In Lie Form (June	60 DEPARTMENT OF INTERIOR		FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993  5. Lease Designation and Serial No. SF-078764  6. If Indian, Allottee or Tribe Name			
	SUBMIT IN	070 FARMINGTON, NM	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 #223			
2.	Name of Operator WILLIAMS PRODUCTION COMPANY	9. API Well No. 30-039-24425				
3.	Address and Telephone No. PO BOX 3102 MS 37-4, TULSA, OK 7410	10. Field and Pool, or Exploratory Area BASIN FRUITLAND COAL				
4.	Location of Well (Footage, Sec., T., R., M., 1215' FNL & 1185' FEL, NE/4 NE/4, SEC 3	or Survey Description) 0 T31N R5W	11. County or Parish, State RIO ARRIBA, NM			
<del></del>	CHECK APPROPRIA	TE BOX(s) TO INDICATE NATURE OF NOTICE, REPO	OPT OF OTHER DATA			
	TYPE OF SUBMISSION					
13.	■ Notice of Intent  □ Subsequent Report  □ Final Abandonment	□ Abandonment □ Recompletion □ Plugging Back □ Casing Repair □ Altering Casing ■ Other <u>Cavitation</u>	F ACTION  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.)			
	Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed wor If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*  Williams Production Company plans to cavitate this coal well as per the attached procedure.    DEC   VE					
<b>-</b>	I hereby certify that the foregoing is true and considered Sysan GRIGUHN  (This space for Federal or State office use)	Title <u>CLERK</u> Date	February 2, 1998			
	Approved by /S/ Duene W. Spence Conditions of approval, if any:	Title	Dat F EB - 6 1998			
1. 10 17						

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 223

## Purpose: To cavitate the Fruitland Coal zone.

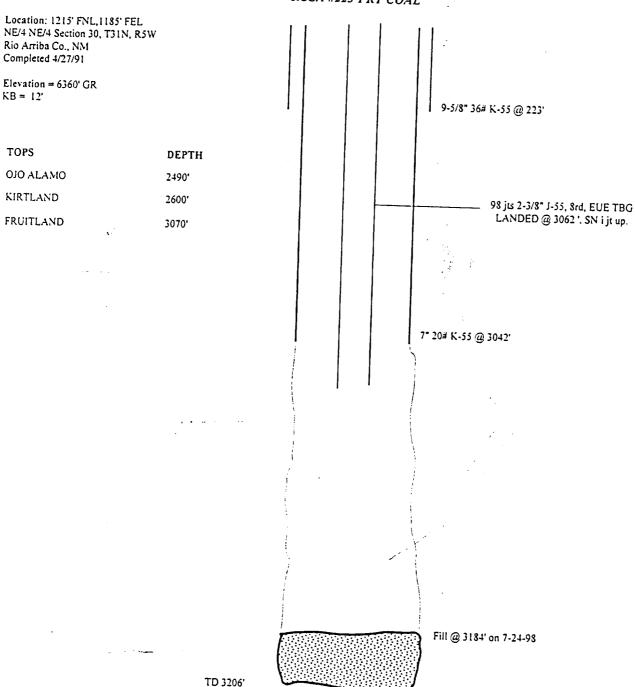
- Notify BLM 24 hours to moving in. Check rig anchors and build pits.
- 2. MIRUSU. Nipple up pneumatic actuated BOP's, 2 blooie lines, pneumatic working valves and 2 7" blooie lines. Anchor blooie lines securely. Test BOP's. Fill rig tank with produced water. Do not filter water unless necessary.
- Rig up air package to consist of three 750 cfm air compressors with booster and one 750 cfm compressor with booster for backup, or equivalent.
- 4. TOOH w/ 98 jts of 2-3/8" tubing and LD.
- 5. Pickup 3-1/2" drill pipe w/ 4-3/4" bit. TIH w/drill pipe and clean out to PBTD @ 3206'. TOH.
- 6. PU 7" X 9-1/2" Underreamer and underream from 3050' to 3206'. TOOH.
- 7. Run 5 to 10 bbl sweeps using 1 GPD soap if necessary.
- 8. PU bit inside 7" casing. Pressure up hole to 3000 psi (maximum pressure) then open to atmosphere. Repeatedly surge well. SI for buildup after surging about 5 times.
  - Record any breaks. Record accurate buildup pressure and pitot gauges after each cycle. Repeat until gas production no longer increases, 2 3 weeks.
- 9. TOH w/ 6-1/4" bit and 3-1/2" DP. Order out 5-1/2" casing.
- Notify Dante Vescovi with TIW to run liner. PU 5-1/2" liner on 3-1/2 DP. Run in with JGS liner hanger with left hand threads and L A set shoe on bottom of liner. Rotate down if necessary. Land liner @ 3206' with 100' overlap in 7". TOOH w/ 3-1/2" DP and LD.
- 11. Load hole w/ formation water or pressure up wellbore with air package to 1200 psi. Perforate 4 JSPF with 0.50" holes at depths to be decided by Engineering;
- 12. TIH w/ 2-3/8", 4.7#, J-55, 8rd, EUE tbg and RIH. Land tubing @ 3180'.
- 13. ND BOP and NU wellhead. Shut well in for buildup.

14. Clean up location and release rig.

Sterg Kathgis Senior Engineer

## WELLBORE DIAGRAM

ROSA #223 FRT COAL



HOLE SIZE	CASING		
12-1/4"		CEMENT	TOP OF CMT
8-3/4"	9-5/8" 36.0#	160 sx	SURFACE
	7" 20.0#	520 sx	
6-1/4*	l N/A	N/A	SURFACE
		INA	N/A

Open hole compeltion

## PERTINENT DATA SHEET

WELLNAME: Rosa #223

FIELD: Basin Fruitland Coal

LOCATION: 1215'FNL, 1185'FEL, Sec 30, T31N, R5W

**ELEVATION:** 

6360 GL TD: 3206'

KB: 12'

PBTD: 3206'

COUNTY: Rio Arriba

**STATE:** New Mexcio

DATE COMPLETED: 4/27/91

CASING C TYPE	ASING SIZE	HOLE SIZE	WEIGHT & GRADE	DEPTH	CEMENT	ТОР
Surface Intermediate Casing 6-1/4" OPEN HOLE		12-1/4" 8-3/4"	36.00#, K-55 20#, K-55	223' 3042'	160 sx 520 sx	surface surface

TUBING EQUIPMENT 98 jts, 2-3/8", 4.7#, J-55, 8 rd, landed @ 3062'. SN nipple one jt off bottom.

WELLHEAD:

Casing Head: 9-5/8" X 11" 3000#

Tubing Head 7-1/16" 3000#

**FORMATION TOPS:** 

Ojo Alamo

2490'

Kirtland

Fruitland

2600' 3070'

LOGGING RECORD:

none

**PERFORATIONS:** 

open hole to 3206'

STIMULATION:

circulated and ran sweeps for 2-1/2 days

WORK OVER HISTORY

Changed out tbg 4/29/97. Bottom 2 jts plugged with coal and scale.

SGK 1/23/98