

DEPARTMENT OF THE INTERIOR

GEOLOGIC SURVEY

U. S. LEASE DESIGNATION AND SERIAL NO.

NM-7951

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

6. INDIAN, AGENCY OR TRIBE NAME

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

7. UNIT AGREEMENT NAME

b. TYPE OF WELL

OIL WELL ☒GAS WELL ☐

OTHER

HINGLE ZONE ☐MULTIPLE ZONE ☐

8. FARM OR LEASE NAME

2. NAME OF OPERATOR

TERRACO OIL COMPANY

Leonard Bros.

3. ADDRESS OF OPERATOR

1860 Lincoln St., Suite 1200, Denver, Colorado

80295

9. WELL NO

15

10. FIELD AND FOOT, OR WILDCAT

Leonard Queen, South

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

At surface

660'FSL and 660'FEL, Unit P

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

Sec 14, T26S, R37E

At proposed prod. zone

12. COUNTY OR PARISH

Lea

13. STATE

New Mexico

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

See Point 1:b of Surface Use Plan

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

2520

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.

19. PROPOSED DEPTH

+4000

20. ROTARY OR CABLE TOOLS

Rotary

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

2999.5'GL

22. APPROX. DATE WORK WILL START*

6-5-77

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#	+ 500'	Suff. to circulate to surface.
7-7/8"	5-1/2"	15.5#	+4000'	Suff. to circulate back up into surface casing.

1. The geologic name of this surface formation is the Ogallala Lime (Miocene).

2&3. Formation Tops (Estimated)

Salado	+ 1140	'	Salt
Yates	+ 2530	'	Possible oil or gas producer
7 Rivers	+ 2840	'	Possible oil or gas producer
Queen	+ 3440	'	Oil and gas
Penrose	+ 3500	'	Oil and gas

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

- Run 8-5/8" OD, K-55 new casing to +500' and circulate cement to surface. Run 5 1/2" OD, 15.5#, K-55 new casing to T. D. and cement with a sufficient amount to circulate up into surface casing in two stages. Casinghead will be a 10" 900 series w/a 3000 psi rating.
- Blowout preventors: Hydraulic, double ram, 10". One set of rams will be provided for each size drill pipe in the hole. One set of blind rams at all times. Fill line will be 2", kill line will be 2", choke relief line will be 2" with variable choke. BOP's will be installed, tested and in working order before drilling below surface casing and shall be maintained ready for use until drilling operations are completed. BOP's, drills, and tests will be recorded in the drillers logs.
- We will use; spud mud = 0-+500'. (8.5 - 9.0 lb. per gallon) Bring gel = 500'-TD. (9.0 - 10.0 lb. per gallon)
- Auxiliary Equipment
 - Kelly cock will be in use at all times.
 - Stabbing valve to fit drill pipe will be present on floor at all times.
 - Mud monitoring will be visual, no abnormal pressures are anticipated in this area.
 - Floats at bits.
 - Drill string safety valve (s) to fit all pipe in the drill string will be maintained on the rig floor while drilling operations are in progress.
- This well will be pump tested after recovery of any load oil or water. No cores will be taken. DLL-GR, CNL-FDC-GR caliper, and BHC Sonic logs will be taken. Any other evaluation that may be necessary during the drilling of this well will be conducted as needed.
- No abnormal pressures or temperatures are anticipated. See point #5 for blowout prevention equipment.
- The drilling of this well will take approximately eight days. The gas is not dedicated to any purchaser as of this date.
- Your office (Telephone 505/393-3612) will be notified of spudding in sufficient time to witness cementing operations. Immediate notice will be given on blowouts, fires, spills, and accidents involving life-threatening injuries or loss of life. Prior approval will be obtained before appreciably changing drilling program or commencing plugging operations, plug back work, casing repair work or corrective cementing operations.

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

D.L. Myers

TITLE Div. Production Manager

(Leave space for Federal or State office use)

PERMIT NO.

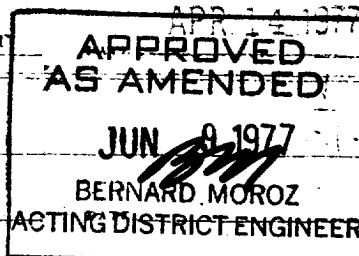
"APPROVAL TO FLARE GRANTED WHILE DRILLING AND TESTING."

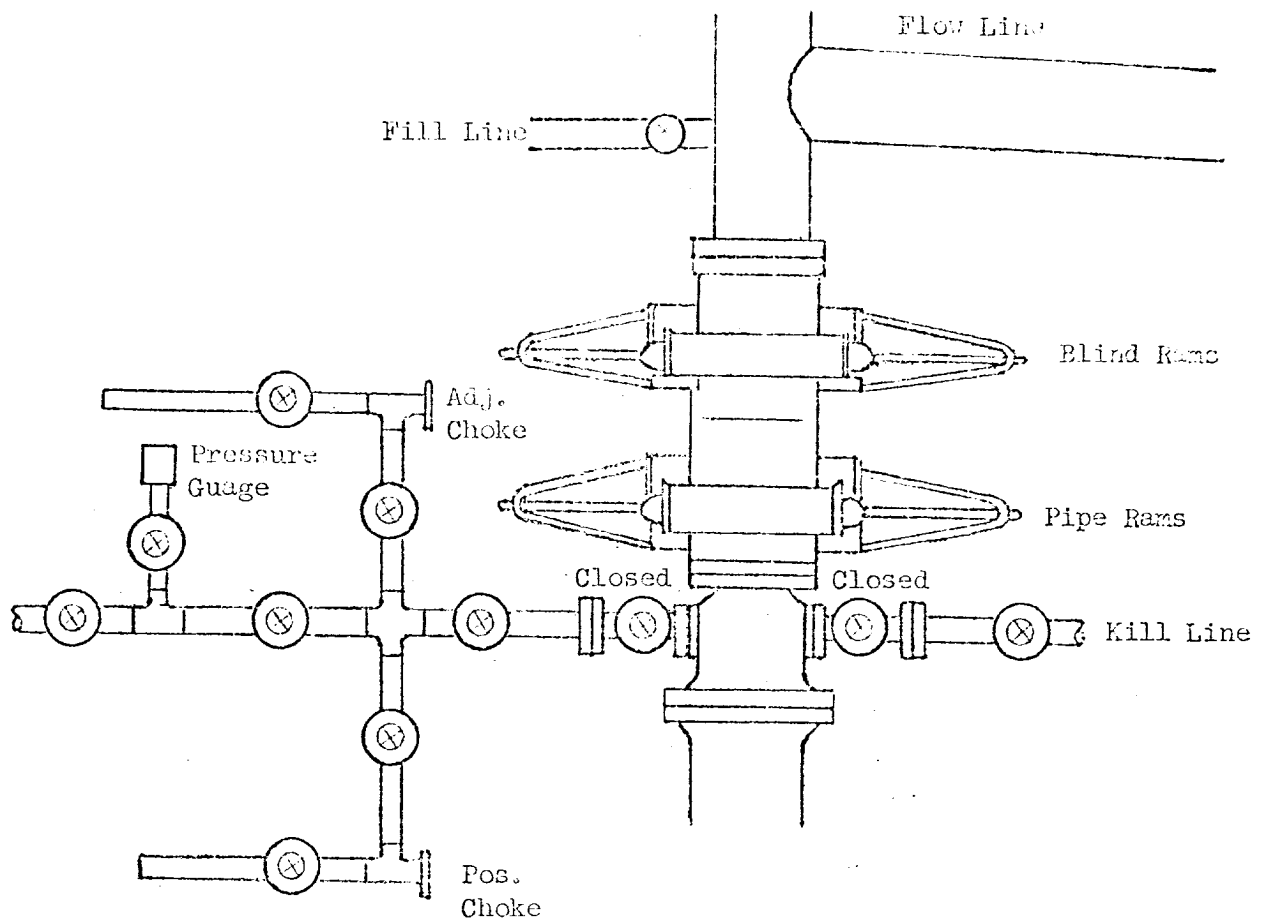
APPROVAL DATE

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE





All valves 2"

All BOPs, flanges, spools, valves, & lines must be series 900 or 3000 psi working press.

Choke manifold must be at ground level and extended out from under substructure.

TENNECO OIL COMPANY

REQUIRED MINIMUM BLOWOUT PREVENTOR

HOOKUP

Denver, Colorado

RECEIVED

JUN 1 1977

GEORGE W. H. COMM.
HOBBS, L. M.