

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

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

1a. TYPE OF WORK DRILL <input type="checkbox"/> DEEPEN <input checked="" type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. LC 031844
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"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR Atlantic Richfield Company		7. UNIT AGREEMENT NAME
3. ADDRESS OF OPERATOR P. O. Box 1978, Roswell, New Mexico 88201		8. FARM OR LEASE NAME Fren Oil Co.
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 660' FSL & 1980' FWL (Unit letter N) At proposed prod. zone		9. WELL NO. 2
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*		10. FIELD AND POOL, OR WILDCAT Grayburg Jackson
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 19, T17S, R31E
16. NO. OF ACRES IN LEASE		12. COUNTY OR PARISH Eddy
17. NO. OF ACRES ASSIGNED TO THIS WELL 40		13. STATE N.M.
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.		20. ROTARY OR CABLE TOOLS Rotary-reverse rig
19. PROPOSED DEPTH 3181'		22. APPROX. DATE WORK WILL START* 6/12/72
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3581' GR		

23. PROPOSED CASING AND CEMENTING PROGRAM			
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH
No change	in original		

RECEIVED  
JUN 7 1972  
U. S. GEOLOGICAL SURVEY  
ARTESIA, NEW MEXICO

In accordance w/NMOCC Order No. R-4306, dated 5/19/72, we propose to deepen this well and convert to water injection service as outlined below:

Deepen from 3116' to 3181' = 4-3/4" hole. Treat O.H. 3065' to 3181' w/3000 gal 15% HCl acid. Run 2-3/8" tubing w/5 1/2" tension packer set at 2975'. Load 2-3/8" x 5 1/2" annulus w/chemically treated water. Commence water injection in Grayburg open hole 3065' to 3181' (Grayburg Jackson Friess-Fren Waterflood Project)

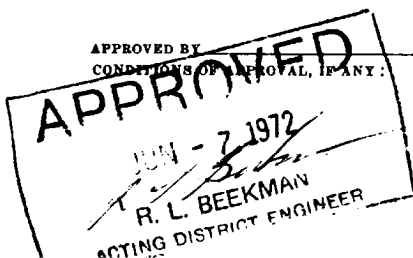
IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED A. B. Britcher TITLE Dist. Drlg. Supervisor DATE 6/5/72

(This space for Federal or State office use)

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

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_



\*See Instructions On Reverse Side