

UNITED STATES  
DEPARTMENT OF INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

SEP 25 2009

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICE AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION TO DRILL" for permit for such proposals.

DEPT. OF LAND MGMT.  
Farrington Field Office

SUBMIT IN TRIPLICATE

1. Type of Well Oil Well Gas Well <input checked="" type="checkbox"/> Other	5. Lease Designation and Serial No NMSF-078766
2. Name of Operator WILLIAMS PRODUCTION COMPANY	6. If Indian, Allottee or Tribe Name
3. Address and Telephone No. PO Box 640 Aztec, NM 87410-0640 505-634-4208	7. If Unit or CA, Agreement Designation Rosa Unit
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) SUR: 1280' FNL & 1635' FWL BHL: 660' FNL & 1100 FWL SEC 25 31N 6W	8. Well Name and No. Rosa Unit 165D
	9. API Well No 30-039-30690
	10. Field and Pool, or Exploratory Area BLANCO MV/BASIN DK/BASIN MC
	11. County or Parish, State Rio Arriba, New Mexico

CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	Abandonment
<input type="checkbox"/> Subsequent Report	Recompletion
<input type="checkbox"/> Final Abandonment	Plugging Back
	Casing Repair
	Altering Casing
	<input checked="" type="checkbox"/> Other <u>Casing Change</u>
	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)

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)\*

Due to change in plans Williams intends to change the casing design (4-1/2" production casing instead of 5-1/2") on this well as per attached operation plan ~~as per attached operation plan~~

CONDITIONS OF APPROVAL

Adhere to previously issued stipulations.

RCVD SEP 28 109

OIL CONS. DIV.

DIST. 3

14. I hereby certify that the foregoing is true and correct

Signed Larry Higgins  
Larry Higgins

Title Drilling COM 9/24/09

(This space for Federal or State office use)

Approved by Troy L. Salyers

Title PE

Date 9/25/09

Conditions of approval, if any:

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.

NMOC



## WILLIAMS PRODUCTION COMPANY

### Operations Plan

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

**DATE:** 9/24/2009 **FIELD:** Basin DK/ Basin MC/BlancoMV  
**WELL NAME:** Rosa Unit #165D **SURFACE:** BLM  
**BH LOCATION:** NWNW Sec 25-31N-6W **MINERALS:** FEDERAL  
Rio Arriba, NM  
**ELEVATION:** 6,403' GR **LEASE #** SF-078766  
**MEASURED DEPTH:** 8,341'

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

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

Name	TVD	MD	Name	TVD	MD
Ojo Alamo	2,497	2,592	Point Lookout	5,692	5,810
Kirtland	2,612	2,713	Mancos	6,047	6,465
Fruitland	2,992	3,105	Gallup	7,007	7,125
Pictured Cliffs	3,267	3,384	Greenhorn	7,717	7,835
Lewis	3,552	3,670	Graneros	7,772	7,890
Cliff House	5,422	5,540	Dakota	7,897	8,015
Menefee	5,467	5,585	Morrison	8,142	8,260
			TD	8,222	8,340

- 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\DSN 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:** Use Water + Gel/Polymer sweeps to drill Surface hole. Convert to a LSLD - EZ-MUD system mud (+/-50 Vis.) to drill 9-7/8 in. Intermediate Hole. Increase vis to +/-60 to run Casing. Treat for lost circulation as necessary. Obtain 100% returns prior to cementing. Notify Engineering of any mud losses. Use Air , Air Hammer and 6-3/4 in. Flat btm. bit to drill-out of 7-5/8 in. csg. and to TD well at +/- 8,341 ft. (MD).
- 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	3,860	7 5/8	26.4	K-55
Longstring	6 3/4	8,340	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 + 1/4 # 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: 610 sx (853 ft<sup>3</sup>) 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<sup>3</sup>/sk, Weight = 13.1 #/gal.). Displace cement at a minimum of 8 BPM. otal volume (853) ft<sup>3</sup>. 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 4-1/2" casing to 6000 psi max, hold at 1500 psi for 30 minutes.

**C. STIMULATION**

1. Stimulate Dakota with approximately 5000# 100 mesh sand and 120,000# Ottawa 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 5000# 100 mesh sand and 150,000# 40/70 Ottawa sand
5. Stimulate Point Lookout with approximately 40,000# 20/40 Ottawa sand 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 40,000# 20/40 Ottawa sand 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

  
for Brian Alleman  
Drilling Engineer