(May 1963)

Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

(Other instructions on reverse)

NM OIL CONS. COMMISSION
Drawer DD
Artesia, NM 88210

30-015-24138

C/SF

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: NM-067964

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 [X] MULTIPLE ZONE [ ]

7. UNIT AGREEMENT NAME: Big Eddy Unit

8. FARM OR LEASE NAME: Big Eddy Unit

2. NAME OF OPERATOR: Perry R. Bass

APR 19 1982

9. WELL NO.: 97

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

10. FIELD AND POOL, OR WILDCAT: Quahada Ridge Morrow

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1980' FNL & 1980' FWL Sec. 35, T21S, R29E
At proposed prod. zone: Same as above

SE NW F

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 35 T21S, R29E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 15½ ENE of Carlsbad, New Mexico

12. COUNTY OR PARISH: Eddy

13. STATE: New Mexico

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
1980	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**
------	13,600	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3409' GL

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	500	400 sxs Circ. to Surface
11"	8-5/8"	24	3300	1350 sxs Circ. to Surface.
7-7/8"	5-1/2"	17	TD	900 sxs Est. TOC @ 9300'+.

Drilling procedure, BOP diagrams, formation tops and surface use plans are attached.

Gas is dedicated.

RECEIVED
APR 20 1982
OIL & GAS
GEOLOGICAL SURVEY
U.S. ROSWELL, NEW MEXICO

Posted ID-1 API + NL Book 4-16-82

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. Smith TITLE Engineering Assistant DATE February 18, 1982

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

Operator	Lease	Well No.
Perry R. Bass	Big Eddy Unit	97

Unit Letter	Section	Township	Range	County
F	35	21 South	29 East	Eddy

Actual Footage Location			
1980 feet from the north line		1980 feet from the west line	

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage
3409.0'	Morrow	Quahada Ridge	320

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

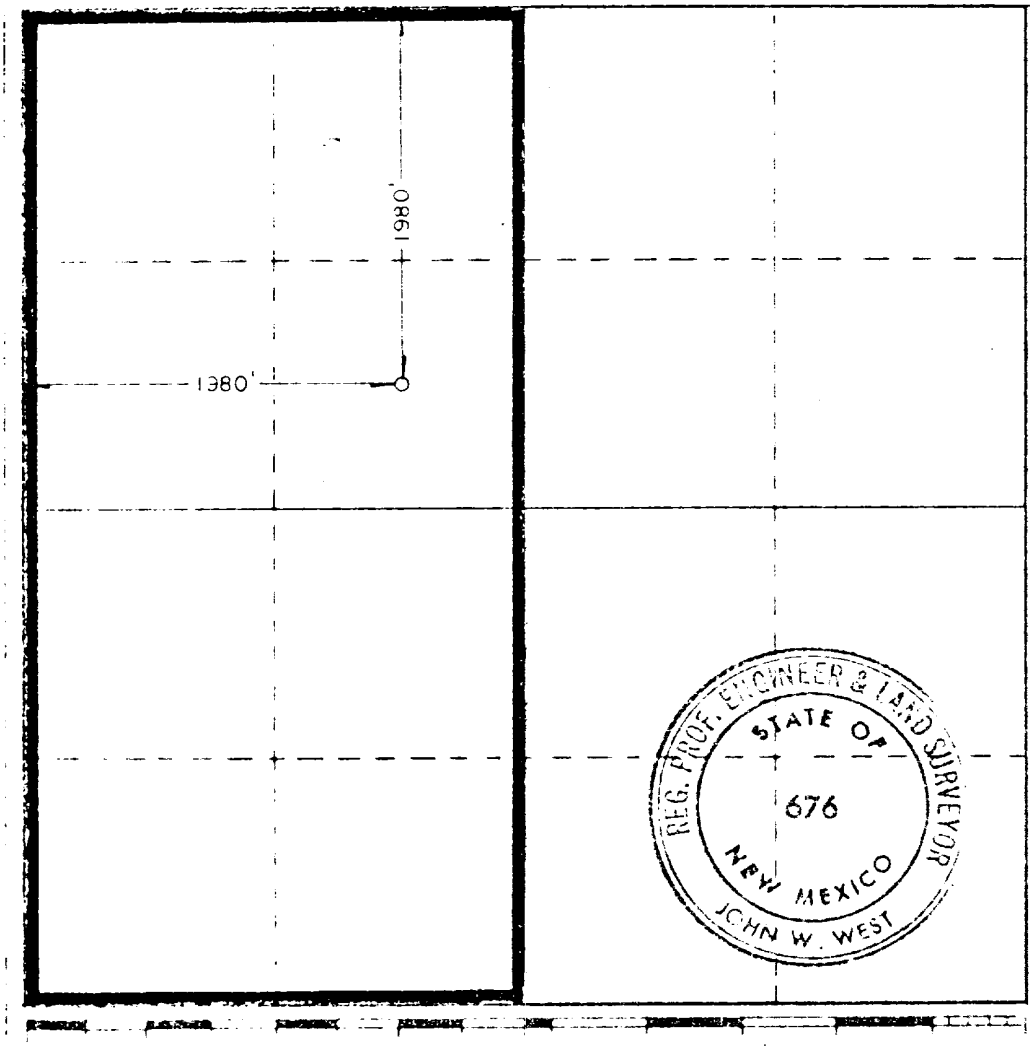
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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

Name: Stephen Smith

Position: Engineering Assistant

Company: Perry R. Bass

Date: February 9, 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.

Date Surveyed: 1-28-82

Registered Professional Engineer and/or Land Surveyor

John W. West

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

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR

Minerals Management Service
South Central Region
P.O. Box 26124
Albuquerque, New Mexico 87125

RECEIVED
APR 13 1982
O. C. D.
ARTESIA, OFFICE

12 APR 1982

Perry R. Bass
P.O. Box 2760
Midland, Texas 79702

Gentlemen:

Your application for Permit to Drill well No. 97 Big Eddy Unit in the SE¼NW¼ sec. 35, T. 21 S., R. 29 E., Eddy County, New Mexico, lease LC-067964, to a depth of 13,500 feet to test the Morrow formation in the oil-potash area, is hereby approved as amended by stipulations attached to the application.

One copy of the application is returned herewith. Please notify the District Supervisor, Minerals Management Service, Roswell, New Mexico, in sufficient time for a representative to witness all cementing operations.

Sincerely yours,

(ORIG SGD) GENE F. DANIEL

Gene F. Daniel
Deputy Minerals Manager
Oil and Gas

Enclosure

cc:
NMOCD (2) ← This Copy for
BLM - Carlsbad
MM, SCR
DMM - Mining (2)
Regional Files
Roswell District Files
Artesia Sub-district
Suspense File
ARF
RCF

GHStewart:mvd:4/6/82

DRILLING PROCEDURE

BIG EDDY UNIT NO. 97

Location:

1980' FNL, 1980' FWL, Sec. 35, T21S, R29E

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 500'± and 11-3/4" 42#/ft H-40 casing run to total depth. The surface casing will be cemented with 400 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 3300'± (T/Delaware Mtn. Group) 8-5/8" 24#/ft S-80 casing will be run to total depth and cemented with approximately 550 sxs Pacesetter Lite plus 8# NaCl/sx plus 1/4#sx Celloseal, "tailed-in" with 600 sx Class "C" with 2% $CaCl_2$. 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 (13,450'±). A PVT recorder, flow-show sensor and rotating head will be installed before drilling the Wolfcamp.

5-1/2" casing will be run to TD. This casing string will be cemented with approximately 900 sx, 200 sxs. Western Pacesetter Lite tailed with 700 sxs. Class "H". The cement volume should be sufficient to bring the cement top 1000' above the Wolfcamp.

Time:

This well is estimated to take 57 days from spud to TD.

Stephen Smith 2-18-82
Stephen Smith

CASING DESIGN

BIG EDDY UNIT NO. 97

SURFACE CASING

Segment	Size	Grade	Thread	Weight	Top	Bottom	Length
1	11-3/4"	H-40	ST&C	42#	0'±	500'±	500'±

INTERMEDIATE CASING

Segment	Size	Grade	Thread	Weight	Top	Bottom	Length
1	8-5/8"	S-80	ST&C	24#	0'±	3,300'±	3,300'±

PRODUCTION CASING

Segment	Size	Grade	Thread	Weight	Top	Bottom	Length
1	5-1/2"	S-95	LT&C	17#	9510'±	13,450'±	3,940'±
2	5-1/2"	N-80	LT&C	17#	680'±	9,510'±	8,830'±
3	5-1/2"	N-80	Buttress	17#	0'±	680'±	680'±

Stephen D. Smith
2-23-82

BIG EDDY UNIT NO. 97

MUD PROGRAM

FROM	TO	TYPE FLUID	WEIGHT	VISCOSITY	% OIL	WATER LOSS
0'±	500'±	FW GEL	8.4-8.6	34-40	0	NC
500'±	3,300'±	BW	10.0	28-34	0	NC
3,300'±	10,318'±	FW	8.4-8.6	28-34	0	NC
10,318'±	11,658'±	BW	10.0	28-34	0	NC
1,658'±	11,838'±	BW	10.3	28-34	0	NC
11,838'±	TD	BW Polymer	11.5	34-40	0	15cc

Stephen Smith 2-18-82

Stephen Smith

BIG EDDY UNIT #97

Anticipated Formation Tops (KB 3168' est)

T/Dela. Sd.	3,378'±	(+ 40'±)
T/Indian Draw	4,218'±	(- 800'±)
T/Bone Springs	7,038'±	(-3,620'±)
T/Wolfcamp	10,318'±	(-6,900'±)
T/Strawn	11,658'±	(-8,240'±)
T/Atoka	11,838'±	(-8,420'±)
T/U. Morrow	12,493'±	(-9,075'±)
T/M. Morrow	12,893'±	(-9,475'±)
T/L. Morrow	13,238'±	(-9,820'±)

Stephen Smith

Stephen Smith 2-18-82

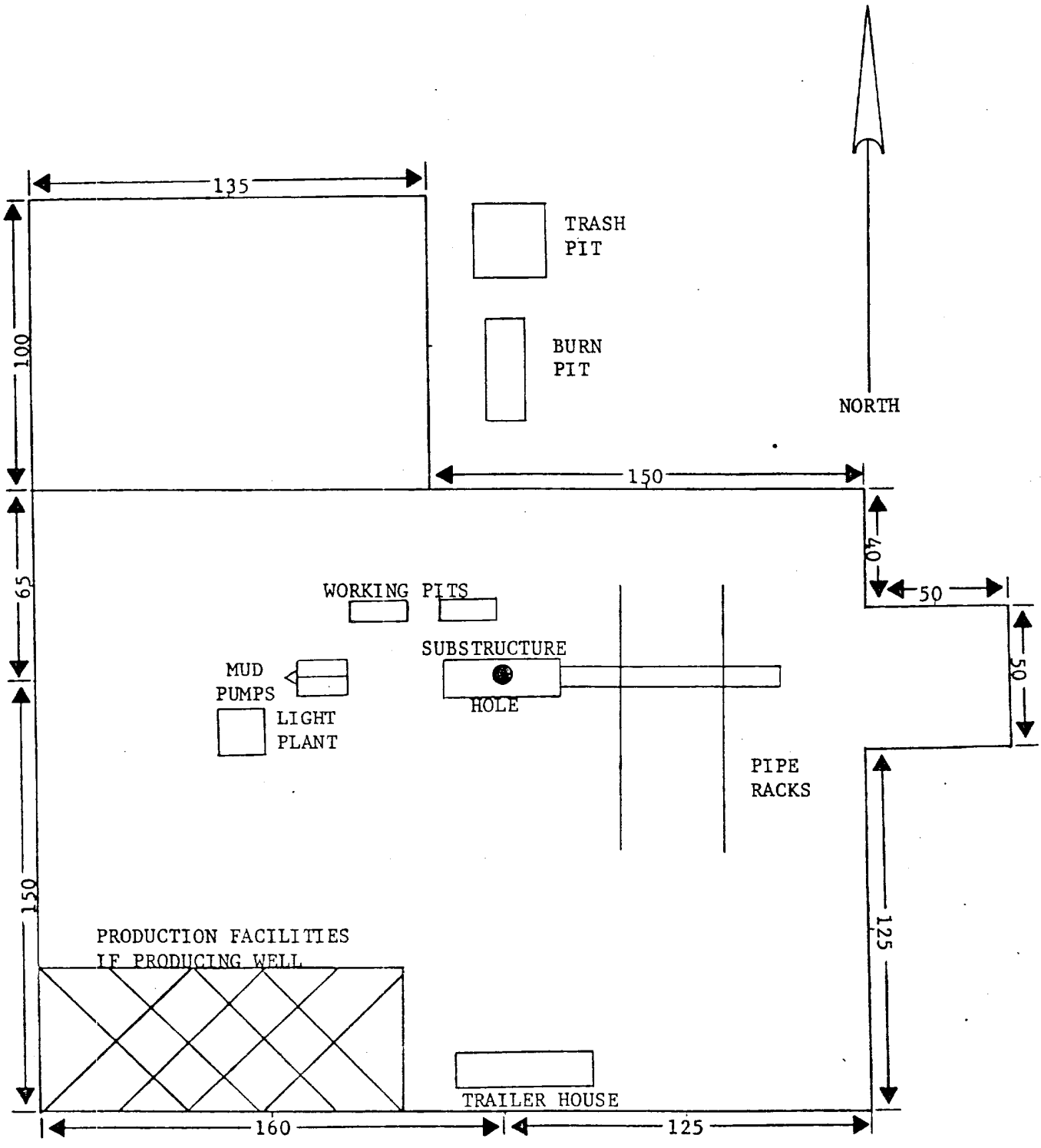
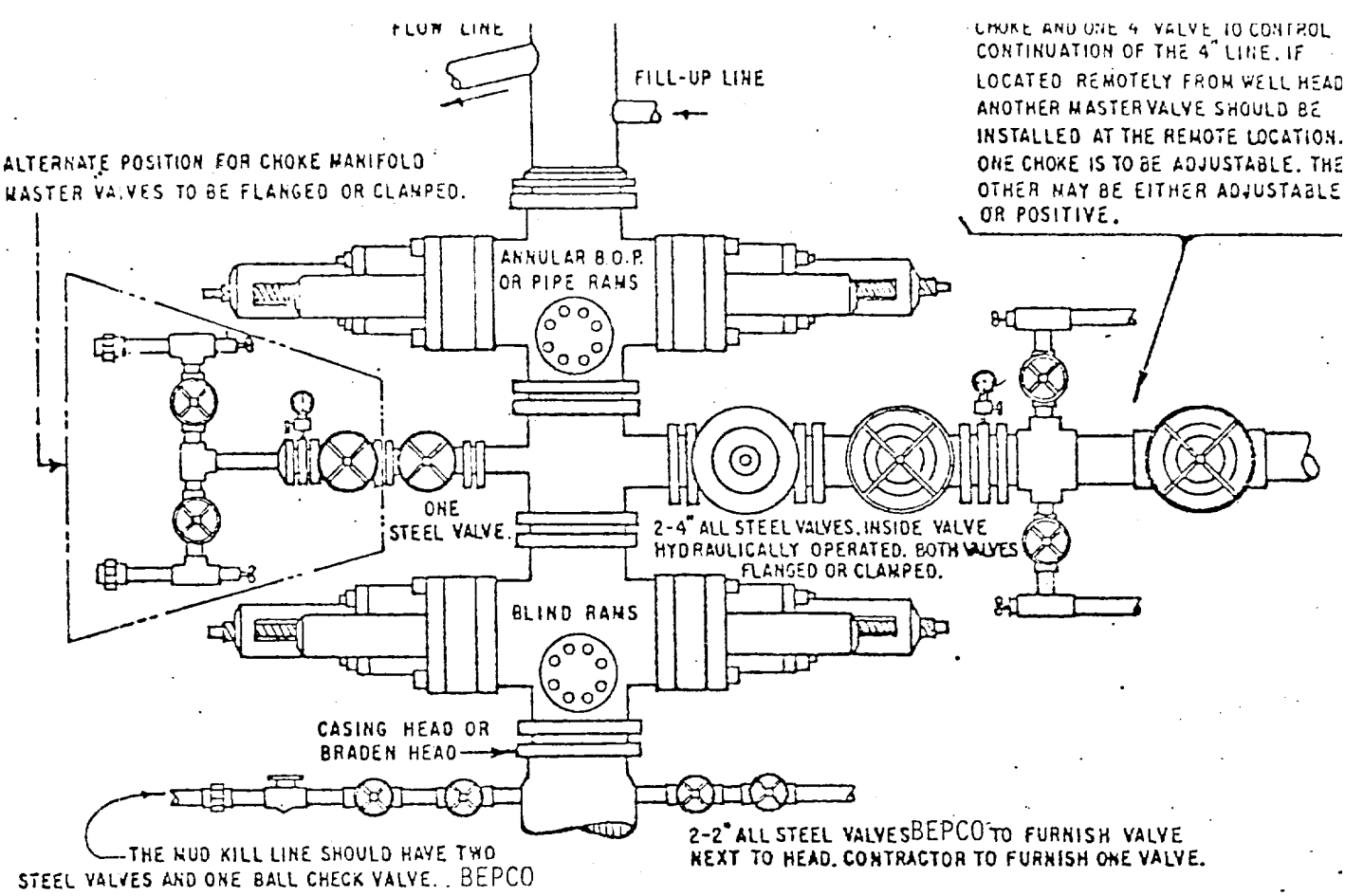

135
100
TRASH PIT
BURN PIT
NORTH
150
65
40
50
50
WORKING PITS
SUBSTRUCTURE
MUD PUMPS
LIGHT PLANT
HOLE
PIPE RACKS
150
125
PRODUCTION FACILITIES IF PRODUCING WELL
TRAILER HOUSE
160
125

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 AT 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 DIAMETER

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

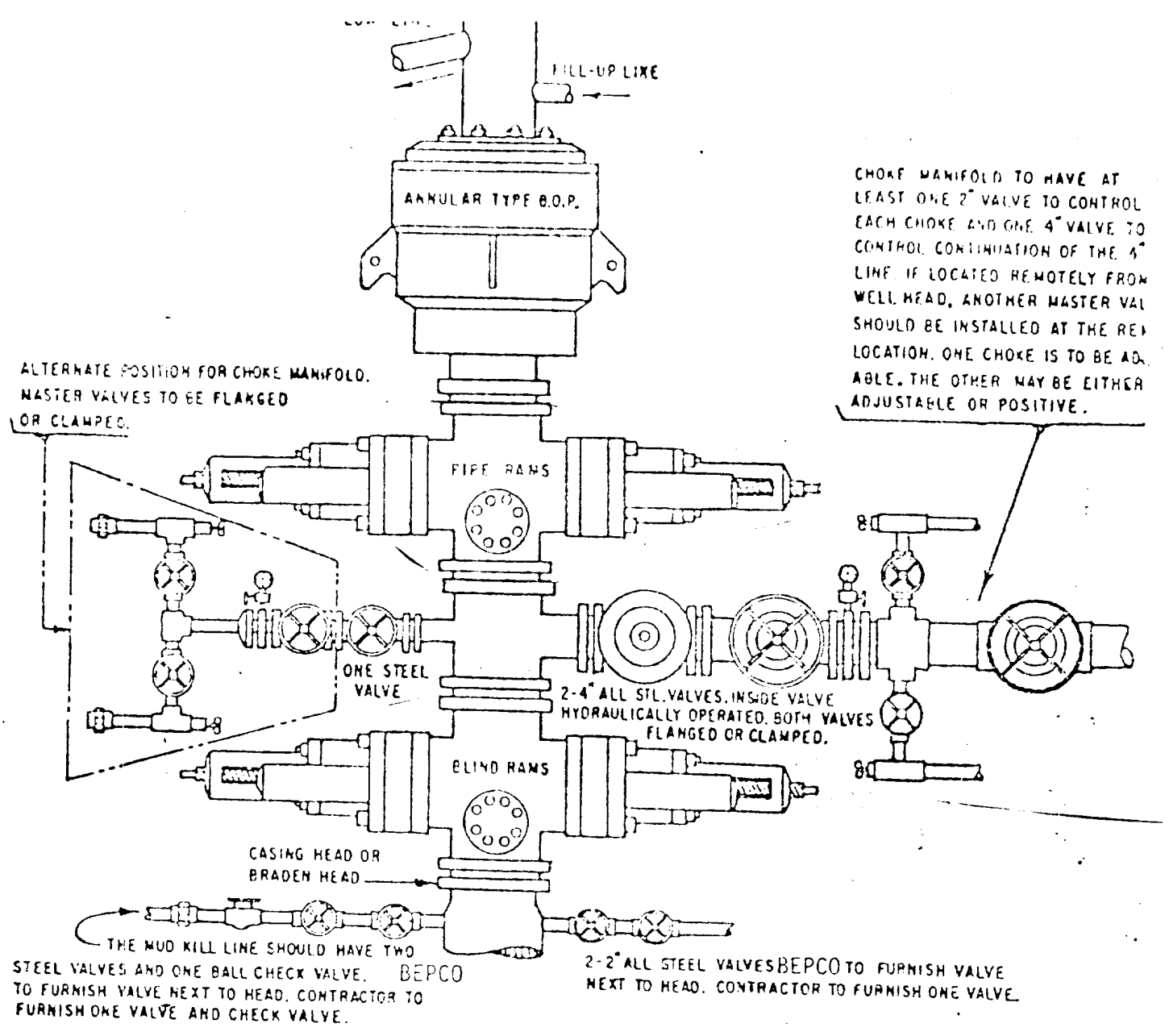
F. MANUAL CONTROLS TO BE INSTALLED BEFORE DRILLING CEMENT PLUG.

G. KELLY COCK TO BE INSTALLED ON KELLY.

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

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 CONTAINI 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 DIAMETER.

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

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 DRILLERS POSITION AND THE OTHER LOCATED A SAFE DISTANCE FROM THE RIG FLOOR.

BEPCO IV

THREE CLOSURE HYDRAULIC BLOWOUT PREVENTERS