

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTN.M. Oil & Gas Division
1301 W. Central Avenue
Artesia, NM 88210FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

12. TYPE OF WORK

DRILL ☒DEEPEN ☐

D. TYPE OF WELL

OIL
WELL ☒GAS
WELL ☐

OTHER

193407

SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

CONCHO OIL & GAS CORP. (915-683-7443) GREG WILKES

3. ADDRESS AND TELEPHONE NO.

110 WEST LOUISIANA SUITE 410 MIDLAND, TEXAS (915-683-7443)

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

At surface

990' FEL & 660' FSL SEC. 25 T18S-R30E EDDY CO. NM

At proposed prod. zone SAME

POTASH

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

Approximately 15 miles Southwest of Loco Hills New Mexico

15. DISTANCE FROM PROPOSED*

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

660'

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,
OR APPLIED FOR, ON THIS LEASE, FT.

600'

19. PROPOSED DEPTH

4000'

20. ROTARY OR CABLE TOOLS

ROTARY

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

3543' GR.

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"	20"	NA	40'	Cement to surface with Redi-mix 250 Sx. circulate cement 500 Sx.
12 1/4"	J-55 8 5/8"	32	800'	
7 7/8"	J-55 5 1/2"	15.5	4000'	

1. Drill 25" hole to 40'. Set 40' of 20" conductor and cement to surface with Redi-mix.
2. Drill 12 1/4" hole to 800'. Run and set 800' of 8 5/8 32# J-55 ST&C casing. Cement with 250 Sx. of Class "C" 35/65 POZ = 6% Gel, + 1/4# Flocele/Sx., + 2% CaCl, tail in with 200 Sx. of Class "C" cement + 2% CaCl, circulate cement to surface.
3. Drill 7 7/8" hole to 4000'. Run and set 4000' of 5 1/2" 15.5# J-55 ST&C casing. Cement with 300 Sx. of Class "C" 50/50 POX, + 10% Gel, + 5% Salt, + 3# Gilsonite/Sx., + 1/4# Flocele/Sx., tail in with 200 Sx. of Class "C" cement + fluid loss + dispersant, + 5% Salt. Estimate top of cement 400' from surface.

Caution Controlled Water Res'n

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

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 directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

TITLE Agent

DATE

(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 entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL IF ANY:

APPROVED BY

LINDA S.C. RUNDALL

TITLE

STATE DIRECTOR

DATE

MAY 01 2003

*See Instructions On Reverse Side APPROVAL FOR 1 YEAR

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

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

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 5300	Pool Name BENSON-QUEEN-GRAYBURG, NORTH
Property Code	Property Name BENSON SHUGART WATERFLOOD UNIT	Well Number 37
OGRID No. 193407	Operator Name CONCHO OIL & GAS CORPORATION	Elevation 3543'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	25	18-S	30-E		660'	SOUTH	990'	EAST	EDDY

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.
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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

<p>GEODETIC COORDINATES SPC NME NAD 1927 Y= 623288.3 X= 627248.7 LAT.= 32°42'46.20"N LONG.= 103°55'10.62"W</p>				<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 01/16/03 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>DECEMBER 26, 2002</p> <p>Date Surveyed Signature & Seal of Professional Surveyor Professional Surveyor RONALD J. EDSON 12/29/02 02-11-1015 Certificate No. 3239 GARY EDSON 12641</p>	

EX HIBIT "A"

APPLICATION TO DRILL

CONCHO OIL & GAS CORP.
 BENSON SHUGART WATERFLOOD UNIT # 37
 UNIT "P" SECTION 25
 T18S-R30E 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: 990' FEL & 660' FSL SEC. 25 T18S-R30E EDDY CO. NM
2. Elevation above Sea Level: 3543' 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: 4000'
6. Estimated tops of geological markers:

Rustler Anhydrite	750'	Penrose	3370'
Base of Salt	1800'	Grayburg	3570'
Seven Rivers	2580		
Queen	3130'		
7. Possible mineral bearing formations:

Queen	Oil	Grayburg	Oil
Penrose	Oil		
8. Casing program:

Hole size	Interval	OD of casing	Weight	Thread	Collar	Grade
25"	0-40'	20"	NA	NA	NA	Conductor
12½"	0-800'	8 5/8"	32	8-R	ST&C	J-55
7 7/8"	0-4000'	5½"	15.5	8-R	ST&C	J-55

APPLICATION TO DRILL

CONCHO OIL & GAS CORP.
 BENSON SHUGART WATERFLOOD UNIT # 37
 UNIT "P" SECTION 25
 T18S-R30E EDDY CO. NM

9. CASING CEMENTING & SETTING DEPTHS:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
8 5/8"	Surface	Set 800' of 8 5/8" 32# J-55 ST&C casing. Cement with 250 Sx. of Class "C" 35/65 POZ + 6% Gel, + 1/4# Flocele/Sx., + 2% CaCl, tail in with 200 Sx. of Class "C" cement + 2% CaCl, circulate cement to surface.
5 1/2"	Production	Set 4000' of 5 1/2" 15.5# J-55 ST&C casing. Cement with 300 Sx. of Class "C" 50/50 POZ + 10% Gel + 5% Salt + 3# Gilsonite/Sx. + 1/4# Flocele/Sx., tail in with 200 Sx. of Class "C" cement + Fluid loss, + dispersant + 5% Salt, circulate cement to surface.

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E" shows a 900 Series 3000 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" 3000 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'	8.5-8.7	29-34	NC	Fresh water Spud mud add paper to control seepage.
800-3000'	9.9-10.1	29-38	NC	Brine water add paper to control seepage and use high viscosity sweeps to clean hole.
3000-4000'	9.9-10.1	34-38	15 cc or less	Brine water add Polymer to control water loss and use high viscosity sweeps to clean hole.

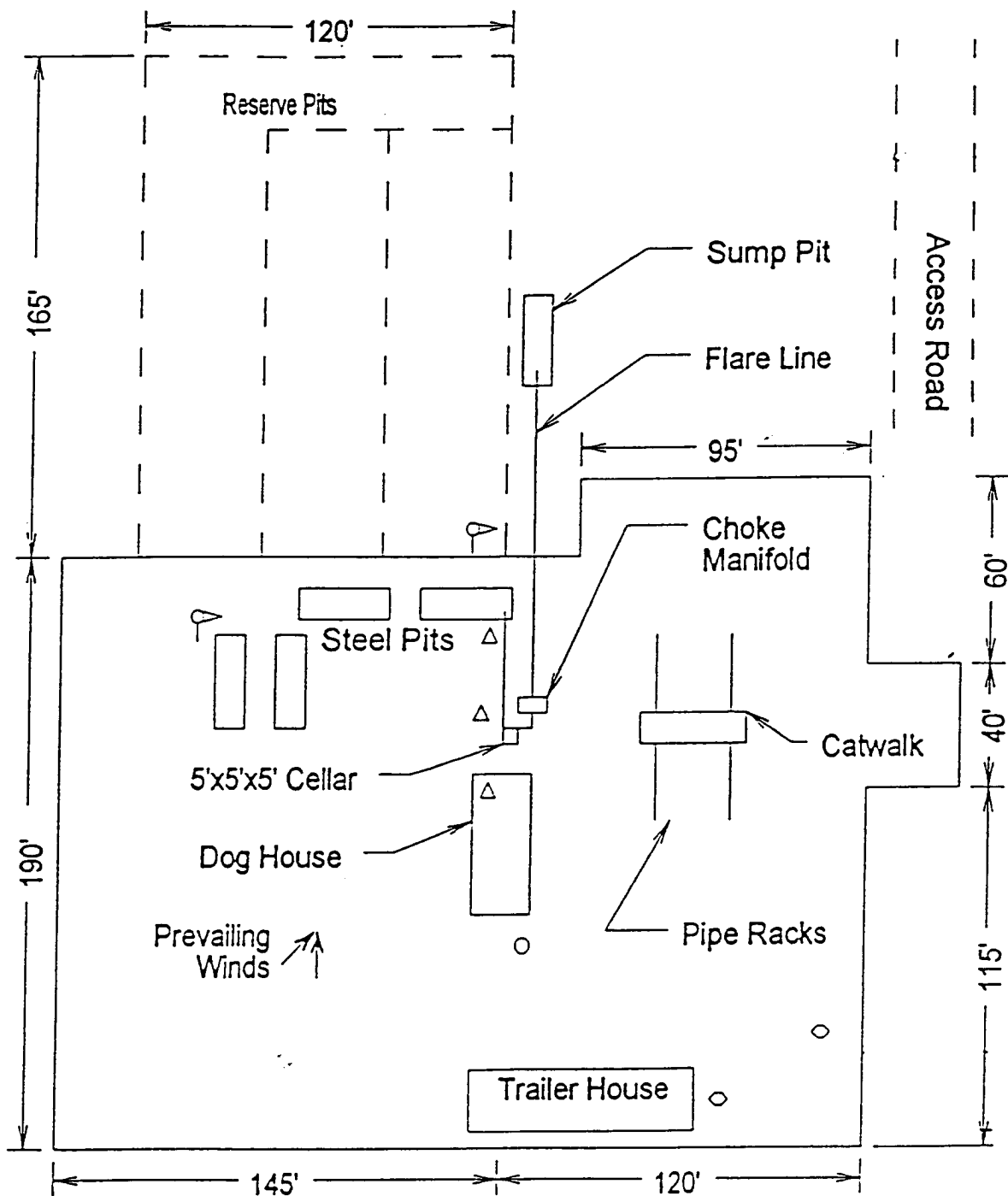
Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's, open hole logs, and casing viscosity and/or water loss may have to be adjusted to meet these needs.

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

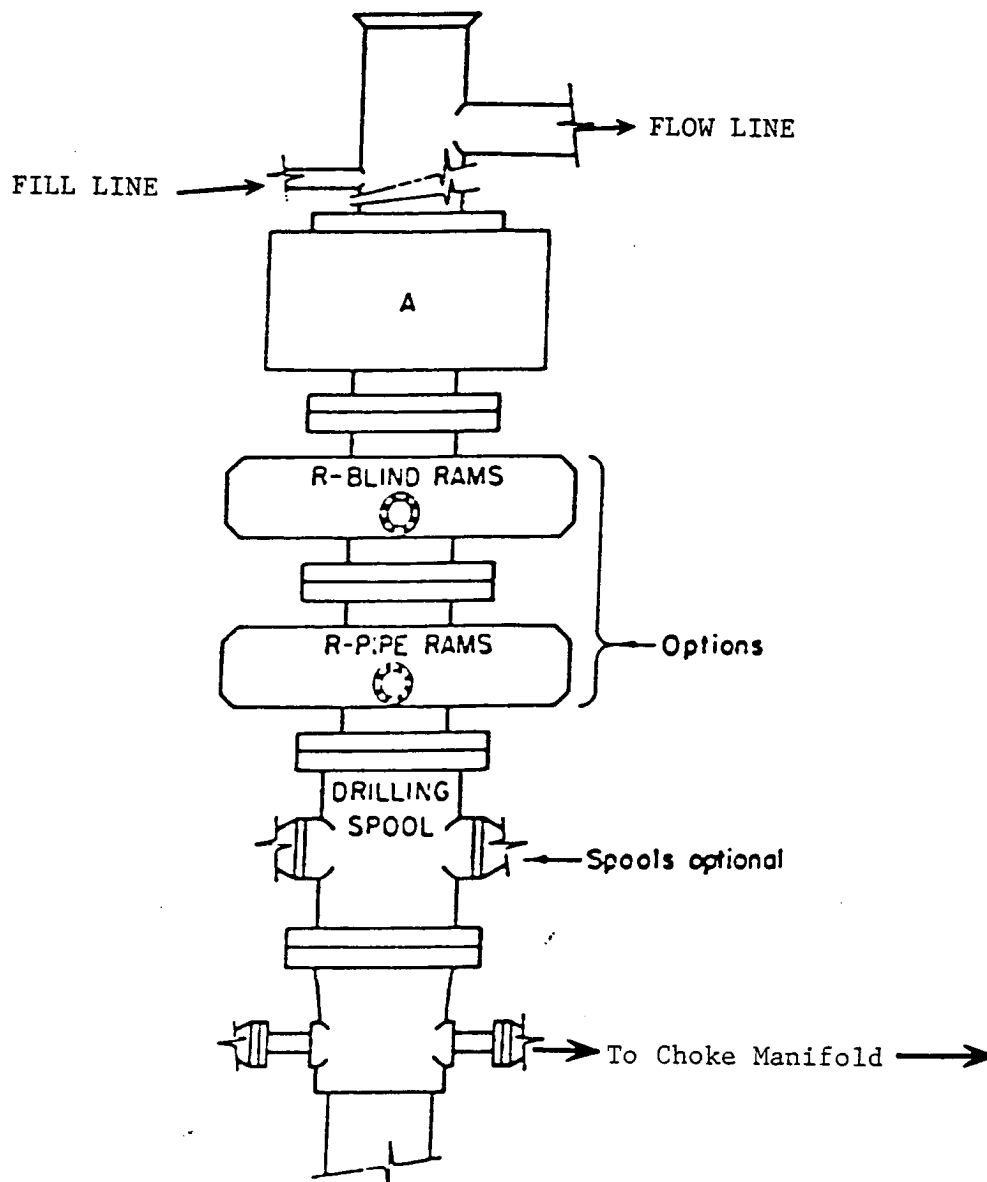
8. Drilling contractor supervisor will be required to be familiar with the effects H₂S has on tubular goods and other mechanical equipment.
9. If H₂S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H₂S scavengers if necessary.



- ☛ 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

CONCHO OIL & GAS CORP.
BENSON SHUGART WATERFLOOD UNIT # 37
UNIT "P" SECTION 25
T18S-R30E EDDY CO. NM



ARRANGEMENT SRRA

900 Series
3000 PSI WP

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

CONCHO OIL & GAS CORP.
BENSON SHUGART WATERFLOOD UNIT # 37
UNIT "P" SECTION 25
T18S-R30E EDDY CO. NM

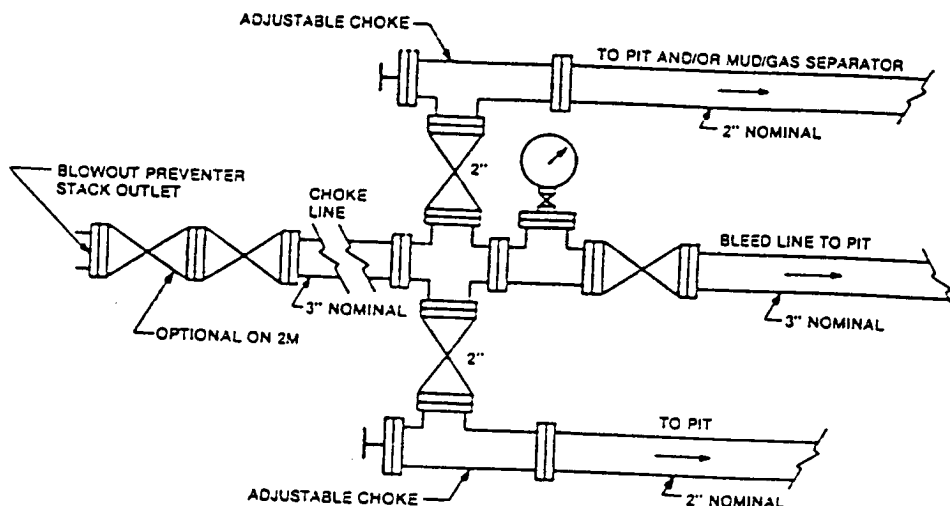


FIGURE K4-1. Typical choke manifold assembly for 2M and 3M rated working pressure service — surface installation.

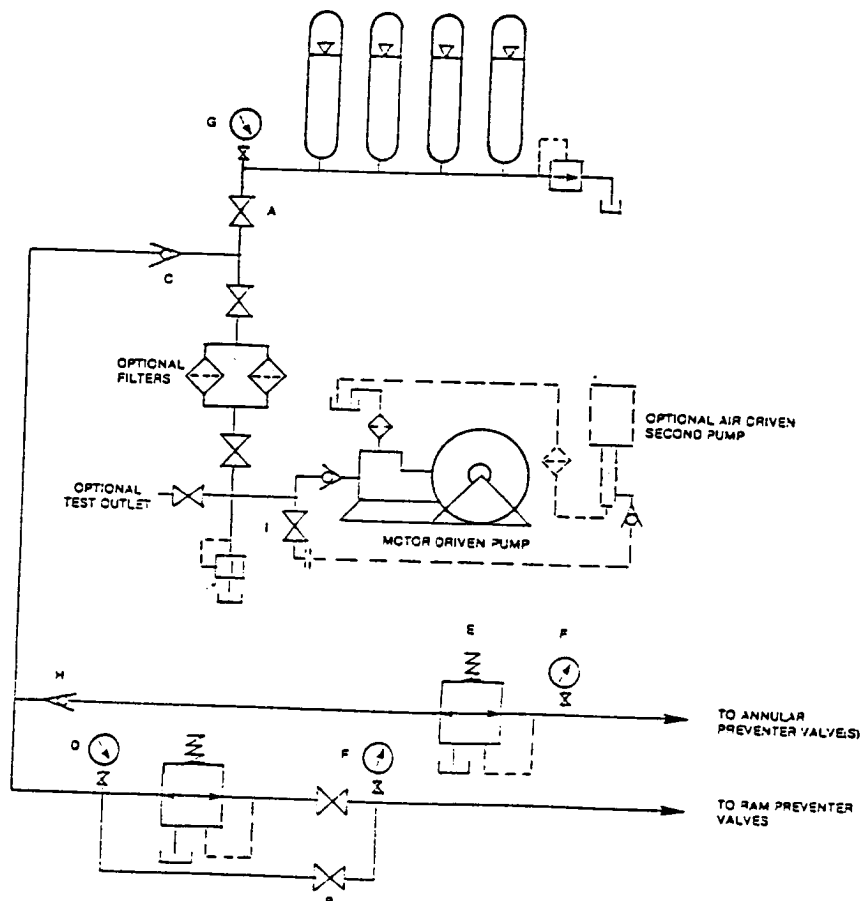


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

CONCHO OIL & GAS CORP.
BENSON SHUGART WATERFLOOD UNIT # 37
UNIT "P" SECTION 25
T18S-R30E EDDY CO. NM