

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTRECEIVED
BLM

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. SF-078768	
1b. TYPE OF WELL OIL WELL <input type="checkbox"/> <input checked="" type="checkbox"/> OTHER SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME 12	
2. NAME OF OPERATOR Williams Production Company		7. UNIT AGREEMENT NAME Rosa Unit	
3. ADDRESS OF OPERATOR c/o Walsh Engineering, 7415 E. Main St. Farmington, NM 87402 (505) 327-4892		8. FARM OR LEASE NAME, WELL NO. 343	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At Surface 1365' FSL and 2375' FWL At proposed Prod. Zone		9. API WELL NO. 30-037-26203	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 35 miles NE of Blanco, NM		10. FIELD AND POOL OR WILDCAT Basin Fruitland Coal	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 1365'		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA K Sec. 26, T31N, R5W	
16. NO. OF ACRES IN LEASE 2560		12. COUNTY OR PARISH Rio Arriba	
17. NO. OF ACRES ASSIGNED TO THIS WELL 5/320		13. STATE NM	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR ON THIS LEASE, FT. 5500'		19. PROPOSED DEPTH 3390	
20. ROTARY OR CABLE TOOLS Rotary		21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6536' GR	
22. APPROX. DATE WORK WILL START* August 15, 1999			

23. PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8"	36# K-55	250'	176 cu ft. Cl "B" w/ 3% CaCl ₂
8-3/4"	7"	20# K-55	3270'	1038cuft. Cl "B" 65/35 poz & 60cuft w/ 2% CaCl
6-1/4"	5-1/2"	15.5# K-55	3170' - 3390'	None

This section is subject to technical and
procedural review pursuant to 43 CFR 3165.3
and appeal pursuant to 43 CFR 3165.4.

Williams Production Company proposes to drill a vertical well to develop the Fruitland Coal formation at the above described location in accordance with the attached drilling and surface use plans.

This location has been archaeologically surveyed by Moore Anthropological Research. Copies of their report have been submitted directly to your office.

This APD also is serving as an application to obtain BLM road and pipeline right-of-ways. This well will be accessed by a new road approximately 5000' long by 30' wide which crosses the N/2 SE/4 of Sec. 26, and the N/2 of SW/4 of Sec. 25, T31N, R5W where it joins Forest Road 309B. The pipeline route is described on Plat #4 and #4A

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS"

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM : If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Paul C. Thompson TITLE Paul Thompson, Agent DATE 7/7/99

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

Application approval does not warrant or certify that the 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:

APPROVED BY Chip Haraden TITLE Acting Team Lead DATE 1/21/00

*See Instructions On Reverse Side

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, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

44M000

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

0701-9 PM12:12 AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-26503		*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL	
*Property Code 17033	*Property Name ROSA UNIT		*Well Number 343	
*OGRIID No. 120782	*Operator Name WILLIAMS PRODUCTION COMPANY		*Elevation 6536'	

¹⁰ Surface Location

UL or lot no. K	Section 26	Township 31N	Range 5W	Lot Idn	Feet from the 1365	North/South line SOUTH	Feet from the 2375	East/West line WEST	County RIO ARriba
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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
*Dedicated Acres 320		*Joint or Infill N		*Consolidation Code U		*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

<div><p>¹⁶</p></div>	<div><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 Paul C. Thompson Printed Name Agent Title 7-7-99 Date</p></div>
	<div><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 15 1998 Date of Survey <i>NEALE C. EDWARDS</i> Signature NEALE C. EDWARDS NEW MEXICO 6857 REGISTERED PROFESSIONAL SURVEYOR Certificate Number</p></div>

WILLIAMS PRODUCTION COMPANY
Operations Plan

DATE: 07/1/99

WELLNAME: Rosa 343 **FIELD:** Basin Fruitland Coal

LOCATION: NE/4 SW/4 Sec. 26, T31N, R5W **SURFACE:** Fee
 Rio Arriba, NM

ELEVATION: 6536 GR **MINERALS:** Fed

TOTAL DEPTH: 3390' **LEASE #** SF-078768

I. GEOLOGY: Surface formation - San Jose

A. FORMATION TOPS: (KB)

Ojo Alamo	2680'
Kirtland	2860'
Fruitland	3190'
Base of Coal	3390'
Total Depth	3390'

B. LOGGING PROGRAM: No logging anticipated. Mud logger will be present to determine TD.

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. Treat for lost circulation as necessary. Expect 100% returns prior to cementing. Notify Engineering of any mud losses. If coal is detected before 3270' DO NOT drill deeper until Engineering is contacted.

B. Drilling Fluid: Coal section will be drilled with Fruitland Coal water. Mud logger will pick TD at +/- 3390'.

C. 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. & GRADE</u>
Surface	12-1/4"	250'	9-5/8"	36# K-55
Intermediate	8-3/4"	3270'	7"	20# K-55
Prod. Liner	6-1/4"	3170-3390'	5-1/2"	15.5# K-55

B. FLOAT EQUIPMENT:

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 1585' to the surface. Total centralizers = 5 regular and 14 turbulent.

Rosa #343
Drilling Prognosis
Page #2

3. PRODUCTION LINER: 5-1/2" liner with notched collar on bottom.

C. CEMENTING:

11. SURFACE: Use 150 sx (176 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 125% excess to circulate the surface. WOC 12 hours. Test to 1500#.

2. INTERMEDIATE: Lead - 500sx (1038 cu.ft.) of class "B" 65/35 poz with 8% gel, 2% CaCl₂ and 1/4# cello-flake/sk (Yield = 2.09 cu.ft./sk, Weight = 12.1 #/gal.). Tail - 50sx (60 cu.ft.) of class "B" with 2% CaCl₂ and 1/4# cello-flake/sk, (Yield = 1.19 cu.ft./sk, Weight = 15.6 #/gal.). Use 125% excess in lead and tail to circulate to surface. Total volume = 1098 cu.ft. WOC 12 hours. Run a temperature survey after 8 hours if cement is not circulated. Test to 1500#.

3. PRODUCTION LINER: Open hole completion. No cement.

IV COMPLETION

A. PRESSURE TEST

Pressure test 7" casing to 3300# for 15 minutes.

B. STIMULATION

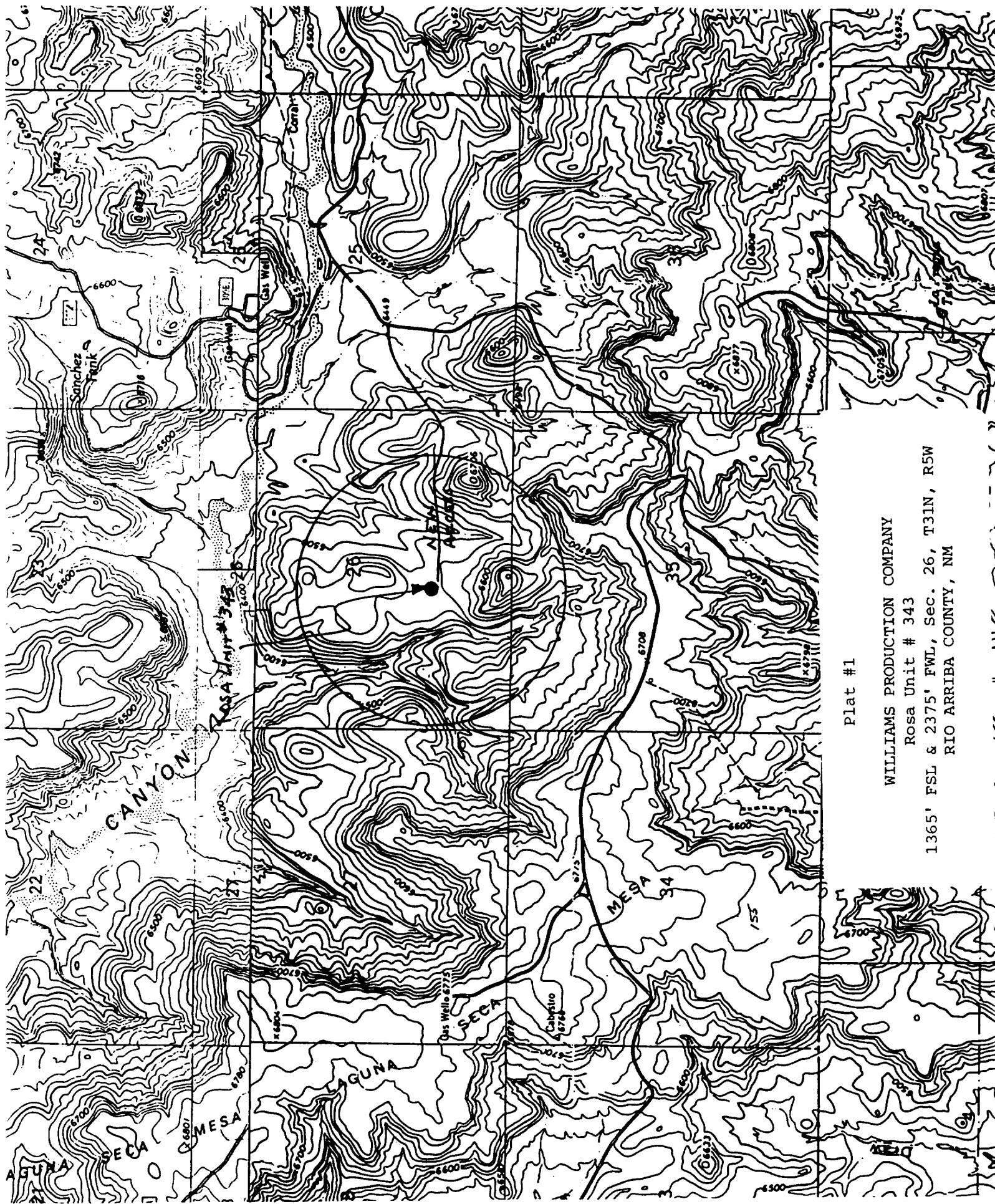
Cavitate Well with reciprocation and rotation. Surge wells with water and air and then flow back to pit. Cavitate for 2 to 3 weeks. Maximum pressure not expected to exceed 2,000 psi.

C. RUNNING TUBING

1. Mesa Verde: Run 2-3/8", 4.7#, J-55, EUE tubing with a SN (1.375" ID) on top of bottom joint. Land tubing approximately 50' above TD.

Lance A. Hobbs
Engineer, Production & Drilling

file:343Rosa



Plat #1

WILLIAMS PRODUCTION COMPANY

Rosa Unit # 343

1365' FSL & 2375' FWL, Sec. 26, T31N, R5W

RIO ARriba COUNTY, NM