

RESUBMITTAL

N.M. Oil Cons. Div-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

P/W

Form 3160-3
(April 2004)

0636

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

AUG 20 2004

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

5. Lease Serial No.
NM-62590

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.
Federal 26 #10

9. API Well No.
30-015-33826

10. Field and Pool, or Exploratory
Livingston Ridge Delaware

11. Sec., T. R. M. or Blk. and Survey or Area

Section 26, T22S, R31E

12. County or Parish
Eddy County

13. State
NM

1a. Type of work: ☒ DRILL

☐ REENTER

SECRETARY'S POTASH

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other

☒ Single Zone ☐ Multiple Zone

2. Name of Operator

Pogo Producing Company

3a. Address 79702-7340

P. O. Box 10340, Midland, TX

3b. Phone No. (include area code)

432-685-8100

4. Location of Well (Report location clearly and in accordance with any State requirements.)*

At surface 1650' FSL & 1980' FWL, Section 26

At proposed prod. zone Same

14. Distance in miles and direction from nearest town or post office*

Approximately 25 miles East of Carlsbad, NM

15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any)

1650'

16. No. of acres in lease

640

17. Spacing Unit dedicated to this well

40 acres

18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft.

1400'

19. Proposed Depth

8600'

20. BLM/BIA Bond No. on file

29771

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

3494' GR

22. Approximate date work will start*

When approved

23. Estimated duration

24. Attachments

CARLSBAD CONTROLLED WATER BASIN

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

1. Well plat certified by a registered surveyor.

2. A Drilling Plan.

3. A Surface Use Plan (if the location is on National Forest System Lands, the
SUPO shall be filed with the appropriate Forest Service Office).

4. Bond to cover the operations unless covered by an existing bond on file (see
Item 20 above).

5. Operator certification

6. Such other site specific information and/or plans as may be required by the
authorized officer.

25. Signature

Cathy Wright

Name (Printed/Typed)

Cathy Wright

Date

05/17/04

Title

Sr. Operation Tech

Approved by (Signature)

Janice L. Ganby

Name (Printed/Typed)

Janice L. Ganby

Date

8/16/04

Title

STATE DIRECTOR

Office

NM STATE OFFICE

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, are attached.

APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United
States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on page 2)

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

If earthen pits are used in
association with the drilling of this
well, an OCD pit permit must be
obtained prior to pit construction.

Pogo Producing Company
Federal 26 #10 Drilling Plan
1650' FSL & 1980' FWL
Section 26, T22S, R31E
Eddy County, NM

1. Drill 25" hole to 40'. Set 40' of 20" conductor and cement to surface w/ Redi-mix.
2. Drill 17-1/2" hole to 800'. Run and set 800' of 13-3/8" 48# H-40 ST&C csg. Cmt w/ 600 sks 65:35:6 Cl "C" POZ-gel followed by 200 sks Cl "C" cmt + 2% CaCl₂ w/ 1/4# Flocele/sk. Circ cmt to surface.
3. Drill 11" hole to 4350'. Run & set 4350' of 8-5/8" 32# J-55 ST&C csg. Cmt w/ 1300 sks 65:35:6 Cl "C" POZ-gel + 5% NaCl, tail in w/ 200 sks Cl "C" cmt + 2% CaCl₂ w/ 1/4# Flocele/sk. Circ cmt to surface.
4. Drill 7-7/8" hole to 8600'. Run and set 8600' 5-1/2" csg as follows: 2600' of 5-1/2" 17# J-55 LT&C, 5000' of 5-1/2" 15.5# J-55 LT&C, 1000' of 5-1/2" 17# J-55 LT&C. Cmt in 3 stages w/ DV tools @ 5800' & 3700'±. Cmt 1st stage w/ 650 sks Cl "H" cmt + additives. Cmt 2nd stage w/ 600 sks Cl "C" cmt + 83 Gilsonite/sk. Cmt 3rd stage w/ 400 sks 65:35:6 Cl "C" POZ-gel followed by 100 sks Cl "C" cmt + 1% CaCl₂. Circ cmt to surface.

DISTRICT I
P.O. Box 1800, Hobbs, NM 88241-1800

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

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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

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

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code 39360	Pool Name LIVINGSTON RIDGE-DELAWARE
Property Code	Property Name FEDERAL 26	Well Number 10
OGRID No. 17891	Operator Name POGO PRODUCING COMPANY	Elevation 3494'

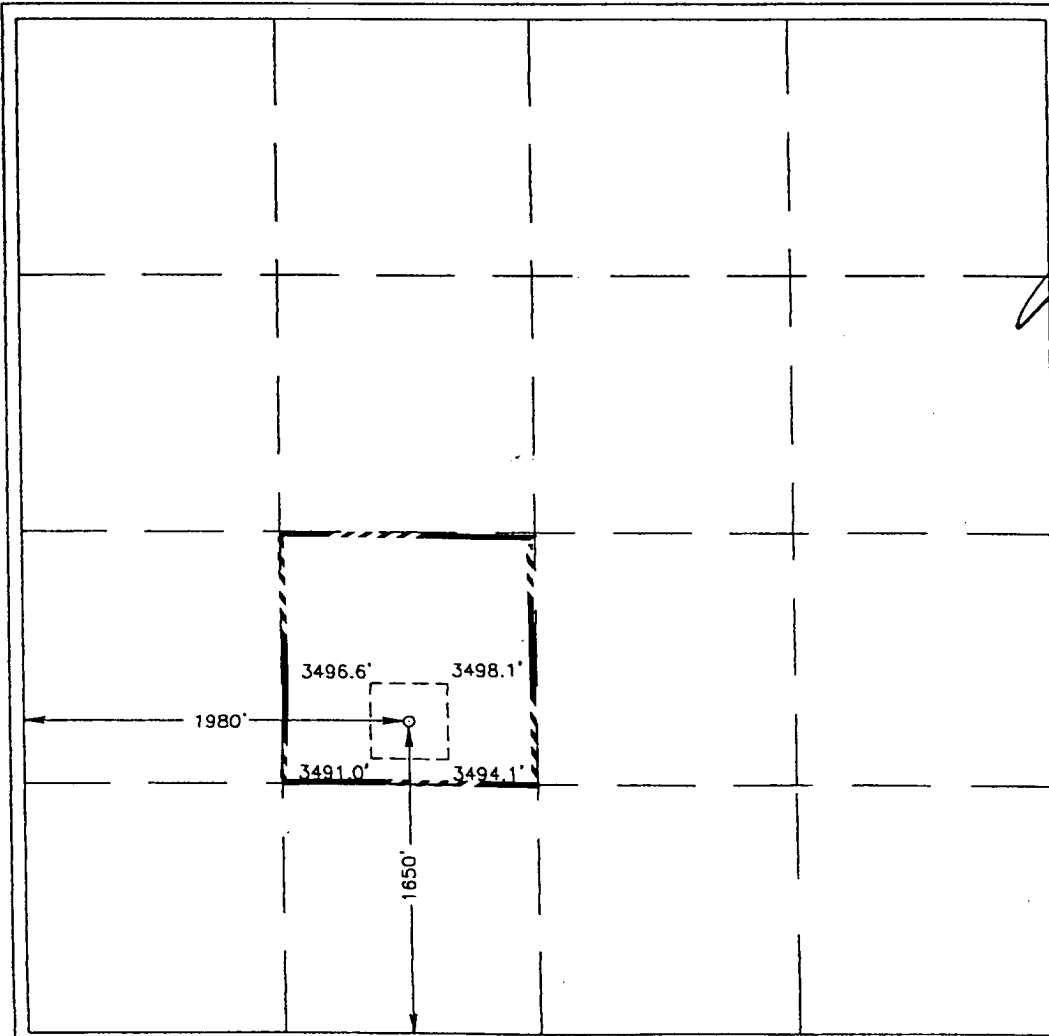
Surface Location

UL or lot No. K	Section 26	Township 22-S	Range 31-E	Lot Idn	Feet from the 1650	North/South line SOUTH	Feet from the 1980	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 40		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

	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Joe T. Janica</i> Signature Joe T. Janica Printed Name Agent Title 02/09/03 Date</p>
	<p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>JANUARY 24, 2003</p> <p>Date Surveyed Signature & Seal of Professional Surveyor Professional Surveyor RONALD J. EDISON 03.11.0111 Certificate No. 3239 12641</p>



BOOTLEG RIDGE,
LOS MEDANOS, N.M.

U.S.G.S. TOPOGRAPHIC MAP
LOS MEDANOS, BOOTLEG RIDGE, N.M.

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

APPLICATION TO DRILL

POGO PRODUCING COMPANY
FEDERAL "26" # 10
UNIT "K" SECTION 26
T22S-R31E 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: 1650' FSL & 1980' FWL SEC. 26 T22S-R31E EDDY CO. NM
2. Elevation above Sea Level: 3494' 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: 8600'
6. Estimated tops of geological markers:

Rustler Anhydrite	750'	Cherry Canyon	5400'
Base of Anhydrite	4238'	Brushy Canyon	6630'
Delaware Lime	4512'	Bone Spring	8380'
Bell Canyon	4570'		
7. Possible mineral bearing formations:

Brushy Canyon	Oil
Bone Spring	Oil
8. Casing program:

Hole size	Interval	OD of casing	Weight	Thread	Collar	Grade
25"	0-40'	20"	NA	NA	NA	Conductor
17½"	0-800'	13 3/8"	48#	8-R	ST&C	H-40
11"	0-4350'	8 5/8"	32#	8-R	ST&C	J-55
7 7/8"	0-8600'	5½"	17 & 15.5	8-R	LT&C	J-55

APPLICATION TO DRILL

POGO PRODUCING COMPANY
FEDERAL "26" # 10
UNIT "K" SECTION 26
T22S-R31E EDDY CO. NM

9. CEMENTING & SETTING DEPTH:

WITNESS	20"	Conductor	Set 40' of 20" conductor and cement to surface with Redi-mix.
	13 3/8"	Surface	Set 800' of 13 3/8" 48# H-40 ST&C casing. Cement with 600 Sx. of Class "C" 65/35/6 POZ-Gel, tail in with 200 Sx. of Class "C" cement + 2% CaCl, circulate cement.
	8 5/8"	Intermediate	Set 4350' of 8 5/8" 32# J-55 ST&C casing. Cement with 1300 Sx. of 65/35/6 Class "C" POZ-Gel + 5% NaCl, tail in with 200 Sx. of Class "C" + 2% CaCl circulate cem.
	5 1/2"	Production	Set 8600' of 5 1/2" as follows: 2600' of 17# J-55 LT&C, 5000' of J-55 15.5# LT&C, 1000' of 17# J-55 LT&C. Cement in 3 stages DV Tools at 5800' & 3700'±. 1st stage 650 Sx of Class "H", 2nd stage 600 Sx. of Class "C" + 8# Gilsonite/Sx., 3rd stage 400 Sx. of 65/35/6 Class "C" POZ Gel, tail in with 100 Sx. + 1% CaCl, circulate cement.

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
40-800'	8.4-8.6	29-32	NC	Fresh water Spud Mud add paper to control seepage.
800-4350'	10.0-10.2	29-36	NC	Brine water add paper to control seepage and use high viscosity sweeps to clean hole.
4350-8000'	8.4-8.7	29-38		Fresh water using high viscosity sweeps to clean hole.
8000-8600'	8.4-8.7	32-38	10 cc or less.	Same as above add a Polymer to control water loss if required to log and run casing.

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

APPLICATION TO DRILL

POGO PRODUCING COMPANY
FEDERAL "26" # 10
UNIT "K" SECTION 26
T22S-R31E EDDY CO. NM

12. LOGGING, CORING, TESTING: PROGRAM:

- A. Open hole logs: Run Dual Induction, SNP, LDT, Gamma Ray Caliper from TD back to intermediate casing shoe at 4350'±.
- B. Run Gamma Ray Neutron from 4350'± back to surface.
- C. Mud logger may be placed on hole at 4350' and remain on hole to TD.
- D. No DST's are planned at this time.
- E. No cores are planned at this time.

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 4000 PSI & estimated BHT 145°.

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 28 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 Bone Spring pay is indicated it will be perforated and stimulated. Then if necessary the pay will be swab tested and completed 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 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.

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.

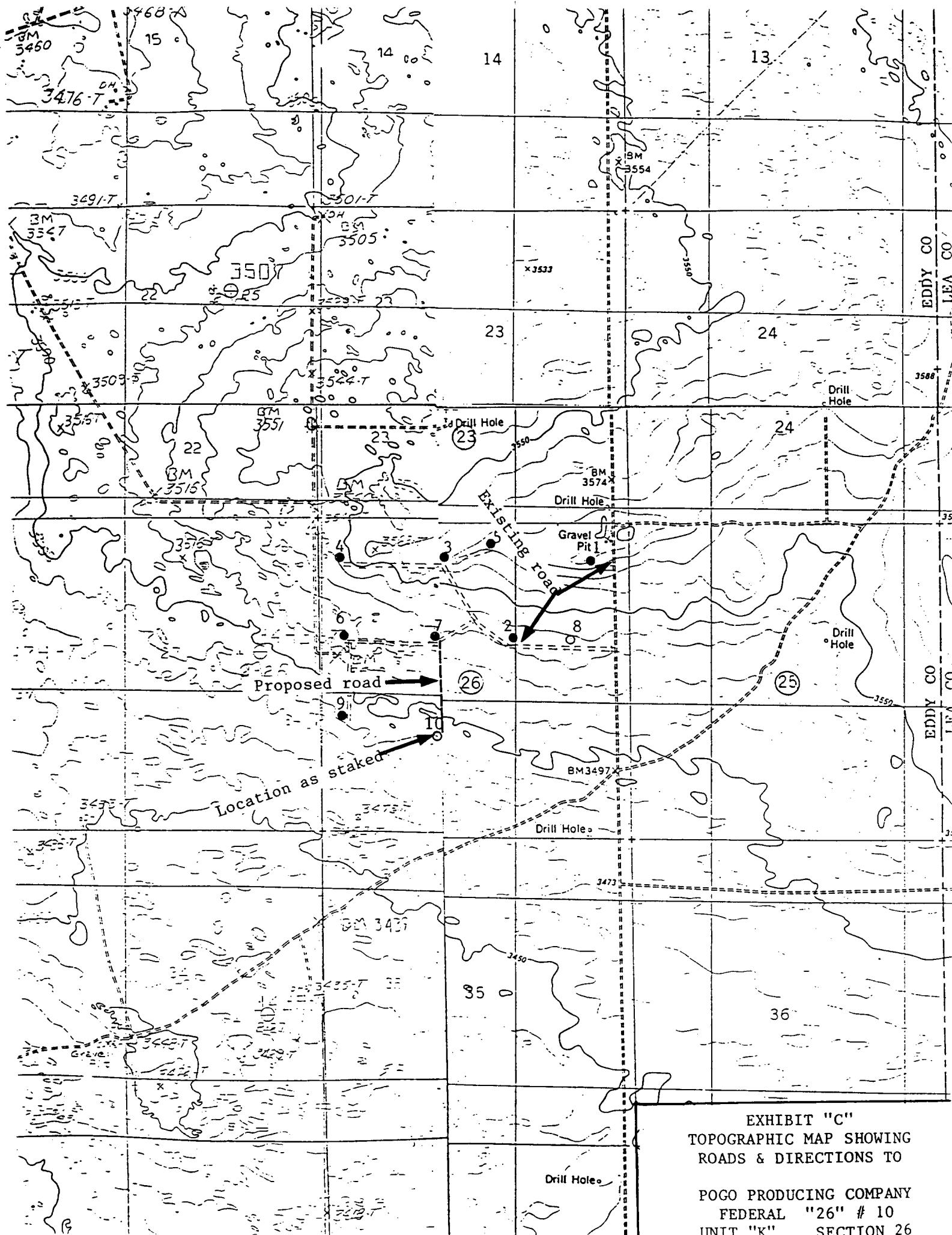
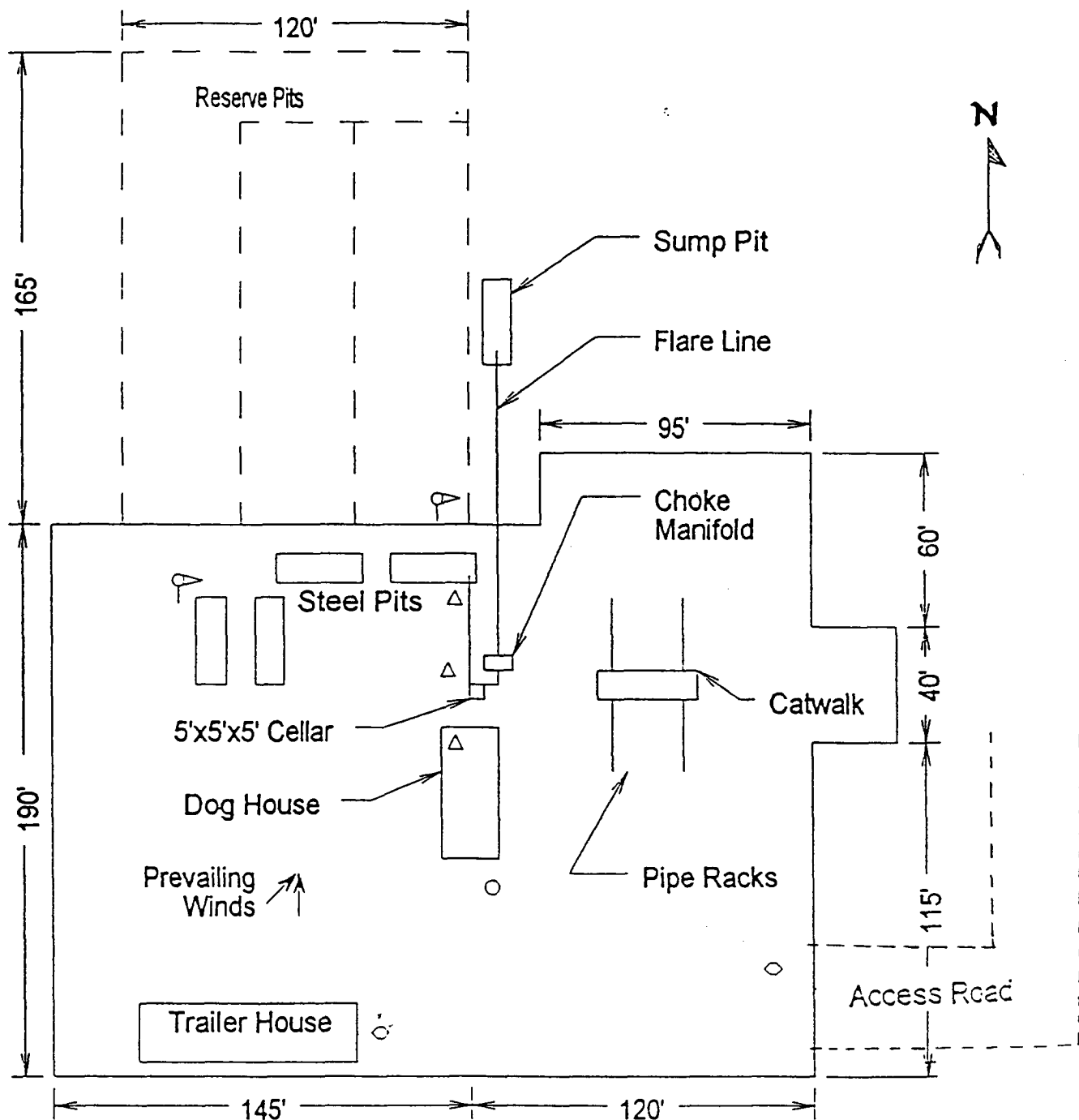


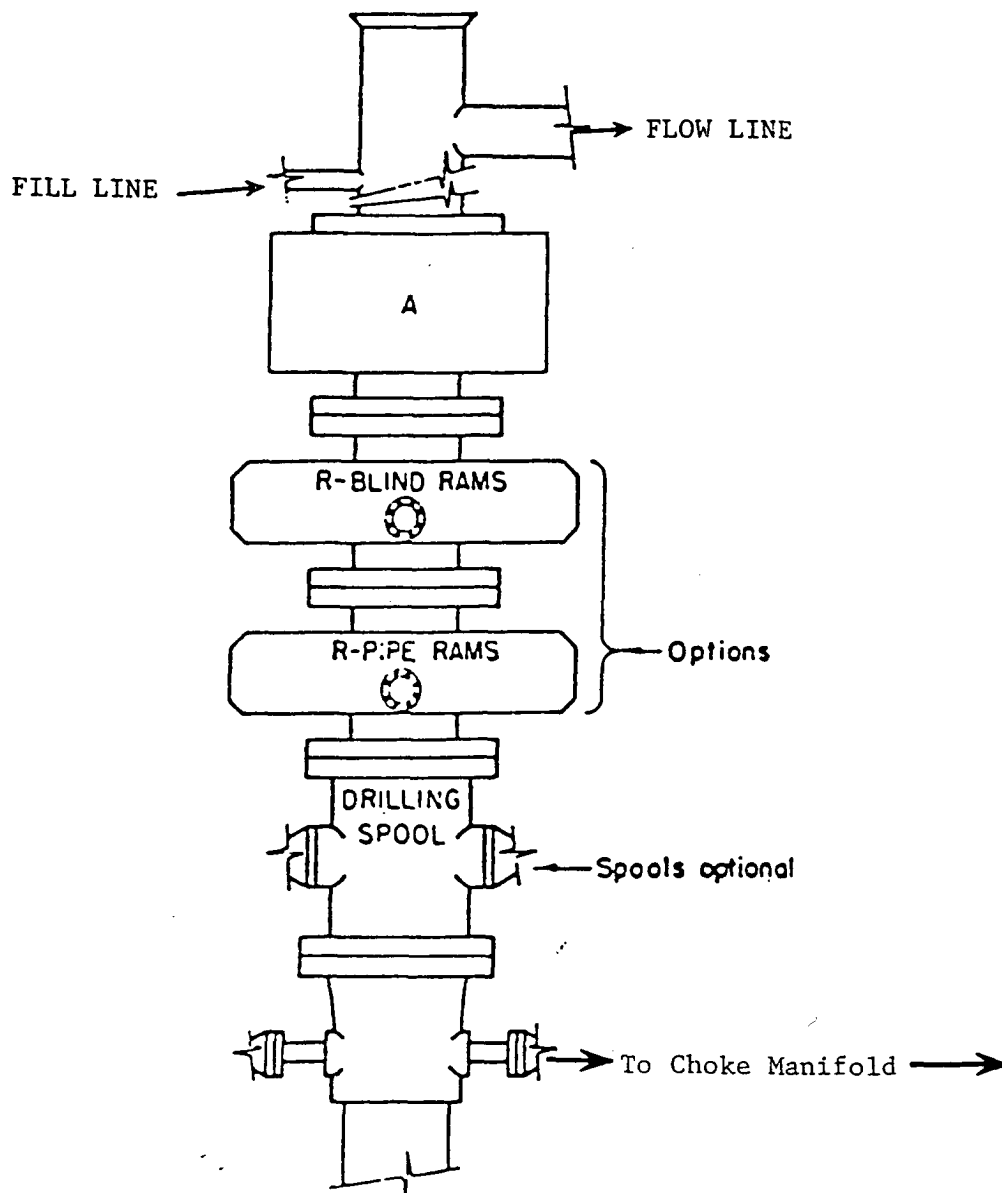
EXHIBIT "C"
TOPOGRAPHIC MAP SHOWING
ROADS & DIRECTIONS TO
POGO PRODUCING COMPANY
FEDERAL "26" # 10
UNIT "K" SECTION 26



- △ 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
FEDERAL "26" # 10
UNIT "K" SECTION 26
T22S-R31E EDDY CO. NM



ARRANGEMENT SRRA

900 Series
3000 PSI WP

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

POGO PRODUCING COMPANY
FEDERAL "26" # 10
UNIT "K" SECTION 26
T22S-R31E EDDY CO. NM

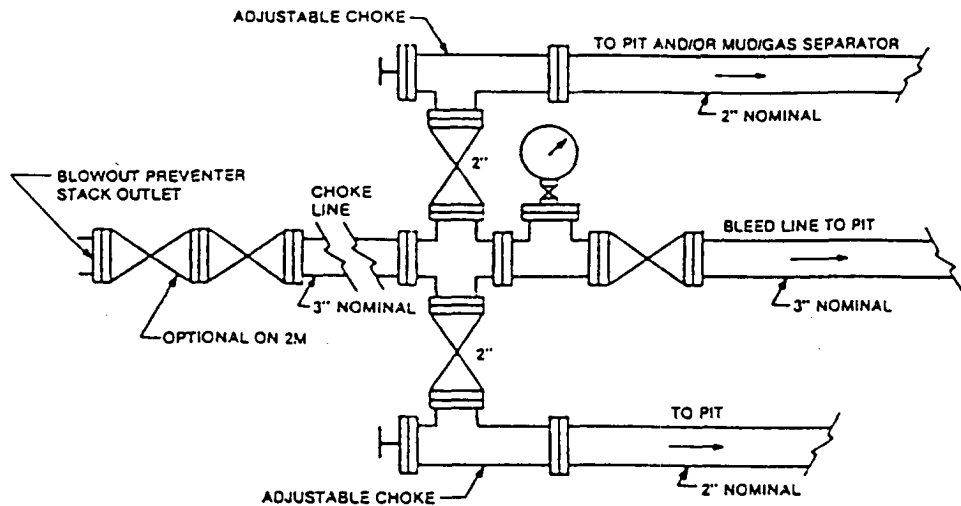


FIGURE K-1. Typical choke manifold assembly for 2M and 3M rated working pressure service — surface installation.

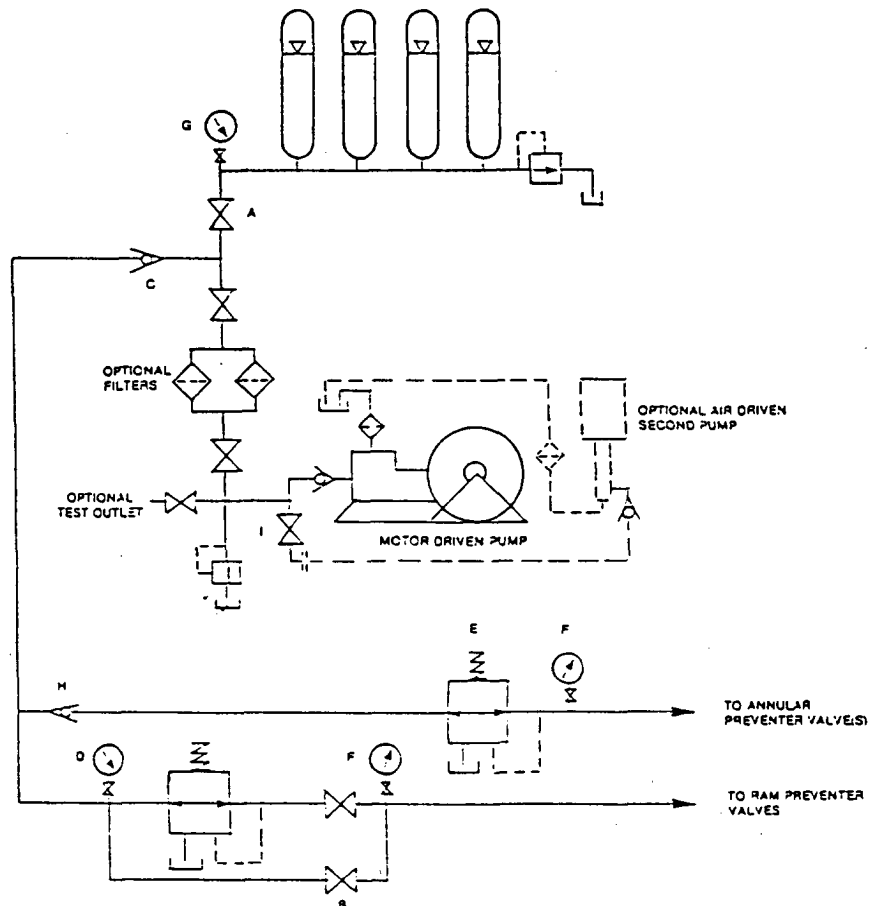


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY
FEDERAL "26" # 10
UNIT "K" SECTION 26
T22S-R31E EDDY CO. NM