

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

ROW/APD

FORM APPROVED  
Budget Bureau No 1004-0136  
Expires: February 28, 1995

## APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. Type of Work

DRILL ☒DEEPEEN ☐

b. Type of Well

Oil Well ☐ Gas Well ☒ Other ☐Single Well ☒Multiple Zone ☐

2. Name of Operator

Williams Production Company

3. Address and Telephone No

P.O. Box 3102, MS 37-2, Tulsa, OK. 74101

4. Location of Well (Footages)

At Surface

815' FSL 1870' FWL, SESW

proposed prod. zone

5. Lease Designation and Serial No  
SF-078769

6. If Indian, Alibotee or Tribe Name

7. If Unit or CA, Agreement Designation

Rosa Unit

8. Well Name and No.

RU-# 187

9. API Well No.

30-039-26373

10. Field and Pool, or Exploratory Area

Blanco - MV

11. Sec., T., R., M., or BLK.  
and Survey or Area

N Section 21, T31N, R5W

14. Distance in Miles and Directions from Nearest Town or Post Office

21.4 miles east Navajo Dam Post Office (straight line)

12. County or Parish

Rio Arriba

13. State

NM

15. Distance from Proposed Location to Nearest

Property or Lease Line, Ft 815'

16. No. of Acres in Lease

2560 acres

17. No. of Acres Assigned to This Well

320 acres W/2

18. Distance from Proposed Location to Nearest Well Drilling, Completed,

or Applied for, on this Lease, FT 185'

19. Proposed Depth

6595' KB

20. Rotary or Cable Tools

Rotary

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

6798' GR

22. Approximate Date Work will Start

April 1, 2000

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE & GRADE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8"	36#	250'	128 sx-176 cu ft Type III
8-3/4"	7"	20#	4180'	490 sx-1021 cu ft Lite 170 sx-236 Cu ft-Type III
6-1/4"	4-1/2"	10.5#	4080' - 6595'	80 sx-114-cuft 185 sx-273cuft Poz/Class H 50/50

Williams Exploration & Production proposes to drill a vertical well to develop the Mesa Verde Formation at the above described location, in accordance with the attached Operation and Surface Use plans. The surface is under the jurisdiction of the U.S. Forest Service, Carson National Forest, Jicarilla District Office. Moore Anthropological Research of Aztec, NM, has surveyed the proposed location for Cultural Resources. The report has been submitted to your office for review.

This APD also is serving as an application to obtain BLM road and pipeline rights-of-way. This well will not require a new access road (see Pipeline & Well Plats #3 and #4). The access road will begin at an existing gas road. The proposed 185-foot long pipeline would tie into the Williams Gathering System on the Rosa Unit Well #263 (see the attached Pipeline Plat Map # 4).

This action is subject to technical and procedural review pursuant to 43 CFR 3160.3 and appeal pursuant to 43 CFR 3160.4.

ONLY INDIVIDUALS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"GENERAL REQUIREMENTS"

4. Above surface description of proposed operation. If proposal to deepen, give present productive zone and proposed new productive zone.  
Signed Steve Nelson Title Agent

COPIES: BLM-4, WELL FILE-1  
Date February 15, 2000

(This space for Federal or State office use)

Permit No

Approval Date

Application approval does not warrant or certify that 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

NMOCD

APPROVED BY:

/s/ Jim Lovato

TITLE

DATE

JUN 21 2000

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

District II  
PO Drawer 00, Artesia, NM 88211-0719

District III  
JO 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

FEB 15 2000

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30039-26373		*Pool Code 72319	*Pool Name Blanco - Mesa Verde
*Property Code 17033	*Property Name ROSA UNIT		*Well Number 187
*OGRID No. 120782	*Operator Name WILLIAMS PRODUCTION COMPANY		*Elevation 6798'

## 10 Surface Location

U. or lot no.	Section	Township	Range	Lot 10n	Feet from the	North/South line	Feet from the	East/West line	County
N	21	31N	5W		815	SOUTH	1870	WEST	RIO ARriba

## 11 Bottom Hole Location If Different From Surface

U. or lot no.	Section	Township	Range	Lot 10n	Feet from the	North/South line	Feet from the	East/West line	County

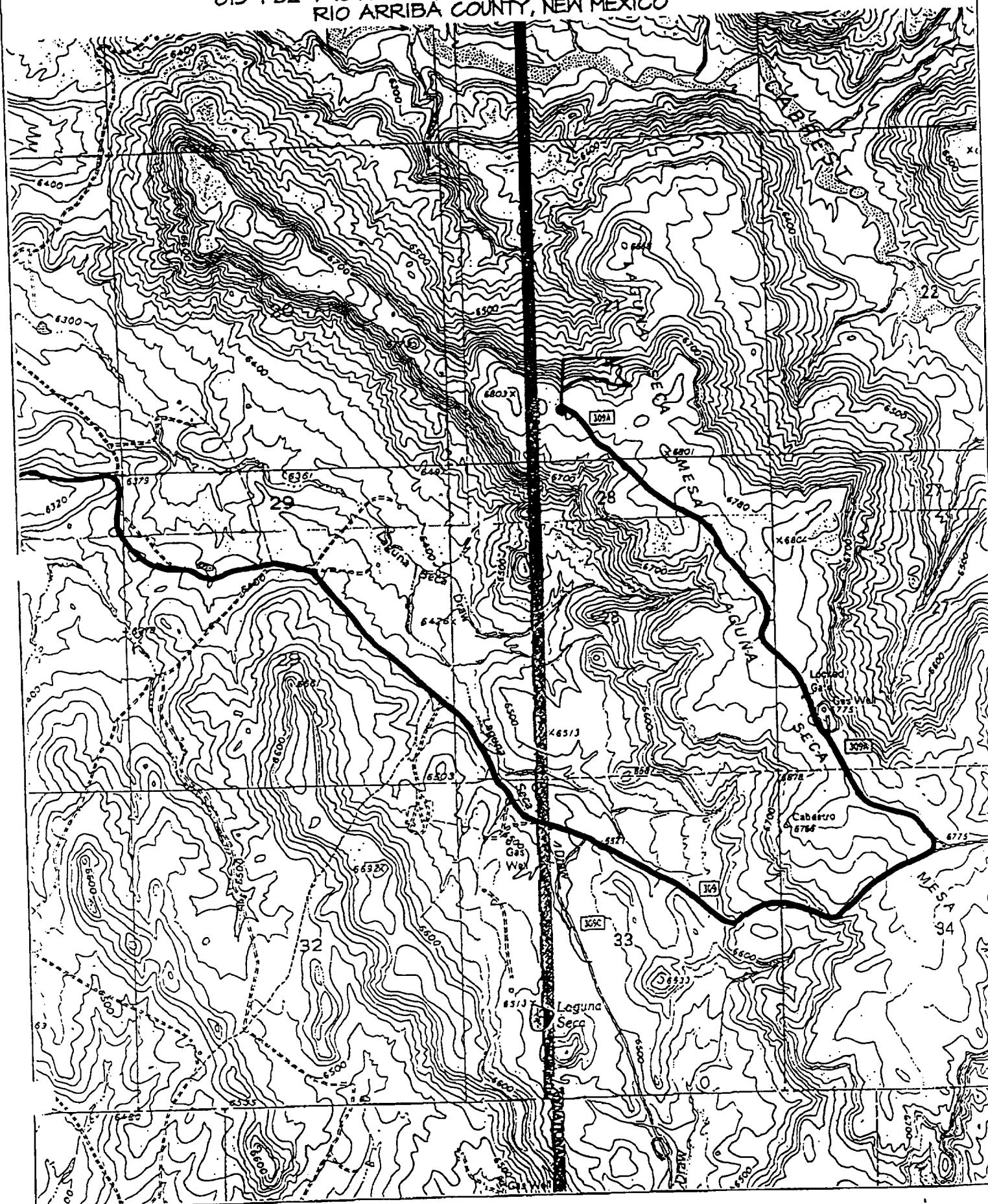
*Dedicated Acres 320 ac. W/2	*Joint or Infill I	*Consolidation Code U	*Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<b>17 OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.   Signature Steve Nelson Printed Name Agent, Nelson Consulting Title February 15, 2000 Date
	<b>18 SURVEYOR CERTIFICATION</b> 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.  DECEMBER 28, 1999 Date of Survey Signature and Seal of Surveyor  Certificate Number 6857

WILLIAMS PRODUCTION COMPANY ROSA UNIT #187

815' FSL & 1870' FWL, SECTION 21, T31N, R5W, N.M.P.M.  
RIO ARriba COUNTY, NEW MEXICO





**WILLIAMS PRODUCTION COMPANY**  
**OPERATIONS PLAN**

<b><u>DATE:</u></b>	2/08/00		
<b><u>WELLNAME:</u></b>	ROSA UNIT #187	<b><u>FIELD</u></b>	Blanco MV
<b><u>SURFACE LOCATION:</u></b>	SE/4 SW/4 Sec.21, T31N, R05W Rio Arriba, NM	<b><u>SURFACE:</u></b>	Forest
<b><u>ELEVATION:</u></b>	6798" GR	<b><u>MINERALS:</u></b>	Federal
<b><u>TOTAL DEPTH:</u></b>	6595'	<b><u>LEASE #</u></b>	SF-078769

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

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

Ojo Alamo	2970'	Cliff House	5895'
Kirtland	3070'	Menefee	5940'
Fruitland	3495'	Point Lookout	6145'
Pictured Cliffs	3705'	Mancos	6455'
Lewis	4005'	Total Depth	6595'

**B. LOGGING PROGRAM:** 8-3/4" IND/GR/Temp log from TD to surface. CDL interval selected by onsite geologist. 6-1/4" IND/GR/Temp log from TD to Intermediate TD. CDL interval selected by onsite geologist.

**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. LSND to log and run pipe.

**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 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	12-1/4"	250'	9-5/8"	36# K-55
Intermediate	8-3/4"	4180'	7"	20# K-55
Prod. Liner	6-1/4"	4080'-6595'	4-1/2"	10.5# K-55

**B. FLOAT EQUIPMENT:**

1. SURFACE CASING: 9-5/8" notched regular pattern guide shoe.