

UN D 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.)

At surface 660' FSL & 660' FWL SEC. 12 T22S-R22E EDDY CO. NM

At proposed prod. zone SAME

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

Approximately 30 miles West of Carlsbad New Mexico.

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drig. unit line, if any)

660'

16. NO. OF ACRES IN LEASE

320

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.

NA

19. PROPOSED DEPTH

10,000

20. ROTARY OR CABLE TOOLS

ROTARY

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

4223' GR

Carlsbad Controlled Water Basin

22. APPROX. DATE WORK WILL START*

WHEN APPROVED

23.

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"	J-55 13 3/8"	54.5	1000'	1200 Sx. circulate to surface
12½"	J-55 9 5/8"	40	2300'	1000 Sx. " " "
8½"	N-80 7"	26	10,000'	1650 Sx. " " "

1. Drill 25" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
2. Drill 17½" hole to 1000'. Run and set 1000' of 13 3/8" J-55 54.5# ST&C casing. Cement with 1200 Sx. of Class "C" cement + 2% CaCl₂ + ¼# Flocele/Sx. circulate cement to surface.
3. Drill 12½" hole to 2300'. Run and set 2300' of 9 5/8" 40# J-55 ST&C casing. Cement with 1000 Sx. of Class "C" cement + 2% CaCl₂ + ¼# Flocele/Sx. circulate cement to surface.
4. Drill 8½" hole to 10,000'. Run and set 10,000' of 7" 26# N-80 LT&C casing. Cement in 3 stages. DV tools @ 5500' ± & 2200'±. Cement 1st stage with 650 Sx. of Class "H" Premium Plus cement + additives, 2nd stage cement with 600 Sx. of Class "C" cement + additives, 3rd stage cement with 400 Sx. of Class "C" cement + additives, circulate cement to surface.

Pogo Producing Company accepts responsibility for the operation of this lease.

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.

SIGNED

TITLE

APPROVAL SUBJECT TO

DATE 07/09/01

(This space for Federal or State office use)

GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

PERMIT NO.

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:

/S/ JOE G. LARA

TITLE

FIELD MANAGER

DATE

AUG 06 2001

*See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

BUREAU OF LAND MGMT.
ROSWELL OFFICE

2001 JUL 10 AM 8:38

RECEIVED

2001 JUL 10 AM 8:38

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

State of New Mexico

Energy, Minerals and Natural Resources Department

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	UNDES. - MORROW	Pool Name
Property Code	Property Name DALTON 12 FEDERAL		Well Number 1
OGRID No. 17891	Operator Name POGO PRODUCING COMPANY		Elevation 4223'

Surface Location

UL or lot No. M	Section 12	Township 22-S	Range 22-E	Lot Idn	Feet from the 660	North/South line SOUTH	Feet from the 660	East/West line WEST	County EDDY
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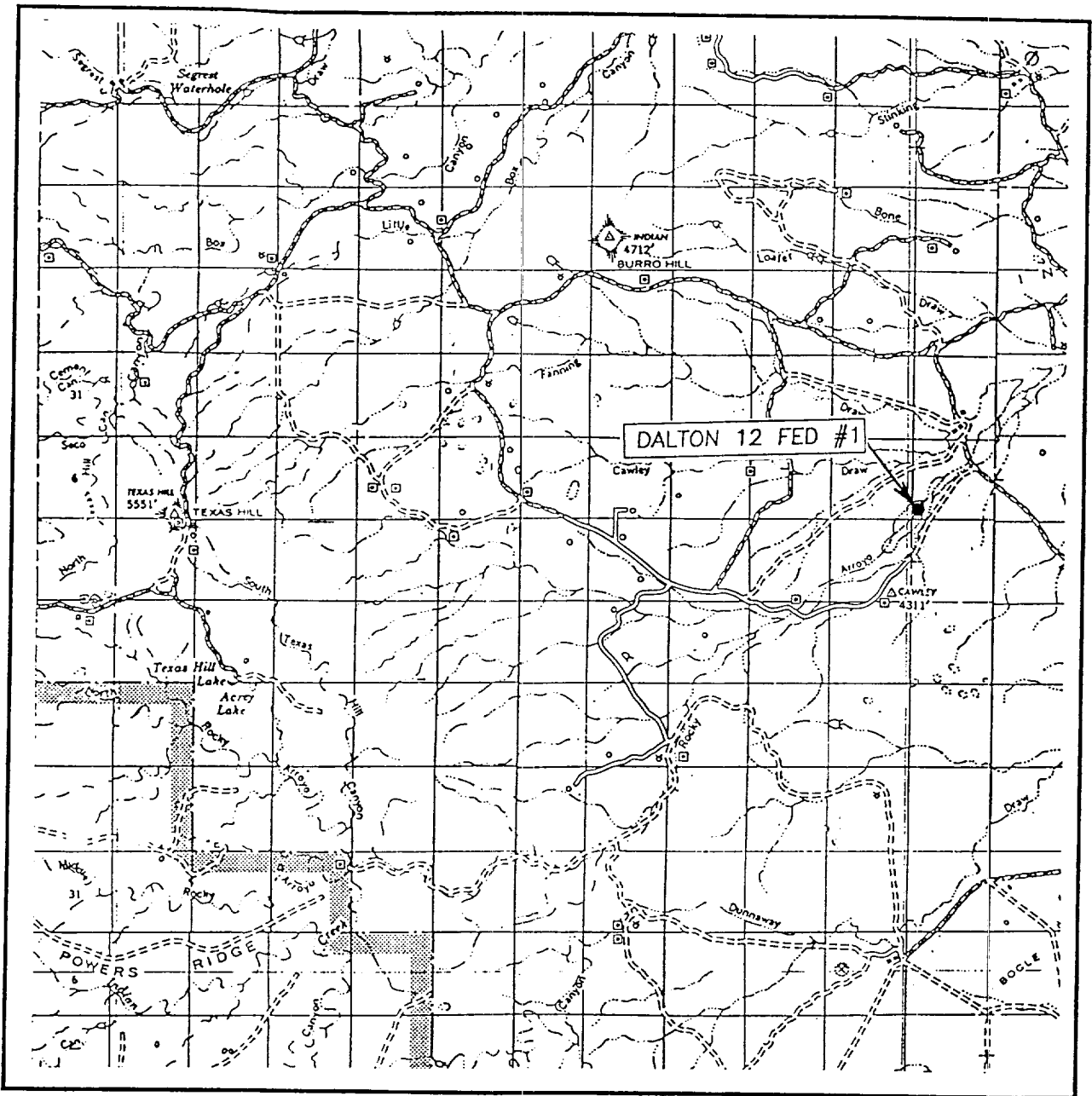
Bottom Hole Location If Different From Surface

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

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

				OPERATOR CERTIFICATION 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 07/09/01 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. JUNE 11, 2001 Date Surveyed AWB Signature & Seal of Professional Surveyor Certificate No. RONALD F. KIDSON 3239 GARY KIDSON 12841	

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 12 TWP. 22-S RGE. 22-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 660' FSL & 660' FWL

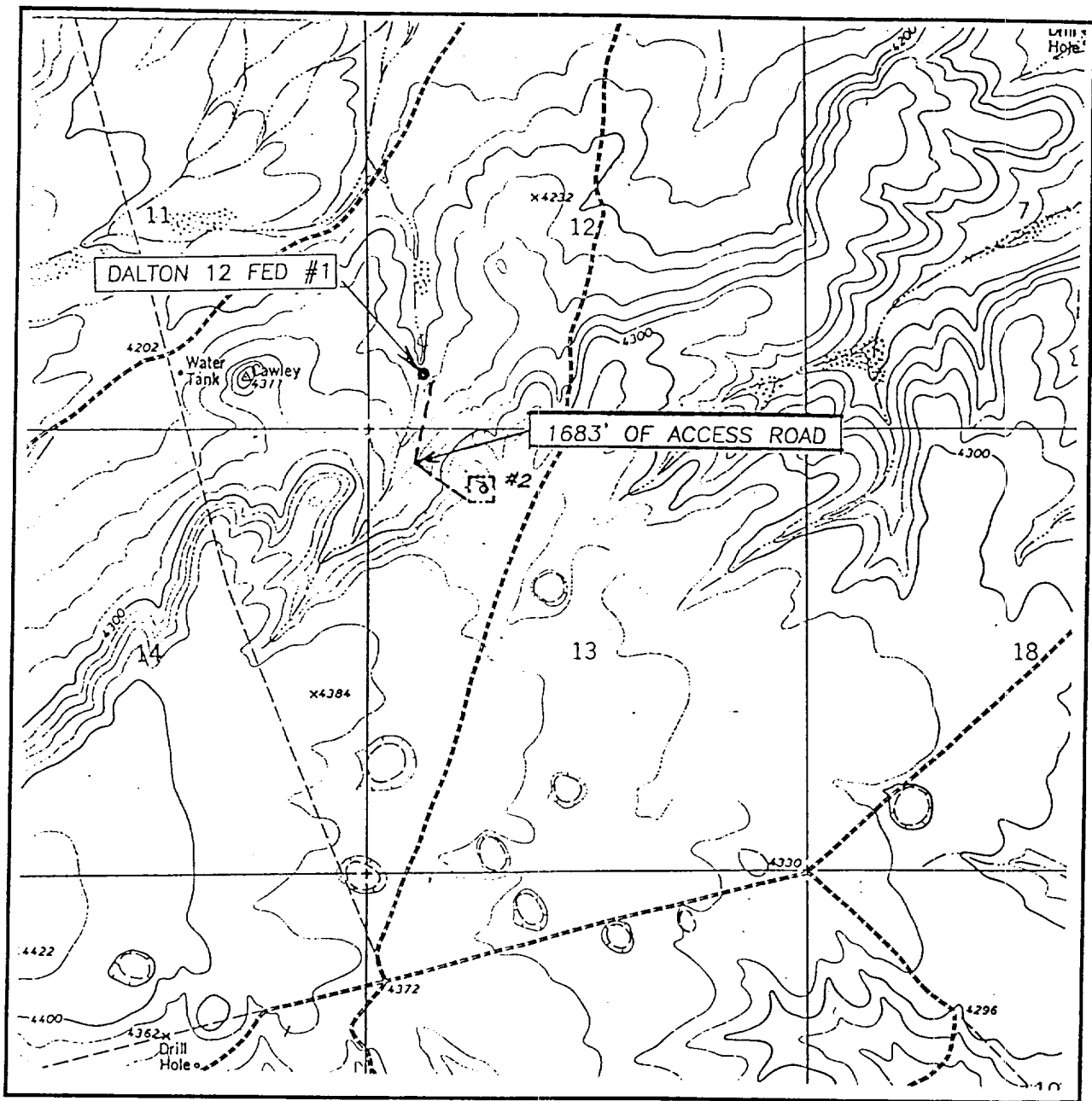
ELEVATION 4223'

OPERATOR POGO PRODUCING COMPANY

LEASE DALTON 12 FEDERAL

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

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 20'

CAWLEY DRAW, N.M.

SEC. 12 TWP. 22-S RGE. 22-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 660' FSL & 660' FWL

ELEVATION 4223'

OPERATOR POGO PRODUCING COMPANY

LEASE DALTON 12 FEDERAL

U.S.G.S. TOPOGRAPHIC MAP

CRAWLEY DRAW, N.M.

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

APPLICATION TO DRILL

POGO PRODUCING COMPANY
 DALTON "12" FEDERAL # 1
 UNIT "M" SECTION 12
 T22S-R22E EDDY 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: 660' FSL & 660' FWL SEC. 12 T22S-R22E EDDY CO. NM

2. Elevation above Sea Level: 4223' 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: 10,000'

6. Estimated tops of geological markers:

San Andres	450'	Cisco	7250'
Glorietta	1900'	Strawn	7950'
Bone Spring	3150'	Atoka	8600'
Wolfcamp	6250'	Morrow	9000'

7. Possible mineral bearing formations:

Bone Spring	Oil	Strawn	Gas
Wolfcamp	Oil	Atoka	Gas
Cisco	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"	0-1000'	13 3/8"	54.5	8-R	ST&C	J-55
12¼"	0-2300'	9 5/8"	40	8-R	ST&C	J-55
8½"	0-10,000'	7"	26	8-R	LT&C	N-80

APPLICATION TO DRILL

POGO PRODUCING COMPANY
DALTON "12" FEDERAL # 1
UNIT "M" SECTION 12
T22S-R22E EDDY CO. NM

9. CASING, CEMENTING & SETTING DEPTH:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
13 3/8"	Surface	Set 1000' of 13 3/8" 54.5# J-55 ST&C casing. Cement with 1200 Sx. of Class "C" cement +2% CaCl + 1/2# Flocele/Sx. circulate cement to surface.
9 5/8"	Intermediate	Set 2300' of 9 5/8" 40# J-55 ST&C casing. Cement with 1000 Sx. of Class "C" cement + 2% CaCl + 1/2# Flocele/Sx. Circulate cement to surface.
7"	Production	Set 10,000' of 7" 26# N-80 LT&C casing. Cement in three stages. 1st stage cement with 650 Sx. of Class "H" + additives, 2nd stage cement with 600 Sx. of Class "C" + additives, 3rd stage cement with 400 Sx of Class "C" + additives, circulate cement to surface, DV tools set at 5500' & 2200'.

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E" shows a 1500 Series 5000 PSI working pressure B.O.P. consisting of an annular bag type preventor, middle blind rams and bottom pipe rams. The B.O.P. will be nipped up on the 13 3/8" casing and tested to API specifications. The B.O.P. will be operated at least once in each 24 hour period and the blind rams will be operated when drill pipe is out of hole on trips. Full opening stabbing valve and upper kelly cock will be utilized. Exhibit "E-1" shows a hydraulically operated closing unit and a 2" 5000 PSI choke manifold with dual adjustable chokes. No abnormal pressures or temperatures are expected.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD SYSTEM
40-1000'	8.4-8.7	29-34	NC	Fresh water spud mud, use paper to control seepage.
1000-2300'	10.-10.5	29-36	NC	Brine water using paper to control seepage and high viscosity sweeps to clean hole.
2300-9000'	8.4-8.7	29-34	NC	Fresh water use paper to control seepage and high viscosity sweeps to clean hole.
9000-10,000'	8.4-8.7	29-38	10 cc or less	Fresh water using polymer to control water loss and paper to control seepage, fresh water Gel for viscosity.

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 casing the viscosity and water loss may have to be adjusted to meet these needs.

APPLICATION TO DRILL

POGO PRODUCING COMPANY
DALTON "12" FEDERAL # 1
UNIT "M" SECTION 12
T22S-R22E EDDY CO. NM

12. TESTING, LOGGING, & COREING PROGRAM:

1. Open hole logs: Run Dual Induction, CNL, LDT, SNP, Caliper, Gamma Ray from TD to 2300'. Run Gamma Ray, Neutron from 2300' to surface.
2. Place mud logger on hole at the request of the Geologist.
3. DST's will be run on shows and drilling breaks.
4. Cores will be taken at the request of the Geologist.

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 of unsafe levels of H₂S. 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 5200 PSI & estimated BHT 180°.

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 45 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 H₂S safety instructor to the following:
 - A. Characteristics of H₂S
 - B. Physical effects and hazards
 - C. Proper use of safety equipment and life support systems.
 - D. Principle and operation of H₂S detectors, warning system and briefing areas.
 - E. Evacuation procedure, routes and first aid.
 - F. Proper use of 30 minute pressure demand air pack.
2. H₂S Detection and Alarm Systems
 - A. H₂S detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse.
3. Windsock and/or wind streamers
 - A. Windsock at mudpit area should be high enough to be visible.
 - B. Windsock at briefing area should be high enough to be visible.
 - C. There should be a windsock at entrance to location.
4. Condition Flags and Signs
 - A. Warning sign on access road to location.
 - B. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag 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" & "E-1"
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 H₂S has on tubular goods and other mechanical equipment.
9. If H₂S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H₂S scavengers if necessary.

SURFACE USE PLAN

POGO PRODUCING COMPANY
DALTON "12" FEDERAL # 1
UNIT "M" SECTION 12
T22S-R22E EDDY 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 Carlsbad NM take U.S. Hi-way 285 North to the Queens Hi-way, turn Left go 9.5± miles to Marathon Plant Road bear Right go 5.2± miles to plant continue 1± mile turn Left go 2 miles bear Right (West) go 1.2± miles turn Left (South) 1.7± miles turn Right (West) go .8± miles turn Left follow road .9± miles turn Right go past gas well to fence follow fence .3± mile turn Right follow new road .8 miles to well # 1 thence to well # 2 continue 1700' to Dalton "12" federal # 1.
2. PLANNED ACCESS ROADS: Approximately 1700' 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 than 5.00%.
 - C. Turn outs will be constructed where 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
DALTON "12" FEDERAL # 1
UNIT "M" SECTION 12
T22S-R22E EDDY 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 minimum depth of 10'. These holes will be covered during drilling and will be back filled upon completion. A Portis-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
DALTON "12" FEDERAL # 1
UNIT "M" SECTION 12
T22S-R22E EDDY 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 7.3 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
DALTON "12" FEDERAL # 1
UNIT "M" SECTION 12
T22S-R22E EDDY CO. NM

11. OTHER INFORMATION:

- A. Topography is relatively flat with a slight dip towards the East with shallow drainage patterns. Native grasses with some mesquite and shinnery oak with various cacti grow in this area.
- 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 505-391-8503
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 : 07/09/01
TITLE : Agent

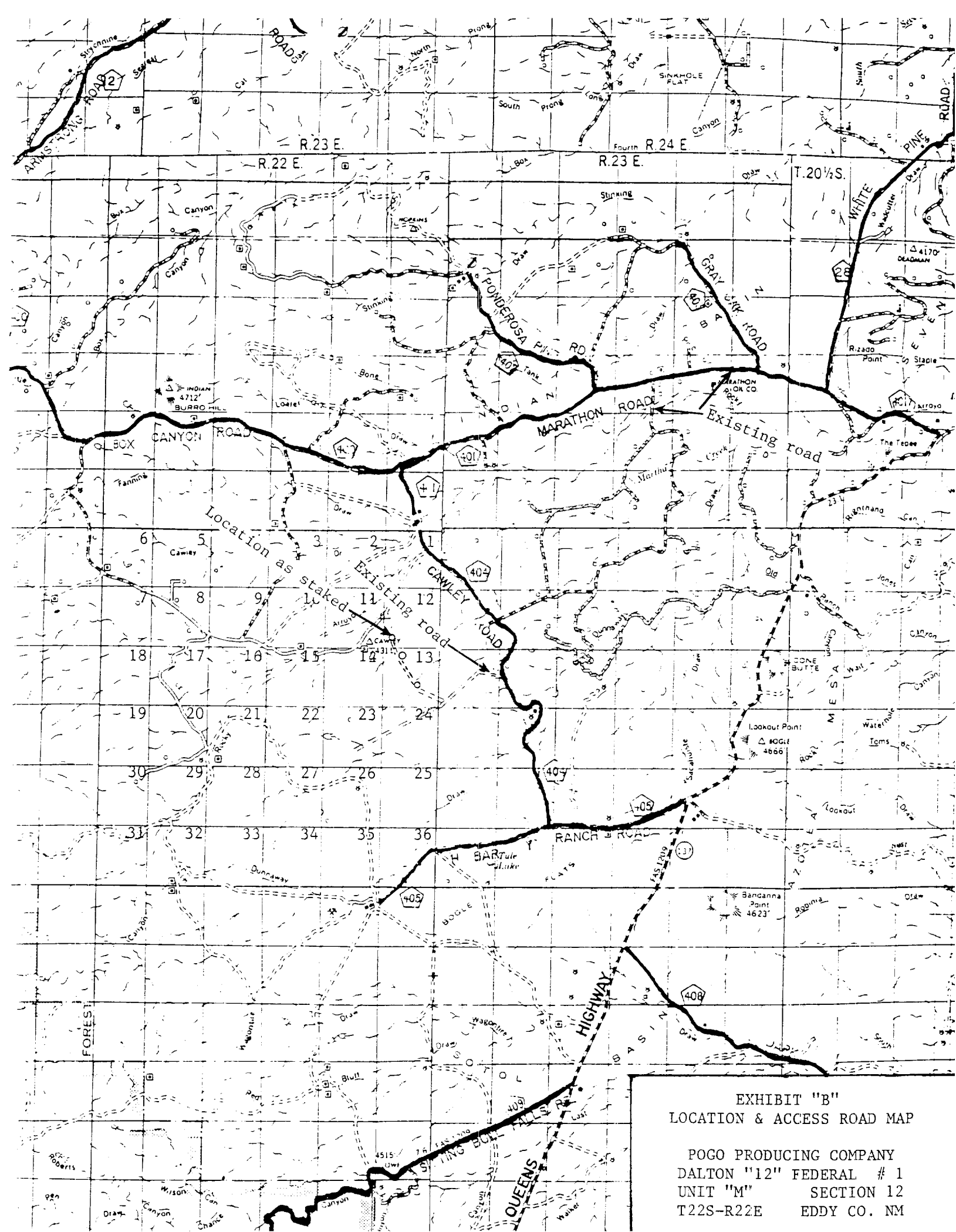


EXHIBIT "B"
LOCATION & ACCESS ROAD MAP

POGO PRODUCING COMPANY
DALTON "12" FEDERAL # 1
UNIT "M" SECTION 12
T22S-R22E EDDY CO. NM

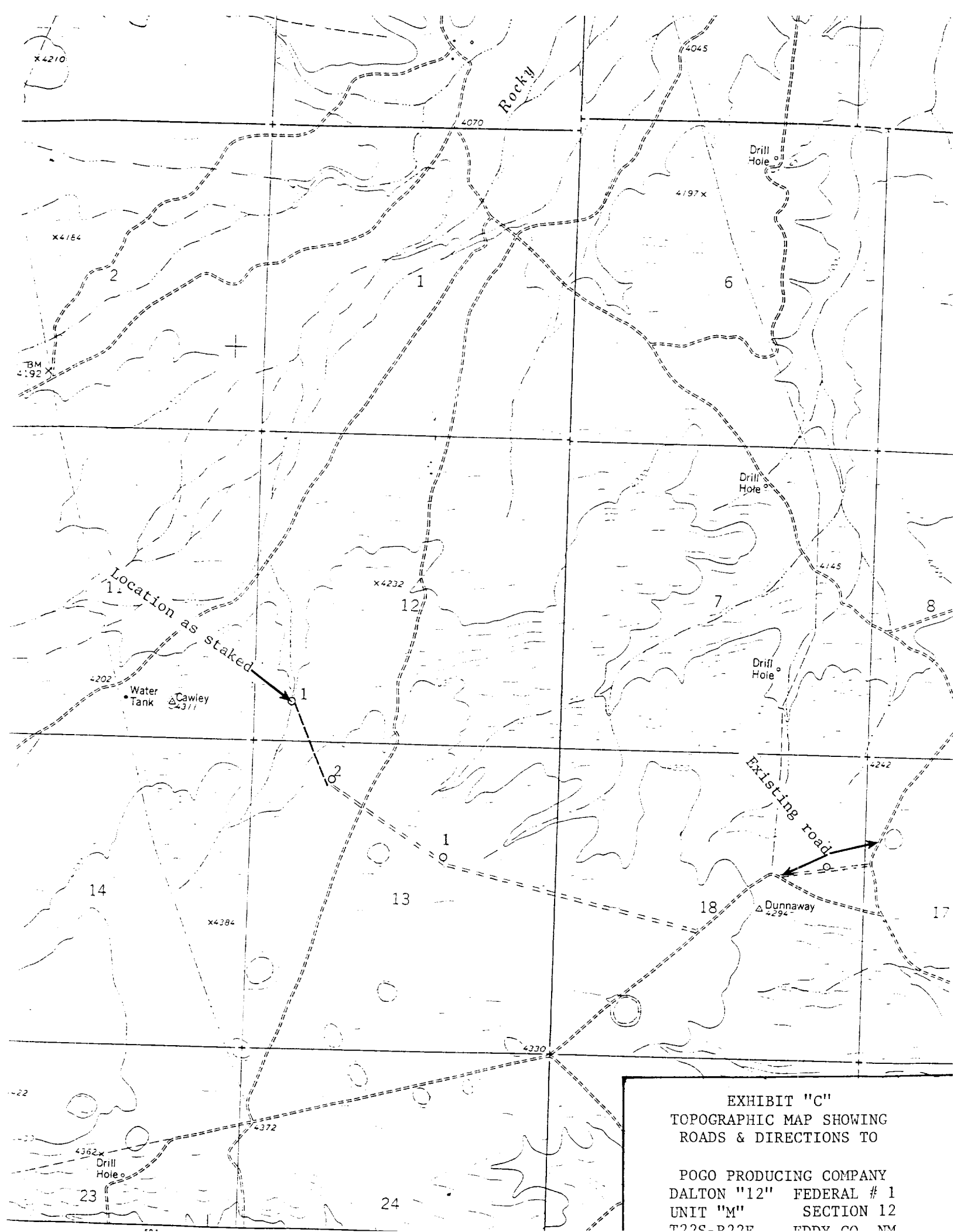
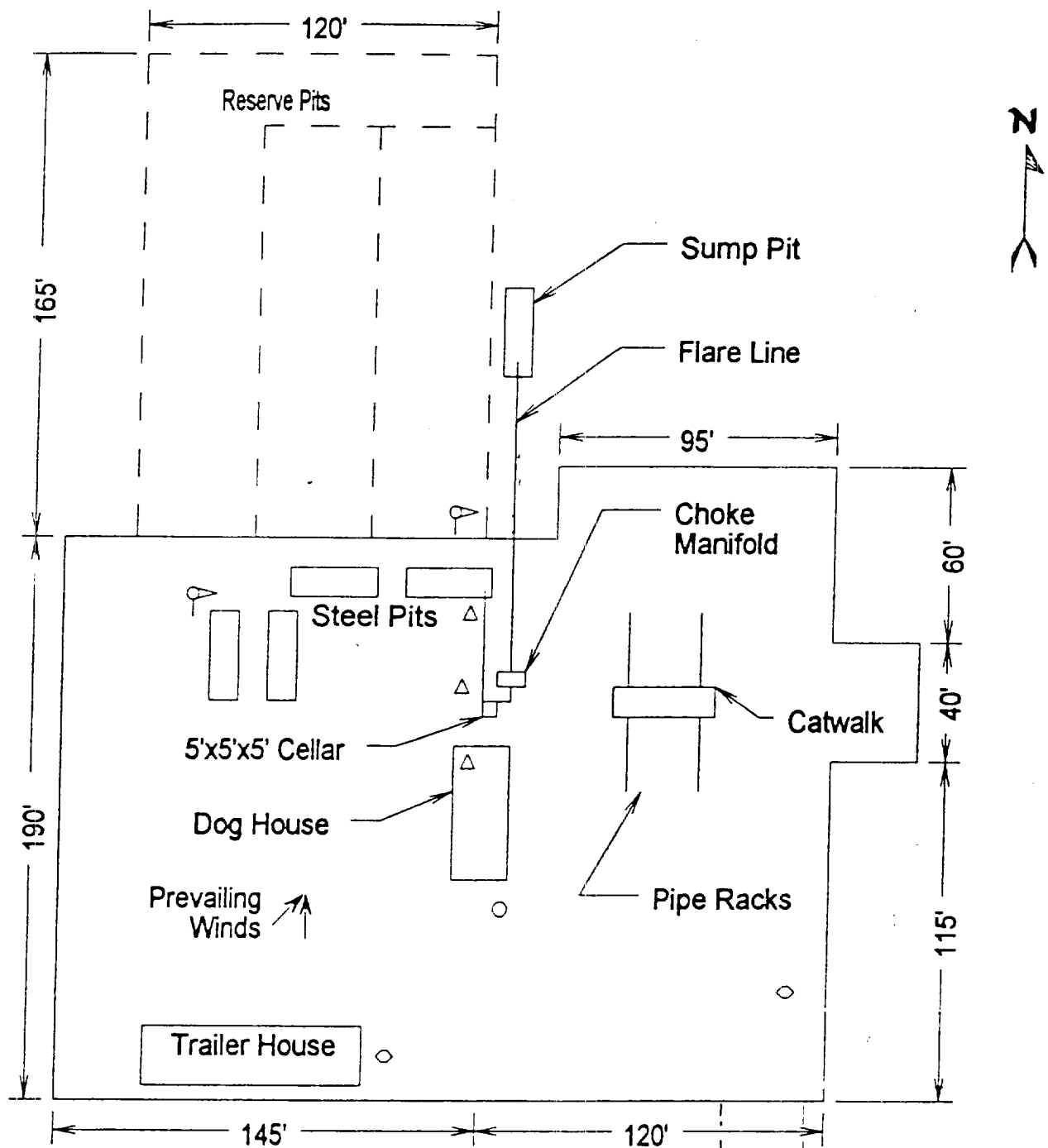


EXHIBIT "C"
TOPOGRAPHIC MAP SHOWING
ROADS & DIRECTIONS TO

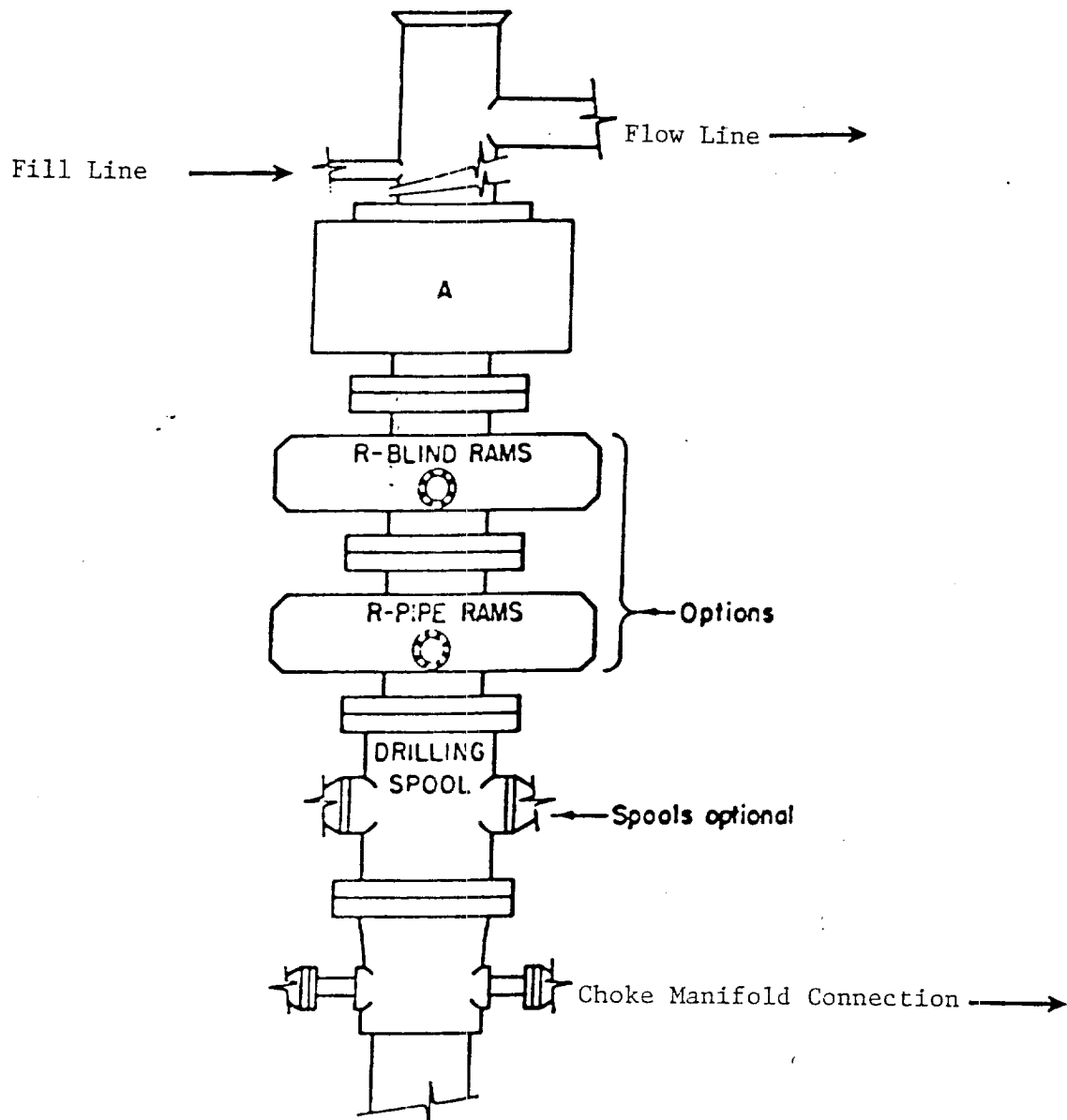
POGO PRODUCING COMPANY
DALTON "12" FEDERAL # 1
UNIT "M" SECTION 12
T22S R22E EDDY CO. NM



- ⚙ 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
DALTON "12" FEDERAL # 1
UNIT "M" SECTION 12
T22S-R22E EDDY CO. NM



ARRANGEMENT SRRA

1500 Series
5000 PSI WP

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

POGO PRODUCING COMPANY
DALTON "12" FEDERAL # 1
UNIT "M" SECTION 12
T22S-R22E EDDY CO. NM

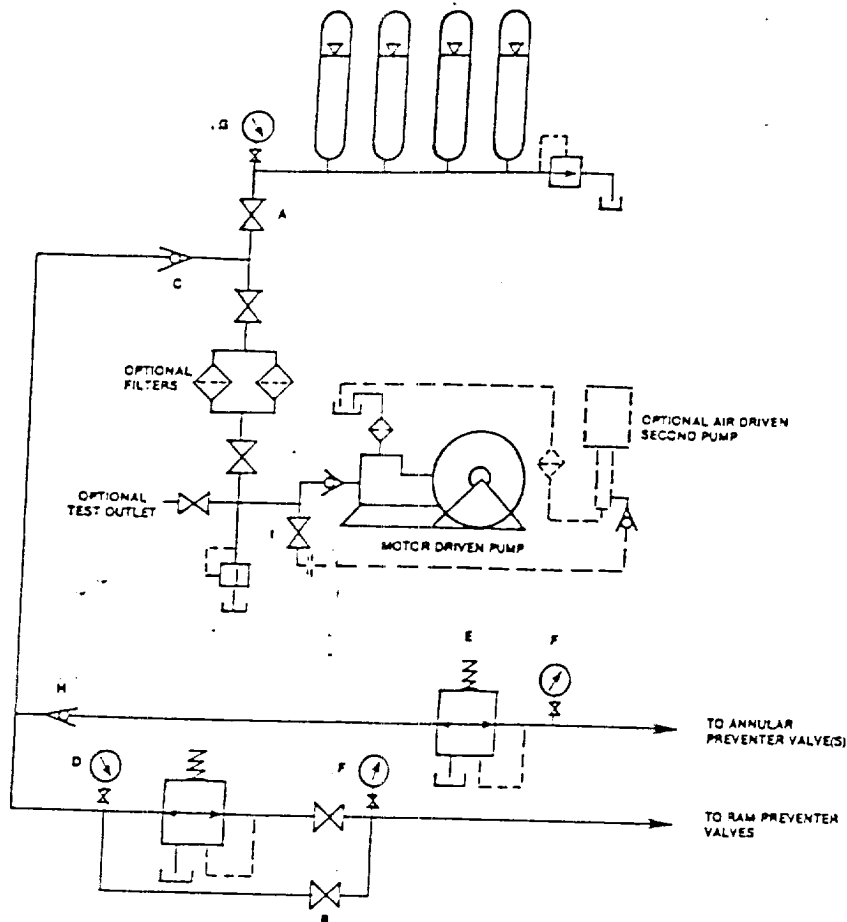


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

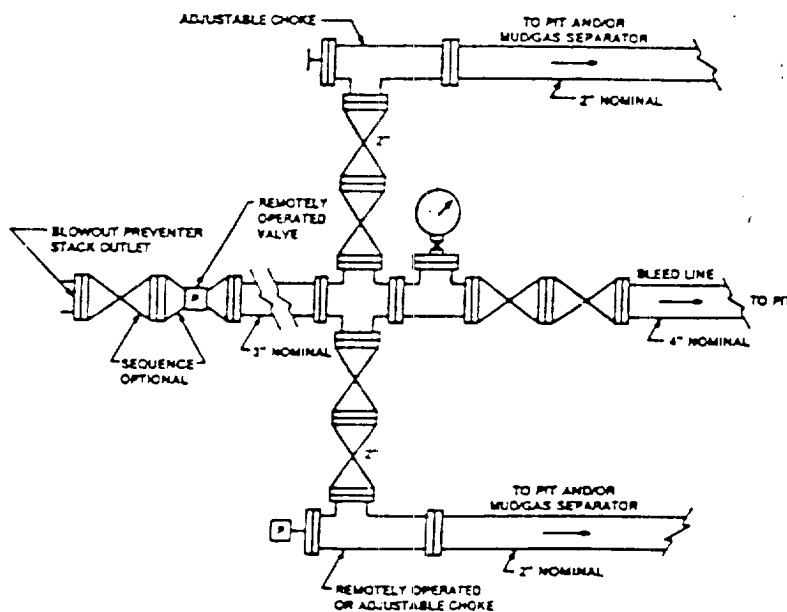


FIGURE K4-2. Typical choke manifold assembly for 5M rated working pressure service — surface installation.

EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY
DALTON "12" FEDERAL # 1
UNIT "M" SECTION 12
T22S-R22E EDDY CO. NM

