Form 9-331 C
(May 1963)

NM OIL CONS. COMMISSION
Drawer
Artesia, NEW MEXICO

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1...

30-015-24108

# UNITED STATES
# DEPARTMENT OF THE INTERIOR
## GEOLOGICAL SURVEY

C/SF

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: ~~NM~~ 059365

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: ---

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [XX] MULTIPLE ZONE [ ]

7. UNIT AGREEMENT NAME: Big Eddy Unit

8. FARM OR LEASE NAME: Big Eddy Unit

2. NAME OF OPERATOR: Perry R. Bass

RECEIVED

9. WELL NO.: 91

3. ADDRESS OF OPERATOR: P.O. Box 2760 Midland, Texas 79702

MAR 8 1982

10. FIELD AND POOL, OR WILDCAT: ~~Fenton Draw~~ Morrow Gas

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 660 FSL & 1980' FEL Sec. 19, T21S, R28E

O. C. D.
ARTESIA, OFFICE

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

At proposed prod. zone: Same As Above

Sec. 19, T21S, R28

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 5 miles NE of Carlsbad, New Mexico

12. COUNTY OR PARISH: Eddy | 13. STATE: New Me

| 15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) | 16. NO. OF ACRES IN LEASE | 17. NO. OF ACRES ASSIGNED TO THIS WELL |
|---|---|---|
| 660' | 320 | 320 |
| **18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.** | **19. PROPOSED DEPTH** | **20. ROTARY OR CABLE TOOLS** |
| None | 12,300 | Rotary |

21. ELEVATIONS (Show whether DF, RT, GR, etc.): GL 3182.6'

22. APPROX. DATE WORK WILL START*: Upon Approval

23. PROPOSED CASING AND CEMENTING PROGRAM

| SIZE OF HOLE | SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT |
|---|---|---|---|---|
| 15" | 11-3/4" | 42 | 900± | 750 sx Circ. to Surface |
| 11" | 8-5/8" | 24 | 2300'± | 3700 sx. Circ. to Surface |
| 7-7/8" | 5-1/2" | 17 | TD | 900 sx Est. TOC @ 8200 |

Drilling Procedure, BOP Diagrams, formation tops and surface use plans are attached.

Gas is Dedicated.

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FEB 16 1982
OIL & GAS
U.S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

Posted ID-1
API + NL Book
3-12-82

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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 Stephen D. Snell TITLE Engineering Assistant DATE February 8, 1982

(This space for Federal or State office use)

PERMIT NO. ---

APPROVED

APPROVAL DATE ---

APPROVED BY ---

TITLE APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

DATE ---

CONDITIONS OF APPROVAL, IF ANY:

MAR 4 1982

JAMES A. GILLHAM
DISTRICT SUPERVISOR

*See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION

# WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-
Effective

All distances must be from the outer boundaries of the Section

| Operator | Lease | Well No. |
|---|---|---|
| PERRY R. BASS | BIG EDDY UNIT | 91 |

| Unit Letter | Section | Township | Range | County |
|---|---|---|---|---|
| O | 19 | 21 South | 28 East | EDDY |

Actual Footage Location of Well:
660 feet from the South line and 1980 feet from the East line

| Ground Level Elev. | Producing Formation | Pool | Dedicated Acreage |
|---|---|---|---|
| | MORROW | ~~FENTON DRAW~~ Ea. | ~~320~~ 317.16 |

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

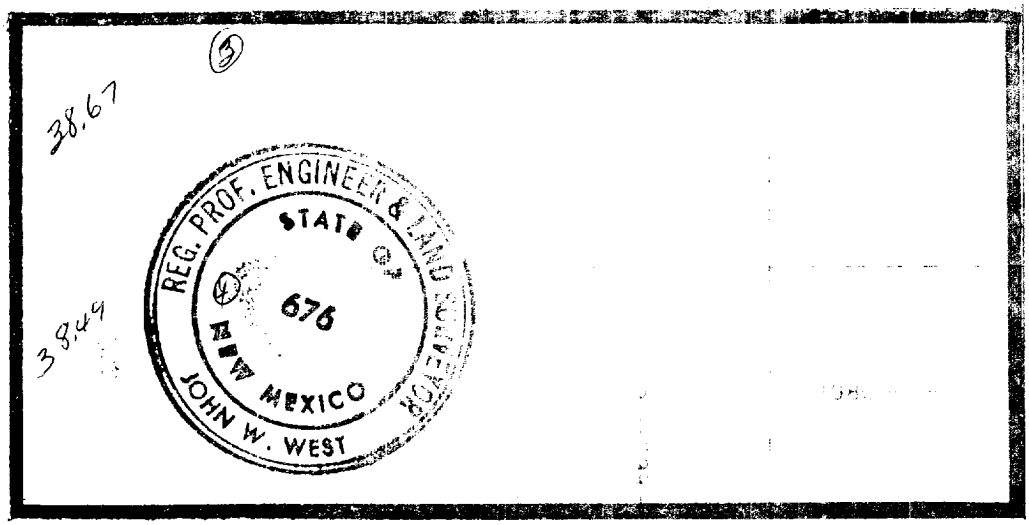
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

X Yes ___ No If answer is "yes," type of consolidation UNIT

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.




## CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Stephen D. Smith

Stephen Smith

Engineering Assistant

Perry R. Bass

February 4, 1982

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 knowledge and belief.

01/27/82

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

Certificate No. JOHN W. WEST 676
PATRICK A. ROMERO 6668
Ronald J. Eidson 3239

0 330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 4000 500

# DRILLING PROCEDURE

## BIG EDDY UNIT NO. 91

Location:

660' FSL, 1980'FEL, Sec. 19, T21S, R28E

Conductor Casing:

40' ± of 16" conductor casing will be set with a rathole machine and cemented to the surface with ready mix.

Surface Hole:

A 15" OH will be drilled to 900'± and 11-3/4" 42#/ft H-40 casing run to total depth. The surface casing will be cemented with a 550 sx Pacesetter Lite, tailed with 200 sx Class "C" with 2% $CaCl_2$. Cement must be circulated to the surface.

Total WOC time is 24 hours.

Nippling Up 11-3/4" Casing:

After waiting 4 hours "nippling up" procedures may begin. An 11-3/4" SW 3000# WP x 12" 3000# WP casinghead will be welded in place. A set of hydraulic operated pipe and blind rams will then be installed (See BEPCO III attached) and tested to 1000 psi with the rig pump.

The results of this test must be reported in the daily driller's log.

Intermediate Hole:

An 11" OH will then be drilled to 2300'± (T/Delaware Mtn. Group) 8-5/8" 24#ft/ S-80 casing will be run to total depth and cemented with approximately 3500 sxs Pacesetter Lite plus 8# NaCl/sx plus 1/4#sx Celloseal, "tailed-in" with 200 sx Class "C" with 2% $CaCl_2$, plus 1/4#/sx Celloseal. Cement must be circulated to the surface.

Total WOC time for this casing string will be 24 hours.

Nippling Up 8-5/8" Casing:

After waiting 4 hours "nippling up" procedures may begin. The 11-3/4" casinghead will be removed and a 8-5/8" SW 5000# x 10" 5000# WP casinghead installed.

A BOP stack consisting of hydril, pipe rams and blind rams will be installed as per BEPCO Drawing IV (attached). This BOP stack will be hydrostatically tested to 5000 psi (Hydril 1500#) by Yellow Jacket. The USGS will be notified in sufficient time to witness the testing of the 8-5/8" BOP stack. A copy of the test results will also be furnished to the USGS.

The results of this test will be recorded in the daily driller's log.

Production Hole:

A 7-7/8" OH will then be drilled to TD (12,150'±). A PWT

...ntered before drilling the Wolfcamp.

5-1/2" casing will be run to TD. This casing string will be cemented with approximately 900 sx Class "H" plus 5# KCl/sx plus 0.3% CFR-2, plus 0.6% Halad 22. The cement volume should be sufficient to bring the cement top 1000' above the Wolfcamp.

Time:

This well is estimated to take 48 days from spud to TD.

Stephen D. Smith 2/5/82
Stephen Smith

SDS/lb

BIG EDDY UNIT #91

Anticipated Formation Tops (KB 3193' est)

| | | |
|---|---|---|
| T/Capitan | 1,400'± | (+1793'±) |
| T/Dela. Sd. | 2,500'± | (+ 693'±) |
| T/Indian Draw | 3,255'± | (- 62'±) |
| T/Bone Springs | 5,693'± | (-2500'±) |
| T/Wolfcamp | 9,203'± | (-6010'±) |
| T/Strawn | 10,473'± | (-7280'±) |
| T/Atoka | 10,821'± | (-7628'±) |
| T/U. Morrow | 11,316'± | (-8123'±) |
| T/M. Morrow | 11,643'± | (-8450'±) |
| T/L. Morrow | 11,893'± | (-8700'±) |
| TD | 12,150'± | (-8957'±) |

Stephen Smith 2/5/82

Stephen Smith

# CASING DESIGN

## BIG EDDY UNIT NO. 91

### SURFACE CASING

| Segment | Size | Grade | Thread | Weight | Top | Bottom | Length |
|---|---|---|---|---|---|---|---|
| 1 | 11-3/4" | H-40 | ST&C | 42# | 0'± | 900'± | 900'± |

### INTERMEDIATE CASING

| Segment | Size | Grade | Thread | Weight | Top | Bottom | Length |
|---|---|---|---|---|---|---|---|
| 1 | 8-5/8" | S-80 | ST&C | 24# | 0'± | 2300'± | 2300'± |

### PRODUCTION CASING

| Segment | Size | Grade | Thread | Weight | Top | Bottom | Length |
|---|---|---|---|---|---|---|---|
| 1 | 5-1/2" | S-95 | LT&C | 17# | 9980'± | 12,150'± | 2170'± |
| 2 | 5-1/2" | N-80 | LT&C | 17# | 0'± | 9980'± | 9980'± |

Stephen D. Smith 2-8-82

Stephen Smith

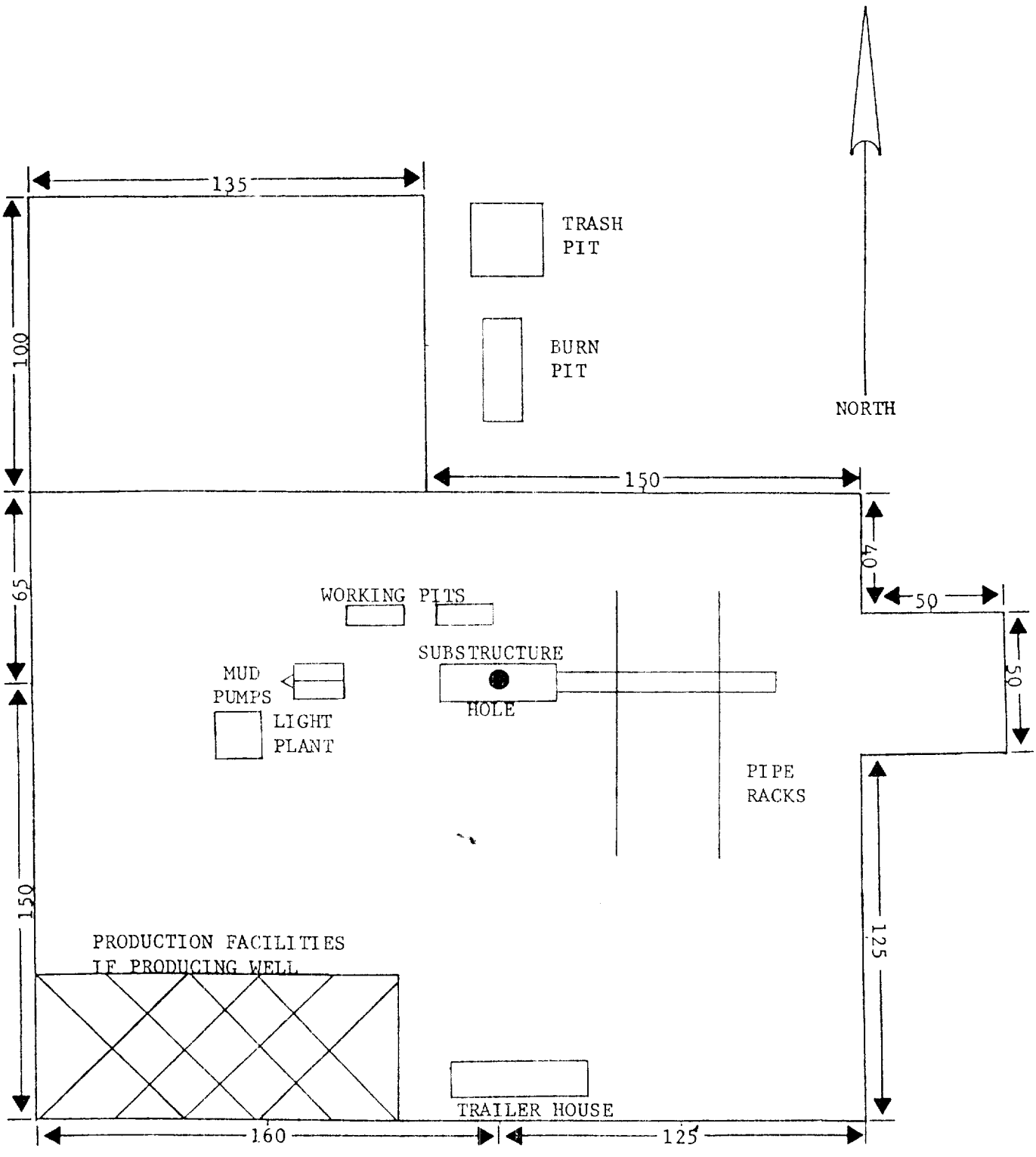
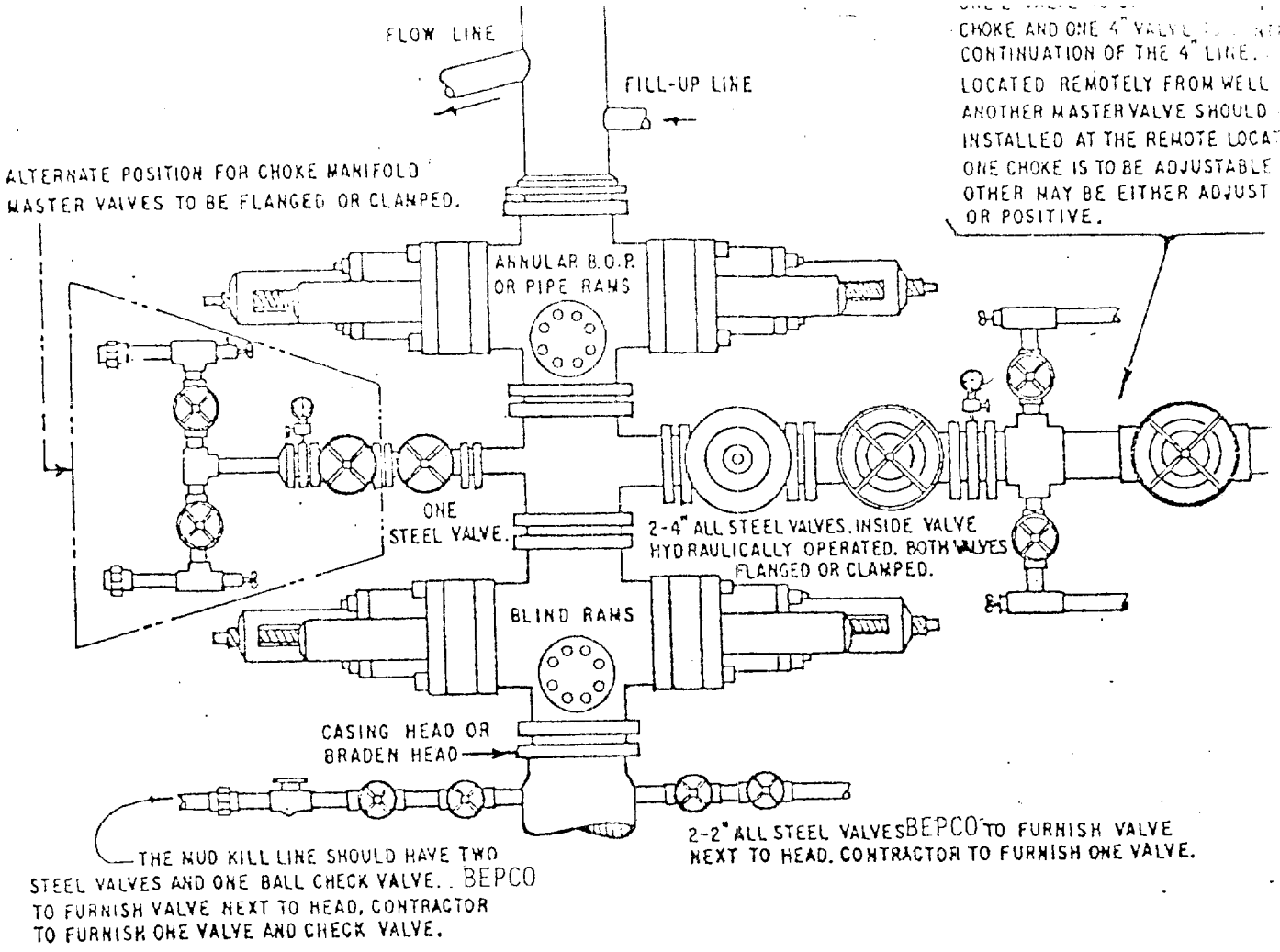

135
100
TRASH
PIT
BURN
PIT
NORTH
150
40
50
50
65
WORKING PITS
SUBSTRUCTURE
MUD
PUMPS
LIGHT
PLANT
HOLE
PIPE
RACKS
150
125
PRODUCTION FACILITIES
IF PRODUCING WELL
TRAILER HOUSE
160
125

EXHIBIT "B"




## THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

A. CONDITIONS MAY BE MET BY EITHER
   (1) AN ANNULAR BLOWOUT PREVENTER ON TOP AND BLIND RAMS BELOW WITH A CHOKE SPOOL BETWEEN THEM.
   (2) PIPE RAMS ON TOP AND BLIND RAMS BELOW WITH A CHOKE SPOOL BETWEEN THEM.
   (3) A DUAL BLOWOUT PREVENTER WITH PIPE RAMS ON TOP AND BLIND RAMS BELOW WITH A SIDE OUTLET BETWEEN THE RAMS LEAST FOUR INCHES DIAMETER.

B. OPENINGS BETWEEN RAMS TO BE FLANGED, STUDDED OR CLAMPED.

C. ALL CONNECTIONS FROM OPERATING MANIFOLD TO PREVENTERS TO BE ALL STEEL HOSE OR TUBE A MINIMUM OF ONE INCH IN DIA

D. THE AVAILABLE CLOSING PRESSURE SHALL BE AT LEAST 15% IN EXCESS OF THAT REQUIRED WITH SUFFICIENT VOLUME TO OPE THE B.O.P's.

E. ALL CONNECTIONS TO AND FROM PREVENTERS TO HAVE A PRESSURE RATING EQUIVALENT TO THAT OF THE B.O.P's.

F. MANUAL CONTROLS TO BE INSTALLED BEFORE DRILLING CEMENT PLUG.

G. KELLY COCK TO BE INSTALLED ON KELLY.

H. INSIDE BLOWOUT PREVENTER TO BE AVAILABLE ON RIG FLOOR.

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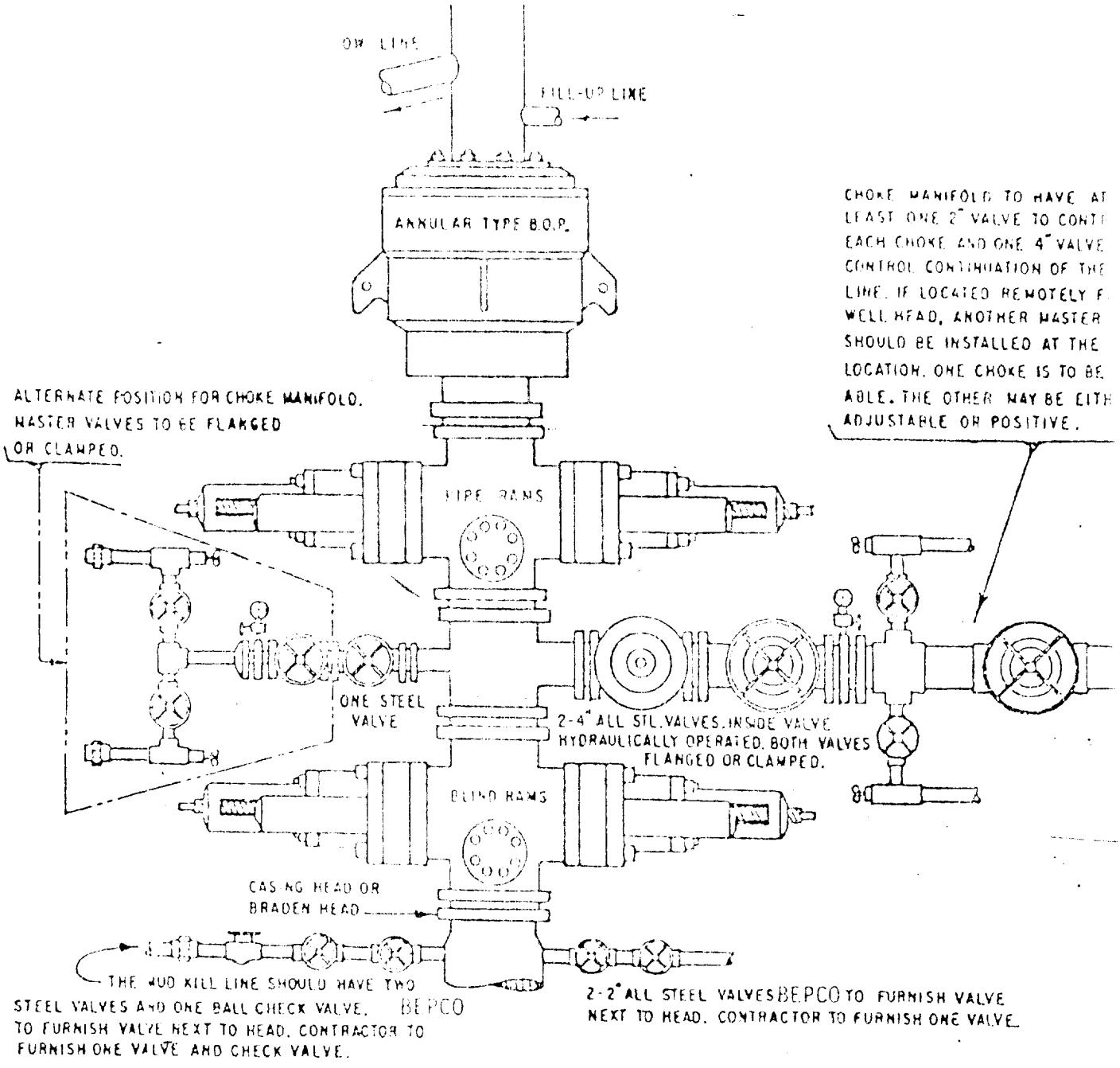
BEPCO III

TWO CLOSURE HYDRAULIC BLOWOUT PREVENTERS




## THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

A. CONDITIONS MAY BE MET BY AN ANNULAR TYPE BLOWOUT PREVENTER ON TOP AND A CHOKE SPOOL BELOW AND EITHER

(1) TWO RAM TYPE BLOWOUT PREVENTERS BELOW THE SPOOL, THE LOWER UNIT CONTAINING BLIND RAMS AND THE UPPER UNIT CONTAI PIPE RAMS, OR

(2) A DUAL BLOWOUT PREVENTER BELOW THE SPOOL WITH BLIND RAMS ON BOTTOM AND PIPE RAMS ON TOP.

B. OPENING ON CHOKE SPOOL TO BE FLANGED, STUDDED OR CLAMPED.

C. ALL CONNECTIONS FROM OPERATING MANIFOLDS TO PREVENTERS TO BE ALL STEEL HOSE OR TUBE A MINIMUM OF ONE INCH IN DIAMETE

D. THE AVAILABLE CLOSING PRESSURE SHALL BE AT LEAST 15% IN EXCESS OF THAT REQUIRED WITH SUFFICIENT VOLUME TO OPERATE THE

E. ALL CONNECTIONS TO AND FROM PREVENTER TO HAVE A PRESSURE RATING EQUIVALENT TO THAT OF THE B.O.P.'s.

F. MANUAL CONTROLS TO BE INSTALLED BEFORE DRILLING CEMENT PLUG.

G. KELLY COCK TO BE INSTALLED ON KELLY

H. INSIDE BLOWOUT PREVENTER TO BE AVAILABLE ON RIG FLOOR

I. DUAL OPERATING CONTROLS ONE LOCATED BY DRILLER'S POSITION AND THE OTHER LOCATED A SAFE DISTANCE FROM THE RIG FLOOR.

BEPCO IV

THREE CLOSURE HYDRAULIC BLOWOUT PREVENTERS

30-015-23628