

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## 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

(RICHARD WRIGHT 915-685-8140)

## 3. ADDRESS AND TELEPHONE NO.

P.O. BOX 10340 MIDLAND, TEXAS 79702-7340 (915-695-8100)

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

1980' FSL & 660' FEL SEC. 23 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.  
(Also to nearest drilg. unit line, if any)

660'

## 16. NO. OF ACRES IN LEASE

640

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

320

18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

330'

## 19. PROPOSED DEPTH

15,400'

## 20. ROTARY OR CABLE TOOLS

ROTARY

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

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"	Conductor	NA	40'	Cement to surface with Redi-mix.
17½"	H-40 13 3/8"	48	850'	1000 Sx. cement to surface
12½"	N-80 9 5/8"	40.5	4700'	1800 Sx. " " "
8½"	P-110, S-95 7"	29	12,500'	1200 Sx. top of cement 3000'
6 1/8"	P-110 5"	18	12,250-15,400'	400 Sx. cement to top of liner

1. Drill 25" hole to 40' Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
2. Drill 17½" hole to 850'. Run and set 850' of 13 3/8" 48# H-40 ST&C casing. Cement with 1000Sx. of Class "C" cement + 2% CaCl, + ½# Flocele/Sx., circulate cement to surface.
3. Drill 12½" hole to 4700'. Run and set 4700' of 9 5/8" 40.5# N-80 ST&C casing. Cement with 1800 Sx. of Class "C" cement + additives, circulate cement to surface.
4. Drill 8½" hole to 12,500'. Run and set 12,500' of casing as follows: 4500' of 7" 29# S-95 LT&C, 8000' of 7" 29# P-110 LT&C casing. Cement in 2 stages DV tool set at 7000'±. Cement with 1200 Sx. of Class "H" cement + additives, estimate top of cement 3000' from surface.
5. Drill 6 1/8" hole to 15,400'. Run and set a 5" 18# P-110 LT&C liner from 15,400' back to 12,250'. Cement with 400 Sx. of Class "H" Premium low water loss cement. Cement back to top of liner hanger.

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHEDSIGNED Joe T. Garcia TITLE Agent

DATE 01/16/01

(This space for Federal or State office use) ORIGINAL SIGNED BY CHAIRMAN  
DISTRICT 1 SUPERVISOR

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  
CONDITIONS OF APPROVAL, IF ANY:APPROVED BY /s/ Joe G. Lara TITLE \_\_\_\_\_

DATE \_\_\_\_\_

OPER. OGRID NO. 17891  
PROPERTY NO. 27858  
POOL CODE 83730  
EFF. DATE 4-9-01  
APNO. 30-025-35505

\*See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

**RECEIVED**

**JAN 17 '00**

**ROSWELL, NM**

DISTRICT II  
P.O. Drawer DD, Artesia, NM 86211-0719

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 30-025-35505	Pool Code 72650 83730	Red Tank; BOOTLEG RIDGE-MORROW, East	Pool Name
Property Code 27858	Property Name BOOTLEG RIDGE "23" FEDERAL COM.		Well Number 2
OGRID No. 17891	Operator Name POGO PRODUCING COMPANY		Elevation 3718

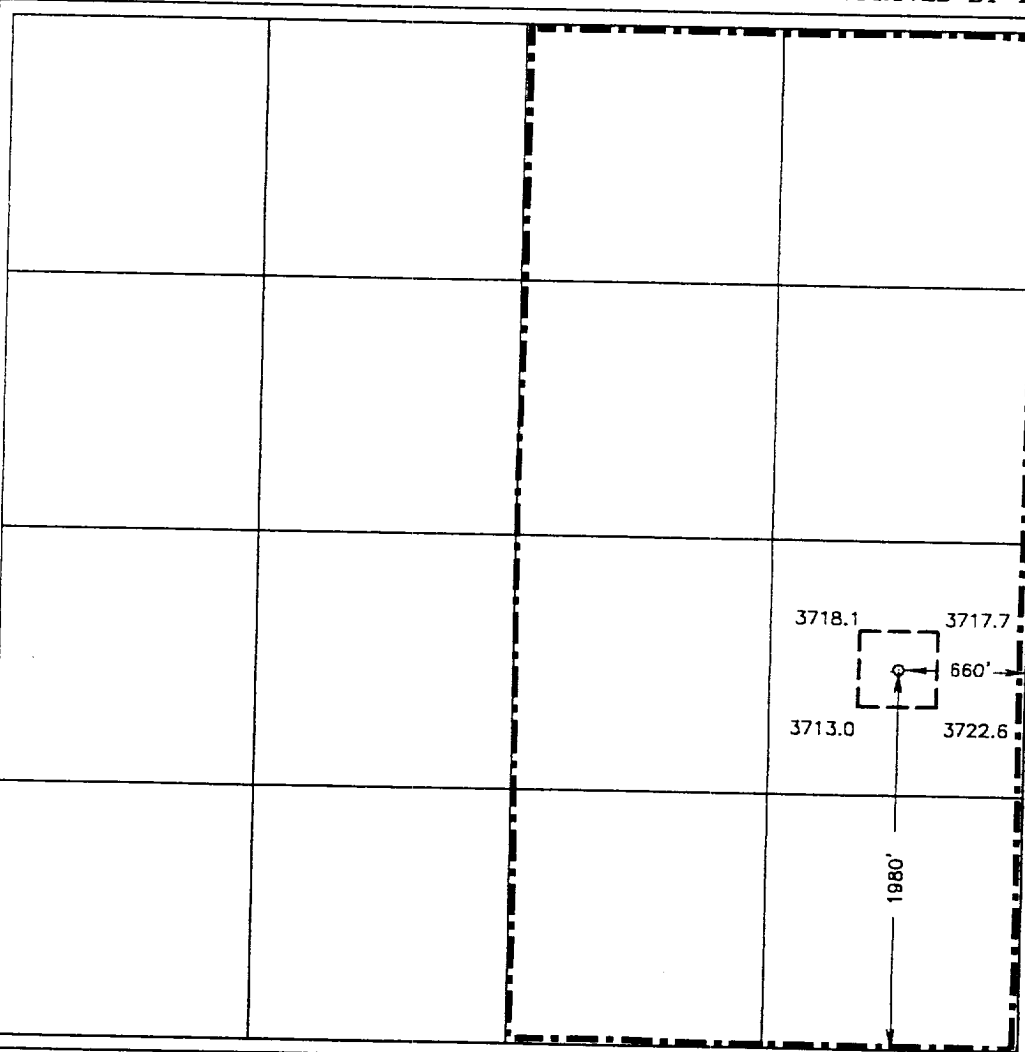
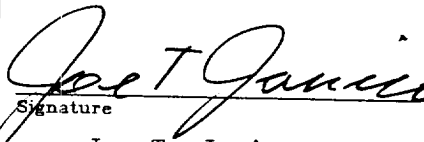

### Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	23	22-S	32-E		1980	SOUTH	660	EAST	LEA

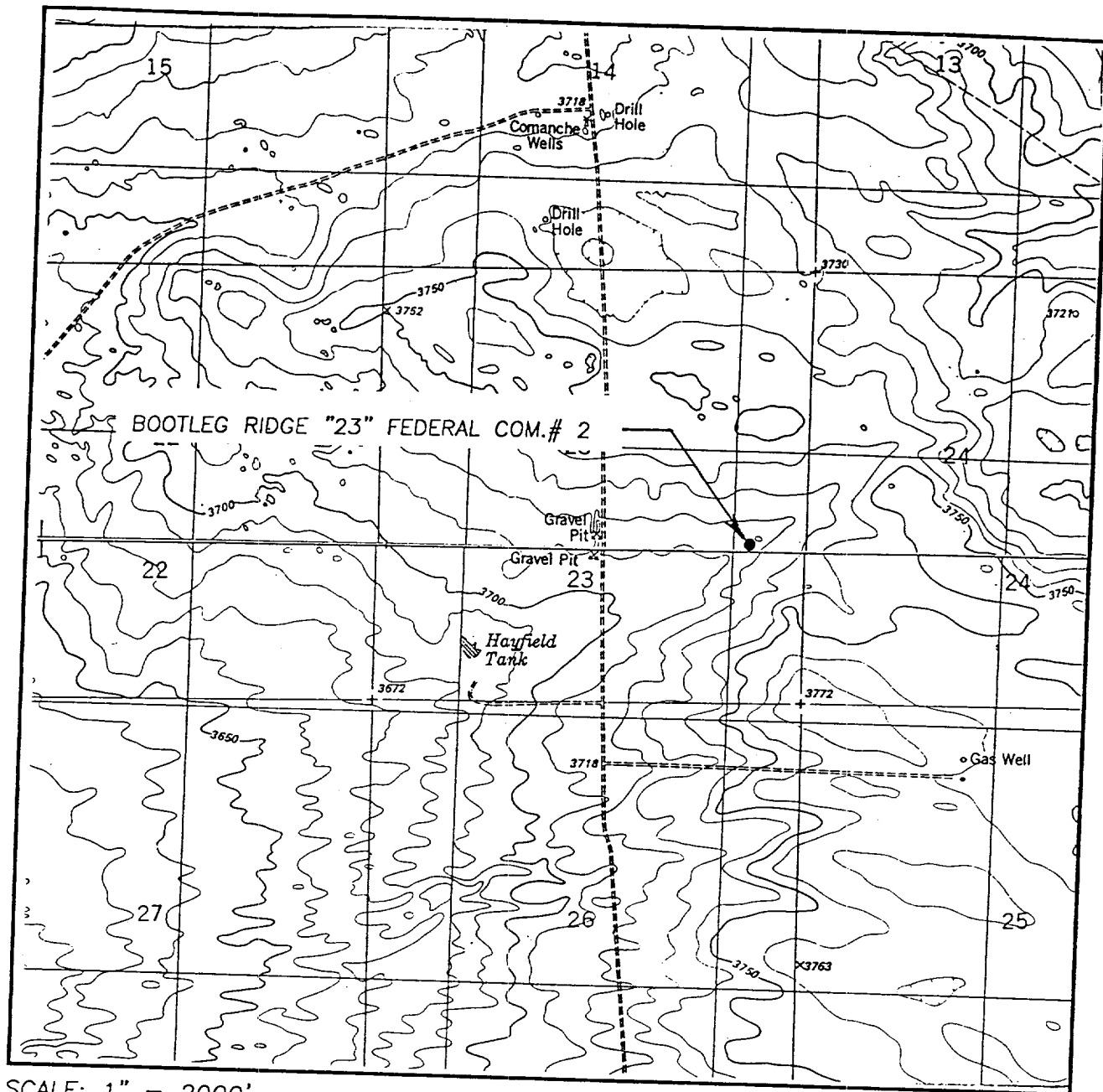
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.						
320									

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>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</i>	
		 Signature	
		Joe T. Janica Printed Name	
		Agent Title	
		01/16/01 Date	
		<b>SURVEYOR CERTIFICATION</b>	
		<i>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.</i>	
		JANUARY 05, 2001	
		Date Surveyed	
		Signature & Seal of Professional Surveyor	
		 01-11-0007	
		Certificate No. RONALD J. EDSON 3239 GARY EDSON 12641	

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'  
THE DIVIED N.M.

SEC. 23 TWP. 22-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 1980' FSL & 660' FEL

ELEVATION 3718

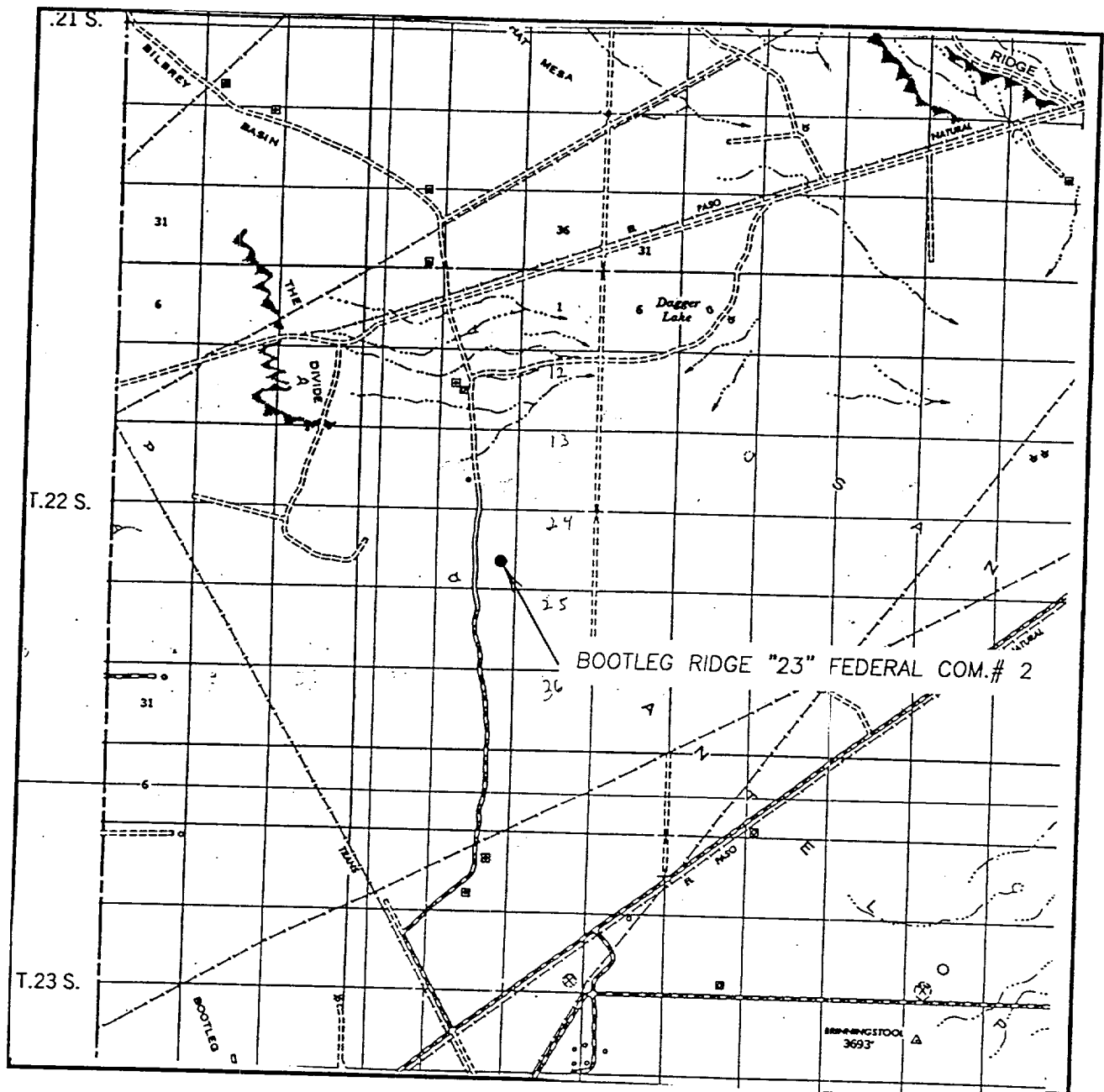
OPERATOR POGO PRODUCING COMPANY

LEASE BOOTLEG RIDGE "23" FEDERAL COM.

U.S.G.S. TOPOGRAPHIC MAP  
THE DIVIED N.M.

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

# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 23 TWP. 22-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 1980' FSL & 660' FEL

ELEVATION 3718

OPERATOR POGO PRODUCING COMPANY

LEASE BOOTLEG RIDGE "23" FEDERAL COM.

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

# APPLICATION TO DRILL

POGO PRODUCING COMPANY  
 BOOTLEG RIDGE "23" FEDERAL COM. # 2  
 UNIT "I" SECTION 23  
 T22S-R32E LEA CO. NM

In response to questions asked under Section II of Bulletin NTL-6 the following information on the above well is provided for your consideration.

1. Location: 1980' FSL & 660' FEL SEC. 23 T22S-R32E LEA CO. NM
2. Elevation above Sea Level: 3718' GR.
3. Geologic name of surface formation: Quaternary Aeolian Deposits.
4. Drilling tools and associated equipment: Conventional rotary drilling rig using drilling mud as a circulating medium for solids removal from hole.
5. Proposed drilling depth: 15,400'
6. Estimated tops of geological markers:

Rustler Anhydrite	800'	Strawn	13590'
Delaware	4815'	Atoka	13890'
Bone Spring	8665'	Morrow	14242'
Wolfcamp	12,090'	Lower Morrow	15263'
7. Possible mineral bearing formations:

Delaware	Oil	Strawn	Gas
Bone Spring	Oil	Atoka	Gas
Wolfcamp	Gas	Morrow	Gas
8. Casing program:

Hole size	Interval	OD of casing	Weight	Thread	Collar	Grade
25"	0-40	20"	NA	NA	NA	Conductor
17½"	0-850'	13 3/8"	48	8-R	ST&C	H-40
12¼"	0-4700'	9 5/8"	40.5	8-R	ST&C	N-80
8½"	0-12,500'	7"	29	8-R	LT&C	S-95 & P-110
6 1/8"	12,250-15,400'	5"	18	8-R	LT&C	P-110

# APPLICATION TO DRILL

POGO PRODUCING COMPANY  
 BOOTLEG RIDGE "23" FEDERAL COM. # 2  
 UNIT "I" SECTION 23  
 T22S-R32E LEA CO. NM

## 9. SETTING DEPTH & CASING CEMENTING:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mic.
13 3/8"	Surface	Set 850' of 13 3/8" 48# H-40 ST&C casing. Cement with 1000 Sx. of Class "C" cement + 2% CaCl + 1/4# Flocele/Sx. cir. to surface.
9 5/8"	1st Intermediate	Set 4700' of 9 5/8" 40.5# N-80 ST&C casing. Cement with 1800 Sx. of Class "C" cement + 2% CaCl + 1/4# Flocele/Sx. cir. to surface.
7"	2nd Intermediate	Set 12,500' of 7" 29# S-95 & P-110 LT&C casing. Cement with 1200 Sx. of Class "H" cement + additives. Cement in 2 stages with DV tool at 7000'±, estimate top of cement 3000'.
5"	Production Liner	Set a 5" 18# P-110 LT&C production liner from 15,400' back to 12,250'. Cement with 400 Sx. of Class "H" Premium low water loss cement, bring cement back to liner hanger.

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E" shows a 1500 Series 5000 PSI working pressure B.O.P. consisting of a top bag type annular preventor, middle blind rams, bottom pipe rams. This will be on hole from 850' to 12,500'. Exhibit "E-1" shows a 10,000 PSI working pressure B.O.P. consisting of top bag type annular preventor, middle top pipe rams, middle bottom blind rams, bottom pipe rams, this system will be on hole from 12,500' to total depth. Both systems will be operated by a hydraulically operated closing unit. Pipe rams will be operated on a regular basis and blind rams will be operated when drill pipe is out of hole. Choke manifold will have hand and hydraulic operated controls. Flow sensor PVT, full opening stabbing valves and upper kelly cock will be utilized. No abnormal pressures or temperatures are expected while drilling.

## 11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD
40-850'	8.5-8.7	29-34	NC	Fresh water spud mud add paper to control seepage if necessary.
850-4700'	10.2-10.4	29-35	NC	Brine water add paper to control seepage & Lime to control pH
4700-12,500'	8.5-8.7	29-38	NC	Fresh water add Gel for High viscosity sweeps to clean hole.
12,500-14,200'	10.5-10.7	28-38	NC	Brine water using high viscosity sweeps to clean hole, and Soda Ash to control pH
14,200-15,400	10.5-10.8	32-40	10 cc or less	Use a Brine Dris-Pac system to control water loss for DST's and open hole logs.

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

APPLICATION TO DRILL

POGO PRODUCING COMPANY  
BOOTLEG RIDGE "23" FEDERAL COM. # 2  
UNIT "I" SECTION 23  
T22S-R32E LEA CO. NM

12. TESTING, LOGGING, & COREING PROGRAM:

- A. Open hole logs: Run # 1 Dual Laterolog, SNP, LDT, Gamma Ray, Caliper from 4700-850', run Gamma Ray, Neutron from 850' to surface. Run # 2 Dual Induction SNP, LDT Gamma Ray, Caliper from 12,500' to 4700'. Run # 3 Dual Laterolog SNP, LDT, Gamma Ray, Caliper from TD back to 12,500'.
- B. Mud logger will be rigged up on hole at 4700' and remain on hole to TD.
- C. DST's and cores may be run and taken as shows dictate.

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 of unsafe levels of H<sub>2</sub>S. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operations of all equipment that will be used. Estimated BHP 9000 PSI & estimated BHT 200°.

14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Roads and location construction will begin after the BLM approves the APD. Anticipated spud date will be as soon as pad & road construction has been completed. Drilling time for the well is estimated to take 85 days. If production casing is run an additional 30 days will be required to complete well and construct surface facilities.

15. OTHER FACETS OF OPERATION:

After running production casing, cased hole Gamma-Neutron & Collar logs will be run over all possible pay intervals. If commercial production from the MORROW pay is indicated it will be perforated and stimulated. Then if necessary the pay will be swab tested and completed as a gas 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 bloop 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<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 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  
BOOTLEG RIDGE "23" FEDERAL COM. # 2  
UNIT "I" SECTION 23  
T22S-R32E LEA CO. NM

1. EXISTING ROADS: Area maps, Exhibit "B" is a reproduction of a County General Highway Map. Exhibit "C" is a reproduction of a USGS Topographic Map, showing existing roads and proposed roads. All existing roads will be maintained in a condition equal to or better than current conditions. Any new roads will be constructed to BLM specifications.
  - A. Exhibit "A" shows the proposed well site as staked.
  - B. From Hobbs, New Mexico take U.S. Hi-way 62-180 towards Carlsbad New Mexico go 38 miles to Co Road C-29 turn South and go 14 miles to Mills Ranch road turn East and follow road for 7.2 miles turn South go 1.3 miles turn East go .3 miles turn North go .5 miles to location on the East side of road.
  - C. Lay flow lines and construct powerlines along road R-O-W to tank battery and existing powerlines, see Exhibit "F".
2. PLANNED ACCESS ROADS: No new roads are required.
  - 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 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"

## SURFACE USE PLAN

POGO PRODUCING COMPANY  
BOOTLEG RIDGE "23" FEDERAL COM. # 2.  
UNIT "I" SECTION 23  
T22S-R32E LEA CO. NM

4. If, upon completion this well is a producer Pogo Producing Company will furnish maps and/or plats showing on site facilities or off site facilities if needed. This will be accompanied with a Sundry Notice.

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 MATERIAL:

If possible construction will be obtained from the excavation of drill site, if additional material is needed it will be purchased from a local source and transported over the access route as shown on Exhibit "C".

7. METHODS OF HANDLING WASTE MATERIAL:

- A. Drill cuttings will be disposed of in the reserve pit.
- B. 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 disposed of in a approved sanitary land fill.
- C. Salts remaining after completion of well will be picked up by supplier including broken sacks.
- D. Sewage from living quarters will drain into holes with a minium depth of 10'. These holes will be covered during drilling and will be back filled upon completion. A Potts-John will be provided for the rig crews. This equipment will be properly maintained during the drilling operations and removed upon completion of the well.
- E. Remaining drilling fluids will be allowed to evaporate in the reserve pit until the pit is dry enough for breaking out. In the event that drilling fluids do not evaporate in a reasonable time they will be hauled off by transports and be disposed of at a state approved disposal facility. Later pits will be broken out to speed drying. Water produced during testing will be put in reserve pits. Any oil or condensate produced will be stored in test tanks until sold and hauled from the site.

8. ANCILLARY FACILITIES:

- A. No camps or airstrips to be constructed.

## SURFACE USE PLAN

POGO PRODUCING COMPANY  
BOOTLEG RIDGE "23" FEDERAL COM. # 2  
UNIT "I" SECTION 23  
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 & 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 polyethelene. The pit liner will be 6 mils thick. Pit liner will extend a minimum of 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  
BOOTLEG RIDGE "23" FEDERAL COM. # 2.  
UNIT "I" SECTION 23  
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 will be conducted and copies of the survey will be filed in the Carlsbad Office of The Bureau of Land Management.
- 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-  
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 : 01/16/01  
TITLE : Agent



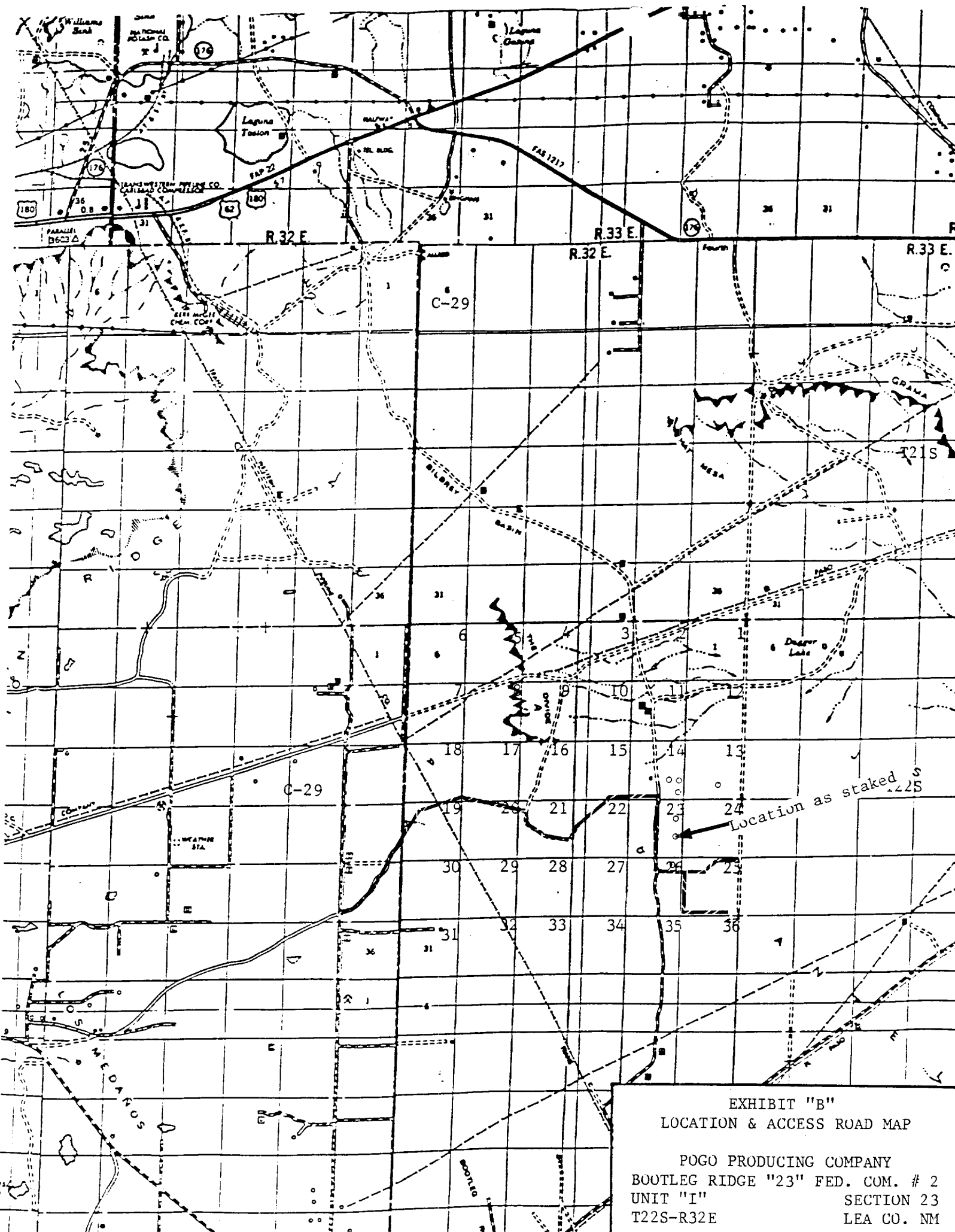


EXHIBIT "B"  
LOCATION & ACCESS ROAD MAP

POGO PRODUCING COMPANY  
BOOTLEG RIDGE "23" FED. COM. # 2  
UNIT "I" SECTION 23  
T22S-R32E LEA CO. NM



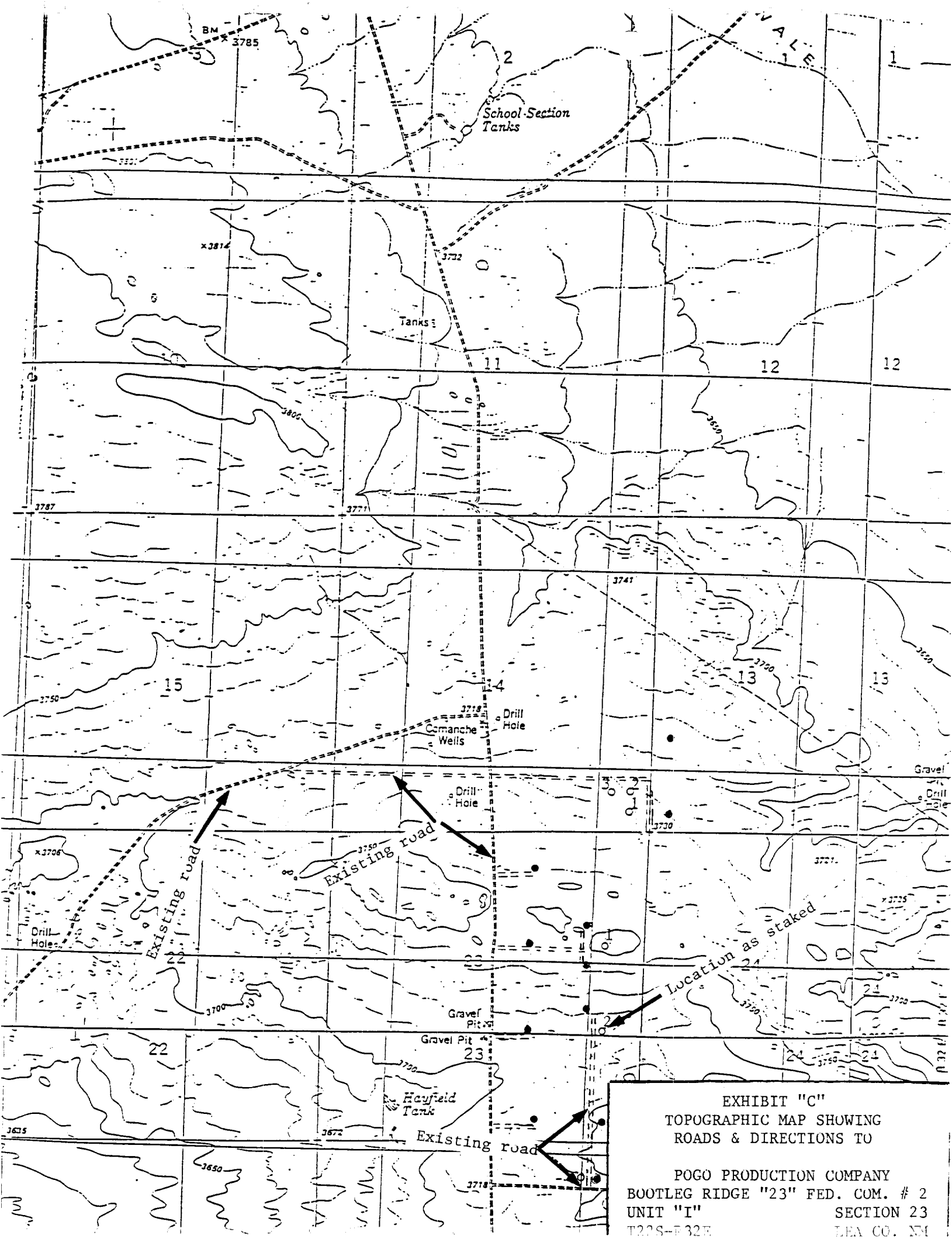
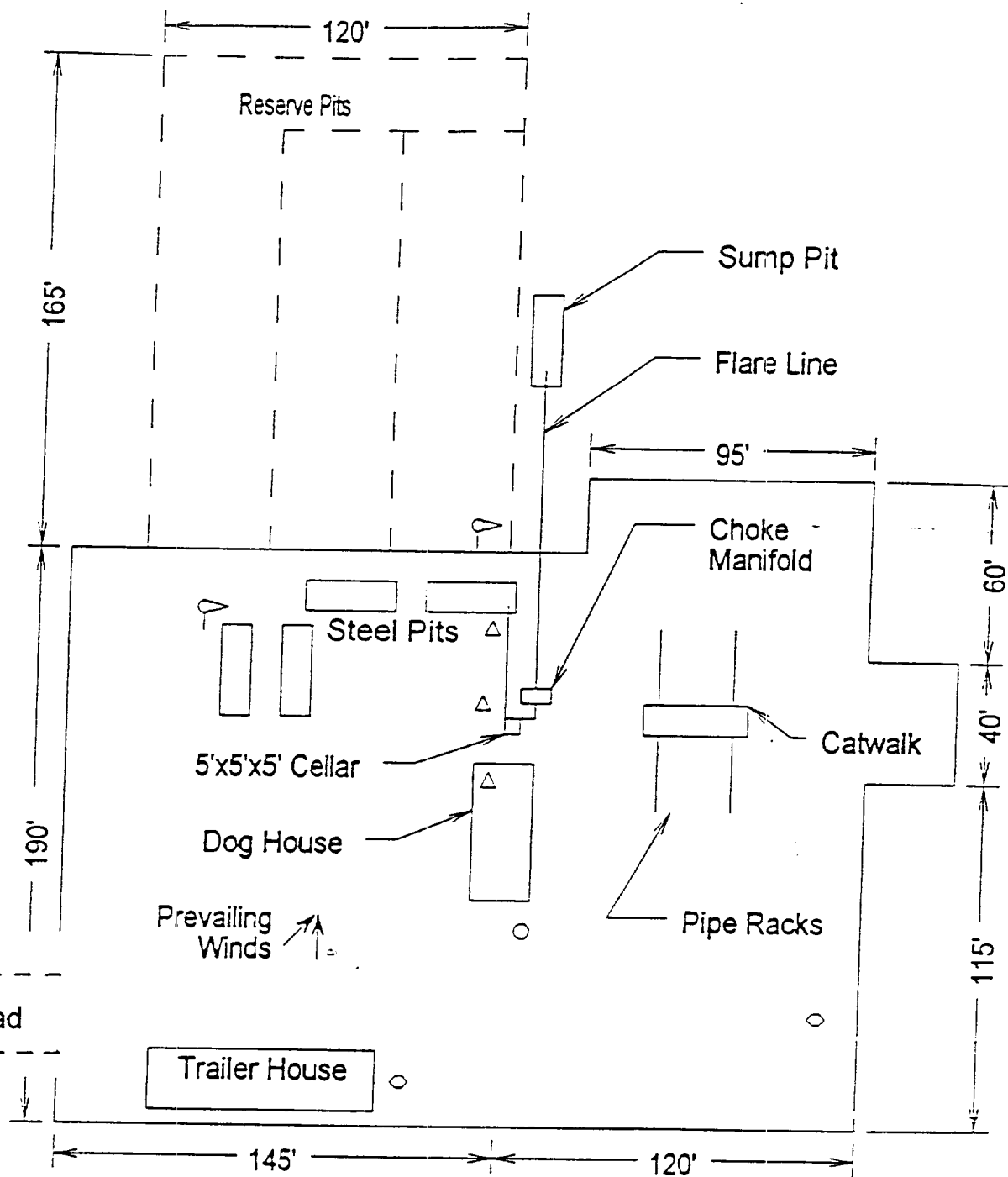


EXHIBIT "C"  
TOPOGRAPHIC MAP SHOWING  
ROADS & DIRECTIONS TO

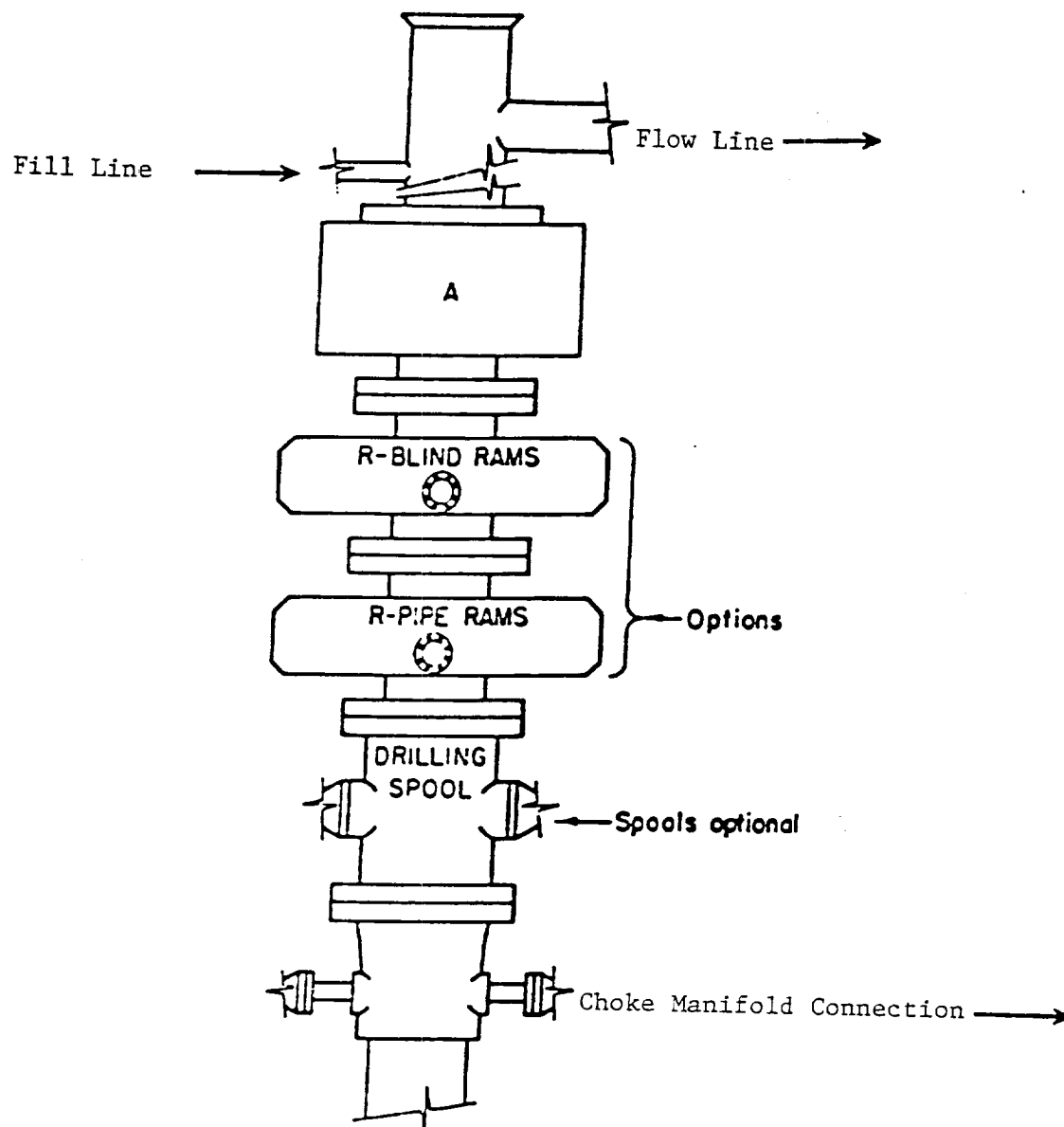
POGO PRODUCTION COMPANY  
BOOTLEG RIDGE "23" FED. COM. # 2  
UNIT "I" SECTION 23  
T23S-E32E LEA CO. NM



- ⌂ 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 LAY OUT PLAT

POGO PRODUCING COMPANY  
 BOOTLEG RIDGE "23" FED. COM. # 2  
 UNIG "I" SECTION 23  
 T22S-R32E LEA CO. NM



# **ARRANGEMENT SRRA**

1500 Series  
5000 PSI WP

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

POGO PRODUCING COMPANY  
BOOTLEG RIDGE "23" FED. COM. # 2  
UNIT "I" SECTION 23  
T22S-R32E LEA CO. NM

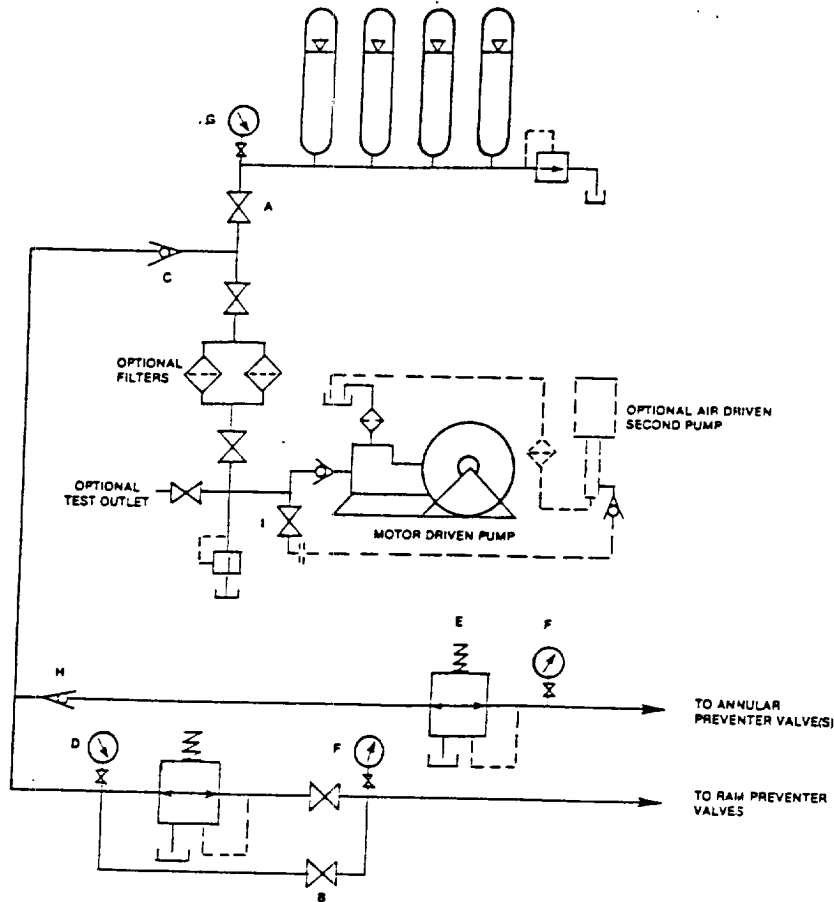


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

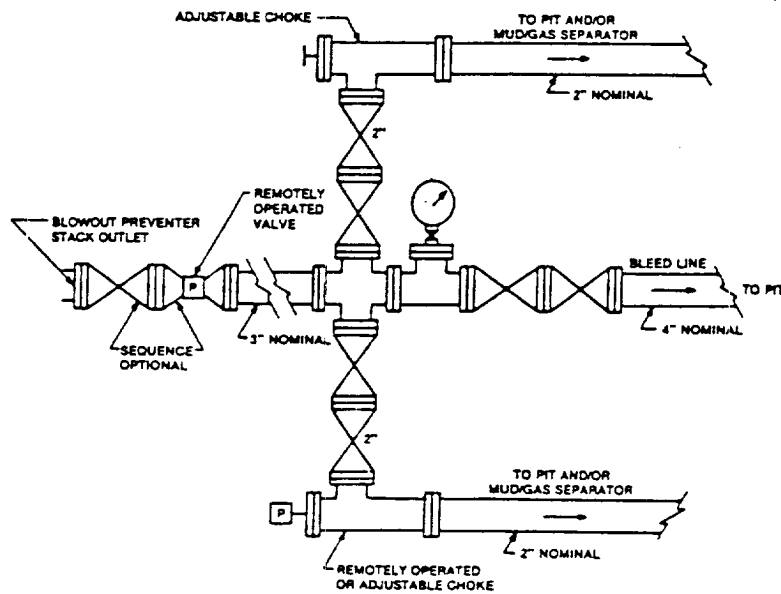


FIGURE K4-2. Typical choke manifold assembly for 5M rated working pressure service — surface installation.

EXHIBIT "E-1"  
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY  
BOOTLEG RIDGE "23" FED. COM. # 2  
UNIT "I" SECTION 23  
T22S-R32E LEA CO. NM



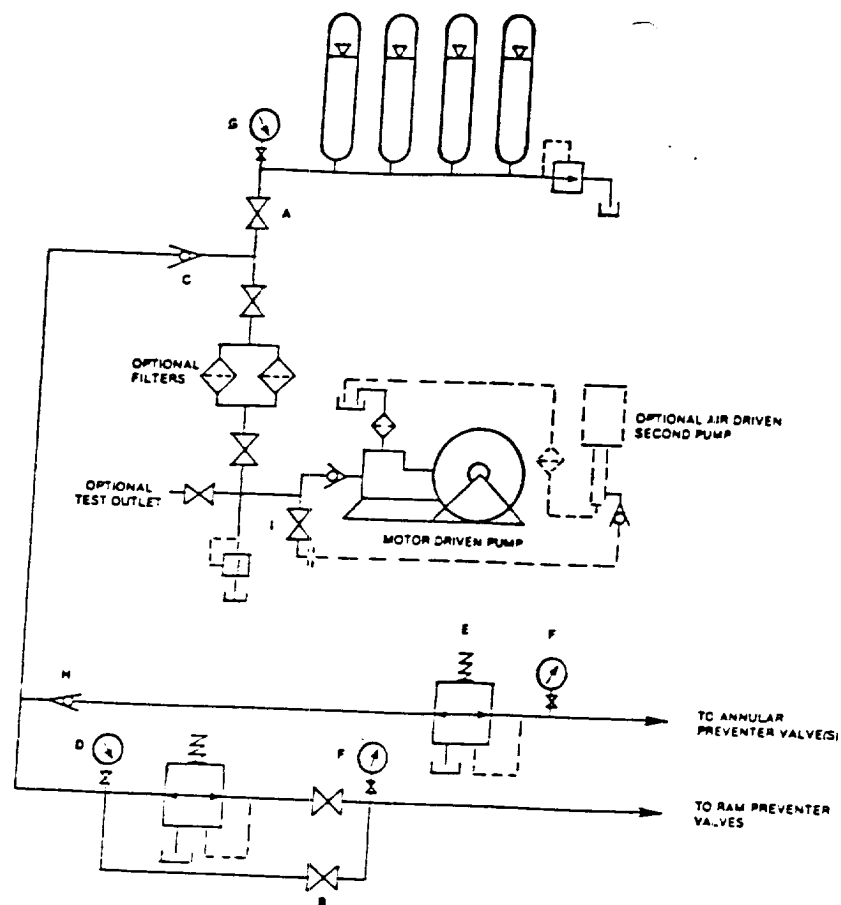


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

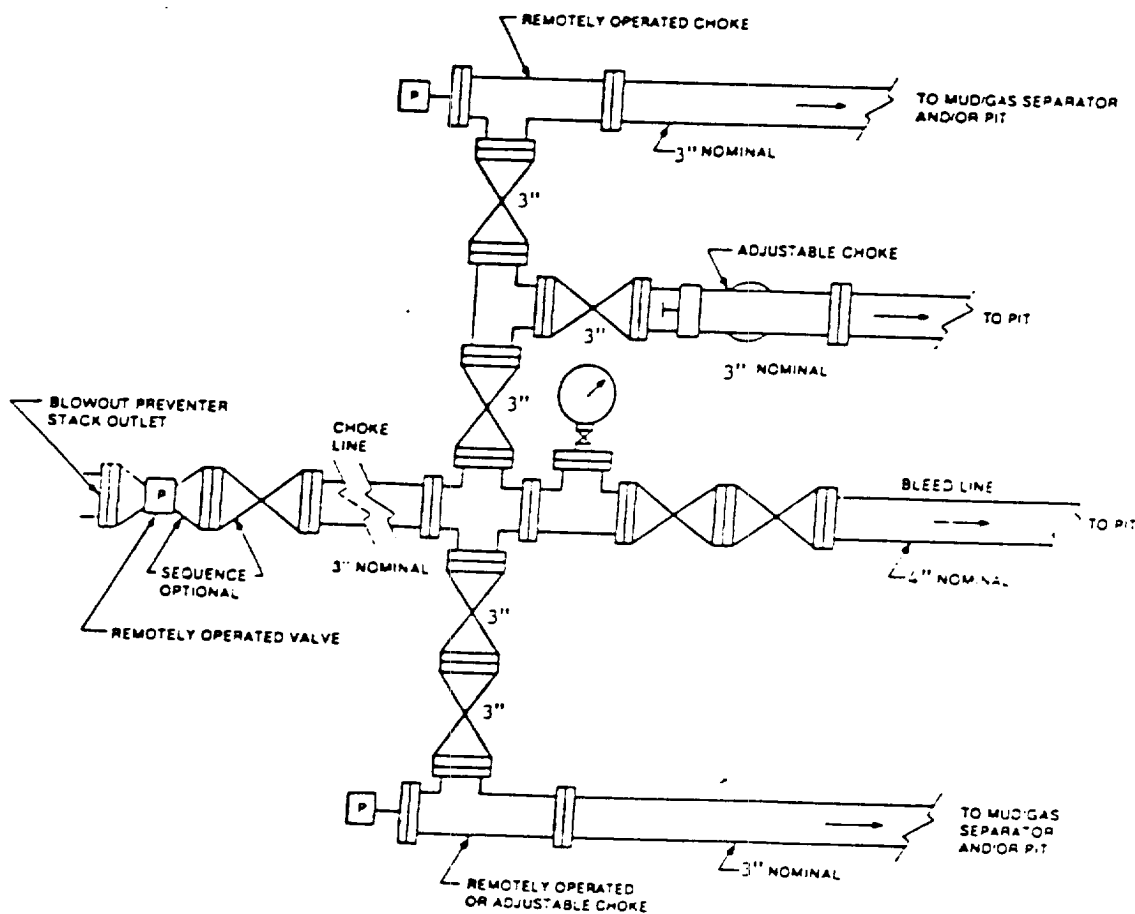


FIGURE K4-3. Typical choke manifold assembly for 10M and 15M rated working pressure service — surface installation.