| 1 2 | * * : | DISTATES | LODA ADDOUGD |
|--|---|---|---|
| forth in | | NI OF PATERIOR | FORM APPROVED Budget Bureau No. 1004-0135 |
| (June 199 | BUREAU OF LA | AND MA' AGEMENT | Expires: March 31, 1993 |
| | SUNDRECTION AND REPORTS ON WELLS aris form for proposals to driller to deepen or reenty to a different reservoir. Use "APPLICATION" | | 5. Lease Designation and Serial No. SF-078764 |
| Do not us | this form for proposals to drill of the teepen of the third for permitted the transfer of the | it for such proposals | 6. If Indian, Allottee or Tribe Name |
| | | | o. I maian, Another of this chairs |
| | 99 MAR -8 PM 1 | . 50 | A |
| | 070 FARMBHON BAY | RNEIDATE | 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 #221 |
| | | Other DECEMAR 1 0 1999 | 9. API Well No. |
| 2. | Name of Operator WILLIAMS PRODUCTION COMPANY | DIE MAR 10 | 30-039-24500 |
| 3. | Address and Telephone No. PO BOX 3102 MS 37-2, TULSA, OK 74101 | a Collins | 10. Field and Pool, or Exploratory Area BASIN FRUITLAND COAL |
| 4. | Location of Well (Footage, Sec., T., R., M., o 990' FNL & 1260' FEL, NE/4 NE/4, SEC 18 | or Survey Description) | 11. County or Parish, State RIO ARRIBA, NM |
| CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA | | | EPORT OR OTHER DATA |
| | | | |
| TYPE OF SUBMISSION | | TYPE OF ACTION | |
| | ■ Notice of Intent | □ Abandonment | ☐ Change of Plans ☐ New Construction |
| | ☐ Subsequent Report | □ Recompletion □ Plugging Back | ☐ Non-Routine Fracturing |
| | | □ Casing Repair | ☐ Water Shut-Off ☐ Conversion to Injection |
| | ☐ Final Abandonment | ☐ Altering Casing ■ Other Cavitation | ☐ Dispose Water |
| | | 2011.07 | (Note: Report results of multiple completion on Well Completion or Recompletion Report |
| | | | and Log form.) |
| 13. | well is directionally drilled, give subsurface | locations and measured and true vertical depths for all i | ntes, including estimated date of starting any proposed work. I markers and zones pertinent to this work.)* ed procedure. Estimated start date 4/1/1999. |
| 14. | I hereby certify that the foregoing is true and | d correct | |
| | Signed C1 | Title CLERK | Date February 5, 1999 |
| | Signed SUSAN GRIGUHN | | |
| (This space for Federal or State office use) Team Lead, Petroleum Menegement | | | Linna a mare |
| | • | | Date MAR - 1 1999 |
| | Approved by /S/ Duane W. Sp | encer Title | Date - 111 1995 |
| | Conditions of approval, if any: | | |
| Title 18 | U.S.C. Section 1001, makes it a crime for any parts or representations as to any matter within it | erson knowingly and willfully to make to any departmen | it or agency of the United States any false, fictitious or fraudule |
| | | J 198149 WIND TO 181 | |

NMOCD

WILLIAMS PRODUCTION COMPANY CAVITATION PROGNOSIS

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

- Prepare location, reserve pit, bank, and test anchors prior to rig move.
 Notify BLM 24 hours to moving in.
 Spot all tanks. Spot air package. Use produced water for workover.
- 2. MIRUSU. Nipple up BOP's, 2 blooie lines, working valves and 2" relief line. Test BOP's.
- 3. TOOH w/ tubing and LD.
- 4. TIH with T.I.W. setting tool on 3-1/2" drill pipe. Tag liner top. Thread setting tool into liner langer and pull straight out to release hanger and liner. TOH with liner and drill pipe.
- 5. Re use liner if not damaged. Recondition JGS liner hanger with left hand threads and re-use.
- 6. 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 liner hanger. TOOH. Pick up spear and the fishing tool assembly and TIH. Spear into the liner top and jar liner loose.
- 7. TOOH w/ liner and LD. Repair liner if necessary."
- 8. PU correct size bit on 3-1/2" DP and TIH. Clean out to TD. TOOH.
- 9. PU 7" X 9-1/2" Underreamer and underream from casing shoe to TD. TOOH.
- 10. Hook up air package.
- 11. TIH w/ bit on 3-1/2" DP and circulate out fill. Run 5 10 bbl sweeps using 1 GPB of soap if necessary.
- 12. PU bit drill pipe inside casing. Pressure up hole to max pressure then surge. Do this repeatedly. Five to ten times. Also alternate with natural surges periodically.
- 13. Repeat 2-3 weeks or until gas production no longer increases.
 - NOTE: Accurate choke guages are required after each cycle. Track buildup pressure also.
- 14. TOH w/ 6-1/4" bit on 3-1/2" DP.
- 15. PU original 5-1/2" liner on 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 @ TD with 100' overlap in casing. TOOH w/ DP and LD.
- 16. Perforate liner. Depths and number of holes will be determined by engineering based off open hole

- and mud logs. Use Blue Jets large diameter "Big Hole" shots (0.71" diameter) or equivalent.
- 17. PU 2-3/8", 4.7#, J-55, 8rd, EUE tbg or 2-7/8" to be determined by cavitation results and RIH. Land tubing near bottom perf. Exact depth to be determined. Leave sufficient rat hole.
- 18. ND BOP and NU wellhead. Shut well in for buildup.
- 19. Cleanup location and release rig.

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