Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
June 19, 2008

WELL API NO.
30-039-30795

5. Indicate Type of Lease
STATE ☐ FEE X

6. State Oil & Gas Lease No.
FEE

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name
Rosa Unit

1. Type of Well: Oil Well ☐ Gas Well X Other

8. Well Number 181D

2. Name of Operator
Williams Production Company, LLC.

9. OGRID Number 120782

3. Address of Operator
P.O. Box 640 – Aztec, NM 87410 634-4222

10. Pool name or Wildcat
Blanco MV/Basin MC/Basin DK

4. Well Location
SURF: UL A 1230' FNL & 730' FEL SEC 15 31N 6W
BHL: UL 0 100' FSL & 1400' FEL SEC 10 31N 6W NMPM Rio Arriba County

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*
6268' GR

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

| NOTICE OF INTENTION TO: | | SUBSEQUENT REPORT OF: | |
|---|---|---|---|
| PERFORM REMEDIAL WORK ☐ | PLUG AND ABANDON ☐ | REMEDIAL WORK ☐ | ALTERING CASING ☐ |
| TEMPORARILY ABANDON ☐ | CHANGE PLANS ☐ | COMMENCE DRILLING OPNS. ☐ | P AND A ☐ |
| PULL OR ALTER CASING ☐ | MULTIPLE COMPL ☐ | CASING/CEMENT JOB ☐ | |
| DOWNHOLE COMMINGLE ☐ | | | |
| OTHER: **CASING CHANGE** | | OTHER: | |

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Due to a change in plans, Williams intends to change the casing design (from 5 ½" only to a 5 ½" and 4 ½" tapered production casing) on this well as per attached operation plan.

RCVD OCT 6 '09
OIL CONS. DIV.
DIST. 3

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Heather Riley TITLE: Regulatory Spec DATE: 10/6/09

Type or print name : Heather Riley E-mail address: heather.riley@williams.com PHONE: (505) 634-4222

**For State Use Only**

APPROVED BY: ~~TITLE~~ Deputy Oil & Gas Inspector, District #3 DATE OCT 07 2009

Conditions of Approval (if any):

# WILLIAMS PRODUCTION COMPANY

## *Operations Plan*

***(Note: This procedure will be adjusted on site based upon actual conditions)***

| | | | |
|---|---|---|---|
| **DATE:** | 10/6/2009 | **FIELD:** | Basin DK/ Basin MC/BlancoMV |
| **WELL NAME:** | Rosa #181D | **SURFACE:** | State |
| **BH LOCATION:** | SWSE Sec 10-31N-6W<br>San Juan, NM | **MINERALS:** | BLM |
| **ELEVATION:** | 6,268' GR | **LEASE #** | SF-078765 |
| **MEASURED DEPTH:** | **8,511'** | | |

**I. I. GEOLOGY:** Surface formation - San Jose

**A. FORMATION TOPS:** ( KB)

| Name | | TVD | MD | | Name | | TVD | MD |
|---|---|---|---|---|---|---|---|---|
| Ojo Alamo | | 2,307 | 2,608 | | Point Lookout | | 5,572 | 5,981 |
| Kirtland | | 2,412 | 2,737 | | Mancos | | 5,877 | 6,286 |
| Fruitland | | 2,807 | 3,195 | | Gallup | | 6,877 | 7,296 |
| Pictured Cliffs | | 3,087 | 3,491 | | Greenhorn | | 7,617 | 8,026 |
| Lewis | | 3,382 | 3,791 | | Graneros | | 7,667 | 8,076 |
| Cliff House | | 5,272 | 5,681 | | Dakota | | 7,792 | 8,201 |
| Menefee | | 5,322 | 5,731 | | Morrison | | 8,022 | 8,431 |
| | | | | | **TD** | | **8,102** | **8,511** |

**B. MUD LOGGING PROGRAM:** Mudlogger on location from intermediate csg to TD. Mud logger to pick TD.

**C. LOGGING PROGRAM:** HRI/Temp from intermediate casing to TD. SDL\DSEN over zones of interest.

**D. NATURAL GAUGES:** Gauge any noticeable increases in gas flow. Record all gauges in Tour book and on morning reports.

**II. DRILLING**

**A. MUD PROGRAM:** Clear water with benex to 7-5/8" casing point. Convert to a LSND mud to log and run pipe. Treat for lost circulation as necessary. Obtain 100% returns prior to cementing. Notify Engineering of any mud losses. Use air w/Air Hammer from 7-5/8in. csg.to TD.

**B. BOP TESTING:** While drill pipe is in use, the pipe rams and the blind rams will be function tested once each trip. The anticipated reservoir is expected to be less than 1300 psi, so the BOPE will be tested to **250 psi (Low) for 5 minutes** and **1500 psi (High) for 10 minutes**. Utilize a BOPE Testing Unit with a recording chart and appropriate test plug for testing. The drum brakes will be inspected and tested each tour. **All tests and inspections will be recorded in the tour book as to time and results.**

## III. MATERIALS

### A. CASING PROGRAM:

| CASING TYPE | OH SIZE (IN) | DEPTH (MD) (FT) | CASING SIZE (IN) | WEIGHT(LB) | GRADE |
|---|---|---|---|---|---|
| Surface | 14 3/4 | 300 | 10 3/4 | 40.5 | K-55 |
| Intermediate | 9 7/8 | 3,971 | 7 5/8 | 26.4 | K-55 |
| Longstring | 6 3/4 | 6,400 | 5 1/2 | 17 | N-80 |
| | | 6,400-8,511 | 4 1/2 | 11.6 | N-80 |

### B. FLOAT EQUIPMENT:

1. SURFACE CASING: 10 3/4" notched regular pattern guide shoe. Run (1) standard centralizer on each of the bottom (4) joints of Surface Casing.

2. INTERMEDIATE CASING: 7 5/8" cement nose guide shoe with a self-fill insert float. Place float collar one joint above the shoe. Install (1) Turbulent centralizer on each of the bottom (3) joints and one standard centralizer every (3) joints to 2,500 ft. Run (1) Turbulent centralizer at 2,700 ft., 2,500 ft., 2,300ft., 2,000ft., 1,500 ft., and 1,000 ft. **(NTL-FRA 90-1).**

3. PRODUCTION LINER / CASING: 4-1/2" whirler type cement nose guide shoe with a latch collar on top of 20' bottom joint. Place marker joint above 5,400'. Place centralizers as needed across selected production intervals.

### C. CEMENTING:

***(Note: Volumes may be adjusted onsite due to actual conditions)***

1. SURFACE: Slurry: 290sx (521 cu.ft.) of "Type III" + 2% Cal-Seal 60 + ¼ # of poly-e-flake/sk + 0.3% Versaset + 2% Econolite + 6% Salt (Yield = 1.796 cu.ft./sk, Weight = 13.5 #/gal.). The 100% excess should circulate cement to the surface. WOC 12 hours. Test csg to 1500psi.

2. INTERMEDIATE: Lead - 525 sx (1430 cu.ft.) of "EXTENDACEM" + 5 #/sk pheno-seal + 5% Cal-Seal 60 (Yield = 2.723 cu.ft./sk, Weight = 11.5 #/gal.). Tail - 100 sx (117.8cu.ft.) of Premium cement + 0.125 #/sk Poly-E-Flake, (Yield = 1.178 cu.ft./sk, Weight = 15.6#/gal.). **NO EXCESS PUMP AS WRITTEN SHOULD CIRCULATE TO SURFACE** Total volume = 1548 cu.ft. Bump Plug to 1,500 psi. Notify engineering if cement is not circulated to surface

3. PRODUCTION CASING: 10 bbl Gelled Water spacer. Cement: 475 sx (664 $ft^3$) of "FRACCEM" + 0.8% Halad-9 + 0.1% CFR-3 + 5 #/sk Gilsonite + 0.125 #/sk Poly-E-Flake + 0.15% HR-800. (Yield =1.398 $ft^3$/sk, Weight = 13.1 #/gal.). Displace cement at a minimum of 8 BPM. **NO EXCESS SHOULD COVER 150 FEET INTO 7" CASING** Total volume (664) $ft^3$. WOC 12 hours.

## IV. IV COMPLETION

### A. CBL

1. Run Cement Bond Log across all intervals to be perforated and find Top of Cement behind all casing strings if cement not circulated to surface..

### B. PRESSURE TEST

1. Pressure test 5-1/2" casing to 6000 psi max, hold at 1500 psi for 30 minutes.

## C. STIMULATION

1. Stimulate Dakota with approximately 10,000# of LiteProp 108™ sand in slick water.
2. Isolate Dakota with a RBP.
3. Perforate Mancos as determined from the open hole logs
4. Stimulate Mancos with 3 stages of approximates 117,000# 40/70 white sand and 7500# 100 mesh white sand
5. Stimulate Point Lookout with approximately 9300# of 14/30 LiteProp™ in slick water.
6. Isolate Point Lookout with a RBP.
7. Perforate the Menefee/Cliff House as determined from the open hole logs.
8. Stimulate with approximately 9300# of 14/30 LiteProp™ in slick water.
9. Test each zone before removing bridge plugs.

## D. RUNNING TUBING

1. *Production Tubing:* Run 2-3/8", 4.7#, J-55, EUE tubing with a SN (1.91" ID) on top of bottom joint. Land tubing approximately 25' above the bottom Point Lookout perforation

Gary Sizemore
Sr. Drilling Engineer