

N.M.O.C.D. COPY
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Submit an application
(Other instructions on
reverse)

Form approved
Budget Bureau No. 42-R1425

30-015-23068

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			5. LEASE DESIGNATION AND SERIAL NO. 061616	
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			7. UNIT AGREEMENT NAME POKER LAKE UNIT	
2. NAME OF OPERATOR PERRY R. BASS			8. FARM OR LEASE NAME POKER LAKE	
3. ADDRESS OF OPERATOR P O BOX 2760 MIDLAND TX 79702			9. WELL NO. 47	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 1980' FSL & 990' FEL At proposed prod. zone same			10. FIELD AND POOL, OR WILDCAT wildcat	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 12 miles ESE from Malaga N M			11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 3, T25S, R30E	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 990'			12. COUNTY OR PARISH Eddy	
16. NO. OF ACRES IN LEASE 640			13. STATE N M	
17. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 4400'			17. NO. OF ACRES ASSIGNED TO THIS WELL 40	
18. ELEVATIONS (Show whether DF, RT, GR, etc.) 3323.5 GL			20. ROTARY OR CABLE TOOLS Rotary	
21. 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
12 1/4"	8 5/8"	24#/ft	700	450 sx Circ to surface
7 7/8"	5 1/2"	14#/ft	4400	315 sx

Drilling procedure, BOPE Diagram, anticipated formation tops, and surface use plans are attached.

U.S. GEOLOGICAL SURVEY
ALBUQUERQUE

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 Mike Waygood TITLE ENGINEERING ASST. DATE 10-12-79
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE 11-16-79

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

Delaware

Wildcat

40

RECEIVED

NOV 19 1979

U.S. GEOLOGICAL SURVEY
ARTESIAN OFFICE

X

Unit

Gary E. Gerhard

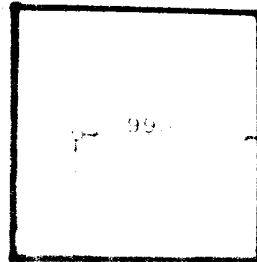
Gary E. Gerhard

Senior Engineer

Bass Enterprises Prod. Co.

10/12/79

007-1000
U.S. GEOLOGICAL SURVEY
ARTESIAN OFFICE





United States Department of the Interior

Geological Survey
P. O. Drawer 11
Artesia, New Mexico 88210

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NOV 19 1979

D. C. C.
ARTESIA, OFFICE

November 16, 1979

Bass Enterprises Production Co.
P. O. Box 2760
Midland, Texas 79702

Gentlemen:

BASS ENTERPRISES PRODUCTION COMPANY
Poker Lake Unit No. 47
1950 FSL 990 FSL Sec. 3 T.25S R.30E
Eddy County Lease No. LC 061616-A

Above Data Required on Well Sign

Your APPLICATION FOR PERMIT TO DRILL the above-described well to a depth of 4,400 feet to test the Delaware formation 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 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 this approval including the GENERAL REQUIREMENTS.
3. Submit a Daily Report of Operations from spud date until the Well Completion Report (form 9-130) is filed. The progress report should be not less than 3" 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 Requirements. The color used should simulate Sandstone Brown (Federal Standard No. 595A, color 20318 or 30318).
5. Cement behind the 8-5/8" casing must be circulated.
6. 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



MULTI-POINT SURFACE USE AND OPERATIONS PLAN

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OCT 18 1979

U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

POKER LAKE UNIT No. 47

1980' FSL & 990' FEL

SEC 3, T 25 S, R 30 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 portion of a map showing existing road. The location is obtained by turning southwest off of New Mexico State Highway 128, 20 miles east of its intersection with State Highway 31. The turnoff is onto a good caliche road which continues southwest for 10.9 miles to the northeast corner of Section 1, T25S, R 30 E. The road then turns west for one mile, south for $1\frac{1}{2}$ miles, west for $1\frac{1}{2}$ miles, north for $\frac{3}{10}$ mile, and northeast for $\frac{3}{10}$ mile. At this point the road turns due north to the location.
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" shows the planned access road to Poker Lake Unit #47. This road will be 12' wide and approximately 4800' long. The road will be constructed of watered and compacted caliche with one turnout, and no cattleguards or gates culverts.
3. Location of existing wells Exhibit "A" shows all surrounding wells.
4. Location of tank battery and flow lines If a commercial well is obtained, a production battery will be constructed on the southwest corner of the location.

5. Location and type of water supply Fresh water will be obtained either from an existing water well 1 3/4 miles to the southeast on the Federal Harrison location or from commercial haulers. Brine will be trucked in.

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

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 "C".

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.

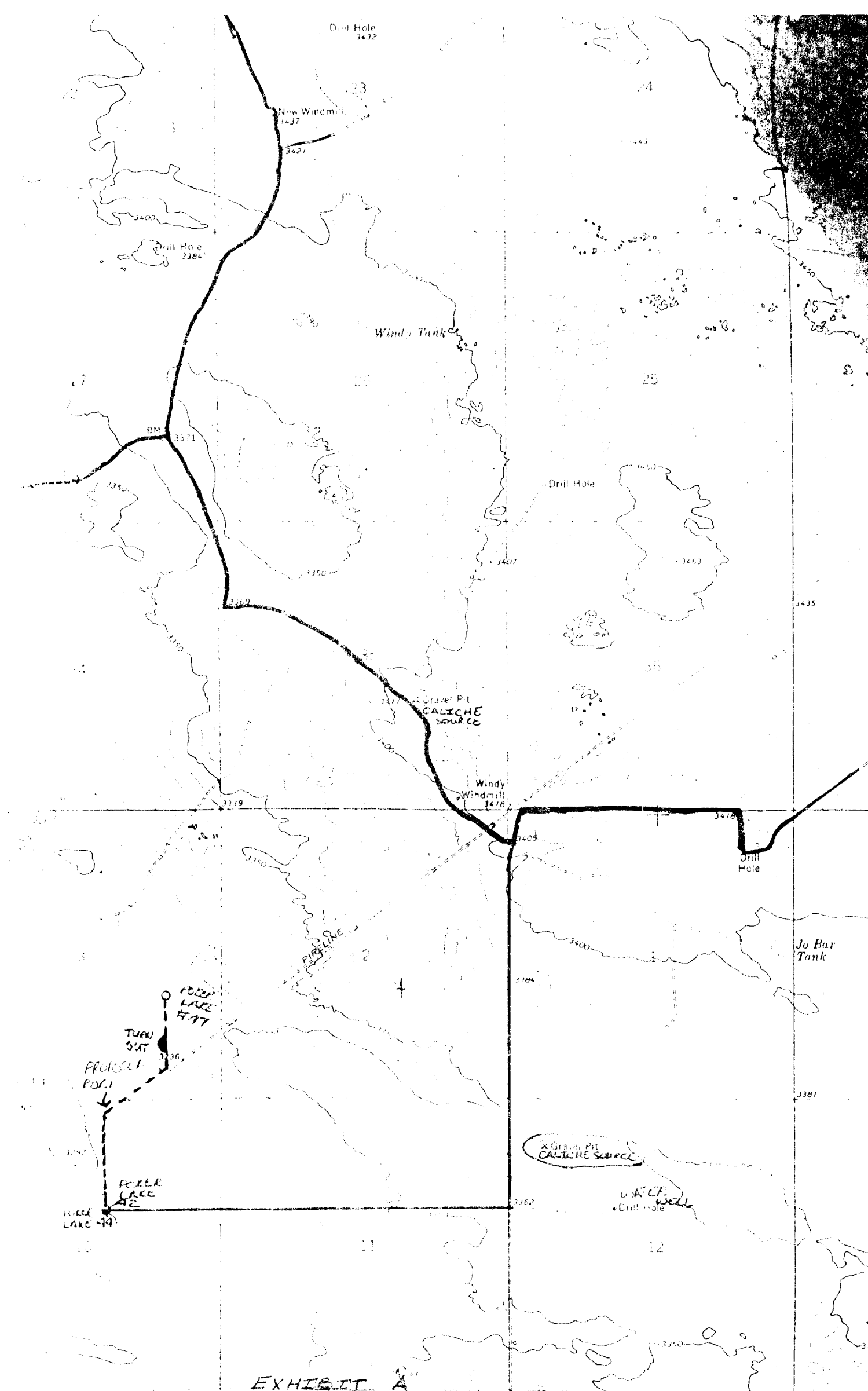
9. Well site layout Exhibit "C" shows the dimensions of the well pad and reserve pit, as well as the relative location of major rig components, trash pit, etc. Only minor leveling of the well site will be required. No significant cuts or fills will be necessary. The reserve pit will be lined with plastic. 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 Flat, with low lying sand hills.
Sandy.
- B. Soil _____
- C. Vegetation Sparse, primarily mesquite with very little grass.
- D. Surface use Grazing.
- E. Surface water None within 1 mile of location.
- F. Water wells There is a waterwell approximately 1 3/4 miles southeast of the subject location.
- G. Residences and buildings None within 1 mile of location.
- H. Surface ownership The well site and access, roads 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.



FORMATION MARKERS

T/Rustler	700'
T/Salt	1200'
B/Salt	3700'
T/Delaware Lime	3950'
Ford Shale	4070'
Olds Sand	4085'

DRILLING PROCEDURE
Poker Lake Delaware Wildcat
Poker Lake Unit #47
Eddy County, New Mexico

Surface Casing: 8 5/8" x 24 #/ft K-55 ST&C casing will be set in a 12 1/4" hole at 700'. Anticipate loss circulation from 100' - TD. After trying a pill of paper, hulls and gel, the hole may have to be dry drilled to TD. The casing will be run with a guide shoe, insert float and 3 centralizers. Cement baskets may be run if circulation is not gained while drilling. The cement basket/baskets may be run 30' + above loss circulation zone. Cement to surface with 200% excess using 450 sx Class "C" + 4% gel + 2% CaCl₂ + 1/4# per sack Floseal 14.9 ppg, 1.69 ft³/sx. Cement will be circulated to surface.

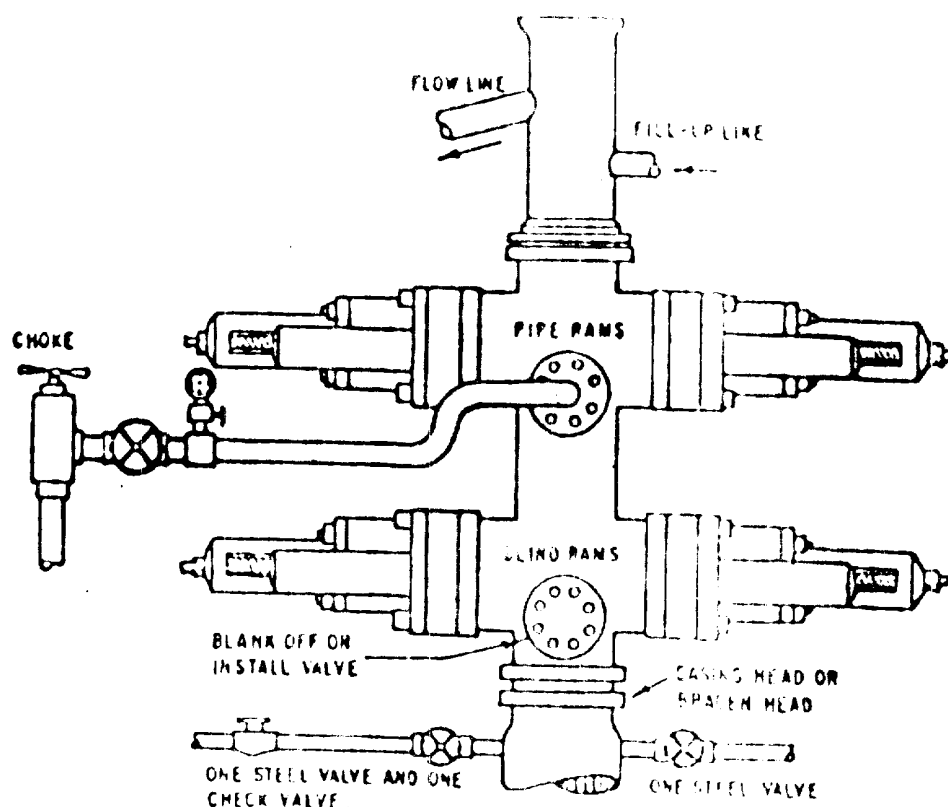
Waiting on Cement time: will be 8 hours.

Nipple Up: A 8 5/8" x 8" 2,000 WP Screw on casing head will be installed. Nipple up double ram BOPs as per BEPCO II. Test casing and BOPs to 1000 psi before drilling plug.

Production hole: A 7 7/8" hole will be drilled to TD (4400') using 10 ppg brine water with lime added for pH control. (Raise viscosity to 32-34 @ 3950.) Paper may also be added to control seepage. Bottom hole assembly will consist of bit, 3 pt. bottom hole reamer, 30' DC, and a 3 pt. reamer. Hole deviation through the salt section will require reduced weights and frequent surveys every 200'.

Evaluation: 10' drilling samples are to be caught from 3900' to TD. Wire line logs to be run at TD are: DLL-RXO-GR, CNL-FDC-GR. DSTs will be run on any significant shows.

Production casing: 5 1/2" 14#/ft. K-55 ST&C casing will be set at TD (4400'). The casing will be run with a float shoe, float collar and six centralizers. The bottom 500' will be ruff-coated. Cement back to 2,000', using approximately 315 sx 50-50 Pozmix Class "C" + 2% gel + 15#/sx salt. TOC 2000'. A 2000 WP w/2" 2000 WP ball valve tubing head will be installed.



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.
- 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.

BERCO II
ONE HYDRAULIC DUAL BLOWOUT PREVENTER

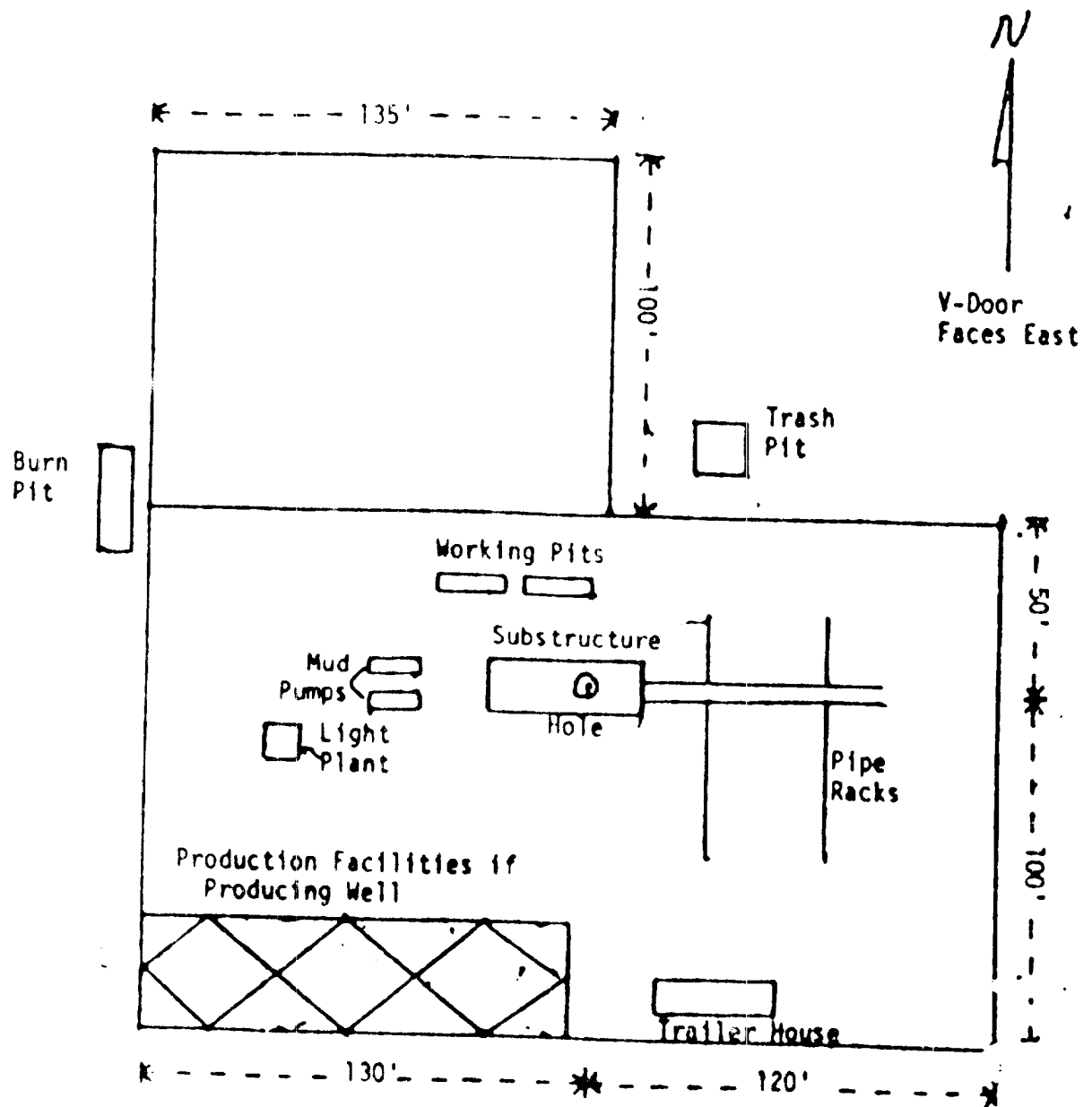


EXHIBIT C