Form 3160-5 (June 1990)

(This space for Federal or State office use)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENTRE RUM

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

Lease Designation and Serial No.

SF-078767

De not use this form for proposals	CES AND REPORTS to drill or to deepen on N FOR PERMIT—" for	r reentry to	i différent reservo	6. If Indian, Allottee or Tribe Name
Use "APPLICATION	BMIT IN TRIPLICATE	TOTO FATE	MATON, NM	7. If Unit or CA, Agreement Designation
1. Type of Well Oil X Gas				8. Well Name and No. (17033)
Well Well Other  2. Name of Operator				Rosa Unit #30
WILLIAMS PRODUCTION COM	PANY 120782			9. API Well No.
3. Address and Telephone No. C/O Walsh I		p.		30-039-25570
	ton, New Mexico 8		5) 327-4892	10. Field and Pool, or Exploratory Area 7231
7415 E. Main Farming  4. Location of Well (Footage, Sec., T., R., M., or S	urvey Description)	7.24		Blanco MV/Basin DK 7159
890' FSL & 920' FEL				11. County or Parish, State
Section 12, T31N, R6W				Rio Arriba
12. CHECK APPROPRIATE	BOX(s) TO INDICATI	NATURE	OF NOTICE, RE	PORT, OR OTHER DATA
TYPE OF SUBMISSION			TYPE OF ACT	
Inli	A PORTOR			X Change of Plans
X Notice of Intent	HISTORY	Abandonment		New Construction
		Recompletion		Non-Routine Fracturing
Subsequent Report	UN 1 3 1956 👺	Plugging Back		Water Shut-Off
	<u> </u>	Casing Repair		Conversion to Injection
Final Abandonment Notal	COM Dank	Altering Casing		Dispose Water
	DIKE STULLING	Other		(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
	<b>2</b> 00 €		- aluding actimated date of s	tarting any proposed work. If well is directionally drilled,
give subsurface locations and measured and t	rue vertical depuis for all markets	<b></b> 201100 pormus	,	starting any proposed work. If well is directionally drilled,
WILLIAMS PRODUCTION Pr	oposes to drill	this well	as a mesa ve.	rue - bakota buai weii
according to the attached of aspects of the original API	Arilling program.  will remain the		l location, a	ccess road, and all other
New casing program is as fo	ollows:		·	
Hole Size Casing Size	WT & Grade	Depth	Ceme	<u>nt</u>
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	3790 <b>'</b>	1276 cu.ft.	65/35 Poz & 268 cu.ft. Cl "
6 3/4" 5 1/2"	17.0 # N-80	8277 <b>'</b>	462 cu.ft.	50/50 Poz & 150 cu.ft. Cl "
14. I hereby certify that the foregoing is true and co	rrect	Paul C. Th	ompson, Agent	Date 5/24/96

District [ 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

PO Bez 2068, Santa Fc, NM 87504-2088

District IV

# State of New Mexico Energy, Minerals & Natural Resources Departs

Form C-102 Revised February 21, 1994 Instructions on back

Submit to Appropriate District Office State Lease - 4 Copies

Fee Lease - 3 Copies

OIL CONSERVATION DEVISION PO Box 2088 95 MAY 30 PM 12: 52 Santa Fe, NM 87504-2088

■ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	<sup>2</sup> Pool Code	³ Pool Name		
30-039-25570	71599	Basin Dakota		
Property Code	* Proper	y Name Well !	'umber	
17033	Rosa Uni	t 30		
OGRID No.	¹ Operat	or Name Elev	ration	
120782	Williams Produc	tion Co. 6490	•	

Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Fret from the	East/West line	County
0	12	31 ห	6 W		890	South	920	East	R.A.
		<u> </u>	11 -		*	CD'CC	- Cumfaaa		

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section Town	uhip	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
11 Dedicated Acres	Joint or Infi	1 " C	onsolidatio	a Code 15	Order No.	<u> </u>	I	L	<u> </u>
271.40	N		U						·

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED

		OR A NON-STAN	NDARD UNIT HAS I	SEEN	APPROVED BI	THE DIVISION
16	261	0.00'	1320.00'	1	512.82	17 OPERATOR CERTIFICATION
		and a control of the second se				I hereby certify that the information contained herein is
				1,		true and complete to the best of my knowledge and belief
				1		
			Mag assa.			
	l n	ecessia				712
ļ						Yaul C. Thompson
			ا الله الله الله الله الله الله الله ال			Signature  Revil C. Thompson Agent
	0	M Gara -				Paul C. Thompson, Agent Printed Name President
		IL GOM. DI Dist. S	Vζ.	2		Walsh Engr. & Prod. Corp.
		DIDI. 3			\ .	Title
				8	<i>F</i> \	2/20/96
		1_	2	1-8		Date
		<i>-</i>	_	52		18SURVEYOR 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
Ì				3	i \	correct to the best of my belief.
			-			11/20/95
						Date of Survey & C. EDH
				<del> </del>	<b>_</b>	Signature and that or Professional Surveyor.
				1.		200
			<u> </u>		[ \	(8857)
				4		
			,06		li 🔍	6859
			90			Certificate Number
Ī	24	0.00'	1320.00	!		Certificate Numb

District I PO Box 1980, Hobbs, NM \$1241-1980

District II

District III

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised February 21, 1994

ENED Instructions of Control Page - 4 Copies

PO Drawer DD, Artesia, NM 88211-0719 OIL CONSERVATION DIVISION PO Box 2088

State Lease - 4 Copies

AMENDED REPORT

1000 Rio Brusos Rd., Aziec, NM 27410 District IV PO Box 2008, Santa Fc, NM 87504-2008 Fee Lease - 3 Copies

Santa Fe, NM 87504-2088

WELL LOCATION AND ACREAGE DEDIGATION

API Number	<sup>2</sup> Pool Code	³ Pool Name	
30-039-2559	72319	Blanco Mesa Verde	
* Property Code	<sup>1</sup> Property	Name 'Well Numb	Des
17033	Rosa Unit	30	
OCRID No.	1 Operator		
120782	Williams Product	ion Co. 6490'	

<sup>10</sup> Surface Location

UL or lot so.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
0	12	31 N	6 W		890	South	920	East	R.A.
			11 Bot	tom Hol	e Location I	f Different Fro	om Surface		-

UL or lot so. East/West lioc Section Township Range Lot Ida Feet from the North/South line Feet from the County 15 Order No. U Dedicated Acres Joint or Instill " Consolidation Code 271.40 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

16	2640.00'	/320.∞′	~	512.82	17 OPERATOR CERTIFICATION
					I hereby certify that the information contained herein is
			١		true and complete to the best of my browledge and belief
-					Paul C. Thompso
					Signature Paul C. Thompson, Agent
		·			Printed Name President
			2		Walsh Engr. & Prod. Corp.
3			8		2/20/96
j j		2	0 0		Date
	7	_	52		"SURVEYOR CERTIFICATION
			-		I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me
			3	!	or under my supervision, and that the same is true and correct to the best of my belief.
		`_~			11/20/95
					Date of Survey & C. EDE
i				1	Signature and that or Profession Suprocer
	•	O_920	2		
			4		(8857)
		, 068			657
					Certificate Number 17 (180)
	2640.00'	1320.00		[ ] = 518.76	

# WILLIAMS PRODUCTION COMPANY OPERATIONS PLAN

DATE:

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

**WELLNAME:** 

ROSA UNIT #30

FIELD:

Blanco MV/ Basin DK

**LOCATION:** 

SW/4 SE/4 Sec. 12, T31N, R6W

**SURFACE:** 

BLM

ELEVATION:

San Juan Co., NM 6490' GR

**MINERALS:** 

Federal

TOTAL DEPTH:

8277'

LEASE #

SF-078767

I. GEOLOGY:

Surface formation - San Jose

## A. FORMATION TOPS:

Oio Alama	2567'	Point Lookout	5807'
Ojo Alamo Kirtland	2702'	Mancos	5962'
Fruitland	3107'	Gallup	6587'
Pictured Cliffs	3337'	Greenhorn	7857'
	3637'	Graneros	7917'
Lewis	5542'	Dakota	8027'
Cliff House Menefee	5592'	Total Depth	8277'
1110110100			

B. <u>LOGGING PROGRAM</u>: IND/GR, CDL/SNL. Log the Dakota from 8277' to 300' above the top of the Greenhorn and the Mesa Vede from 6000' to 300' above the Cliff House.

C. <u>NATURAL GAUGES:</u> Gauge any noticeable increases in gas flow. Gauge well @ 6000' and before TOH for logs @ 8277'. 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 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:

CASING TYPE	HOLE SIZE	<b>DEPTH</b>	<b>CASING SIZE</b>	WT. & GRADE
Surface	13-3/4"	300'	10-3/4"	32.75# H-40
Intermediate	9-7/8"	3790'	7-5/8"	26.4# K-55
Production	6-3/4"	8277'	5-1/2"	17.0# N-80

# B. FLOAT EQUIPMENT:

- 1. SURFACE CASING: 10-3/4" notched regular pattern guide shoe.
- 2. <u>INTERMEDIATE CASING:</u> 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 2567' to the surface. Total centralizers: 5 regular and 19 turbulent.
- 3. <u>PRODUCTION CASING:</u> 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 5542'.

#### C. CEMENTING:

- 1. <u>SURFACE</u>: Use 200 sx (240cu.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 615 sx (1276 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 (268 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 = 1544 cu.ft. WOC 12 hours. Run a temperature survey after 8 hours if cement is not circulated. Test to 1500#.
- 3. <u>PRODUCTION CASING</u>: Use 340 sx (462 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 = 612 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. <u>Dakota</u>: 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. <u>Mesa Verde:</u> 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:#30opp

	ROSA UNIT	PORE PRESSUR	RESSURES			
FORMATION	DEPTH	FRAC GRADIENT	PORE PRESSURB	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	Q.65	3729	2600		

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

Where: F = Frac Gradient
Pf = Pore Pressure

D = Depth