

New Mexico

SUBMIT IN TRIPLICATE

(Other Inst: one on  
reverse )FORM APPROVED  
OMB NO. 1004-0136  
Expires: February 28, 1995UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. NM-2379
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME -----
2. NAME OF OPERATOR POGO PRODUCING COMPANY (RICHARD WRIGHT) 915-685-8140		7. UNIT AGREEMENT NAME -----
3. ADDRESS AND TELEPHONE NO. P.O. BOX 10340 MIDLAND, TEXAS 79702-7340 915-685-8100		8. FARM OR LEASE NAME, WELL NO. COVINGTON "A" FEDERAL # 12
4. LOCATION OF WELL (Report location clearly and in accordance with any State Requirements.) At surface: 2180' FNL & 750' FEL SEC. 25 T22S-R32E LEA CO. NM At proposed prod. zone: SAME		9. API WELL NO. 30-025-34998
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: Approximately 30 miles East of Carlsbad New Mexico		10. FIELD AND POOL, OR WILDCAT RED TANK-BONE SPRING
15. NO. OF ACRES IN LEASE 1280		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 25 T22S-R32E
16. NO. OF ACRES ASSIGNED TO THIS WELL 40		12. COUNTY OR PARISH 13. STATE LEA NEW MEXICO
17. PROPOSED DEPTH 9200'		20. ROTARY OR CABLE TOOLS ROTARY
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3740' GR.		22. APPROX. DATE WORK WILL START WHEN APPROVED

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
25"	20" Conductor	NA	40'	Cement to surface with Redi-mix
14 3/4"	H-40 10 3/4"	32.75	850'	750 Sx. Circulate to surface
9 7/8"	J-55 7 5/8"	26.40	4600'	1250 Sx. " " " "
6 3/4"	J-55, N-80 4 1/2"	11.6	9200'	1425 Sx. Estimate TOC 4000'

1. Drill 25" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
2. Drill 14 3/4" hole to 850'. Run and set 850' of 10 3/4" H-40 32.75# ST&C casing. Cement with 750 Sx. of Class "C" cement + additives, circulate cement to surface.
3. Drill 9 7/8" hole to 4600'. Run and set 4600' of 7 5/8" J-55 26.4# ST&C casing. Cement with 1250 Sx. of Light & Premium cement + additives, circulate cement to surface.
4. Drill 6 3/4" hole to 9200'. Run and set 9200' of 4 1/2" casing as follows: 2200' of 4 1/2" N-80 11.6# ST&C, 6000' of 4 1/2" J-55 11.6# ST&C, 1000' of 4 1/2" N-80 11.6# LT&C casing. Cement with 1425 Sx. of Class "H" Premium cement + additives, estimate TOP 4000'.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give depth of productive zone and proposed to deepen directionally, give pertinent data on subsurface conditions and measured and true vertical depths.

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
SPECIAL STIPULATIONS  
ATTACHEDSIGNED: *Joe T. Jancia* TITLE: *Assistant Field Manager*

(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 enable the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

Acting Assistant Field Manager,  
Lands And Minerals

\*See Instructions On Reverse Side

APPROVED FOR 1 YEAR

RECEIVED  
FEB 17 2000  
BLM  
ROSWEIL, NM

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

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 <b>30-025-34998</b>	Pool Code <del>51681</del> <b>51683</b>	Pool Name <b>RED TANK - BONE SPRING</b>
Property Code <b>009316</b>	Property Name <b>COVINGTON "A" FEDERAL</b>	Well Number <b>12</b>
OGRID No. <b>17891</b>	Operator Name <b>PCGO PRODUCING COMPANY</b>	Elevation <b>3740</b>

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	25	22 S	32 E		2180	NORTH	750	EAST	LEA

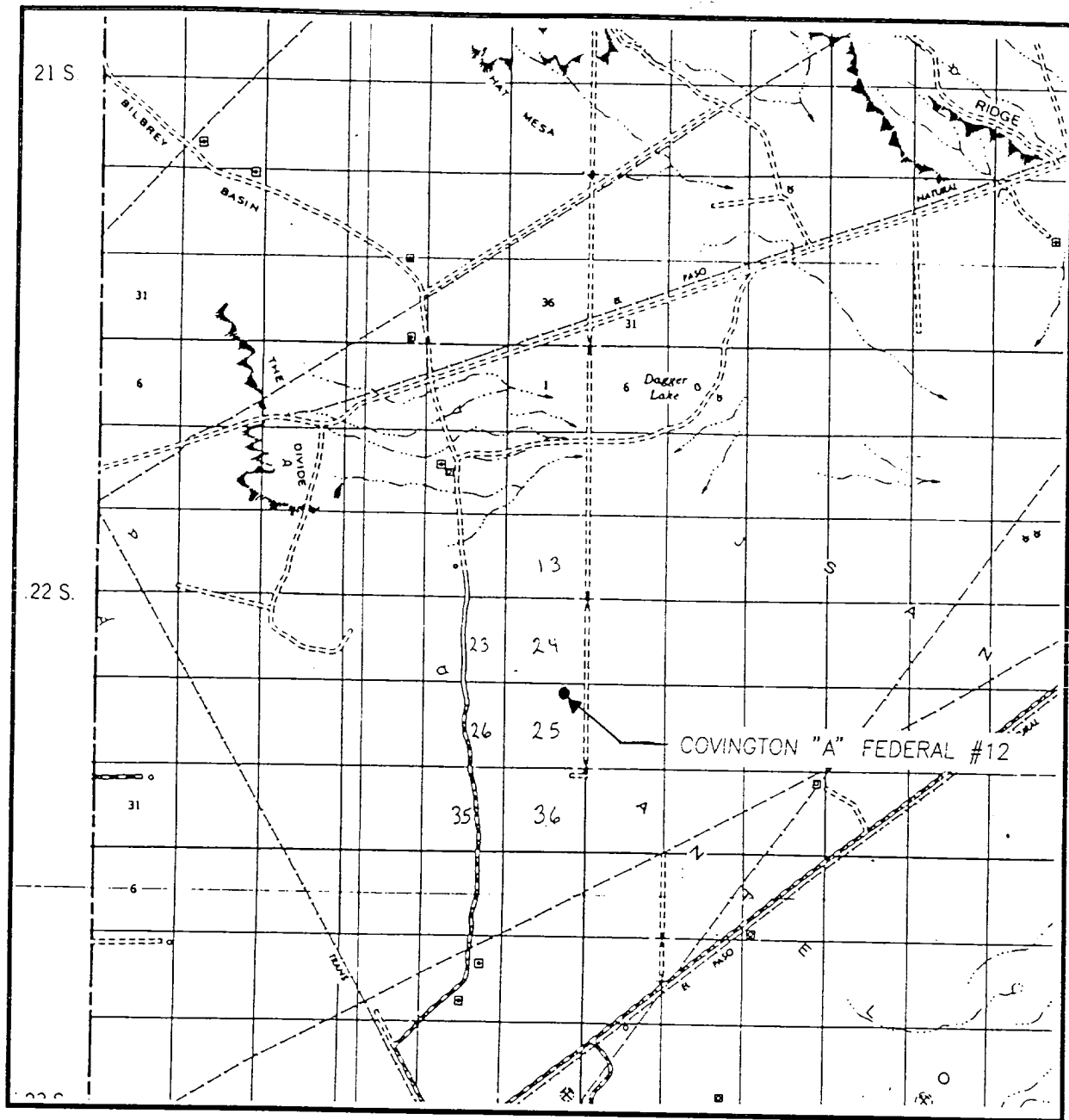
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres <b>40</b>	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

	<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 <b>Joe T. Janica</b> Printed Name <b>Agent</b> Title <b>02/16/00</b> Date
	<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.  <b>MAY 8, 1997</b> Date Surveyed  Signature & Seal of Professional Surveyor <b>RONALD J. EIDSON</b> Professional Surveyor <b>0688</b> Certificate No. <b>JOHN W. WESS</b> Professional Surveyor <b>0688</b> Certificate No.

# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 25 TWP. 22-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 2180' FNL & 750' FEL

ELEVATION 3740

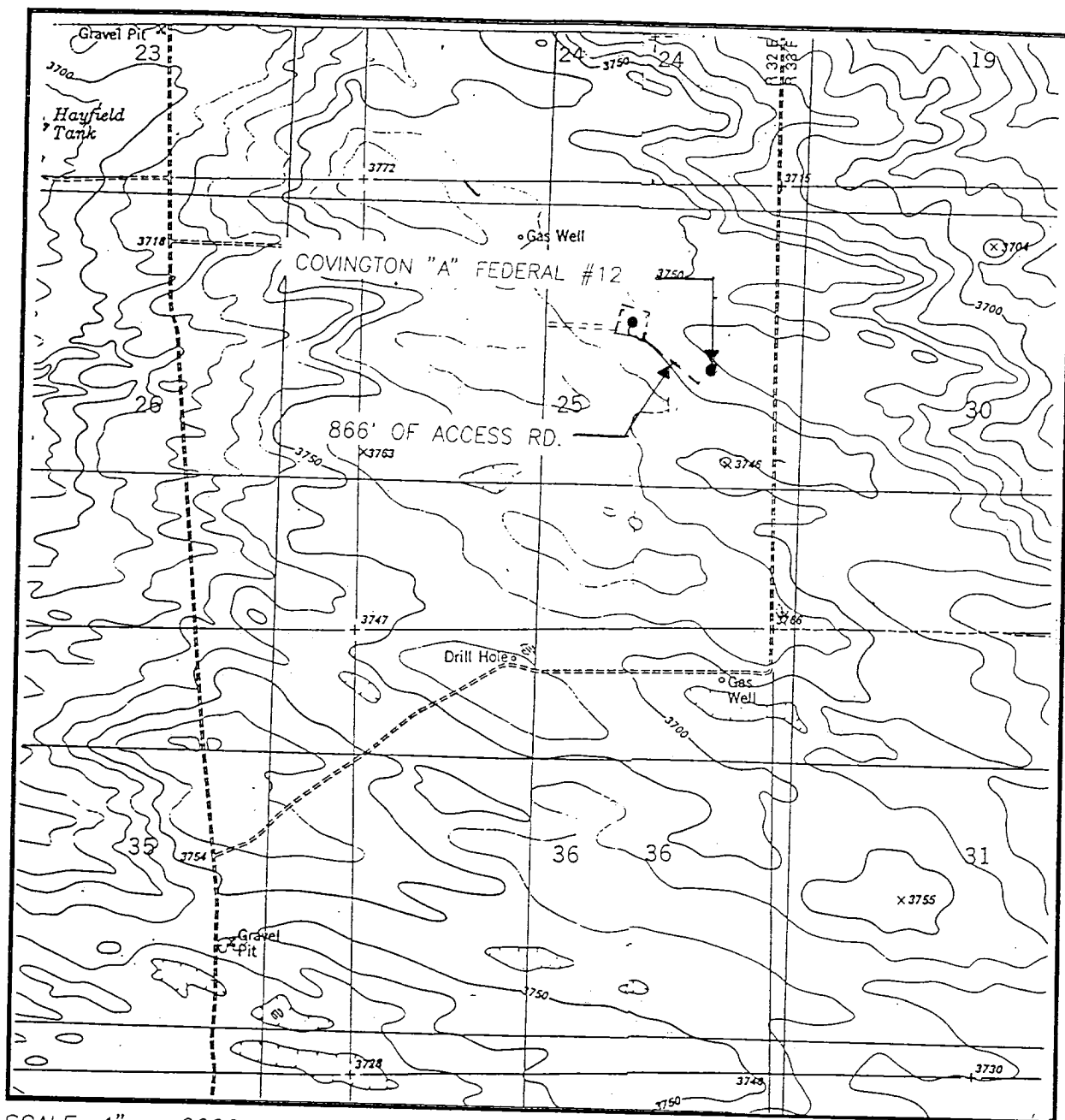
OPERATOR POGO PRODUCING COMPANY

LEASE COVINGTON "A" FEDERAL

**JOHN WEST ENGINEERING  
HOBBS, NEW MEXICO**

**(505) 393-3117**

# LOCATION VERIFICATION ON MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:  
BOOTLEG RIDGE - 10'  
TIP TOP WELLS - 10'

SEC. 25 TWP. 22-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 2180' FNL & 750' FEL

ELEVATION 3740

OPERATOR POGO PRODUCING COMPANY

LEASE COVINGTON "A" FEDERAL

U.S.G.S. TOPOGRAPHIC MAP

BOOTLEG RIDGE, TIP TOP WELLS, N.M.

**JOHN WEST ENGINEERING**  
**HOBBS, NEW MEXICO**

**(505) 393-3117**

APPLICATION TO DRILL  
 POGO PRODUCING COMPANY  
 COVINGTON "A" FEDERAL # 12  
 UNIT "H" SECTION 25  
 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: 2180' FNL & 750' FEL SEC. 25 T22S-R32E Lea Co. NM
2. Elevation above sea level: 3740' GR.
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: 9200'
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 formations:

Delaware	Oil
Bone Spring	Oil
8. Casing program:

HOLE SIZE	INTERVAL	OD CSG	WEIGHT	THREAD	COLLAR	GRADE	COND.
25"	0-40'	20"	.31 Wall	NA	NA	NA	New
14 3/4"	0-800	10 3/4"	32.7	8-R	ST&C	H-40	New
9 7/8"	0-4600'	7 5/8"	26.4	8-R	ST&C	J-55 & N-80	New
6 3/4"	0-9200'	4 1/2"	11.6	8-R	LT&C	J-55 & N-80	New

APPLICATION TO DRILL  
 POGO PRODUCING COMPANY  
 COVINGTON "A" FEDERAL # 12  
 UNIT "H" SECTION 25  
 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 4600' of 7 5/8" casing cement with 800 Sx. Halco Light + additives, tail in with 500 Sx. Premium cement C additives circulate to surface.
4 1/2" Production	Set 9200' of casing cement with 500 Sx. Halco Light + additives, tail in with 450 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 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 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. No pressures greater than 3700 psi anticipated.

11. Proposed Mud Circulating Svstem:

Depth	Mud Wt.	Mud Visc.	Fluid Loss	Type Mud
0-800'	8.4-8.6	29-36	NC	Fresh water spud mud Paper to control seepage
800-4600'	10-10.6	28-30	NC	Brine water use paper for seepage and lime for pH control
4600-9200'	8.4-8.6	28-36	NC	Fresh water Use fresh water Gel for viscosity and paper for seepage control.

APPLICATION TO DRILL  
POGO PRODUCING COMPANY  
COVINGTON "A" FEDERAL # 12  
UNIT "H" SECTION 25  
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<sub>2</sub>S detectors will be in place to detect any presence. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used. Estimated 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 potentialled as an Oil well.



## HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. All Company and Contract personnel admitted on location must be trained by a qualified H<sub>2</sub>S safety instructor to the following:
  - A. Characteristics of H<sub>2</sub>S
  - B. Physical effects and hazards
  - C. Proper use of safety equipment and life support systems.
  - D. Principle and operation of H<sub>2</sub>S detectors, warning system and briefing areas.
  - E. Evacuation procedure, routes and first aid.
  - F. Proper use of 30 minute pressure demand air pack.
2. H<sub>2</sub>S Detection and Alarm Systems
  - A. H<sub>2</sub>S detectors and audio alarm system to be located at bell nipple, end of bloopie line (mud pit) and on derrick floor or doghouse.
3. Windsack and/or wind streamers
  - A. Windsack at mudpit area should be high enough to be visible.
  - B. Windsack at briefing area should be high enough to be visible.
  - C. There should be a windsack 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<sub>2</sub>S present in dangerous concentration. Only emergency personnel admitted to location.
5. Well control equipment
  - A. See exhibit "E"
6. Communication
  - A. While working under masks chalkboards will be used for communication.
  - B. Hand signals will be used where chalk board is inappropriate.
  - C. 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. Exhausts will be watered.
  - B. Flare line will be equipped with an electric ignitor or a propane pilot light in case gas reaches the surface.
  - C. If the location is near to a dwelling a closed DST will be performed.

## HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

8. Drilling contractor supervisor will be required to be familiar with the effects H<sub>2</sub>S has on tubular goods and other mechanical equipment.
9. If H<sub>2</sub>S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H<sub>2</sub>S scavengers if necessary.

# SURFACE USE PLAN

POGO PRODUCING COMPANY  
COVINGTON "A" FEDERAL # 12  
UNIT "H" SECTION 25  
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 of construction.
  - A. Exhibit "A" shows the proposed development well as staked.
  - B. From Hobbs NM take U.S. Hi-way 62-180 toward Carlsbad NM, go 38 miles to Co. road C-29, turn South go 14 mi to Mills Ranch Road turn East follow this road 7.2 mi, turn South go 1.3 mi turn East go .8 miles turn South go .2 miles turn Left (Northeast) go .35 miles, turn Right (Southeast) go .2 miles to location.
  - C. Construct a powerline from location along road to existing powerline
  - D. Lay a pipeline along road & existing ROW to tank battery located at well # 1
2. PLANNED ACCESS ROADS: Approximately .2 mile of new road will be constructed.
  - A. The access road will be crowned and ditched to a 12'00" wide travel surface with 40' right-of-way.
  - B. Gradient on all roads will be less than 5.00%.
  - C. No turnouts will be necessary.
  - D. If needed, road will be surfaced with a minimum of 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 Topography.
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"

POGO PRODUCING COMPANY  
 COVINGTON "A" FEDERAL # 12  
 UNIT "H" SECTION 25  
 T22S-R32E 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 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 FACILITIES

No camps or airstrips will be constructed.

POGO PRODUCING COMPANY  
COVINGTON "A" FEDERAL # 12  
UNIT "H" SECTION 25  
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  
COVINGTON "A" FEDERAL # 12  
UNIT "H" SECTION 25  
T22S-R32E LEA CO. NM

11. OTHER INFORMATION:

- A. Topography consists of sand dunes with a slight dip toward the West. Deep sandy soil supports native grasses, mesquite, and shinnery Oak.
- B. Surface is owned by the Bureau of Land Management U.S. Department of Interior. Surface is used for grazing of livestock and is leased to ranchers for this purpose.
- C. An Archaeological survey has been made of this location and road and a copy is attached.
- D. There are no dwellings or habitation within three miles of this location.

12. OPERATORS REPRESENTATIVE:

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:

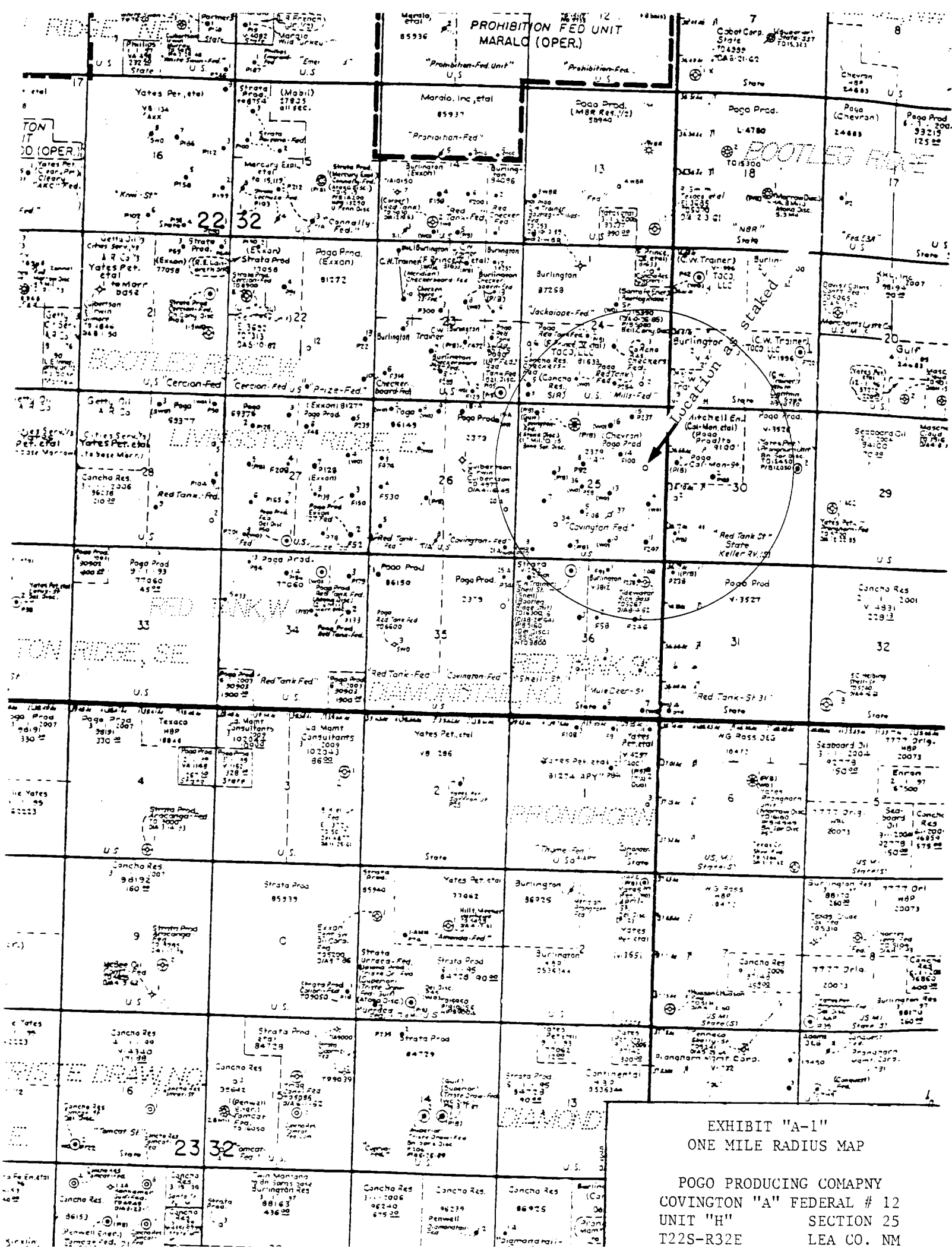
POGO PRODUCING COMPANY  
P.O. BOX 10340  
MIDLAND, TEXAS 79702-7340  
OFFICE PHONE 915-685-8100  
MR. RICHARD WRIGHT 915-685-8140

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

NAME : Joe T. Janica

DATE : 02/16/00

TITLE : Agent



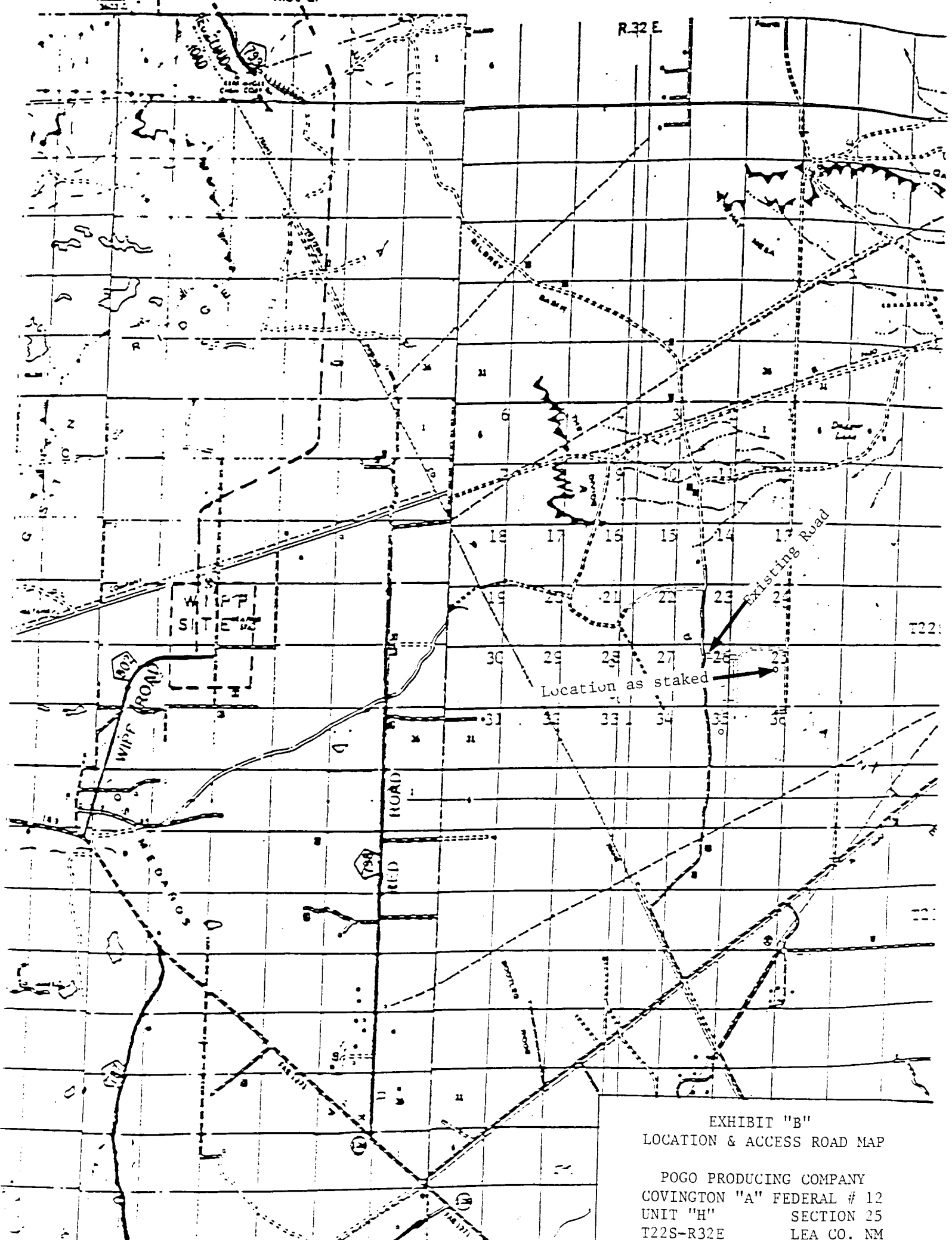


EXHIBIT "B"  
LOCATION & ACCESS ROAD MAP

POGO PRODUCING COMPANY  
COVINGTON "A" FEDERAL # 12  
UNIT "H" SECTION 25  
T22S-R32E LEA CO. NM



# BOOTLEG RIDGE QUADRANGLE

NEW MEXICO

7.5 MINUTE SERIES (TOPOGRAPHIC) DEPARTMENT OF THE

SW 1/4 HAT MESA 15' QUADRANGLE

UNITED STATES  
GEOLOGICAL SURVEY

26

710 000 FEET

28

29

103°37'30"

30 000 000 E

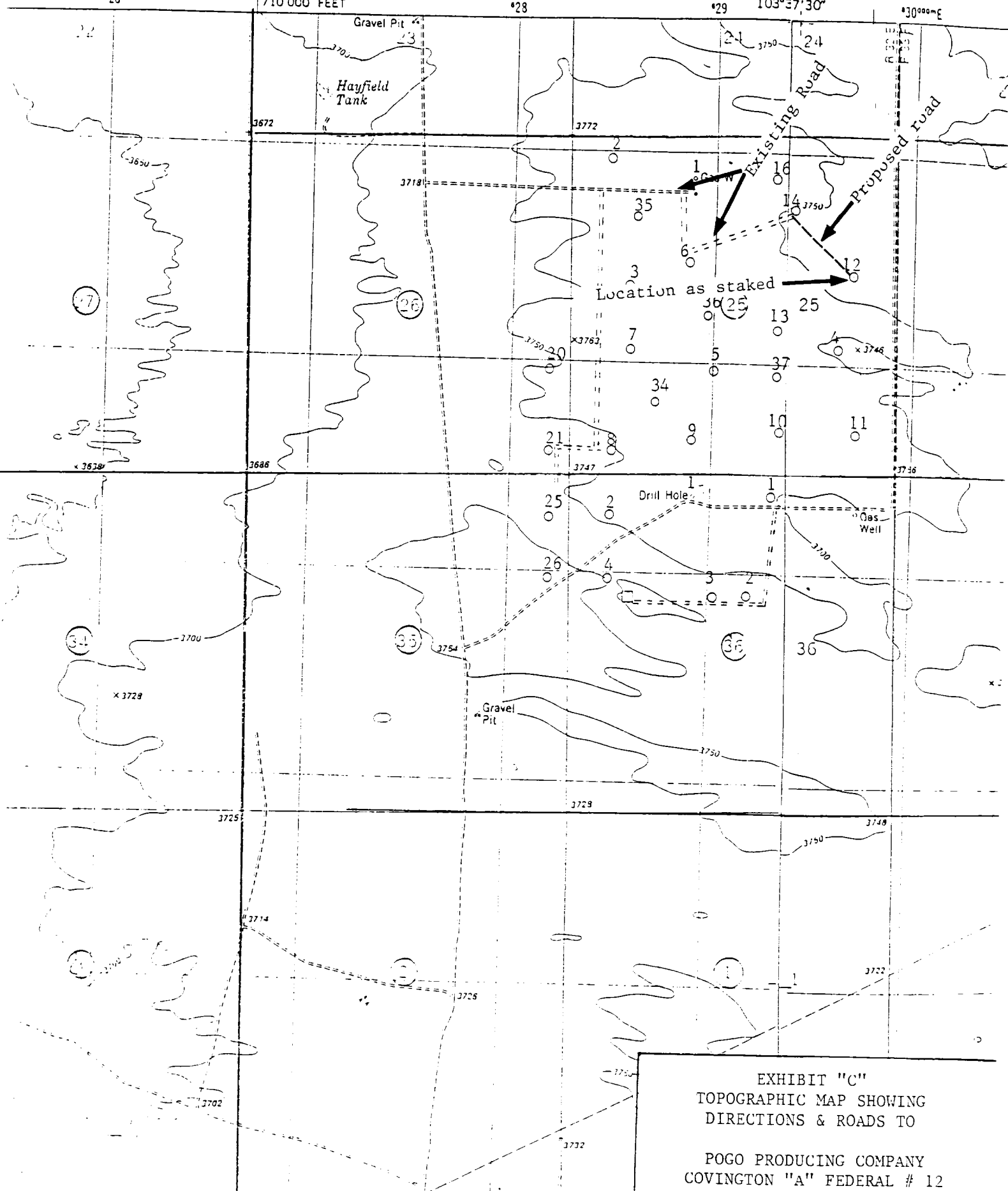
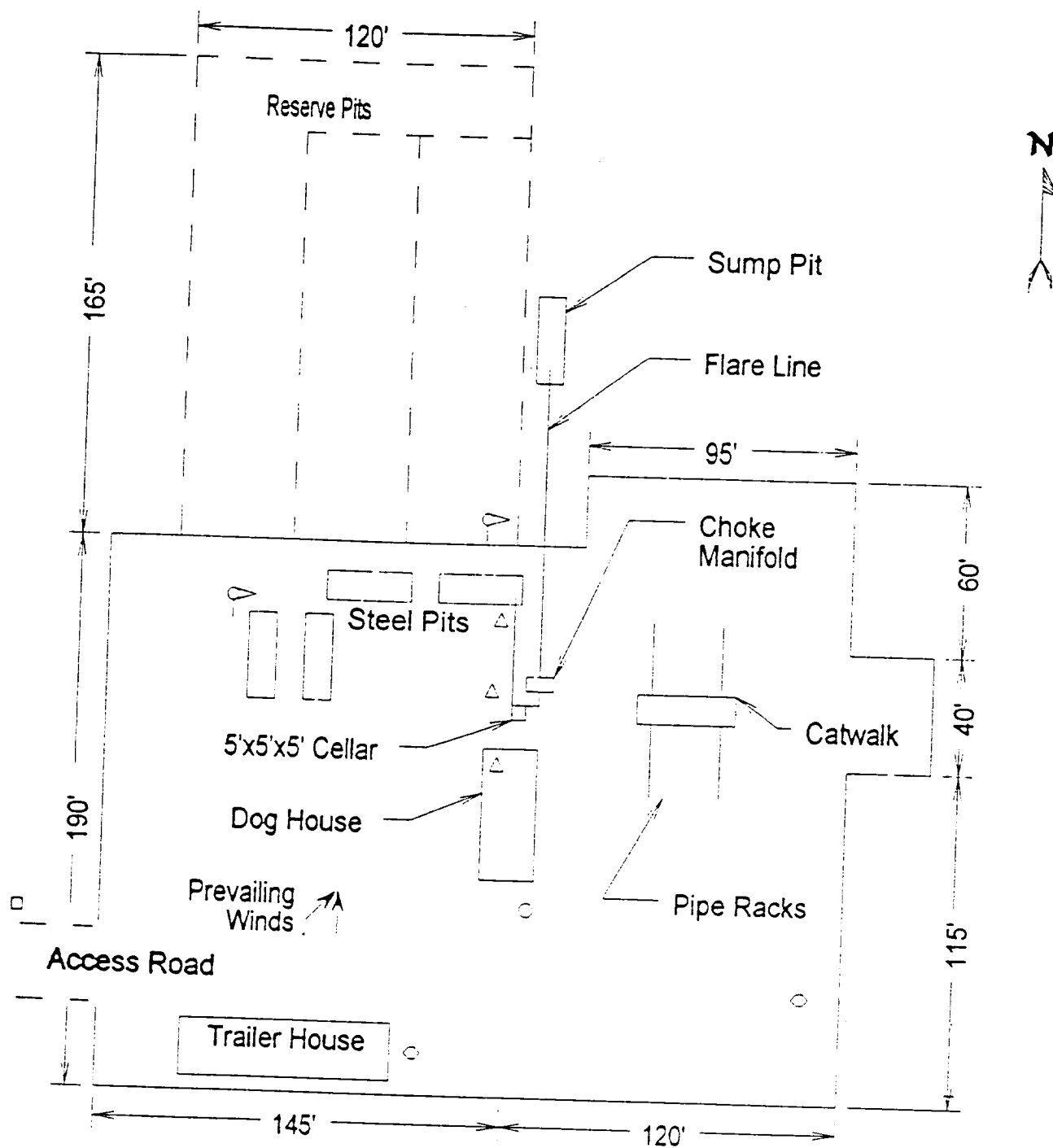


EXHIBIT "C"  
TOPOGRAPHIC MAP SHOWING  
DIRECTIONS & ROADS TO

POGO PRODUCING COMPANY  
COVINGTON "A" FEDERAL # 12  
UNIT "H" SECTION 25



- 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  
COVINGTON "A" FEDERAL # 12  
UNIT "H" SECTION 25  
T22S-R32E IFA CO NM

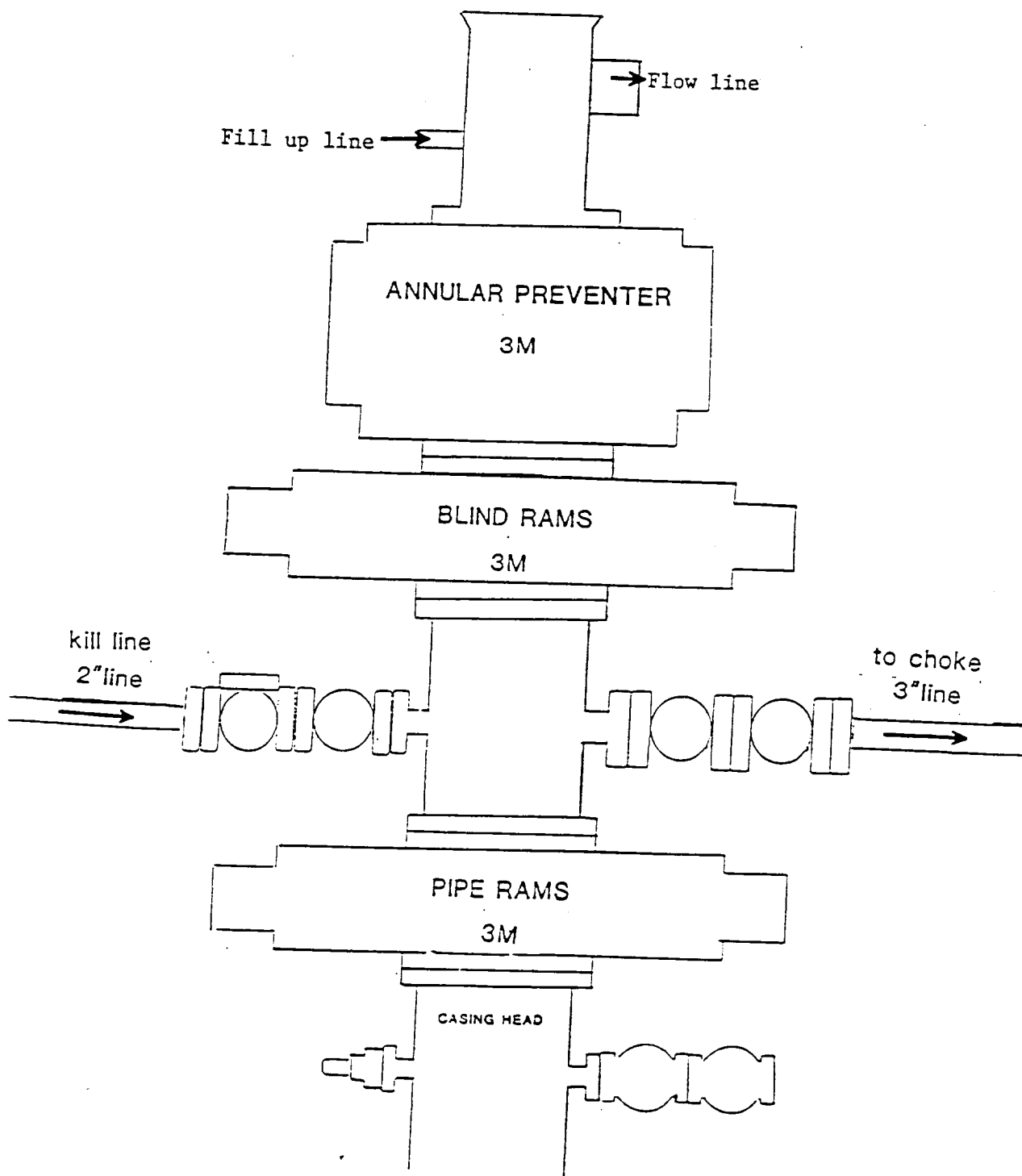
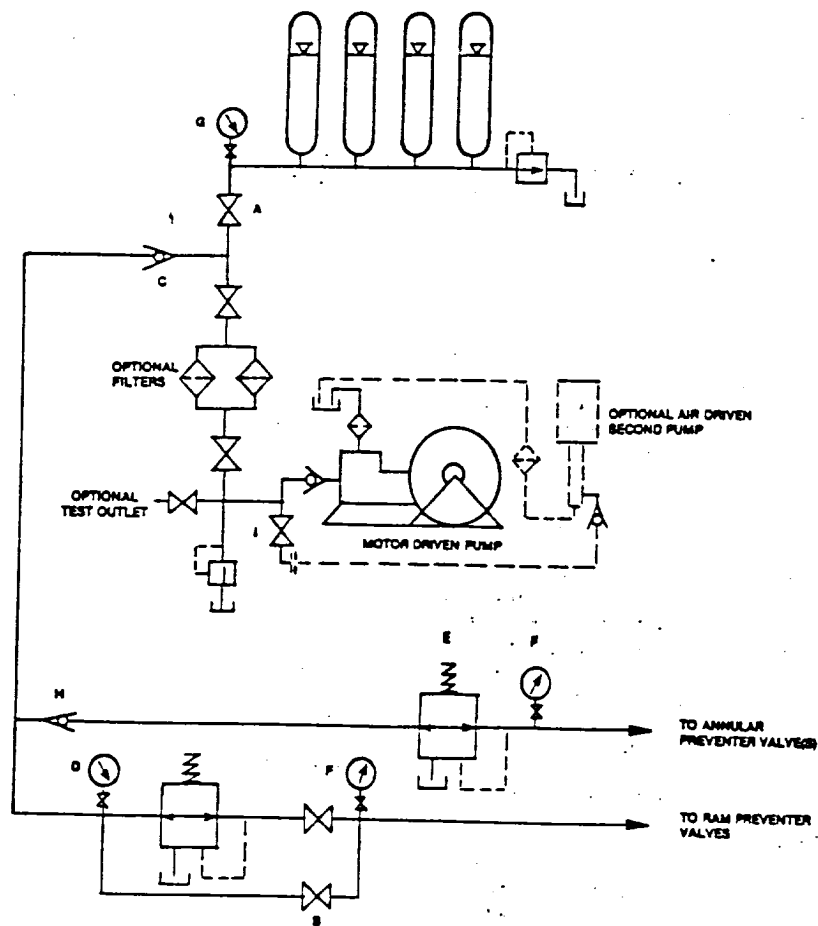
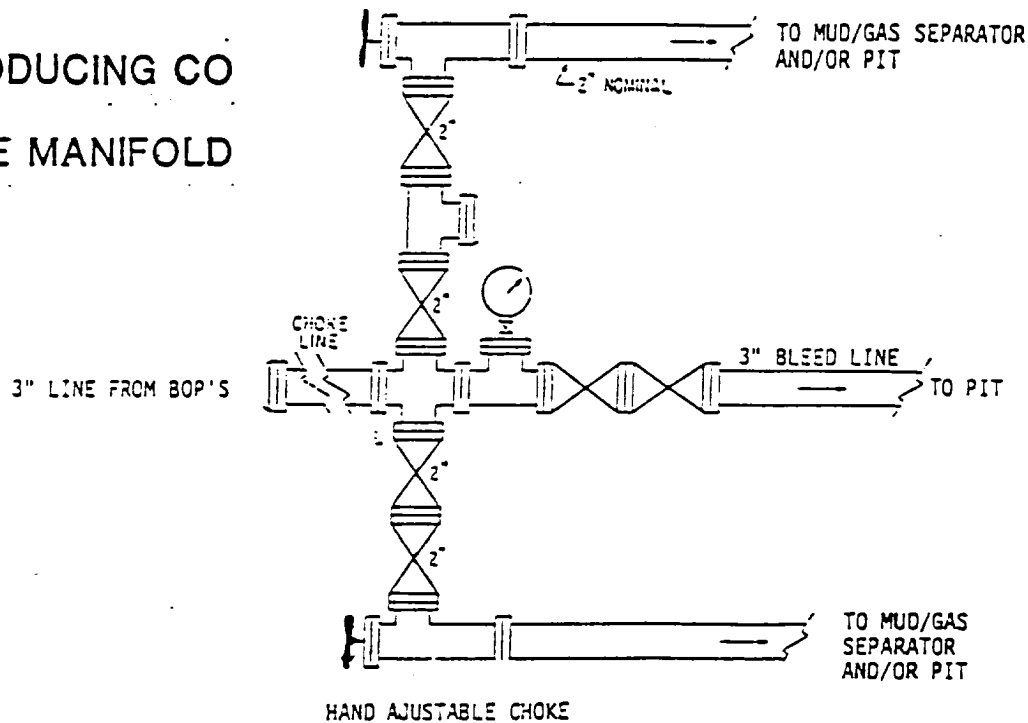


EXHIBIT "E"  
SKETCH OF B.O.P. TO BE USED ON

POGO PRODUCING COMPANY  
COVINGTON "A" FEDERAL # 12  
UNIT "H" SECTION 25  
T22S-R32E LEA CO. NM



HAND AJUSTABLE CHOKE



HAND AJUSTABLE CHOKE

EXHIBIT "E-1"  
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY  
COVINGTON "A" FEDERAL # 12  
UNIT "H" SECTION 25  
T22S-R32F LEA CO. INC.

POGO PRODUCING CO  
3M CHOKE MANIFOLD

