

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

District II
811 South First, Artesia, NM 88210

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-101
Revised October 18, 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 P.O. Box 3102, MS 37-2 Tulsa, OK 74101		² OGRID Number 120782
		³ API Number 30039-26629
⁴ Property Code 17033	⁵ Property Name Rosa Unit	⁶ Well No. 34B

⁷ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	36	32N	6W		1815'	South	2455'	East	Rio Arriba

⁸ Proposed 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

⁹ Proposed Pool Blanco - Mesa Verde	¹⁰ Proposed Pool 2
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¹¹ Work Type Code N -	¹² Well Type Code G -	¹³ Cable/Rotary Rotary	¹⁴ Lease Type Code S -	¹⁵ Ground Level Elevation 6491' GR
¹⁶ Multiple No -	¹⁷ Proposed Depth 6218' KB -	¹⁸ Formation Blanco - Mesa Verde	¹⁹ Contractor Aztec Well Service	²⁰ Spud Date April 1, 2001

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# K-55	250' KB	130 sx (181 cuft)	Surface -
8-3/4"	7"	20# K-55	3758' KB	610 sx (1130cuft)	Surface -
6-1/4"	4-1/2"	10.5# K-55	3658' - 6218' KB	270 sx (394 cuft)	Top of Liner -

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 Exploration & Production proposes to drill a vertical well with an 12-1/4" hole with water & benex to approx. 250' KB and set 9-5/8" 36# K55 surface casing, cement to surface with 130 sx of Class Type III, 2% CaCl2 (181 cu ft), then drill 8-3/4" hole to 3758' KB, set 7" K-55 casing. Cement Lead with 440 sx (896 cu ft) of Type III 65/35 Poz with 8% gel + 1% CaCl2; Cement Tail with 170 sx (234 cuft) of class Type III + 1% CaCl2. Drill 6-1/4" hole to 6218'KB, set 4-1/2" K-55 casing, set production liner, cement Lead with 80 sx (116 Cuft) of Class H + 50/50 poz, cement Tail with 190 sx (278 cu ft) of Class-H 50/50 poz + 4% gel + 0.4% FL-5. Run cased hole log (TMDL). While drill pipe in use run not less than one BOP test per day. Set 9-5/8" 36# K-55 production casing from 250'KB to surface, set 7", 20# K-55 casing from 250'KB to 3758'KB, and set 4-1/2" 10.5# K-55 casing from 3658'KB to 6218'KB. The 125% excess should circulate cement to surface. WOC 12 hours. Run cement bond log across all intervals to be perforated & find Top of Cement behind all casing strings. Pressure test 7" & 4-1/2" casing to 3300# for 15 minutes. Mesa Verde: run 2-3/8", 4.7#, J-55 EUE tubing with a SN (1.91" ID) on top of bottom joint. Land tubing approximately 25' above bottom Point Lookout perforation. Will test Mesa Verde through perforated casing. Will fracture stimulate and put on for production test. Surface ownership is State of NM. Surface State procedures. Formation tops: Ojo Alamo- 2548', Kirtland-2663', Fruitland-3083', Pictured Cliffs 3283', Lewis 3618', Cliff House 5528', Menefee 5573', Point Lookout 5768', Mancos 6103', TD 6218', all KB.

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

Signature: *Steve Nelson*

Printed name: **Steve Nelson**

Title: **Agent, Nelson Consulting, Inc.**

Date: **January 8, 2001** Phone: **505-327-6331**

OIL CONSERVATION DIVISION

Approved by: *[Signature]*

Title: **DEPUTY OIL & GAS INSPECTOR DIST. III**

Approval Date: **JAN 10 2001** Expiration Date: **JAN 10 2002**

Conditions of Approval:
Attached ☐

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-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 30-039-26629		*Pool Code 72319	*Pool Name Blanco Mesaverde
*Property Code 17033	*Property Name ROSA UNIT		*Well Number 348
*OGRID No. 120782	*Operator Name WILLIAMS PRODUCTION COMPANY		*Elevation 6491

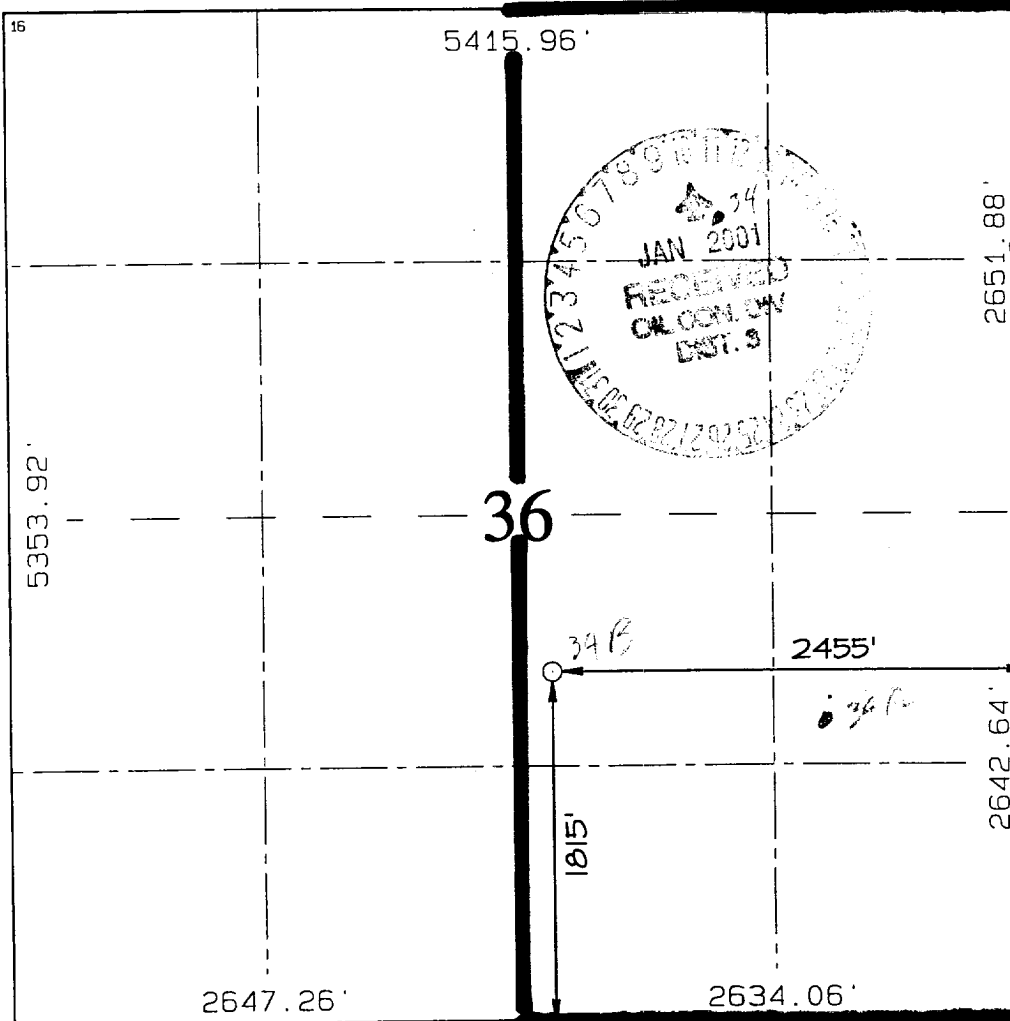
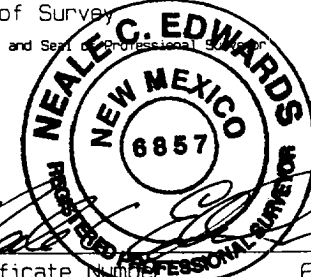
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	36	32N	6W		1815	SOUTH	2455	EAST	RIO ARriba

¹¹ Bottom Hole Location If Different From Surface

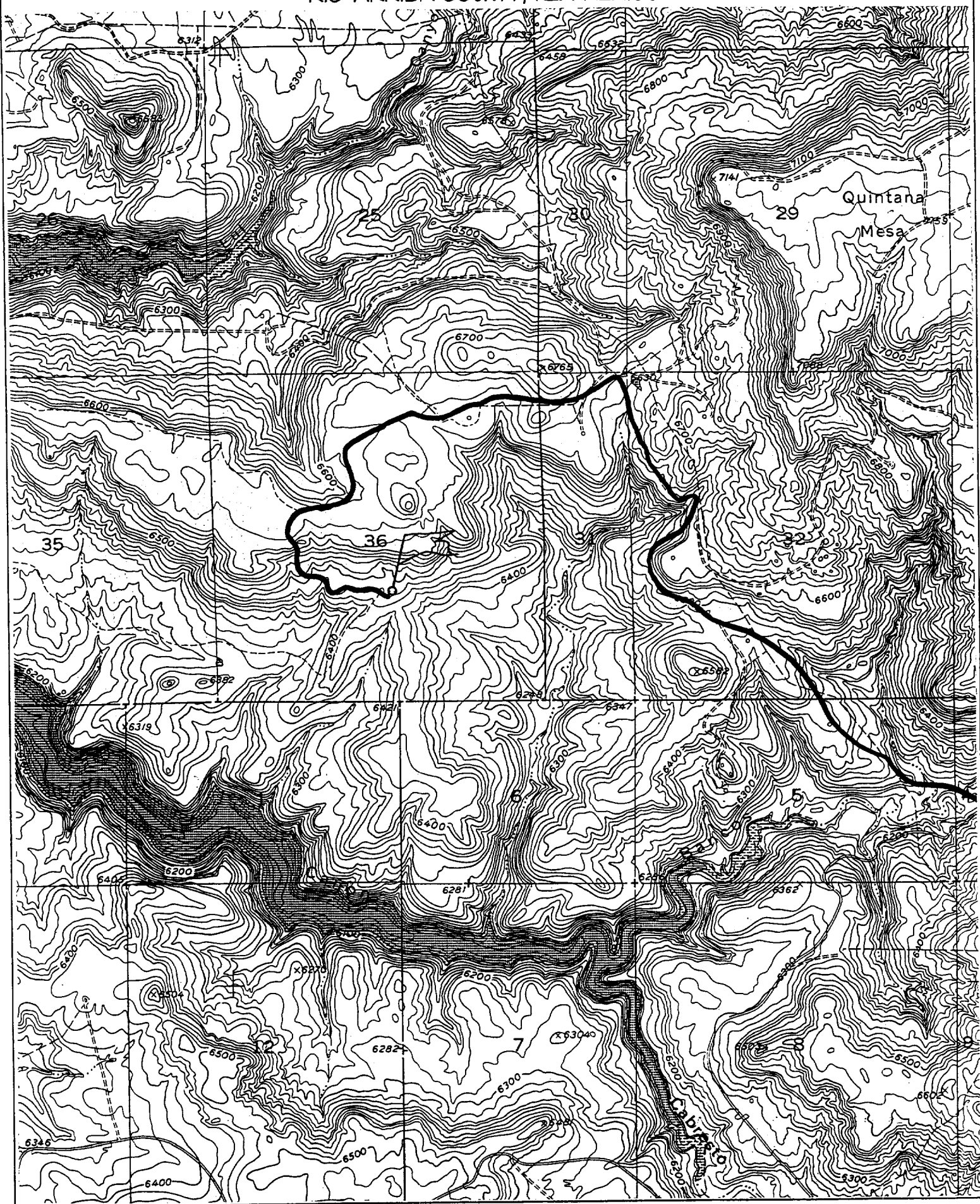
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres 320 - E/2		¹³ Joint or Infill I		¹⁴ Consolidation Code U		¹⁵ Order No.			

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

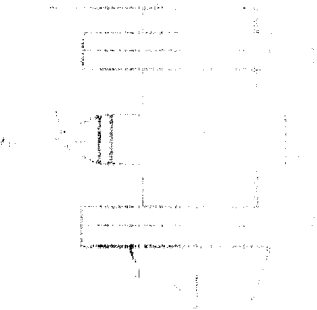
¹⁶ 	<p>¹⁷ OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p><i>Steve Nelson</i> Signature Steve Nelson Printed Name Agent, Nelson Consulting Title January 8, 2001 Date</p>
	<p>¹⁸ SURVEYOR CERTIFICATION</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>DECEMBER 11, 2000 Date of Survey <i>Neale C. Edwards</i> Signature and Seal of Professional Surveyor  Certificate Number 6857</p>

WILLIAMS PRODUCTION COMPANY ROSA UNIT #34B

1815' FSL & 2455' FEL, SECTION 36, T32N, R6W, N.M.P.M.
RIO ARriba COUNTY, NEW MEXICO



• **How to use this book:** This book is designed to be used in a variety of ways. It can be used as a textbook, a reference, or a study guide. The book is divided into chapters, each of which covers a specific topic. The chapters are arranged in a logical sequence, starting with the basics and moving on to more advanced topics. Each chapter includes a list of objectives, a list of key terms, and a list of exercises. The exercises are designed to help you understand the concepts and apply them to real-world situations. The book also includes a glossary and an index to help you find the information you need.



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