

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

CONTACT RECEIVING  
OFFICE FOR NUMBER  
OF COPIES REQUIRED  
(Other instructions on  
reverse side)

30-025- 30860  
BLM Roswell District  
Modified Form No.  
NM060-3160-2

RECEIVED  
5. LEASE DESIGNATION AND SERIAL NO.  
NM-93  
6. IF INDIAN, ALLOTTEE, OR TRIBE NAME  
7. UNIT AGREEMENT NAME  
8. FARM OR LEASE NAME  
West Corbin Federal  
9. WELL NO.  
22  
10. FIELD AND POOL, OR WILDCAT  
West Corbin (Delaware)  
11. SEC., T., R., M., OR BLK.  
AND SURVEY OR AREA  
Sec. 18, T18S, R33E  
12. COUNTY OR PARISH  
Lea  
13. STATE  
NM

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

a. 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  
3a. AREA CODE & PHONE NO.  
915/686-5600  
3. ADDRESS OF OPERATOR  
21 Desta Dr., Midland, TX 79705  
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
At surface  
1980' FNL & 1780' FWL  
At proposed prod. zone  
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
11 miles southeast of Maljamar, NM  
15. DISTANCE FROM PROPOSED\*  
LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)  
1830'  
16. NO. OF ACRES IN LEASE  
640  
17. NO. OF ACRES ASSIGNED  
TO THIS WELL  
40  
18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.  
200' (SEE NOTE)  
19. PROPOSED DEPTH  
5500'  
20. ROTARY OR CABLE TOOLS  
Rotary  
21. ELEVATIONS (Show whether DF, RT, GR, ETC.)  
3880' GR.  
22. APPROX. DATE WORK WILL START\*  
09 April 1990

23. PROPOSED CASING AND CEMENTING PROGRAM

| HOLE SIZE | CASING SIZE | WEIGHT/FOOT | GRADE | THREAD TYPE | SETTING DEPTH | QUANTITY OF CEMENT |
|-----------|-------------|-------------|-------|-------------|---------------|--------------------|
| 12 1/4"   | 8 5/8"      | 24#         | K-55  | STC         | 370'          | 240 sx-Circ.       |
| 7 7/8"    | 5 1/2"      | 15.5#       | K-55  | STC         | 5500'         | 1000 sx-Circ.      |

Drill 12 1/4" hole to 370'. Set 8 5/8" csg @370'. Cmt w/240 sx. Circ.

Drill 7 7/8" hole to 5500'. Set 5 1/2" csg @ 5500'. Cmt w/1000 sx. Circ.

MUD PROGRAM: 0-370' fresh water gel & lime; 370'-5500' salt water, MW 9.8-10.2. No abnormal pressures or temperatures expected.

BOP PROGRAM: 10"-3M BOP stack to be installed on 8 5/8" & left for remainder of drilling. Stack to consist of annular BOP, blind ram BOP, and one pipe rem BOP. Test BOP's with an independent tester after setting the 8 5/8" csg.

NOTE: The West Corbin Federal #18 is a twin to this well & produces from the Wolfcamp formation.

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

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 Robert Bradshaw TITLE Sr. Staff Env./Reg. Spec. DATE 01 March 1990  
(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
APPROVED By [Signature] TITLE \_\_\_\_\_ DATE 4-4-90  
CONDITIONS OF APPROVAL, IF ANY: \_\_\_\_\_

\*See Instructions On Reverse Side

TITLE 18 U.S.C. SECTION 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

SOUTHLAND ROYALTY COMPANY  
(Operated by Meridian Oil Inc.)

West Corbin Federal No. 22  
1980' FNL & 1780' FWL  
Sec. 18, T-18-S, R-33-E  
Lea County, New Mexico  
NM-93

To supplement USGC Form 3160-3 Application to Drill the following additional information is submitted concerning questions on Page 5 of NTL-6:

1. See Form 3160-3
2. See Form 3160-3
3. The geological name of surface formation is: Ochoa
4. See Form 3160-3
5. See Form 3160-3
6. The estimated tops of important geological markers are:

|            |        |          |        |
|------------|--------|----------|--------|
| Queen      | 4,090' | Delaware | 5,040' |
| San Andres | 4,690' |          |        |
7. The estimated depths at which anticipated water, oil, gas, and mineral bearing strata are as follows:

|          |              |
|----------|--------------|
| Delaware | 5,040' - Oil |
|----------|--------------|
8. See Form 3160-3. All casing will be new.
9. See Form 3160-3 for depths of strings. Cement volumes and additions as follows:
  - a. 8 5/8" csg: Cement w/ 240 sx Cl "C" + 2% CaCl<sub>2</sub> + 1/4#/sx CF.
  - c. 5 1/2" csg: Cement w/ 735 sx Cl "C" Lite + 12% SALT + 1/4#/sx CF and tail in w/ 265 sx Cl "C" Neat. Circulate.
10. The pressure control diagram is attached to Form 3160-3. The following additional information is as follows:

8 5/8" casing installation: 10" - 3M BOP stack to be installed and tested by an independent tester to 3,000 psi before drilling the 8 5/8" casing shoe. The BOP stack to consist of an annular BOP, a blind ram BOP, and one pipe ram BOP.
11. See Form 3160-3
12.
  - A. DST Program: None
  - B. Core: None
  - C. Mud Logging: None
  - D. Wire Line Logs:

The following suite of logs will be run in both of the listed intervals:

|            |                            |
|------------|----------------------------|
| CNL-FDC-GR | TD-3000' (GR/CNL to surf.) |
| DLL-RXO    | TD-3000'                   |
13. No abnormal pressures are anticipated. Bottom hole pressures at TD expected to be 2000 psi. Bottom hole temperature 110° F. No Hydrogen Sulfide expected in this known drilling area. No crooked hole or abnormal deviation problems.
14. Anticipated starting date to spud - on or before 4-09-90. Anticipated drilling time expected to be 10 days from surface to TD.

6. Source of Construction Material:

Caliche for surfacing access road and pad will be obtained from an existing pit located in the SW/4 NE/4 of Sec. 9 or in the SE/4 SW/4 of Sec. 7. There has been an Archaeological Report filed on these pits.

7. Handling Waste Disposal:

- a. Drill cuttings - disposed into drilling pits.
- b. Drill fluids - allowed to evaporate in drill pits until pits dry.
- c. Produced water during testing - drill pits.
- d. Produced oil during testing - storage tank until sold.
- e. Current laws and regulations pertaining to disposal of human waste will be observed.
- f. Reserve pit will be plastic lined.
- g. Waste paper, garbage, and junk will be disposed of into a special trash bin on location and regularly disposed of into an approved landfill site. All waste material will be contained to prevent scattering by wind.
- h. All trash and debris will be buried or removed from well site within 30 days after drilling and/or completion operations are finished.

8. Ancillary Facilities:

None

9. Plans for Restoration of Surface:

- a. After completion of drilling and/or completion of operations, all equipment and other material not needed for operations will be removed. Pits will be filled and locations cleaned of trash and junk to leave well in as aesthetically pleasing a condition as possible.
- b. Any unguarded pits containing fluids will be fenced until filled.
- c. After abandonment of well, surface restoration will be in accordance with the Bureau of Land Management Surface Requirements.

10. Topography and Soil:

New Mexico Archaeological Services, Inc. Report by Dr. J. Loring Haskell will be submitted when available.

11. Land Use:

Grazing and hunting - Federal

Surface Lessee - Caviness Cattle Company  
c/o Mr. Gary Caviness  
East Star Route  
Maljamar, New Mexico 88264

12. Surface Ownership:

Bureau of Land Management (Federal)

13. Operators Representatives:

Field representatives (Responsible for compliance with approved surface use and operations plan):

Southland Royalty Company  
(Operated by Meridian Oil Inc.)  
P. O. Box 837  
Hobbs, New Mexico 88240  
Office: 505-393-5844

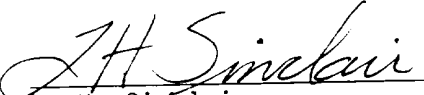
Mr. Johnny Ellis, Drilling Foreman, or a consultant  
Hobbs, New Mexico  
Home: 505-393-8150

Mr. Bill Dawson, Drilling Superintendent  
Midland, Texas Office: 915-686-5600  
Home: 915-682-9037

14. Certification:

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route; that I am familiar with conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by Meridian Oil Inc. and its contractors and sub-contractors in uniformity with this plan and the terms and conditions under which it is approved.

Date: 3-2-90

  
L. H. Sinclair  
Senior Drilling Engineer  
Meridian Oil Inc.

## SURFACE USE PLAN

SOUTHLAND ROYALTY COMPANY  
(Operated by Meridian Oil Inc.)

West Corbin Federal No. 22  
1980' FNL & 1780' FWL  
Sec. 18, T-18-S, R-33-E  
Lea County, New Mexico  
NM-93

This plan is submitted with Application to Drill on above described well. The minerals are federal and the surface is leased for grazing (See below for surface lessee). The purpose of this plan is to describe the location, proposed construction activities and operations plans, magnitude of necessary surface disturbance and procedures to be followed in rehabilitating the surface after completion of the operation so that complete appraisal can be made of the environmental effects associated with the operations.

### 1. Existing Roads:

Exhibit "A" is a portion of a USGS Topographic map showing the location of the proposed well as staked.

Directions to the well are as follows: From the junction of US 180 and Hwy. 529, 14 miles west of Hobbs, go NW 19.4 miles on Hwy. 529, thence SW and south 2.8 miles on lease road to a point  $\pm 2300'$  east of the NW<sup>C</sup> of the Section 18.

### 2. Planned Access Road:

- a. An existing access road will be used.

### 3. Location of Existing Wells in Area:

See Exhibit "B"

### 4. Location of Proposed Facilities:

Location of proposed well site and tank battery is shown on Exhibit "C". The battery will be located on proposed well pad, no additional surface disturbance will be necessary.

### 5. Water Supply:

No available surface or sub-surface fresh water exists in the vicinity of the proposed well. Drilling water will be transported or pumped to the drill site from the nearest commercial source.

Submit to Appropriate  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

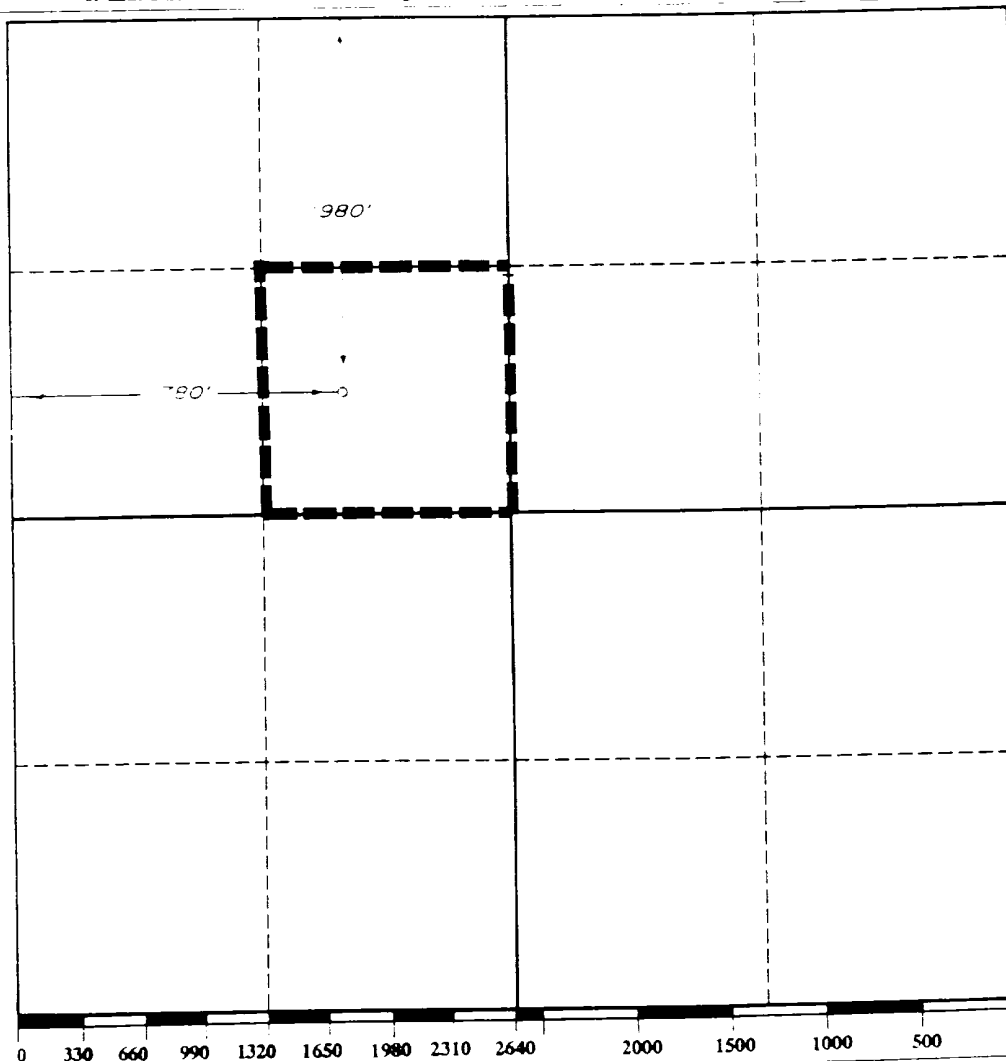
All Distances must be from the outer boundaries of the section

Operator SOUTHLAND ROYALTY COMPANY Lease WEST CORBIN FEDERAL Well No 22  
Unit Letter - Section 8 Township 9-S Range 33-E County NMPM EA EA

Actual Footage Location of Well:

980' feet from the NORTH line and 1780' feet from the WEST line  
Ground level Elev 7880' Producing Formation DELAWARE Pool WEST CORBIN Dedicated Acreage 40 Acres

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty)
- If more than one lease of different ownership is dedicated to the well, have the interest 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 interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature Robert L. Bradshaw  
Printed Name Robert L. Bradshaw  
Position Sr. Staff Env./Reg. Spec.  
Company Meridian Oil Inc.  
Date March 2, 1990

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes or 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 1990  
Signature & Seal Y. LYNN  
Professional Surveyor NO. 7920  
Certificate No. 7920

RECEIVED

APR 5 1990

OCD

HOBBS OFFICE

Topographic map of a coastal area. The map features a grid system and various labels. The coastline is irregular, with several 'Drill Hole' locations marked by dashed lines and 'Oil Well' locations marked by solid lines. Elevation contours are shown, with labels such as 3855, 3860, 3866, 3870, 3877, 3880, 3890, and 3891. A large area is labeled '18'. The map is titled 'D U E R E C H O' and 'P L A'.

CONTOUR INTERVAL 10'

LEASE WEST CORBIN FEDERAL #22

LAGUNA GATUNA NW &amp; DOG LAKE, N. MEX.

LONG: W 103°42'10"



Review this plot and notify us immediately of any possible discrepancy.

## Surveying & Mapping for the Oil & Gas Industry

EXHIBIT 4

(214) 838-9802  
SOUTHLAND ROYALTY COMPANY  
West Corbin Federal No. 22  
Sec. 18, T18S, R33E