

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED  
BLM

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

SUBMIT IN TRIPLICATE

1. Type of Well

Oil Well  Gas Well  Other

2. Name of Operator

WILLIAMS PRODUCTION COMPANY 120782

3. Address and Telephone No.

c/o Walsh Engr. & Prod. Corp.  
7415 E. Main Farmington, New Mexico 87420 (505) 327-4892

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1620'FNL & 1665'FWL  
Section 24, T31N, R6W

5. Lease Designation and Serial No.

SF-078767

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Rosa Unit #19A (17033)

9. API Well No.

10. Field and Pool, or Exploratory Area

Blanco MV/Basin DK 72319

11. County or Parish, State

Rio Arriba

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

Notice of Intent  
 Subsequent Report  
 Final Abandonment Notice

TYPE OF ACTION

Abandonment  
 Recompletion  
 Plugging Back  
 Casing Repair  
 Altering Casing  
 Other

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 proposes to drill this well as a Mesa Verde - Dakota Dual well according to the attached drilling program. The well location, access road, and all other aspects of the original APD will remain the same.

New casing program is as follows:

Hole Size	Casing Size	WT & Grade	Depth	Cement
13 3/4"	10 3/4"	32.75# H-40	300'	240 cu.ft. Cl "B"
9 7/8"	7 5/8"	26.4 # K-55	3505'	1147 cu.ft. 65/35 Poz & 273 cu.ft. Cl "B"
6 3/4"	5 1/2"	17.0 # N-80	7988'	462 cu.ft. 50/50 Poz & 150 cu.ft. Cl "H"

14 I hereby certify that the foregoing is true and correct

Signed Paul C. Thompson

Title Paul C. Thompson, Agent

Date 5/29/96

(This space for Federal or State office use)

Approved by \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

Conditions of approval, if any:

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 a false statement or representation as to any matter within its jurisdiction.

\*See Instruction on Reverse Side

APPROVED

JUN 10 1996

District Manager

NMOCD

✓

District I  
 PO Box 1910, Hobbs, NM 88241-1920  
 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-10  
 Revised February 21, 1996  
 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		1 Pool Code 71599		1 Pool Name Basin Dakota	
4 Property Code 17033		4 Property Name Rosa Unit			4 Well Number 19M
1 OGRID No. 120782		1 Operator Name Williams Production Co.			1 Elevation 6231'

10 Surface Location

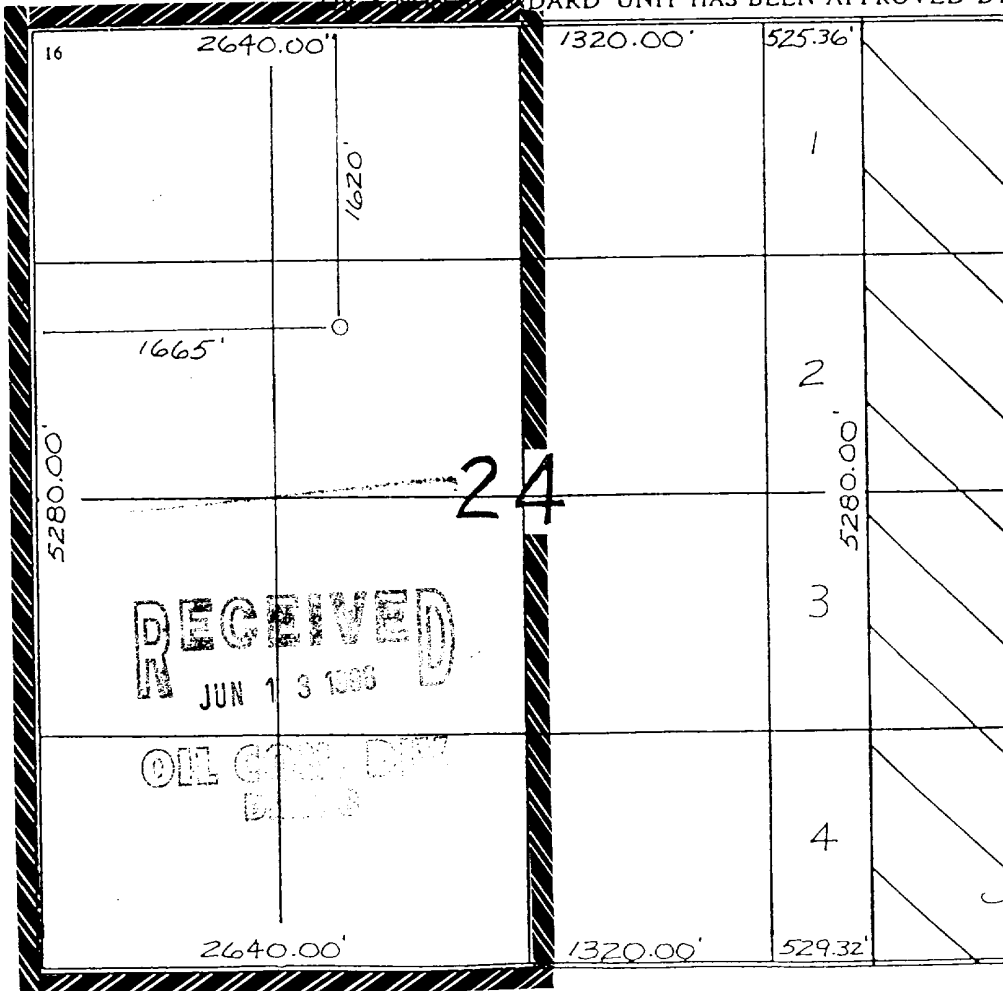
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	24	31 N	6 W		1620	North	1665	West	R.A.

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	13 Joint or Infill	14 Consolidation Code	15 Order No.
320	N	U	

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.

*Paul C. Thompson*  
 Signature  
 Paul C. Thompson, P.E. (Agent)  
 Printed Name President  
 Walsh Engr. & Prod. Corp.  
 Title  
 Date 2/26/96

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.

1-12-96  
 Date of Survey  
 Signature and Seal of Professional Surveyor  
 HEARLE C. EDWARDS  
 8857  
 6857  
 Certificate Number

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  
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 PO Box 2088  
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Submit to Appropriate District Office

Form C-10  
 Revised February 21, 1991  
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 Fee Lease - 3 Copies

AMENDED REPORT

RECEIVED  
 FEB 11 1996  
 96 NOV 01 PM 1:13

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Pool Code 72319	Pool Name Blanco Mesa Verde
Property Code 008480	Property Name Rosa Unit		Well Number 19M
OGRID No. 120782	Operator Name Williams Production Co.		Elevation 6231'

10 Surface Location

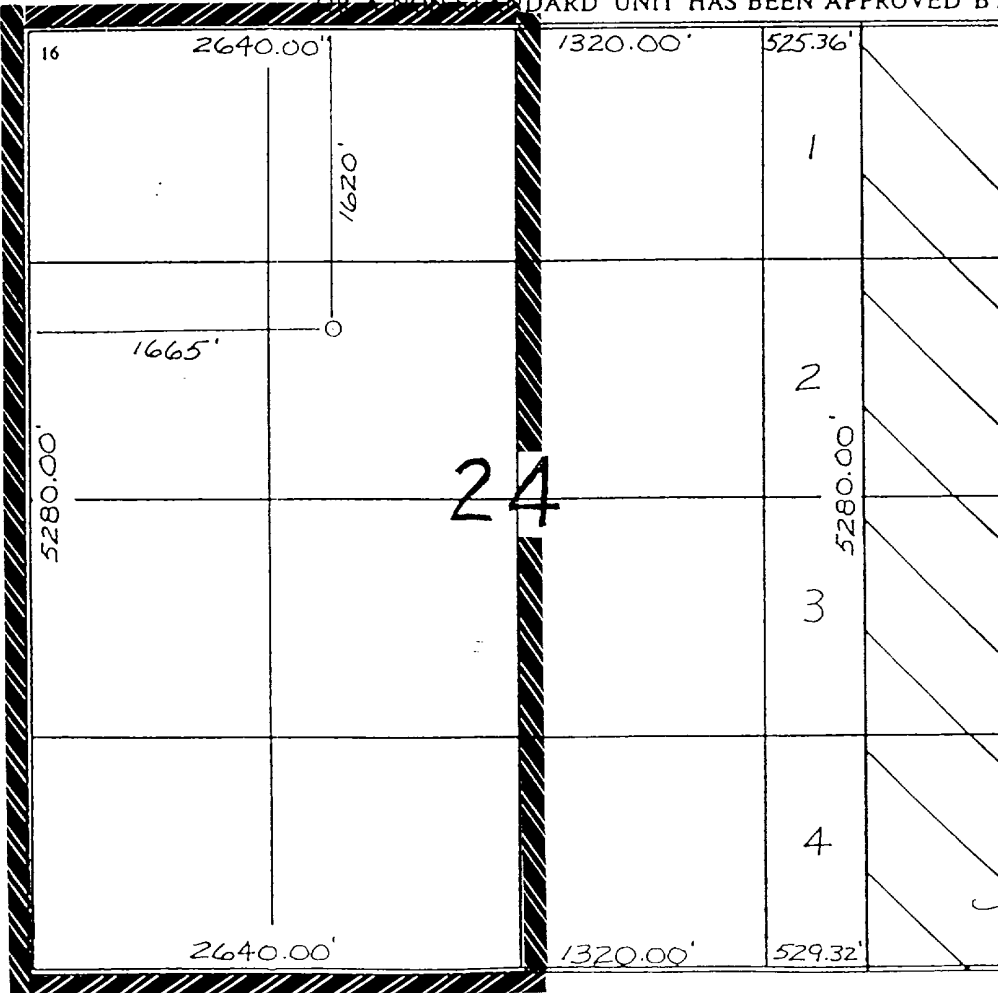
UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
F	24	31 N	6 W		1620	North	1665	West	R.A.

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres 320	Joint or Infill N	Consolidation Code U	Order No.
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1-12-96  
 Date of Survey  
 Signature and Title of Professional Surveyor

HEALE C. EDWARDS  
 NEW MEXICO  
 8857  
 6857  
 REGISTERED LAND SURVEYOR  
 Certificate Number

WILLIAMS PRODUCTION COMPANY  
OPERATIONS PLAN

DATE: 2/1/96 (revised 3/8/96)

WELLNAME: ROSA UNIT #19A                      FIELD: Blanco MV/Basin DK

LOCATION: SE/4 NW/4 Sec. 29, T31N, R5W                      SURFACE: Game & Fish  
San Juan Co., NM

ELEVATION: 6231' GR                      MINERALS: Federal

TOTAL DEPTH: 7988'                      LEASE # SF-078767

I. GEOLOGY: Surface formation - San Jose

A. FORMATION TOPS:

Ojo Alamo	2308'	Point Lookout	5523'
Kirtland	2408'	Mancos	5673'
Fruitland	2808'	Gallup	6273'
Pictured Cliffs	3053'	Greenhorn	7573'
Lewis	3353'	Graneros	7628'
Cliff House	5253'	Dakota	7738'
Menefee	5298'	Total Depth	7988'

B. LOGGING PROGRAM: IND/GR, CDL/SNL. Log the Dakota from 7988' to 300' above the top of the Greenhorn and the Mesa Verde from 5700' to 300' above the Cliff House.

C. NATURAL GAUGES: Gauge any noticeable increases in gas flow. Gauge well @ 5700' and before TOH for logs @ 7988'. Record all gauges in Tour book and on morning reports.

II. DRILLING

A. MUD PROGRAM: Included in footage bid.

B. BOP TESTING: While drill pipe is in use, the pipe rams will be tested not less than once each day. The blind rams will be tested once each trip. The drum brakes will be inspected and tested each tour. All tests and inspections 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	13-3/4"	300'	10-3/4"	32.75# H-40
Intermediate	9-7/8"	3505'	7-5/8"	26.4# K-55
Production	6-3/4"	7988'	5-1/2"	17.0# N-80

## **B. FLOAT EQUIPMENT:**

1. SURFACE CASING: 10-3/4" notched regular pattern guide shoe.
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 2308' to the surface. Total centralizers: 5 regular and 19 turbulent.
3. PRODUCTION CASING: 5-1/2" whirler type cement nose guide shoe with a latch collar on top of 20' joint. Place 20' marker joint on top of 10th joint and one above 5253'.

## **C. CEMENTING:**

1. SURFACE: Use 200 sx (240cu.ft.) of class "B" with 3% CaCl<sub>2</sub> and 1/4# of cello-flake/sk (Yield = 1.19 cu.ft./sk, Weight = 15.6 #/gal.). Use 100% excess to circulate the surface. WOC 12 hours. Test to 1500#.
2. INTERMEDIATE: Lead - 550 sx (1147 cu.ft.) of class "B" 65/35 poz with 8% gel and 1/4# cello-flake/sk (Yield = 2.1 cu.ft./sk, Weight = 12.1 #/gal.). Tail - 230 sx (273 cu.ft.) of class "B" , 1/4# cello-flake/sk and 2% CaCl<sub>2</sub> (Yield = 1.20 cu.ft./sk, Weight = 15.6#/gal.). Use 100% excess in Lead and 75% in tail to circulate to surface. Total volume = 1420 cu.ft. WOC 12 hours. Run a temperature survey after 8 hours if cement is not circulated. Test to 1500#.
3. PRODUCTION CASING: Use 340 sx (461 cu.ft.) of class "B" 50/50 poz with 4% gel, 6-1/4# fine gilsonite/sk and 0.5% CF-14 (Yield = 1.35 cu.ft./sk, Weight = 13.4 #/gal.). Tail 100sx (150 cu.ft) of class "H" with 35% silica flour, 1/4# cello-flake/sk, 1.8% FL-62 and 0.2% A-2 (Yield = 1.50 cf/sk, Weight 15.9 #/gal). Displace cement at a minimum of 10 BPM. Use 60% excess in lead and tail to circulate 100' into intermediate casing. Total volume = 611 cu ft. WOC 12 hours. Run a temperature survey after 8 hours to determine TOC behind 5-1/2" casing.

## **IV COMPLETION**

### **A. CBL**

1. Run Cement Bond Log across all intervals to be perforated and find Top of Cement behind all casing strings.

### **B. PRESSURE TEST**

1. Pressure test 7-5/8 to 3300# & 5-1/2" casing to 6000# for 15 minutes.

### **C. STIMULATION**

1. Stimulate Dakota with approximately 100,000# of 20/40 sand in x-link foam.
2. Isolate Dakota with a RBP.
3. Stimulate Point Lookout with approximately 100,000# of 20/40 sand in slick water.
4. Isolate Point Lookout with a RBP.
5. Perforate the Menefee/Cliff House as determined from the open hole logs.
6. Stimulate with approximately 80,000# of 20/40 sand in slick water.
7. Test each zone before removing bridge plugs.

**D. RUNNING TUBING**

1. Dakota: Run 1-1/2", 2.9#, J-55 EUE tubing with 1/2 mule shoe on bottom, SN with pump-out plug on top of adeem joint and 5 Seal Units. Land tubing approximately 100' below top Dakota perf.

1. Mesa Verde: Run 1-1/4", 2.3#, J-55, IJ tubing with a bull plugged perforated nipple on bottom and a SN with pump-out plug on top of bottom joint. Land tubing approximately 25' above the bottom Point Lookout perforation.

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Lance A. Hobbs  
Engineer, Production & Drilling

file:#19Aopp

## ROSA UNIT PORE PRESSURES

FORMATION	DEPTH	FRAC GRADIENT	PORE PRESSURE	RESERVOIR PRESS
FRUITLAND	2950	0.69	1578	1400
PICTURED CLIFFS	3200	0.65	1520	1400
CLIFF HOUSE	5200	0.50	1300	1200
MENEFEE	5350	0.50	1338	1200
POINT LOOKOUT	5650	0.48	1201	1200
GALLUP	6800	0.55	2210	2000
DAKOTA	7850	0.65	3729	2600

Based on :  $F = 1/3(1+2P/D)$   
 $P_f = (3F-1)D/2$

Where: F = Frac Gradient  
 P<sub>f</sub> = Pore Pressure  
 D = Depth