Form 3160-3
(November 1983)
(formerly 9-331C)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

30-015-25877

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

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

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

2. NAME OF OPERATOR
Phillips Petroleum Company

3. ADDRESS OF OPERATOR
4001 Penbrook St., Odessa, TX 79762

RECEIVED
FEB 22 '88
O. C. D.
ARTESIA, OFFICE

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface Unit P, 660' FEL & 660' FSL
At proposed prod. zone Unit P, 660' FEL & 660' FSL

Ut P

5. LEASE DESIGNATION AND SERIAL NO.
LC-028793-C

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Burch-C Fed

9. WELL NO.
47

10. FIELD AND POOL, OR WILDCAT
Grayburg Jackson 7R-Q-G-SA

11. SEC., T., R., M., OR BLK., AND SURVEY OR AREA
Sec. 30, T-17-S, R-30-E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
1 mile South and West of Loco Hills, NM

12. COUNTY OR PARISH
Eddy

13. STATE
NM

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
1115.20 ac.

17. NO. OF ACRES ASSIGNED TO THIS WELL
40

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1320' West to #32

19. PROPOSED DEPTH
3600'

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
unprepared GL 3599'

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'	350 sk Class C (*)
7-7/8"	5-1/2"	14#	3600'	Caliper vol. plus 30% (*)

Lead slurry: Class "C" + 10% NaCl + 20% Diacel D
Tail Slurry: Class "C" Neat

*Circ. to Surface

RECEIVED
JAN 21 11 01 AM '88
CARLSBAD AREA

Post ID #1
NL & API
2-26-88

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 1/20/88

(This space for Federal or State office use)

PERMIT NO. ______ APPROVAL DATE ______

APPROVED BY ______ TITLE ______ DATE 2-1988

CONDITIONS OF APPROVAL, IF ANY:

***See Instructions On Reverse Side**

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-102
Revised 10-1-78

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
PHILLIPS PETROLEUM COMPANY	BURCH "C" FEDERAL	47

Unit Letter	Section	Township	Range	County
P	30	17-S	30E	EDDY

Actual Footage Location of Well:
660 feet from the SOUTH line and 660 feet from the EAST line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3599'	San Andres	Grayburg-Jackson-7R-Q-G-SA	40 Acres

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

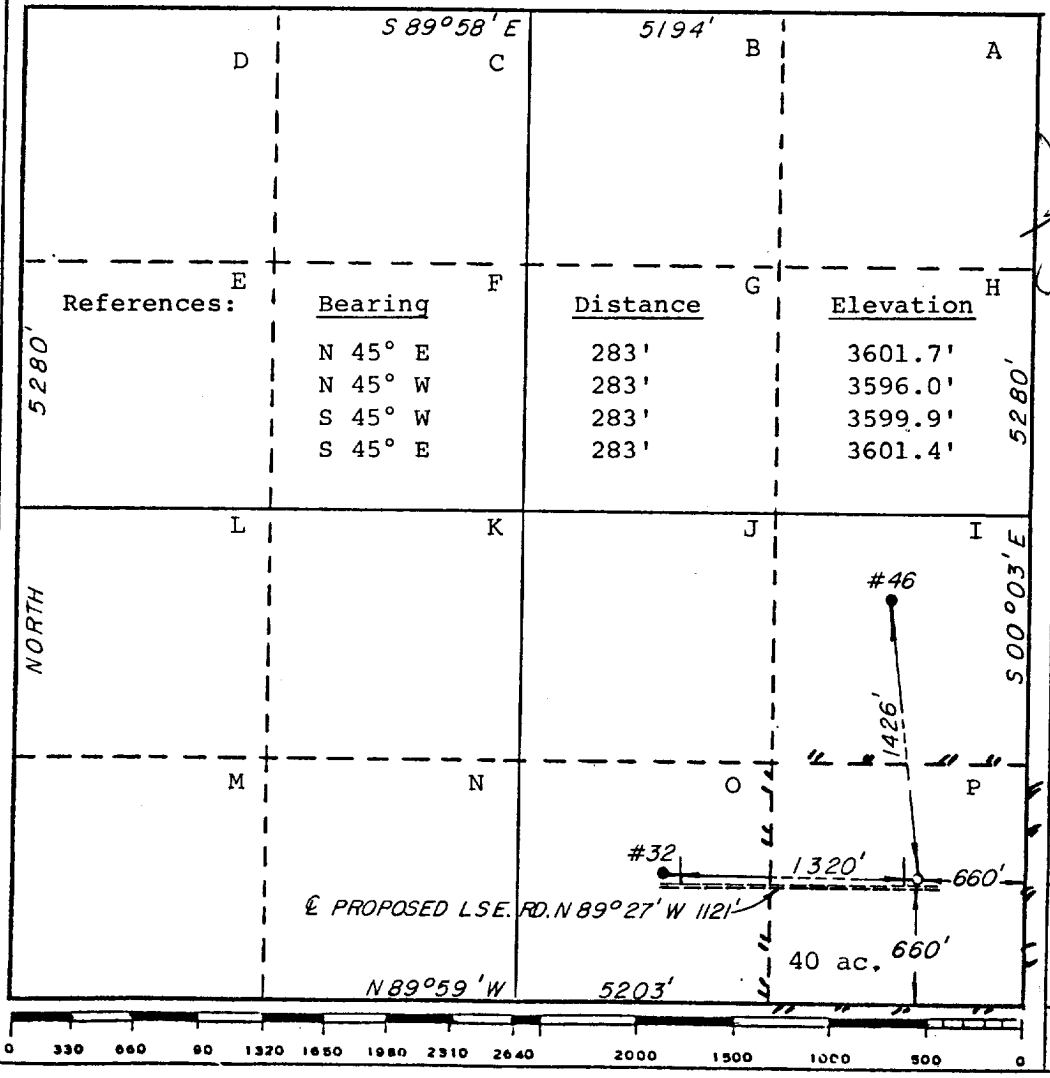
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

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 Division.



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: Eng. Supervisor, Reservoir

Company: Phillips Petroleum Company

Date: 1/19/88

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.

DECEMBER 22, 1987

Date Surveyed

RICHARD B. DONIVEN

Registered Professional Engineer and/or Land Surveyor

Certificate No. 14882

PHILLIPS PETROLEUM COMPANY
BURCH-C FED
WELL NO. 47

DRILLING PROGNOSIS

1. Location of Proposed Well: Unit P, 660' FEL & 660' FWL of Sec. 30, T-17-S, R-30-E, Eddy County, New Mexico

2. Unprepared Ground Elevation: 3599'

3. The geologic name of the surface formation is tertiary.

4. Type of drilling tools will be rotary.

5. Proposed drilling depth is 3600'.

6. The estimated tops of important geologic markers are as follows:

Tertiary	Surface	Yates	1215'
Rustler	265'	Queen	2230'
Salt	565'	Grayburg	2600'
Tansill	1090'	San Andres	3080'

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

Water:	None	
Oil:	Grayburg	2600'
	San Andres	3080'

8. The proposed casing program is as follows:

Surface String	8-5/8" 24# K-55 @ 350'
Production String	5-1/2" 14# K-55 ST&C @ 3600'

9. Cement Program:
Surface String = 350 sx Class 'C' + 2% $CaCl_2$ circulated to surface

Production String = Caliper Volume Plus 30%
Lead: Class "C" + 10% NaCl + 20% Diacel D

Tail: Class "C" Neat
Circulated to surface

10. The minimum specifications for pressure control equipment which are to be used, a schematic diagram thereof showing sizes, pressure ratings (or) API series and the testing procedure and testing frequency are attached.

11. The proposed mud program is attached.

12. The testing, logging, and coring programs are as follows:
D.S.T.'s or cores: None
Logs: DLL-MSFL-GR
CNL-LithoDensity-GR-Caliper

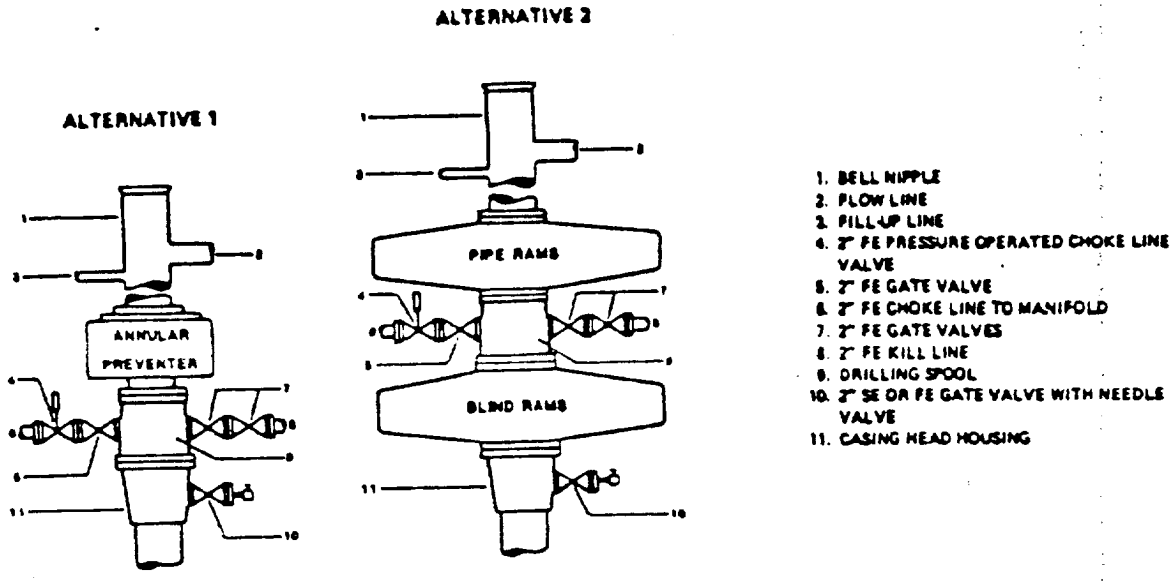
Special Tests: None

13. Anticipate no abnormal pressures or temperatures to be encountered or any other potential hazards such as Hydrogen Sulfide Gas. Low risk H_2S equipment will be used.

14. The anticipated starting date is immediately upon approval with duration of operations for approximately 30 days thereafter.

15. Water Supply: Trucked

16. Caliche for road and pad construction to be obtained from: Federal Pit - SW/4 of Sectio 19, T-17-S, R-30-E, Eddy County, New Mexico



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

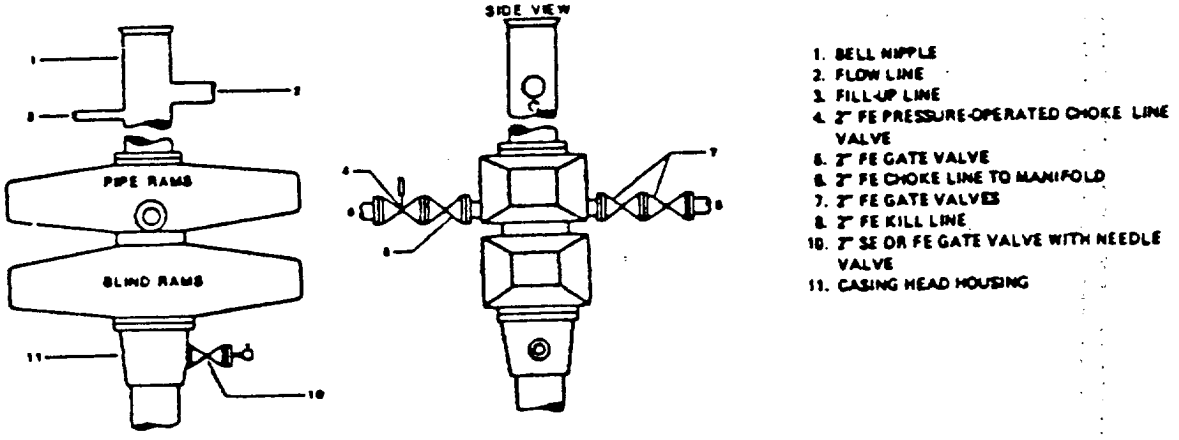


Figure 7-10. Standard Hydraulic Blowout Preventer Assembly (2 M or 3 M Working Pressure) Alternative 3 (without Drilling Spool)

BLOWOUT PREVENTER REQUIREME

Well Name: Burch-C Fed Well No. 47, Fed Lease No. LC-028793-C

I. Blowout preventer equipment, installation, testing and responsibilities will be in accordance with Phillips Petroleum Company's Blowout Preventer Standards.

II. Figure Nos. 7-9 or 7-10 (Drawing Attached): Casing String 8-5/8", 5-1/2" BOP Size: 8-5/8"; Working Pressure 3000 psi

III. Equipment to be furnished by Contractor:

A. Ram Type BOPs:
   1. No. Required two
   2. Acceptable Manufacturers & Types
      a. Cameron Iron Works: QRC; F; SS; U
      b. Shaffer Tool Works: B; E; LWS; LWP
      c. Hydril

B. Annular Type BOPs:
   1. No. Required none
   2. Acceptable Manufacturers & Types
      a. Hydril - GK
      b. Shaffer - Spherical
      c. Cameron - D

C. Preventer Operating Equipment
   1. Hydraulic Pump - air, steam or electrically operated of sufficient volume and pressure capacity to close the largest ram type preventer in less than 30 seconds. Electrically operated pump must be equipped with explosion proof motor and controls.
   2. Manifold with a control valve for each preventer.
   3. A Hydril or equivalent regulator for each annular type preventer.
   4. Accumulator of sufficient volume and pressure capacity to close all preventers in the assembly without recharging. If the pump in C.1. is incapable of recharging the accumulator in excess of 1500 psi, a separate pump capable of this is to be furnished.
   5. Remote control panel with a station for each preventer control valve.
   6. Steel piping to connect hydraulic closing units to preventers.
   7. Choke manifold with seamless steel piping and flanged or clamp hub connections. Choke manifold assembly and piping sizes as specified, on the attached drawing. All working lines, except hydraulic closing lines, shall have flanged or clamp hub connections to preventers, spools and casing heads.
   8. Full opening drill string safety valve (I.D. equal or larger than I.D. of tool joint in use). Working pressure to equal or exceed specified BOP working pressure. O.D. and configuration such that valve can be run in the hole with adequate clearance.
   9. Full opening upper Kelly cock. Working pressure to equal or exceed specified BOP working pressure.

REG3/burchc47

III. C.(continued)

10. Hydraulic pump of sufficient pressure rating to test preventer assembly to rated working pressure with necessary hose and fittings to connect the pump to drill pipe box or safety valve pin.
11. Drilling spool for use with single ram type preventers or with dual ram type preventers which do not have outlets between the rams.
12. Two valves on each side of drilling spool or dual preventers, one side for choke manifold connection and the other for kill line connection.
13. Hand wheels and extensions for manual operation of the ram type preventers. U-joints, extension guides, working platform(s) as necessary.
14. A 1" - 5000 psi WP plug valve on the closing side of the annular type preventer using a XXE 1" X 4" nipple.
15. Flowlines from choke manifold to pits.
16. Pressure gauge with pressure range at least equivalent to BOP WP.

IV. Equipment to be Furnished by Phillips:

A. Test plug to seat in casing head.

B. Remote controlled chokes, if installed.

C. Casinghead with valves on outlets.

D. Inside blowout preventer, if required.

E. Mud-gas separator, if required, and necessary piping.

V. Location of Equipment & Controls:

A. Remote control panel on the rig floor adjacent to drillers position and stairway exit from the floor.

B. Accumulator-Hydraulic Control Valve Unit to be placed minimum of 50 feet from well bore in easily accessible location.

C. Choke Manifold located 5 feet or more from the BOPs with minimum number of turns in the run.

D. Manual closing facilities installed so handwheels are outside the substructures in unobstructed location. U-joints, extension guides and working platforms installed as necessary for proper and safe operation.

E. Choke Manifold connection, where possible, is to be made between the two bottom ram type preventers through use of a drilling spool or by connecting between rams of dual type units with outlets so installed.
   1. On dual type preventers where outlets are not installed between rams, connection is to be made to a drilling spool installed between the ram type and annular type preventers.

V. (Continued)

F. Position and Type Rams will be as shown on the attached drawing.

G. Fill up line to be tied into the bell nipple above annular preventers.

H. Safety Valve, open with connections and/or subs available to fit any tool joint in use, shall be on the rig floor at all times.

VI. Testing

A. Initial Installation Test
Immediately after installation, each component part of the blowout preventer assembly including choke lines, valves and closing facilities will be tested individually by steps as outlined in the Blowout Preventer Testing Procedure section of Phillips' Blowout Preventer Standards. The test pressure will be at the working pressure specified in Item II. All components must be satisfactorily tested before drilling out.

B. Ram Change or Repair Test
1. After each ram change or when any component part of the preventer assembly, including lines and valves, is disturbed, the disturbed portion is to be tested to working pressure specified in Item II.
2. Installation of casing rams is not required for running casing.

C. Weekly Pressure Test
The first trip out of the hole after 12:01 AM, Tuesday, weekly test will be performed as outlined in the Blowout Preventer Testing Procedure which includes testing the entire assembly with water to 1/2 the specified working pressure for 10 minutes. The Kelly cock and safety valve are to be tested to the specified working pressure. The weekly test is not required where the test falls within three days after the initial installation test.

D. Operational Test
Each preventer unit is to be closed and opened on each trip or at least once each 48 hours (trip is not required just to actuate blind rams or pipe rams that do not fit top section of tapered string).

VII. Responsibilities

A. Contractor is to install and test the blowout preventer assembly as specified.

B. The driller is to check and record the accumulator pressure on the daily drilling report at the beginning of each tour.

C. Expense of rig time and pressure testing services for initial and weekly tests will be borne by:
1. Contractor while on footage contract.
2. Owner while on daywork contract.

BURCH C FED #47
660 FSL & 660 FEL, Sec. 30 T-17-S, R-30-E
Eddy County, New Mexico