### State of New Mexico Energy, Minerals and Natural Resources Department

Form C-103

To Appropriate District Office **DISTRICT I** 

P.O. Box 1980, Hobbs, NM 88240

**OIL CONSERVATION DIVISION** 

Revised 1-1-89

WELL API NO.

| 1.0. Box 1900, 110008, 1411 66240                              | 2040 South Pacheco<br>Santa Fe, NM 87505 |        | 30-039-27240                          |
|--|--|--------|---------------------------------------|
| DISTRICT II  | ,  | 5.     | Indicate Type of Lease                |
| 811 South First, Artesia NM 88210                              |  |        | STATE   FEE                           |
| DISTRICT III   | •  | 6.     | State Oil & Gas Lease No.             |
| 1000 Rio Brazos Rd., Aztec, NM 87410                           |  |        |                                       |
| SUNDRY NOTICES AND R (DO NOT USE THIS FORM FOR PROPOSALS TO DI | RILL OR TO DEEPEN OR PLUG BACK TO A      | 7.     | Lease Name or Unit Agreement<br>Name: |
| DIFFERENT RESERVOIR. USE "APPLICATION<br>PROPOSA               | · · · · · · · · · · · · · · · · · · ·    |        | ROSA UNIT                             |
| 1. Type of Well:   |  |        |                                       |
| Oil Well ☐ Gas Well ■  | Other                                    |        |                                       |
| 2. Name of Operator  |  | 8.     | Well No.                              |
| WILLIAMS PRODUCTION COMPANY                                    |  |        | #32C                                  |
| 3. Address of Operator   |  | 9.     | Pool name or Wildcat                  |
| P O BOX 3102, MS 25-4, TULSA, OK 74101                         |  |        | BLANCO MV/BASIN DK                    |
| 4. Well Location (Surface)                                     |  |        |                                       |
| Unit letter <u>F</u> : <u>1675</u> feet from the <u>NORTH</u>  | line & 1700 feet from the WEST line See  | c 21-: | 31N-R6W RIO ARRIBA, NM                |

|                           | 10. Elevation (Show   | whether DF, RKB, RT, GR, etc.<br>6331' GR   |   |  |
|---------------------------|---|---|---|--|
| (                         | Check Appropriate Box to  | o Indicate Nature of Notice, Repor  | rt or Other Data                        |  |
| NOTICE OF IN              | NTENTION TO:  | SUBSEQUENT  | REPORT OF:                              |  |
| PERFORM REMEDIAL<br>WORK  | PLUG AND ABANDON  | REMEDIAL WORK   | ALTERING CASING                         |  |
| TEMPORARILY ABANDON       | CHANGE PLANS  | COMMENCE DRILLING OPNS.   | PLUG AND<br>ABANDONMENT                 |  |
| PULL OR ALTER CASING      |   | CASING TEST AND CEMENT JOB  |   |  |
| X OTHER: <u>COMMINGLE</u> |   | OTHER:  |   |  |
|                           | leted operations. (Clearly state alw to satisfy NM OCD Rule 303.0 | Il pertinent details, and give pertinent dates, i C.3 (b) (i)-(vii)               | ncluding estimated date of starting any |  |
|                           | -   | Ve recommend commingling this well for a stifficial lift system and produce both. |   |  |

production optimization. In doing so, Williams can install an artific

**Commingle Procedure:** 

- 1. Mesa Verde tubing will be pulled
- 2. Dakota tubing will be pulled
- 3. Production packer will be removed
- 4. Well will be cleaned out to PBTD
- 5. A single string of 2-3/8" tubing will be run to  $\sim$ 7900'.
- 6. Run completion profiler for allocation purposes
- 7. Install plunger lift system.
- 8. Remove one set of wellhead facilities.
- 9. Return to production as DK/MV comingle.

| I hereby certify that the information above is true and complete to the | e best of n | ny knowledge and belief.  |                             |      |
|---|-------------|---------------------------|-----------------------------|------|
| SIGNATURE Lepper  | TITLE:      | Engineering Technician II | DATE: March 23, 2           | .010 |
|   | _           | -                         |                             |      |
| Type or print name Rachel Lipperd                                       |             | Telephon                  | e No: <u>(918) 573-3046</u> |      |
| (This space for State use) APPROVED                                     |             | Deputy Oil & G            | as Inspector.               | MAR  |

District #3

DATE



# COMMUNICATION REPAIR & COMINGLING PROCEDURE

ROSA #32C T31N, R6W, SECT. 21 ELEVATION: 6331' GR PBTD:8341' MD

### **WELLBORE STATUS:**

MV 2-1/16", 3.3 #/FT EUE, To 6269' MD

DK 2-1/16", 3.3 #/FT EUE, To 8247' MD

5-1/2" BAKER MODEL D PACKER @ 6390' MD

### **OBJECTIVE: Remove failed packer and commingle MV and DK**

- 1. Pull Mesa Verde tubing
- 2. Pull Dakota tubing
- 3. Remove Production packer
- 4. Clean out to PBTD
- 5. Acid stimulate each formation if needed.
- 6. Run completion profiler for allocation purposes.
- 7. Complete with single string 2-3/8" tubing landed @ 8250'.
- 8. Install plunger lift system.
- 9. Remove one set of wellhead facilities
- 10. Return to production as DK/MV comingle

### **PRIOR TO PRIMARY JOB**

- 1) Test rig anchors.
- 2) Verify location is OK for rig operations.
- 3) Ensure JSA, ECP's and lockout procedures are in place for the flowline and other energized piping or equipment.
- 4) Acquire 8400' of 2-3/8" N-80 or stronger work string.
- 5) Acquire ~8250' of 2-3/8", EUE, 8rd, 4.7 #/ft J-55 tubing.
- 6) Acquire wellhead and convert from dual tubing string to a single, 2-3/8" tubing string.
- 7) Acquire 2-3/8", I.D. Type X or XN type nipple.

8) KCL on location to treat kill water as needed.

### SAFETY NOTICE

PERSONNEL SAFETY IS THE NUMBER ONE JOB.

NO EXCEPTIONS!!!

# PLEASE FOLLOW APPROPRIATE WILLIAMS CONTRACTOR PROTOCOLS FOR THIS JOB PLAN

Please see your Williams Business Representative if you have any questions; Contrator protocols can be located in the Williams E&P Contractor Guide

### **PRIMARY JOB**

Note: Safety meetings shall be held each morning before work and subsequent "tailgate" safety meetings are to be held during the day when operation objectives shift in nature and intent (i.e. beginning/ending fishing operations, squeeze jobs, rigging down, perforating, etc.) Please ensure these are documented per section 2.2.7 of the Williams E&P Contractor Guide

- 1. MI and spot equipment to include fluid pumps and tanks.
- 2. MIRU.
- 3. ND/NU killing well with KCL water as necessary
- 4. Test the BOP's to 2500 psig minimum. If they fail, then rebuild and retest. If they cannot pass tests <u>DO NOT PROCEED</u> and notify Production Engineer.
- 5. Pick up on long string (DK) to determine if the long string will pull.
- 6. If long string will release, then POOH with short string (MV) and proceed to step # 7. If the long string will not release, proceed with sub-steps 6.1 through 6.3 below:
  - 6.1. POOH with short string one or two joints to confirm ability to move.
  - 6.2. Pick up additional joints of 2-1/16" pipe and wash to top of packer at 6390' using heavy air mist. Wash as necessary until returns clean up to approximately ¼ cup of sand in 5 gallons of water returns.
  - 6.3. After returns clean up, POOH with pipe laying down string.
- 7. Spear or screw in and POOH with 2-1/16" 3.3 #/ft long string (DK) string using straight pull to pull out of Baker Model D packer seal assembly up to 40,000 #'s.
- 8. POOH with lay down tubing 2-1/16" 3.3# J-55 and seal assembly.
- 9. NU additional pipe ram for work string or replace pipe ram with annular preventer.
- 10. Pick up work string.

- 11. Pick up Baker Model D packer millover & pulling tool, using DC's and assembly as necessary and RIH on work string to mill over Baker Model D packer @ 6390' MD and RIH on work string. If work string not inspected prior to work do not exceed 70% of joint strength of the work string pipe when pulling.
- 12. Millover and attempt to pluck Baker Model D packer at 6390' MD. If using 4.7 #/ft work string, weight of dry string above packer is 32.6k #s. If using 6.5 #/ft work string, dry string weight will be 41.5k #'s. When attempting to pull packer and tail pipe determine work string weight and do not pull more than 70% of joint strength.
- 13. POOH with packer and lay down work string, tools and packer.
- 14. RIH w/ work string.
- 15. Clean out to 8341' PBTD using a bit, scraper, and air unit package. Acid stimulate if needed.
- 16. TOOH w/ work string.
- 17. TIH with 2-3/8" production string to 5130' (+/- 150 above top MV perf @ 5380').
- 18. MIRU slickline
- 19. TIH w/ gauge ring/dummy assembly w/ to PBTD.
  - 19.1. Ensure slickline unit can run @ 30 to 150 fpm
- 20. Allow flow to stabilize overnight.
- 21. RIH w/ completion profiler and log the production intervals per ProTechnics procedures.
- 22. TIH w/ completion profiler and record final wellhead pressure.
- 23. TIH w/ blanking plug and set a blanking plug in the F-nipple to isolate tubing from well.
- 24. TOH w/ slick line and bleed tubing pressure down to zero.
- 25. RD slick line

Note: Only use pipe dope on the pins. Do not dope the couplings.

26. RIH w/ tubing and set @ 8250' w/ seat nipple & standing valve, testing tubing to 1000 psi every 900'. Report leaks and replace.

Note: This well should be dead and the BOP's shall be closed and locked at the end of daily operations.

27. Ensure tubing is not plugged prior to releasing the rig

- 28. N/D BOP's and N/U wellhead.
- 29. Return well to production.
- 30. R/D, move off location.
- 31. Return well to production.



## Production Allocation Recommendation Rosa #32C (DK/MV)

WELLNAME: Rosa #32

LOCATION: NW/4 NW/4 Sec.21, T31N, R06W

**API No.:** 03-039-27240

FIELD:

Rosa Blanco Rio Arriba, NM

ate: March 5, 2010

Current Status: The Rosa #32C is currently a dual completion well producing from the Dakota and Mesa Verde formations. The packer assembly at 6390' has failed and repair is mandatory. Williams recommends comingling this well for two reasons; packer repair, and production optimization. In doing so, Williams can install an artificial lift system and produced both zones effectively.

### **Commingle Procedure:**

- 1. Mesa Verde tubing will be pulled
- 2. Dakota tubing will be pulled
- 3. Production packer will be removed
- 4. Well will be cleaned out to PBTD
- 5. A single string of 2-3/8" tubing will be run to  $\sim 7900$ '.
- 6. Run completion profiler for allocation purposes
- 7. Install plunger lift system.
- 8. Remove one set of wellhead facilities.
- 9. Return to production as DK/MV comingle.

Allocation Method: Historic production data from both zones on this well was gathered and analyzed. Monthly production data from January 2005 through January 2008 was considered as this represented a time when both zones appear to be free from loading problems and each zone was producing optimally. During this time the Mesa Verde contributed approximately 71% of the total production of the well, while the Dakota accounted for the remaining 29% during the same time span. Williams will run a completion profiler once well is comingled to re-evaluate allocation percentages.

### ROSA UNIT #32C BLANCO MV/BASIN DK

Spud: 09/21/02 Completed: 11/25/02

Surface Location: 1675' FNL and 1700' FWL SE/4 NW/4 Sec 21(F), T31N, R6W Rio Arriba, NM

Bottom Hole Location: 615' FNL and 763' FWL NW/4 NW/4 Sec 21(D), T31N, R6W Rio Arriba, NM

Elevation: 6331' GR API # 30-039-27240

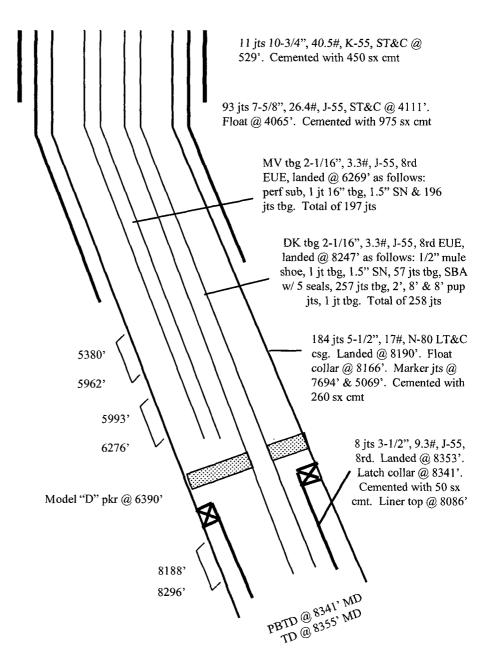
| Тор             | _MD<br>_Depth |
|-----------------|---------------|
| Pictured Cliffs | 3501'         |
| Lewis           | 3809'         |
| Cliffhouse Ss.  | 5681'         |
| Menefee         | 5746'         |
| Point Lookout   | 5990'         |
| Mancos          | 6423'         |
| Dakota          | 8204'         |

#### Stimulation:

Cliffhouse/Menefee: 5380' - 5962' (30, 0.33" holes) Frac with 81,200# 20/40 sand in 1878 bbls fresh water.

Point Lookout: 5993' - 6276' (26, 0.33" holes) Frac with 80,000# 20/40 sand in 1950 bbls fresh water.

<u>Dakota:</u> 8188' - 8296' (16, 0.33" holes) Frac with 4500# 100 Mesh sand, 90,000# 20/40 Ottawa sand & 6400# Flex sand MSE in 20Q Vistar foam.



| Hole Size | Casing         | Cement | Volume       | Top of Cmt |
|-----------|----------------|--------|--------------|------------|
| 14-3/4"   | 10-3/4", 40.5# | 450 sx | 635 cu. ft.  | Surface    |
| 9-7/8"    | 7-5/8", 26.4#  | 975 sx | 1792 cu. ft. | Surface    |
| 6-3/4"    | 5-1/2", 17#    | 260 sx | 574 cu. ft.  | 3250'      |
| 4-3/4"    | 3-1/2", 9.3#   | 50 sx  | 101 cu. ft.  | 8086'      |