In Lieu of Form 3.60 (June 1990) SUNDRY NOTICE AND Do not use this form for proposals to drill or to deepen TO DRILL" for pern	FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993 5. Lease Designation and Serial No. SF-078771 6. If Indian, Allottee or Tribe Name 7. If Unit or CA, Agreement Designation			
l. Type of Well	TRIPLICATE □ Other	8. Well Name and No. ROSA UNIT #214		
Name of Operator WILLIAMS PRODUCTION COMPANY	- Other	9. API Well No. 30-039-24427		
3. Address and Telephone No. PO BOX 3102 MS 37-4, TULSA, OK 7410	l (918) 588-4592	10. Field and Pool, or Exploratory Area BASIN FRUITLAND COAL		
4. Location of Well (Footage, Sec., T., R., M., 790' FSL & 1745' FWL, SE/4 SW/4, SEC 14	or Survey Description) T31N R6W	11. County or Parish, State RIO ARRIBA, NM		
CHECK APPROPRIA	TE BOX(s) TO INDICATE NATURE OF NOTICE, REP	ORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE C	OF ACTION		
■ 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.)		
If well is directionally drilled, give subsurfa	mpany plans to stimulate this coal well by			
Signed SUSAN GRIGUAN		ate February 2, 1998		
(This space for Federal or State office use) Approved by /S/ Duane W. Spectrum Conditions of approval, if any:	Title	_{Date} F <u>EB</u> - 6 1998		

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 214

Purpose: To cavitate the Fruitland Coal zone.

- Notify BLM 24 hours to moving in. Notify Dante Vescovi with T.I.W.
- MIRUSU. Nipple up BOP's, 2 blooie lines, hydraulic valves, working valves and 2" relief line. Test BOP's.
 Fill rig pit with produced water. Do not filter water unless necessary.
- 3. TIH w/ tubing and check for fill. TOH with tbg and LD.
- 4. Pickup 3-1/2" drill pipe w/ 4-3/4" bit. TIH w/drill pipe and clean out to PBTD @ 3163'. TOOH.
- 5. Notify Dante Vescovi with T.I.W. to be on location with liner setting/retrieving tool. TIH with T.I.W. setting tool on 3-1/2" drill pipe. Tag liner top at 2946'. Thread setting tool into liner hanger and pull straight out to release hanger and liner. TOH with liner and drill pipe.
- 6. Recondition 5-1/2" liner as necessary. Order new pipe if necessary. Recondition JGS liner hanger with left hand threads.
- 7. If liner recovery with setting tool was unsuccessful, mill it out as follows. Pickup 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 off the JGS, Steel Sleeve, Right Hand Release liner hanger. TOOH. Pick up a spear and the fishing tool assembly and TIH. Spear into the liner top and jar liner loose.
- 8. TOOH w/ 5-1/2" Liner and LD. Repair liner if necessary.
- 9. PU 6-1/4" bit on 3-1/2" DP and TIH. Clean out to 3163'. TOOH.
- 10. PU 7" X 9-1/2" Underreamer and underream from 3010' to 3163'. TOOH.
- 11. Install three 750 cfm rated compressors with boosters and one 750 cfm compressor with booster for backup on location.
- 12. TIH w/ 6-1/4" bit on 3-1/2" DP and circulate out fill. Cavitate well! Run 10 to 5 bbl sweeps using 1 GPB of soap if necessary.
- 13. PU bit and drill inside 7". Pressure up hole to 3000 psi (Max pressure) then surge. Do this repeatedly. S.I. and measure pressure buildup. Pitot gauge flow.
- 14. Repeat 2-3 weeks or until gas production no longer increases.
 - NOTE: Accurate guages will be essential in determining the success of each step.
- 15. TOH w/ 6-1/4" bit on 3-1/2" DP.

16. PU original 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 @ 3163' with 60' overlap in 7". TOOH w/ 3-1/2" DP and LD.

If new 5-1/2" is run, perforation depths will be picked as per engineering, approximately 3024'-3162'.

- 17. PU 2-3/8", 4.7#, J-55, 8rd, EUE tbg and RIH. Land tubing @ 3130'.
- 18. ND BOP and NU wellhead. Shut well in for buildup.
- 19. Cleanup location and release rig.

Sterg Katifgis

Senior Engineer

PERTINENT DATA SHEET

WELLNAME: Rosa #214

FIELD: Basin Fruitland Coal

LOCATION: 790'FSL, 1745'FWL, Sec 14, T31N, R6W

ELEVATION:

6345 GL TD: 3163'

KB: 12'

PBTD: 3163'

COUNTY: Rio Arriba

STATE: New Mexcio

DATE COMPLETED: 6/25/90

CASING TYPE	CASING SIZE	HOLE SIZE	WEIGHT & GRADE	DEPTH	CEMENT	TOP
Surface	9-5/8"	12-1/4"	36.00#, K-55	227'	160 sx	surface
Intermediate Cas	sing 7"	8-3/4"	23.0#, K-55	3000'	500 sx	surface
Production Liner	5-1/2"	6-1/4"	15.5#, K-55	2946'-3162'	NO CEMENT	

TUBING EQUIPMENT 100 jts, 2-3/8", 4.7#, J-55, 8 rd, landed @ 3123'. SN nipple one jt off bottom. Bottom jt is perfed.

WELLHEAD:

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

Tubing Head 7-1/16" 3000#

FORMATION TOPS:

Ojo Alamo

2415'

Kirtland

2510'

Fruitland

2980'

LOGGING RECORD:

Mud log.

PERFORATIONS:

3040'-3159', pre perfed liner

STIMULATION:

circulated and ran sweeps for 2 days

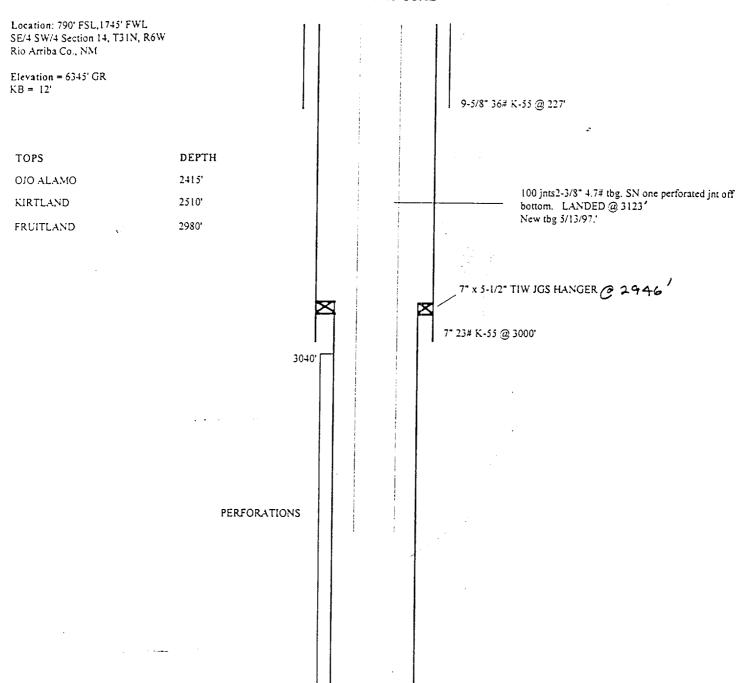
WORK OVER HISTORY

Pulled rods and changed out tbg 5/13/97

SGK 1/26/98

WELLBORE DIAGRAM

ROSA #214 FRT COAL



HOLE SIZE	CASING	CEMENT	TOP OF CMT
12-1/4"	9-5/8" 36#	160 sx	SURFACE
8-3/4"	7" 23#	500 sx	SURFACE
6-1/4*	5-1/2" 15.5#	N/A	N/A

TD 3163'

5-1/2" 15.5# K-55 @ 2946' - 3162'

OPEN HOLE COMPLETION. NO CEMENT

3159