#### SUBMIT IN TRIPLICATE\*

Form approved.

**IINITED STATES** 

(Other instructions on reverse side)

| Budget | Bureau | reau No. 42 |  | -R1425. |  |  |
|--------|--------|-------------|--|---------|--|--|
|        |        |             |  |         |  |  |

| DEPARTMENT OF THE INTERIOR  |                                   |                      |                |                 | 5. LEASE DESIGNATION AND SERIAL NO. |                                      |  |  |  |
|---|-----------------------------------|----------------------|----------------|-----------------|-------------------------------------|--------------------------------------|--|--|--|
| GEOLOGICAL SURVEY   |                                   |                      |                |                 |                                     | SF-077056                            |  |  |  |
| APPLICATION   | N FOR PERMIT                      | O DRILL, I           | DEEPEN,        | OR PLUG E       | 3ACK                                | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME |  |  |  |
| 1a. TYPE OF WORK  | LL X                              | DEEPEN [             |                | PLUG BA         |                                     | 7. UNIT AGREEMENT NAME               |  |  |  |
| b. TYPE OF WELL   |                                   |                      | SINGLE<br>ZONE | MULTIE ZONE     | LE :                                | S. FARM OR LEASE NAME                |  |  |  |
| 2. NAME OF OPERATOR   |                                   |                      |                |                 | =.                                  | McDaniel "C"                         |  |  |  |
|   | nd Royalty Comp                   | any                  |                |                 |                                     | -  #1E                               |  |  |  |
| 3. ADDRESS OF OPERATOR  | 570 77                            | in the NTM           | 07/01          |                 |                                     | 10. FIELD AND POOL, OR WILDCAT       |  |  |  |
| P. O. DI  | rawer 5/0, Farm                   | in accordance wi     | th any State   | requirements.*) |                                     | Basin Dakota                         |  |  |  |
| At surface  |                                   |                      |                |                 |                                     | 11. SEC., T., R., M., OR BLK.        |  |  |  |
|   | VL & 870' FWL                     |                      |                |                 |                                     | AND SURVEY OR AREA                   |  |  |  |
| At proposed prod. zon   | e                                 |                      |                |                 |                                     | Section 19, T29N, R11W               |  |  |  |
| 14. DISTANCE IN MILES   | AND DIRECTION FROM NEA            | REST TOWN OR POS     | T OFFICE*      |                 |                                     | 12. COUNTY OR PARISH   13. STATE     |  |  |  |
|   | iles West of Bl                   |                      |                |                 |                                     | San Juan New Mexico                  |  |  |  |
| 1 1/2 III.<br>15. DISTANCE FROM PROPO   | SED*                              | CARLIETO, I          | 16. NO. OF     | ACRES IN LEASE  |                                     | OF ACRES ASSIGNED                    |  |  |  |
| LOCATION TO NEAREST<br>PROPERTY OR LEASE I  | r                                 | 870' 713.69          |                | 69              | TO T                                | THIS WELL N/317.55                   |  |  |  |
| (Also to nearest drig<br>18. DISTANCE FROM PROP   | g. unit line, if any)             |                      |                | 20. ROTA        | ROTARY OR CABLE TOOLS               |                                      |  |  |  |
| TO NEAREST WELL, D  | RILLING, COMPLETED,               | 20731                | (              | 6 <b>425</b> '  |                                     | Rotary -                             |  |  |  |
| OR APPLIED FOR, ON THIS LEASE, FT. 2073 U425  21. ELEVATIONS (Show whether DF, RT, GR, etc.)  5618 GR |                                   |                      |                |                 | February 1, 1980                    |                                      |  |  |  |
| 23.   |                                   | PROPOSED CASI        | NG AND CE      | MENTING PROGR   | AM                                  | •                                    |  |  |  |
| THE CO. WOLD  | SIZE OF CASING                    | WEIGHT PER F         |                | SETTING DEPTH   | - <del></del>                       | QUANTITY OF CEMENT                   |  |  |  |
| SIZE OF HOLE  | 8 5/8"                            |                      |                | 200'            | 140 s                               | L40 sacks                            |  |  |  |
| 12 1/4"<br>7 7/8"   | 4 1/2"                            | 15.5                 |                |                 | _                                   | sacks (Stage One)                    |  |  |  |
| 1 1/0   | 4 1/2                             | 2000                 | <u>'</u>       |                 | 320 s                               | sacks (Stage Two)                    |  |  |  |
|   |                                   |                      | İ              |                 | 270 s                               | sacks (Stage Three)                  |  |  |  |
| Surface fo  | rmation is Naci<br>itland sand is | miento.<br>at 1450'. |                |                 |                                     |                                      |  |  |  |
| mon of Dia  | tured Cliffs sa                   | md is at li          | 705'.          |                 |                                     |                                      |  |  |  |
|   |                                   | rand to dri          | ll from        | surface to      | total d                             | lepth.                               |  |  |  |
| It is anti  | cipated that ar                   | n IES and a          | GR-Dens        | ity log wil     | l be ru                             | n from TD to surface                 |  |  |  |
| •   |                                   |                      |                |                 |                                     |                                      |  |  |  |
| No abserva  | l pressures or                    | poisonous q          | gases ar       | e anticipat     | ed in t                             | this well.                           |  |  |  |
| T+ ic ovno  | , 1000. 11110 dichinating         |                      |                |                 |                                     |                                      |  |  |  |
| time requi<br>Gas is ded  | red for approva                   | al, rig ava:         | ilabilit       | y and the w     | eather.                             |                                      |  |  |  |
|   |                                   |                      | •              |                 |                                     | (NOV201979)                          |  |  |  |
|   |                                   |                      |                |                 |                                     | 1. 715. (23) 3                       |  |  |  |

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical preventer program, if any. 24. TITLE District Production Manager DATE (This space for Federal or State office use) PERMIT NO. \_\_ APPROVED BY \_ CONDITIONS OF APPROVAL, IF ANY:

# NMOCC'

ADDITIONAL WITH INCIDENCE FOR A STATE OF THE MEXICO ORDER R-1670-V. U.S.G.S. RATIFICATION DATED AGES A, MICH.

## OIL, CONSERVATION DIVISION

# P. O. BOX 2088

Form C-102 kevised 10-1-78

STATE OF NEW MEXICO LIVERGY AND MINERALS DELIGRATIMENT

660

1320 1650

1980 2310

SANTA FE, NEW MEXICO 87501

All distances must be from the cuter houndaries of the Section Cherator McDANIEL "C" 1-E SOUTHLAND ROYALTY COMPANY County Range Unit Letter Township San Juan 11W 29N 19 Actual Footage Location of Well: 870 West 1550 North feet from the line and feet from the Pool Ground Level Elev. Producing Formation 320 317.55 Acres 5618 Basin Dakota Dakota 1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. 2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). 3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc? Communitized If answer is "yes," type of consolidation X Yes ☐ No If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.). No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission. CERTIFICATION I hereby certify that the information contoined herein is true and complete to the best of my knowledge and belief. / Fee 0 L. O. Van Ryan 8701 Position District Production Manager SF-077056 Fee Southland Royalty Company November 7, 1979 Sec. 19 I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief. Date Surveyed <u>October</u> Registered Pro and/or Land Fred E Certificate No <u> 3950</u>

2000

1000

500

## DRILLING SCHEDULE - McDANIEL "C" #1E

1550' FNL & 870' FLW, Section 19, T29N, RllW, San Juan County, New Mexico

TD: 6425' ELEVATION: 5618' GR Basin Dakota FIELD:

GEOLOGY:

Formation Tops:

| Ojo Alamo Fruitland Pictured Cliffs Cliff House | 730'<br>1450'<br>1705'<br>3270'<br>4065' | Gallup<br>Graneros<br>Dakota | 5310'<br>6110'<br>6225' |
|---|--|------------------------------|-------------------------|
| Point Lookout                                   | 4065'                                    |                              |                         |

IES and GR-Density from TD to surface casing. Logging Program:

None. Coring Program:

None. Natural Gauges:

DRILLING:

Tool Pusher: Contractor:

325-1841 SRC Answering Service: SRC Representative: 325-7391 Dispatch Number:

Mud Program: Fresh water to 5250'. Mud up at 5250'. Maintain mud wgt from 8.9 -9.3; vis of 35 - 40 sec; water loss of 10 - 12 cc.

MATERIALS:

| MATERIALS:  Casing Program: | Hole Size | Depth_                        | Casing Size      | Wt. & Grade  |  |
|-----------------------------|-----------|-------------------------------|------------------|--------------|--|
| Casing Flogram.             | 12-1/4"   | 200 <b>'</b><br>6425 <b>'</b> | 8-5/8"<br>4-1/2" | 24#<br>15.5# |  |

### FLOAT EQUIPMENT:

Pathfinder guide shoe. 8-5/8" Surface Casing:

41/2" Production Casing: Pathfinder guide shoe and Howco self-fill insert valve. Run 5 centralizers every other joint above shoe. Run Dowell stage tool at 4450' and 1900'. Run cement basket 1 joint below and 5 centralizers above each tool.

8-5/8" X 10", 2000# Casinghead with 4-1/2" casing hanger. Wellhead Equipment: 10" X 6", 2000# tubing head and tree.

## DRILLING SCHEDULE MCDANIEL "C" #1E

Page two

#### Cementing Program:

8 5/8" Surface Casing - 140 sacks (165 cu. ft.) of Class "B" w/l/4# gel flake per sack & 3% CaCl<sub>2</sub>. WCC 12 hours. Test to 600# prior to drilling out. (Volume is 100% excess.)

4 1/2" Production String - STAGE ONE - 215 sacks (317 cu. ft.) of 50/50 Poz w/6%  $\frac{1}{4}$  gel flake/sx, followed by 50 sacks of Neat w/2% CaCl<sub>2</sub>. (Volume is 25% excess to cover top of Gallup.)

STAGE TWO - 270 sacks (403 cu. ft.) of 50/50 Poz w/6% gel, followed by 50 sacks of Neat w/2% CaCl<sub>2</sub>. (Volume is 50% excess to cover top of Cliff House.)

STAGE THREE - 270 sacks (400 cu. ft.) of 50/50 Poz w/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



November 7, 1979

United States Geological Survey P. O. Box 959 Farmington, New Mexico

Attention: James Sims

Dear Sir:

Enclosed please find a map showing existing roads and planned access roads to Southland Royalty Company's McDaniel "C" #1E well. The locations of tank batteries and flow lines will be on location with well. A burn pit will be provided for disposal of trash. Cuttings, drilling fluid and produced fluids will be put into the reserve pit and properly disposed of depending on amount and type of fluids.

Contractor will furnish restroom facilities on location.

There will be no air strips or camps.

Also, encolsed is a location layout showing approximate location of rig, pits and pipe racks and cut required to build this location.

Water supply will be the Citizens Ditch

The location will be restored according to Bureau of Land Management standards. This work will begin when all related construction is finished.

Mr. Ross Lankford will be Southland Royalty Company's field representative supervising these operations.

Yours truly,

L. O. Van Ryan

District Production Manager

LOVR/dg



United States Geological Survey P. O. Box 959 Farmington, New Mexico 87401

Attention: James Sims

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 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: November 7, 1979 Name:

Title: District Production Manager



November 7, 1979

United States Geological Survey P. O. Box 959 Farmington, New Mexico

Attention: James Sims

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.

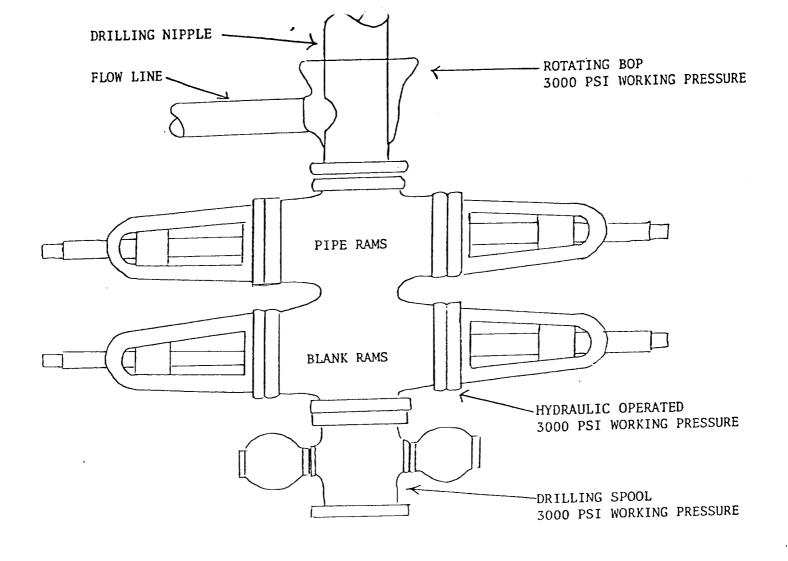
The preventer is 3000# working pressure and 6000# test.

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,

L. O. Van Ryan

District Production Manager



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

