

PLEASE EXPEDITE

New Mexico Oil Conservation Division, District I
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

1625 N. French Drive
Hobbs, NM 88240

APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

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

ARCH PETROLEUM, INC.

(RICHARD WRIGHT 915-685-8140)

3. ADDRESS AND TELEPHONE NO.

P.O. BOX 10340 MIDLAND, TEXAS 79702-7340 (915-685-8100)

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

At surface

2310' FNL & 2630' FWL SEC. 28 T23S-R37E LEA CO. NM

At proposed prod. zone

SAME

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

Approximately 15 miles Southeast of Eunice New Mexico

15. DISTANCE FROM PROPOSED*

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

2310'

16. NO. OF ACRES IN LEASE

1520

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.

245'

19. PROPOSED DEPTH

5500'

20. ROTARY OR CABLE TOOLS

ROTARY

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

3313' 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"	Conductor	NA	40'	Cement to surface with Redi-mix
12 1/4"	J-55 8 5/8"	32	1100'	775 Sx. circulate to surface
7 7/8"	J-55 5 1/2"	15.5	5500'	1150 Sx. 2 stage cement to surface

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 1100'. Run and set 1100' of 8 5/8" 32# J-55 ST&C casing. Cement with 775 Sx. of Class "C" cement + 1/4# Floccels/Sx, + 2% CaCl, circulate cement to surface.

3. Drill 7 7/8" hole to 5500'. Run and set 5500' of 5 1/2" 15.5# J-55 ST&C casing. Cement in Two stages with DV tool at 1500'±. Cement 1st stage with 800 Sx of Class cement + additives, cement 2nd stage with 350 Sx. of Class "C" cement + additives, circulate cement to surface.

OPER. OGRID NO. 962

PROPERTY NO. 14898

POOL CODE 58300

EFF. DATE 5-9-03

API NO. 30-025-36276

**APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED**

It is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or measure and true vertical depths. Give blowout preventer program, if any.

SIGNED

TITLE Agent

DATE 03/07/03

(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:

/S/ JOE G. LARA

FIELD MANAGER

APPROVED BY

DATE

APR 4 2003

*See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.

LC-030187

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on reverse side

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

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

ARCH PETROLEUM, INC. (RICHARD WRIGHT 915-685-8140)

8. Well Name and No.

C.E. LAMUNYON # 85

3a. Address

P.O. BOX 10340 MIDLAND, TEXAS 79702

3b. Phone No. (include area code)

915-685-8100

9. API Well No.

30-025-36276

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2360' FNL & 2630' FWL SECTION 28 T23S-R37E LEA CO. NM

10. Field and Pool, or Exploratory Area
TEAGUE PADDOCK BLINEBRY

11. County or Parish, State

LEA CO. NEW MEXICO

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>Move location</u>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleation in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

1. Arch Petroleum, Inc. requests the approval to move the location of their C.E. LAMUNYON # 85 from 2310' FNL & 2630' FWL SECTION 28 T23S-R37E LEA CO. NEW MEXICO to 2360' FNL & 2630' FWL SECTION 28 T23S-R37E LEA CO. NM.

2. The reason for this request is to comply with the request of the Surface Protection Specialist from the BLM. In order to get a further distance from a pipeline on the North side of the location.

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Joe T. Janica

Title Agent

Signature

Date 03/26/03

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

/s/ JOE G. LARA

FIELD MANAGER

Date

APR 4 2003

Conditions of approval, if any, are attached. Approval of this notice 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.

Office

CARLSBAD FIELD OFFICE

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

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 30-025-36276	Pool Code 58300	Pool Name TEAGUE PADDOCK BLINEBRY
Property Code 14898	Property Name C.E. LAMUNYON	Well Number 85
OGRID No. 17891	Operator Name ARCH PETROLEUM, INC.	Elevation 3314'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	28	23-S	37-E		2360	NORTH	2630	WEST	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.
40			NSL-4878

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 03/26/03 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>MARCH 03, 2003</p> <p>Date Surveyed Signature & Seal of Professional Surveyor <i>Gary Eidson</i> 3/25/03 03110264 Certificate No. RONALD J. EIDSON 3239 GARY EIDSON 12641</p>
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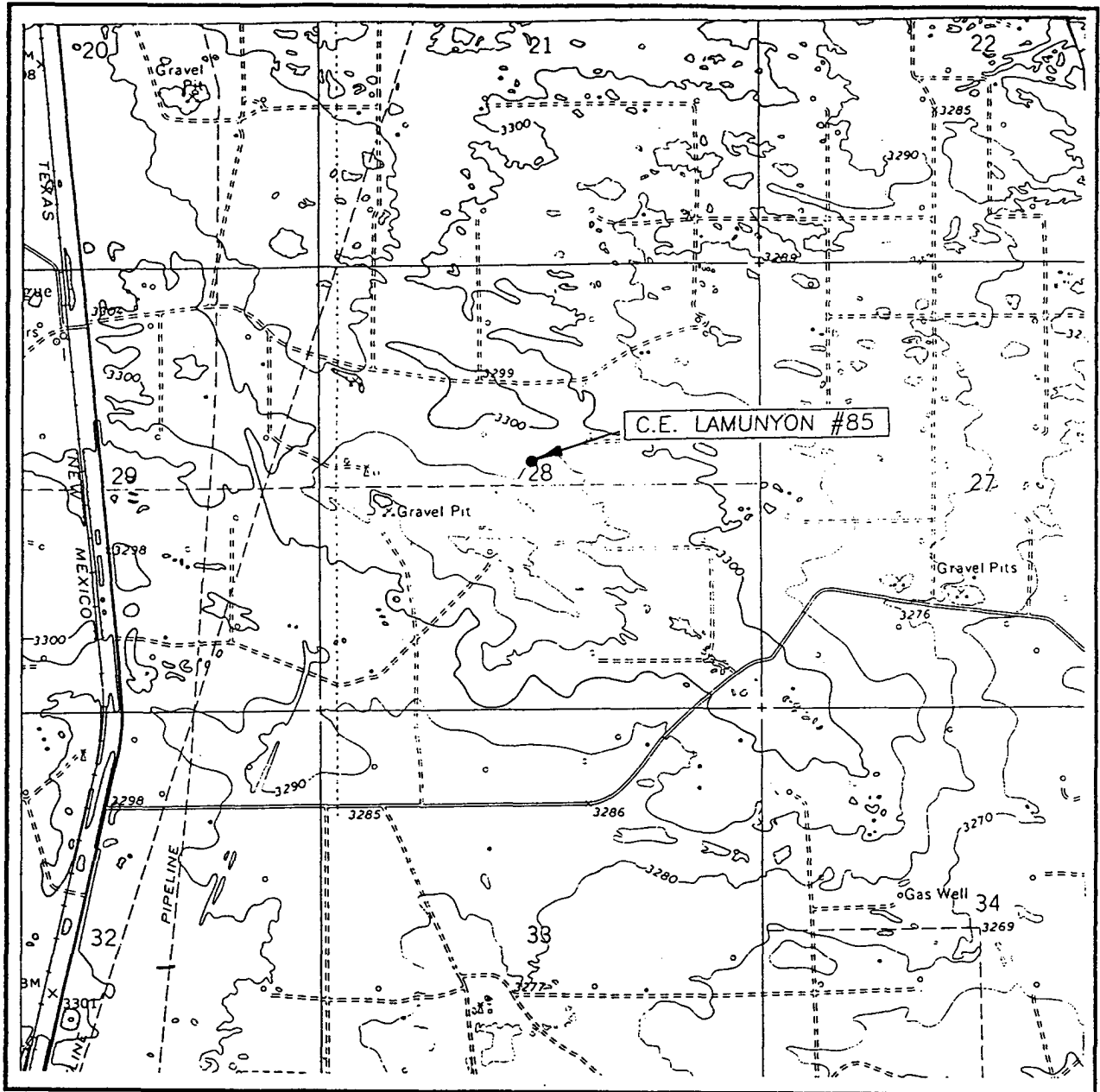
EXHIBIT "A"


 HINT



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

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'
RATTLESNAKE CANYON, N.M.

SEC. 28 TWP. 23-S RGE. 37-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 2360' FNL & 2630' FWL

ELEVATION 3314'

OPERATOR ARCH PETROLEUM

LEASE C.E. LAMUNYON

U.S.G.S. TOPOGRAPHIC MAP
RATTLESNAKE CANYON, N.M.

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

APPLICATION TO DRILL

ARCH PETROLEUM, INC.
C.E. LAMUNYON # 85
UNIT "F" SECTION 28
T23S-R37E 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 of well: 2310' FNL & 2630' FWK SEC. 28 T23S-R37E LEA CO. NM
2. Ground Elevation above Sea Level: 3313' GR.
3. Geological age of surface formation: Quaternary Deposits:
4. Drilling tools and associated equipment: Conventional rotary drilling rig using drilling mud as a circulating medium to remove solids from hole.
5. Proposed drilling depth: 5500'
6. Estimated tops of geological markers:

Rustler Anhydrite	1033'	Penrose	3376'
Top Salt	1130'	Grayburg	3554'
Yates	2535'	San Andres	3806'
7 Rivers	2782'	Blaine	5295'
7. Possible mineral bearing formations:

Yates	Oil	San Andres	Oil
Penrose	Oil	Blaine	Oil
Grayburg	Oil		
8. Casing Program:

Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade
25"	0-40'	20"	NA	NA	NA	Conductor
12 1/4"	0-1100'	8 5/8"	32#	8-R	ST&C	J-55
7 7/8"	0-5500'	5 1/2"	15.5#	8-R	ST&C	J-55

APPLICATION TO DRILL

ARCH PETROLEUM, INC.
C.E. LAMUNYON # 85
UNIT "F" SECTION 28
T23S-R37E LEA CO. NM

9. CASING SETTING DEPTH & CEMENTING:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
8 5/8"	Surface	Set 1100' of 8 5/8" 32# J-55 ST&C casing. Cement with 775 Sx. of Class "C" cement + 1/4# Flocele/Sx, + 2% CaCl, circulate cement to surface.
5 1/2"	Production	Set 5500' of 5 1/2" 15.5# J-55 ST&C casing. Cement in two stages with DV tool at 1500'±. Cement 1st stage with 800 Sx. of Class "C" cement + additives, cement 2nd stage with 350 Sx. of Class "C" cement + 1/4# Flocele/Sx, + 2% CaCl. circulate cement to surface.

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E" shows a 2000 PSI working pressure B.O.P. consisting of a rotating head, middle blind rams and bottom pipe rams. This B.O.P. will be nipped up on the 8 5/8" casing and tested to A.P.I. specifications. The B.O.P. will be operated at least once in each 24 hour period and the blind rams will be operated when the drillpipe 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 abnormal temperatures are expected in this well, as it is in a mature field.

11. PROPOSE MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE SYSTEM
40-1100'	8.4-8.7	29-34	NC	Fresh water Spud Mud use paper to control seepage.
1100-5500'	10.0-10.2	29-40	NC*	Brine water using paper to control seepage, and high viscosity sweeps to clean hole.

* If water loss control is desired or needed to run logs and casing add a Polymer to the system to control water loss.

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

APPLICATION TO DRILL

ARCH PETROLEUM, INC.
C.E. LAMUNYON # 85
UNIT "F" SECTION 28
T23S-R37E LEA CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: Run Dual Laterolog, SNP, LDT, Gamma Ray, Caliper from TD to 8 5/8" casing shoe at 1100'±.
- B. Run Gamma Ray, Neutron from 1100'± back to surface.
- C. No cores or DST's are planned at this time.
- D. Mud logger may be placed on hole if desired by the Geologist.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of H²S in this area. If H²S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 2000 PSI, and Estimated BHT 135°.

14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operation and drilling is expected to take 18 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flowlines in order to place well on production.

15. OTHER FACETS OF OPERATIONS:

After running casing, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The Blaine formation will be perforated and stimulated in order to establish production. 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 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"
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 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.

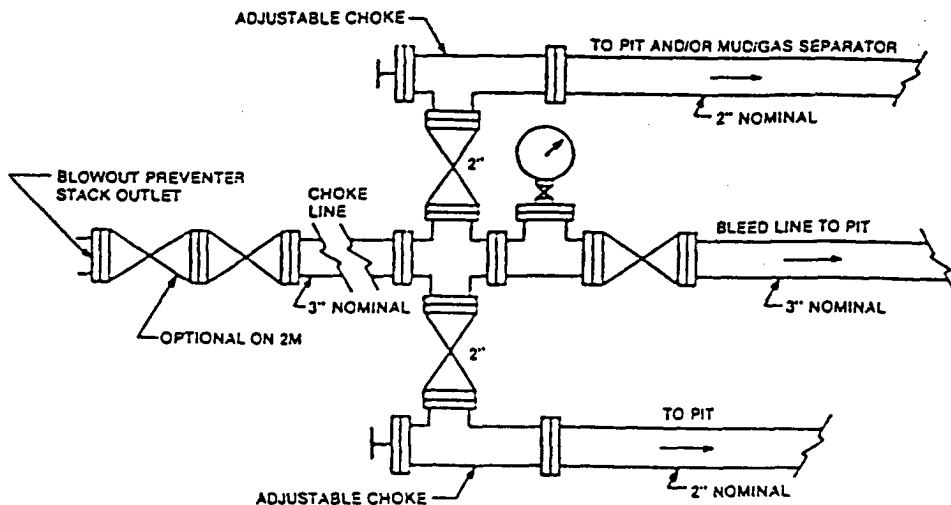


FIGURE K4-1. Typical choke manifold assembly for 2M and 3M rated working pressure service — surface installation.

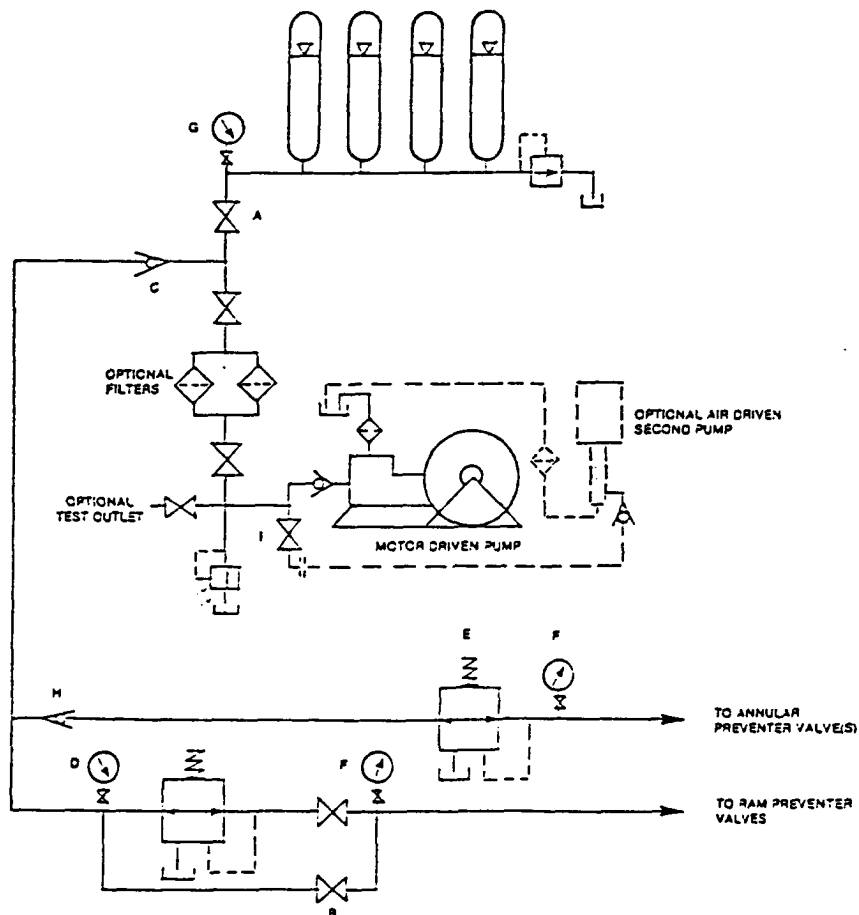


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

ARCH PETROLEUM, INC.
C.E. LAMUNYON # 85
UNIT "F" SECTION 28
T23S-R37E LEA CO. NM