

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
NM OIL CONS. COMMISSION
Artesia, NM 88210

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☐GAS
WELL ☒OTHER ☐SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Perry R. Bass ✓

RECEIVED

3. ADDRESS OF OPERATOR

P.O. Box 2760, Midland, Texas 79702

MAR 11 1982

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

At surface

660' FNL & 1980' FEL Sec. 29 T21S, R30E

At proposed prod. zone

Same as above

O. C. D.
ARTESIA, OFFICE

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

18 miles ENE of Carlsbad, 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

18. DISTANCE FROM PROPOSED LOCATION*

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

19. PROPOSED DEPTH

13,750'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320

20. ROTARY OR CABLE TOOLS

Rotary

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

3184' GL

22. APPROX. DATE WORK WILL START*

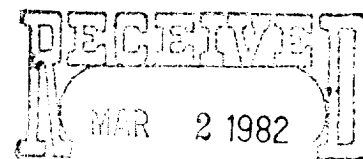
Upon Approval

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	3250'+	1350 sxs. Circ. to surface
7 7/8"	5 1/2"	17	TD	900 sxs. Est. TOC @ 10,250'

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

Gas is Dedicated



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. Smith

TITLE

Engineering Assistant

DATE

February 23, 1982

(This space for Federal or State office use.)

PERMIT NO.

APPROVED

APPROVAL DATE

APPROVED BY

CONDITIONS OF APPROVAL, IF

MAR 10 1982

JAMES A. GILLHAM
DISTRICT SUPERVISOR

TITLE

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

DATE

*See Instructions On Reverse Side

MEXICO U.S. CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-12
Supersedes C-12A
1-10-79

29 30 EAST EDDY

BIG EDDY UNIT

98

Morrow Maroon Cliffs, South 320

the subject well by colored pencil or ballpoint pen on the plat below.

the well is located to the well, with each and identify the ownership thereof (such as to working

the well, have the interests of all owners been considered, and the well is located to the well, with each and identify the ownership thereof (such as to working

X Unit

the well is located to the well, with each and identify the ownership thereof (such as to working

the well is located to the well, with each and identify the ownership thereof (such as to working

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 9, 1982

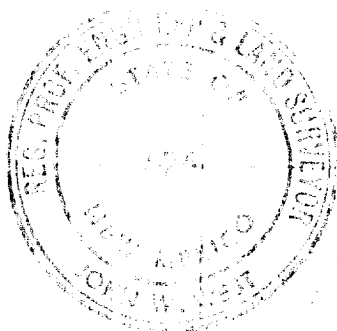
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

1-30-82

Registered Professional Engineer
and Land Surveyor

John W. West

Certificate No. JOHN W. WEST 676
PATRICK A. ROMERO 6663
Ronald J. Eidson 3239



0 200 400 600 800 1000 1200 1400 1600 1800 2000 2200 2400 2600 2800 3000 3200 3400 3600 3800 4000 4200 4400 4600 4800 5000 5200 5400 5600 5800 6000 6200 6400 6600 6800 7000 7200 7400 7600 7800 8000 8200 8400 8600 8800 9000 9200 9400 9600 9800 10000

CASING DESIGN

BIG EDDY UNIT NO. 98

SURFACE CASING

<u>Segment</u>	<u>Size</u>	<u>Grade</u>	<u>Thread</u>	<u>Weight</u>	<u>Top</u>	<u>Bottom</u>	<u>Length</u>
1	11-3/4"	H-40	ST&C	42#	0' ⁺ ₋	400' ⁺ ₋	400' ⁺ ₋

INTERMEDIATE CASING

<u>Segment</u>	<u>Size</u>	<u>Grade</u>	<u>Thread</u>	<u>Weight</u>	<u>Top</u>	<u>Bottom</u>	<u>Length</u>
1	8-5/8"	s-80	ST&C	24#	0' ⁺ ₋	3250' ⁺ ₋	3250' ⁺ ₋

PRODUCTION CASING

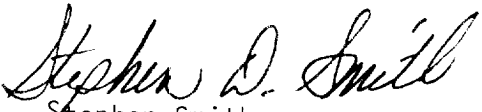
<u>Segment</u>	<u>Size</u>	<u>Grade</u>	<u>Thread</u>	<u>Weight</u>	<u>Top</u>	<u>Bottom</u>	<u>Length</u>
1	5-1/2"	S-95	LT&C	17#	9460' ⁺ ₋	13,550' ⁺ ₋	4090' ⁺ ₋
2	5-1/2"	N-80	LT&C	17#	780' ⁺ ₋	9460' ⁺ ₋	8680' ⁺ ₋
3	5-1/2"	N-80	Buttress	17#	0' ⁺ ₋	780' ⁺ ₋	780' ⁺ ₋

Stephen D. Smith
2/22/82

BIG EDDY UNIT # 98

Anticipated Formation Tops (KB 3198' est)

T/Dela. Sd.	3398' ⁺ _—	(- 200' ⁺ _—)
T/Indian Draw	4248' ⁺ _—	(- 1050' ⁺ _—)
T/Bone Springs	7118' ⁺ _—	(- 3920' ⁺ _—)
T/Wolfcamp	10,288' ⁺ _—	(- 7090' ⁺ _—)
T/Strawn	11,668' ⁺ _—	(- 8470' ⁺ _—)
T/Atoka	11,878' ⁺ _—	(- 8675' ⁺ _—)
T/U. Morrow	12,548' ⁺ _—	(- 9350' ⁺ _—)
T/M. Morrow	12,963' ⁺ _—	(- 9765' ⁺ _—)
T/L. Morrow	13,323' ⁺ _—	(-10,125' ⁺ _—)


Stephen Smith
2/24/92

DRILLING PROCEDURE

BIG EDDY UNIT NO. 98

Location:

660' FNL, 1980 FEL, Sec. 29, T21S, R30E

Conductor Casing:

40' $\pm$ 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' $\pm$ 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 3250' $\pm$ (T/Lamar Lime) and 8 5/8" 24#/ft S-80 casing will be run to total depth and cemented with approximately 1150 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"

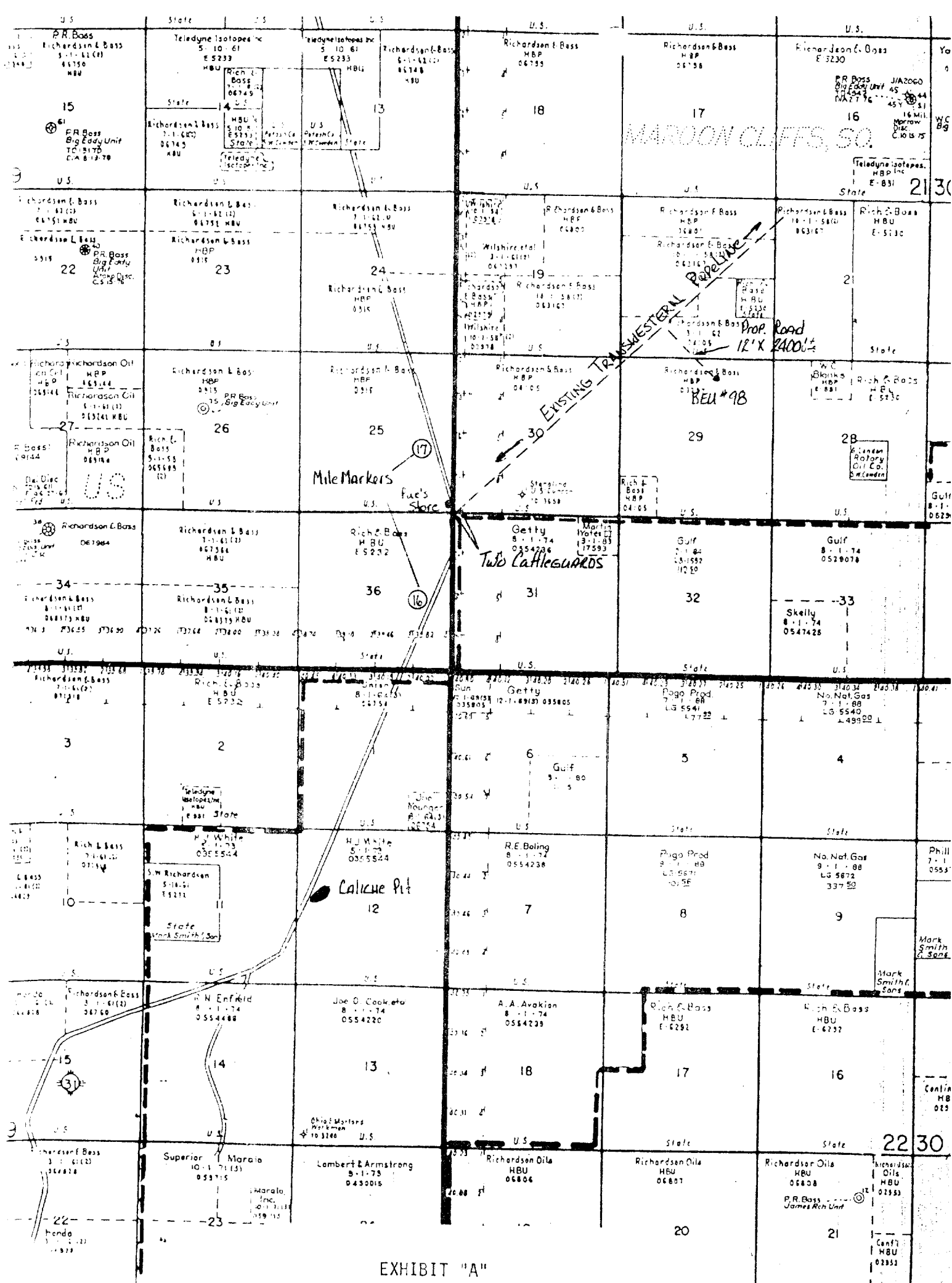


EXHIBIT "A"

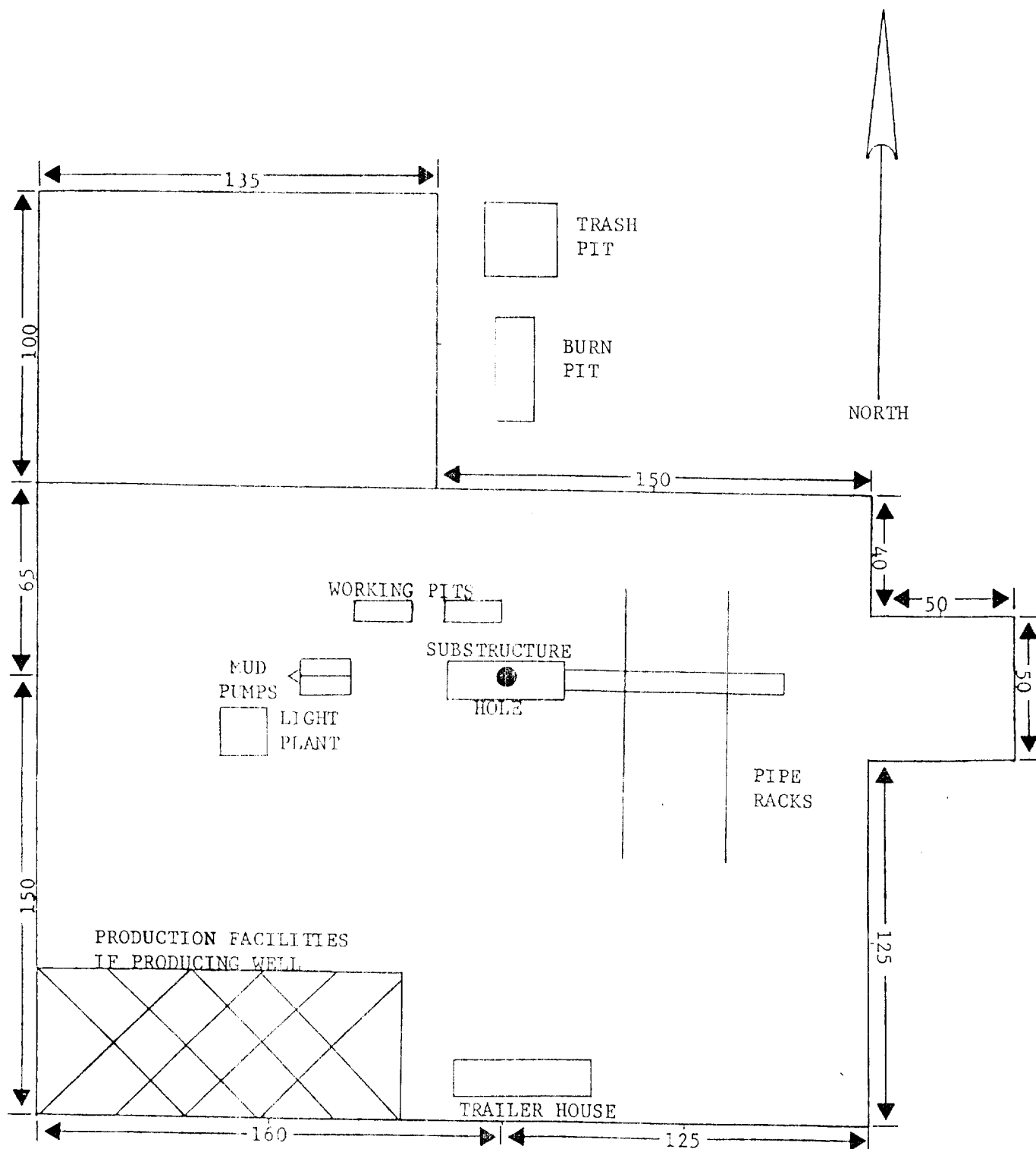
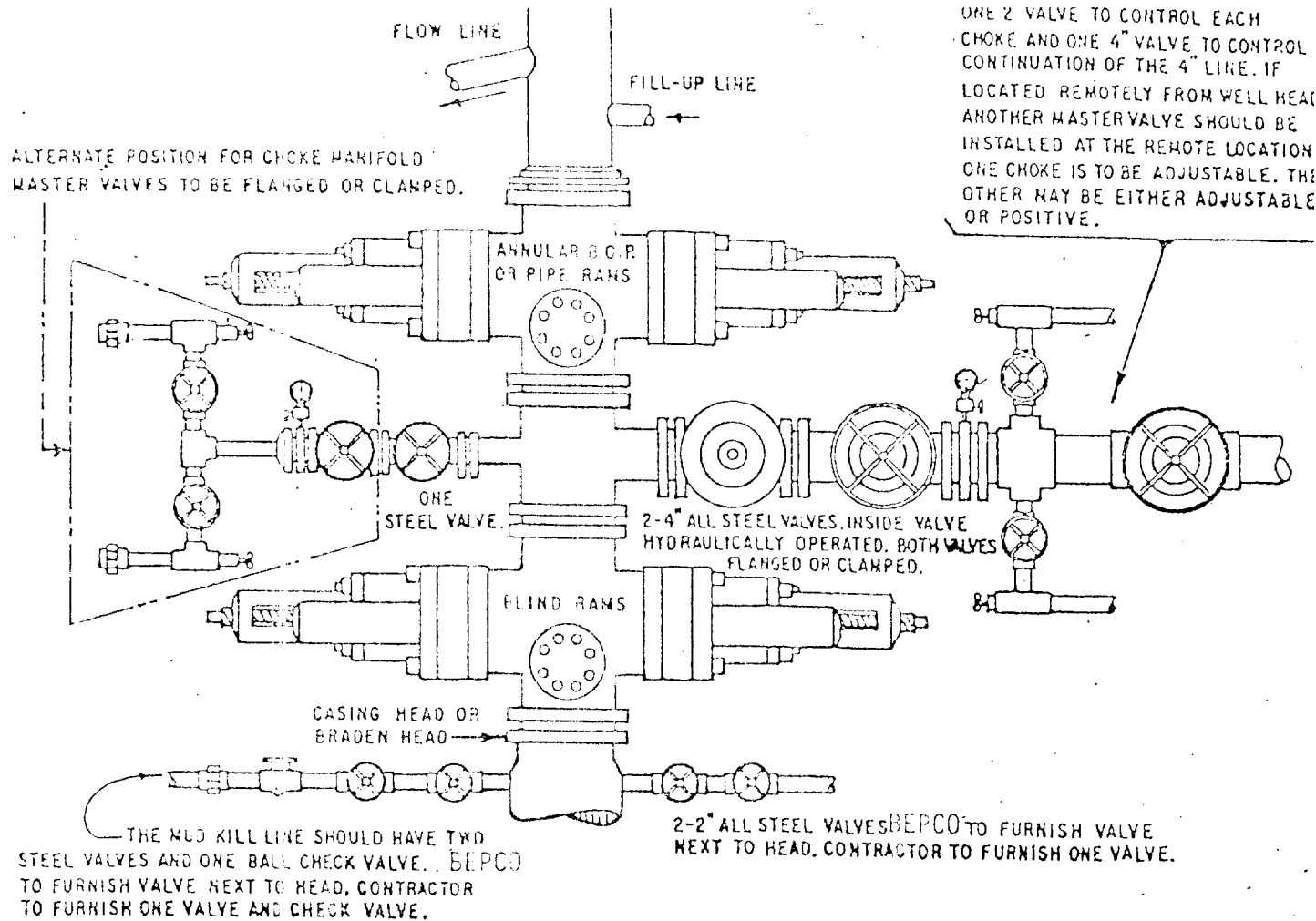
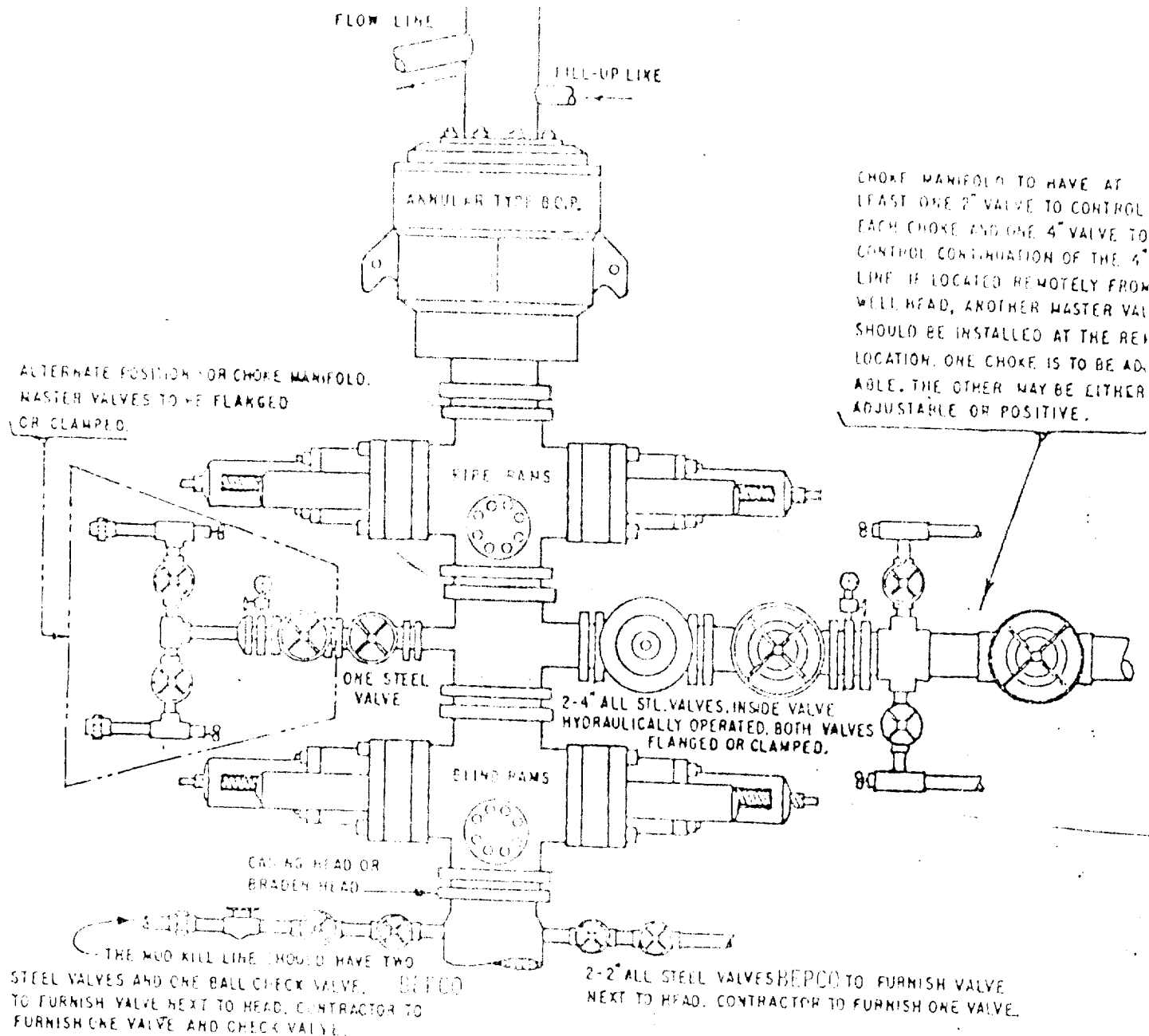


EXHIBIT "B"



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.



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 CONTAINING 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 BOP'S.
- E. ALL CONNECTIONS TO AND FROM PREVENTER TO HAVE A PRESSURE RATING EQUIVALENT TO THAT OF THE BOP'S.
- F. MANUAL CONTROLS TO BE INSTALLED BEFORE GRILLING 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.

BOPCO IV

THREE CLOSURE HYDRAULIC BLOWOUT PREVENTERS