

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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.*

5. Lease Serial No.
NMSF-078771

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE – Other instructions on page 2.

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
WILLIAMS PRODUCTION CO., LLC

3a. Address
P O BOX 640
AZTEC, NM 87410

3b. Phone No. (include area code)
(505) 634-4208

7. If Unit of CA/Agreement, Name and/or No.
ROSA UNIT

8. Well Name and No
ROSA UNIT #005C

9. API Well No.
30-039-30178

10. Field and Pool or Exploratory Area
BLANCO MV/LAGUNA SECA GALLUP/BASIN DAKO

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1845' FSL & 1735' FEL SEC 26, 31N, 6W

11. Country or Parish, State
RIO ARRIBA, NM

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 checked="" type="checkbox"/> Other <u>PAY ADD</u>
	<input 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 recompleat 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 recompleat 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.)

Williams Production Company, LLC. request authorization to drill the above well as a mesa verde/gallup/dakota test as per attached plat and drilling plan. The plan is for the gallup and dakota to be commingled at completion.

RCVD JUN 11 '08

OIL CONS. DIV.

DIST. 3

PIT, CLOSED LOOP SYSTEM, BELOW GRADE
TANK, PROPOSED ALTERNATIVE METHOD
OR CLOSURE PLAN TO BE DESIGNED,
CONSTRUCTED, OPERATED & CLOSED
PURSUANT TO NMOCD RULE 19.15.17
EFFECTIVE 06/16/08

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 Drlg COM

Signature

Date 06/09/2008

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

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

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.

(Instructions on page 2)

NMOCD

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13 - Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment.

NOTICES

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

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

¹ API Number	² Pool Code 79870 / 72319 / 71599	³ Pool Name LAGUNA SECA GALLUP / BLANCO MESAVERDE / BASIN DAKOTA
⁴ Property Code 17033	⁵ Property Name ROSA UNIT	⁶ Well Number 5C
⁷ OGRID No. 120782	⁸ Operator Name WILLIAMS PRODUCTION COMPANY	⁹ Elevation 6419'

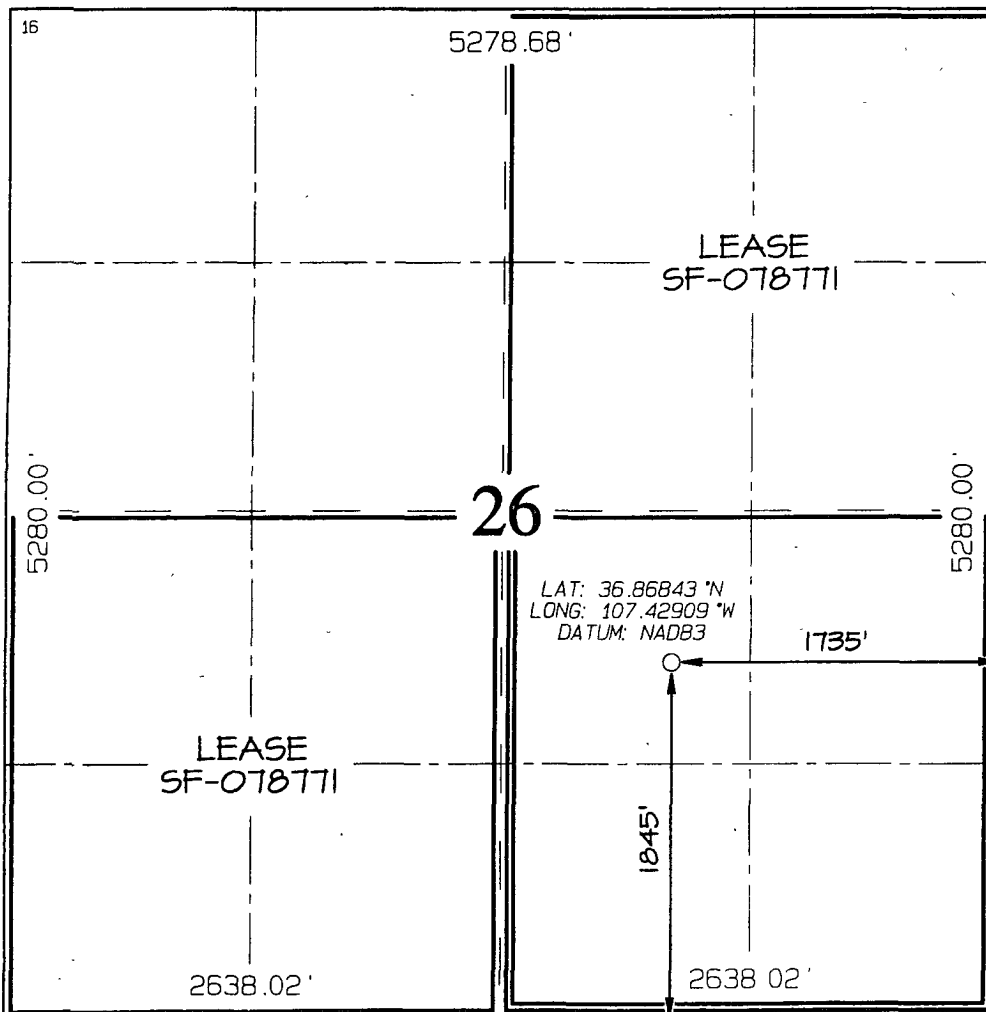
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	26	31N	6W		1845	SOUTH	1735	EAST	RIO ARriba

¹¹ 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
¹² Dedicated Acres 160.0 Acres (SE/4) - GL 320.0 Acres- (MV E/2) - (DK S/2)					¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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



¹⁷ 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.

Signature _____ Date _____

Printed Name _____

¹⁸ 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 of Survey: MARCH 26, 2008

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269



WILLIAMS PRODUCTION COMPANY

DRILLING PLAN (DRAFT)

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

DATE: 5/15/2008

WELL NAME: Rosa Unit #5-C **FIELD:** Blanco MV/DK/Mancos

SURFACE LOCATION: NW/4 SE/4 Sec. 26- T31N-R6W **SURFACE:** BLM
R10 Arriba, NM

ELEVATION: 6,421ft. (GL) **MINERALS:** BLM

LEASE # SF-078771 **API#:** 30-039-30178

TOTAL DEPTH: 8,295ft. (MD)

I. GEOLOGY: Surface formation - San Jose

A. FORMATION TOPS: (KB)

	<u>MD</u>		<u>MD</u>
20in. Casing	400ft.	Graneros sh	7,760ft.
Ojo Alamo	2,485ft.	Dakota ss	7,885ft.
Kirtland sh	2,605ft.	Morrison fm	8,145ft.
Fruitland cl	2,985ft.		
Pictured Cliffs ss	3,255ft.		
Lewis sh	3,555ft.		
10-3/4in. Casing	3,730ft.		
Cliff House ss trans	5,100ft.		
Cliff House ss	5,415ft.		
Menefee	5,465ft.		
Point Lookout ss	5,695ft.		
7-5/8in. Liner	6,010ft.		
Mancos sh	6,010ft.		
Gallup ss	6,985ft.		
Greenhorn ls	7,700ft.	Total Depth (MD)	8,295ft.

B. LOGGING PROGRAM: (SEE ATTACHED GEOLOGICAL PROGNOSIS).

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

II. DRILLING

- A. **SURFACE HOLE:** PU 12 ¼", 17 ½" 26" in. Bit, Drill / ream to +400 ft. (MD). Drill with water and Gel sweeps. RU and run 20 in. Surface Casing, set at 400 ft.+ (MD). NU 20in. SOW X 21-1/4 in. 2000 psi Braden Head. NU 20in annular preventer. The surface casing will be pressure tested to 1400 psi in conjunction with the BOP test before drilling out cement. Run TOTCO surveys at 200ft. and 400ft.
- B. **INTERMEDIATE HOLE:** Drill out of 20in. csg. with a 14-3/4in. Tri-cone bit. Use LSND Mud System to 10-3/4 in. intermediate casing point. Increase Viscosity of mud system to 40+ to run casing. Treat for lost circulation as necessary. Obtain 100% returns prior to cementing. Notify Engineering of any mud losses. Circulate cement to surface. NU 21-1/4in 2,000 psi X 13-5/8 in. "B" Section. Run TOTCO Surveys each 500 ft.
- C. **INTERMEDIATE LINER HOLE:** Drill out of 10-3/4in. csg. with a 9-7/8in. air hammer bit. Use Air Drilling System, to 7-5/8 in. intermediate casing point. Run & set 7-5/8" liner. Circulate cement to 100ft. above TOL. Run TOTCO Surveys each 500 ft.
- D. **PRODUCTION HOLE:** Drill out of 7-5/8in. csg with a 6-3/4in tri-cone bit. Use Dispersed Mud System with water loss less than 8 ml/30 min. POOH, run OH logs. Increase Viscosity of mud system to 40+ to run casing. Treat for lost circulation as necessary. Notify Engineering of any mud losses.
- E. **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 surface and Intermediate casing will be pressure tested to **1500 psi for 30 minutes** after the BOPE test before drilling out cement. The drum brakes will be inspected and tested each tour. **All tests, inspections and SPR's will be recorded in the tour book as to time and results.**

III. MATERIALS

A. CASING PROGRAM:

<u>CASING TYPE</u>	<u>HOLE SIZE</u>	<u>DEPTH</u>	<u>CASING SIZE</u>	<u>WT. & GRADE</u>
Surface	26in.	+/- 400'	20in.	94#/ft X-52-BUTT
Intermediate	14-3/4in.	+/- 3,730'	10-3/4in.	45.5#/ft K-55-BUTT
Drilling Liner	9-7/8in.	+/-3,580ft.- 6,010ft.	7-5/8in.	26.4#/ft K-55-LTC
Longstring	6-3/4in.	+/- 8,295ft.	5-1/2in.	17#/ft N-80-LTC

B. FLOAT EQUIPMENT:

1. **SURFACE CASING:** 20in. notched regular pattern guide shoe. Run one (1) standard centralizer on each of the bottom three (3) joints
2. **INTERMEDIATE CASING:** 10-3/4in. cement nose guide shoe with a self-fill insert float. Place float collar one joint above the shoe. Install one Turbulent centralizer on each of the bottom (3) joints and one standard centralizer every (3) joints to the surface casing.
3. **DRILLING LINER:** 7-5/8in. Whirler type cement nose guide shoe with a latch collar on top of bottom joint.
4. **PRODUCTION CASING:** 5-1/2" whirl type cement nose guide shoe with a float collar on top of bottom joint. Place marker joint above 5,600'. Place one turbolizer every third joint thru Dakota and Mesa Verde intervals. **(Call this in to BLM for approval. If denied, follow what is in the Operations Plan in the Permit package.)**

C. CEMENTING:

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

1. SURFACE: Lead: 480 sx (826 cu.ft.) of class Premium Lite FM, 8% gel+1% CaCl₂+1/4# cello-flake/sk (Yield = 1.72 cu.ft./sk, Weight = 12.1 #/gal.). Tail: 270sx (381 cu.ft.) of class "Type III" with 1/4# cello-flake/sk+1% CaCl₂ (Yield = 1.41 cu.ft./sk, Weight = 14.5#/gal.). 125% excess in lead and tail to circulate to surface. Total volume = 983 cu.ft. WOC 12 hours. Run a temperature survey after 8 hours if cement is not circulated.
2. INTERMEDIATE: 10 bbl fresh water spacer Lead: 2060sx (4285 cu.ft.) of class "Premium Lite FM" with 8% gel and 1/4# cello-flake/sk + 2% pheno seal (Yield = 2.08 cu.ft./sk, Weight = 12.1 #/gal.). Tail: 200sx (278 cu.ft.) of class "Type III" with 1/4# cello-flake/sk (Yield = 1.39 cu.ft./sk, Weight = 14.5#/gal.). **NO EXCESS IN EITHER SLURRY PUMP AS WRITTEN**. Total volume = 3953 cu.ft. WOC 12 hours. Run a temperature survey after 8 hours if cement is not circulated.
3. DRILLING LINER: 10 bbl gelled water +0.25 gal/bbl XLFC-5 spacer and 10 bbl fresh water spacer. 400 sx (854 cu. Ft.) "Premium Lite HS FM"+1% FL-52+0.2%CD-32+5 lb/sk LCM-1 (gilsonite)+3 lb/sk CSE+1/4 lb/sk cello-flake (Yield = 2.14 cu ft/sk, weight = 12.3 #/gal). **NO EXCESS PUMP AS WRITTEN**. Total volume 854 ft³. WOC 12 hours.
4. LONGSTRING: 20 bbl Mud Clean II as spacer Lead: 145 sx (349 cu ft) Premium Lite HS FM +1% FL-52+0.2% CD-32+3 #/sk CSE+2% Pheno Seal+1/4 #/sk cello-flake (Yield=2.44 #/sx, Weight=11.8 #/gal). Tail: 135 sx (289 cu ft) Premium Lite HS FM+1% FL-52+0.2% CD-32+3 #/skCSE+2% Pheno Seal+1/4 #/sk Cello-flake (Yield=2.14 cu ft/sk, Weight =12.30 #/gal) Displace cement at a minimum of 8 BPM. **NO EXCESS IN EITHER SLURRY PUMP AS WRITTEN**. Total volume 638 ft³. WOC 12 hours.

Gary C. Sizemore
Sr. Drilling Engineer

GEOLOGIC PROGNOSIS			
Company:	Williams Production Company. LLC		
Project:	2008 Drilling Plan -		
Area:	Rosa Unit		
Operator:	Williams Poduction Company. LLC		
Well Name:	Rosa Unit No. 5C (Kmv/Kg/Kd)		
Location:	NWSE 26-31N-06W		
Footage:	1870' FSL & 1730' FEL		
County/State:	Rio Arriba/New Mexico		
Surveyed GL:	6421	Aztec #124 (14') KB:	6435
Formation	Thickness	Depth	Struct. Elev.
San Jose Fm.	400	Surface	6421
Surf. Csg. Depth (20")	2085	400	6035
Ojo Alamo Ss.	120	2485	3950
Kirtland Sh.	380	2605	3830
Fruitland Fm.	270	2985	3450
Pictured Cliffs Ss.	300	3255	3180
Lewis Sh.	175	3555	2880
Int. Csg. Depth (10-3/4")	1370	3730	2705
Cliff House Ss. Trans.	315	5100	1335
Cliff House Ss.	50	5415	1020
Menefee Fm.	230	5465	970
Point Lookout Ss.	315	5695	740
Mancos Sh.	0	6010	425
Prot. Lnr. Depth (7-5/8")	975	6010	425
Gallup Ss.	715	6985	-550
Greenhorn Ls.	60	7700	-1265
Graneros Sh.	125	7760	-1325
Dakota Ss.	260	7885	-1450
Morrison Fm.	150	8145	-1710
Total Depth	NA	8295	-1860
Mud Log:	Mud log (5"=100') from protection liner to TD (mud logger to pick TD)		
Gas Geochemistry:	Sampling as required		
Cores:	None		
Mechanical Logs:	Schlumberger: induction/density/neutron logs from intermediate casing depth to TD, additional speciality logs from protection liner depth to TD		
Correlation Logs:	Rosa Unit No. 5A (SESE 26-31N-06W) Rosa Unit No. 8B (SENW 26-31N-06W)		
Notes:	Revised to deepen well into Morrison, revise casing program, revise logging program, and put on mud logger at protection liner point (03-13-08)		
	Revised to change logging program, adjust KB for Aztec #124, and deepen well an additional 50-feet into the Morrison for logging		