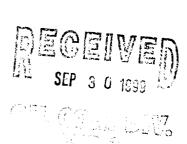
In Lieu of Form 316 (June 199	0 DEPARTME	ED STATES NT OF INTERIOR ND MANAGEMENT	CEIVE	FORM APPROVED / Budget Bureau No. 1004-0135 Expires: March 31, 1993
Do not u	SUNDRY NOTICE AND use this form for proposals to drill or to deepen or TO DRILL" for permi	reentry to a different reservoir. Use "APPLICATION -	1,4950	Lease Designation and Serial No.  SF-078767  35 If Indian, Allottee or Tribe Name
	SUBMIT IN T	RIPLICATE	7.	If Unit or CA, Agreement Designation ROSA UNIT
1.	Type of Well  ☐ Oil Well ■ Gas Well  ☐ Other		8.	Well Name and No. ROSA UNIT #228
2.	Name of Operator WILLIAMS PRODUCTION COMPANY		9.	API Well No. 30-039-24362
3.	Address and Telephone No. PO BOX 3102 MS 37-2, TULSA, OK 74101 (918) 573-6254		10.	Field and Pool, or Exploratory Area BASIN FRUITLAND COAL
4.	Location of Well (Footage, Sec., T., R., M., or Survey Description) 1850' FNL & 1355' FEL, SW/4 NE/4, SEC 07 T31N R5W		11.	County or Parish, State RIO ARRIBA, NM
	CHECK APPROPRIA	TE BOX(s) TO INDICATE NATURE OF NOTICE, REF	ORT, OR C	THER DATA
TYPE OF SUBMISSION		ТҮРЕ	OF ACTION	N
	■ Notice of Intent  □ Subsequent Report  □ Final Abandonment	□ Abandonment □ Recompletion □ Plugging Back □ Casing Repair □ Altering Casing ■ OtherCavitation		☐ Change of Plans ☐ New Construction ☐ Non-Routine Fracturing ☐ Water Shut-Off ☐ Conversion to Injection ☐ Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and
				Log form.)

Williams Production Company plans to cavitate this well as per the attached procedure. Estimated start date 9/30/1999.



		्रिक्ष्या क्षेत्र ।	
14.	I hereby certify that the foregoing is true and correct  Signed TRACY ROSS	Title Production Analyst Date August 31, 1999	
	(This space for Federal or State office use)  Approved byWAYNE TOWNSEND	Title A. T. L. Date 9-26.	-27
	Conditions of approval, if any:		

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.

## WILLIAMS PRODUCTION COMPANY **CAVITATION PROGNOSIS ROSA 228**

Purpose: To pull the liner and cavitate the Fruitland Coal zone.

- Notify BLM 24 hours to moving in. 1. Load tank with produced water. Do not filter water unless necessary.
- MIRUSU. Nipple up BOP's, 2 blooie lines, working valves and 2" relief line. Test BOP's. 2.
- RIH to TD and check for fill. TOOH w/ 2-3/8" tubing and LD. 3.
- TIH to liner top and mill it out as follows. 4. Pick up rotary shoe, bumper sub, jars, 6-1/4" mill and 4-3/4" drill collars on 3-1/2" drill pipe and TIH. Mill the top hold down slips. TOOH. Pick up a spear and the fishing tool assembly and TIH. Spear into the liner top and jar liner loose.
- TOOH w/ 5-1/2" Liner and LD. Re use liner if possible. 5.
- PU 6-1/4" bit on 3-1/2" DP and TIH. Clean out to TD. TOOH. 6.
- PU 7" X 9-1/2" Underreamer and underream from 2919' to TD'. TOOH. 7.

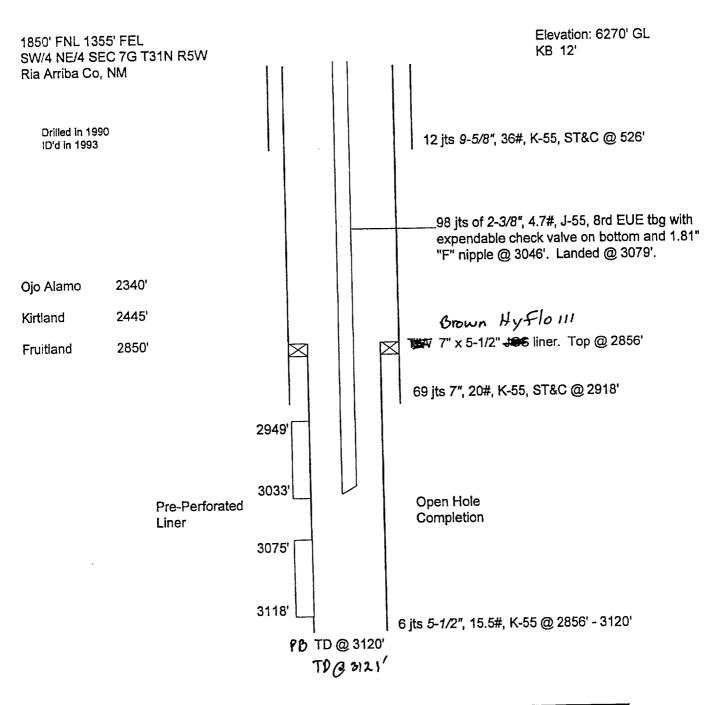
## CAVITATE

- TIH w/ 6-1/4" bit on 3-1/2" DP and circulate out fill. Run 10 to 5 bbl sweeps using 1 GPB of soap if 8. necessary.
- PU bit drill pipe inside casing. Pressure up hole( 2500 psi max pressure) then surge. Do this an 9. avg of 5 times. Gauge well after each cycle.
- Repeat. Maximum on location 3 weeks or until gas production no longer increases. 10.

NOTE: Accurate gauges will be essential in determining the success of each step.

- TOH w/ 6-1/4" bit on 3-1/2" DP. 11.
- PU 5-1/2" liner on 3-1/2 DP. Run in with reconditioned JGS liner hanger with left hand threads and L A set shoe on bottom of liner. Rotate down if necessary. Land liner @ 3121' with ±75' 12. overlap in 7". TOOH w/ 3-1/2" DP and LD.
- Review perf depth with engineering. Perforate liner using 4 SPF, 0.71" big holes (Blue Jet) at the 13. following depths; 2946'-2964', 3006'-3024', 3096'-3120'(as low as possible).
- PU 2-3/8", 4.7#, J-55, 8rd, EUE tbg and RIH. Land tubing @ ±3080'. 14.
- ND BOP and NU wellhead. Shut well in for buildup. 15.
- Cleanup location and release rig. 16.

## ROSA UNIT #228 BASIN FRUITLAND COAL



HOLE SIZE	CASING	CEMENT	TOP OF CMT
12-1/4"	9-5/8" 36#	400 sx	SURFACE
8-3/4"	7" 20#	600 sx	SURFACE
6-1/4"	5-1/2" 15.5#	Did Not Cement	N/A