

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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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

5. Lease Designation and Serial No.
SF-078771

6. If Indian, Allottee or Tribe Name
14

7. If Unit or CA, Agreement Designation
070 FARMINGTON, NM

8. Well Name and No.
Rosa Unit #9A

9. API Well No.

10. Field and Pool, or Exploratory Area
Blanco MV/Basin DK 72319

11. County or Parish, State
Rio Arriba

SUBMIT IN TRIPLICATE

070 FARMINGTON, NM

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 87402 (505) 327-4892

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1250'FNL & 2245'FWL
Section 11, T31N, R6W

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

TYPE OF SUBMISSION

TYPE OF ACTION

- Notice of Intent
- Subsequent Report
- Final Abandonment Notice

- 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.)

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OIL CON. DIV.
DIST. 3

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	500'	401 cu.ft. C1 "B"
9 7/8"	7 5/8"	26.4 # K-55	3700'	1196 cu.ft. 65/35 Poz & 268 cu.ft. C1 "B"
6 3/4"	5 1/2"	17.0 # N-80	8224'	467 cu.ft. 50/50 Poz & 150 cu.ft. C1 "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 any false or fraudulent statements or representations as to any matter within its jurisdiction.

APPROVED

Need a - 1000 for #46 (Wakota) & NMVNSL (E)

NMOCD

JUN 10 1996
District Manager

*See Instruction on Reverse Side

District I
 PO Box 1980, Hobbs, NM 88241-1980
 District II
 PO Drawer DD, Artesia, NM 88211-0719
 District III
 1000 Kin Brassow Rd., Aztec, NM 87410
 District IV
 PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
 Energy, Minerals & Natural Resources Dept

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

Form C-1
 Revised February 21, 1980
 Instructions on back
 Submit to Appropriate District Office
 State Lease - 4 Copies
 Fee Lease - 3 Copies

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95 MAY 31 PM 1:14

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

AFT Number		Pool Code	070 FARMING UNIT, NM Basin Dakota
Property Code	17033	Property Name	Rosa Unit
Well Number		Well Number	9A
OGRID No.	120782	Operator Name	Williams Production Co.
		Elevation	6427'

10 Surface Location

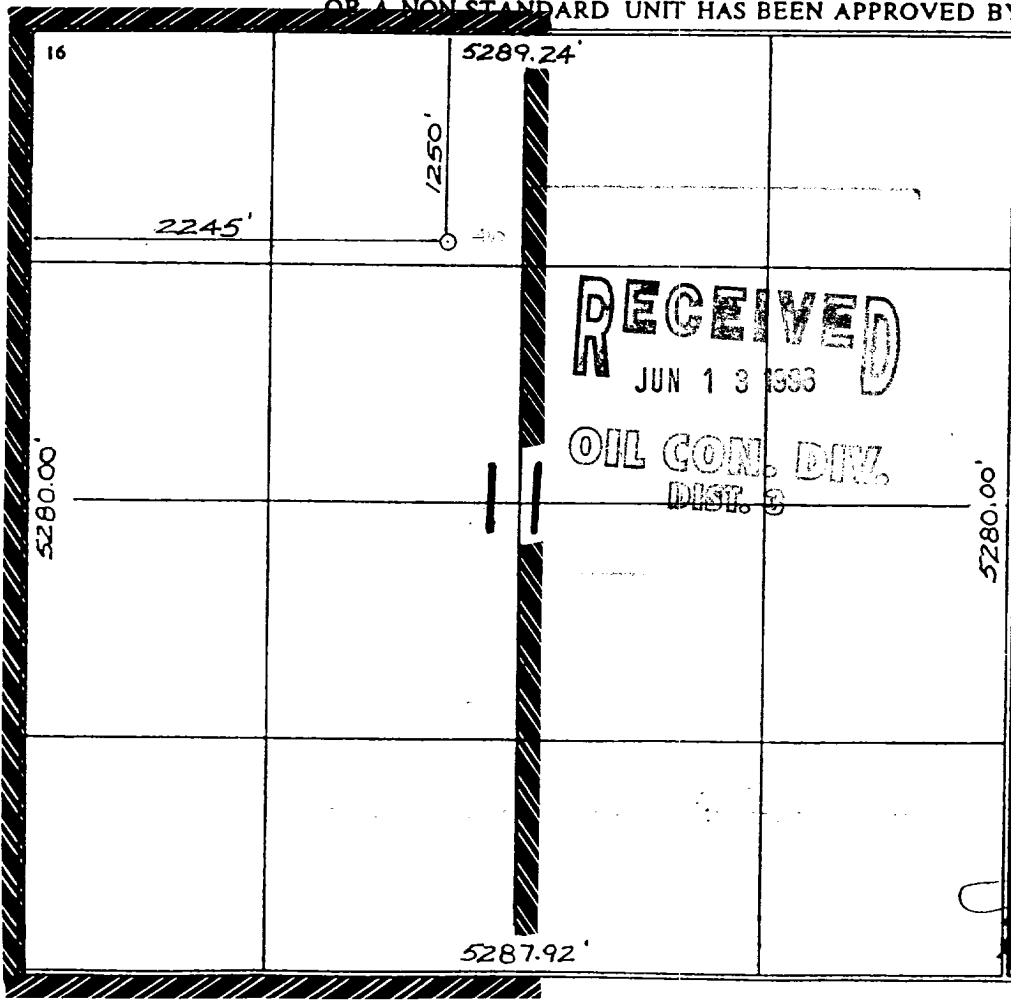
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	11	31 N	6 W		1250	North	2245	West	R.A.

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



RECEIVED
 JUN 13 1996
 OIL CON. DIV.
 DIST. 3

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 (Agent)
 Printed Name President
 Walsh Engr. & Prod. Corp.
 Title
 2/29/96
 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.

1-10-96
 Date of Survey
 Signature and Seal of Professional Surveyor

 Certificate Number

District I
 PO Box 1980, Hobbs, NM 88241-1980
 District II
 PO Drawer DD, Artesia, NM 88211-0719
 District III
 1000 Hls Brazos Rd., Aztec, NM 87410
 District IV
 PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
 Energy, Minerals & Natural Resources Dept

Not previously permitted

Form C-1
 Revised February 21, 1988
 Instructions on back
 Submit to Appropriate District Office
 State Lease - 4 Copies
 Fee Lease - 3 Copies

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

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 96 MAY 31 PM 1:14

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Pool Code	Pool Name
		72319	Blanco Mesa Verde
Property Code	Property Name		Well Number
17033	Rosa Unit		9A
OGRID No.	Operator Name		Elevation
120782	Williams Production Co.		6427'

10 Surface Location

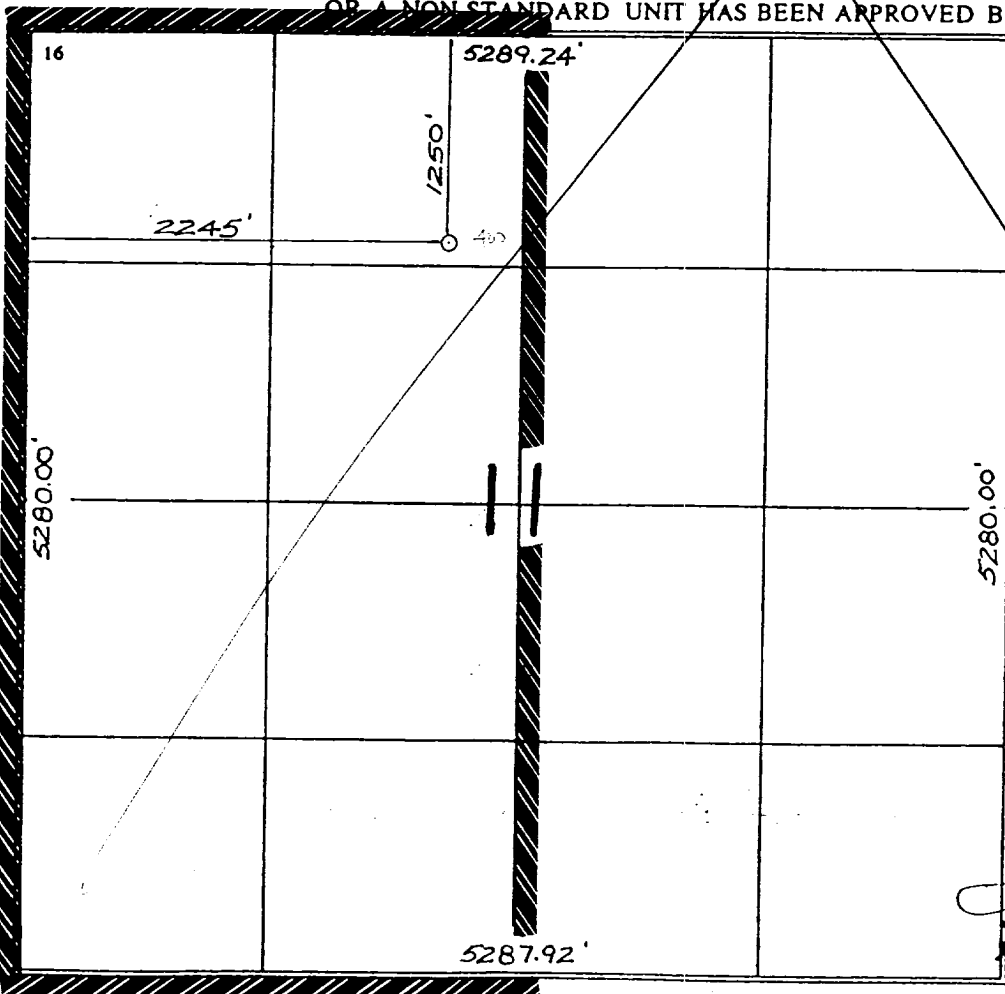
UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
C	11	31 N	6 W		1250	North	2245	West	R. A.

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 Printed Name President
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 Title
 2/29/96
 Date

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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.

1-10-96
 Date of Survey
 Signature and Title of Professional Surveyor
 HELEN C. EDWARDS
 8857
 6857
 Certificate Number

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 2444' 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 5459'.

C. CEMENTING:

1. SURFACE: Use 335 sx (401cu.ft.) of class "B" with 3% CaCl₂ 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 - 575 sx (1196 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 - 225 sx (269 cu.ft.) of class "B", 1/4# cello-flake/sk and 2% CaCl₂ (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 = 1465 cu.ft. WOC 12 hours. Run a temperature survey after 8 hours if cement is not circulated. Test to 1500#.
3. PRODUCTION CASING: Use 345 sx (467 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 = 617 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.

Lance A. Hobbs
Engineer, Production & Drilling

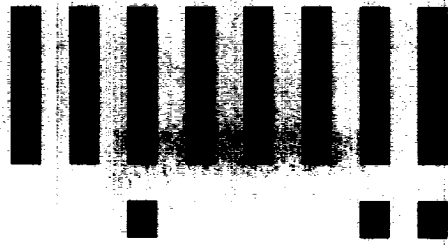
file:#9Aopp

ROSA UNIT PORE PRESSURES

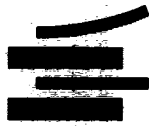
FORMATION	DEPTH	FRAC GRADIENT	PORE PRESSURE	RESERVOIR PRESS
FRUITLAND	2950	0.69	1578	1400
PICTURED CLIFFS	3200	0.65	1520	1400
CLIFF HOUSE	5200	0.50	1300	1200
MENEFEE	5350	0.50	1338	1200
POINT LOOKOUT	5650	0.48	1201	1200
GALLUP	6800	0.55	2210	2000
DAKOTA	7850	0.65	3729	2600

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

Where: F = Frac Gradient
P_f = Pore Pressure
D = Depth



LTR



Job separation sheet

**NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL**

Form C-122

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special						Test Date Aug 15, 1996				
Company Williams Production Company				Connection						
Pool Basin			Formation Dakota			Unit Rosa				
Completion Date 8-05-96		Total Depth 8195'		Plug Back TD 8173'		Elevation 6247'		Farm or Lease Name Rosa Unit		
Casing Size		Weight	d	Set At	Perforations: From To		Well No. 9A			
Tubing Size 1-1/2"		Weight 2.9#	d	Set at 8051'	Perforations: From 7960' To 8128'		Unit C	Sec 11	Twp 31N	Rng 6W
Type Well - Single - Bradenhead - GG or GO Multiple				Packer Set At 6600'			County Rio Arriba			
Producing Thru Tubing		Reservoir Temp. °F		Mean Annual Temp. °F		Barometer Pressure - P _a		State New Mexico		
L	H	Gq .6	%CO ₂		%N ₂	%H ₂ S	Prover 3/4"	Meter Run	Taps	
FLOW DATA					TUBING DATA		CASING DATA			
NO.	Prover Line	X	Orifice Size	Pressure p.s.i.q.	Temperature °F	Pressure p.s.i.q.	Temperature °F	Pressure p.s.i.q.	Temperature °F	Duration of
SI			2" X 3/4"			2382				0
1.						181	78°			0.5 hr
2.						123	81°			1.0 hr
3.						101	83°			1.5 hrs
4.						86	84°			2.0 hrs
5.						68	80°			3.0 hrs
RATE OF FLOW CALCULATIONS										
NO.	Coefficient (24 Hour)		√h _v P _m	Pressure P _m	Flow Temp. Factor	Gravity Factor	Super Compress.	Rate of Flow		
1.	9.604			80	.9813	1.29	1.012	984		
2.										
3.										
4.										
NO.	P _c	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.					
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.					
2.					Specific Gravity Separator _____ XXXXXX					
3.					Specific Gravity Flowing Fluid _____ xxxxx					
4.					Critical Pressure _____ p.s.i.a. _____ p.s.i.a.					
5.					Critical Temperature _____ R _____ R					
P _c 2394		P _c ² 5731236		<div style="border: 2px solid black; padding: 5px; display: inline-block;"> RECEIVED SEP 13 1996 OIL CON. DIV. DIST. 2 </div>						
NO.	P _c ¹	P _w	P _w ²	P _c ² - P _w ²						
1.		80	6400	5724836						
2.										
3.										
4.										
					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0011$ (2) $\frac{[P_c^2 - P_w^2]}{[P_c^2 - P_w^2]} = 1.0008$					
					AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right] = 985$					
Absolute Open Flow		985		Mcf @ 15.025		Angle of Slope e		Slope, n .75		
Remarks:										
Approved By Commission:			Conducted By: C. Charley			Calculated By: Susan Griguahn			Checked By:	