

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

Phillips Petroleum Company

3. ADDRESS OF OPERATOR

Room 401, 4001 Penbrook St., Odessa, Texas

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

At surface

Unit C, 330' FNL & 2580' FWL

At proposed prod. zone

Unit C, 330' FNL & 2580' FWL

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

2 miles NW of Loco Hills, NM

16. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.

330' FNL

(Also to nearest drlg. unit line, if any)

18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

666' WSW to #17

16. NO. OF ACRES IN LEASE

1115.20

19. PROPOSED DEPTH

3500'

17. NO. OF ACRES ASSIGNED TO THIS WELL

40

20. ROTARY OR CABLE TOOLS

Rotary

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

3602.3 (Unprepared)

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
12-1/4"	8-5/8"	24#	350'	400 sk Class C + 10% Diacel D + 9#/sk salt
7-7/8"	5-1/2"	17#	3500'	Circ. to surface using caliper vol. + 30% excess (*2)

(\*1) Circ. to surface

(\*2) Lead: 800 sk Class C + 10% Diacel D + 9#/sk salt  
Tail: 500 sk Class C + 5#/sk salt

Note: This unorthodox location has been previously approved by New Mexico Oil Conservation Division Order No. R-7914

This location shares proration unit with Burch-C Fed well No. 17.

Posted ID-1  
NL, API  
1-9-87

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

W.J. Mueller

TITLE

Eng. Supervisor, Reservoir

DATE

12/18/86

(This space for Federal or State Office use)

PERMIT NO.

Charles S. Dahlen  
Area Manager

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

Subject to  
Like Approval  
by State

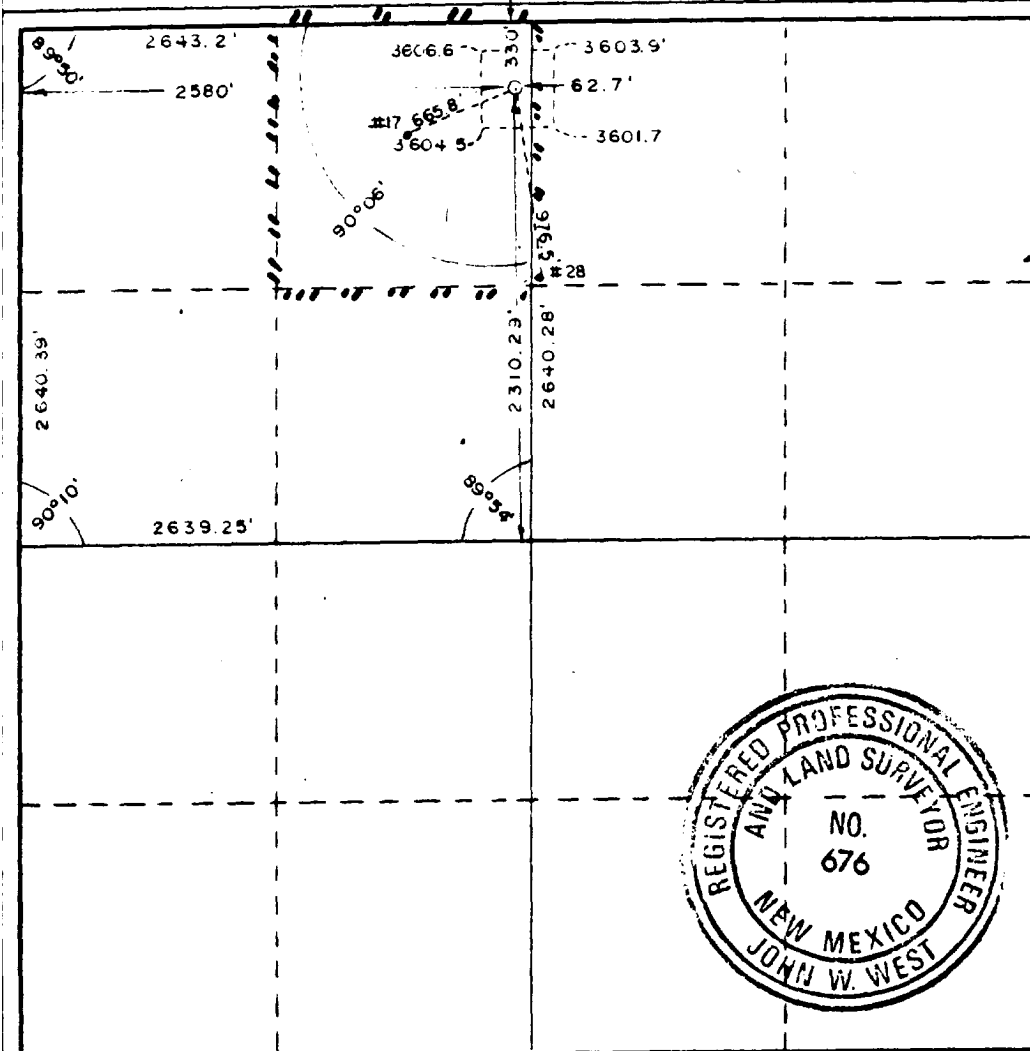
\*See Instructions On Reverse Side

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

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

Operator PHILLIPS PETROLEUM COMPANY		Lease Burch C - Federal		Well No. 45
First Letter C	Section 23	Township 17 South	Range 29 East	County Fridy
Actual Footage Location of Well:				
330 feet from the north line and 2580 feet from the west line				
Ground Level Elev. 3412.3	Producing Formation San Andres	Pool Grayburg-Jackson-7R-Q-G-SA		Dedicated Acreage: 40 Acres

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.

Name W. J. Mueller

Position  
Engineering Supervisor, Res.

Company  
Phillips Petroleum Company

Date  
December 18, 1986

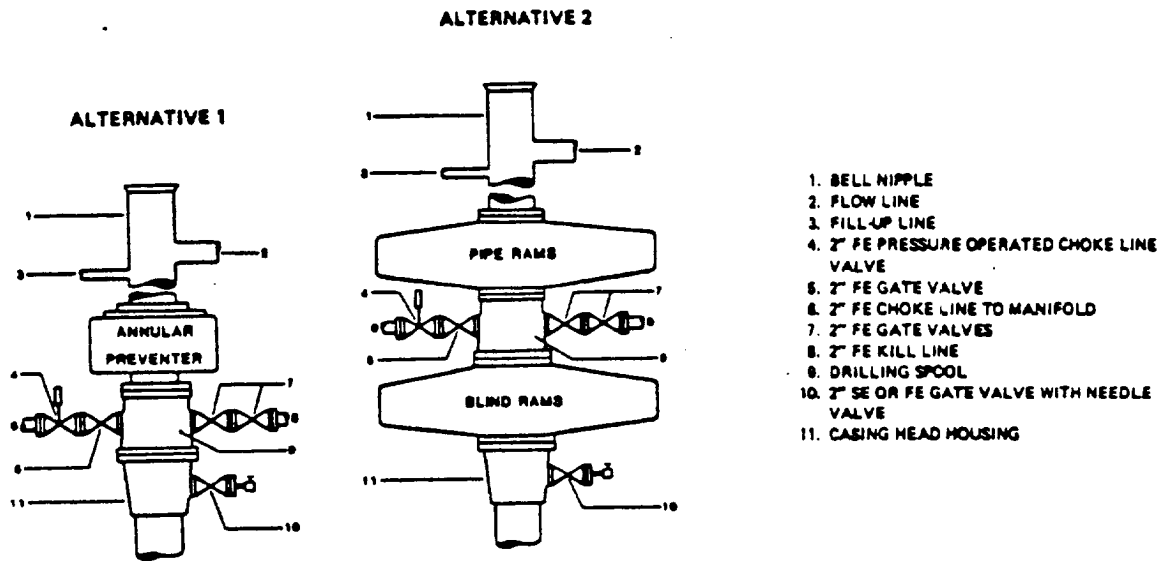
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed  
Dec 3, 1986

Registered Professional Engineer  
and/or Land Surveyor

Certificate No.	JOHN W. WEST,	676
	RONALD J. EIDSON	3239

# FIELD PRACTICES AND STANDARDS



NOTE: THE DRILLING SPOOL MAY BE LOCATED BELOW BOTH SETS OF RAMS IF A DOUBLE PREVENTER IS USED AND IT DOES NOT HAVE SUITABLE OUTLETS BETWEEN RAMS

Figure 7-9. Standard Hydraulic Blowout Preventer Assembly (2 M or 3 M Working Pressure) Alternative 1

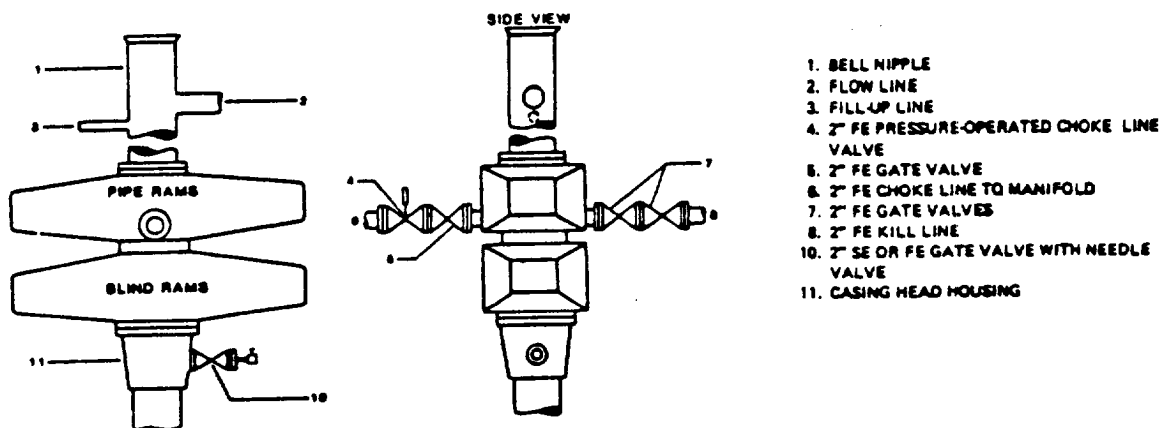


Figure 7-10. Standard Hydraulic Blowout Preventer Assembly (2 M or 3 M Working Pressure) Alternative 3 (without Drilling Spool)

PHILLIPS PETROLEUM COMPANY

Burch-C Fed, Well No. 45, Federal Lease No. LC-028793-C

DRILLING PROGNOSIS

1. Location of Proposed Well: 330' FNL and 2580' FWL of Section 23,  
T-17-S, R-29-E
2. Unprepared Ground Elevation: 3602.3.
3. The geologic name of the surface formation is Typic Torripsamment  
Subgroup/Kermit-Berino Series.
4. Type of drilling tools will be rotary.
5. Proposed drilling depth is 3500'.
6. The estimated tops of important geologic markers are as follows:

<u>Tertiary Surface</u>	<u>Yates 960'</u>
<u>Rustler 190'</u>	<u>Queen 1855'</u>
<u>Salt 330'</u>	<u>Grayburg 2190'</u>
<u>Tansill 805'</u>	<u>San Andres 2525'</u>

7. The estimated depths at which anticipated water, oil, gas, or other mineral bearing formations are expected to be encountered are as follows:

Water: Fresh water - None  
Salt water - 1855'  
Grayburg & San Andres 2190'-2600'

8. The proposed casing program is as follows:

Surface String 8 5/8", 24#/ft., K-55, ST&C  
Production String 5 1/2", 17#/ft., K-55, ST&C

9. Cement Program:

Surface String = Circulate to surface with 400 sacks of Class  
'C' + 2% CaCl<sub>2</sub>. WOC 18 hrs. Test casing to 1000 psi for 30 min.

Production String = Circulate to surface using caliper volume plus  
30% excess. Lead: 800 sk Class 'C' + 10% DiaceI D + 9#/sk salt.  
(Slurry weight 13.2 ppg, Slurry yield 2.07 cu ft/sk, 11.0 gal.  
wtr/sk.)  
Tail: 500 sx Class 'C' + 5#/sk salt. (Slurry weight 15.0 ppg,  
Slurry yield 1.35 cu ft/sk, 6.3 gal. water/sk. If water flow is  
encountered while drilling, perform job at max. rate & then SI BOP  
4 hours.

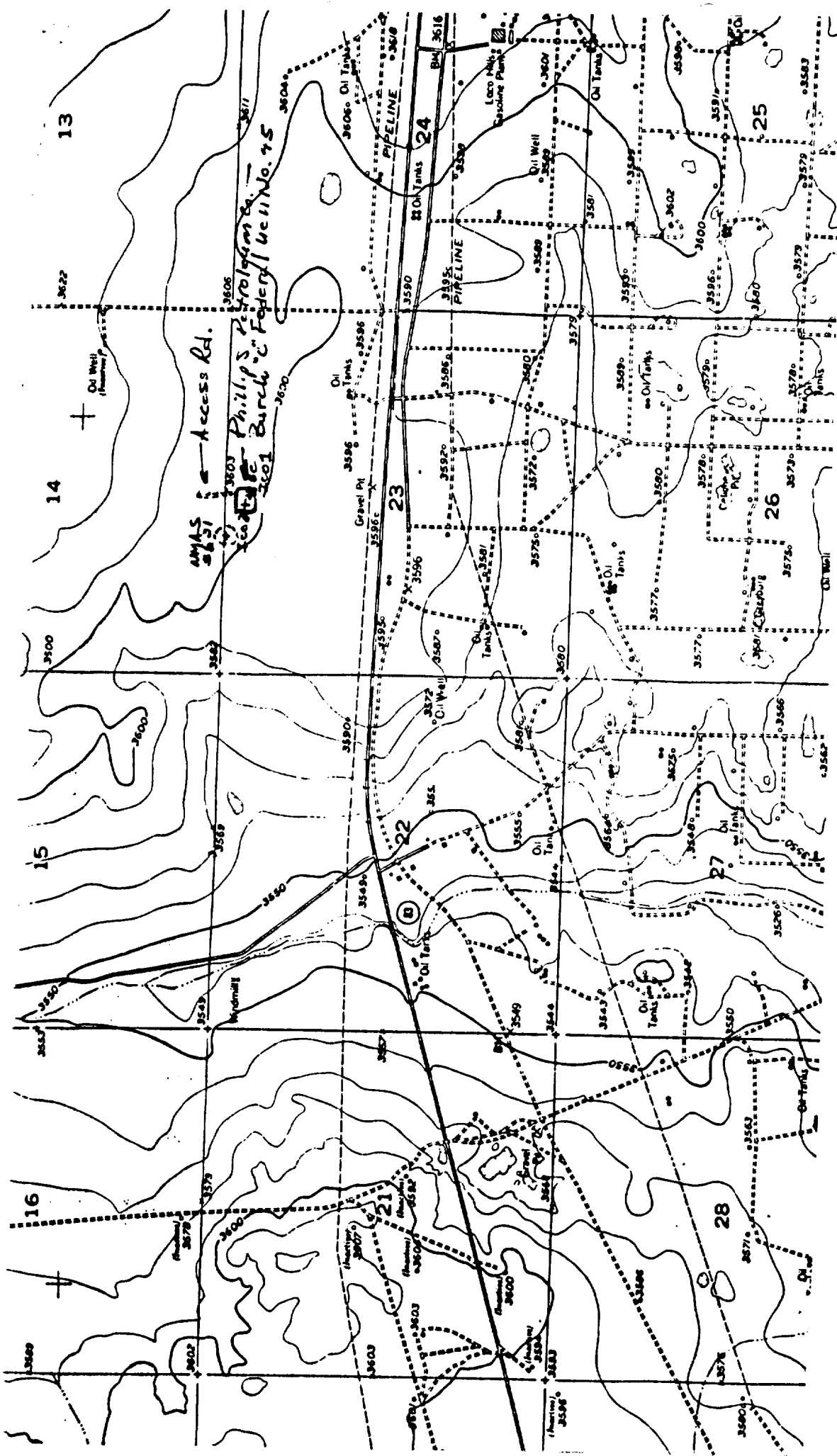
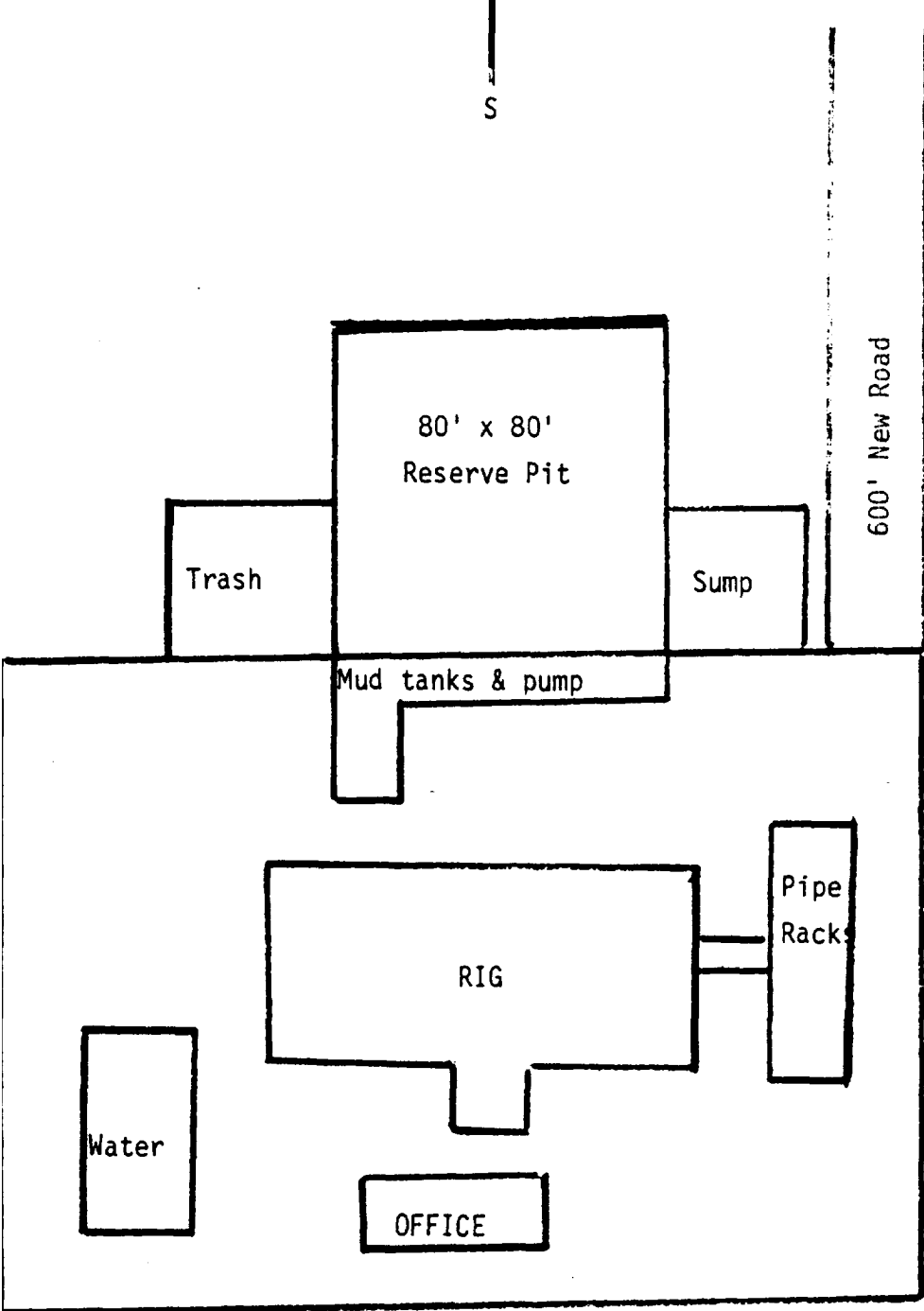
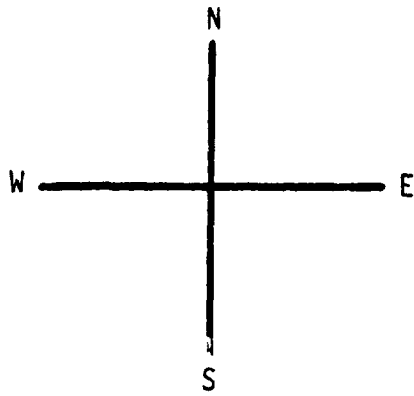


Fig. 1. USGS RED LAKE SE QUADRANGLE, 7.5 Minute Series, 1:24,000, 1955, showing PHILLIPS PETROLEUM COMPANY's proposed Burch "C" Federal Well No. 45, 330 FNL, 2580 FWL, and access road, Sections 14 and 23, T17S, R29E, NMMP, Eddy County, New Mexico.



250' x 250'  
BURCH-C FED WELL NO. 45