

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-101
Revised February 10, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address. WILLIAMS PRODUCTION COMPANY c/o Walsh Engr. & Prod. Corp.. 7415 E. Main Farmington, New Mexico 87402		¹ OGRID Number 120782
		¹ API Number 30-045-29592
¹ Property Code 17033	¹ Property Name Rosa Unit	¹ Well No. 150A

⁷ Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
M	32	32N	6W		1120	South	1025	West	San Juan

⁸ Proposed 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
72319									
⁹ Proposed Pool 1 Blanco Mesa Verde w/320					¹⁰ Proposed Pool 2				

¹¹ Work Type Code N	¹² Well Type Code G	¹³ Cable/Rotary R	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 6271'
¹⁶ Multiple No	¹⁷ Proposed Depth 5775'	¹⁸ Formation Mancos	¹⁹ Contractor Big A Rig 47	²⁰ Spud Date June 1998

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12 1/4	9 5/8	36#	250	130	Surface
8 3/4	7	20#	3420	385 + 110	Surface
6 1/4	4 1/2	10.5#	3320 - 5775	230	3320

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Williams Production Company proposes to drill a vertical well at the above described location to test the Mesa Verde Formation in accordance to the attached operations plan.

RECEIVED
MAY - 7 1998

RECEIVED
APR 23 1998

²³ I hereby certify that the information given above is true and correct to the best of my knowledge and belief

Signature: Paul C. Thompson

Printed name: Paul C. Thompson

Title: Agent

Date: 4/21/98

Phone: (505) 327-4892

Approved by: Ernie Burch 5-7-98

Title:

Approved: MAY 07 1998

Expiration Date: MAY 07 1999

Conditions of Approval
Attached ☐

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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		*Pool Code	*Pool Name
		72319	Blanco Mesa Verde
*Property Code	*Property Name		*Well Number
17033	ROSA UNIT		150A
*GRID No.	*Operator Name		*Elevation
120782	WILLIAMS PRODUCTION COMPANY		6271'

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
M	32	32N	6W		1120	SOUTH	1025	WEST	SAN JUAN

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.			
W/ 320		Y		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

	<p>¹⁷ OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p><i>Paul C. Thompson</i> Signature</p> <p>Paul C. Thompson Printed Name</p> <p>Agent Title</p> <p>4/21/98 Date</p>
	<p>¹⁸ SURVEYOR CERTIFICATION</p> <p>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.</p> <p>APRIL 13, 1998 Date of Survey</p> <p>Signature and Seal of Professional Surveyor</p> <p><i>NEALE C. EDWARDS</i> NEW MEXICO 6857 Professional Surveyor</p>

I. GEOLOGY: Surface formation - San Jose

Ojo Alamo	2140'	Cliff House	4895'
Kirtland	2245'	Menefee	5275'
Fruitland	2775'	Point Lookout	5475'
Pictured Cliffs	2990'	Mancos	5610'
Lewis	3270'	Total Depth	5775'

C. NATURAL GAUGES: Gauge any noticeable increases in gas flow. Record all gauges in Tour book and on morning reports.

A. MUD PROGRAM: Clear water with benex to 7" casing point. LSND to log and run pipe. Treat for lost circulation as necessary. Expect 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 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.

A. CASING PROGRAM:

<u>CASING TYPE</u>	<u>HOLE SIZE</u>	<u>DEPTH</u>	<u>CASING SIZE</u>	<u>WT. & GRADE</u>
Surface	12-1/4"	250'	9-5/8"	36# K-55
Intermediate	8-3/4"	3420'	7"	20# K-55
Prod. Liner	6-1/4"	3320'-5775'	4-1/2"	10.5# K-55

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

2. INTERMEDIATE CASING: 7" 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 2040' to the surface. Total centralizers = 5 regular and 17 turbulent.

3. PRODUCTION CASING: 4-1/2" whirler type cement nose guide shoe with a latch collar on top of 20" bottom joint. Place marker joint above 4895'.

C. CEMENTING:

1. SURFACE: Use 130 sx (157 cu.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 - 385sx (804 cu.ft.) of class "B" 65/35 poz with 10% gel and 1/4# cello-flake/sk (Yield = 2.1 cu.ft./sk, Weight = 12.1 #/gal.). Tail - 110sx (195 cu.ft.) of class "B" with 4% gel, 1/4# cello-flake/sk, 0.5% FL-25 and 2% CaCl₂ (Yield = 1.74 cu.ft./sk, Weight = 13.5#/gal.). Use 100% excess in lead and 75% excess in tail to circulate to surface. Total volume = 999 cu.ft. WOC 12 hours. Run a temperature survey after 8 hours if cement is not circulated. Test to 1500#.

3. PRODUCTION LINER: 230sx (403 cu.ft.) of class "B" with 4 % gel, 1/4# cello-flake/sk, 0.5% FL-25 and 2 % CaCl₂ (Yield = 1.74 cu.ft./sk, Weight = 13.5 #/gal.) Displace cement at a minimum of 8 BPM. Use 60% excess in lead and tail to cover liner top. Total volume 416 cuft. WOC 12 hours. Run a temperature survey after 8 hours if liner top is not circulated.

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

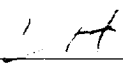
1. Pressure test 7" & 4-1/2" casing to 3300# for 15 minutes.

C. STIMULATION

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

D. RUNNING TUBING

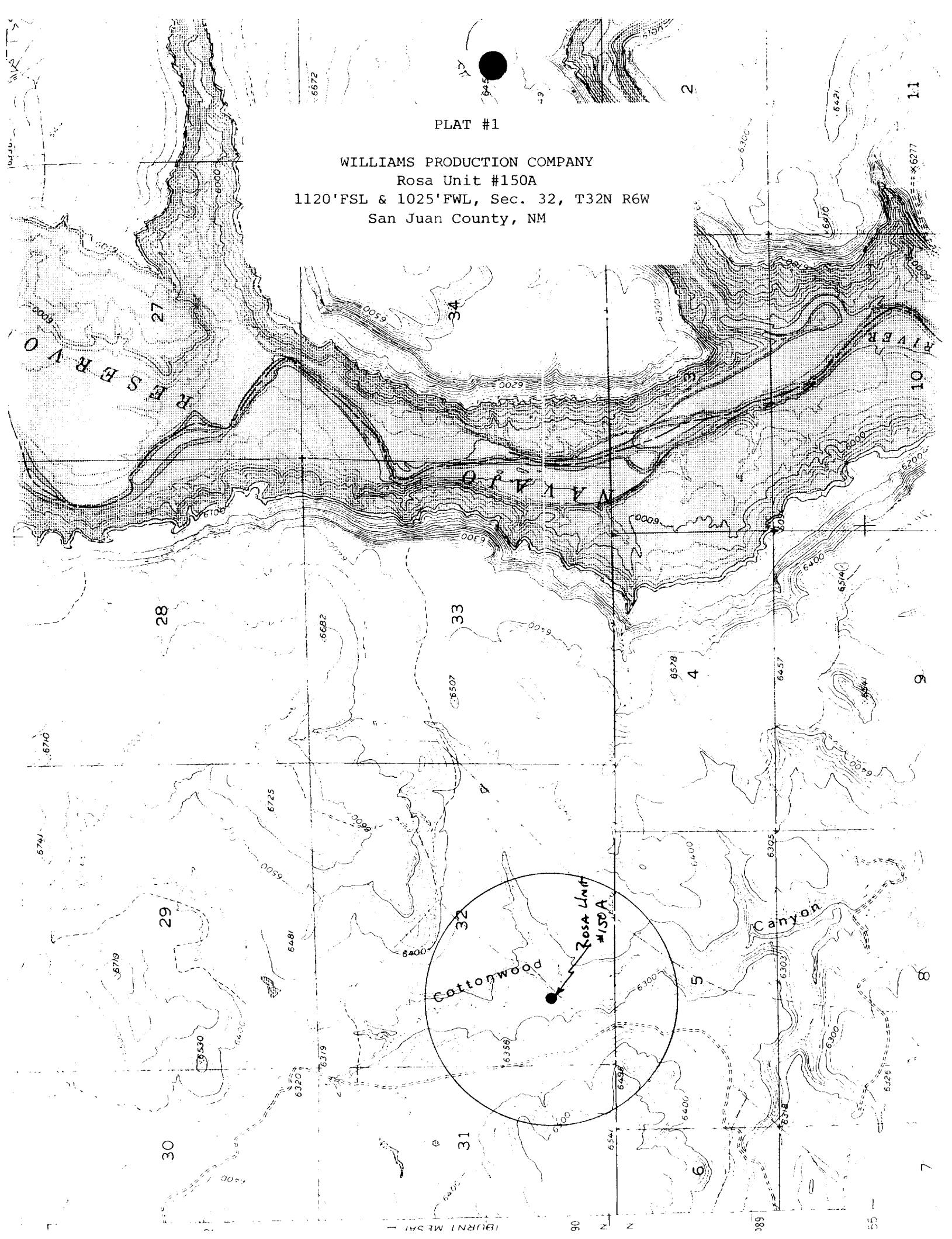
1. Mesa Verde: Run 2-3/8", 2.9#, J-55, EUE tubing with a SN (1.375" ID) on top of bottom joint. Land tubing approximately 50' above the bottom Point Lookout perforations.



Lance Hobbs
Engineer, Production & Drilling

PLAT #1

WILLIAMS PRODUCTION COMPANY
Rosa Unit #150A
1120'FSL & 1025'FWL, Sec. 32, T32N R6W
San Juan County, NM



WILLIAMS PRODUCTION COMPANY
A 3A UNIT #150A, 1120' FSL & 10' FWL
SECTION 32, T32N, R6W, NMPM
SAN JUAN COUNTY, NEW MEXICO
GROUND ELEVATION: 6271'

