

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

5. LEASE DESIGNATION AND SERIAL NO.

SF- 078766

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

Rosa Unit

8. FARM OR LEASE NAME, WELL NO.

160 B

9. API WELL NO.

30-039-26962

10. FIELD AND POOL OR WILDCAT

Blanco Mesa Verde/DK

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

L Sec. 25, T31N, R6W

12. COUNTY OR PARISH

Rio Arriba

13. STATE

NM

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐

1b. TYPE OF WELL

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

2. NAME OF OPERATOR

Williams Production Company, LLC

3. ADDRESS OF OPERATOR

c/o Walsh Engineering 7415 E. Main St., Farmington, NM 87402 (305) 327-4892

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

At Surface 1425' FSL and 50' FWL

At proposed Prod. Zone

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

26 miles NE of Blanco, NM

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

50'

16. NO. OF ACRES IN LEASE

2552.71

17. NO. OF ACRES ASSIGNED TO THIS WELL

272.52 5/2 - MV  
320 W/2 - DK18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL,  
DRILLING, COMPLETED, OR APPLIED FOR ON THIS LEASE, FT.

1300'

19. PROPOSED DEPTH

8117'

20. ROTARY OR CABLE TOOLS

21. ELEVATION OF SURFACE OF PROPOSED WELL

This action is subject to technical and  
procedural review pursuant to 43 CFR 3165.3  
and appeal pursuant to 43 CFR 3165.4DRILLING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"GENERAL REQUIREMENTS" 2002

23. CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT/FOOT	SETTING DEPTH	QUANTITY OF CEMENT
14-3/4"	10-3/4"	32.75#	+/- 250'	~313 cu.ft. Type III w/ 2% CaCl <sub>2</sub>
9-7/8"	7-5/8"	26.4#	+/- 3687'	~1240 cu.ft. 65/35 poz & ~344 cu.ft. Type
6-3/4"	5-1/2"	17.0#	+/- 8117'	~454 cu.ft. Prem. Lite HS w/ additives

Williams Production Company proposes to drill a vertical well to develop the Mesa Verde and Dakota formations 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 require ~1150' of new access road (see Pipeline & Well Plats #3 & #4). The well will be accessed by utilizing an existing road that runs in the through the SE/SE, SW/SE of section 26, NW/NE, NE/NE of section 35, NW/NW, NE/NW, NW/NE of section 36 all of T31N, R6W where it joins the main "Rosa Road".

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 John C. Thompson TITLE John C. Thompson, Agent DATE 3-20-02

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

4/23/02

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

/s/ David J. Mankiewicz

TITLE

AFM

DATE

4/23/02

\*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.

1000

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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

*API Number <b>30-039-26962</b>		*Pool Code 72319 - 71599		*Pool Name Blanco Mesaverde - Basin Dakota	
*Property Code 17033		*Property Name ROSA UNIT			*Well Number 1608
*GRID No. 120782		*Operator Name WILLIAMS PRODUCTION COMPANY			*Elevation 6410'

#### <sup>10</sup> Surface Location

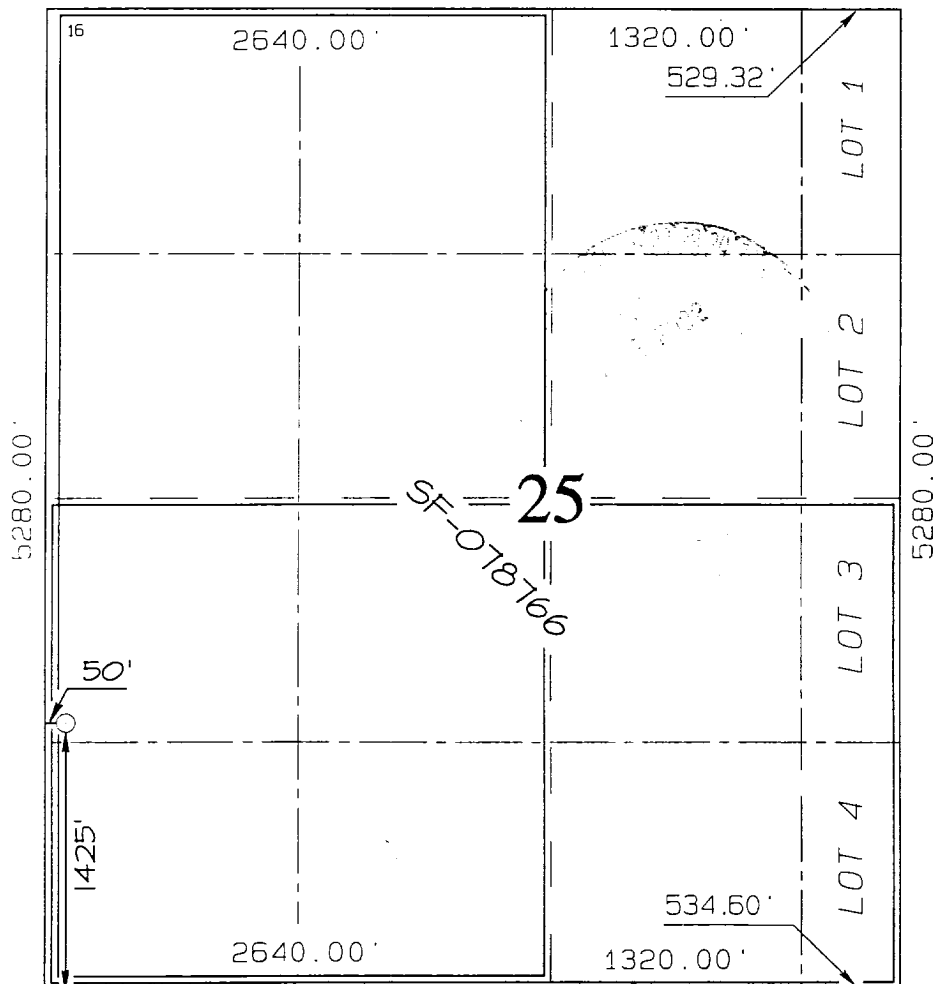
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	25	31N	6W		1425	SOUTH	50	WEST	RIO ARriba

#### <sup>11</sup> 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

<sup>12</sup> Dedicated Acres	272.32 Acres (S/2) - MV	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
	320.00 Acres (W/2) - DK			

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



#### <sup>17</sup> OPERATOR CERTIFICATION

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

*John C. Thompson*  
Signature

John C. Thompson

Printed Name

Agent/Engineer

Title

3/18/02

Date

#### <sup>18</sup> 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: FEBRUARY 14, 2002

Signature and Seal of Professional Surveyor



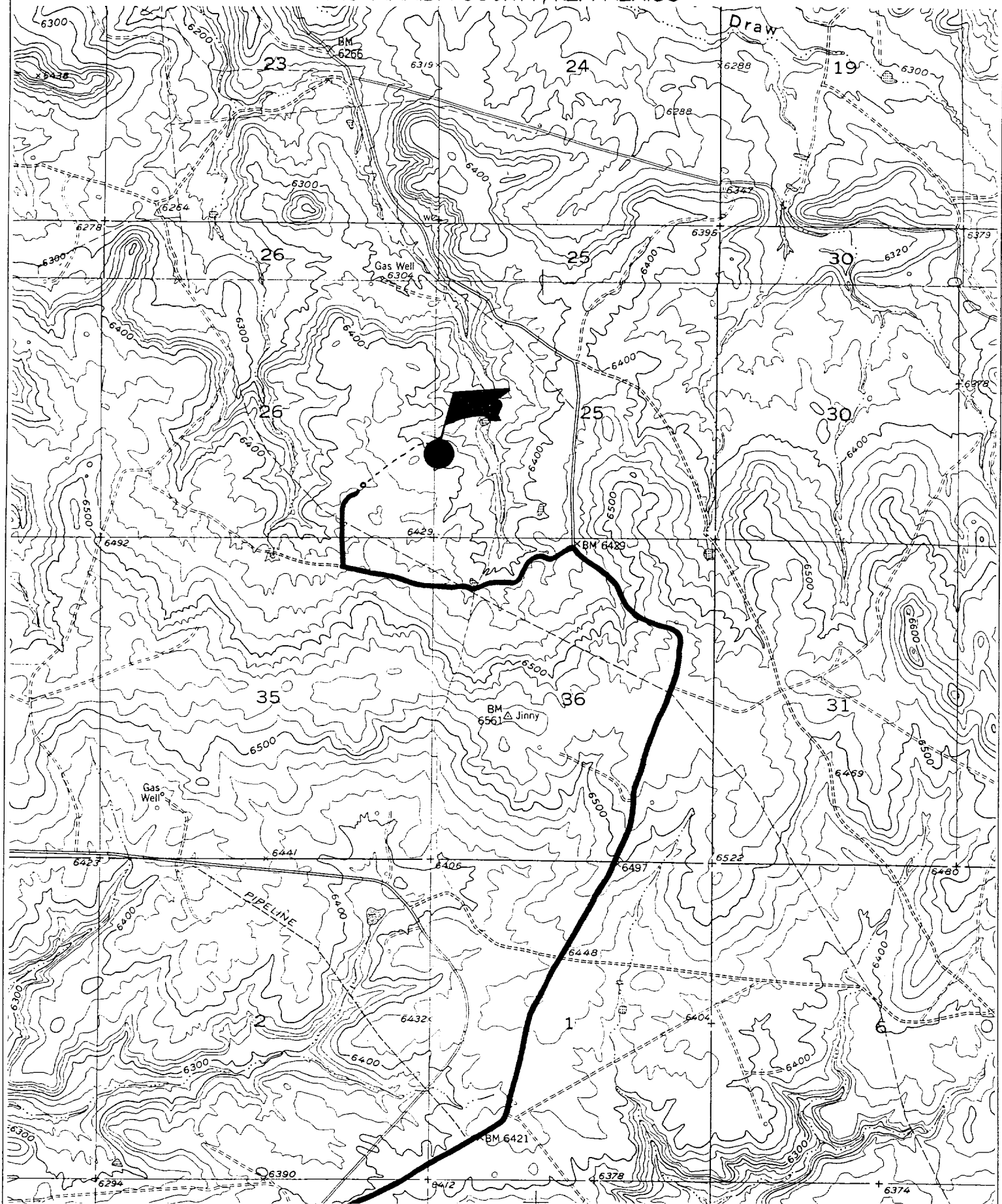
*JASON C. EDWARDS*

Certificate Number 15269

# WILLIAMS PRODUCTION COMPANY ROSA UNIT #160B

1425' FSL & 50' FWL, SECTION 25, T31N, R6W, N.M.P.M.

RIO ARriba COUNTY, NEW MEXICO





## WILLIAMS PRODUCTION COMPANY

### OPERATIONS PLAN

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

**DATE:** 3/18/2002

**WELL NAME:** Rosa Unit 160B **FIELD:** Basin Blanco MV/DK

**SURFACE LOCATION:** NW/4 SW/4 Sec. 25-T31N-R6W **SURFACE:** BLM  
Rio Arriba, NM

**ELEVATION:** 6410' GR **MINERALS:** BLM

**LEASE #** SF-078766

**MEASURED DEPTH:** 8117'

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

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

	<u>MD</u>		<u>MD</u>
Ojo Alamo	2467'	Mancos sh	5997'
Kirtland sh	2602'	Gallup ss	6977'
Fruitland cl	2987'	Greenhorn ls	7697'
Pictured Cliffs ss	3212'	Graneros sh	7742'
Lewis sh	3527'	Dakota ss	7867'
Cliff House ss	5382'		
Menefee	5432'		
Point Lookout ss	5632'	<b>Total Depth</b>	<b>8117'</b>

**B. LOGGING PROGRAM:** DIL from TD to the Intermediate Casing Shoe. CNL/FDC over intervals of interest (selected intervals by on-site Geologist). *Subject to change as wellbore conditions dictate.*

**C. NATURAL GAUGES:** Gauge any noticeable increases in gas flow. Gauge well @ 5800' and before TOH for logs. Record all gauges in Tour book and on morning reports.

**II. DRILLING**

**A. MUD PROGRAM:** Clear water with benex to 7" casing point. LSND to log and run pipe. Treat for lost circulation as necessary. Obtain 100% returns prior to cementing. Notify Engineering of any mud losses.

**B. BOP TESTING:** While drill pipe is in use, the pipe rams will be function tested not less than once each day. 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 TYPE</u>	<u>HOLE SIZE</u>	<u>DEPTH</u>	<u>CASING SIZE</u>	<u>WT. &amp; GRADE</u>
Surface	14-3/4"	+/- 250'	10-3/4"	32.75# H-40
Intermediate	9-7/8"	+/-3687'	7-5/8"	26.4# K-55
Prod. Casing	6-3/4"	+/- 8117'	5-1/2"	17.0# N-80

#### B. FLOAT EQUIPMENT:

1. SURFACE CASING: 10-3/4" notched regular pattern guide shoe. Run (1) Standard centralizer on each of the bottom (3) Joints.
2. INTERMEDIATE CASING: 7-5/8" 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 1500' to the surface. Total centralizers (5 regular and 13 turbulent).
3. PRODUCTION CASING: 5-1/2" whirler type cement nose guide shoe with a latch collar on top of 20' bottom joint. Place 20' marker joint on top of 10 th joint and one above 5100'.

#### C. CEMENTING:

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

1. SURFACE: Use 230sx (313cu.ft.) of class "Type III" with 2% CaCl<sub>2</sub> and 1/4# of cello-flake/sk (Yield = 1.39 cu.ft./sk, Weight = 14.5 #/gal.). 125% excess to circulate the surface. WOC 12 hours. Test to 1500#.
2. INTERMEDIATE: Lead: 595sx (1240cu.ft.) of class "Premium Lite" 65/35, Type III/Poz with 8% gel and 1/4# cello-flake/sk (Yield = 2.09 cu.ft./sk, Weight = 12.1 #/gal.). Tail: 245sx (344cu.ft.) of class "Type III" with 1/4# cello-flake/sk (Yield = 1.39 cu.ft./sk, Weight = 14.5#/gal.). 100% excess in lead and tail to circulate to surface. Total volume = 1584 cu.ft. WOC 12 hours. Run a temperature survey after 8 hours if cement is not circulated.
3. PRODUCTION CASING: 30 sks Scavenger of Premium Light HS + 1% FL-52 + .3% CD-32 + 2% KCl + .25 #/sk Celloflake + 4% Phenoseal + .3% R3. (Weight = 11 #/gal.). **Cement Slurry:** 230 sx (454 ft<sup>3</sup>) of Premium Light HS + 1% FL-52 + .3% CD-32 + 2% KCl + .25 #/sk Celloflake + 4% Phenoseal + .1% R3. (Yield = 1.99 ft<sup>3</sup>/sk, Weight = 12.5 #/gal.). Displace cement at a minimum of 8 BPM. Use 20% excess in calculation to raise cement 100' into intermediate casing. Total volume 454 ft<sup>3</sup>. WOC 12 hours.

# 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)

