

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED  
SUBMIT IN TRIPLICATE\*  
(Other instructions on  
reverse side)

Form approved.  
Budget Bureau No. 1004-0136

Expires December 31, 1991

2003 JAN -9 AM 9:44

5. LEASE DESIGNATION AND SERIAL NO.

SF- 078764

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

Rosa Unit

8. FARM OR LEASE NAME, WELL NO.

230A

9. API WELL NO.

3003927288

10. FIELD AND POOL OR WILDCAT

Basin Fruitland Coal

11. SEC., T., R., M., OR BLK.  
AND SURVEY OR AREA

Sec. 31, T31N, R5W

12. COUNTY OR PARISH

Rio Arriba

13. STATE

NM

2. NAME OF OPERATOR

Williams Production Company, LLC

3. ADDRESS OF OPERATOR

c/o Walsh Engineering 7415 E. Main St., Farmington, NM 87402 (505) 327-4892

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

At Surface 1460' FNL and 790' FWL

At proposed Prod. Zone

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

25 miles NE of Blanco, NM

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY  
OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)

790'

16. NO. OF ACRES IN LEASE

2507.30

17. NO. OF ACRES ASSIGNED TO THIS WELL

232.89

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

75'

19. PROPOSED DEPTH

3327'

20. ROTARY OR CABLE TOOLS

Rotary

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

6512' GR

22. APPROX. DATE WORK WILL START\*

April 15, 2003

23. PROPOSED CASING AND CEMENTING PROGRAM

| SIZE OF HOLE | SIZE OF CASING | WEIGHT/FOOT | SETTING DEPTH     | QUANTITY OF CEMENT                             |
|--------------|----------------|-------------|-------------------|--|
| 12-1/4"      | 9-5/8"         | 36.0#       | +/- 300'          | ~211 cu.ft. Type III with 2% CaCl <sub>2</sub> |
| 8-3/4"       | 7"             | 20.0#       | +/- 3157'         | ~740 cu.ft. 65/35 poz & ~209 cu.ft. Type II    |
| 6-1/4"       | 5-1/2"         | 15.5#       | +/- 3057' - 3327' | Open hole completion - no cement               |

Williams Production Company proposes to drill a vertical well to develop the Fruitland Coal formation at the above described location in accordance with the attached drilling and surface use plans.

This location has been archaeologically surveyed by Independent Contract Archaeology. Copies of their report have been submitted directly to your office.

This APD also is serving as an application to obtain BLM road and pipeline right-of-ways. This well will not require any new access road (see Pipeline & Well Plats #3 & #4). The well will be accessed by an existing road that crosses the SW/NW, NW/SW of section 31, 31N, R5W and NE/SE of section 36, 31N 6W, where it joins the main "Rosa Road". Note: This well will be drilled on the same pad as the existing Rosa Unit #13A..

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 John C. Thompson, Agent

DATE

1/8/2003

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

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

David J. Markiewicz

TITLE

DATE

APR 14 2003

\*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.

DRILLING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"GENERAL REQUIREMENTS".

This action is subject to technical and  
procedural review pursuant to 43 CFR 3165.8  
and appeal pursuant to 43 CFR 3165.4

NMOCD

District I  
PO Box 1980, Hobbs, NM 88241-1980

District II  
PO Drawer DD, Artesia, NM 88211-0719

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

District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

Form C-102  
Revised February 21, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

# WELL LOCATION AND ACREAGE DEDICATION PLAT

|                                     |  |  |  |                                     |                       |
|-------------------------------------|--|--|--|-------------------------------------|-----------------------|
| 1 API Number<br><b>30-039-27288</b> |  | 2 Pool Code<br>71629                           |  | 3 Pool Name<br>Basin Fruitland Coal |                       |
| 4 Property Code<br>17033            |  | 5 Property Name<br>ROSA UNIT                   |  |                                     | 6 Well Number<br>230A |
| 7 OGRID No.<br>120782               |  | 8 Operator Name<br>WILLIAMS PRODUCTION COMPANY |  |                                     | 9 Elevation<br>6512'  |

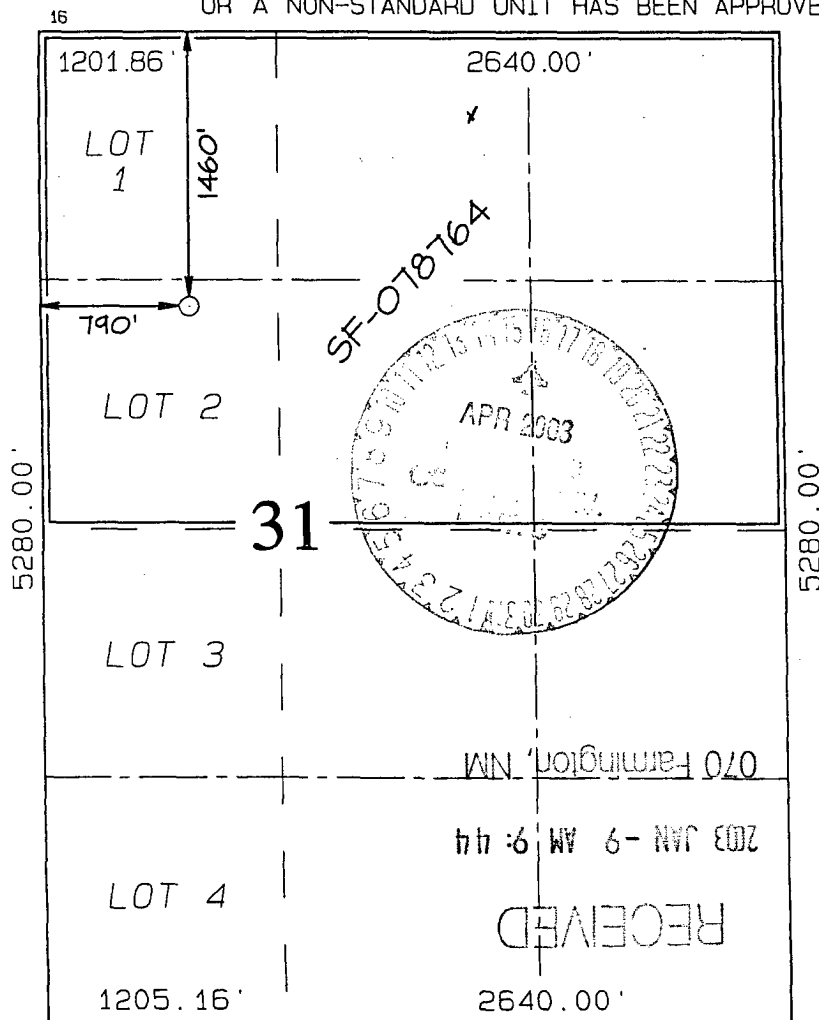
## 10 Surface Location

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County     |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|------------|
| F             | 31      | 31N      | 5W    |         | 1460          | NORTH            | 790           | WEST           | RIO ARriba |

## 11 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       |
|--|---------|----------|-------|---------|--------------------|------------------|-----------------------|----------------|--------------|
| 12 Dedicated Acres<br>232.89 Acres - (N/2) |         |          |       |         | 13 Joint or Infill |                  | 14 Consolidation Code |                | 15 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



|   |  |
|---|--|
| 17 OPERATOR CERTIFICATION   |  |
| I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief  |  |
| <i>John C. Thompson</i>   |  |
| Signature<br>John C. Thompson   |  |
| Printed Name<br>Agent   |  |
| Title<br>11/18/02   |  |
| Date  |  |
| 18 SURVEYOR CERTIFICATION   |  |
| 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. |  |
| Survey Date: OCTOBER 23, 2002   |  |
| Signature and Seal of Professional Surveyor   |  |
|   |  |
| <b>JASON C. EDWARDS</b><br>Certificate Number 15269   |  |



## **WILLIAMS PRODUCTION COMPANY**

### **Operations Plan**

*(Note: This procedure will be adjusted on site based upon actual conditions)*

|                            |  |                         |                      |
|----------------------------|--|-------------------------|----------------------|
| <b><u>DATE:</u></b>        | 1/8/2003                                       |                         |                      |
| <b><u>WELLNAME:</u></b>    | Rosa #230A                                     | <b><u>FIELD:</u></b>    | Basin Fruitland Coal |
| <b><u>LOCATION:</u></b>    | SE/4 NW/4 Sec. 31, T31N, R5W<br>Rio Arriba, NM | <b><u>SURFACE:</u></b>  | Federal              |
| <b><u>ELEVATION:</u></b>   | 6512' GR                                       | <b><u>MINERALS:</u></b> | Federal              |
| <b><u>TOTAL DEPTH:</u></b> | 3327'  | <b><u>LEASE #</u></b>   | SF-078764            |

**I. GEOLOGY:** Surface formation - San Jose

**A. FORMATION TOPS:** ( KB)

|                 |       |
|-----------------|-------|
| Ojo Alamo       | 2572' |
| Kirtland        | 2702' |
| Fruitland       | 3047' |
| Top of Coal     | 3177' |
| Base of Coal    | 3327' |
| Pictured Cliffs | 3327' |
| Total Depth     | 3327' |

**B. LOGGING PROGRAM:** No mechanical logs. Mud logger will be present to determine intermediate casing point and TD.

**C. NATURAL GAUGES:** Gauge any noticeable increases in gas flow. Record all gauges in Tour book and on morning reports.

## **II. DRILLING**

**A. MUD PROGRAM:** Clear water with benex to 7" casing point. Treat for lost circulation as necessary. Expect 100% returns prior to cementing. Notify Engineering of any mud losses. If coal is detected before 3177' DO NOT drill deeper until Engineering is contacted.

**B. Drilling Fluid:** Coal section will be drilled with Fruitland Coal water. Mud logger will pick TD at +/- 3551'.

3327'

**C. BOP TESTING:** While drill pipe is in use, the pipe rams and the blind rams will be function tested once each trip. The anticipated reservoir is expected to be less than 1300 psi, so the rams will be tested to 1500 psi. The surface and intermediate casing strings will be pressure tested to 1500 psi in conjunction with the BOP test before drilling out cement. The drum brakes will be inspected and tested each tour. All tests, inspections and SPR's will be recorded in the tour book as to time and results.

### **III. MATERIALS**

#### **A. CASING PROGRAM:**

| <u>CASING TYPE</u> | <u>HOLE SIZE</u> | <u>DEPTH</u>   | <u>CASING SIZE</u> | <u>WT. &amp; GRADE</u> |
|--------------------|------------------|----------------|--------------------|------------------------|
| Surface            | 12-1/4"          | +/- 300'       | 9-5/8"             | 36# K-55               |
| Intermediate       | 8-3/4"           | +/- 3157'      | 7"                 | 20# K-55               |
| Prod. Liner        | 6-1/4"           | +/- 3057-3327' | 5-1/2"             | 15.5# K-55             |

#### **B. FLOAT EQUIPMENT:**

1. SURFACE CASING: 9-5/8" notched regular pattern guide shoe.
2. INTERMEDIATE CASING: 7" cement nose guide shoe with a self- fill insert float. Place float one(1) joint above the shoe and five(5) centralizers, spaced every other joint, starting with the float collar. Place turbulent centralizers, at 120' intervals, starting at 1585' to the surface. Total centralizers = 5 regular and 14 turbulent.
3. PRODUCTION LINER: 5-1/2"liner with notched collar on bottom.

#### **C. CEMENTING:**

*(Note: Volumes may be adjusted onsite due to actual conditions)*

1. SURFACE: Use 160 sx (211 cu.ft.) of "Type III" with 2% CaCl<sub>2</sub> and 1/4# of cello-flake/sk (Yield = 1.41 cu.ft./sk, Weight = 14.5 #/gal.). Use 125% excess to circulate the surface. WOC 12 hours. Test to 1500#.
2. INTERMEDIATE: Lead - 355 sx (740 cu.ft.) of "Type III" 65/35 poz with 8% gel, 1% CaCl<sub>2</sub> and 1/4# cello-flake/sk (Yield = 2.09 cu.ft./sk, Weight = 12.1 #/gal.). Tail - 150 sx (209cu.ft.) of "Type III" with 1/4# cello-flake/sk, and 1% CaCl<sub>2</sub> (Yield = 1.4 cu.ft./sk, Weight = 14.5#/gal.). Use 100% excess in lead and tail to circulate to surface. Total volume = 949 cu.ft. WOC 12 hours. Run a temperature survey after 8 hours if cement is not circulated. Test to 1500#..
3. PRODUCTION LINER: Open hole completion. No cement.

#### **IV COMPLETION**

##### **A. PRESSURE TEST**

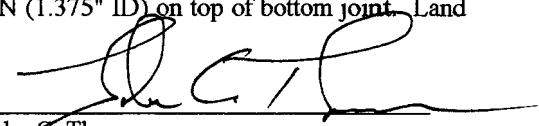
Pressure test 7" casing to 3300# for 15 minutes.

##### **B. STIMULATION**

**Cavitate Well** with reciprocation and rotation. Surge wells with water and air and then flow back to pit.  
Cavitate for 2 to 3 weeks. Maximum pressure not expected to exceed 2,000 psi.

##### **C. RUNNING TUBING**

1. Fruitland Coal: Run 2-3/8", 4.7#, J-55, EUE tubing with a SN (1.375" ID) on top of bottom joint. Land tubing approximately 50' above TD.

  
\_\_\_\_\_  
John C. Thompson  
Engineer

file:230ARosaOP

# Williams Production Company, LLC

## Well Control Equipment Schematic for 2M Service

Attachment to Drilling Technical Program

### Typical BOP setup

Location: San Juan Basin, New Mexico

Date: August 20, 2001

By: John Thompson (Walsh E&P)

