

UNITED STATES  
DEPARTMENT OF INTERIOR  
BUREAU OF LAND MANAGEMENT

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

RECEIVED

MAY 12 2010

Bureau of Land Management  
Farmington Field Office

SUBMIT IN TRIPPLICATE

1. Type of Well  
Oil Well ☒ Gas Well ☐ Other ☐

2. Name of Operator  
WILLIAMS PRODUCTION COMPANY

3. Address and Telephone No  
PO BOX 640 Aztec, NM 87410-0640

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Surface: 2320' FNL & 2600' FWL Sec 11, T31N, R4W

5 Lease Designation and Serial No  
SF-078888

6 If Indian, Allottee or Tribe Name  
N/A

7 If Unit or Co. Agreement Designation  
Rosa NMNM 78407X

8 Well Name and No  
Rosa Unit #600

9. API Well No.  
30-039-29783

10 Field and Pool, or Exploratory Area  
Blanco MV/Basin MC/Basin DK

11 County or Parish, State  
Rio Arriba, NM

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

TYPE OF SUBMISSION

☒ Notice of Intent  
☐ Subsequent Report  
☐ Final Abandonment

TYPE OF ACTION

Abandonment  
Recompletion  
Plugging Back  
Casing Repair  
Altering Casing  
☒ Other name change - formation change -  
Spacing change - extension - BHL

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)\*

Williams Production Company, LLC hereby requests authorization to: 1) change the name of this well from the Rosa Unit #369 to the Rosa Unit #600; 2) change the formation from the Fruitland Basin Coal to the Blanco Mesaverde, Basin Mancos and Basin Dakota; 3) change the spacing from W/2 to N/2; 4) request a short term extension of 120 days. This has been discussed with the USFS. The current APD expires 5-23-10. 5) Change the bottom hole location. Williams will now drill this as a vertical well from the present surface location. Williams has built the location and will drill this well in the current drilling season. See attached C-102 and operations plan.

RCVD JUN 3 '10

OIL CONS. DIV.

DIST. 3

CONDITIONS OF APPROVAL  
Adhere to previously issued stipulations.

14 I hereby certify that the foregoing is true and correct

Signed

Larry Higgins

Title Permit Supervisor Date 5/12/10

(This space for Federal or State office use)

Approved by

Troy L. Salyers

Title

Petroleum Engineer

Date 5/26/2010

Conditions of approval, if any

District I  
1625 N French Dr., Hobbs, NM 88240

District II  
1301 W Grand Avenue, 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 & Natural Resources Department

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

Form C-102  
Revised October 12, 2005  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number <b>30-039-29783</b>	*Pool Code 97232 / 72319 / 71599	*Pool Name BASIN MANCOS / BLANCO MESAVERDE / BASIN DAKOTA
*Property Code 17033	*Property Name ROSA UNIT	*Well Number 600
*OGRID No. 120782	*Operator Name WILLIAMS PRODUCTION COMPANY	*Elevation 7018'

<sup>10</sup> Surface Location

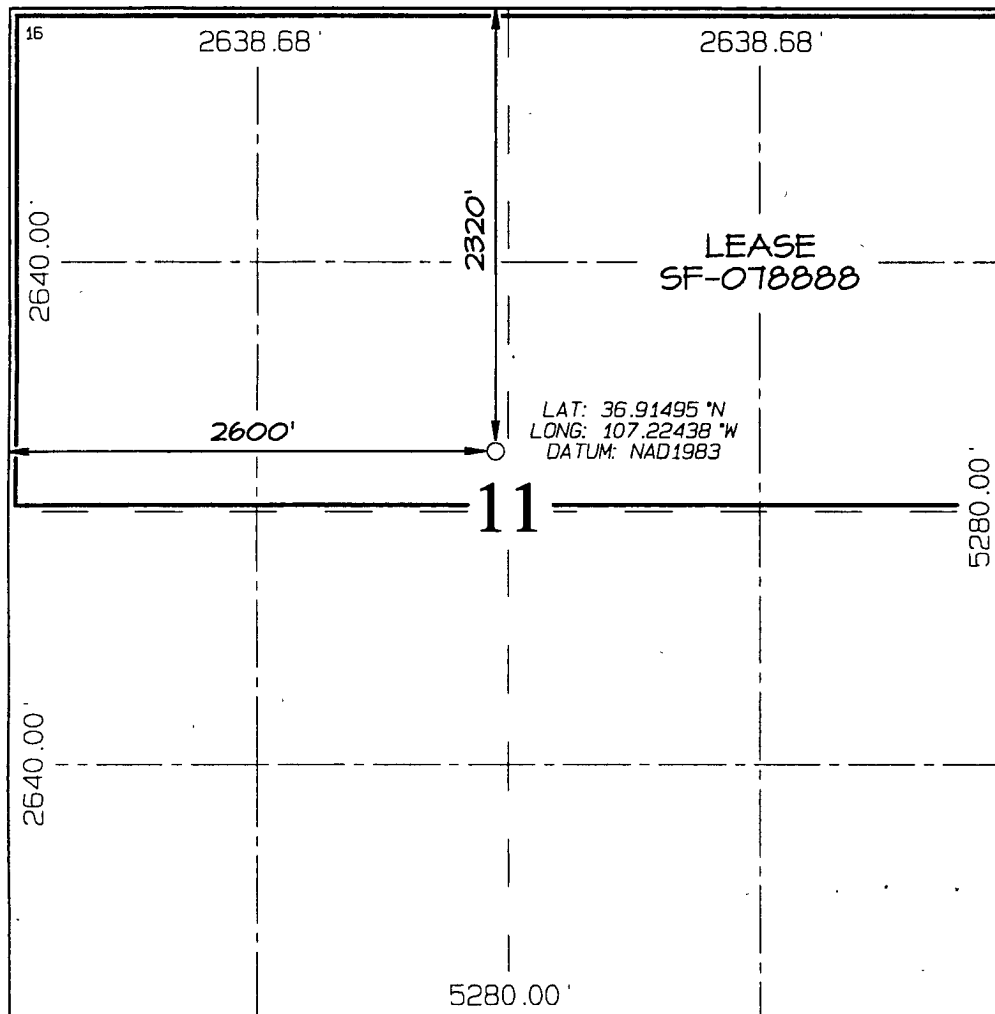
UL or lot no. F	Section 11	Township 31N	Range 4W	Lot Idn	Feet from the 2320	North/South line NORTH	Feet from the 2600	East/West line WEST	County RIO ARriba
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<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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<sup>12</sup> Dedicated Acres 320.0 Acres - N/2	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



<sup>17</sup> OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom-hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

*Larry Higgins* 5-12-10  
Signature Date  
*Larry Higgins*  
Printed Name

<sup>18</sup> SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date Revised: MAY 11, 2010  
Survey Date: OCTOBER 18, 2004

Signature and Seal of Professional Surveyor



**JASON C. EDWARDS**  
Certificate Number 15269

Standard location per L.H. 6-4-10

PO



## WILLIAMS PRODUCTION COMPANY

### Operations Plan

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

**DATE:** 5/6/2010 **FIELD:** Basin DK/ Basin MC/BlancoMV  
**WELL NAME:** Rosa Unit #600 **SURFACE:** USFS  
**BH LOCATION:** SENW Sec 11-31N-4W **MINERALS:** Federal  
Rio Arriba, NM  
**ELEVATION:** 7,018' GR **LEASE #** SF-078888  
**MEASURED DEPTH:** 9,057'

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

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

Name	Depth	Name	Depth
Ojo Alamo	3,367	Point Lookout	6,432
Kirtland	3,502	Mancos	6,757
Fruitland	3,722	Gallup	7,757
Pictured Cliffs	3,982	Greenhorn	8,487
Lewis	4,377	Graneros	8,537
Cliff House	6,232	Dakota	8,642
Menefee	6,282	Morrison	8,957
		TD	9,057

- B. **MUD LOGGING PROGRAM:** Mudlogger on location from surface csg to TD. Mud logger to pick TD. Weatherford Portable X-Ray Diffraction and Source Rock Analysis from intermediate csg to TD.
- C. **LOGGING PROGRAM:** ACRt/GR/CN/WAVE/SDL from surface casing to intermediate casing. ACRt/GR/CN/WAVE/SDL from intermediate casing to TD
- D. **FULL DIAMETER CORING:** 3" diameter core will be cut between intermediate csg point and TD through intervals of interest as identified by open hole logs and other analyses.
- E. **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 12-1/4 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. Drill out of 9-5/8" casing with 7-7/8" PDC to top of first coring interval. POOH to pick up wireline retrievable coring assembly and drill to TD at +/- 9,057 ft (MD) while cutting core over intervals of interest.
- 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	17 1/2	500	13 3/8	68	K-55
Intermediate	12 1/4	4,527	9 5/8	36	HCK-55
Longstring	7 7/8	9,057	4 1/2	11.6	P-110

#### 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 600psi. for 30 minutes
2. INTERMEDIATE: Lead - 875 sx (2383 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.). Total volume = 2,501 cu.ft. Bump Plug to 1,500 psi. Notify engineering if cement is not circulated to surface. WOC 12 hours. Test to 1500psi. for 30 minutes.
3. PRODUCTION CASING: 10 bbl Gelled Water spacer. Cement: 1155 sx (1614 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 (1614) ft<sup>3</sup>. WOC 12 hours. Casing will be tested at completion.

### 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 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 approximately 5000# 100 mesh sand and 150,000# 40/70 Ottawa sand
5. Isolate Mancos with RBP
6. Stimulate Point Lookout with approximately 40,000# 20/40 Ottawa sand in slick water.
7. Isolate Point Lookout with a RBP.
8. Perforate the Menefee/Cliff House as determined from the open hole logs.
9. Stimulate with approximately 40,000# 20/40 Ottawa sand in slick water.
10. 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 Dakota perforation

  
for Brian Alleman  
Drilling Engineer