SUBMIT IN TRIPLICATE*

(Other instructions on

Form approved.

| Budget | Bureau | No. | 42-R1 | 425 |
|--------|--------|-----|-------|-----|
| 2 1 | ade. | _ 🤈 | 40 | , - |

| UNITE | D STATES OF THE INTERIO | reverse side | le) | 30-045-24212 5. LEASE DESIGNATION AND SERIAL NO. |
|--|----------------------------|------------------------------------|-------|---|
| | | • | | |
| GEOLOGI | CAL SURVEY | | | SF-078813 |
| APPLICATION FOR PERMIT TO | DRILL, DEEPEN, | OR PLUG BA | ACK_ | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME |
| DRILL X | DEEPEN 🗆 | PLUG BAC | к 🗆 🕆 | 7. UNIT AGREEMENT NAME |
| D. TYPE OF WELL OIL WELL WELL OTHER | SINGLE ZONE | MULTIPLI ZONE | للجل_ | 8. FARM OR LEASE NAME |
| 2. NAME OF OPERATOR | | | . \ | Cooper "B" |
| Southland Royalty Company | | CEIVED | | 9. WELL NO. |
| 3. ADDRESS OF OPERATOR | IRE | | \ | #1E |
| P. O. Drawer 570, Farmington, | NM 87401\ | ALL 1000 | | 10. FIELD AND POOL, OR WILDCAT Basin Dakota |
| 4. LOCATION OF WELL (Report location clearly and in At surface | accordance with any State | difference: | MEA A | Blanco Mesa Verde 11. sec., T., R., M., OR BLE. |
| 1015' FSL & 850' FEL At proposed prod. zone | \\ | GEOLOGICAL SUR FARMINGTON, N. M | ·· | AND SURVEY OR AREA |
| At proposed prod. some | 1 | FARIMING | | Section 7, T29N, R11W |
| 14. DISTANCE IN MILES AND DIRECTION PROM NEARES | | | | 12. COUNTY OR PARISH 13. STATE |
| Approximately 2 1/4 miles from | Bloomfield, NM | | | San Juan NM |
| 15. DISTANCE FROM PROPOSED* | 16. NO. OF | ACRES IN LEASE | | F ACRES ASSIGNED |

Approxim 15. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drig, unit line, if any) E 308.9 320 617.8 acres 470' 18. DISTANCE FROM PEOPOSED LOCATION²
TO NEAREST WELL, DRILLING, COMPLETED.
OR APPLIED FOR, ON THIS LEASE, FT. 19. PROPOSED DEPTH 20. ROTARY OR CABLE TOOLS 835' Rotary 6630' 22. APPROX. DATE WORK WILL START* 21. ELEVATIONS (Show whether DF, RT, GR, etc.)

5733' GR

March 31, 1980

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# | 200' | 140 Sacks (Circulate) |
| 7 7/8" | 5 1/2" | 15.5# | 6630 ' | 215 Sacks (Stg. 1-Cover Gallup) |
| _ / // 0 | | | | 245 Sacks (Stg. 2-Cover Cliff House |
| | | 1 | | 180 Sacks (Stg. 3-Cover Ojo Alamo) |

Surface formation is Nacimiento.

Top of Ojo Alamo sand is at 1055'.

Top of Pictured Cliffs sand is at 1890'.

Fresh water mud will be used to drill from surface to total depth.

It is anticipated that a GR-Density and IES log will be run from surface to total depth.

No abnormal pressures or poisonous gases are anticipated in this well.

This depends on It is expected that this well will be drilled before July 31, 1980.

time required for approval, rig availability and the weather.

Gas is dedicated.

| SIGNED Chital Character | TITLE District Engine | per |
|--|-----------------------|---------------------------------|
| (This space for Federal or State office use) | | |
| PERMIT NO. | APPROVAL DATE | AG AMENDED |
| APPROVED BY | TITLE | DATE |
| CONDITIONS OF APPROVAL, IF ANY: | 2 | James F. Sims District Engineer |

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO EHERGY AND MINERALS DEPARTMENT

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

Form C-102 Revised 10-1-78

| Operator | | | | Lease | | | | Well No. |
|--|----------------------------|---------------|---------------------------|------------------------|--------------------|-------------|--|--|
| • SOUTHLAND ROYAL | | | | | ER "B" | Т | | |
| Unit Letter Sect | ion | Township | | Romge | | County | | |
| P ' | 7 | 29N | | | .lW | Sai | n Juan | |
| Actual Footage Location | | | | 040 | | | D+ | |
| | | South | line and | 850 | fee | t from the | East_ | line |
| Ground Level Elev. | Producing For | | | Pool | Dlana | _ | | Dedicated Acreage: 308-9-320 Acres |
| 5733 | L | - Mesa Ve | | Basi | | | | 1 |
| Outline the ac If more than of interest and ro | ne lease is | | | | | | | he plat below. |
| dated by commu | nitization, u No If an | nitization, f | orce-pooli :s;' type o | ng. etc? f consolic | lation | Communit | ized | all owners been consoli- |
| this form if nec No allowable w | essary.) ill be assigne | d to the we | ll until all | interests | have been o | consolidate | ed (by com | munitization, unitization, approved by the Commis- |
| | i | <u> </u> | | | | | | CERTIFICATION |
| RECE JAN U. S. GEO' FARMI | DGICAL SURVE | | | | | | notation to the state of the st | certify that the information con- rein is true and complete to the y knowledge and belief. C. Parsons C. Parsons |
| | | | | i | | | Southla | and Royalty Company |
| | l Se | ec. | | | 13 | | January | 30, 1980 |
| | | | 7 7 - | | 1015' @ SF-07881 | 5501 | EB26"11 is true GON. G DIST. 3 Date Survey Octobe Registered and/or Land | One best of my One best of my or 18 chartes |
| 0 230 660 .90 | 1320 1650 1980 | 2310 2640 | 2000 | 1800 | 1000 5 | | Fred F Centificate 1 | No. THE ALL |

1800

2000

-90 1320 1650 1980 2310 2640

1000

SOUTHLAND ROYALTY COMPANY

DRILLING SCHEDULE

" B " # 1 E COOPER

1015' FSL & 850' FEL Section 7, T29N, R11W San Juan County, New Mexico

| Field: Basin Da | kota/Blanco Mesa V | /erde | Elevation: | 5733' GR |
|-----------------|---|---|---|----------------------------------|
| Formation Tops: | Ojo Alamo Fruitland Pictured Cliffs Cliff House Pt. Lookout | 1055' 1625' 1890' 3490' 4218' | Gallup Graneros Dakota Total Depth | 5500' 6305' 6430' 6630' |

Logging Program: IES and GR-Density from surface to Total Depth.

Drilling Program: Contractor:

Tool Pusher:

SRC (Answ. Svc.) 325-1841 SRC Rep: 325-7391 Dispatch

Mud Program: Fresh water to 4200'. Fresh water mud from 4200'

to TD. Maintain mud weight of 8.9 to 9.4, viscosity

of 35 to 40 sec, water loss of 10 to 12 cc's.

Materials: Casing Program:

| Hole Size | Depth | Casing Size | Wt. & Grade |
|-----------|---------------|-------------|-------------|
| 12 1/4" | 200 ' | 8 5/8" | 24# H-40 |
| 7 7/8" | 6630 ' | 5 1/2" | 15.5# K-55 |

Float Equipment:

8 5/8" Surface Casing: Pathfinder type "A" guide shoe.

Pathfinder type "A" guide shoe. Self-fill flapper 5 1/2" Production Casing: type float collar run 1 joint off bottom. Run 5

Pathfinder bow type stabilizers every other joint above shoe. Run Dowell stage tools at 4600' and 2090'. Run 1 cement basket below and 5 Pathfinder

rigid stabilizers above each tool.

Wellhead Equipment:

8 5/8" x 10", 2000# bradenhead with 5 1/2" casing hanger.

10", 2000# X 6", 2000# tubing head and tree.

Drilling Schedule Cooper "B" #lE Page #2

Cementing:

8 5/8" Surface Casing: 140 sacks (165 cu. ft.) of Class "B" with 1/4# gel flake per sack and 3% CaCl2. WOC 12 hours. Test to 600# prior to drilling out. (Volume is 100% excess.)

5 1/2" Production String: STAGE ONE - 165 sacks (245 cu. ft.) of 50/50 Poz with 6% gel, 1/4% gel flake per sack, followed by 50 sacks of neat with 2% CaCl₂. (Volume is 25% excess to cover top of Callup.)

STAGE TWO - 195 sacks (288 cu. ft.) of 50/50 Poz with 6% gel followed by 50 sacks of neat with 2% CaCl₂. (Volume is 50% excess to cover top of Cliff House.)

STACE THREE - 180 sacks (269 cu. ft.) of 50/50 Poz with 6% gel. (Volume is 50% excess to cover top of Ojo Alamo.)

WOC and circulate between stages as required by well conditions.

L. O. Van Ryan District Production Manager

BJM/ke



January 29, 1980

United States Geological Survey Mr. James Sims P. O. Box 959 Farmington NM 87401

| Farm: | ington, NM 8/401 |
|-------|---|
| Dear | Sir: |
| roads | Enclosed please find a map showing existing roads and planned access to Southland Royalty Company'sCooper "B" #1E well. |
| A-11 | The locations of tank batteries and flow lines will be on location well. A burn pit will be provided for disposal of trash. Cuttings, ling fluid and produced fluids will be put into the reserve pit and early disposed of depending on amount and type of fluids. |
| | There will be no camps or airstrips. |
| rig, | Also, enclosed is a location layout showing approximate location of pits and pipe racks. |
| | Water supply will be The San Juan River |
| stano | The location will be restored according to Bureau of Land Management dards. This work will begin when all related construction is finished. |
| tive | Mr. Ross Lankford will be Southland Royalty Company's field representations. |

CCP/ke

Yours truly,

District Engineer

Curtis C. Parsons



January 29, 1980

United States Geological Survey Mr. James Sims P. O. Box 959 Farmington, NM 87401

RE: Blowout Preventer Plan

Dear Sir:

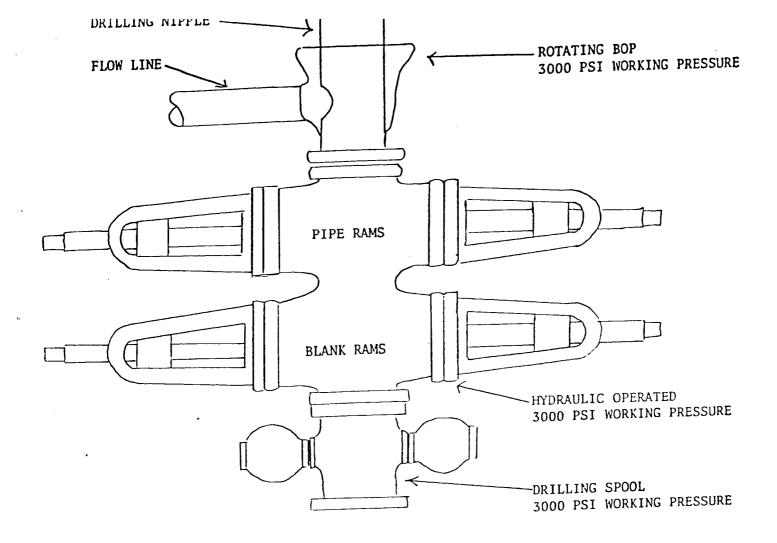
All drilling and completion rigs will be equipped with 6" or larger double hydraulic blowout preventers and a hydraulic closing unit with steel lines.

The preventer is 3000# working pressure and 6000# test pressure. All crews will be thoroughly trained in the operation of this preventer. The preventer will be tested frequently enough to insure proper operation.

Yours truly,

Curtis C. Parsons
District Engineer

CCP/ke



PREVENTERS AND SPOOLS ARE TO HAVE THROUGH BORE OF 6" - 3000 PSI OR LARGER

COOPER "B" #1E 1015' FSL & 850' FEL Section 7, T29N, R11W



United States Geological Survey Mr. James Sims P. O. Box 595 Farmington, NM 87401

Dear Sir:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Southland Royalty Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Date: January 29, 1980

L. O. Van Ryan

District Production Manager

LOVR/ke

