Form 3160-3
(July 1992)

N.M. OPER. OGRID NO. 17891
P.O. PROPERTY NO. 9325
HOBBS TE*
UNITED POOL CODE 51683
DEPARTMENT O EFF. DATE 10/29/96
BUREAU OF LA API NO. 30-025-33652

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

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ]	5. LEASE DESIGNATION AND SERIAL NO.: NM-69376
b. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] OTHER — SINGLE ZONE [X] MULTIPLE ZONE [ ]	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: ----------
	7. UNIT AGREEMENT NAME: ----------
	8. FARM OR LEASE NAME, WELL NO.: Federal "27" # 2
2. NAME OF OPERATOR: POGO PRODUCING COMPANY (RICHARD WRIGHT)	9. API WELL NO.
3. ADDRESS AND TELEPHONE NO.: P.O. BOX 10340 MIDLAND, TEXAS 79702 Ph. 915-682-6822	10. FIELD AND POOL, OR WILDCAT: Red Tank-Bone Spring
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*) At surface: 990' FNL & 990' FWL SEC. 27 T22S-R32E LEA CO. NEW MEXICO	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 27 T22S-R32E
At proposed prod. zone: Same Unit D	12. COUNTY OR PARISH: Lea Co. 13. STATE: New Mexico
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: Approximately 30 miles East of Carlsbad, New Mexico	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 990'	16. NO. OF ACRES IN LEASE: 320 — 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.: 990'	19. PROPOSED DEPTH: 9000' — 20. ROTARY OR CABLE TOOLS: Rotary
21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3627' GR.	22. APPROX. DATE WORK WILL START*: As soon as approved

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
26"	20" Conductor	NA	40'	Cement to surface W/Redi-Mix
14 3/4"	H-40 10 3/4"	32.75	800'	650 Sx. circulate cement to surface
9 7/8"	J-55,N-80 7 5/8"	26.4	4650'	1300 Sx circulate cement to surface
6 3/4"	J-55,N-80 4½"	11.6	9000	1100 Sx. Top of cement 3600'

1. Drill 26" hole to 40'. Set 40' of 20" conductor cement to surface W/Redi-Mix.
2. Drill 14 3/4" hole to 800'. Run and set 800' of H-40 32.75# ST&C casing. Cement with 650 Sx. Class "C" cement + additives, circulate cement to surface.
3. Drill 9 7/8" hole to 4650'. Run and set 4650' of 7 5/8" 26.4# casing, 1500' of N-80, 3000' of J-55 and 150' of N-80. Cement with 800 Sx. Halco Light tail in with 500 Sx. Premium + additives, circulate cement to surface.
4. Drill 6 3/4" hole to 9000'. Run and set 9000' of 4½" 11.6 # casing, 1500' of N-80 LT&C, 4800' of J-55 LT&C, 2700' of N-80 LT&C casing. Cement with 700 Sx. Halco Light + additives, tail in with 400 Sx. Premium Plus + additives, bring cement back to 3600' verify with log.

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 Joe T Janica TITLE Agent DATE 09/14/96

(This space for Federal or State office use)

PERMIT NO. ---------- APPROVAL DATE Attached

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.) RICHARD L. MANUS TITLE Area Manager DATE OCT 23 1996

*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.

GENERAL REQUIREMENTS and Special Stipulations Attached

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, N.M. 87504-2088

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-025-33652	51683	RED TANK BONE SPRING

Property Code	Property Name	Well Number
9325	FEDERAL 27	2

OGRID No.	Operator Name	Elevation
17891	POGO PRODUCING COMPANY	3627'

Surface Location

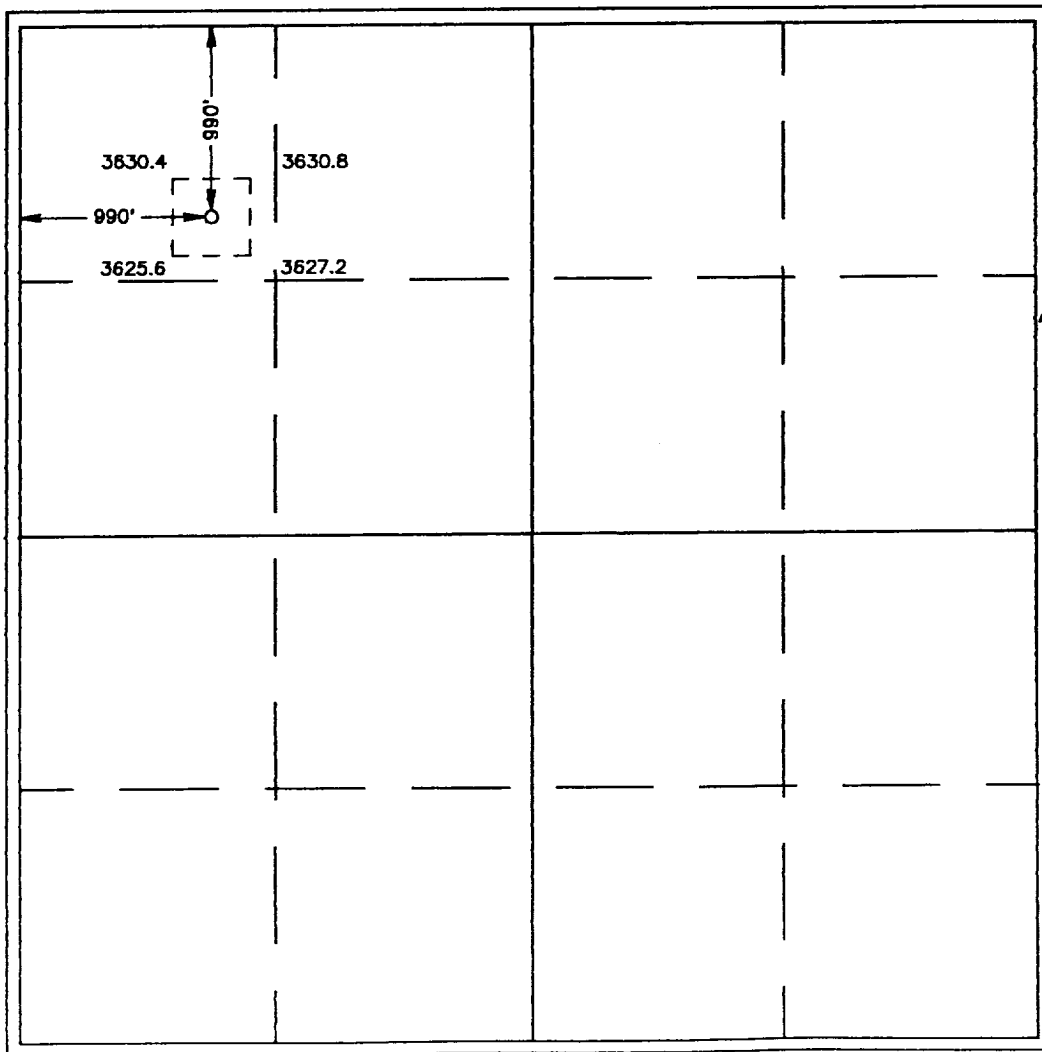
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	27	22 S	32 E		990	NORTH	990	WEST	LEA

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.
40			

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.

Signature: Joe T. Janica

Printed Name: Joe T. Janica

Title: Agent

Date: 09/16/96

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.

SEPTEMBER 5, 1996

Date Surveyed

Signature & Seal of Professional Surveyor

RONALD J. EIDSON NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR

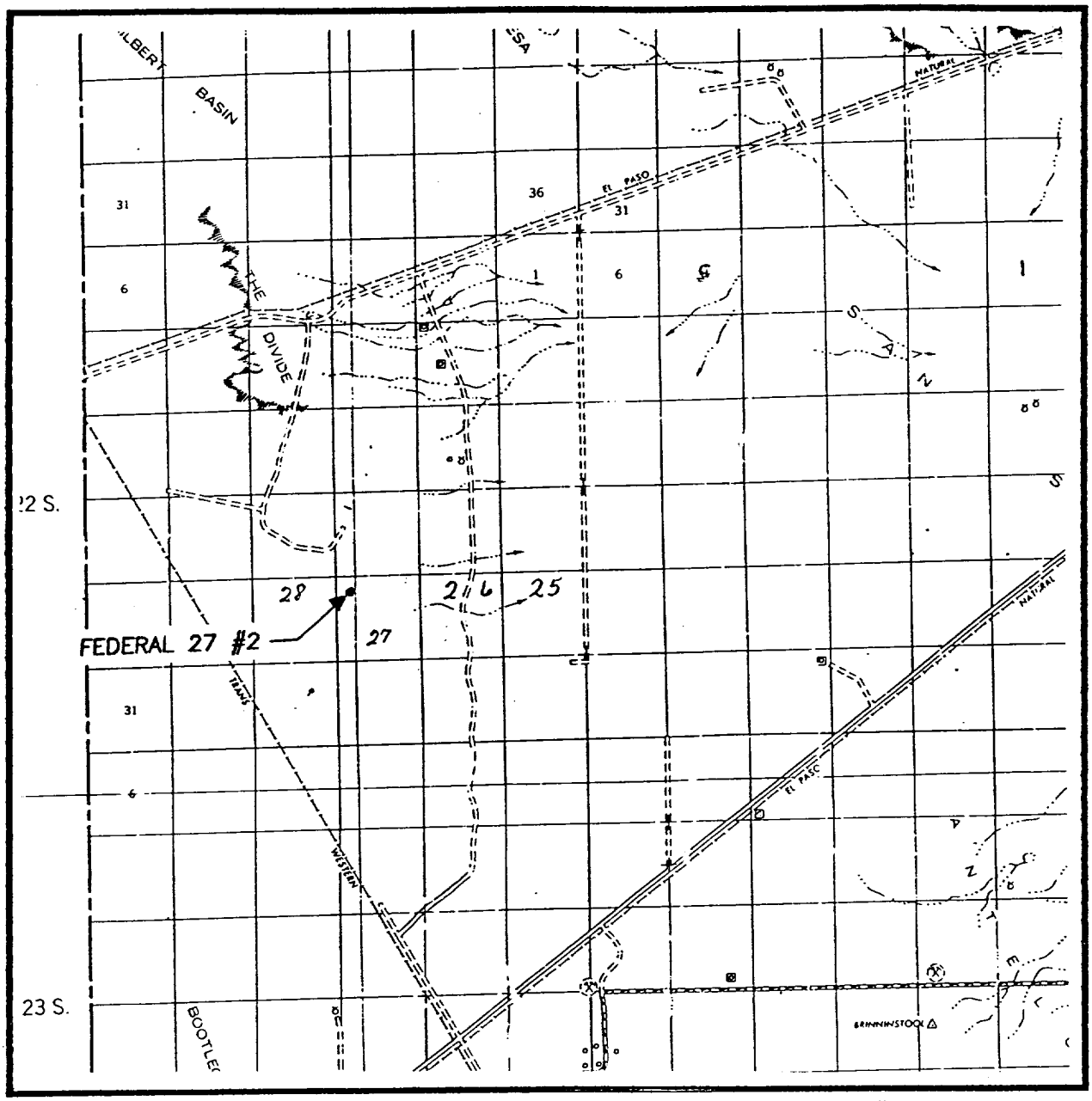
9-11-96

W.O. Num. 96-11-1132

Certificate No. JOHN W. WEST 676
RONALD J. EIDSON 3239
GARY EIDSON 12641

EXHIBIT "A"

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 27 TWP. 22-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 990' FNL & 990' FWL

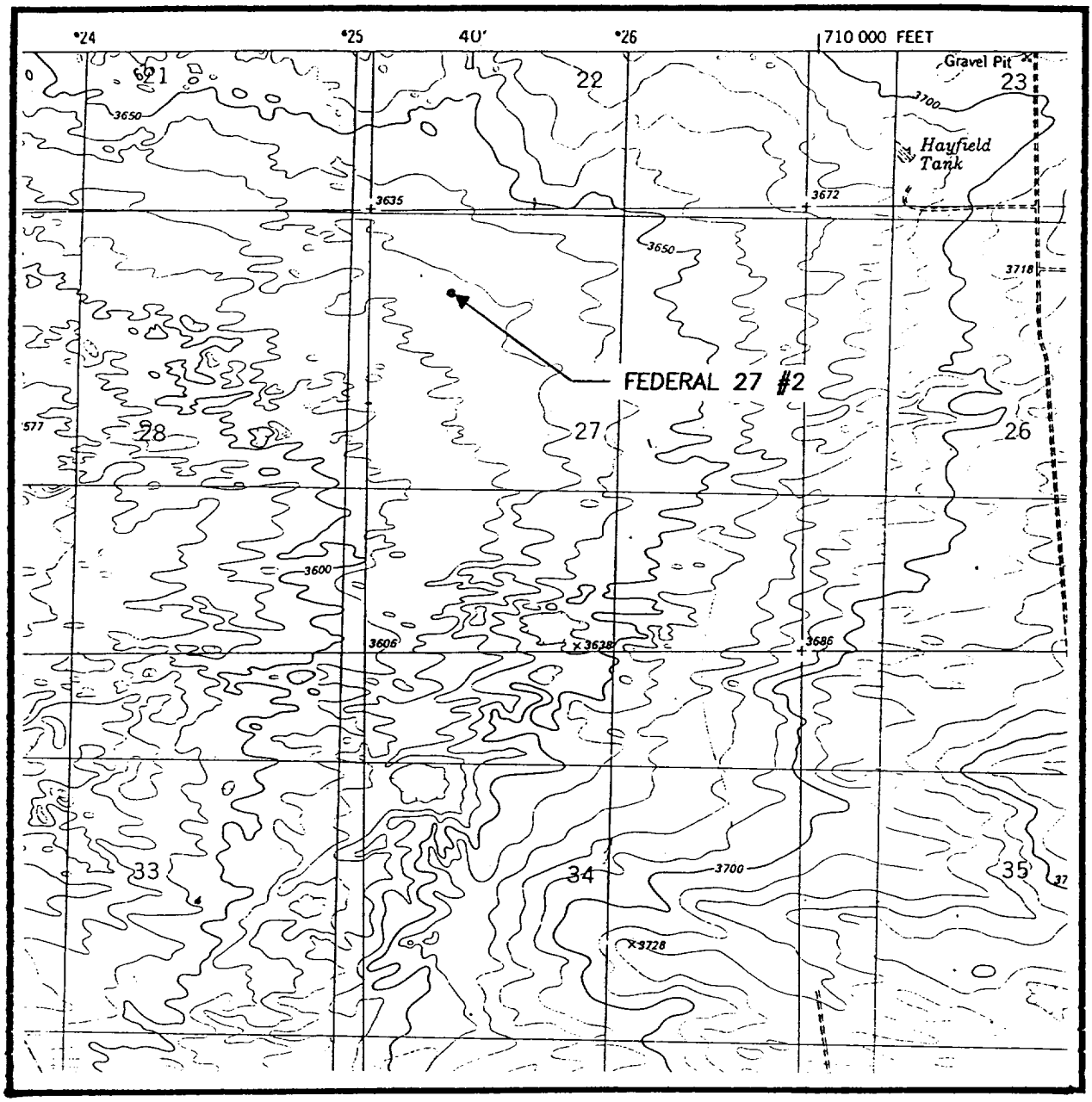
ELEVATION 3627'

OPERATOR POGO PRODUCING CO.

LEASE FEDERAL 27

JOHN WEST ENGINEERING
HOBBS, NEW MEXICO
(505) 393-3117

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
BOOTLEG RIDGE – 10'

SEC. 27 TWP. 22-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 990' FNL & 990' FWL

ELEVATION 3627'

OPERATOR POGO PRODUCING CO.

LEASE FEDERAL 27

U.S.G.S. TOPOGRAPHIC MAP
BOOTLEG RIDGE, N. MEX.

JOHN WEST ENGINEERING
HOBBS, NEW MEXICO
(505) 393-3117

APPLICATION TO DRILL

POGO PRODUCING COMPANY
FEDERAL 27 #2
990' FNL & 990' FWL SEC.27
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: 990' FNL & 990' FWL SEC. 27 T22S-R32E LEA CO. NEW MEXICO.

2. Elevation above sea level: 3627' GR.

3. Geologic name of surface formation: Quaternery 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 Spring	8800'
Cherry Canyon	6100'		

7. Possible mineral bearing formation:

Delaware	Oil
Bone Spring	Oil

8. Casing program:

Hole size	Interval	OD casing	Weight	Thread	Collar	Grade	Condition
14 3/4"	0-800'	10 3/4"	32.75	8-R	ST&C	H-40	New
9 7/8"	0-4650'	7 5/8"	26.4	8-R	ST&C	J-55 & N-80	New
6 3/4"	0-9000'	4½"	11.6	8-R	ST&C	J-55 & N-80	New

APPLICATION TO DRILL

POGO PRODUCING COMPANY
FEDERAL 27 #2
990' FNL & 990' FWL SEC.27
T22S-R32E LEA CO. NM

9. Cementing and Setting Depth:

20"	Conductor	Set 40' of 20" conductor cement to surface with Redi-Mix.
10 3/4"	Surface	Set 800' of 10 3/4" casing, cement with 600 Sx. Class "C" + additives, circulate to surface.
7 5/8"	Intermediate	Set 4650' of 7 5/8" casing, cement with 800 Sx. Halco Light + additives, tail in with 500 Sx. Premium cement + additives circulate to surface.
4½"	Production	Set 9000' of 4½" casing, cement with 600 Sx. Halco Light + additives, tail in with 500 Sx. Premium Plus + additives, top cement 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 annular type preventer all 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 nippled up on 10 3/4"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.

11. Proposed Mud Circulating System:

Depth	Mud Wt.	Mud Visc.	Fluid Loss	Type Mud
40-800'	8.4-8.6	29-36	NC	Fresh water Spud mud add paper for seepage control.
800-4650'	10.-10.5	29-30	NC	Brine water add paper for seepage control and lime for pH control.
4650'-9000'	8.4-8.6	29-36	NC	Fresh water use Gel for viscosity and paper for seepage control.

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

APPLICATION TO DRILL

POGO PRODUCING COMPANY
FEDERAL 27 #2
990' FNL & 990' FWL SEC.27
T22S-R32E LEA CO. NM

12. Testing, Logging and Coring Program:

A. Mud logger will be on hole from 4650' to TD.

B. No cores or DST'S are planned.

C. Open hole logs will be run, Dual Induction, Gamma Ray, Caliper, Density and CNL.

13. Potential Hazards:

No abnormal pressures or temperatures are expected. Hydrogen Sulfide gas may be encountered, H_2S detectors will be in place to detect any presence. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used. Estimated BHP 3700 PSI, estimated BHT 145° .

14. Anticipated Starting Date and Duration of Operation:

Road and location construction will begin after BLM approval of APD. Anticipated spud date as soon as approved. Drilling expected to take 20-25 days. If production casing is run an additional 30 days to complete and construct surface facility and place well on production.

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 potentialed 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_2S safety instructor to the following:

   A. Characteristics of H_2S
   B. Physical effects and hazzards
   C. Proper use of safety equipment and life support systems.
   D. Principle and operation of H_2S 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_2S Detection and Alarm Systems

   A. H_2S 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 indicates potential pressure and danger. Red flag, danger, H_2S 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. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephoned 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 H_2S has on tubular goods and other mechanical equipment.

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

APPLICATION TO DRILL

POGO PRODUCING COMPANY
FEDERAL 27 #2
990' FNL & 990' FWL SEC.27
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 developement well as staked.

   B. From Hobbs New Mexico take US Highway 62-180 West towards Carlsbad New Mexico go 38 miles to Co. road C-29, turn South go 14 miles to Mills Ranch Road, turn East and follow oil field road 5.2 miles turn Southeast go .6 miles turn East go 200' to location on the North side of road

   C. The construction of powerlines and laying of pipelines will be along existing roads or along existing Right of Ways.

2. PLANNED ACCESS ROADS - Approximately 100' 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 - Comanche wells approximately 2.2 miles North Northeast.

   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"

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 commercial 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 "C".

7. METHODS FOR HANDLING WASTE DISPOSAL

A. 1. Drill cuttings will be disposed of in the reserve pit.

2. All trash, junk and other waste material will be contained in trash cages or bins to prevent scattering. When the job is completed all contents will be removed and deposited in an approved sanitary landfill.

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. Pits will then be broken out to speed drying.

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 FACILITILS

No camps or airstrips will be constructed.

9. WELL SITE LAYOUT

A. Exhibit "D" shows rig site layout.

B. This exhibit indicates proposed location of reserve and trash 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 PVC or polyethylene line. 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 recountered 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
990' FNL & 990' FWL SEC. 27
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 mainlu 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, N.M.

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, NM 88241
Office Phone: 505-392-2112
Joe T. Janica

During and after Construction

Pogo Producing Company
P.O. Box 10340
Midland, Tx 79702
Office Phone: 915-682-6822
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: 09/14/96

TITLE: AGENT

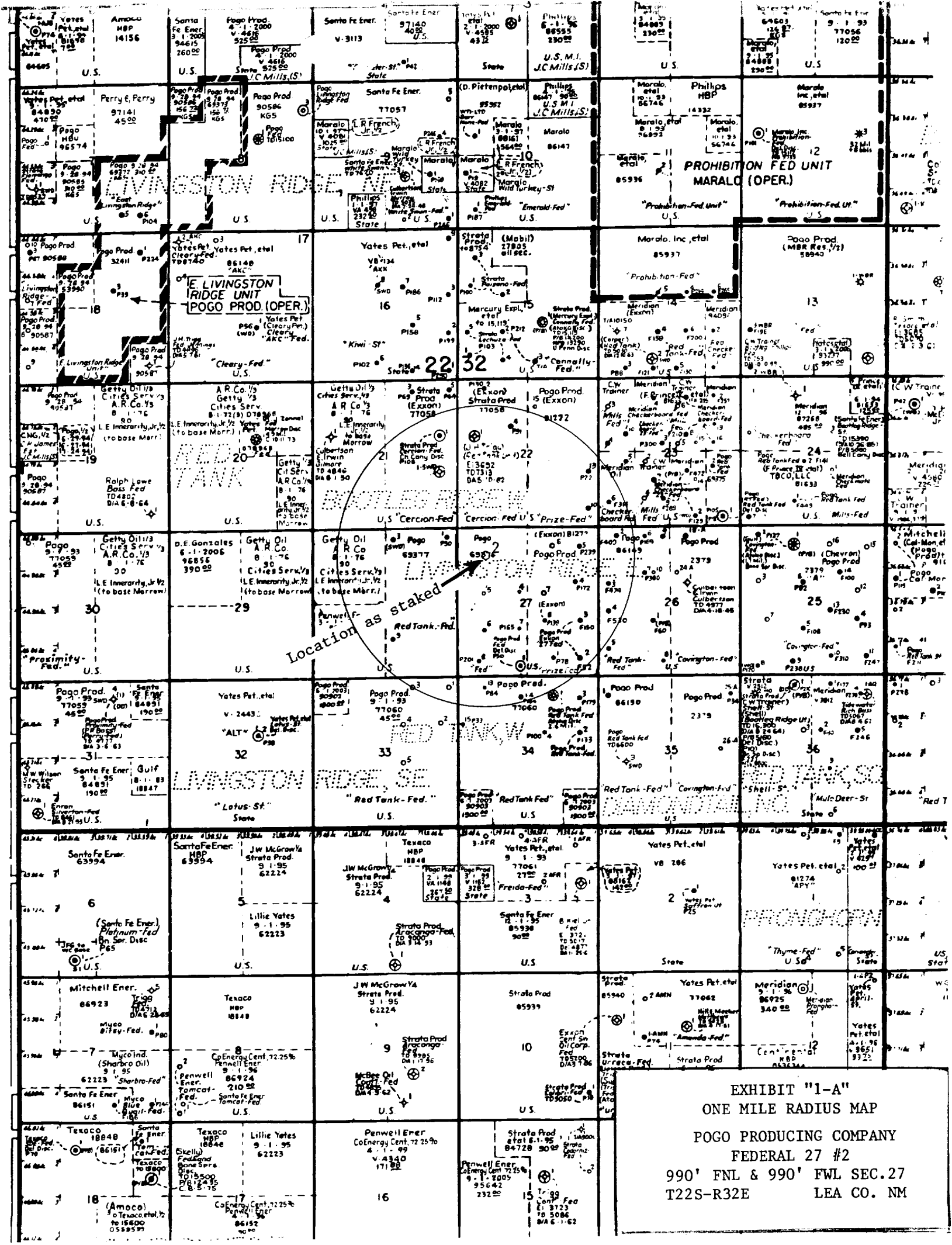


EXHIBIT "1-A"
ONE MILE RADIUS MAP

POGO PRODUCING COMPANY
FEDERAL 27 #2
990' FNL & 990' FWL SEC.27
T22S-R32E LEA CO. NM

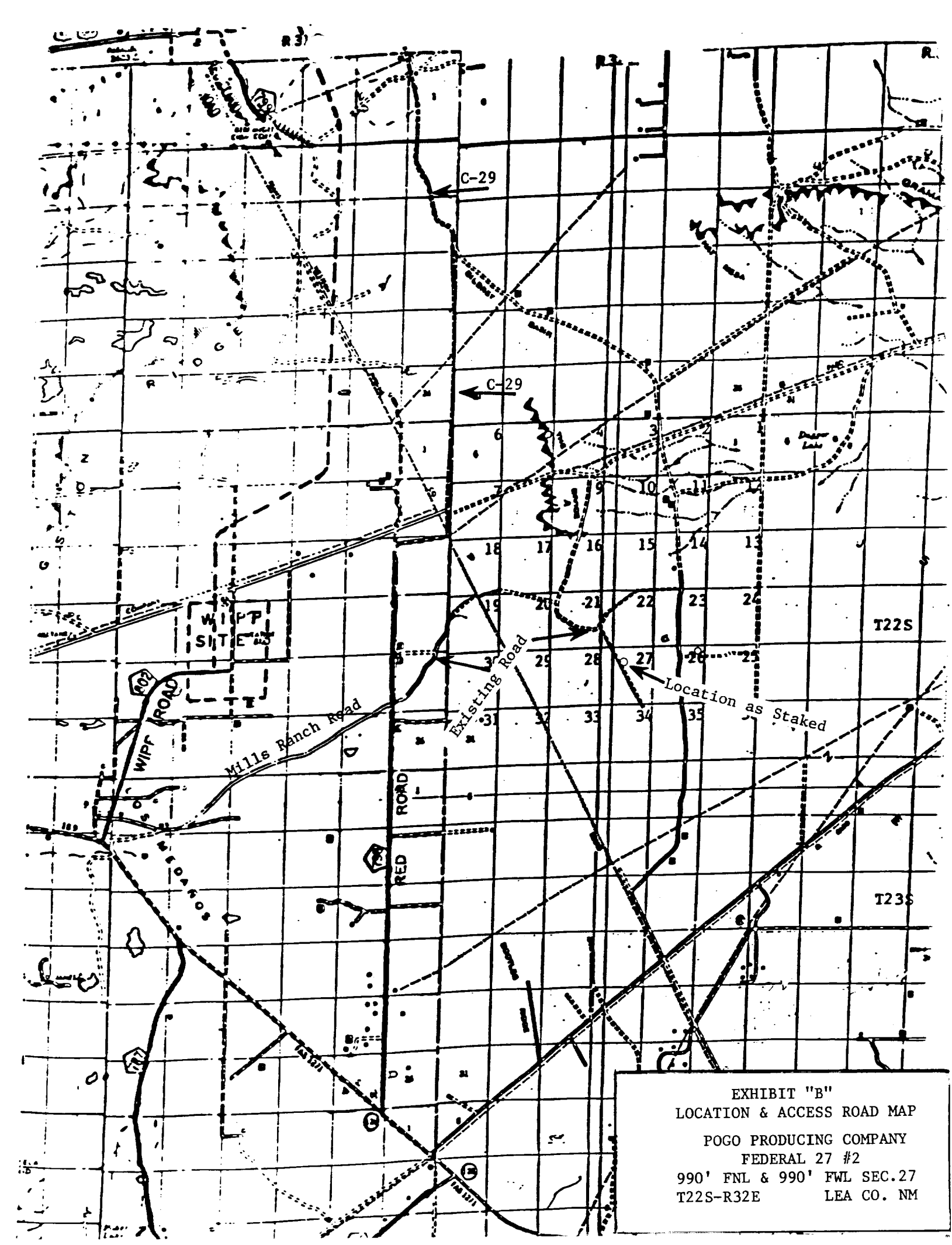


EXHIBIT "B"
LOCATION & ACCESS ROAD MAP

POGO PRODUCING COMPANY
FEDERAL 27 #2
990' FNL & 990' FWL SEC.27
T22S-R32E LEA CO. NM

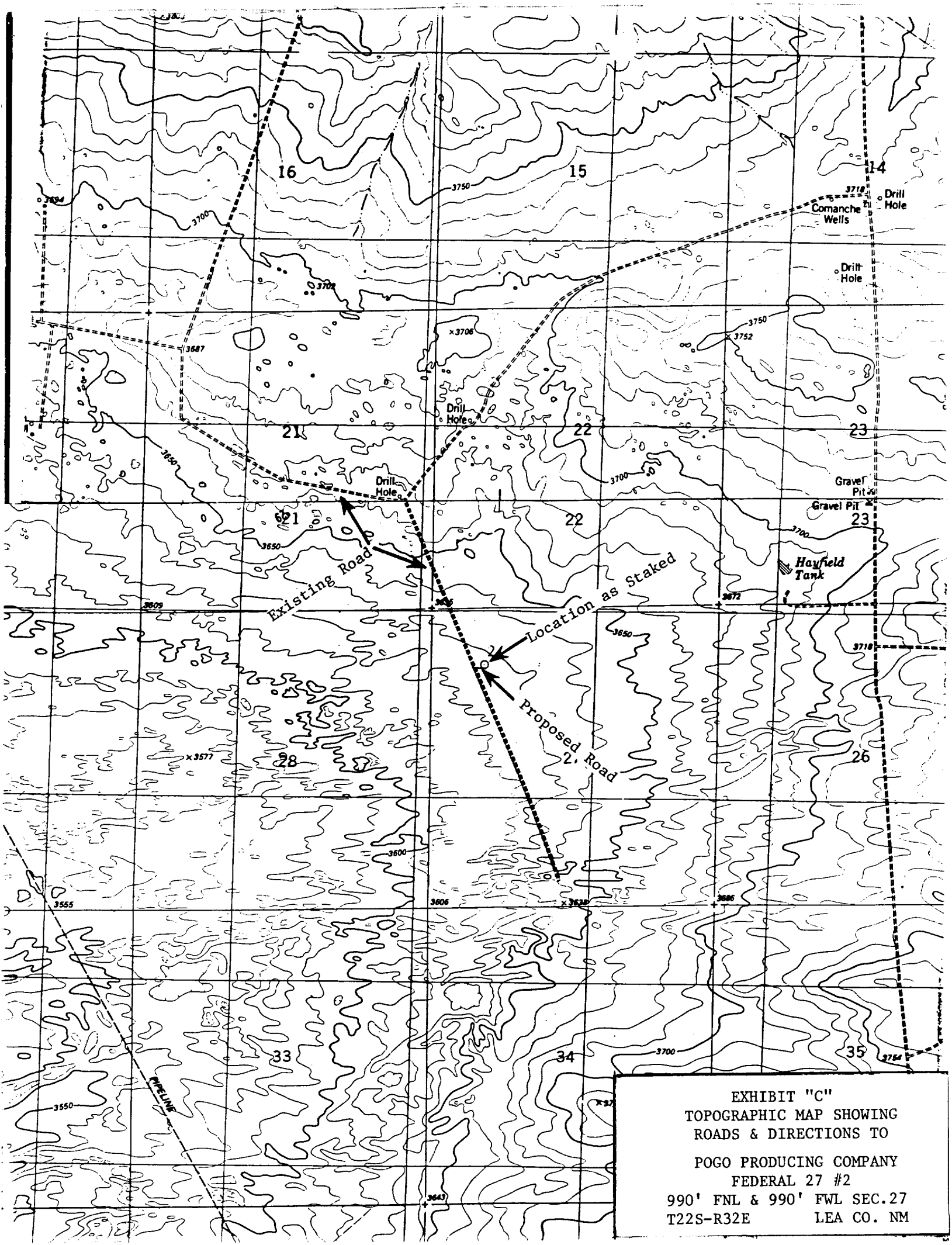
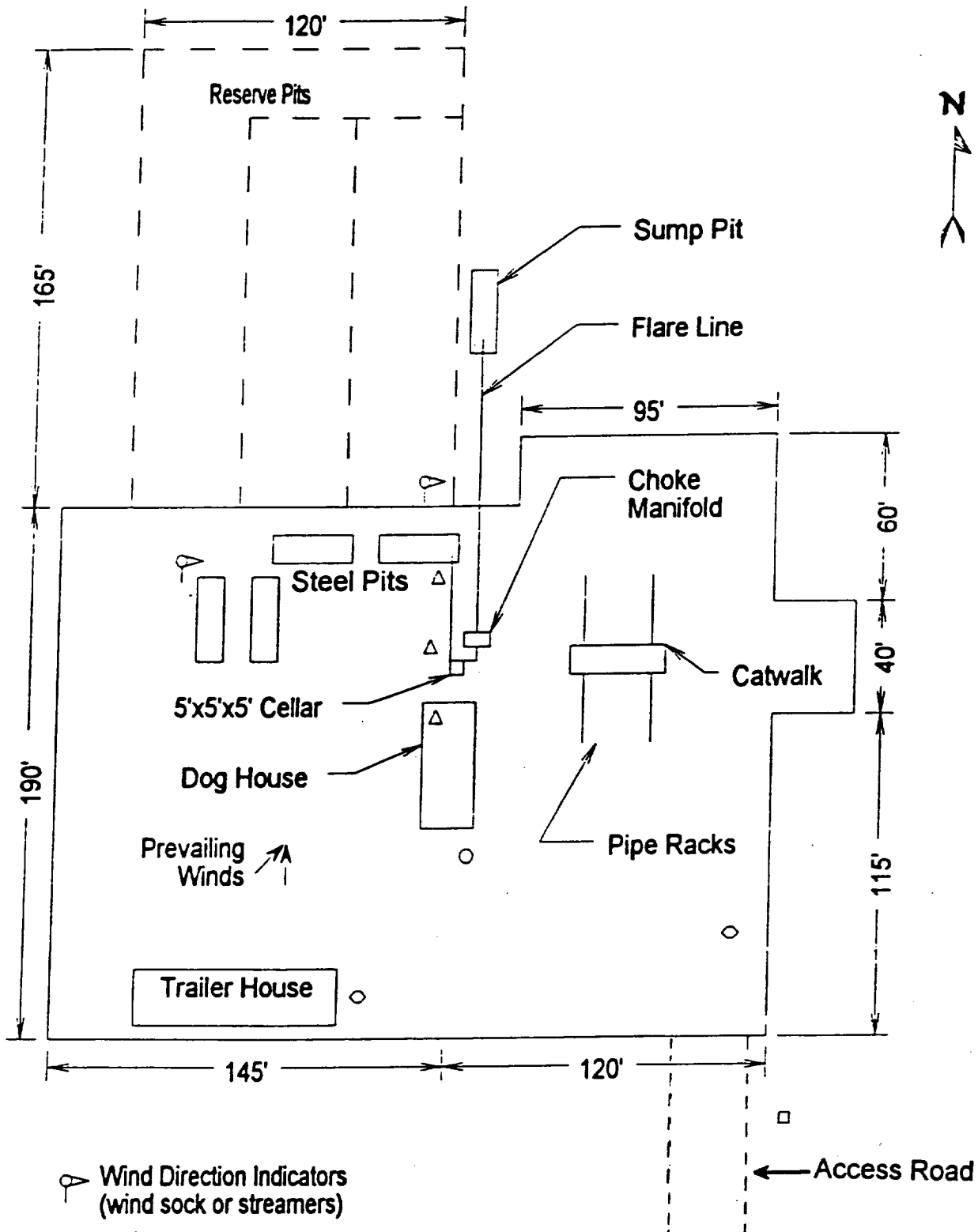


EXHIBIT "C"
TOPOGRAPHIC MAP SHOWING
ROADS & DIRECTIONS TO

POGO PRODUCING COMPANY
FEDERAL 27 #2
990' FNL & 990' FWL SEC.27
T22S-R32E LEA CO. NM



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
FEDERAL 27 #2
990' FNL & 990' FWL SEC.27
T22S-R32E LEA CO. NM

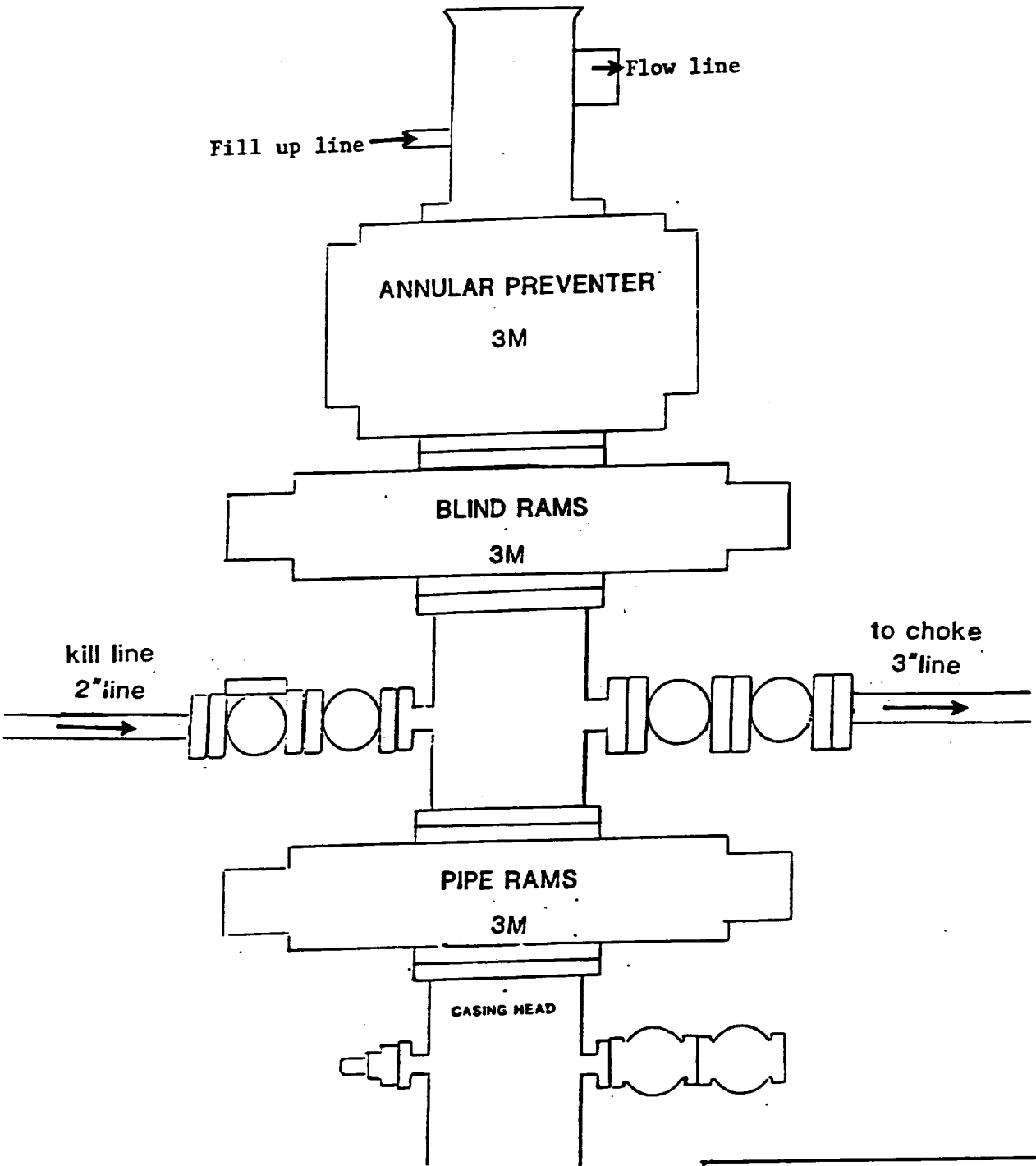
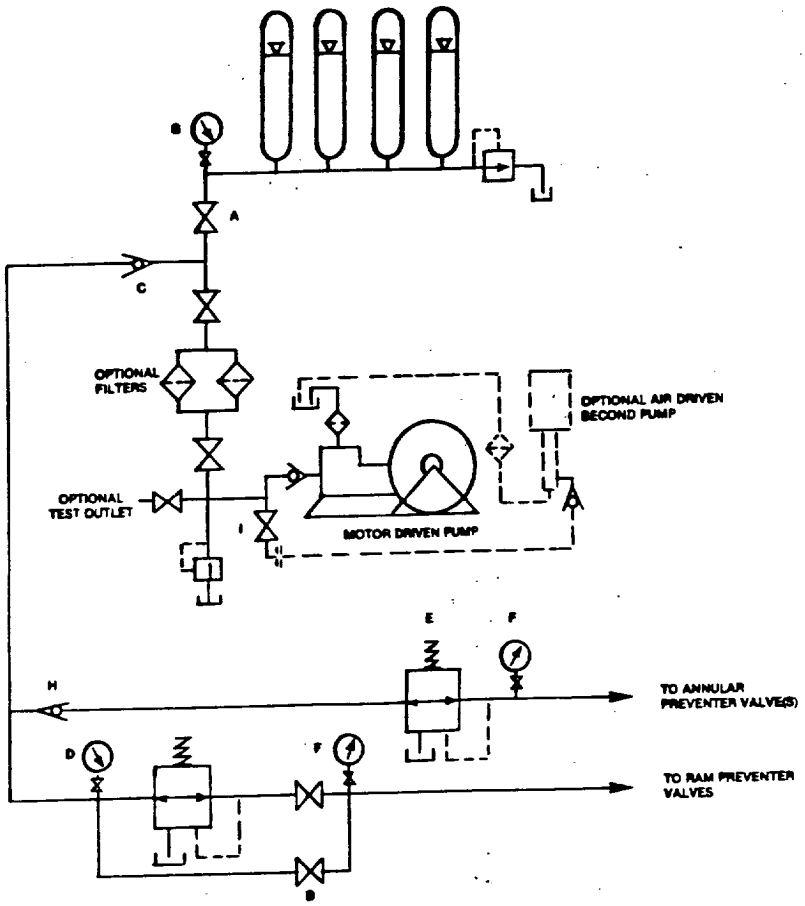


EXHIBIT "E"
B.O.P. SKETCH TO BE USED ON

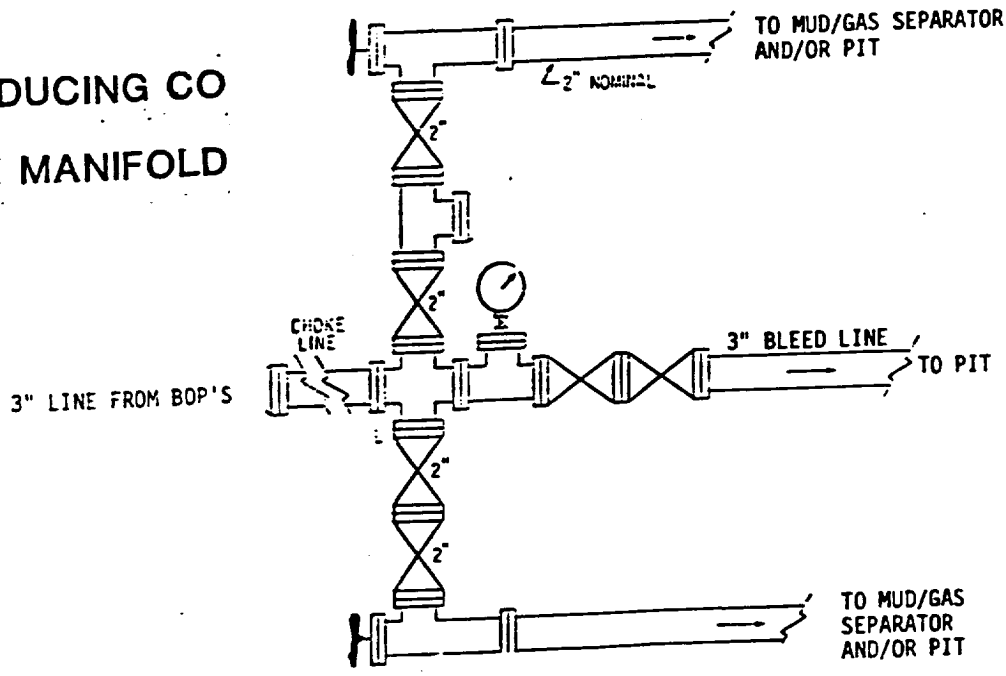
POGO PRODUCING COMPANY
FEDERAL 27 #2
990' FNL & 990' FWL SEC. 27
T22S-R32E LEA CO. NM



HAND AJUSTABLE CHOKE

POGO PRODUCING CO

3M CHOKE MANIFOLD



HAND AJUSTABLE CHOKE

EXHIBIT "1-E"
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY
FEDERAL 27 #2
990' FNL & 990' FWL SEC. 27
T22S-R32E LEA CO. NM