

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 type="checkbox"/> PLUG BACK <input checked="" type="checkbox"/>			5. LEASE DESIGNATION AND SERIAL NO. LC-064118	
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR Arch Petroleum Inc.			7. UNIT AGREEMENT NAME	
3. ADDRESS OF OPERATOR 10 Desta Drive, Suite 420 E., Midland, TX 79705			8. FARM OR LEASE NAME E.C. Hill "D" Federal	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 990 FNL & 660 FWL Section 35, T23S, R37E At proposed prod. zone			9. WELL NO. 3	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 12 miles North of Jal			10. FIELD AND POOL, OR WILDCAT Teague Devonian	
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 480	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 35, T-23-S, R-37-E	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 990		19. PROPOSED DEPTH 7304	12. COUNTY OR PARISH Lea	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3250 GR		17. NO. OF ACRES ASSIGNED TO THIS WELL 40		
23. PROPOSED CASING AND CEMENTING PROGRAM		20. ROTARY OR CABLE TOOLS		
22. APPROX. DATE WORK WILL START* As soon as approved				

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2	13 3/8	48	302	300 sx - circulated
12 1/4	9 5/8	32 & 36	2904	1600 sx - TOC 50' F.S.
8 5/8	7	23 & 26	7304	500 sx - TOC 4400' F.S.

Current producing interval 7207-7280' with 188 holes in Devonian Formation. Current production uneconomic to pump.

Plan to plug back using 7" CIBP set at 7180' and dump 35' cement on top of CIBP. Test casing and plug to 500 psi. Perforate Blinbry formation in interval 5310-5760'. Frac zone with CO<sub>2</sub> and sand.

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 Karut Miller TITLE Operations Manager DATE April 23, 1990  
(This space for Federal or State office use)

PERMIT NO. One Section 35, T23S, R37E APPROVAL DATE 5-1-90  
APPROVED BY FRANCIS J. [illegible] TITLE FRANCIS J. [illegible] DATE 5-1-90  
CONDITIONS OF APPROVAL, IF ANY: