

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

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

|   |  |  |  |
|---|--|--|--|
| 1a. TYPE OF WORK<br>DRILL <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input checked="" type="checkbox"/>  |  |  | 5. LEASE DESIGNATION AND SERIAL NO.<br>NM-01165                |
| b. TYPE OF WELL<br>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"/> |  |  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME                           |
| 2. NAME OF OPERATOR<br>TXO Production Corp. ✓   |  |  | 7. UNIT AGREEMENT NAME   |
| 3. ADDRESS OF OPERATOR<br>415 West Wall, Suite 900, Midland, Texas 79701  |  |  | 8. FARM OR LEASE NAME<br>Yates Federal                         |
| 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*<br>At surface<br>At proposed prod. zone<br>660 FWL & 1980 FNL   |  |  | 9. WELL NO.<br>2   |
| 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*<br>20 miles NE of Carlsbad, New Mexico  |  |  | 10. FIELD AND POOL, OR WILDCAT<br>E. Burton Flat East Morrow   |
| 15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.<br>(Also to nearest drlg. unit line, if any) 660'   |  |  | 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA<br>18-20S-29E |
| 16. NO. OF ACRES IN LEASE<br>640  |  |  | 12. COUNTY OR PARISH<br>Eddy                                   |
| 17. NO. OF ACRES ASSIGNED TO THIS WELL<br>320   |  |  | 13. STATE<br>New Mexico  |
| 18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.   |  |  | 20. ROTARY OR CABLE TOOLS                                      |
| 19. PROPOSED DEPTH<br>3400' New PBTD  |  |  | 21. APPROX. DATE WORK WILL START*<br>8-29-89                   |
| 21. ELEVATIONS (Show whether DF, RT, GR, etc.)<br>GR 3254   |  |  |  |

## 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"         | 24-32#          | 3211          | 2485 sx + 200 sx   |
| 7 7/8"       | 4 1/2"         | 11.6-13.5       | 117 5/8       | 300 sx             |

## Procedure

1. MIRU workover unit. Load tbwg w/2% KCL wtr. ND wellhead, NU BOP. Rel pkr. TOH w/tbg & pkr.
2. RU wireline. Set CIBP @ 11,120'. Place 35' of cmt on CIBP w/dump bailer.
3. ND wellhead. Weld on 4 1/2" pull nipple, remove csg slips Free-point & cut 4 1/2" csg. (TOC bond log 8670)
4. POH w/csg. Inspect, drift & tst csg on loc.
5. TIH w/2 3/8" tbwg to 75' below top of csg stub.
6. Circ hole spot 150' cmt plug in & out of 4 1/2" csg stub. Wait 2 hr tag plug.
7. TOH w/2 3/8" tbwg to 3600'. Spot 200' cmt plug from 3600' to 3400'. Wait 2 hr tag plug.
8. TIH w/4 1/2" csg. Set csg @ 3400'. Centralize & cmt csg back to approx. 2800'. Displace cmt w/trtd 2% KCL H2O.
9. Run GR CCL-CBL logs & perf Dela 3240-3260, 1 shot/ft. (21 holes).
10. TIH w/tbg & pkr. Set pkr @ 3200' swb tst. Acidize perfs w/2000 gal 7 1/2% w/additives. Swb tst evaluate for frac.

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 Cecil Pearce TITLE District Drlg. & Prod. Supt. DATE 8-22-89  
(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY Original Signed by District Manager TITLE PETROLEUM ENGINEER DATE 9-19-89  
CONDITIONS OF APPROVAL, IF ANY:

\*verbal given 9/13/89 to Monte Carroll (SJS)  
→ they will notify us prior to pulling csg. & tagging stub/shoe plugs.

CARLSBAD  
AREA OFFICE  
RECEIVED

SEP 8 11 06 AM '89

RECEIVED