004. 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.

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.

3-30-01
Date

Ann E. Ritchie
Agent

Enclosures

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

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

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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
	96650	COTTON DRAW BONE SPRINGS, SW

Property Code	Property Name	Well Number
20010	PATTON "17" FEDERAL	11

OGRID No.	Operator Name	Elevation
017891	POGO PRODUCING COMPANY	3550

Surface Location

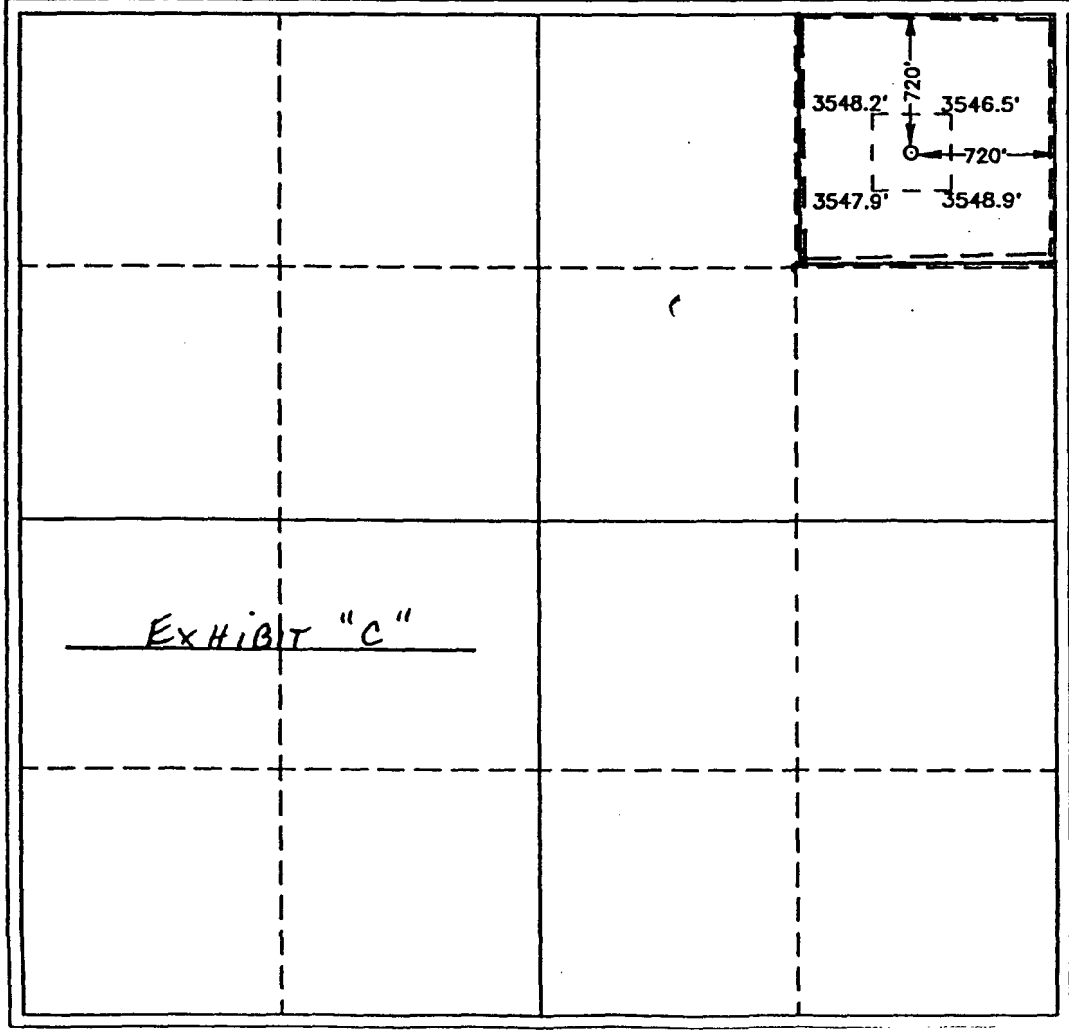
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	17	24 S	31 E		720	NORTH	720	EAST	EDDY

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



OPERATOR CERTIFICATION

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

James M.C. Ritchie Jr.
Signature

James M.C. Ritchie Jr.
Printed Name

Agent
Title

JAN. 28, 1998
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 supervison, and that the same is true and correct to the best of my belief.

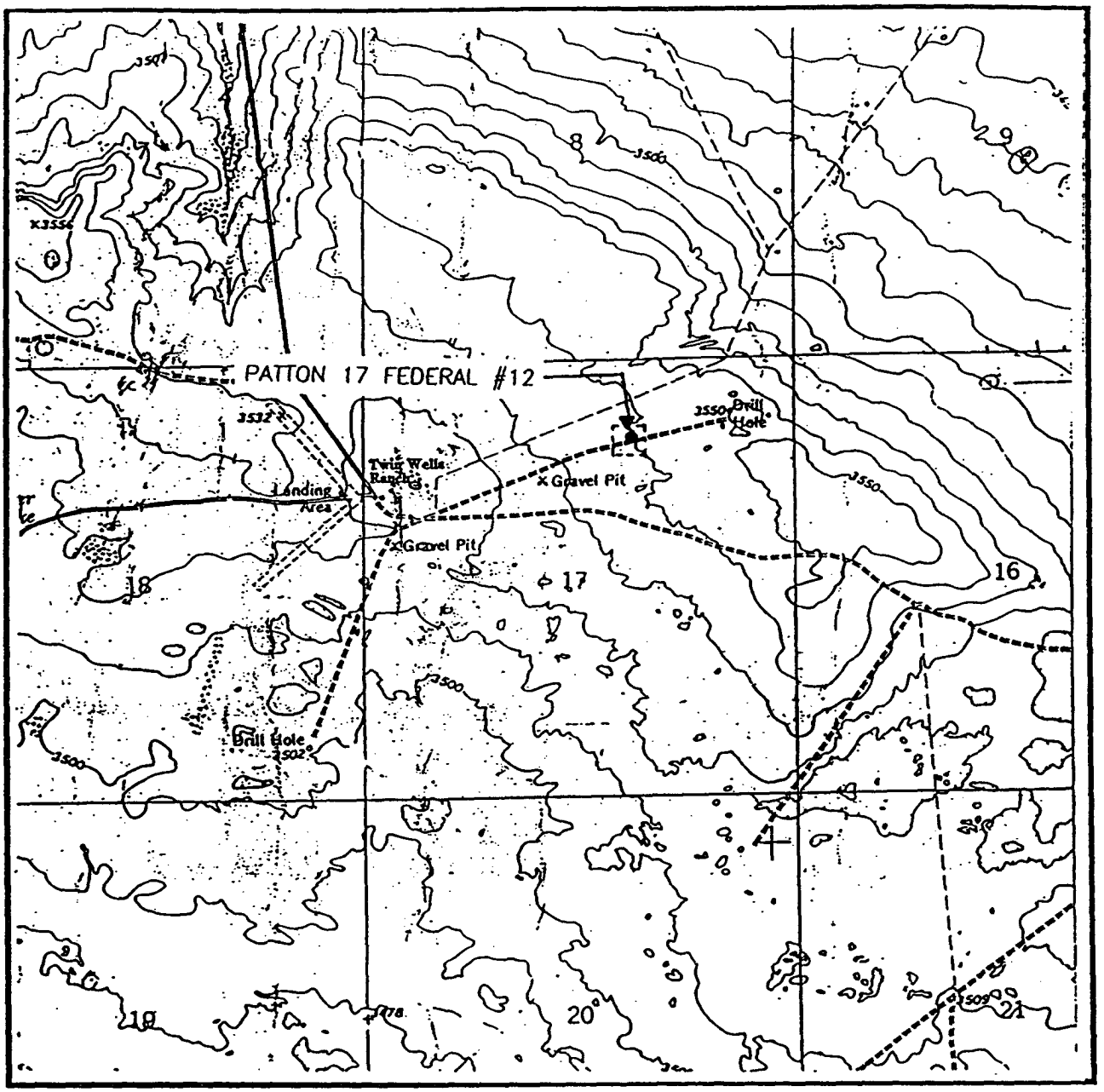
JANUARY 21, 1998

Date Surveyed JLP
Signature & Seal of Professional Surveyor
NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR
01-23-98

W.O. Num 97-11-2106

Certificate No. RONALD J. EIDSON, 3239
GARY L. EIDSON, 12641
JASON McDONALD, 12185

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

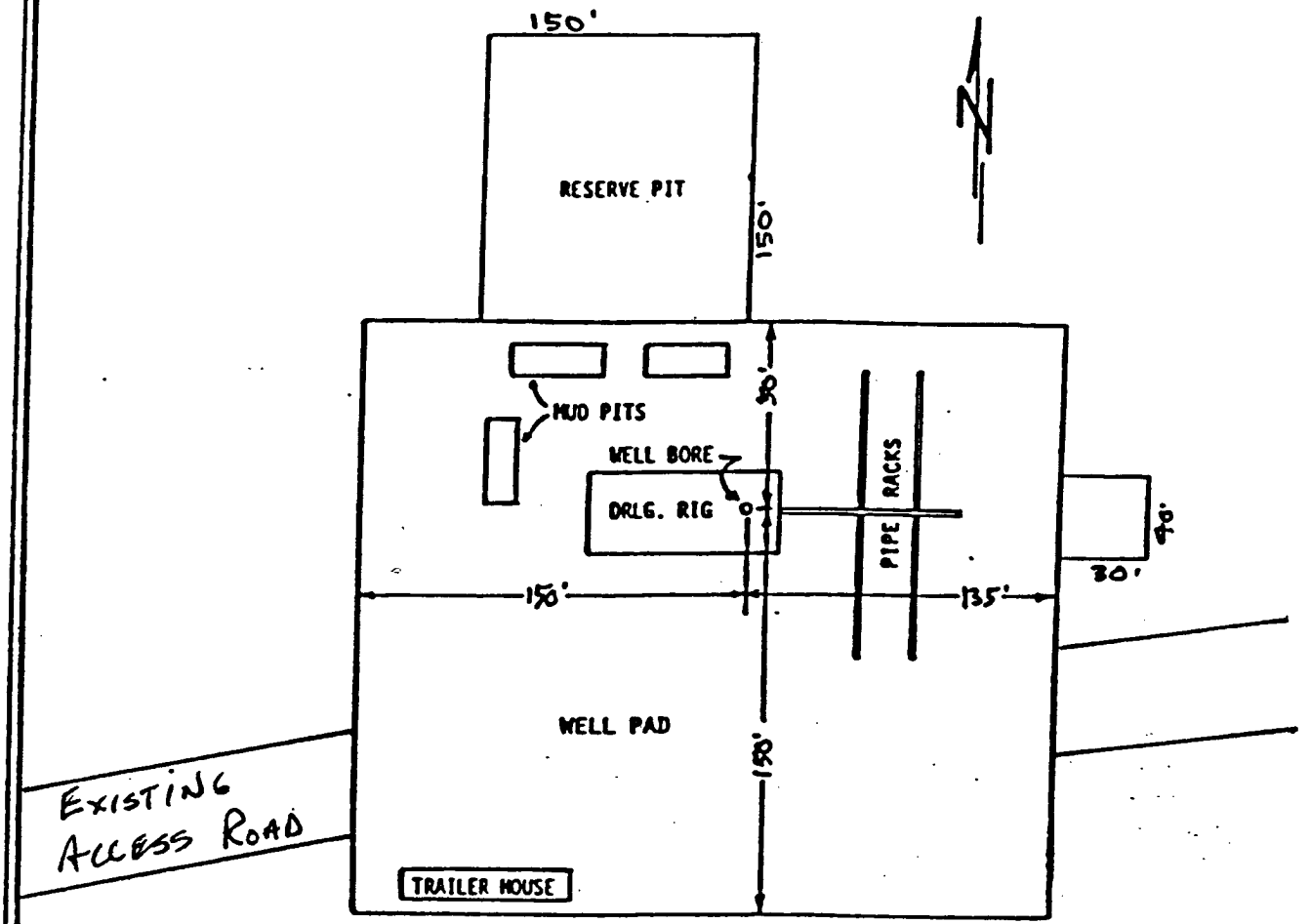


EXHIBIT "D"

Pogo Producing Company

PATTON "17" Fed. No. 12

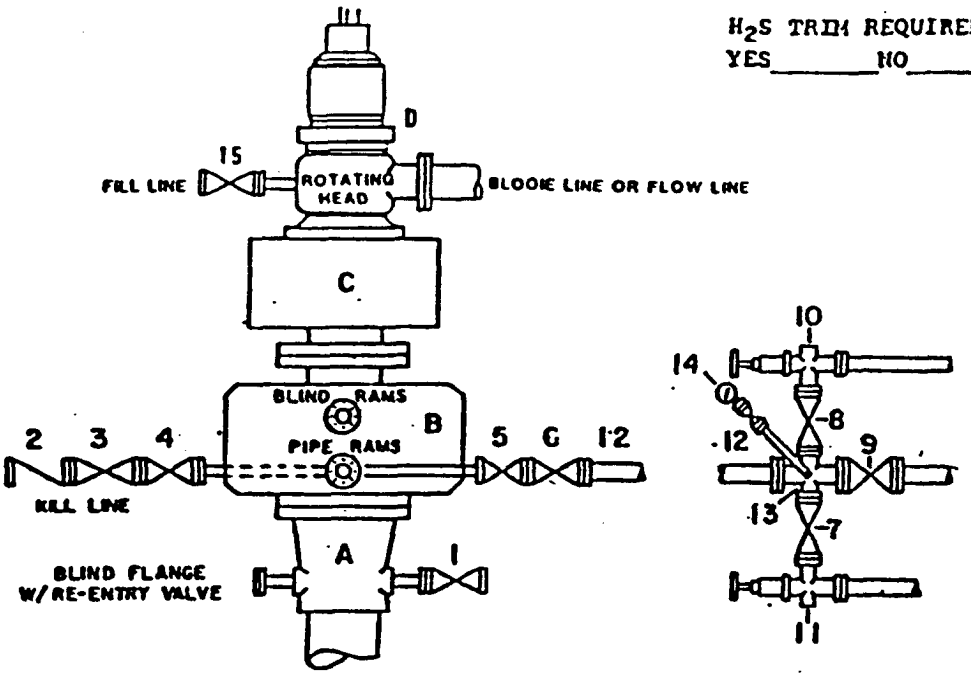
DRILLING RIG LAYOUT

SCALE: None

DRILLING CONTROL

CONDITION III-B 3000 PSI WP

H_2S 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 Blooie line.
1,3,4, 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	Caseron 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				EXHIBIT E
APPROVED BY				