| In Lieu of UNITED Form 3160-5 DEPARTMENT O (June 1990) BUREAU OF LANS SUNDRY NOTICES ANI Do not use this form for proposals to drill or to "APPLICATION FOR PERMIT" for such proposals | F THE INTERIOR O MANAGEMENT | FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993 5. Lease Designation and Serial No. SF-078766 6. If Indian, Allottee or Tribe Name |
|---|---|--|
| | TRIPLICATE | 7. If Unit or CA, Agreement Designation |
| 1. Type of Well |] Other | 8. Well Name and No. ROSA UNIT #332 |
| 2. Name of Operator WILLIAMS PRODUCTION COMPANY | 1 Outei | 9. API Well No. 3003924929 |
| 3. Address and Telephone No. PO BOX 3102 MS 37-4, TULSA, OK 74101 | (918) 561-6181 | 10. Field and Pool, or Exploratory Area BASIN FRUITLAND COAL |
| 4. Location of Well (Footage, Sec., T., R., M. 1565' FSL 1330' FWL, NESW SEC. 18, T3 | or Survey Description) | 11. County or Parish, State RIO ARRIBA, NEW MEXICO |
| | \mathcal{E} E BOX(s) TO INDICATE NATURE OF NOTICE, REPO | ORT, OR OTHER DATA |
| TYPE OF SUBMISSION | ТҮРЕ О | F ACTION |
| ☐ Notice of Intent ☐ Subsequent Report ☐ Final Abandonment | ☐ Abandonment ☐ Recompletion ☐ Plugging Back ☐ Casing Repair ☐ Altering Casing ■ Other <u>CONTINUE SHUT-IN</u> STATUS | ☐ 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 subsurface | the locations and measured and true vertical depths for all the shut-in status for 6 months on the above refu | s, including estimated date of starting any proposed work. markers and zones pertinent to this work.)* erenced Rosa Unit Well. This well was recently |
| | | |
| | | |
| ?≽GS A) | PPROVAL EXPIRES AUG 0.1 199 | 6 |
| 14. I hereby certify that the foregoing is true an Signed Kris Russell (This space for Federal or State office use) | d correct MILL Title Production Analyst | Date February 02, 1996 |
| Approved by Conditions of approval, if any: | <u>Title</u> D | ate |

*See Instruction on Reverse Side

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.

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In Lieu of Form 3160-5 (June 1990)

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UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED Budget Bureau No. 1004-0135

| | <u>/EX</u> | pires. | Maici | 1 21, | 1773 | |
|------------|------------|--------|--------|-------|--------|----|
| X e | ase | Desig | nation | and | Serial | No |

| | 5. | Lease Designation and S |
|---|----|-------------------------|
| ļ | / | SF-078766 |

| SUNDRY NOTICES AND REPORTS ON WELLS | | | SF-078766 | | |
|-------------------------------------|---|---------------------------|--------------------------------------|--|--|
| "APP | Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use LICATION FOR PERMIT" for such proposals | ERMIT* for such proposals | | | |
| | SUBMIT IN TRIPLICATE | 7. | If Unit or CA, Agreement Designation | | |
| 1. | Type of Well Oil Well X Gas Well Other | 8. | Well Name and No. ROSA UNIT #332 | | |
| 2. | Name of Operator | 9. | API Well No. | | |

Name of Operator 30-039-24929 WILLIAMS PRODUCTION COMPANY Field and Pool, or Exploratory Area 10. Address and Telephone No. BASIN FRUITLAND COAL PO BOX 3102 MS 37-4, TULSA, OK 74101 (918) 588-4592 11. County or Parish, State Location of Well (Footage, Sec., T., R., M., or Survey Description) RIO ARRIBA COUNTY, NEW MEXICO 1565' FSL & 1330' FWL, NE/4SW/4 SECTION 18-31N-5W-22-31N6W

CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF ACTION TYPE OF SUBMISSION Change of Plans Abandonment

X Notice of Intent New Construction Recompletion Non-Routine Fracturing Plugging Back Water Shut-Off Casing Repair Subsequent Report Conversion to Injection Altering Casing Dispose Water

(Note: Report results of X Other Initial Completion Final Abandonment multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

ESTIMATE START DATE: 05-20-96

WILLIAMS PRODUCTION COMPANY TOOK THIS WELL OVER FORM MERIDIAN 12/95. IT WAS DRILLED AND NOT COMPLETED. WILLIAMS PRODUCTION COMPANY PROPOSES TO FRACTURE STIMULATE THE FRUITLAND FORMATION AS PER THE ATTACHED PROCEDURE.

| 14. | I hereby certify that the foregoing is true and correct BOB MC ELHATTAN Signed B+6 Mc Challa | Title DIVISION ORDER ANALYST Date April 17, 1996 | APPROVED |
|-----|---|--|-------------|
| | (This space for Federal or State office use) Approved by Title Conditions of approval, if any: | Date | APR 25.1996 |

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 RECOMPLETION PROGNOSIS ROSA 332

<u>Purpose:</u> To perforate and complete the Fruitland Coal zone.

- 1. Spot and fill 2- 400 bbl tanks with 1% KCl water. Do not filter water unless necessary. Filter water to 25 microns if necessary.
- 2. MIRUSU. Nipple up BOP, blooie line, working valves and 2" relief line. Test BOP.
- Pickup 2-3/8" tubing w/ 3-7/8" bit. TIH w/tubing and clean out to PBTD @ 3123'.
- 4. TIH with 4-1/2" Packer on tubing. Set at 2900' and pressure test entire casing to 2000 psi and hold for 15 minutes. Then test to 3300 psi and hold for 15 minutes.
- TIH with perf isolation tool. Breakdown each set of perforation with 1000 gals 15% HCL acid. Maximum pressure 3300 psi.
 Acid to contain 5 GPT of Iron Control, 3 GPT of Corrosion Inhibtor, 2 GPT of surfactant.

Note: Existing perfs from 3117'-2950', 176 holes, 0.38", 4 spf. See Data Sheet for depths.

6. TOH w/ tubing. Rig up pump trucks and fracture stimulate the Fruitland Coal with 100,000# 20/40 Arizona sand using a 70 quality foam. Initial injection rate of 40 BPM rate down casing as follows.

| STAGE | FLUID (gals) | DOWNHOLE FOAM (gals) | SAND (lbs) |
|---------|--------------|----------------------|------------|
| Pad | 3,000 gals | 10,000 gals | - |
| 1.0 ppg | 3,000 gals | 10,000 gals | 10,000# |
| 1.5 ppg | 3,000 gals | 10,000 gals | 20,000# |
| 2.0 ppg | 3,000 gals | 10,000 gals | 30,000# |
| 2.5 ppg | 3,000 gals | 10,000 gals | 40,000# |
| Flush | (4,804gals) | <u> </u> | |
| | 19,804 gals | 50,000 gals | 100,000 # |
| | | | |

Maximum injection rate = 40BPM or greater at maximum STP =3300 psi.

All frac fluid to contain 20 PPT of Guar Gel, 1 PPT of Breaker, 5 GPT Foaming Agent SI well and record ISDP and 15 minute shut in pressure if not on vacuum.

- 7. TIH with bit on tubing and clean out to PBTD @ 3123'. Obtain pitot gauge when possible.
- 8. TIH w/ 2-3/8", 4.7#, J-55, 8rd, EUE tubing w/ notched collar on bottom and SN 1 joint up. Land tubing at ±3100'. Pump out plug if used and reverse circulate clean. Obtain pitot tube gauge.
- 9. ND BOP and NU wellhead. Shut well in for buildup.
- 10. Cleanup location and release rig.

Sterg Kajirgis

Senior Engineer

PERTINENT DATA SHEET

WELLNAME: Rosa #332

FIELD: Basin Fruitland Coal

LOCATION: 1565'FSL, 1330'FWL, Sec 18, T31N, R5W

ELEVATION:

6330 GL TD: 3167'

KB: 13'

PBTD: 3167'

COUNTY: Rio Arriba

STATE: New Mexcio

DATE COMPLETED: 4/1/91

| CASING TYPE | CASING SIZE | HOLE SIZE | WEIGHT & GRADE | DEPTH | CEMENT | TOP |
|------------------|----------------|--------------|----------------|-------------|--------|---------|
| Surface | 9-5/8" | 12-1/4" | 36.00#, K-55 | 230' | 180sx | surface |
| Intermediate Cas | sing 7" | | 20.0#, K-55 | 2929' | 620sx | surface |
| Production Liner | 4-1/2" | 6-1/4" | 10.5#, J-55 | 2744'-3167' | 65sx | 2744' |

TUBING EQUIPMENT None

WELLHEAD:

Casing Head -NA

Casing Spool - NA

Tubing Head - NA

FORMATION TOPS:

Ojo Alamo 2290' Kirtland 2400' Fruitland 2910' Pictured Cliff 3110'

LOGGING RECORD:

Schlumberger Natural Gamma Ray Spectrometry, Comp. Neutron-Litho Density, Microlog, Coal Log, Cyberlook, Dual Induction-SFL, Basin Cement Bond Log, Rocky Mountain Geo

Engineering Co. Mud log.

PERFORATIONS:

Coal: (4spf) 0.38" dia 2950'-53', 2972'-78', 3076'-3104', 3107'-3114'.

STIMULATION:

None

PRODUCTION HISTORY: Has not produced yet.

WORK OVER HISTORY: Cavitation unsuccesful.(4/2/91)

DFS 3/5/96

WELLBORE DIAGRAM

ROSA #332

