

## BLM-CARLSBAD

Form 3160-3  
(July 1992)SUBMIT IN PLICATE\*  
(Other instructions on  
reverse side)FORM APPROVED  
OMB NO. 1004-0136  
Expires: February 28, 1995

J-58

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL OR DEEPEN

## 1a. TYPE OF WORK

DRILL ☒DEEPEN ☐

## b. TYPE OF WELL

OIL  
WELL ☒GAS  
WELL ☐OTHER ☐SINGLE  
ZONE ☐MULTIPLE  
ZONE ☐

## 2. NAME OF OPERATOR

SOUTHWEST ROYALTIES INC.

(NELSON PATTON)

## 3. ADDRESS AND TELEPHONE NO.

P.O. BOX 11390 MIDLAND, TEXAS 79702

407 NORTH BIG SPRING PHONE 915-686-9927

## 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface 330' FNL &amp; 660' FEL SEC. 34 T17S-R33E LEA CO. NM

At proposed prod. zone SAME

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

8 Miles Southeast of Maljamar New Mexico

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any) 330'

## 16. NO. OF ACRES IN LEASE

520

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.

660'

## 19. PROPOSED DEPTH

5500'

## 20. ROTARY OR CABLE TOOLS

Rotary

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

4142'

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

As soon as approved

23.

## PROPOSED CASING AND CEMENTING PROGRAM Lea County Controlled Water Basin

| SIZE OF HOLE | GRADE SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH     | QUANTITY OF CEMENT   |
|--------------|----------------------|-----------------|-------------------|--|
| 12 1/4"      | J-55 8 5/8"          | 24# WITNESS     | 1460' CIRCULATE   | 500 Sx. Hal-light + 400 Sx. Cl "C"                                   |
| 7 7/8"       | J-55 5 1/2"          | 15.5#           | 5500' (see slips) | 350 Sx. Hal-light W/10# Salt/Sx.<br>+ 250 Sx. Class "C" + additives. |

- Set 40' of 20'' Conductor Pipe Cement to surface with Redi-Mix
- Drill 12 1/4'' Hole to Run 8 5/8'' Casing to 1460' J-55, 24# ST&C. Cement with 500 Sx Halliburton-Light tail in 400 Sx class "C". circulate to surface.
- Drill 7 7/8'' hole to 5500' Run 5500' of 5 1/2'' J-55, 15.5# ST&C casing. Cement with 350 Sx of Halliburton-Light cement W/10# salt per Sx tail in with 250 Sx class "C" + additives. Tie back into the 8 5/8" casing at 1460'. Verify top of cement with temp. Log or cement bond Log. OPER. OGRID NO. 21355

PROPERTY NO. 16868

POOL CODE 43329

EFF. DATE 9/11/95

API NO. 30-D25-33094

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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.

RECEIVED

Agent

DATE 07/18/95

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL IF ANY:

APPROVED BY

TITLE

DATE

\*See Instructions On Reverse Side

NOS REC'D: 7/11/95

## DISTRICT I

P.O. Box 1980, Hobbs, NM 88241-1980

## State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102

Revised February 10, 1994

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

## DISTRICT II

P.O. Drawer DD, Artesia, NM 88211-0719

## DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

## DISTRICT IV

P.O. BOX 2088, SANTA FE, N.M. 87504-2088

## OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

|                                   |   |   |
|-----------------------------------|---|---|
| API Number<br><b>30-025-33094</b> | Pool Code<br>43329                                | Pool Name<br>Maljamar-Grayburg San Andres |
| Property Code<br>16868            | Property Name<br>EILLIAMS <del>"34" FEDERAL</del> | Well Number<br>12                         |
| OGRID No.<br>021355               | Operator Name<br>SOUTHWEST ROYALTIES INC.         | Elevation<br>4142                         |

## Surface Location

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| A             | 34      | 17 S     | 33 E  |         | 330           | NORTH            | 660           | EAST           | LEA    |

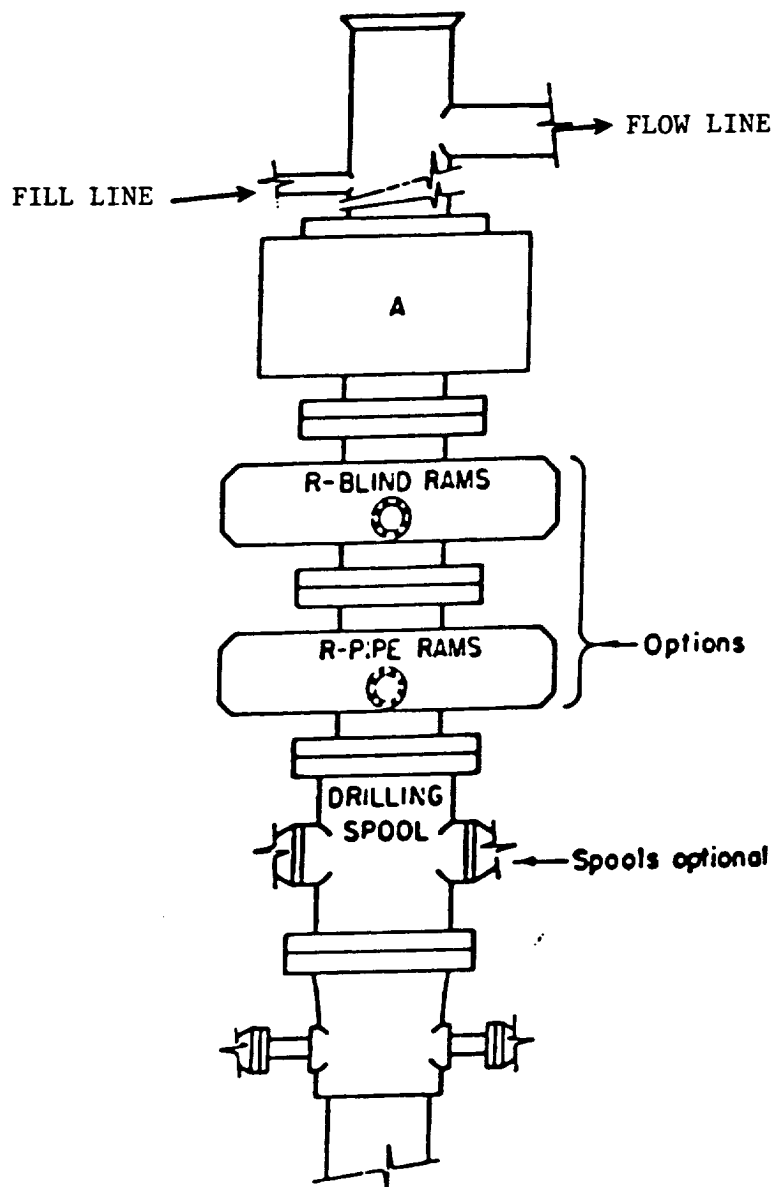
## Bottom Hole Location If Different From Surface

| UL or lot No.         | Section         | Township           | Range     | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|-----------------------|-----------------|--------------------|-----------|---------|---------------|------------------|---------------|----------------|--------|
|                       |                 |                    |           |         |               |                  |               |                |        |
| Dedicated Acres<br>40 | Joint or Infill | Consolidation Code | Order No. |         |               |                  |               |                |        |

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

|  |  |  |
|--|--|--|
|  | <b>OPERATOR CERTIFICATION</b><br>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.<br><br>Signature<br>Joe T. Janica<br>Printed Name<br>Agent<br>Title<br>07/18/95<br>Date  |  |
|  | <b>SURVEYOR CERTIFICATION</b><br>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 belief.<br>JULY 10, 1995<br>Date Surveyed<br><br>Signature of Professional Surveyor<br>7-1245<br>95-1087<br>JOHN W. WEST<br>RONALD J. EIDSON<br>CERTIFIED PROFESSIONAL SURVEYOR |  |
|  | DMCC<br>676<br>3239<br>1264  |  |
|  |  |  |

EXHIBIT "A"



# **ARRANGEMENT SRRA**

900 Series  
3000 PSI WP

EXHIBIT "E"  
BOP SKETCH TO BE USED ON  
SOUTHWEST ROYALTIES INC.  
EILLIAMS "34" FEDERAL # 12  
330' FNL & 660' FEL SEC. 34  
T17S-R33E LEA CO. NM

# APPLICATION TO DRILL

SOUTHWEST ROYALTIES INC.  
EILLIAMS "34" FEDERAL #12  
330' FNL & 660' FEL SEC. 34  
T17S-R33E LEA CO. NM

In response to questions asked under Section II B of Bulletin NTL-6 the following information is provided for your consideration:

1. Location: 330' FNL & 660' FEL SEC. 34 T17S-R33E LEA CO. NEW MEXICO
2. Elevation above sea level: 4153' GL
3. Geologic name of surface formation: Quaternary Aeolian Deposits.
4. Drilling tools and associated equipment: Conventional rotary drilling rig using fluid as a circulating medium for solids removal.
5. Proposed drilling depth: 5500'
6. Estimated tops of geological markers:

|                   |       |                   |       |
|-------------------|-------|-------------------|-------|
| Rustler anhydrite | 1440' | Top of Queen      | 3727' |
| Top of salt       | 1605' | Top of Grayburg   | 4150' |
| Base of salt      | 2630' | Top of San Andres | 4526' |
| Top of Yates      | 2730' |                   |       |
7. Possible mineral bearing formation:

Grayburg -San Andres Oil

## 8. Casing program:

| Hole size | Interval | OD casing | Weight  | Thread    | Collar | Grade              | Condition |
|-----------|----------|-----------|---------|-----------|--------|--------------------|-----------|
| 25"       | 0-40'    | 20"       |         | Conductor | Pipr   | .30 Wall thickness |           |
| 12 1/4"   | 0-1460'  | 8 5/8"    | 24#     | 8-R       | ST&C   | J-55               | New       |
| 7 7/8"    | 0-5500'  | 5 1/2"    | 15 5/8# | 8-R       | ST&C   | J-55               | New       |

# SURFACE USE PLAN

SOUTHWEST ROYALTIES, INC.  
 EILLIAMS "34" FEDERAL #12  
 330' FNL & 660' FEL SEC.34  
 T17S-R33E LEA CO. NM

## 9. Cementing and Setting Depth:

|       |            |  |
|-------|------------|--|
| 20'   | Conductor  | Set @ 40' Cement With Redi-Mix<br>Cement to surface  |
| 8 5/8 | Surface    | Set 1460' of 8 5/8" 24# 8-R J-55 ST&C<br>Cement with 500 Sx of light<br>cement tail in with 400 Sx<br>class "C" with additives<br>Circulate cement to surface  |
| 5½    | Production | Set 5500' of 5½ 15.5# 8-R J-55 ST&C<br>Cement with 350 Sx of light<br>cement with 10# Salt/Sx tail<br>in with 250 Sx of Class "C"<br>or 50/50 POZ with additives<br>Tie Back into 8 5/8" casing.<br>Verify top of cement with log. |

10. Pressure Control Equipment: Exhibit "E". A Blow-out Preventer (no less than 900 series 3000 psi working pressure) consisting of double ram type preventer with bag type preventer. Units will be hydraulically operated. Exhibit "E-1" Choke Manifold and Closing Unit. Blind rams on top, pipe rams on bottom to correspond with size of drill pipe in use. BOP will be nipped up on 8 5/8" casing and remain on well until casing is run and cemented. BOP will be tested as well as choke manifold. BOP will be worked at least once each day while drilling and blind ram will be worked on trips when no drill pipe is in hole. Flow sensor PVT, full opening stabbing valve and upper kelley cock will be utilized. No pressures greater than 2000 psi anticipated.

## 11. Proposed Mud Circulating System:

| Depth     | Mud Wt.     | Mud Visc. | Fluid Loss | Type Mud   |
|-----------|-------------|-----------|------------|--|
| 0-1460    | 8.6 - 9.0   | 34-36     | NC         | Fresh Water  |
| 1460-5500 | 10.0 - 10.1 | 28-29     | NC         | Brine water<br>w/lime for pH<br>control and paper<br>for seepage |

To log well and run casing viscosity may have to be raised and water loss may be required to be lowered to 8cc or less depending on hole conditions.

APPLICATION TO DRILL

SOUTHWEST ROYALTIES, INC.  
EILLIAMS "34" FEDERAL # 12  
330' FNL & 660' FEL SEC.34  
T17S-R33E LEA CO. NM

**12. Testing, Logging and Coring Programs:**

- (A) No planned DST
- (B) Open Hole Logs: DLLw/LDT-CNL from TD to 1460' with Gamma Ray to surface.
- (C) No coring planned.

**13. Potential Hazards:**

No abnormal pressures of temperature zones expected (nothing abnormal in offset wells or other wells in the area). Hydrogen sulfide gas is not anticipated however, precautions for detection will be observed. No major lost circulation is expected (none reported in this area). H2S contingency attached "13-A".

**14. Anticipated Starting Date and Duration of Operation:** Road and location construction will begin after BLM approval of APD. Anticipated spud date 09/15/95 Drilling expected to take 10 to 12 days. If production casing is run an additional 20 days to complete and construct surface facility and place well on production.

**15. Other Facets of Operations:** After running casing, cased hole gamma ray collar correlation logs will be run from total depth over possible pay intervals. The Grayburg-San Andres will be perforated & stimulated. The well will be swab tested and potentialled as an oil well.