Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-015-23131

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

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

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

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

2. NAME OF OPERATOR: Perry R. Bass

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

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1980' FWL & 660' FSL, Sec. 33, T21S, R28E
At proposed prod. zone: Same as above

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JAN 14 1980
O. C. D.
ARTESIA, OFFICE

5. LEASE DESIGNATION AND SERIAL NO.: LC ~~069140~~
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT AGREEMENT NAME: BIG EDDY UNIT
8. FARM OR LEASE NAME: BIG EDDY UNIT
9. WELL NO.: 64
10. FIELD AND POOL, OR WILDCAT: Wildcat
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 33 T21S. R28E
12. COUNTY OR PARISH: Eddy
13. STATE: N M

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 8 miles N E of Carlsbad N M

| 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** |
| | 12,600' | Rotary |

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3147.2 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 | 300 | 300 |
| 11" | 8 5/8" | 24 & 28 | 2500 | 1000 |
| 7 7/8" | 5 1/2" | 15.5 & 17 | 12600 | 900 |

DRILLING PROCEDURE, BOPE DIAGRAMS, FORMATION TOPS AND SURFACE USE PLANS ARE ATTACHED.

GAS IS DEDICATED

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 Mary A. Garland TITLE Senior Dly Engr. DATE December 14, 1979

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE 1-16-80

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

Morrow Wildcat 320

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XX Yes No If answer is "yes," type of lease Unit

If answer is "no," list the owners and their descriptions on the reverse side of this form if necessary. _____

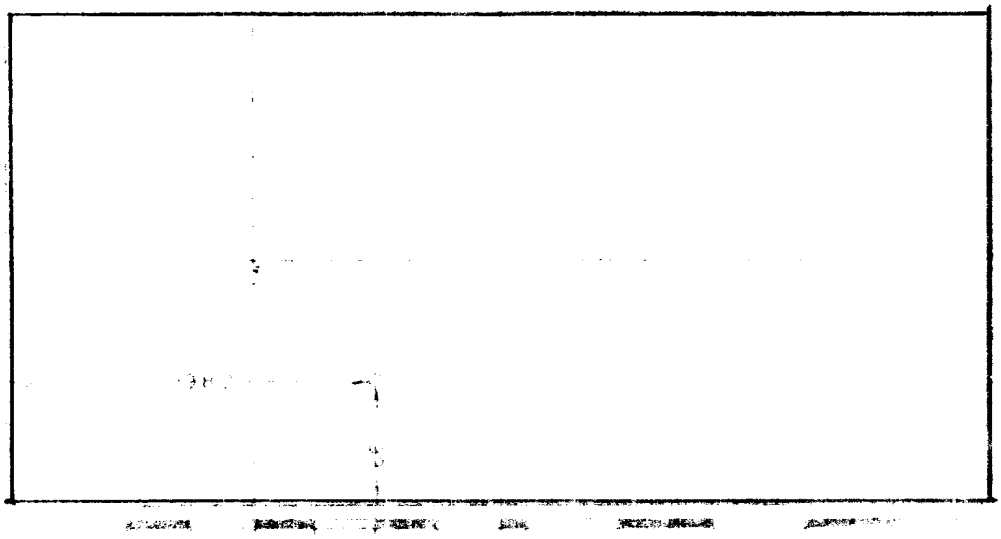
No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.

Gary Gerhard

Senior Drilling Engineer

Bass Enterprises Prod. Co.

12/14/79



# United States Department of the Interior

GEOLOGICAL SURVEY

P. O. Drawer U
Artesia, New Mexico 88210

RECEIVED
JAN 16 1980
O. C. D.
ARTESIA, OFFICE

January 14, 1980

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

Gentlemen:

| PERRY R. BASS |
|---|
| Big Eddy Unit No. 64 |
| 660 FSL 1980 FWL Sec. 33 T.21S R.28E |
| Eddy County Lease No. LC 070061 |
| Above Data Required on Well Sign |

Your APPLICATION FOR PERMIT TO DRILL the above-described well to a depth of 12,600 feet to test the Morrow is hereby approved subject to compliance with the OIL AND GAS OPERATING REGULATIONS (30 CFR 221) and the following conditions:

1. Drilling operations authorized are subject to compliance with the attached General Requirements for Oil and Gas Operations on Federal Leases, dated July 1, 1978.

2. Prior to commencing construction of road, pad, or other associated developments, operator will provide the dirt contractor with a copy of the Surface Use Plan and these Conditions of Approval including the attached General Requirements.

3. Submit a Daily Report of Operations from spud date until the well is completed and the Well Completion Report (form 9-330) is filed. The report should not be less than 8" x 5" in size and each page should identify the well.

4. All permanent above-ground structures and equipment shall be painted in accordance with the attached Painting Guidelines. The color used should simulate Sandstone Brown (Federal Standard No. 595A, color 20318 or 30318).

5. Before drilling below the 8-5/8" casing, the blowout preventer assembly will consist of a minimum of one annular type and two ram type preventers.

6. A kelly cock will be installed and maintained in operable condition.

7. After setting the 8-5/8" casing string and before drilling into the Wolfcamp formation, the blowout preventers and related control equipment shall be pressure tested to rated working pressures by an independent service company. Any equipment failing to test satisfactorily shall be repaired or replaced. This office should be notified in sufficient time for a representative to witness the tests and shall be furnished a copy of the pressure test report.

8. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be installed and operating before drilling into the Wolfcamp formation and used until production casing is run and cemented. Monitoring equipment shall consist of the following:

   (1) A recording pit level indicator to determine pit volume gains and losses.

   (2) A mud volume measuring device for accurately determining mud volume necessary to fill the hole on trips.

   (3) A flow sensor on the flow-line to warn of any abnormal mud returns from the well.

9. Notify the Survey in sufficient time to witness the cementing of the 11-3/4" and 8-5/8" casing.

10. Cement behind the 11-3/4" casing must be circulated.

11. Please have anyone contacting the Survey in regard to this well to identify the well with all of the information required above for the well sign.

Sincerely yours,

George H. Stewart
Acting District Engineer

# DRILLING PROCEDURE

## BIG EDDY UNIT #64

Location: 660' FSL & 1980' FWL, Sec. 33, T21S, R28E, Eddy County, New Mexico.

Conductor Casing: 40' of 16" conductor casing will be set with a rathole machine and cemeneted with ready-mix.

Surface Hole: A 15" OH will then be drilled to 300'+ (top of the salt). The drilling fluid will be fresh water spud mud, vis. 28-32 weight, 8.4-8.6 ppg. 11 3/4", 42#/ft, H-40, ST&C casing will be run to TD and cemented with 300 sx. Class "C" + 2% $CaCl_2$. Cement will be circulated to the surface.

Nippling up procedures-11 3/4" csg. A minimum of 8 hours WOC time will be observed. A set of 10" x 3000# dual hudraulic BOPs will be installed on a 11 3/4" SW x 12" 3000# casing head. The casing head, 11 3/4" casing and BOP stack will be tested to 1000 psi with the mud pump.

Intermediate Hole: A 11" OH will be drilled to 2500' (50' into Lamar Lime-T/Lamar @ 2450'). The drilling fluid will be a 10 ppg brine system with paper added as needed for lost circulation control. A 8 5/8" combination casing string will then be run to TD and cemented with 800 sx Halliburton Lite (1.54 $ft^3$/sx, 13.6#/gal) followed with 200 sx Class "C" + 2% $CaCl_2$. Cement will be circulated to the surface.

Nippling up Procedures-8 5/8" Casing: A minimum of 12 hours WOC time will be observed. A set of 10" x 5000# dual hydraulic BOPs with Hydril as per BEPCO IV (attached) will be installed on a 12" 3000# x 10" 5000#casing spool. The casing spool, 8 5/8" casing, BOP stack and choke manifold will then be hydrostatically tested by "Yellow Jacket" or similar to 5000 psi. (Hydril 1500 psi) 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 be furnished the USGS and the results will be recorded in the daily driller's log.

Production Hole: A 7 7/8" OH will then be drilled to TD (TD-12,600'approximately) the drilling fluid will be FW 8.4 ppg, 28 vis. to 9350' (T/Wolfcamp) from 9350' to 11,100' (T/Atoka) 10 ppg brine water will be used. At 11,100' the brine system will be mudded up with Drispac, XC-polymer and barite to 11.0 ppg. This fluid will be maintained to TD.

A PVT recorder, flow show sensor and rotating head will be installed at 9350' (Top/ Wolfcamp).

5½" casing will be run to TD. This casing string will be cemented with approximately 200 sx Haliburton Lite followed with 800 sx Class "H" & .6% Halad 22 + 5#/KCL per sack. The cement volume should be sufficient to bring the cement top 1000' above the Wolfcamp.

Time: Anticipated starting date is February 1, 1980. This well is expected to take approximately 55 days from spud to TD.

Gary E. Gerhard 12/14/79

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

BIG EDDY UNIT # 64

1980' FWL, 660' FSL

Sec. 33, T 21 S, R 28 E

Eddy County, New Mexico

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction, activities, and operations plan, the magnitude of necessary surface disturbance involved, and the procedures to rehabilitate the surface after completion of operations so that an appraisal can be made on environmental effects.

1. Existing roads including location of exit from main highway Exhibit "A" is a map showing existing road. This road is obtained by travelling approximately 2½ miles NE of Carlsbad and turning right at the Sheriff's Posse Roping Arena. The existing road to the planned location is approximately 5½ miles down this road.

2. Planned access road (Width, maximum grade, turnout, drainage design, location & size of culverts & surfacing material, where fences will be cut, & where gates or cattleguard will be used.) Exhibit "A" is a drawing of existing roads. The planned access road will be 12' wide by approximately 100' long. It will be constructed of watered and compacted caliche. There are no turnouts, gates, cattleguards or culverts anticipated.

3. Location of existing wells Exhibit "A" shows existing surrounding wells.

4. Location of tank battery and flow lines If a commercial well is obtained, production facilities will be located on the well pad. Refer to Exhibit "B".

5. Location and type of water supply Fresh water will be hauled from the city of Carlsbad. Brine water will be hauled from Champion Brine Sales 3½ miles east and 2½ miles south of Carlsbad.

6. Source of construction material Exhibit "A" shows approximate location of caliche pit.

7. Methods of handling waste disposal:

   A. Drill cuttings will be disposed of in the drilling pits.

   B. Drilling fluids will be allowed to evaporate in the drilling pits until pits are dry.

   C. Water produced during tests will be disposed of in the drilling pits. Oil produced during tests will be stored in test tanks until sold.

   D. Current laws and regulations pertaining to the disposal of human waste will be complied with.

   E. Trash, paper, garbage, and junk will be buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste materials will be contained to prevent scattering by the wind. Location of trash pit is shown in Exhibit "B".

   F. Trash and debris will be buried or removed from the well site within 30 days after finishing drilling and/or completion operations. (Note: All trash left on well site to be removed or buried within 30 days must be contained to prevent scattering.)

8. Ancillary facilities none required.

9. Well site layout Exhibit "B" shows the approximate dimensions of the well pad and reserve pit as well as the relative location of major rig components. Only minor leveling of the well site will be required. The reserve pit will be lined with plastic. The pit and pad area have been staked and flagged.

10. Plans for restoration of surface:

A. Producing well - all pits will be cut, filled, and leveled as soon as practical to original conditions with rehabilitation to commence following removal of drilling and completion equipment.

B. Dry hole - same as above with dry hole marker to be installed and surface reseeded if required. At the time of final abandonment, both USGS and BLM restoration stipulations will be complied with.

11. Other information:

A. Terrain Relatively flat

B. Soil Sandy

C. Vegetation Sparse, mesquite with very little grass

D. Surface use Grazing

E. Surface water None

F. Water wells There is a windmill approximately 1½ miles South of location.

G. Residences and buildings None

H. Surface ownership The well site and road are on Federal land

I. Well signs posted at each drilling site.

J. Open pits - all pits containing liquid or mud will be fenced.

K. Archaeological resources none observed.

12. Operator's representative
(Field personnel responsible for compliance with development plan for surface use)

DRILLING
Mike Cure
Box 2760
Midland, Texas 79702
915-684-5723

PRODUCTION
Al Gallas
Box 1043
Kermit, Texas 79745
915-563-0656
(or) Mike Cure
Box 2760
Midland, Texas 79702
915-684-5723

13. Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Bass Enterprises Production Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

12/19/79
(Date)

Gary C. Jarrard
(Name)

SENIOR DRILLING ENGINEER
(Title)

CLB:gp

## FORMATION TOPS

| | |
|---|---|
| T/Salt | 300' |
| B/Salt | 2,000' |
| T/Delaware Group | 2,450' |
| T/Delaware Sand | 2,550' |
| T/Indian Draw | 3,300' |
| T/Bone Spring | 5,800' |
| T/Wolfcamp | 9,350' |
| T/Strawn | 10,550' |
| T/Atoka | 11,100' |
| T/Atoka Sand | 11,200' |
| T/Middle Morrow | 11,750' |
| T/Lower Morrow | 12,000' |

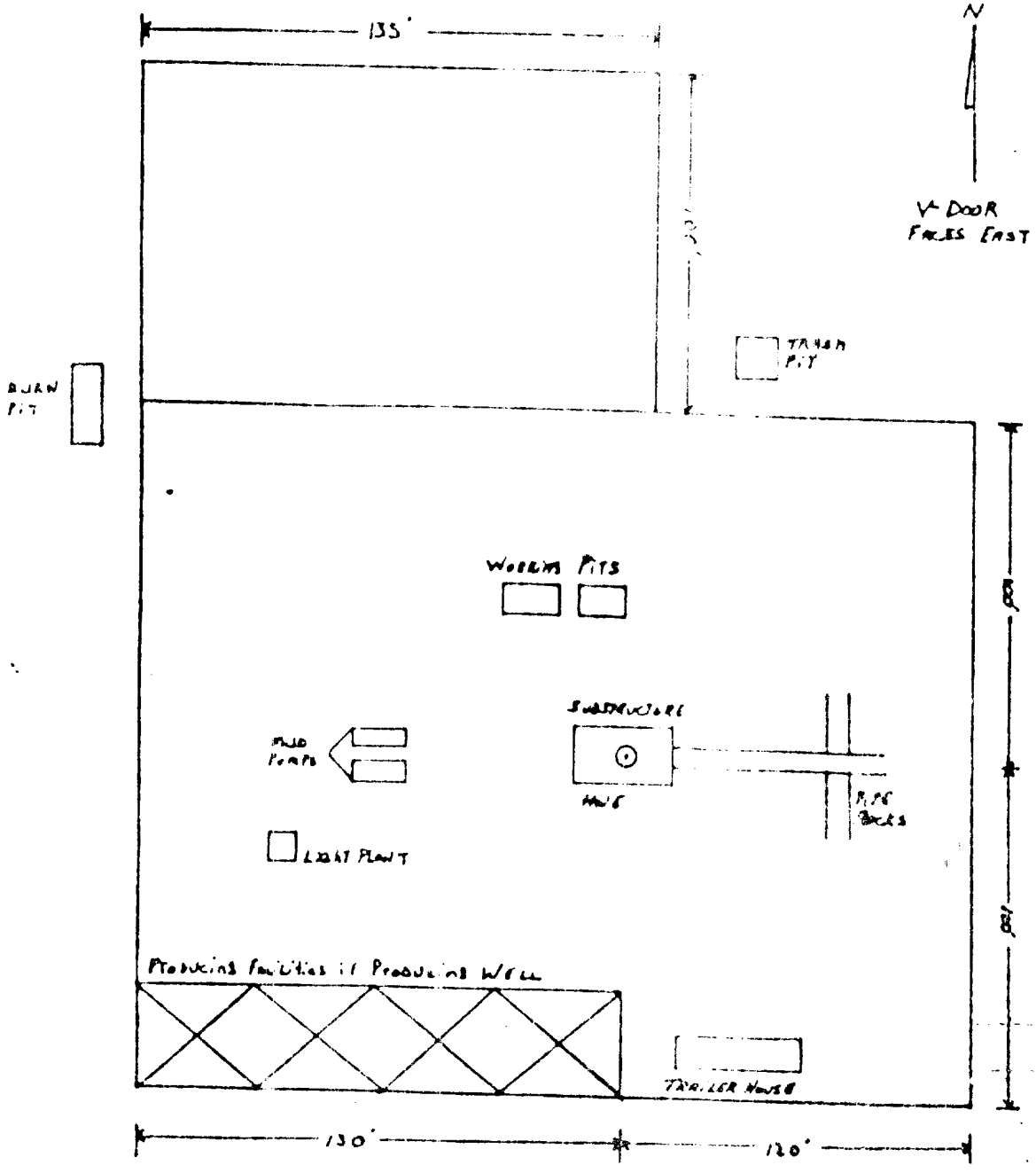
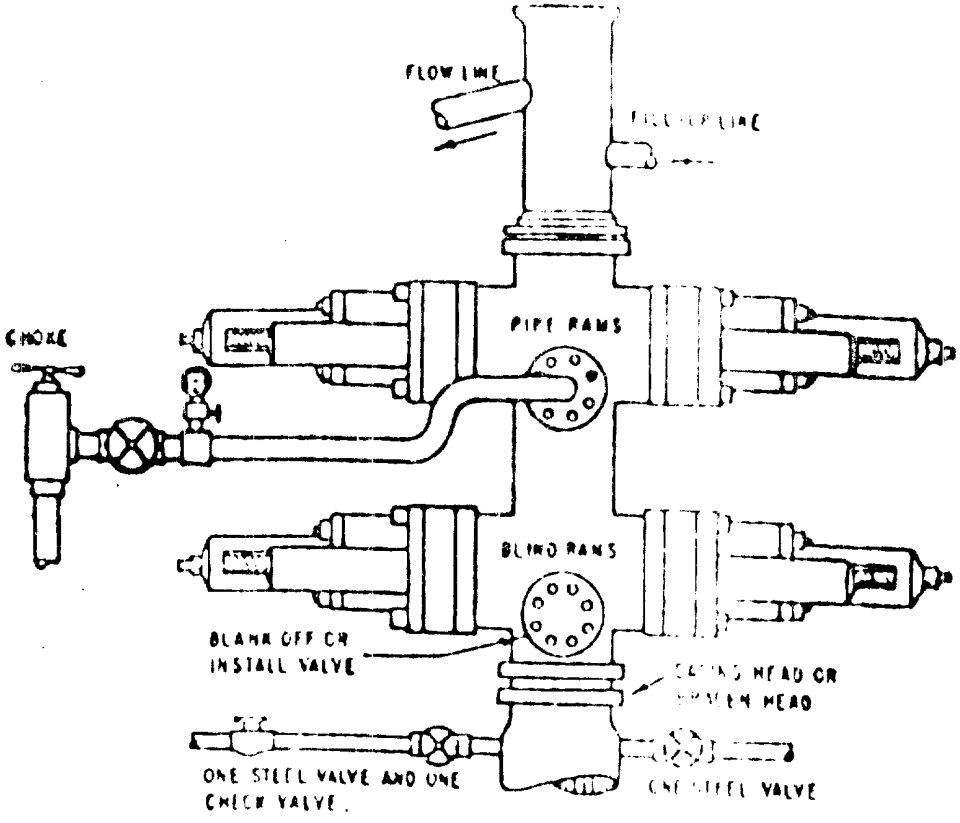

135'
N
V-DOOR FACES EAST
TRASH PIT
BURN PIT
WORKING PITS
SUBSTRUCTURE
MUD PUMPS
MOUSE
PIPE RACKS
LIGHT PLANT
Producing Facilities if Producing Well
TRAILER HOUSE
130'
120'

EXHIBIT B




## THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

A ONE DOUBLE GATE BLOWOUT PREVENTER WITH LOWER RAMS BLIND AND UPPER RAMS FOR PIPE, ALL HYDRAULICALLY CONTROLLED. OPENING ON PREVENTERS BETWEEN RAMS.

B OPENING TO BE FLANGED, STUDDED OR CLAMPED AND AT LEAST TWO INCHES DIAMETER.

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 PREVENTERS.

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

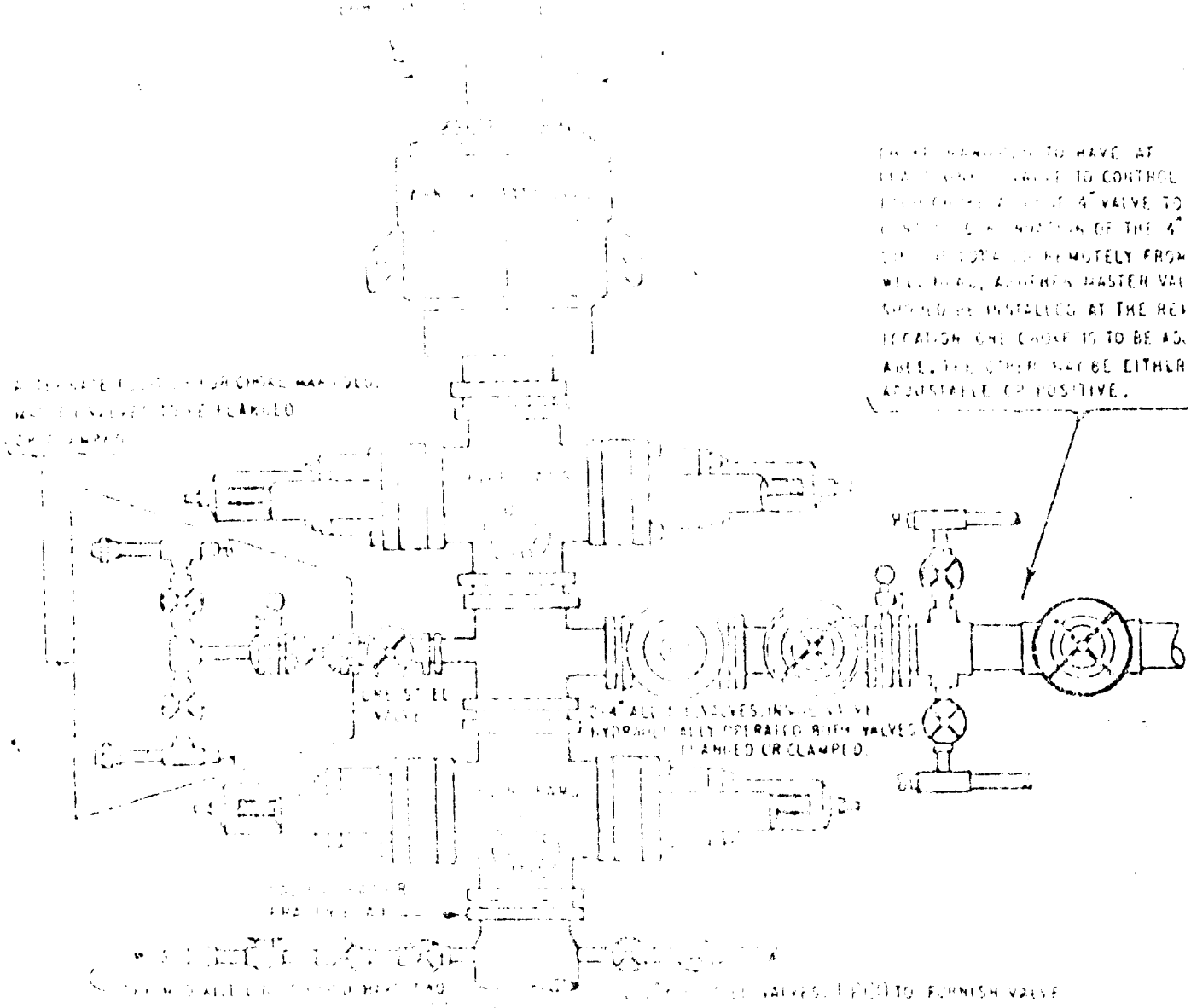
F MANUAL CONTROLS TO BE INSTALLED BEFORE DRILLING CEMENT PLUG.

G. VALVE TO CONTROL FLOW THROUGH DRILL PIPE TO BE LOCATED ON RIG FLOOR.

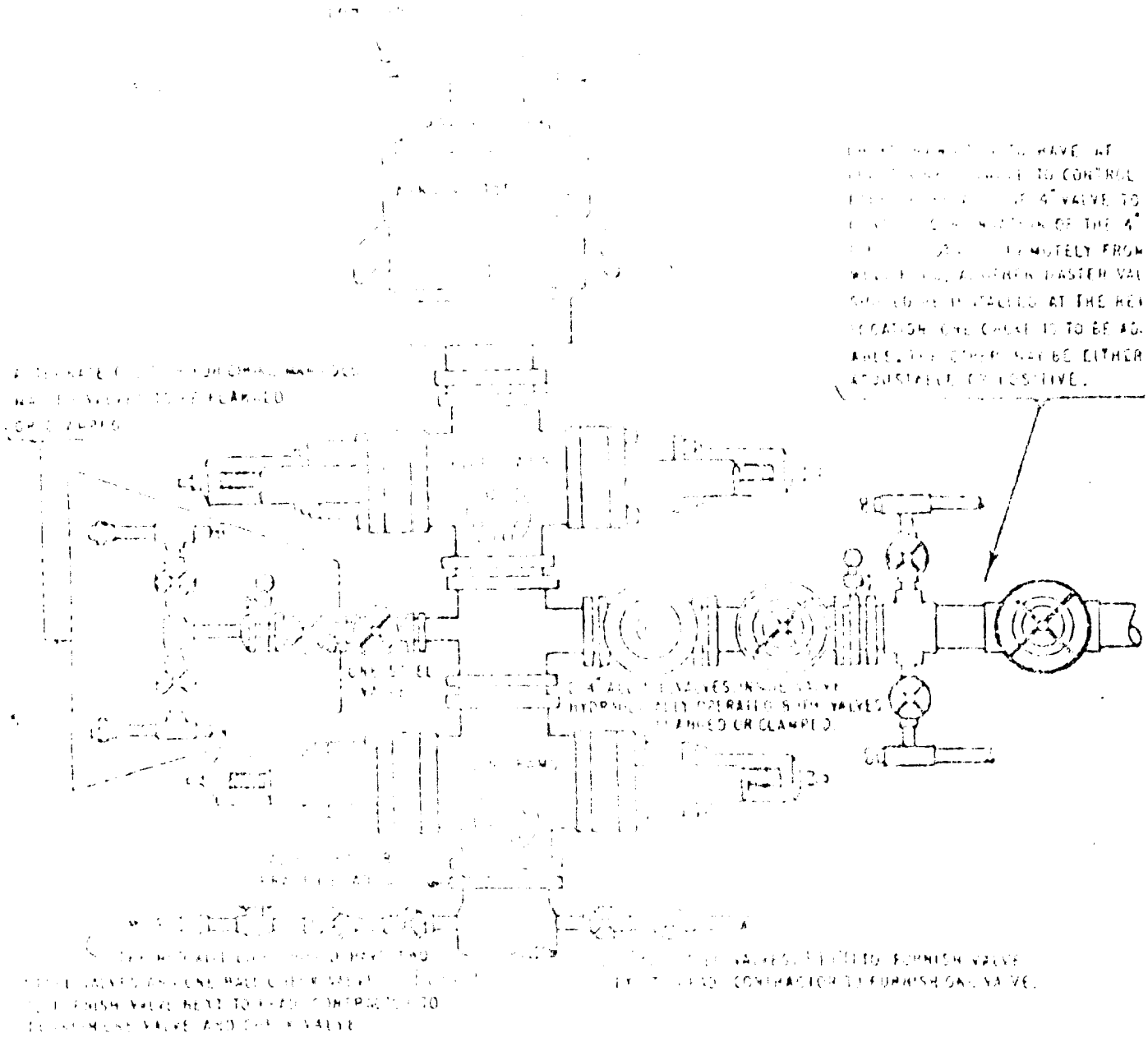
H CHOKE MAY BE EITHER POSITIVE OR ADJUSTABLE.. choke spool may be used between rams.

REPCO II

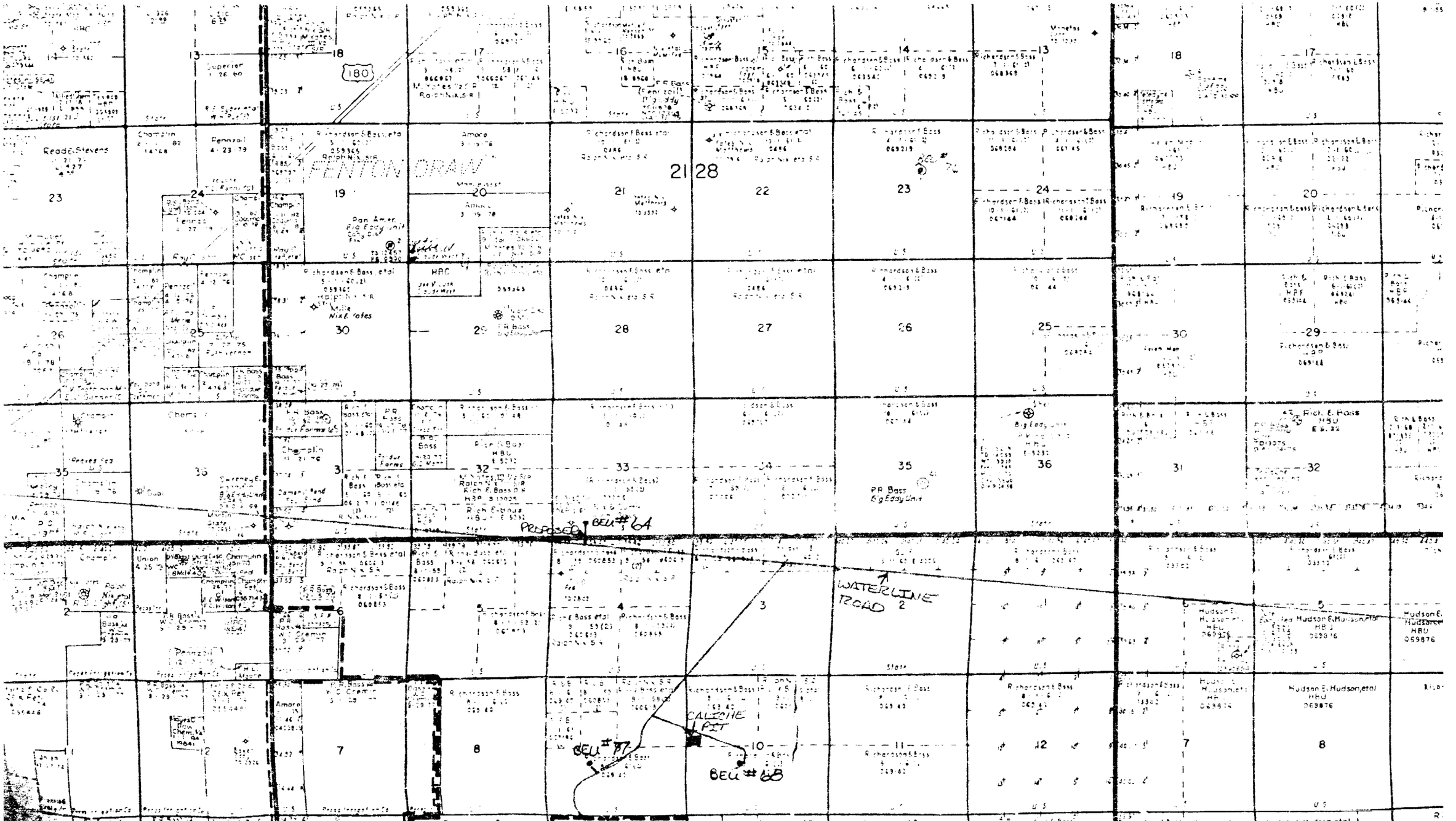
ONE HYDRAULIC DUAL BLOWOUT PREVENTER



## ... FORMS CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS



## ... CONSTITUTE MINIMUM B ... BOUT PREVENTER REQUIREMENTS


FENTON DRAW
PROPOSED BEU #64
WATERLINE ROAD 2
CALICHE PIT
BEU #67
BEU #68
180