

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

N.M. Oil Cons. Division

NM-69377

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

Hobbs, NM 88241

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 (RICHARD WRIGHT) Ph 915-685-8140

3. ADDRESS AND TELEPHONE NO.

P.O. BOX 10340 MIDLAND, TEXAS 79702-7340 915-685-8140

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)

At surface

990' FSL & 330' FEL SEC. 28 T22S-R32E LEA CO. NM

At proposed prod. zone Same

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. 330'
(Also to nearest dril. unit lde. if any)

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, 1320'
OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH

8900'

20. ROTARY OR CABLE TOOLS

ROTARY

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

3601' GR.

22. APPROX. DATE WORK WILL START*

WHEN APPROVED

23.

PROPOSED CASING AND CEMENT

CARLSBAD CONTROLLED WATER BASIN

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
25"	20"	NA	40'	Cement to surface with Radi-mix
14 3/4"	H-40 10 3/4"	32.75	800'	Circulate to surface
9 7/8"	J-55 7 5/8"	26.4	4550'	1100 Sx. Circulate to surface
6 3/4"	J-55, N-80 4 1/2"	11.6	8900'	1000 Sx. Estimate top Cem 4000'

1. Drill 25" hole to 40'. Set 40' of 20" Conductor pipe & cement to surface with Radi-mix.
2. Drill 14 3/4" hole to 800'. Run and set 800' of 10 3/4" 32.75# H-40 ST&C casing. Cement with 800 Sx of Class "C" cement + additives, circulate cement to surface.
3. Drill 9 7/8" hole to 4550'. Run and set 4550' of 7 5/8" 24.6# J-55 ST&C casing. Cement with 1100 Sx. of Class "C" cement + additives, circulate cement to surface.
4. Drill 6 3/4" hole to 8900'. Run and set 8900' of 4 1/2" casing as follows: 2100' of 4 1/2" 11.6# N-80, ST&C, 5400' of 4 1/2" 11.6# J-55 LT&C, 1400' of 4 1/2" 11.6# N-80 LT&C casing. Cement with 1000 Sx. of Class "H" Premium cement + additives, estimate top of cement 4000'.

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS

ATTACHED

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present production zone and depth of productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give bottom of casing and depth of casing.

SIGNED

TITLE

Ag

OFFICE RECORD NO. 17891

DATE 06/17/98

(This space for Federal or State office use)

PROPERTY NO. 9342

WELL CODE 51683

DATE 7-17-98

API NO. 30-025-34458

PERMIT NO.

Application approval does not warrant or certify that the applicant holds legal or equitable title

CONDITIONS OF APPROVAL, IF ANY:

Acting

Assistant Field Office Manager,
Lands and Minerals

APPROVED BY

ARMANDO A. LOPEZ

TITLE

DATE

JUL 18 1998

*See Instructions On Reverse Side

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 30-025-34458	Pool Code 51683	Pool Name RED TANK BONE SPRING
Property Code 9342	Property Name RED TANK 28 FEDERAL	Well Number 2
OGRID No. 17891	Operator Name POGO PRODUCING COMPANY	Elevation 3601

Surface Location

UL or lot No. P	Section 28	Township 22 S	Range 32 E	Lot Idn	Feet from the 990	North/South line SOUTH	Feet from the 330	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
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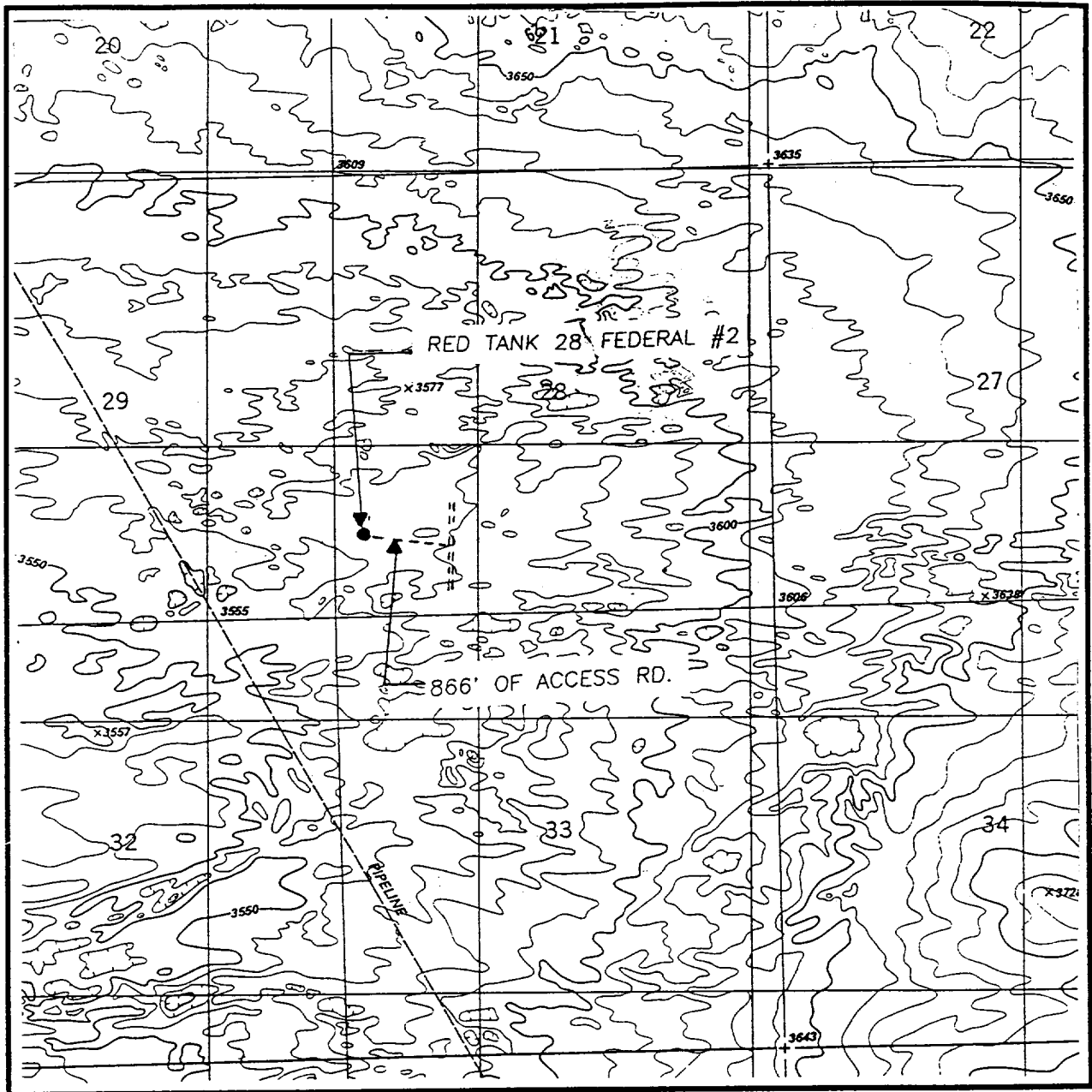
Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

				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 Agent Title 06/17/98 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 supervision and that the same is true and correct to the best of my belief. MAY 28, 1998 Date Surveyed Signature & Seal of Professional Surveyor Certificate No. RONALD EIDSON 3239 GARY EIDSON 12641 MICHAEL McDONALD 12185	

EXHIBIT "A"

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 28 TWP. 22-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 990' FSL & 330' FEL

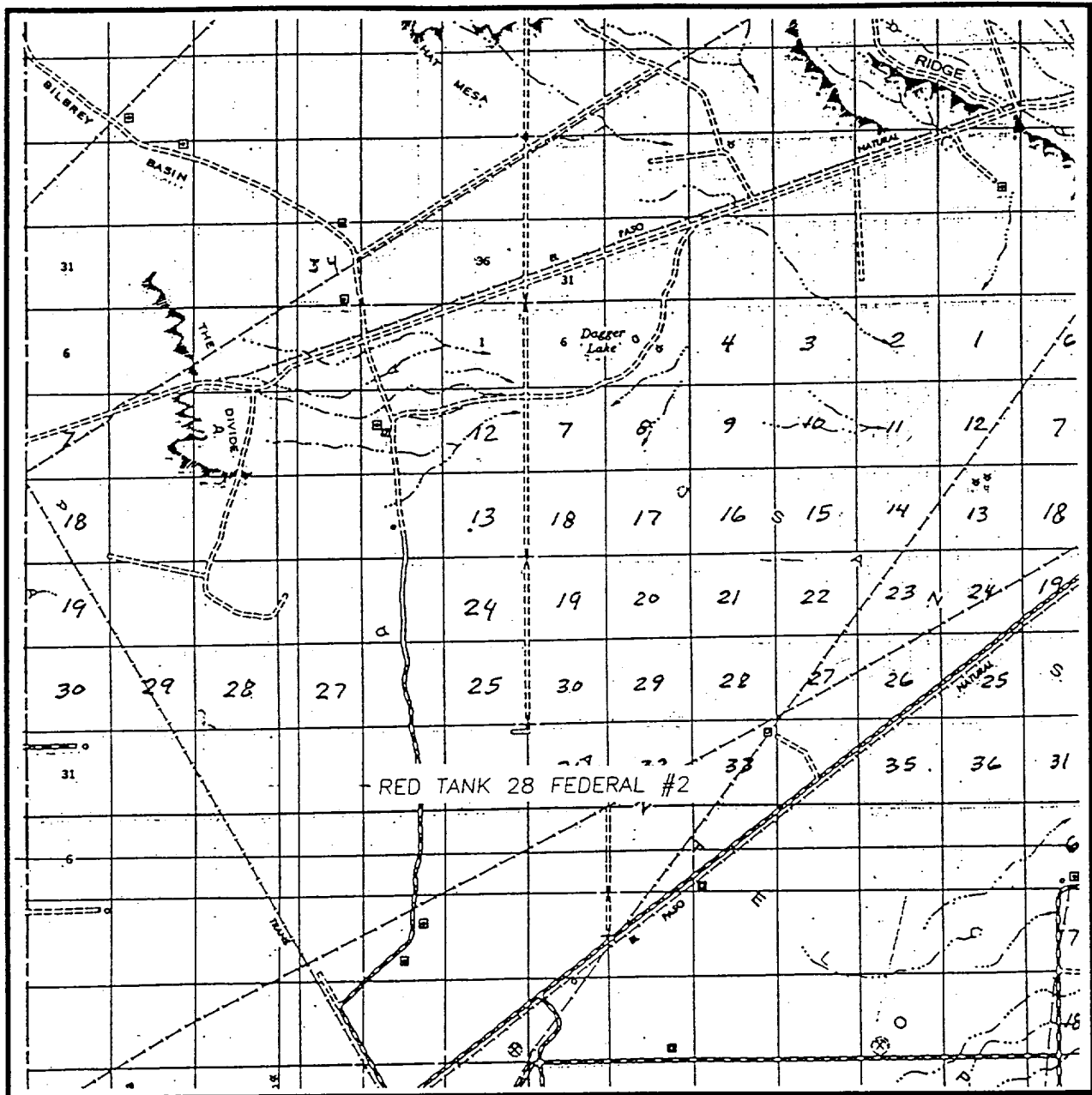
ELEVATION 3601

OPERATOR POGO PRODUCING COMPANY

LEASE RED TANK 28 FEDERAL

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

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
BOOTLEG RIDGE - 10'

SEC. 28 TWP. 22-S RGE. 32-E

SURVEY _____ N.M.P.M.

COUNTY _____ LEA

DESCRIPTION 990' FSL & 330' FEL

ELEVATION 3601

OPERATOR POGO PRODUCING COMPANY

LEASE RED TANK 28 FEDERAL

U.S.G.S. TOPOGRAPHIC MAP

BOOTLEG RIDGE, N.M.

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

POGO PRODUCING COMPANY
 RED TANK "28" FEDERAL # 2
 UNIT "P" SECTION 28
 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' FSL & 330' FEL SEC. 28 T22S-R32E LEA CO. NM
2. Elevation above sea level: 3601' 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: 8900'
6. Estimated tops of geological markers:

Rustler Anhydrite	775'	Brushy Canyon	7400'
Delaware Lime	4800'	Bone Spring	8300'
Cherry Canyon	6100'		
7. Possible mineral bearing formation:

Delaware	Oil
Bone Spring	Oil
8. Casing program:

<u>Hole size</u>	<u>Interval</u>	<u>OD casing</u>	<u>Weight</u>	<u>Thread</u>	<u>Collar</u>	<u>Grade</u>
25"	0-40-	20"	NA	NA	NA	Conductor
14 3/4"	0-800'	10 3/4"	32.75	8-R	ST&C	H-40
9 7/8"	0-4550'	7 5/8"	26.4	8-R	ST&C	J-55
6 3/4"	0-8900'	4 1/2"	11.6	8-R	LT&C	J-55 N-80

POGO PRODUCING COMPANY
RED TANK "28" FEDERAL # 2
UNIT "P" SECTION 28
T22S-R32E LEA CO. NM

9. Casing Cementing and Setting Depth:

20"	Conductor	Set 40' of 20" conductor and cement to surface with Redi-mix.
10 3/4"	Surface	Set 800' of 10 3/4" H-40 32.75# ST&C casing. Cement with 800 Sx. of Class "C" + additives circulate cement to surface.
7 5/8"	Intermediate	Set 4550' of 7 5/8" J-55 26.4# ST&C casing. Cement with 1100 Sx. of Class "C" cement + additives, circulate cement to surface.
4 1/2"	Production	Set 8900' of 4 1/2" J-55 & N-80 11.6# LT&C casing. Cement with 1000 Sx. of Class "H" + additives, Tie cement back to 7 5/8" casing estimate top of cement 3500'.

10. Pressure Control Equipment: Exhibit "E", A 900 Series 3000 PSI working pressure B.O.P. consisting of a double ram type preventor with a bag type annular preventor will be used. The B.O.P. unit will be hydraulically operated. Exhibit "E-1" shows choke manifold and closing unit. B.O.P. will be nipped up on 10 3/4" casing and will be operated at least once each 24 hour period while drilling and blind rams will be operated when out of hole during trips. Full opening stabbing valve and upper kelly cock will be utilized.

11. Proposed Mud Circulating System:

Depth	Mud Wt.	Visc.	Fluid Loss	Type Mud
40-800'	8.6-8.8	29-36	NC	Fresh water Spud mud, add paper to control seepage.
800-4550'	10-10.6	29-32	NC	Brine water add paper for seepage control and Lime for pH control, hole sweeps to clean hole.
4550-8500'	8.6-8.8	29-32	NC	Fresh water add paper to control seepage.
8500-8900'	8.6-8.8	29-38	10 cc or less	Fresh water Drispac system add soda ash to control pH and starch to control water loss

Sufficient mud materials will be kept on location at all times in order to combat lost circulation and unexpected kicks. In order to run DST'S, open hole logs and casing the viscosity and water loss may have to be adjusted to meet these needs.

POGO PRODUCING COMPANY
RED TANK "28" FEDERAL # 2
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T22S-R32E LEA CO. NM

12. Testing, Logging and Coring Program:

- A. Mud logger will be on hole from 4550' 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. from TD to 4550'
- D. Gamma Ray Neutron from 4550' to surface.

13. Potential Hazards:

No abnormal pressures or temperatures are expected. Hydrogen Sulfide gas may be encountered, H₂S 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 potentialized 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 block 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, 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 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 telephones 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 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 separator will be brought into service along with H_2S scavengers if necessary.

SURFACE USE PLAN

POGO PRODUCING COMPANY
RED TANK "28" FEDERAL # 2
UNIT "P" SECTION 28
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. Existings 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, New Mexico take US Hi-way 62-180 West toward Carlsbad New Mexico go 40 miles to Co.Road C-29 turn South go 14 miles to Mills Ranch Road. Turn East and follow oil field road for 5.1 miles turn Southeast go .95 miles turn West go .6 miles to location.
 - C. Lay 3" polyethalene pipeline to transport produced fluids to a common tank battery. Construct a 1250 KV electric power line along road ROW in order to produce oil and gas from this well.
2. PLANNED ACCESS ROADS: Approximately 875' 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 in the immediate area.
 - B. Disposal wells - One approximately 1.5 miles North.
 - 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
RED TANK "28" FEDERAL # 2
UNIT "P" SECTION 28
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 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. 3. 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.

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.

POGO PRODUCING COMPANY
RED TANK "28" FEDERAL # 2
UNIT "P" SECTION 28
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.
- 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:

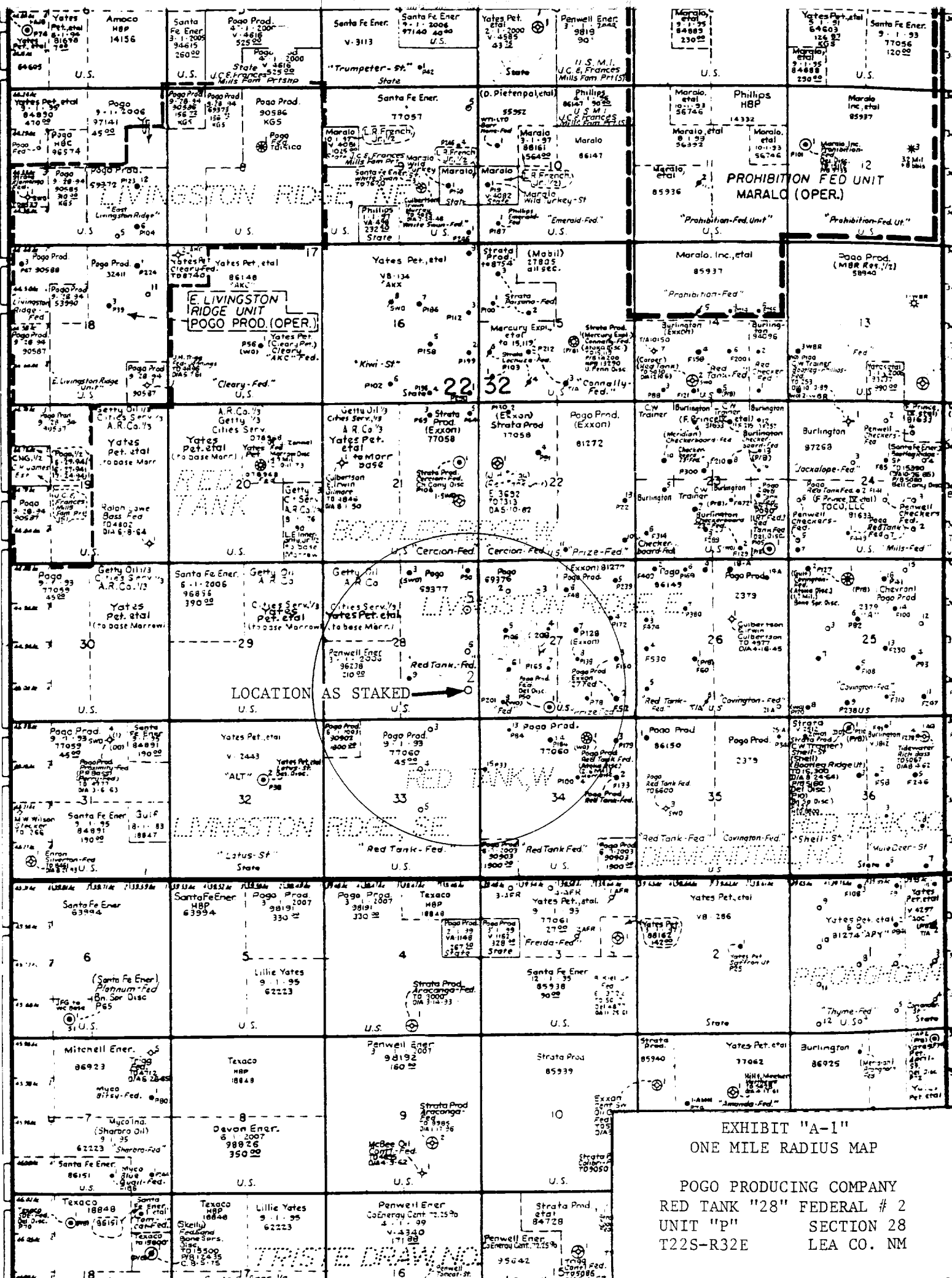
Tierra Exploration Inc.
P.O. Box 2188
Hobbs, NM 88241
Office Phone: 505-392-2112
Joe T. Janica

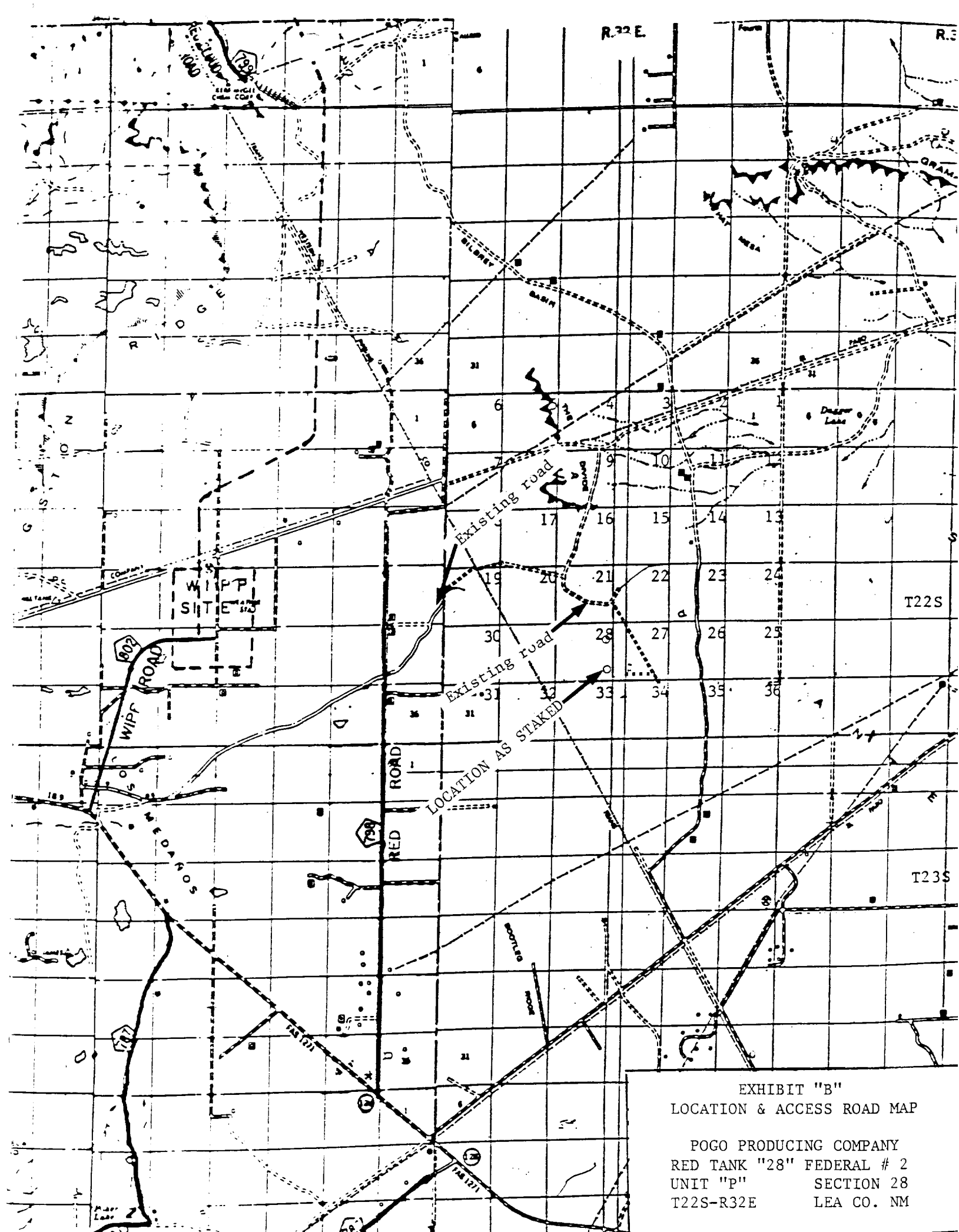
During and after Construction

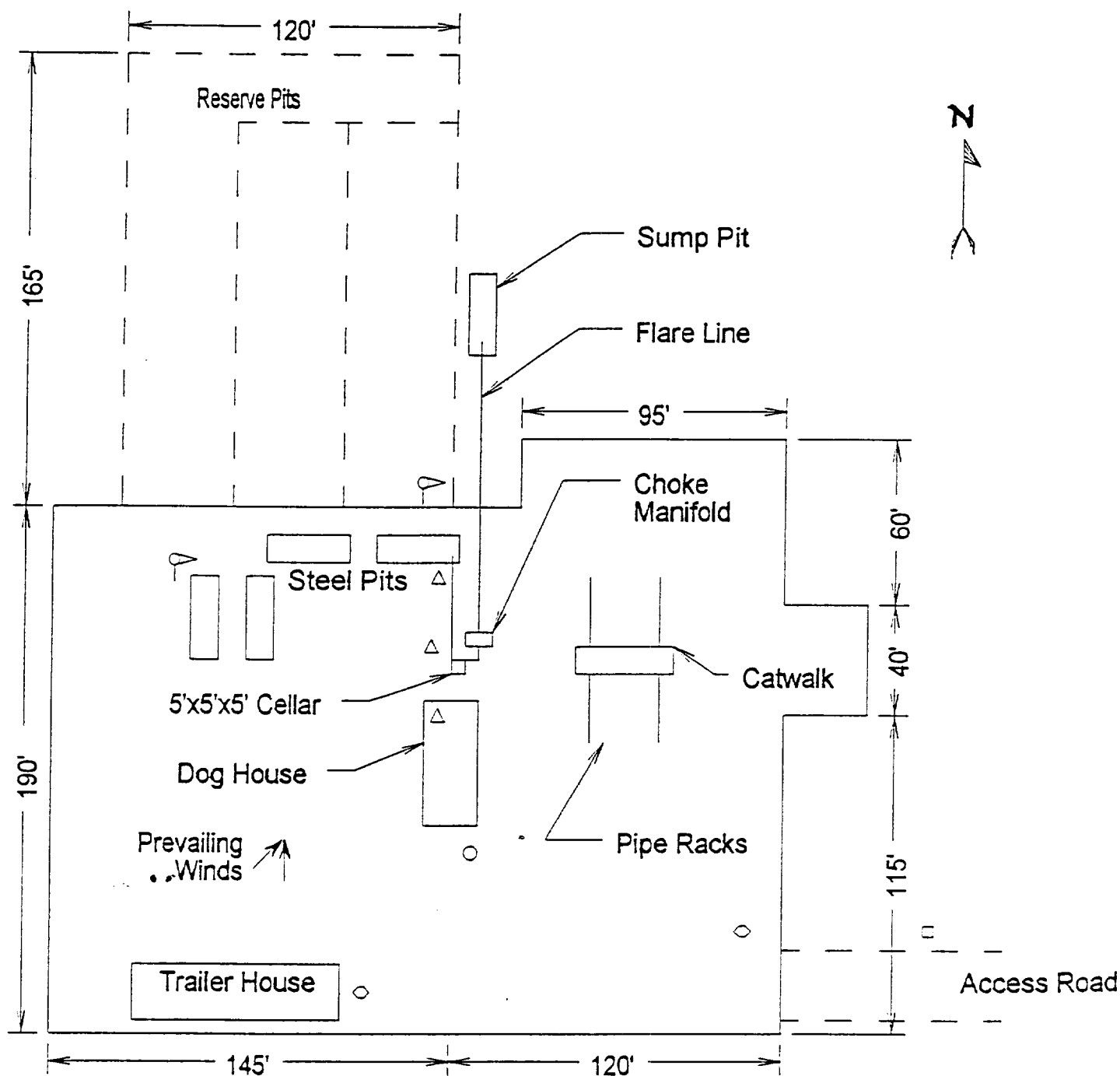
Pogo Producing Company
P.O. Box 10340
Midland, Tx 79702-7340
Office Phone: 915-685-8140
Mr. Richard Wright

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
TITLE: Agent
DATE: 06/17/98







- 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 "28" FEDERAL # 2
UNIT "P" SECTION 28
T22S-R32E LEA CO. NM

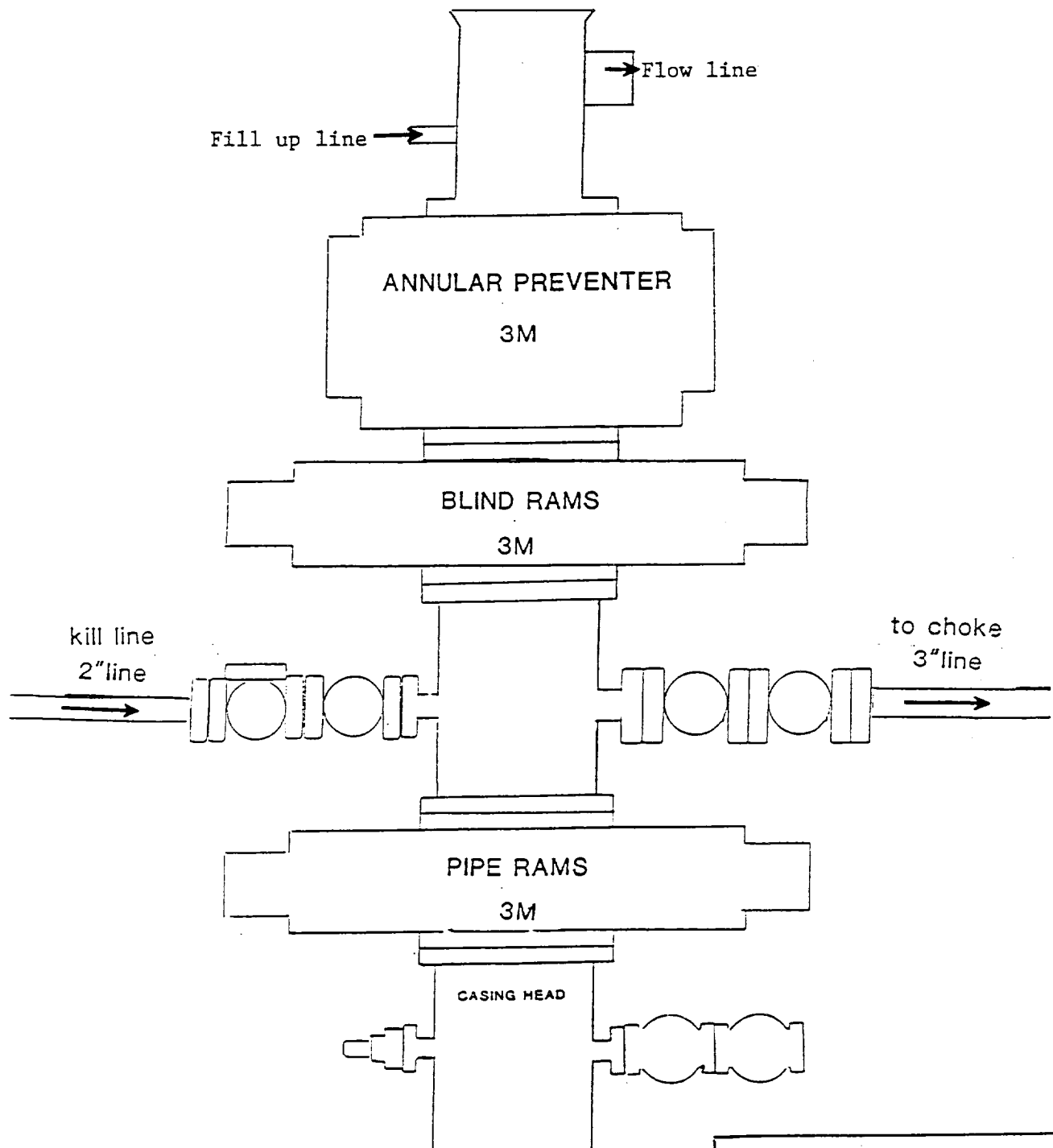
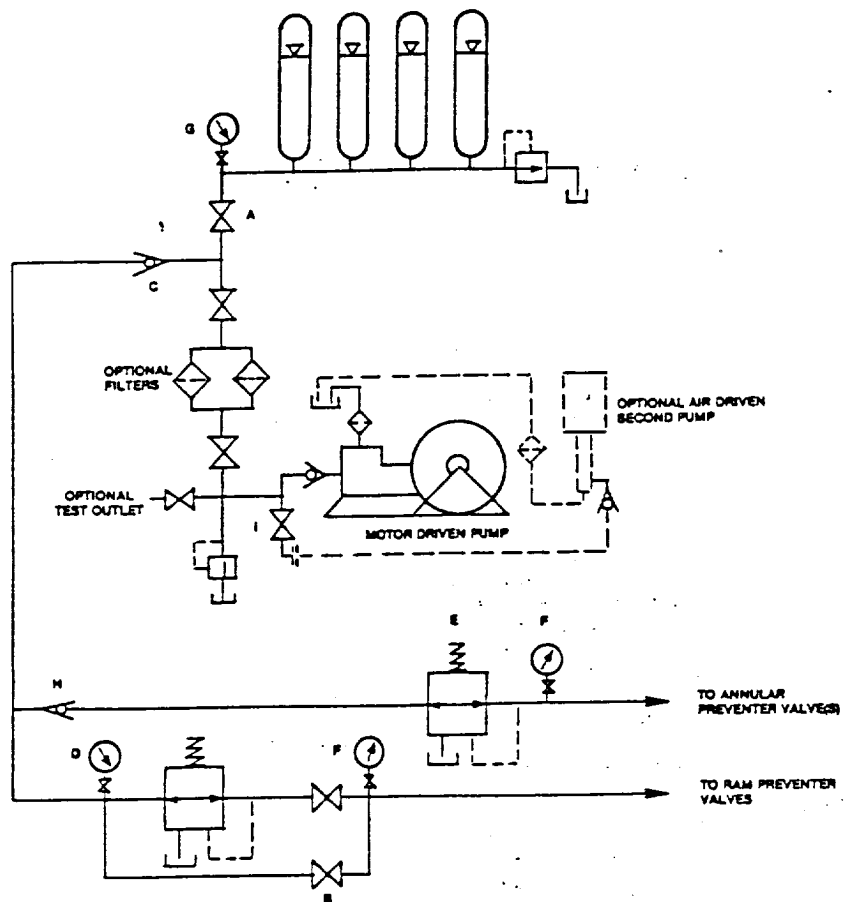


EXHIBIT "E"
B.O.P. SKETCH TO BE USED ON

POGO PRODUCING COMPANY
RED TANK "28" FEDERAL # 2
UNIT "P" SECTION 28
T22S-R32E LEA CO. NM



POGO PRODUCING CO
3M CHOKE MANIFOLD

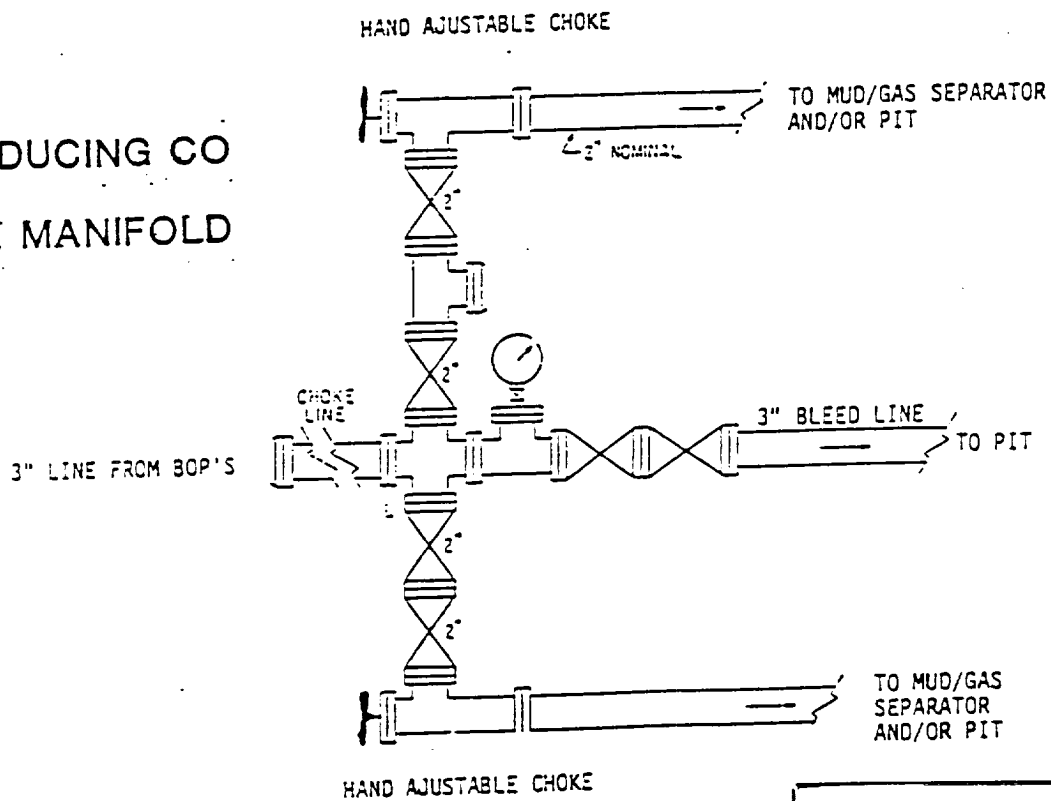


EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY
RED TANK "28" FEDERAL # 2
UNIT "P" SECTION 28
T22S-R32E LEA CO. NM