

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

ROW/APD

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5. Lease Designation and Serial No.
SF-078769

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation
Rosa Unit

8. Well Name and No.
Rosa Unit #363

9. API Well No.
30-039-26683

10. Field and Pool, or Expiatory Area
Basin Fruitland Coal

11. Sec., T., R., M., or BLK. and Survey or Area
A Section 17, T31N, R5W

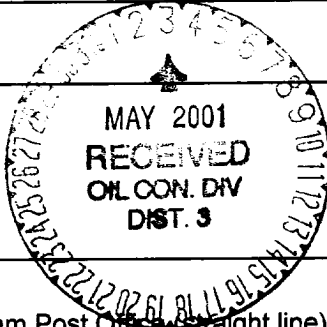
a. Type of Work
DRILL DEEPEN

b. Type of Well
Oil Well Gas Well Other Single Well Multiple Zone

2. Name of Operator
Williams Production Company

3. Address and Telephone No
P.O. Box 3102, MS 37-2, Tulsa, OK. 74101

4. Location of Well (Footages)
At Surface
1105' FNL 795' FEL, NENE
proposed prod. zone



14. Distance in Miles and Directions from Nearest Town or Post Office
Approximately 21.8 miles northeast of Navajo Dam Post Office (straight line)

12. County or Parish
Rio Arriba

13. State
NM

15. Distance from Proposed Location to Nearest Property or Lease Line, Ft 795'	16. No. of Acres in Lease 2560 acres	17. No. of Acres Assigned to This Well 320 acres, E/2
18. Distance from Proposed Location to Nearest Well Drilling, Completed, or Applied for, on this Lease, FT 49'	19. Proposed Depth 3145 KB	20. Rotary or Cable Tools Rotary
21. Elevations (Show whether DF, RT, GR, etc) 6305' GR	22. Approximate Date Work will Start April 1, 2001	

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE & GRADE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8"	36# K-55	250'	130 sx-188 cu ft Class Type 3
8-3/4"	7"	20# K-55	2995'	335 sx-696 cu ft Type 3 65/35 150 sx-204 Cu ft-Type III
6-1/4"	5-1/2"	15.5# K-55	2895' - 3145'	Open hole completion, no cement

Williams Exploration & Production proposes to drill a vertical well to develop the Basin Fruitland Coal Formation in the described location above, and in accordance with the attached Operation and Surface Use plans. **The surface is under the jurisdiction of the Bureau of Land Management-Farmington Field Office.** Independent Contract Archaeology of La Plata, NM has surveyed the proposed location for Cultural Resources, and the report has been submitted to the BLM-FFO for review. Nelson Consulting, Inc. of Farmington, NM has submitted the Environmental Assessment to BLM-FFO for review.

This proposed well would utilize an existing gas field road, therefore no new access road would be constructed (see Pipeline & Well Plats #3 and #4). The proposed 49-foot long pipeline would tie into Williams Gathering System on the Rosa Unit Well #153A (see the attached Pipeline Plat Map # 4). This application will also serve as the application for the pipeline right-of-way.

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

APPLICANT'S COPY OF THIS APPLICATION AND ATTACHED "GENERAL REQUIREMENTS"

By APPLICANT: Steve Nelson Title Agent Date February 27, 2001

COPIES: BLM+4, WELL FILE+1

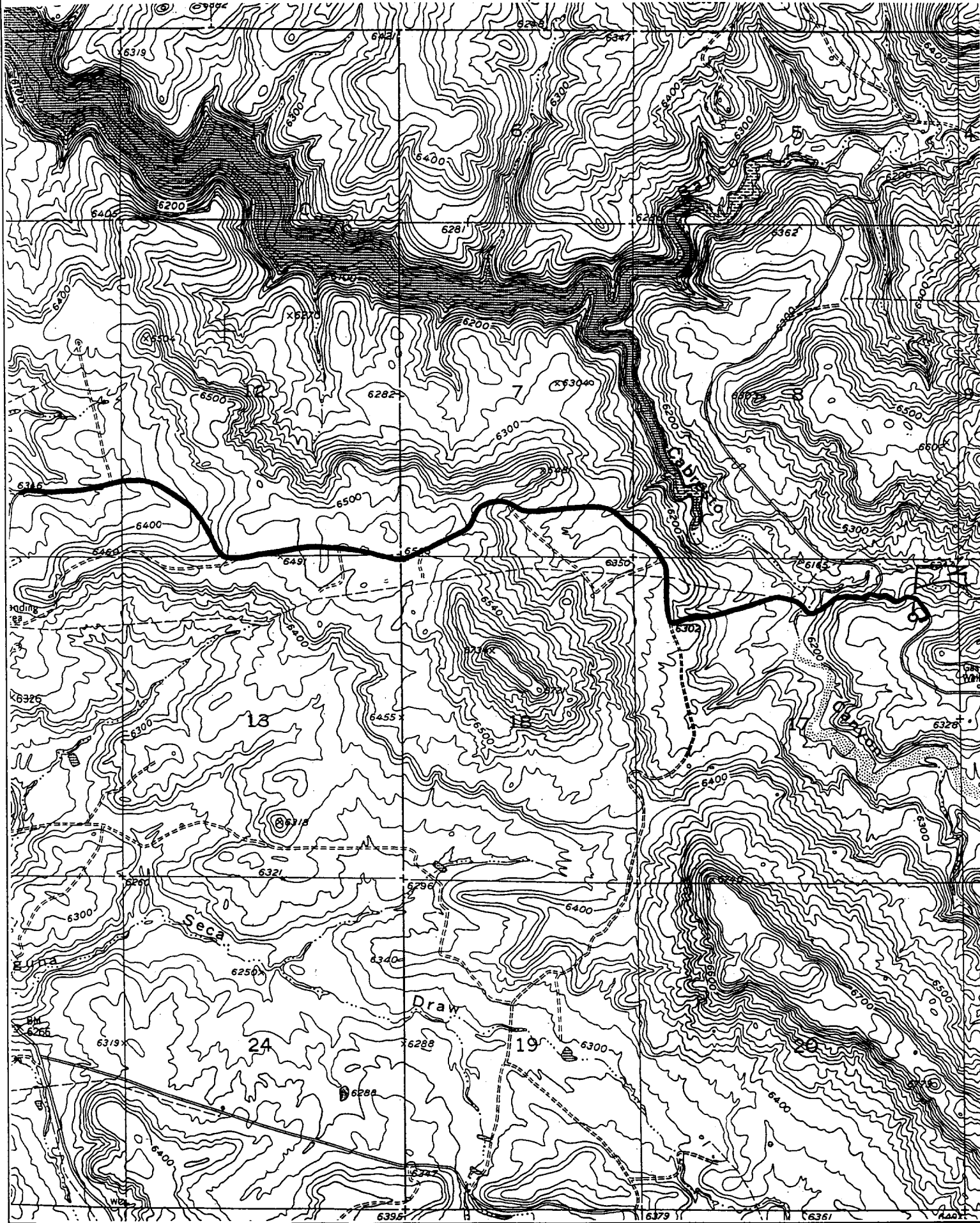
(This space for Federal or State office use)

Permit No. _____ Approval Date 4/11/01
Application approval does not warrant or certify that 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: Lee Otten DATE _____

WILLIAMS PRODUCTION COMPANY ROSA UNIT #363

1105' FNL & 795' FEL, SECTION 17, T31N, R5W, N.M.P.M.
RIO ARRIBA COUNTY, NEW MEXICO



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

C. CEMENTING:

1. SURFACE: Use 130 sx (188 cu.ft.) of "Type III" with 2% CaCl₂ and 1/4# of cello-flake/sk (Yield = 1.41 cu.ft./sk, Weight = 14.5 #/gal.). Use 125% excess to circulate the surface. WOC 12 hours. Test to 1500#.
2. INTERMEDIATE: Lead - 335 sx (696cu.ft.) of "Type III" 65/35 poz with 8% gel, 1% CaCl₂ and 1/4# cello-flake/sk (Yield = 2.09 cu.ft./sk, Weight = 12.1 #/gal.). Tail - 150 sx (204cu.ft.) of "Type III" with 1/4# cello-flake/sk, and 1% CaCl₂ (Yield = 1.4 cu.ft./sk, Weight = 14.5#/gal.). Use 100% excess in lead and tail to circulate to surface. Total volume = 900 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

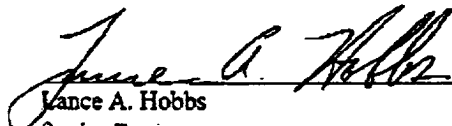
Pressure test 7" casing to 3300# for 15 minutes.

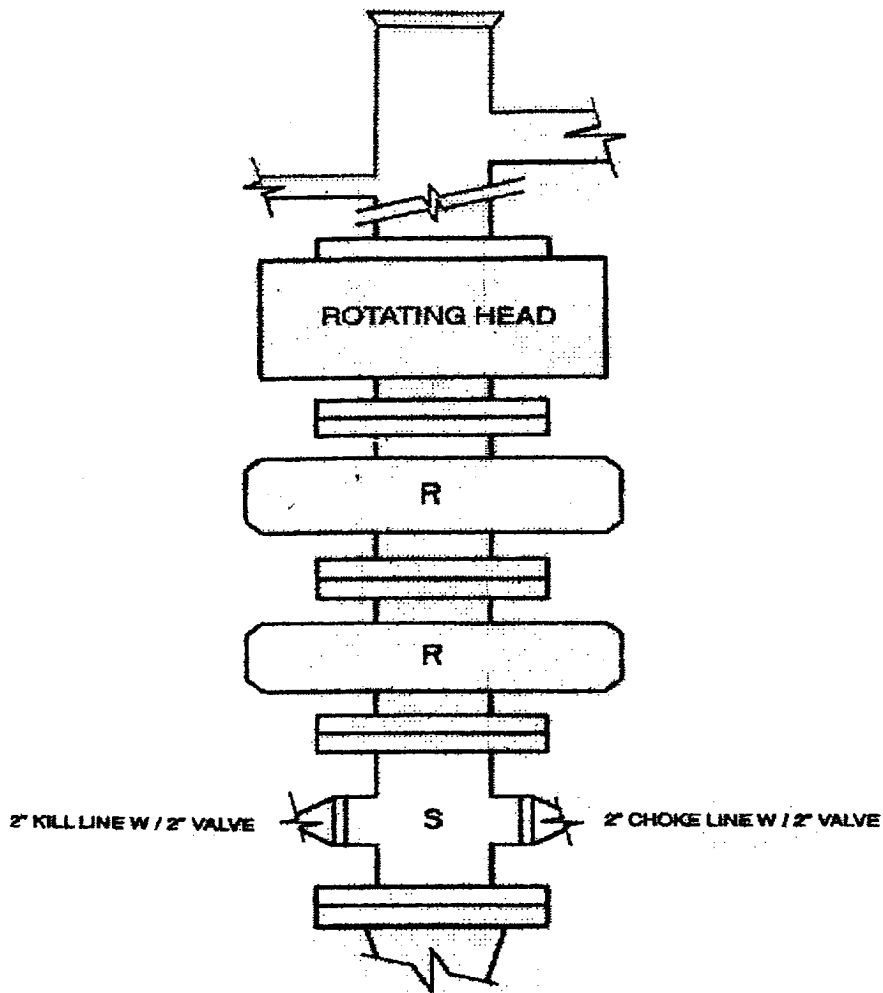
B. STIMULATION

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. Fruitland Coal: 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
Senior Engineer



2M – BOP ARRANGEMENT

2M SYSTEM:

- Annular preventer or double ram or two rams with one being blind and one being a pipe ram
- Kill line (2 inch minimum)
- 1 kill line valve (2 inch minimum)
- 1 choke line valve
- 2 chokes (refer to diagram)
- Upper kelly cock valve with handle available
- Safety valve and subs to fit all drill strings in use
- Pressure gauge on choke manifold
- 2 inch minimum choke line
- Fill-up line above uppermost preventer

Anticipated reservoir pressure is expected to be less than 1300 psi on all encountered zones.

All ram type preventers and related equipment will be hydraulically tested at nipple-up and after any use under pressure to 1500 psi. The pipe and blind rams will be activated and checked for operational readiness each trip. All checks of the BOP stack and equipment will be noted on the daily drilling report. The BOP equipment will include a kelly cock with handle, floor safety valve with changeovers for each tool joint in the string and choke manifold all rated to 2000 psi