

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

MAY 14 2009

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

<b>SUBMIT IN TRIPLICATE</b> - Other instructions on page 2.		5 Lease Serial No. NMSF- 078769
1 Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		6 If Indian, Allottee or Tribe Name
2. Name of Operator WILLIAMS PRODUCTION CO., LLC		7 If Unit of CA/Agreement, Name and/or No ROSA UNIT
3a. Address P O BOX 640 AZTEC, NM 87410		8 Well Name and No ROSA UNIT #189
3b Phone No. (include area code) (505) 634-4208		9 API Well No. 30-039-30186
4 Location of Well (Footage, Sec., T., R., M., or Survey Description) 1455 FNL & 1780 FEL Sec 21, T31N, R5W		10. Field and Pool or Exploratory Area BLANCO MV/BASIN MC/BASIN DK
		11. Country or Parish, State RIO ARRIBA, NEW MEXICO

12 CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13 Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Due to a change of plan, Williams Production intends to drill this as a vertical well. See attached C-102 and operations plan. ✓

RCVD MAY 19 '09

OIL CONS. DIV.  
DIST. 3

**CONDITIONS OF APPROVAL**  
Adhere to previously issued stipulations.

14 I hereby certify that the foregoing is true and correct Name (Printed/Typed) Larry Higgins	Title Drilling COM
Signature <i>Larry Higgins</i>	Date 05/14/2009

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by <i>Troy L. Salyers</i>	Title Petroleum Engineer	Date 5/15/2009
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon	Office FFO	

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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

NMOCD

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

<sup>1</sup> API Number <b>30-039-30186</b>	<sup>2</sup> Pool Code 97232 / 72319 / 71599	<sup>3</sup> Pool Name BASIN MANCOS / BLANCO MESAVERDE / BASIN DAKOTA
<sup>4</sup> Property Code 17033	<sup>5</sup> Property Name ROSA UNIT	<sup>6</sup> Well Number 189
<sup>7</sup> GRID No. 120782	<sup>8</sup> Operator Name WILLIAMS PRODUCTION COMPANY	<sup>9</sup> Elevation 6589'

#### <sup>10</sup> Surface Location

UL or lot no G	Section 21	Township 31N	Range 5W	Lot Idn	Feet from the 1455	North/South line NORTH	Feet from the 1780	East/West line EAST	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
<sup>12</sup> Dedicated Acres 320.0 Acres - (E/2)					<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.		

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

<div><p><sup>16</sup></p><p>5287.26'</p><p>1455'</p><p>1780'</p><p>LAT: 36.88833°N LONG: 107.36475°W DATUM: NAD1983</p><p>21</p><p>5280.00'</p><p>2643.30'</p><p>LEASE SF-078769</p></div>	<div><p><sup>17</sup> OPERATOR CERTIFICATION</p><p>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.</p><p><i>Larry Higgins</i> 5-14-09 Signature Date <b>LARRY HIGGINS</b> Printed Name</p></div> <div><p><sup>18</sup> SURVEYOR CERTIFICATION</p><p>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.</p><p>Date Revised: MAY 13, 2009 Date of Survey MAY 3, 2006</p><p>Signature and Seal of Professional Surveyor</p><div><p><b>JASON C. EDWARDS</b> Certificate Number 15269</p></div></div>
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## WILLIAMS PRODUCTION COMPANY

### Operations Plan

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

**DATE:** 5/14/2009 **FIELD:** Basin DK/ Basin MN/BlancoMV  
**WELL NAME:** Rosa #189 **SURFACE:** USFS  
**BH LOCATION:** SWNE Sec 21-31N-5W **MINERALS:** Federal  
Rio Arriba, NM  
**ELEVATION:** 6,589' GR **LEASE #** SF-078769  
**MEASURED DEPTH:** 8,443'

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

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

Name	MD	Name	MD
Ojo Alamo	2,758	Point Lookout	5,918
Kirtland	2,868	Mancos	6,228
Fruitland	3,238	Gallup	7,228
Pictured Cliffs	3,453	Greenhorn	7,943
Lewis	3,753	Graneros	7,998
Cliff House	5,678	Dakota	8,138
Menefee	5,723	Morrison	8,363
		TD	8,443

- B. **MUD LOGGING PROGRAM:** Mudlogger on location from intermediate csg to TD. Mud logger to pick TD.
- C. **LOGGING PROGRAM:** HRI/Temp from surface casing to TD. SDL\DSN\DSN\TEMP 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 +/- 8,443 ft. (MD). **If Mesaverde is wet do not attempt to make hole dry, notify engineering and prepare for mud drilling. Run TOTCO Survey at 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	3,928	7 5/8	26.4	K-55
Longstring	6 3/4	8,443	5 1/2	17	N-80

**B. FLOAT EQUIPMENT:**

- SURFACE CASING: 10 3/4" notched regular pattern guide shoe. Run (1) standard centralizer on each of the bottom (4) joints of Surface Casing.
- 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).
- PRODUCTION LINER / CASING: 5-1/2" 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)

- SURFACE: Slurry: 290sx (~~341 cu.ft.~~ <sup>520 Ft<sup>3</sup></sup>) 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.
- 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 = ~~1498 cu.ft.~~ Bump Plug to 1,500 psi. Notify engineering if cement is not circulated to surface **Test csg. 1500 psi. 30 min Total Volume = 1550 Ft<sup>3</sup>**
- PRODUCTION CASING: 10 bbl Gelled Water spacer. Cement: 325 sx (454 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. **NO EXCESS SHOULD COVER 150 FEET INTO 7" CASING** Total volume (~~342~~ <sup>454 Ft<sup>3</sup></sup>) ft<sup>3</sup>. WOC 12 hours.

**IV. IV COMPLETION****A. CBL**

- 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**

- 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 approximately 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

1-02   
Gary Sizemore  
Sr. Drilling Engineer