

**RECEIVED**

**AUG 25 2006**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Bureau of Land Management  
Farmington Field Office

FORM APPROVED  
OMB No. 1004-0136  
Expires January 31, 2004

RCVD DEC 21 '06  
OIL CONS. DIV.  
DIST. 3

**APPLICATION FOR PERMIT TO DRILL OR REENTER**

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>JICARILLA TRIBAL CONTRACT #116</b>	
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name <b>Jicarilla Apache Nation</b>	
2. Name of Operator <b>Williams Production Company, LLC</b>		7. If Unit or CA Agreement, Name and No. <b>JAECO 26-3 16 #1A COM</b>	
3a. Address <b>P.O. Box 640 Aztec, NM 87410</b>	3b. Phone No. (include area code) <b>(505) 634-4208</b>	8. Lease Name and Well No. <b>JAECO 26-3 16 #1A COM</b>	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface <b>1160' FSL &amp; 860' FEL</b> At proposed prod. zone <b>same</b>		9. API Well No. <b>30-039-30049</b>	
14. Distance in miles and direction from nearest town or post office* <b>16 miles from Lindrith, NM</b>		10. Field and Pool, or Exploratory <b>Blanco MV/Basin Dakota</b>	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>2500'</b>	16. No. of Acres in lease <b>320</b>	11. Sec., T., R., M., or Blk. and Survey or Area <b>Section 16, T26N R3W</b>	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>860'</b>	19. Proposed Depth <b>299'</b>	12. County or Parish <b>Rio Arriba</b>	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>7,070' GR</b>	20. BLM/BIA Bond No. on file <b>E-01576</b>	13. State <b>NM</b>	
22. Approximate date work will start* <b>November 1, 2006</b>		23. Estimated duration <b>1 month</b>	
24. Attachments			

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Land to cover the operations unless covered by an existing bond on file (see item 20 above).
- Operator certification.
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature <i>Larry Higgins</i>	Name (Printed/Typed) <b>Larry Higgins</b>	Date <b>8-25-06</b>
Title <b>Drilling COM</b>		
Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed) <b>AFM</b>	Date <b>12/19/06</b>
Title <b>FFO</b>		

Application approval 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.  
Conditions of approval, if any, are attached.

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 reverse)

Williams Production Company, LLC, proposes to drill a vertical well to develop the Blanco Mesa Verde/Basin Dakota formation at the above described location in accordance with the attached drilling and surface use plans.

The surface is located on Jicarilla Apache Nation lands

This location has been archaeologically surveyed by Velarde Energy.

A 5052.5 foot pipeline tie would be required for this location and it is also located on Jicarilla Apache Nation Lands.

15' of new access road will be needed to access this well.

*File pit permit application on NM OGP Form C-103 prior to constructing location.*

**NMCCD** 8/12/22/06

DRILLING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"GENERAL REQUIREMENTS".

This action is subject to technical and  
procedural review pursuant to 43 CFR 3165.3  
and appeal pursuant to 43 CFR 3165.4

## 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 &amp; Natural Resources Department

## OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-102

Revised June 10, 2003

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

* APT Number 30-039-30049		* Pool Code 72319	* Pool Name BLANCO MESAVERDE
* Property Code 36209	* Property Name JAECO 26-3 16		* Well Number 1A COM
* OGRID No. 120782	* Operator Name Williams Production JAECO Company, LLC		* Elevation 7070

## 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
P	16	26N	3W		1160	SOUTH	860	EAST	RIO ARriba

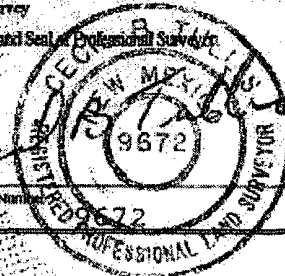
## 11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

* Dedicated Acres E/2 320	* Joint or Infill	* Consolidation Cells	* 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

5280.00	16	5284.84	5280.00	SECTION 16	860'	1160'	5284.25	<b>17 OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature: <u>Larry Higgins</u> Printed Name: <u>LARRY HIGGINS</u> Title and E-mail Address: <u>DARLINE COM</u> Date: <u>8-25-06</u>
								<b>18 SURVEYOR CERTIFICATION</b> 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: <u>APRIL 19, 2006</u> Signature and Seal of Professional Surveyor: <u>[Signature]</u> Certificate Number: <u>9672</u>



ELEVATION: 7070



LATITUDE: 36°28'57" N  
LONGITUDE: 107°08'39" W  
WGS 84  
VERT. DATUM: NAD 1921

C-C'		
1080		
1010		
1060		



## WILLIAMS PRODUCTION COMPANY

### Operations Plan

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

**DATE:** 8/11/2006 **FIELD:** Blanco MV  
**WELL NAME:** JAECO 26-3 16 #1A COM **SURFACE:** BOIA  
**BH LOCATION:** SESE Sec 16-26N-3W **MINERALS:** Jicarilla Apache  
Rio Arriba, NM  
**ELEVATION:** 7,070' GR **LEASE #** Jicarilla Apache  
Contract # 116

**MEASURED DEPTH:** 6,299'

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

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

Name	MD	Name	MD
Ojo Alamo	3,244	Cliff House	5,429
Kirtland	3,449	Menefee	5,544
Fruitland	3,509	Point Lookout	5,849
Picture Cliffs	3,704	Mancos	6,144
Lewis	3,889	TD	6,299

**B. MUD LOGGING PROGRAM:** None

**C. LOGGING PROGRAM:** HRI/GR, D-N from surface to int. casing. High Resolution Dual Induction log from intermediate shoe to TD. High Resolution Induction/ GR and Density/ Neutron log over zones of interest. Onsite geologist will pick Density/ Neutron log intervals on both logging runs.

**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" 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 in. 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	12 1/4	300	9 5/8	36	K-55
Intermediate	8 3/4	4,116	7	20	K-55
Liner	6 1/4	4,019   6,299	4 1/2	10.5	J-55

**B. FLOAT EQUIPMENT:**

- SURFACE CASING:** 9-5/8" notched regular pattern guide shoe. Run (1) standard centralizer on each of the bottom (3) joints of Surface Casing.
- INTERMEDIATE CASING:** 7" 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 CASING:** 4-1/2" & 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.

**IV. CEMENTING:**

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

- SURFACE:** Slurry: 150sx (205 cu.ft.) of "Type III" + 2% CaCl<sub>2</sub> + 1/4 # of cello-flake/sk (Yield = 1.39 cu.ft./sk, Weight = 14.5 #/gal.). The 100% excess should circulate cement to the surface. WOC 12 hours. Test csg to 1500psi.
- INTERMEDIATE:** Lead - 525 sx (1,098 cu.ft.) of "Premium Light" with 8% gel, 1% CaCl<sub>2</sub> and 1/4# cello-flake/sk (Yield = 2.09 cu.ft./sk, Weight = 12.1 #/gal.). Tail - 50 sx (70cu.ft.) of "Type III" with 1/4# cello-flake/sk (Yield = 1.4 cu.ft./sk, Weight = 14.5#/gal.). Use **100% excess in Lead Slurry** to circulate to surface. **No excess in Tail Slurry.** Total volume = ~~1,000~~ <sup>1108</sup> cu.ft. Bump Plug to 1,500 psi. Notify engineering if cement is not circulated to surface.
- PRODUCTION LINER:** 10 bbl Gelled Water space. Cement: 140 sx (215 ft<sup>3</sup>) of Premium Light HS + 1% FL-52 + .2% CD-32, 0.1% R-3, 3 #/sk CSE, 1/4 #/sk cello flake and 4% Phenoseal. (Yield = 2.15 ft<sup>3</sup>/sk, Weight = 12.3 #/gal.). Displace cement at a minimum of 8 BPM. The 20% excess in lead and tail should cover 100 ft into intermediate casing. Total volume ~~293~~ <sup>301</sup> ft<sup>3</sup>. WOC 12 hours

**V. 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 is not circulated to surface.

**B. PRESSURE TEST**


1. Pressure test 7" & 4-1/2" casing to 1500# for 15 minutes as per state regulations.

**C. STIMULATION**

1. Perforate the Point Lookout as determined from the open hole logs.
2. Stimulate with approximately 9,300# of 14/30 LiteProp™ sand in slick water.
3. Isolate Point Lookout with a CIBP.
4. Perforate the Menefee/Cliff House as determined from the open hole logs.
5. Stimulate with approximately 9,300# of 14/30 LiteProp™ sand in slick water.
6. Test each zone before removing bridge plugs.

**D. RUNNING TUBING**

1. Mesa Verde: 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.

  
1502 Gary Sizemore  
Sr. Drilling Engineer

# Well Control Equipment Schematic for 2M Service

Attachment to Drilling Technical Program

## Exhibit #1 Typical BOP setup

Location: San Juan Basin, New Mexico

Date: August 20, 2001

By: John Thompson (Walsh E&P)

