

~~TIGHT HOLE~~

In Lieu of
Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use APPLICATION FOR PERMIT--" for such proposals

070 FARMINGTON, NM

SUBMIT IN TRIPLICATE

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
Williams Production Company, LLC

3. Address and Telephone No. C/O Walsh Engineering & Production Corp.
7415 East Main, Farmington, NM 87402 505-327-4892

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1425' FNL & 495' FWL Sec 11, T31N, R6W (BHL: 987.58' FNL & 1985.73 FEL, Sec 10/31N/6W)

5. Lease Designation and Serial No.
SF - 078765

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation
Rosa

8. Well Name and No.
Rosa #381

9. API Well No.
30-039-27041

10. Field and Pool, or Exploratory Area
Basin Fruitland Coal

11. County or Parish, State
Rio Arriba, NM

CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☐ Notice of Intent
☒ Subsequent Report
☐ Final Abandonment

TYPE OF ACTION

- ☐ Abandonment
☐ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☐ Other See Below

- ☒ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut-Off
☐ Conversion to Injection
☐ Dispose Water
(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Williams Production Company, LLC intends to construct the Rosa #381 as a horizontal coal well as per the attached operations/directional plan. The bottom hole location at TD is planned to be 987.58' FNL & 1985.73' FEL, Sec 10, T31N, R6W.

Attached: Operations Plan

Directional Plan

Well Bore Schematic

14. I hereby certify that the foregoing is true and correct

Signed John C. Thompson Title Agent/Engineer Date 10/14/02

(This space for Federal or State office use)

Approved by Petr. Eng. Title Petr. Eng. Date 10/21/02

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.

*See Instruction on Reverse Side

CONDITIONS OF APPROVAL
Adhere to previously issued stipulations.

~~TIGHT HOLE~~

NMOCD

HOLD C104 FOR Directional Survey, Revised C102

TIGHT HOLE

TIGHT HOLE



WILLIAMS PRODUCTION COMPANY

DRILLING PLAN

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

<u>DATE:</u>	10/14/02	<u>FIELD:</u>	Basin Fruitland
<u>WELL NAME:</u>	Rosa Unit # 381 - HOR	<u>SURFACE:</u>	BOR
<u>SURFACE LOCATION:</u>	SW/4 SW/4 Sec. 11-T31N-R6W Rio Arriba, NM	<u>MINERALS:</u>	BLM
<u>ELEVATION:</u>	6,308' (GL)	<u>LEASE #</u>	N/A
<u>TOTAL DEPTH (MD):</u>	5,275 ft.		

I. GEOLOGY: Surface formation - San Jose

A. FORMATION TOPS: (KB)

	<u>TVD</u>	<u>MD</u>
Ojo Alamo	2,368 ft.	2,368 ft.
Kirtland Sh.	2,468 ft.	2,468 ft.
Fruitland Fm.	2,878 ft.	2,950 ft.
Target Fruitland Coal	2,988 ft.*	3,278 ft.
Pictured Cliffs ss	3,133 ft.	N/A

* Adjust Target Coal depths and thickness to OH Log on Rosa # 9-B.

Total Depth: 5,275 ft. (MD)

B. LOGGING PROGRAM: NONE

II. DRILLING

- A. MIRURT, Aztec # 124. PU BHA #1 and drill 12-1/4 in. Surface hole to + 500 ft. Run and cement 9-5/8 in. Surface Casing to + 500 ft.
- B. PU BHA #2 to drill Build Section of well. (Directional Plan attached). Note the West section line of Section 11 is a Hard Line. **Do not penetrate target coal interval prior to crossing this Hard Line (VS = 519 ft.).** Use LSND Mud to drill this interval.
- C. PU BHA #3 to drill Lateral Section of well. (Directional Plan attached). Note: Do not run HWDP past 40 degree angle point in the Build Section. Use Drilling Fluid Mixture, (Density selected after drilling the Rosa # 9-B), to drill this section.
- D. 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 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 STRING</u>	<u>HOLE SIZE</u>	<u>DEPTH</u>	<u>CASING SIZE</u>	<u>WT. & GRADE</u>
Surface	12-1/4"	500 ft.	9-5/8"	36.0# K-55
Intermediate Casing	8-3/4"	3,275 ft.	7"	23.0# K-55
Production Liner	6-1/4"	5,275 ft.	4 -1/2"	14.0# K-55
Production Tubing	N/A	3,000 ft.	2-3/8"	4.7# J-55

B. FLOAT EQUIPMENT:

1. SURFACE CASING: 9-5/8" notched regular pattern guide shoe. Run (1) Standard centralizer on each of the bottom (3) Joints (hole conditions permitting).
2. INTERMEDIATE CASING: 7" cement nose guide shoe with a self- fill insert float. Place Float Collar one (1) joint above the shoe joint. No Centralizers.
3. PRODUCTION LINER: 4-1/2" cement nose guide shoe. No Cement. No centralizers.

C. CEMENTING:

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

1. SURFACE: Slurry: 255sx (354 cu.ft.) of "Type III" + 2% CaCl₂ + 1/4 # of cello-flake/sk (Yield = 1.39 cu.ft./sk, Weight = 14.5 #/gal.). The 125% excess should circulate cement to the surface. WOC 12 hours. Test csg to 1500psi.
2. INTERMEDIATE: Lead: 430sx (898 ft³) of "Type III" 65/35 poz + 8% gel + 1% CaCl₂ + 1/4 # cello-flake/sk (Yield = 2.09 ft³/sk, Weight = 12.1 #/gal.). Tail: 150sx (209 ft³) of class "Type III" + 1% CaCl₂ + 1/4 # cello-flake/sk. (Yield = 1.39 ft³/sk, Weight = 14.5#/gal.). The 100% excess in lead and tail should circulate cement to the surface. Total volume = 1107 ft³. WOC 12 hours. Run a temperature survey after 8 hours if cement is not circulated to the surface. Test csg. to 1500psi.
3. PRODUCTION CASING: No Cementing.



Gary C. Sizemore
Sr. Drilling Engineer