

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## 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

940' FNL &amp; 1430' FWL

At proposed prod. zone

## 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

44 miles northeast of Aztec, New Mexico

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drg. unit line, if any)

## 16. NO. OF ACRES IN LEASE

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

320

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

## 19. PROPOSED DEPTH

8237'

## 20. ROTARY OR CABLE TOOLS

Rotary

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

6650' GR

## 22. APPROX. DATE WORK WILL START\*

May 15, 1979

## 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"	36#	300'	189 cu. ft.
8-3/4"	7"	20#	6231'	536 cu. ft. (1st stage)
				484 cu. ft. (2nd stage)
6-1/4"	4-1/2"	10.5#	6081'-8237'	380 cu. ft.
	2-3/8"	4.7#	8200'	
	1-1/2"	2.76#	6000'	

Surface formation is San Jose.

Top of Ojo Alamo sand is at 1712'.

Top of Pictured Cliffs sand is at 3497'.

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

An air system will be used to drill from intermediate depth to total depth.

It is anticipated that a GR-Density and an IES log will be run at intermediate depth.

It is anticipated that a GR-Density and a GR-Induction log will be run at total depth.

It is expected that this well will be drilled before August 15, 1979. This depends on time required for approvals, rig availability and the weather.

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

Mesaverde gas is dedicated.

Dakota gas is not dedicated.

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

TITLE District Production Manager DATE May 1, 1979

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

U. S. GEOLOGICAL SURVEY  
FARMINGTON, N.M.

\*See Instructions On Reverse Side

NMOCC

5. LEASE DESIGNATION AND SERIAL NO.

NM-6892

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Reese Mesa

9. WELL NO.

#5

10. FIELD AND POOL, OR WILDCAT

Blanco Mesaverde  
Basin Dakota11. SEC., T., R., M., OR BLK.  
AND SURVEY OR AREA

Section 13, T32N, R8W

12. COUNTY OR PARISH

13. STATE

San Juan

New Mexico

**NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

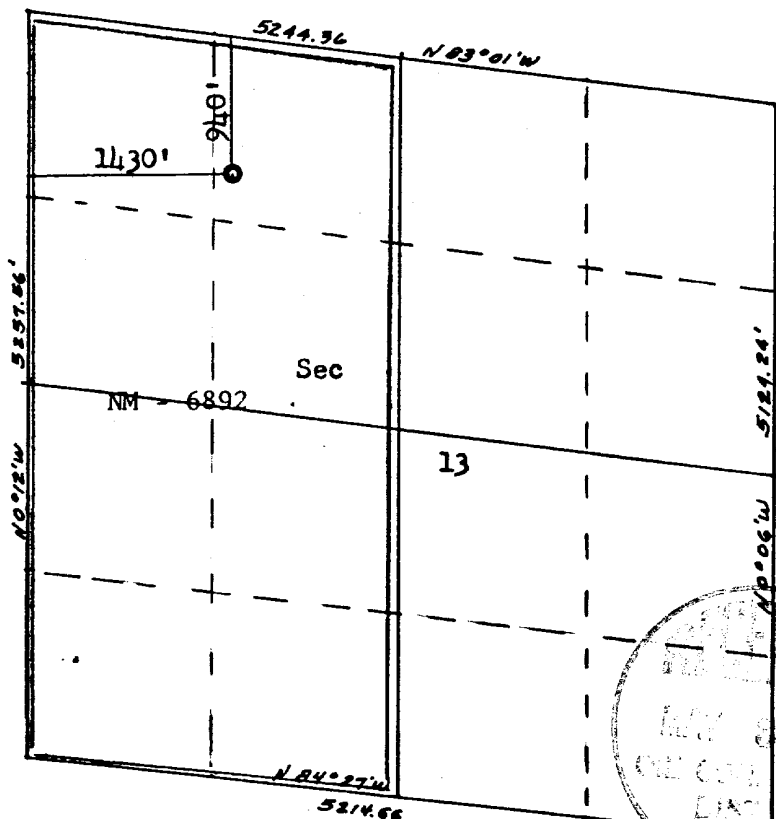
Operator <b>SOUTHLAND ROYALTY COMPANY</b>			Lease <b>REESE MESA</b>		Well No. <b>5</b>
Unit Letter <b>C</b>	Section <b>13</b>	Township <b>32N</b>	Range <b>8W</b>	County <b>SAN JUAN</b>	
Actual Footage Location of Well: <b>940</b> feet from the <b>North</b> line and <b>1430</b> feet from the <b>West</b> line					
Ground Level Elev: <b>6650</b>	Producing Formation <b>Mesaverde-Dakota</b>		Pool <b>Blanco-Basin</b>	Dedicated Acreage: <b>320</b> Acres	

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?

☐ Yes    ☐ No    If answer is "yes," type of consolidation \_\_\_\_\_

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.



Scale: 1"=1320'

**CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name \_\_\_\_\_

Position \_\_\_\_\_

**District Production Manager**

Company \_\_\_\_\_

**Southland Royalty Company**

Date \_\_\_\_\_

**May 1, 1979**

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 \_\_\_\_\_

**February 27, 1979**

Registered Professional Engineer and Land Surveyor

**Fred B. Kerr Jr.**

Certificate No. **KERR, JR.**

**3950**

DRILLING SCHEDULE - REESE MESA #5

Location: 940' FNL & 1430' FWL, Sec. 13, T32N, R8W, San Juan County, New Mexico

Field: Blanco Mesaverde/Basin Dakota

Elevation: 6650' GR

Geology:

Formation Tops:	Ojo Alamo	1712'	Cliff House	5337'
	Fruitland	2532'	Point Lookout	5831'
	Pictured Cliffs	3497'	Intermediate depth	6231'
			Total Depth	8237'

Logging Program: GR-Density and IES at intermediate total depth.  
GR-Density and GR-Induction at total depth.

Coring Program: None

Natural Gauges: Gauge at last connection above Cliff House, Point Lookout and total depth.  
Gauge any increase in gas flow.

Drilling:

Contractor:

Tool Pusher:

SRC Representative:

SRC Ans. Service: 325-1841

Dispatch Number: 325-7391

Mud Program: Fresh water mud from surface to Intermediate total depth.  
Air from intermediate to total depth.

Materials:

Casing Program:	Hole Size	Depth	Casing Size	Wt. & Grade
	12-1/4"	300'	9-5/8"	36# K-55
	8-3/4"	6231'	7"	20# K-55
	6-1/4"	6081'-8237'	4-1/2"	10.5# K-55

Float Equipment:

9-5/8" Surface Casing: Pathfinder, type "A", guide shoe.

7" Intermediate Casing: Pathfinder, type "A", guide shoe. Pathfinder self-fill insert float valve. Five (5) Pathfinder rigid centralizers. Run float 2 joints above shoe. Run centralizers every other joint above shoe. Stage tool at 3850'. Petal basket two jts under stage tool. Centralizers (5) run every other joint above stage tool.

4-1/2" Liner: Pathfinder, type "AP", guide shoe. Pathfinder, type "A", flapper float collar. Liner hanger will have tie back capability for 4-1/2" casing.

Tubing:

Wellhead Equipment: 9 5/8" X 10", 2000# casing head.  
10", 2000# X 6", 2000# tubing head.

Cementing:

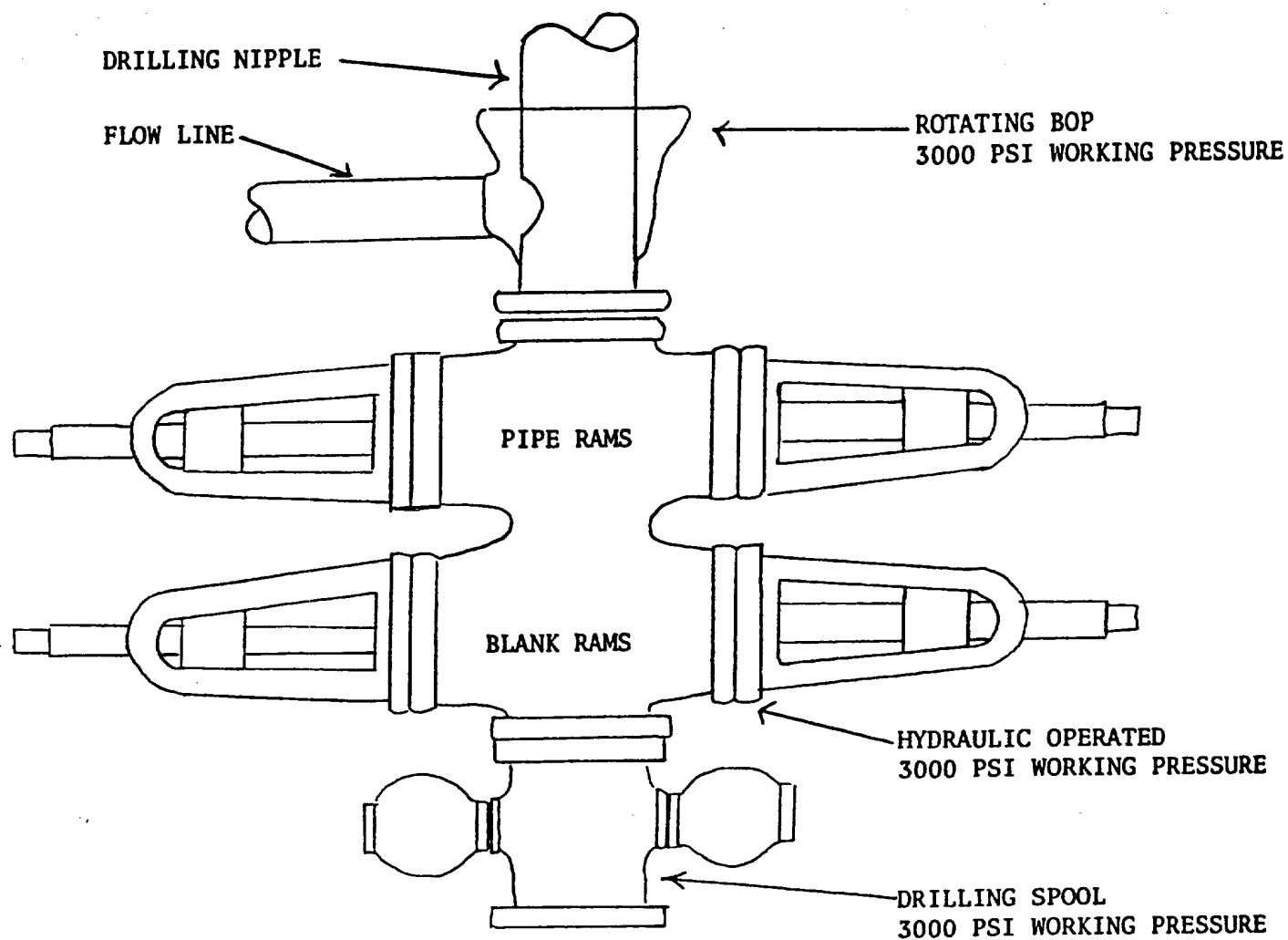
9 5/8" surface casing: 189 cu. ft. 160 sx Class "B" with 1/4# gel flake per sack and 3%  $\text{CaCl}_2$  (100% excess).

7" intermediate casing: 536 cu. ft. 320 sx 50/50, Class "B", Poz with 6% gel. Mix with 7.2 gals water per sack to weigh 12.85 ppg. Tail in with 50 sacks of Class "B" with 2%  $\text{CaCl}_2$ . If lost circulation occurs, add 1/4# cello flake per sack (50% excess to cover Ojo Alamo).

2nd stage:

484 cu. ft., 325 sxs 50/50 Class B Poz with 6% Gel. Mix with 7.2 gals  $\text{H}_2\text{O}$  per sack to weigh 12.85 PPG.

4 1/2" liner: 380 cu. ft. Precede cement with 20 bbls. gelled water. Cement with 255 sx of 50/50, Class "B", Poz with 6% gel, 1/4# cello flake and .6% Halad 9. Mix cement with 7.2 gals water per sack to weigh 12.85 ppg (70% excess).



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



**Southland Royalty Company**

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

Attention: Mr. P. T. McGrath

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: May 1, 1979

Name: 

Title: District Production Manager



**Southland Royalty Company**

May 1, 1979

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

Attention: Mr. P. T. McGrath

Dear Sir:

Enclosed please find a map showing existing roads and planned access roads to Southland Royalty Company's Reese Mesa #5 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, enclosed is a location layout showing approximate location of rig, pits and pipe racks and cut required to build this location.

Water supply will be an irrigation ditch from the Pine River.

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



**Southland Royalty Company**

May 1, 1979

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

Attention: Blowout Preventer Plan

Dear Sir:

All drilling and completion rigs will be equipped with 6" or larger double gate hydraulic blowout preventers and a hydraulic operated 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





LOVR/dg





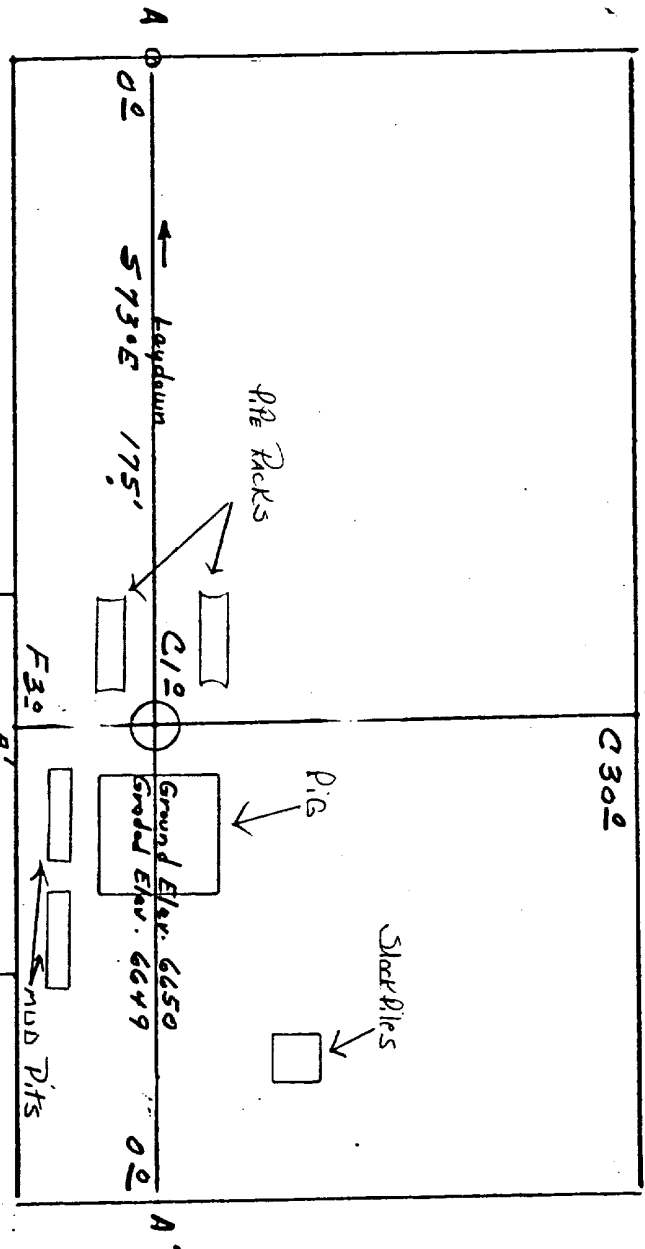
Vicinity Map for  
SOUTHLAND ROYALTY CO. #5 REESE MESA  
94°0'FNL 114°30'FWL Sec 13-T32N-R8W  
SAN JUAN COUNTY, NEW MEXICO



PROPOSED LOCATION   
EXISTING LOCATIONS   
PROPOSED ROAD   
EXISTING ROADS 

Vicinity Map for  
SOUTHLAND ROYALTY CO. #5 REESE MESA  
940'FNL 1430'FWL Sec 13-T32N-R8W  
SAN JUAN COUNTY, NEW MEXICO

LOCATION: FIDALGO LUT  
 SOUTHLAND ROYALTY COMPANY #5 REESE MESA  
 940' FNL 14,30' FNL Sec 13-T32N-R8W SAN JUAN COUNTY, NEW MEXICO

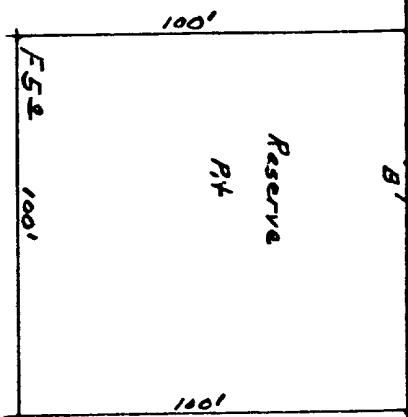


Vert. 1"=40'      A-A'      Horiz. 1"=100'

6670					
6660					
6650					
6640					

B-B'

6670					
6660					
6650					
6640					



Vert. 1"=40'      C-C'      Horiz. 1"=100'


D-D'


KERR LAND SURVEYING  
 Date: 2-27-79