

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-093-23220

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
 DRILL DEEPEN PLUG BACK

b. TYPE OF WELL
 OIL WELL GAS WELL OTHER
 SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
 Southland Royalty Company

3. ADDRESS OF OPERATOR
 P. O. Drawer 570, Farmington, New Mexico

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
 At surface 1780' FNL & 1570' FWL
 At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 8 miles northwest of Aztec, New Mexico 87410

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 6057' GR

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8"	56#	200'	125 cu. ft.
8-3/4"	7"	20	2680'	291 cu. ft.
6-1/4"	4-1/2"	10.5#	2530'-5119'	452 cu. ft.
	2-3/8"	4.7#	5119'	

Surface formation is Nacimiento.
 Top of Ojo Alamo sand is at 1389'.
 Top of Pictured Cliffs sand is at 2430'.
 Fresh water mud will be used to drill from surface to intermediate casing point.
 An air system will be used to drill from intermediate casing point to total depth.
 It is anticipated that a Gamma Ray Density and a Gamma Ray Induction log will be run at total depth.
 No abnormal pressures or poisonous gases are anticipated in this well.
 It is expected that this well be drilled before April 15, 1979. This depends on time required for approvals, rig availability and the weather.
 Gas is dedicated.

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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: *[Signature]* TITLE: District Production Manager DATE: December 5, 1978

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____
 APPROVED BY _____ TITLE _____

CONDITIONS OF APPROVAL, IF ANY:
ok Frank

NMOCC

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 G. S. COOK, COM.
 DIST. 3