

New Mexico Oil Conservation Division, District I
1625 N. French Blvd.
Hobbs, NM 88240

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM 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, TX 79702-7340 (915)685-8100

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
At surface 2310' FSL & 1980' FEL, Section 33
At proposed prod. zone Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE
30 miles East of Carlsbad, NM

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest orig. unit line, if any)
1980'

16. NO. OF ACRES IN LEASE
1160

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
9000'

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3596' GR

22. APPROX. DATE WORK WILL START
as soon as approved

PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2	J-55 13-3/8	54.5#	800'	700 sks circulate to surface
11	J-55 8-5/8	32#	4600'	1400 sks circulate to surface
7-7/8	J-55 5-1/2	17#	9000'	900 sks TOC 3600'

Per conditions of approval

1. Drill 17-1/2" hole to 800'. Run & set 800' of 13-3/8" J-55 54.5# ST&C csg. Cement w/ 500 sks light cmt. Tail in w/ 200 sks Cl "C" + 2% CaCl. Circulate to surface.
2. Drill 11" hole to 4600'. Run & set 4600' of 8-5/8" csg as follows: 300' of S-80 32# ST&C + 4300' of J-55 32# ST&C csg. Cement w/ 1200 sks light cmt + 10% salt. Tail in w/ 200 sks Premium cmt + 1% CaCl circulate cmt to surface.
3. Drill 7-7/8" hole to 9000'. Run & set 9000' of 5-1/2" csg as follows: 2000' of N-80 17# LT&C, 6000' of J-55 17# LT&C, 1000' of N-80 17#, LT&C. Cmt w/ 500 sks light cmt. Tail in w/ 400 sks premium cmt. Top of cmt to be at 3600', verify w/ log.

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS

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 brief description of program, if any.

24. SIGNED Cathy Imberlin TITLE Sr. Operation Tech DATE 10/09/02

(This space for Federal or State office use)

PERMIT NO.

APPROVAL D/

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY

ISI/ JOE G. LARA

TITLE

FIELD MANAGER

DATE

04 2003

*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.

APPROVAL FOR 1 YEAR

DISTRICT I
P.O. Box 1960, Hobbs, NM 88241-1960

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 DD, Artesia, NM 88211-0719

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

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

OIL CONSERVATION DIVISION
P.O. Box 2088

Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-36400	Pool Code 51683	Pool Name Red Tank Bone Spring
Property Code 17271	Property Name RED TANK 33 FEDERAL	Well Number 5
GRID No. 17891	Operator Name POGO PRODUCING COMPANY	Elevation 3596

Surface Location

UL or lot No. J	Section 33	Township 22 S	Range 32 E	Lot Idn	Feet from the 2310	North/South line SOUTH	Feet from the 1980	East/West line EAST	County LEA
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Bottom Hole Location If Different From Surface

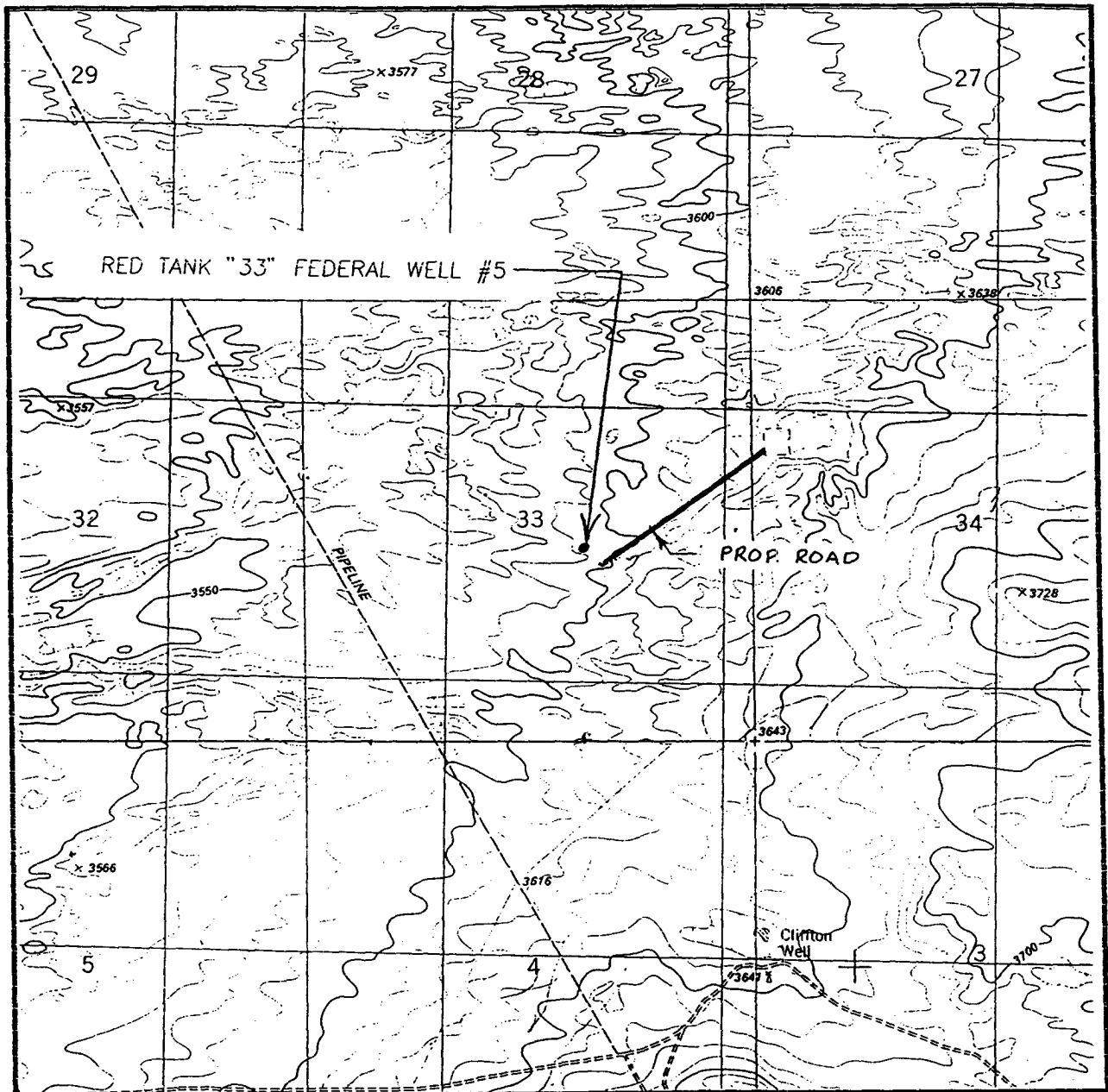
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 40					Joint or Infill	Consolidation Code	Order No.		

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	
				<p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Richard L. Wright</i> Signature Richard L. Wright Printed Name Division Operations Mgr. Title 10-17-95 Date</p>	
				SURVEYOR CERTIFICATION	
				<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>SEPTEMBER 26, 1995 Date Surveyed <i>Richard L. Wright</i> Signature & Seal of Professional Surveyor 12641 Num. 95-51-1454</p>	
				<p>SW-0. Num. 95-51-1454</p>	
				<p>WEST 676 3239 12641</p>	

EXHIBIT "A"

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL - 10'
W.5'S.1.

SEC. 33 TWP. 22-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 2310' FSL & 1980' FEL

ELEVATION 3596

OPERATOR POGO PRODUCING COMPANY

LEASE RED TANK "33" FEDERAL

U.S.G.S. TOPOGRAPHIC MAP

BOOTLEG RIDGE, N.M.

**JOHN WEST ENGINEERING
HOBBS, NEW MEXICO**

(505) 393-3117

[illegible]

(505) 393-3117

APPLICATION TO DRILL

POGO Producing Company
Red Tank Federal #5
2310' FSL & 1980' FEL Sec.33
T22S-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:
2. Elevation above sea level:
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: 9000'
6. Estimated tops of geological markers:

Rustler Anhydrite	850'	Brushy Canyon	7400'
Delaware Lime	4800'	Bone Springs	8800'
Cherry Canyon	6100'		
7. Possible mineral bearing formations:

Delaware	Oil
Bone Spring	Oil
8. Casing program:

HOLE SIZE	INTERVAL	OD CSG	WEIGHT	THREAD	COLLAR	GRADE	COND.
17-1/2"	0 - 800'	13-3/8"	54.5	8-R	ST&C	J-55	New
11"	800' -4600'	8-5/8"	32	8-R	ST&C	J-55, N80	New
7-7/8"	4600' -9000'	5-1/2"	17	8-%	LT&C	J-55, N80	New

APPLICATION TO DRILL

POGO Producing Co.
Red Tank Federal #5
2310' FSL & 1980' FEL Sec.33
T22S-R32E Lea Co. NM

9. Cementing and Setting Depth:

13-3/8" Surface Casing	Run and set 800' of 13-3/8" J-55 54.5 ST&C casing. Cement with 500 sx light cement. Tail in with 200 sx Class "C" + 2% CaCl. Circulate to surface.
8-5/8" Intermediate casing	Run and set 4600' of 8-5/8" J-55 & S-80 as follows: 300' of 32# S-80 ST&C, 4300' of 32# J-55 ST&C. Cement with 1200 sx of light cement + 10% salt, tail in with 200 sx premium cement + 1% CaCl. Circulate to surface.
5-1/2" Production casing	Run and set 9000' of J-55 & N-80 casing as follows: 2000' of 17# N-80 LT&C, 6000' of 17# J-55 LT&C, 1000' of 17# N-80 LT&C. Cement with 500 sx of light cement tail in with 400 sx premium. TC 3600'.

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 and blind ram will be worked on trips when no drill pipe is in hole. Flow sensor PVT, full opening stabbing valve and upper kelley cock will be utilized. Anticipated BHP 3600 PSI and BHT 125°

11. Proposed Mud Circulating System:

DEPTH	MUD WT.	MUD VISC.	FLUID LOSS	TYPE MUD
0-800'	8.4-8.6	30-36	N.C	Fresh water spud mud. Use paper to control seepage.
800'-4600'	9.8-10	32-36	N.C.	Brine water with Gel to control viscosity for hole cleaning. Lime for PH control 9-10 pH.
4600'-TD	9-10	38-45	6-10cc	Brine water with Gel to control viscosity PH 9&10, control with lime. Water loss thru pay section 6-10 cc.

Sufficient mud materials to maintain mud properties, meet lost circulation and weight increase requirments 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.

APPLICATION TO DRILL

POGO PRODUCING COMPANY
RED TANK "33" FEDERAL # 5
2310' FSL & 1980' FEL SEC. 33
T22S-R32E LEA CO. NM

12. Testing, Logging, and Coring Program:

- A. Mud logger will be on well from 4600' to TD.
- B. DST'S will be run when shows indicate that a test is needed.
- C. Open hole logs: Dual-laterolog, Gamma Ray, Caliper, CNL -Density.
- D. No coring is planned at this time.

13. Potential Hazards:

No abnormal pressures or temperature zones are expected in this well. (nothing abnormal encountered in offset well at this depth) Hydrogen Sulfide gas is not anticipated, however all precautions will be observed and detection equipment will be installed. No lost circulation is expected (none reported in this area). Estimated BHP 3600 PSI estimated BHT 125°. H₂S contingency plan is included in this APD.

14. Anticipated spud date and duration of operation:

Road and location will begin after the BUREAU OF LAND MANAGEMENT has approved this APD. Anticipated spud date is 01/20/96. Drilling is expected to take 25 to 30 days. If production casing is run an additional 30 days will be required to complete and construct surface facilities in order to place well on production.

15. Other facets of operation:

After running casing cased hole correlation logs will be run from TD over the pay intervals. The Bone Spring pay will be perforated and stimulated. The well will be stimulated, swab tested and completed as an oil well

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. All Company and Contract personnel admitted on location must be trained by a qualified H₂S safety instructor to the following:
 - A. Characteristics of H₂S
 - B. Physical effects and hazards
 - C. Proper use of safety equipment and life support systems
 - D. Principle and operation of H₂S detectors, warning system and briefing areas.
 - E. Evacuation procedure, routes and first aid
 - F. Proper use of 30 minute pressure demand air pack
2. H₂S Detection and Alarm Systems
 - A. H₂S 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 flag indicated potential pressure and danger. Red flag, danger, H₂S 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 chalkboard is inappropriate.
 - C. Two way radio will be used to communicate off location in case emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.
7. Drillstem Testing
 - A. All testing will be done in daylight hours.
 - B. Exhausts will be watered.
 - C. Flare line will be equipped with an electric ignitor or a propane pilot light in case gas reaches the surface.
 - D. If location is near any dwelling a closed D.S.T. will be performed.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

8. Drilling contractor supervisor will be required to be familiar with the effects H₂S has on tubular goods and other mechanical equipment.
9. If H₂S 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 H₂S scavengers if necessary.

SURFACE USE PLAN

POGO PRODUCING COMPANY

RED TANK "33" FEDERAL # 5
2310' FSL & 1980' FEL SEC. 33
T22S-R32E LEA CO. NM

1. **EXISTING ROADS.** Area map, Exhibit "B" is a reproduction of the New Mexico General Hi-way Co. Map. Exhibit "C" is a reproduction of a topographic map. Existing roads and proposed roads are shown on each exhibit. All roads will be maintained in a condition equal to or better than existed prior to start of construction.
 - A. Exhibit "A" shows the proposed development well as staked.
 - B. From Hobbs New Mexico take U.S. High-way 62-180 West toward Carlsbad New Mexico, go 38 miles to mile post 67 . Turn South on C-29 go 14 miles to Mills Ranch Road, turn East follow road in a Northeasterly direction for 5.2 miles. Turn Southeast go 1.7 miles to POGO Red Tank "34" federal #1 Turn West go 1.2 miles to Red Tank "33" Federal # 3. Turn South go .8 miles to Well # 5.
2. **PLANNED ACCESS ROADS** - Approximately 1500' of new road will be constructed.
 - A. the access road will be crowned and ditched to a 12'00" wide travel surface with a 40' right-of-way.
 - B. Gradient on all roads will be less tha 5.00%.
 - C. No turnouts will be necessary.
 - D. If needed, road will be surfaced with a minimum of 4" 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. The road will be constructed to utilize low water crossings for drainage as required by the Lopography.
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 - None known
 - D. Producing wells - As shown on Exhibit "A-1"
 - E. Abandoned wells - As shown on Exhibit "A-1"

SURFACE USE PLAN

POGO Producing Company
Red Tank Federal #5
2310' FSL & 1980' FEL SEC.33
T22S-R32-E Lea Co. NM

4. If, upon completion, the well is a producer, Pogo Producing Company will furnish maps or plats showing On Well Pad facilities and Off well Pad facilities (if needed) on a Sundry Notice before construction of these facilities starts.

5. 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.

6. 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".

7. 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 during storage. When the rig moves out, all trash and debris left at the site will be contained to prevent 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.

8. ANCILLARY FACILITIES

No camps or airstrips will be constructed.

SURFACE USE PLAN

POGO Producing Company
Red Tank Federal #5
2310' FSL & 1980' FEL Sec.33
T22S-R32E Lea Co. NM

9. 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.
- 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.

10. 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.

SURFACE USE PLAN

POGO PRODUCING COMPANY

Red Tank Federal #5
2310' FSL & 1980' FEL SEC.33
T22S-R32E Lea Co. NM

11. OTHER INFORMATION.

- A. Topography consists of sand dunes with a slight regional dip to the West. Soil supports native grasses mesquites and miniature oaks.
- B. The surface is used mainly for grazing livestock. Surface is owned by The Department of Interior BLM. Grazing lessee is J.C. Mills of Abernathy, Texas P.O. Box 190 79331.
- C. An Archeological survey will be conducted and copies will be sent to the BLM., Carlsbad Resource Area in Carlsbad NM.
- D. There are no dwellings or habitation within three miles of this location.

12. OPERATOR'S REPRESENTATIVE.

Field representative to contact regarding compliance with surface use plan:

Before Construction:

Tierra Exploration Inc.
P.O. Box 2188
Hobbs, New Mexico 88241
Office Phone 505-392-2112
Joe T. Janica

During and after construction.

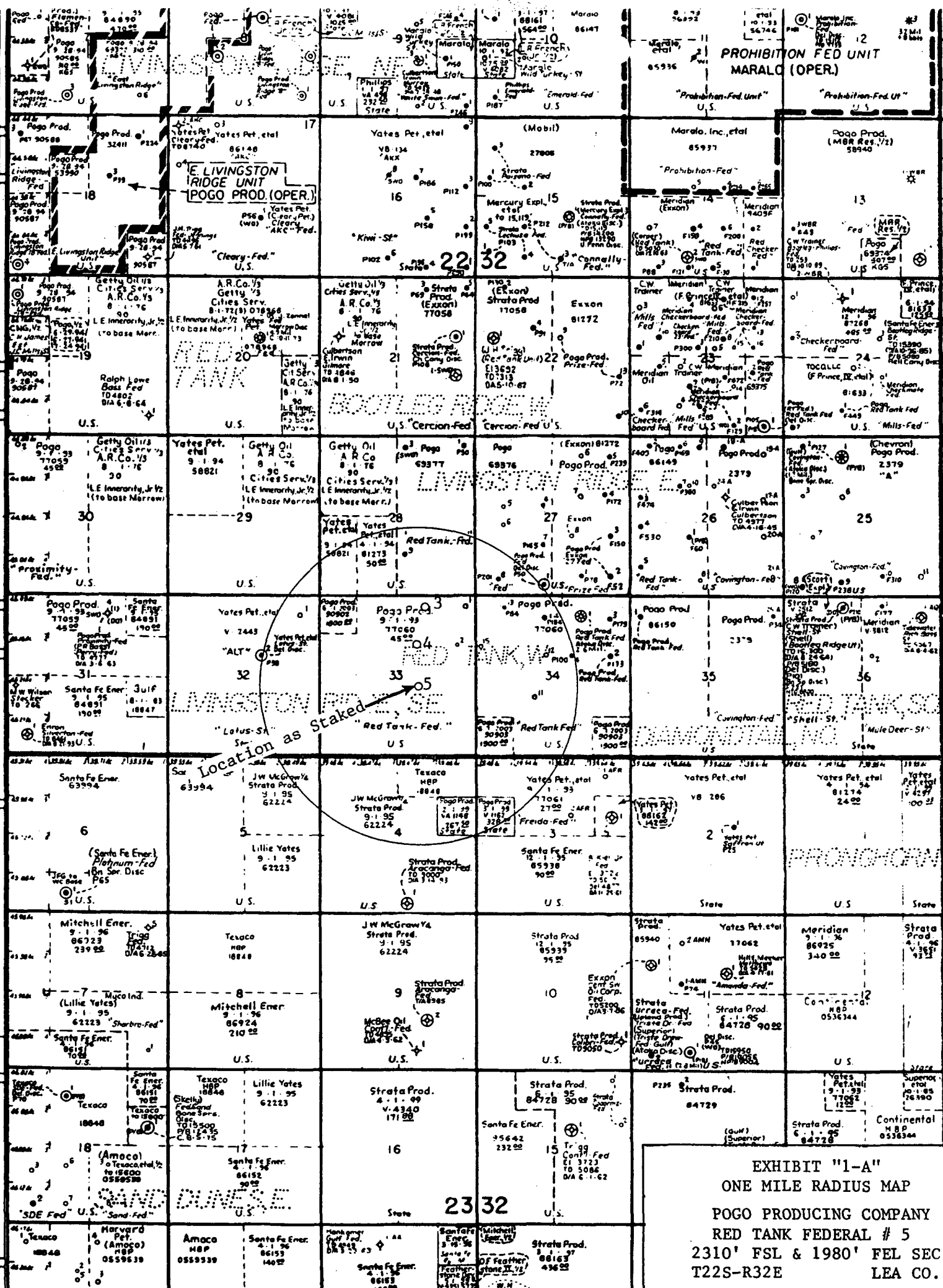
Pogo Producing Company
P.O. Box 10340
Midland, Texas 79702
Office Phone 915-685-8100
Mr. Richard Wright

13. **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, are true and correct; and that the work associated with the operations proposed herein will be performed by Pogo producing Company, its contractors/ subcontractors in conformity with this plan and the terms and conditions underwhich it is approved. This statement is subject to the provision of 18 U.S.C. 1001 for the filing of a false statement.

NAME: Joe T Janica

DATE: 10-17-95

TITLE: Agent



PROHIBITION FED UNIT
MARALO (OPER.)

E LIVINGSTON
RIDGE UNIT
POGO PROD. (OPER.)

RED TANK

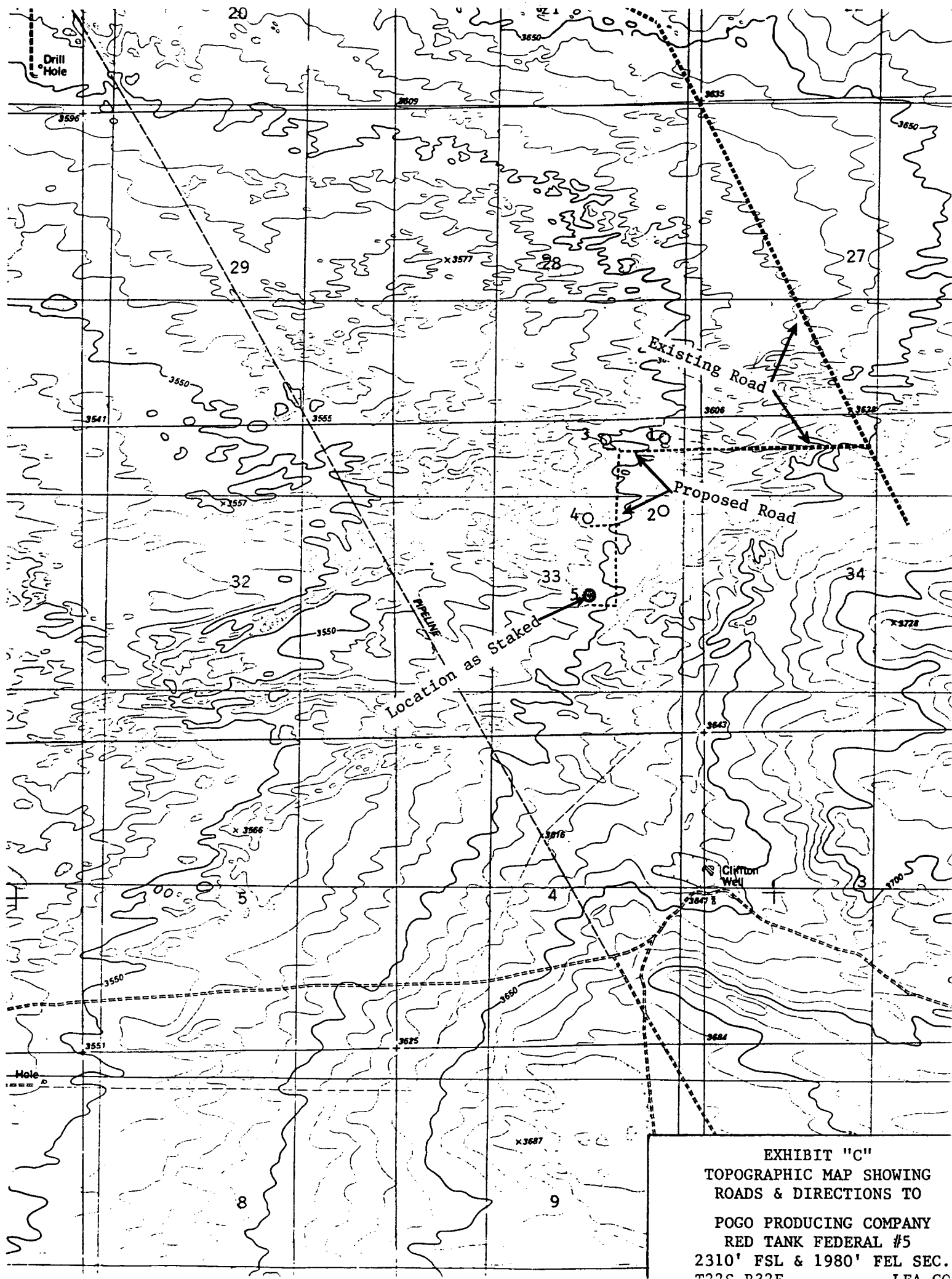
LIVINGSTON RIDGE

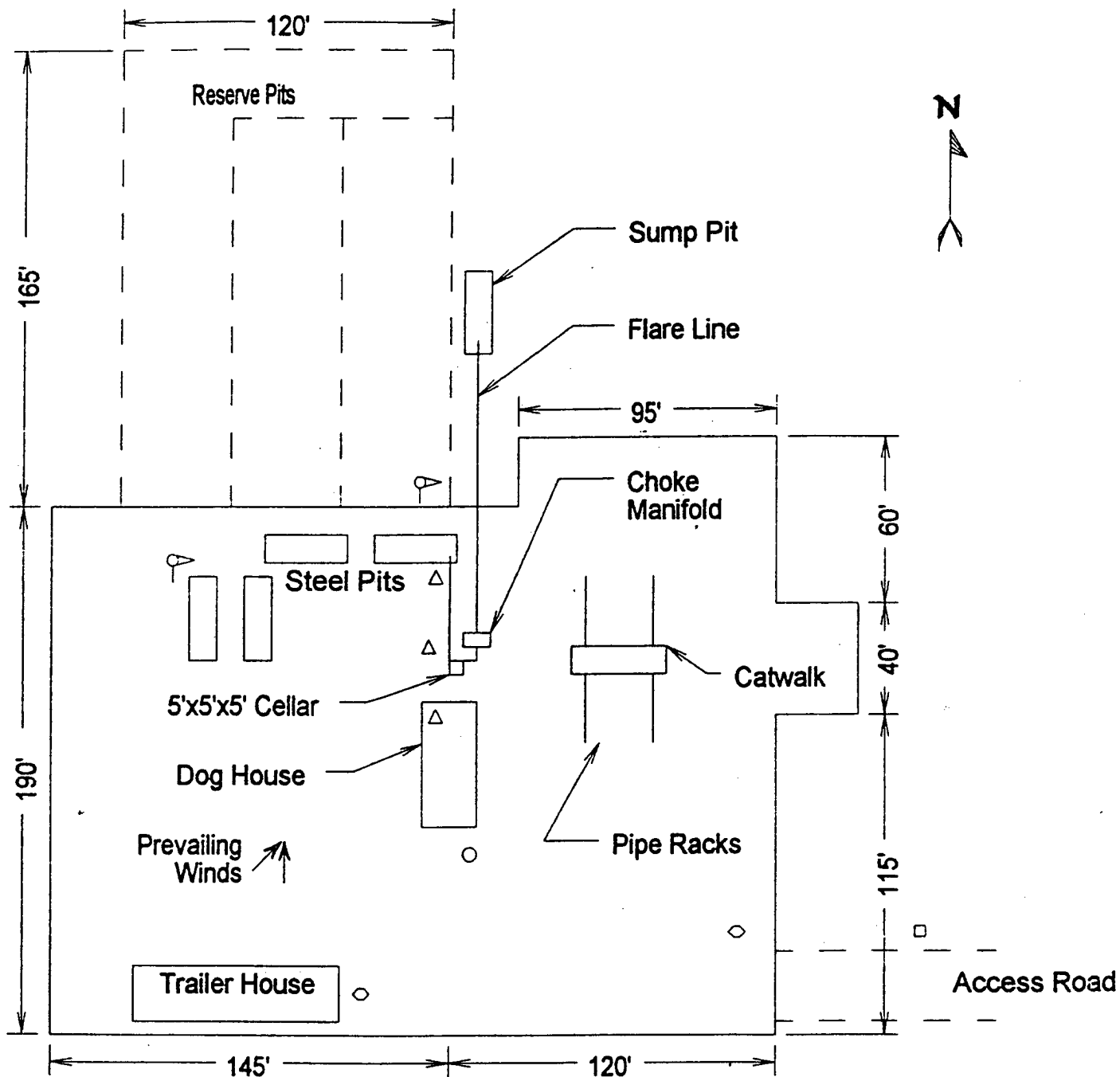
LIVINGSTON RIDGE

PRONCHORN

EXHIBIT "1-A"
ONE MILE RADIUS MAP

POGO PRODUCING COMPANY
RED TANK FEDERAL # 5
2310' FSL & 1980' FEL SEC.
T22S-R32E LEA CO.





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

EXHIBIT "D"
RIG LAYOUT PLAT
POGO PRODUCING COMPANY
RED TANK FEDERAL #5
2310' FSL & 1980' FEL SEC
T22S-R32E LEA C

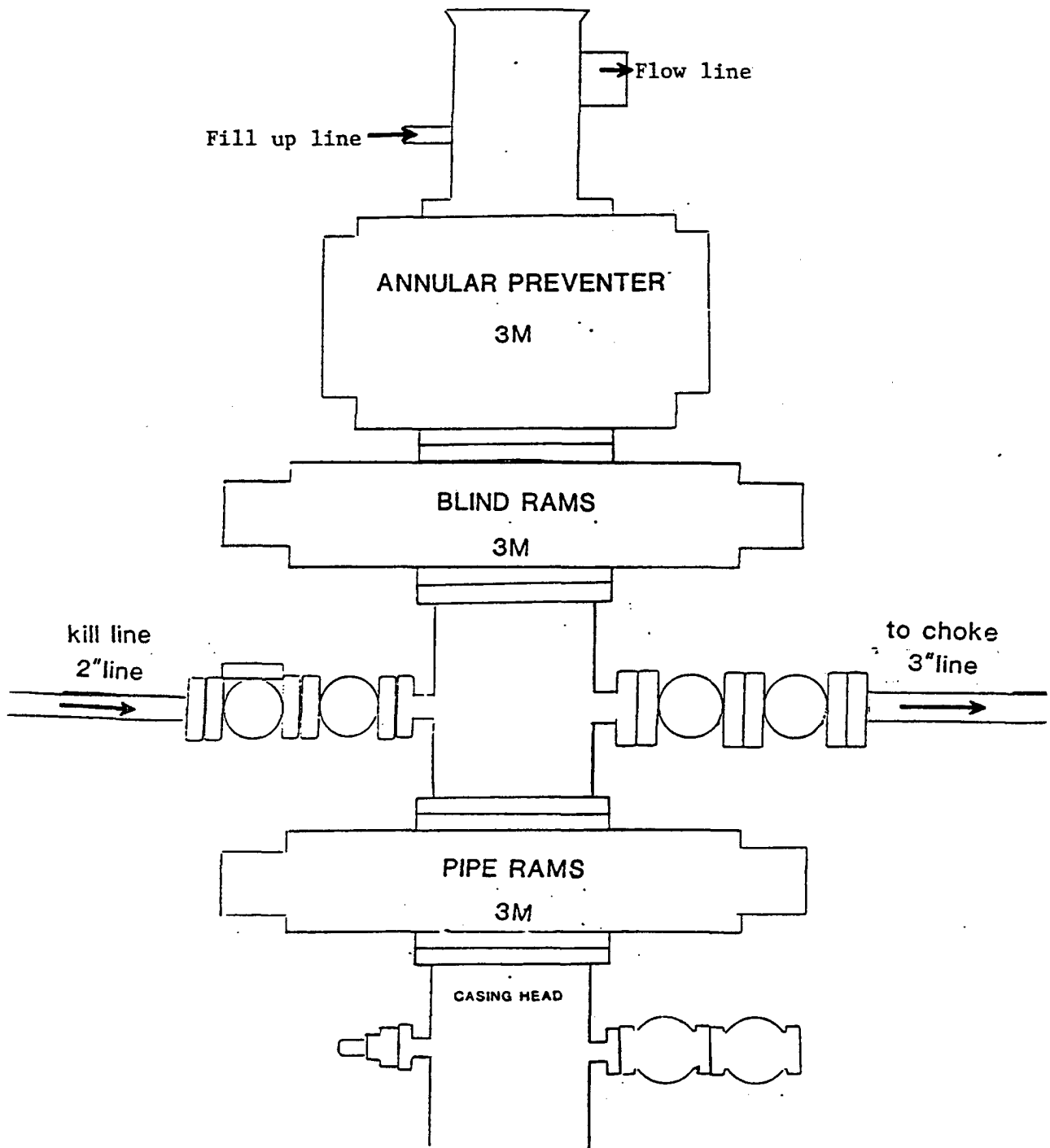
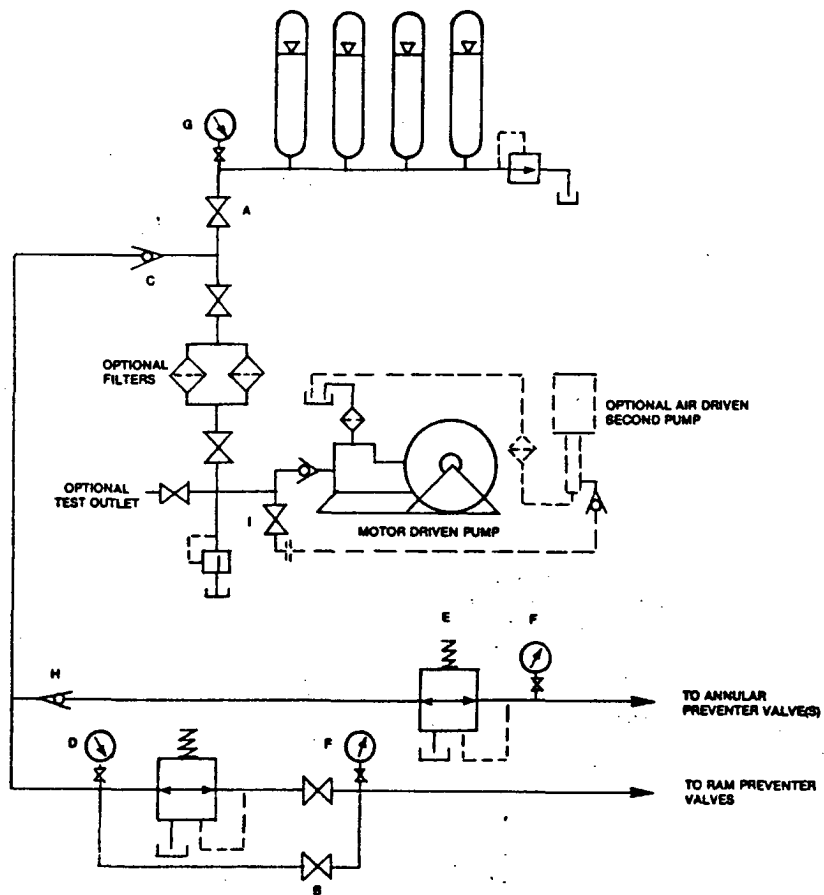


EXHIBIT "E"
 B.O.P. SKETCH TO BE USED C
 POGO PRODUCING COMPANY
 RED TANK FEDERAL #5
 2310' FSL & 1980' FEL SEC
 T22S-R32E LEA CO.



HAND AJUSTABLE CHOKE

POGO PRODUCING CO
3M CHOKE MANIFOLD

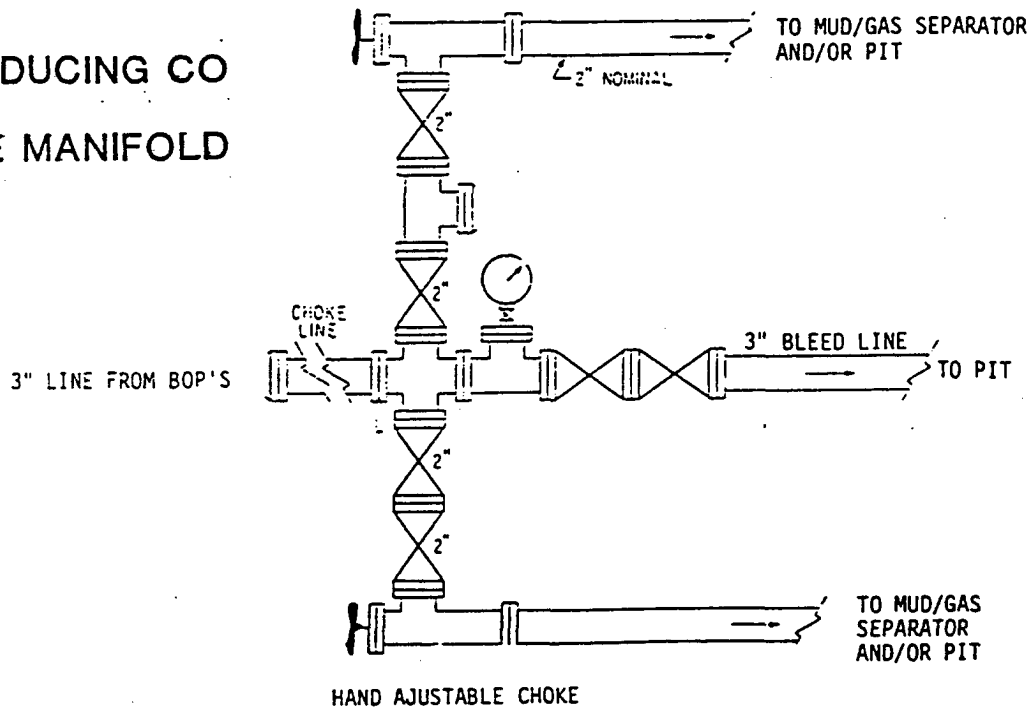


EXHIBIT "1-E"
CHOKE MANIFOLD & CLOSING UN
POGO PRODUCING COMPANY
RED TANK FEDERAL #5
2310' FSL & 1980' FEL SEC
T22S-R32E
LEA CO