

New Mexico Oil Conservation Division, District I
UNITED STATES 1625 N. French Drive
DEPARTMENT OF THE INTERIOR, NM 88240
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPPLICATE

FORM 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

990' FSL & 2310' FWL SEC. 21 T23S-R37E LEA CO. NM

At proposed prod. zone SAME

N

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

Approximately 15 miles Southeast of Eunice New Mexico

13. DISTANCE FROM PROPOSED

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

990'

16. NO. OF ACRES IN LEASE

1520

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

13. DISTANCE FROM PROPOSED

LOCATION TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

400'

19. PROPOSED DEPTH

5500'

20. ROTARY OR CABLE TOOLS

ROTARY

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

3298' GR.

22. APPROX. DATE WORK WILL START

WHEN APPROVED

23.

PROPOSED CASING AND CEMENTING PROGRAM

Capitan Controlled Water Basin

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 1/2"	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 1/2" 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 + 1/2# 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 "C" cement + additives, cement 2nd stage with 350 Sx. of Class "C" cement + additives, circulate cement to surface. 962

PROPERTY NO. 14898
POOL CODE 58300
EFF. DATE 4-7-03
APLNO 30-025-36239APPROVAL 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 or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED Joe G. LARA TITLE AgentDATE 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

APPROVED BY Joe G. LARA TITLE FIELD MANAGER

DATE

APR 4 2003

*See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

APR 10 1964

RECEIVED

2003 MAR 10 AM 9:21

BUREAU OF LAND MGMT.
ROSWELL OFFICE

36-103-3K331

APR 10 1964

2:00 PM

10:30 AM

10:30 AM

36-103-3K331

APR 10 1964
BUREAU OF LAND MGMT.
ROSWELL OFFICE
NEW MEXICO OIL CORPORATION

DISTRICT I
P.O. Box 1280, Hobbs, NM 88241-1280

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 30-025-36239	Pool Code 58300	Pool Name TEAGUE PADDOCK BLINEBRY
Property Code 14898	Property Name C.E. LAMUNYON	Well Number 83
GRID No. 962	Operator Name ARCH PETROLEUM, INC.	Elevation 3298'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	21	23-S	37-E		990'	SOUTH	2310'	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

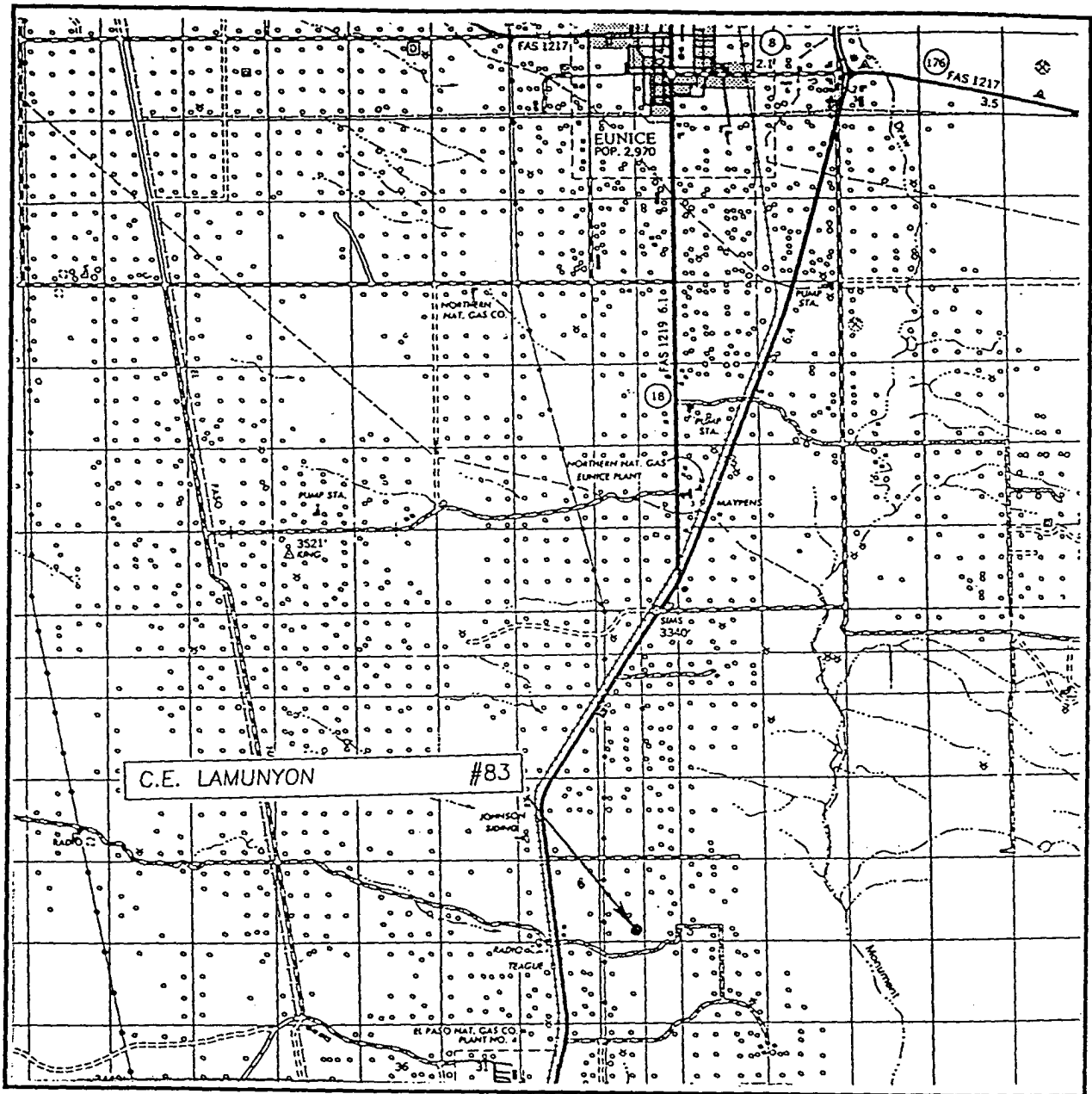
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

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

GEODETIC COORDINATES NAD 27 NME Y = 469461.9 X = 859973.4 LAT. 32°17'07.06"N LONG. 103°10'06.68"W	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. <i>Joe T. Janica</i> Signature Joe T. Janica Printed Name Agent Title 03/07/03 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. MARCH 03, 2003 Date Surveyed Signature & Seal of Professional Surveyor Professional Surveyor NEW MEXICO 3/5/03 03.11.0262 Certificate No. RONALD J. EDSON 3239 12641
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EXHIBIT "A"

VICINITY MAP

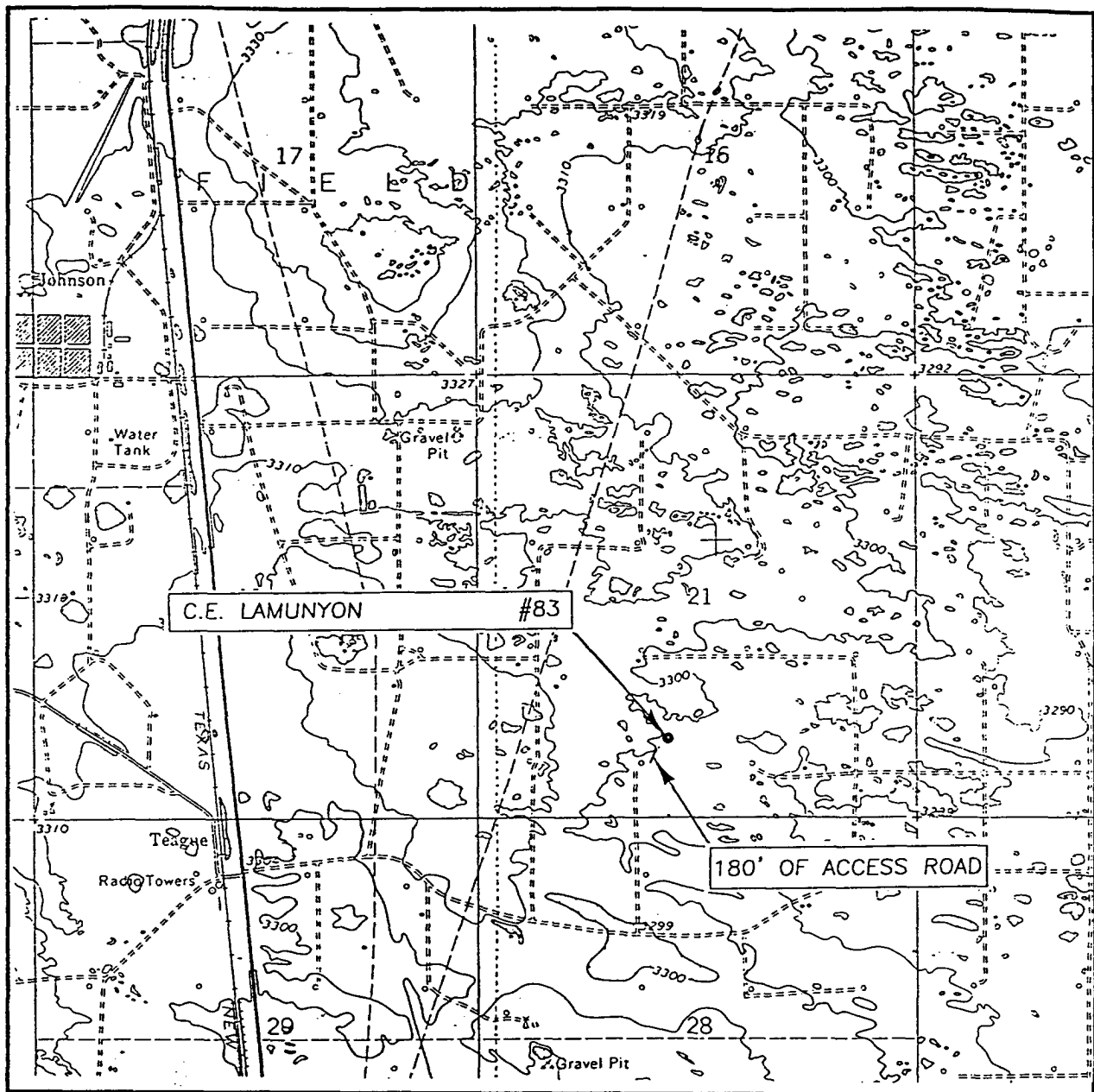


SCALE: 1" = 2 MILES

SEC. 21 TWP. 23-S RGE. 37-E
 SURVEY N.M.P.M.
 COUNTY LEA
 DESCRIPTION 990' FSL & 2310' FWL
 ELEVATION 3298'
 OPERATOR ARCH PETROLEUM, INC.
 LEASE C.E. LAMUNYON

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

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

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

SEC. 21 TWP. 23-S RGE. 37-E

SURVEY _____ N.M.P.M.

COUNTY _____ LEA

DESCRIPTION 990' FSL & 2310' FWL

ELEVATION 3298'

OPERATOR ARCH PETROLEUM, INC.

LEASE C.E. LAMUNYON

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

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

APPLICATION TO DRILL

ARCH PETROLEUM, INC.

C.E. LAMUNYON # 83

UNIT "N" SECTION 21

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: 990' FSL & 2310' FWL SEC. 21 T23S-R37E LEA CO. NM
2. Ground Elevation above Sea Level: 3298' 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
12½"	0-1100'	8 5/8"	32#	8-R	ST&C	J-55
7 7/8"	0-5500'	5½"	15.5#	8-R	ST&C	J-55

APPLICATION TO DRILL

ARCH PETROLEUM, INC.
C.E. LAMUNYON # 83
UNIT "N" SECTION 21
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 # 83
UNIT "N" SECTION 21
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.

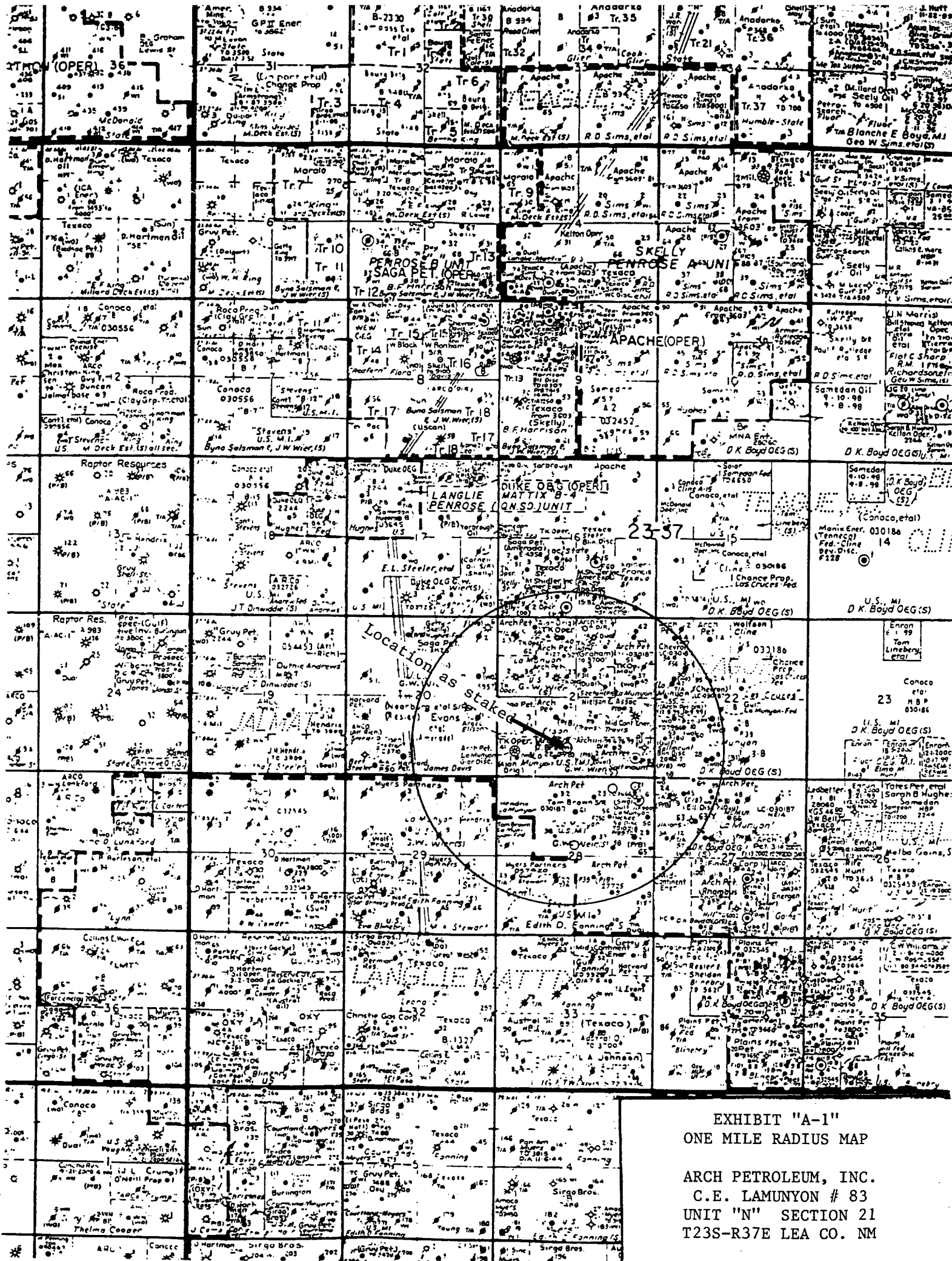


EXHIBIT "A-1"
ONE MILE RADIUS MAP
ARCH PETROLEUM, INC.
C.E. LAMUNYON # 83
UNIT "N" SECTION 21
T23S-R37E LEA CO. NM

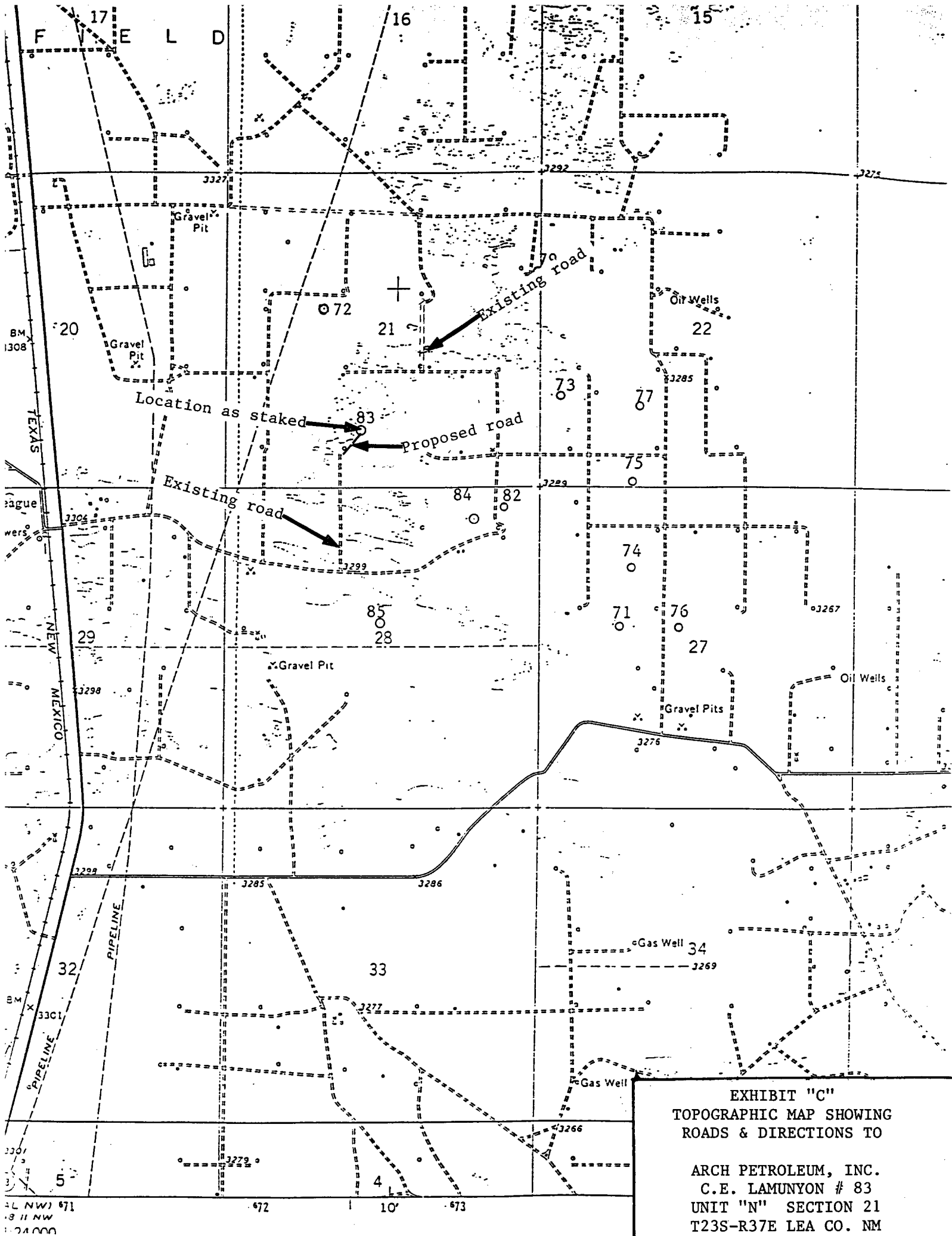


EXHIBIT "C"
TOPOGRAPHIC MAP SHOWING
ROADS & DIRECTIONS TO

ARCH PETROLEUM, INC.
C.E. LAMUNYON # 83
UNIT "N" SECTION 21
T23S-R37E LEA CO. NM

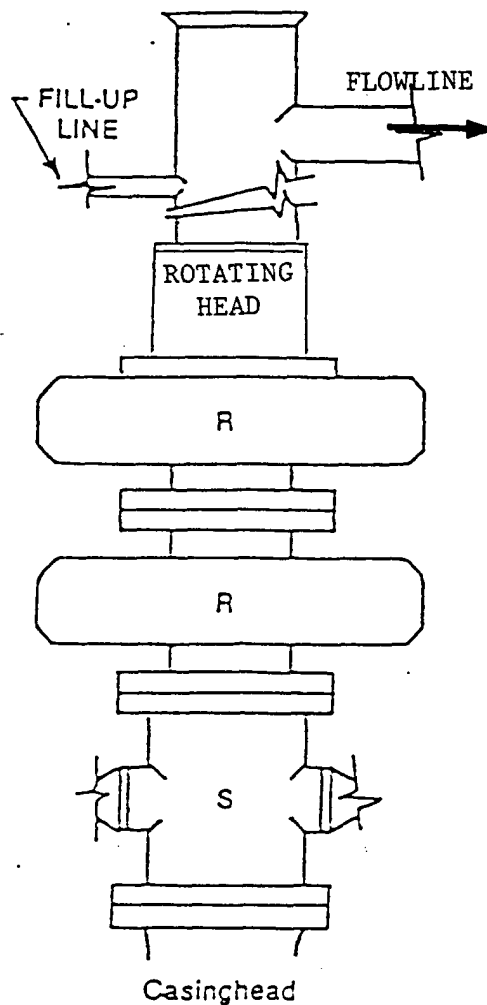


FIGURE K1-1. Recommended IADC Class 2 BOP stack, 2000 psi WP. Either SRd (left) or SA (right) arrangement is acceptable and drilling spool is optional.

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

ARCH PETROLEUM, INC.
C.E. LAMUNYON # 83
UNIT "N" SECTION 21
T23S-R37E LEA CO. NM

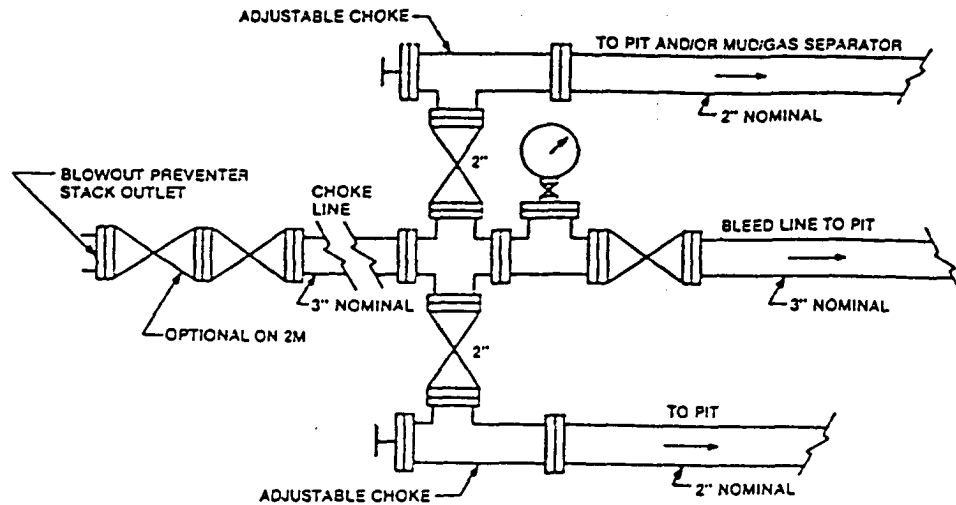


FIGURE K4-1. Typical choke manifold assembly for 2M and 3M rated working pressure service — surface installation.

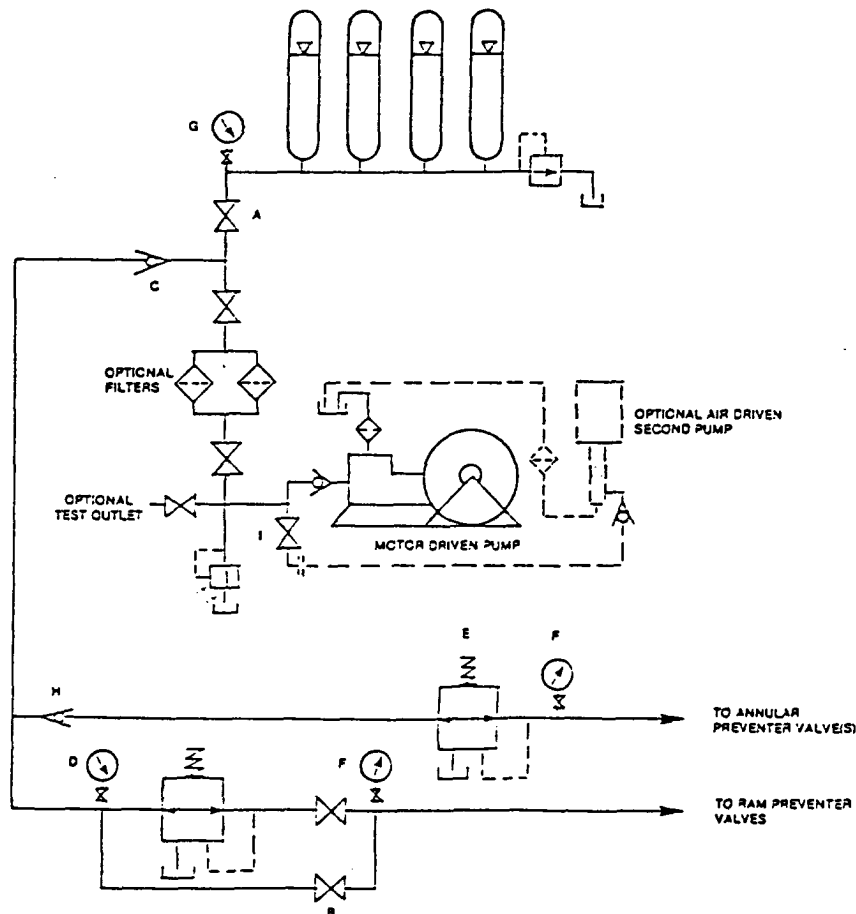


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

ARCH PETROLEUM, INC.
C.E. LAMUNYON # 83
UNIT "N" SECTION 21
T23S-R37E LEA CO. NM