

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

5. Lease Serial No.

Jicarilla Tribal Contract #116

6. If Indian, Allottee or Tribe Name

Jicarilla Apache Nation

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.

JAECO 26-3 15 #1A COM

9. API Well No.

30-039-30067

10. Field and Pool, or Exploratory

Blanco MV

11. Sec., T., R., M., or Blk. and Survey or Area

A Section 15, T26N R3W

12. County or Parish

Rio Arriba

13. State

NM

1a. Type of Work: ☒ DRILL

☐ REENTER

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

☒ Single Zone ☐ Multiple Zone

2. Name of Operator

Williams Production Company, LLC

3a. Address

P.O. Box 640 Aztec, NM 87410

3b. Phone No. (include area code)

(505) 634-4208

4. Location of Well (Report location clearly and in accordance with any State requirements. \*)

At surface 1300' FNL & 1300' FEL

At proposed prod. zone same

14. Distance in miles and direction from nearest town or post office\*

16 miles from Lindrith, NM

15. Distance from proposed\*

location to nearest  
property or lease line, ft.  
(Also to nearest drig. unit line, if any)

1300'

16. No. of Acres in lease

320

17. Spacing Unit dedicated to this well

320 (E/2)

18. Distance from proposed location\*

to nearest well, drilling, completed,  
applied for, on this lease, ft

2640'

19. Proposed Depth

6,294'

20. BLM/BIA Bond No. on file

B001576

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

7,175' GR

22. Approximate date work will start\*

November 1, 2006

23. Estimated duration

1 month

24. Attachments

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

1. Well plat certified by a registered surveyor.

2. A Drilling Plan.

3. A Surface Use Plan (if the location is on National Forest System Lands, the  
SUPO shall be filed with the appropriate Forest Service Office).

4. Bond to cover the operations unless covered by an existing bond on file (see  
Item 20 above).

5. Operator certification.

6. Such other site specific information and/or plans as may be required by the  
authorized officer.

25. Signature

Name (Printed/Typed)

Date

Larry Higgins

Larry Higgins

8-31-06

Drilling COM

Approved by (Signature)

Name (Printed/Typed)

Date

Markus

Markus

12/19/06

Title

Office

FFO

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 2667.2 foot pipeline tie would be required for this location and it is also located on Jicarilla Apache Nation Lands.

480' of existing access road will be needed to access this well.

NMOC

8 12/22/06

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

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

RCVD DEC21'06  
OIL CONS. DIV.

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Grande Rd., Artesia, 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 6102.3  
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**

API Number <b>30-039-30067</b>		Pool Code <b>72319</b>	Pool Name <b>BLANCO MESAVERDE</b>
Property Code <b>36208</b>	Property Name <b>JAECO 26-3 15</b>		Well Number <b>1A COM</b>
GRID No. <b>120782</b>	Operator Name <b>Williams Production &amp; Service Company, LLC</b>		Elevation <b>7175</b>

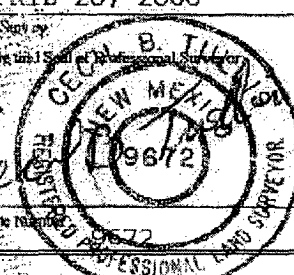
**10 Surface Location**

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	15	26N	3W		1300	NORTH	1300	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" <b>E/2 320</b> "Joint or Infill"    "Consolidation Code"    "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

16 5280.00 SECTION 15 5285.68	5285.14	1300'	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature <i>Larry Higgins</i> Printed Name <b>LARRY HIGGINS</b> Title and E-mail Address <b>DRILLING COM</b> <b>8-31-06</b> Date
	1300'	1300'	
	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. <b>APRIL 20, 2006</b> Date of Survey Signature and Seal of Professional Land Surveyor 		
	5285.68	5280.00	

Submit 3 Copies To Appropriate District  
Office  
District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Ave., 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 and Natural Resources

Form C-103

May 27, 2004

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

WELL API NO. **30-039-30067**

5. Indicate Type of Lease  
Federal (Indian)

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

Jicarilla Tribal Contract #116

8. Well Number  
JAECO 26-3 15 #1A COM

9. OGRID Number 120782

10. Pool name or Wildcat  
Blanco MV/Basin Dakota

SUNDRY NOTICES AND REPORTS ON WELLS  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A  
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH  
PROPOSALS.)

1. Type of Well: Gas Well ☒

2. Name of Operator  
Williams Production Company

3. Address of Operator  
P.O. Box 640, Aztec, NM 87410

4. Well Location  
Unit Letter **A** : 1300 feet from the North line and 1300 feet from the East line  
Section 15 Township 26N Range 3W NMPM County Rio Arriba

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
7175' GR

Pit or Below-grade Tank Application X

Pit type Drilling Depth to Groundwater >100' Distance from nearest fresh water well >1000' Distance from nearest surface water >500'<1000'

Pit Liner Thickness: 12 mil Below-Grade Tank: Volume bbls; Construction Material

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ P AND A ☐  
CASING/CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Drilling/Completion pit to be located approximately 50-75 feet from well head. Pit multi-use drilling and completion to avoid additional site disturbance and pit will be considered out of service once production tubing set. Reserve pit to be constructed in accordance with NMOCD Interim Pit and Below-Grade Tank Guidelines

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

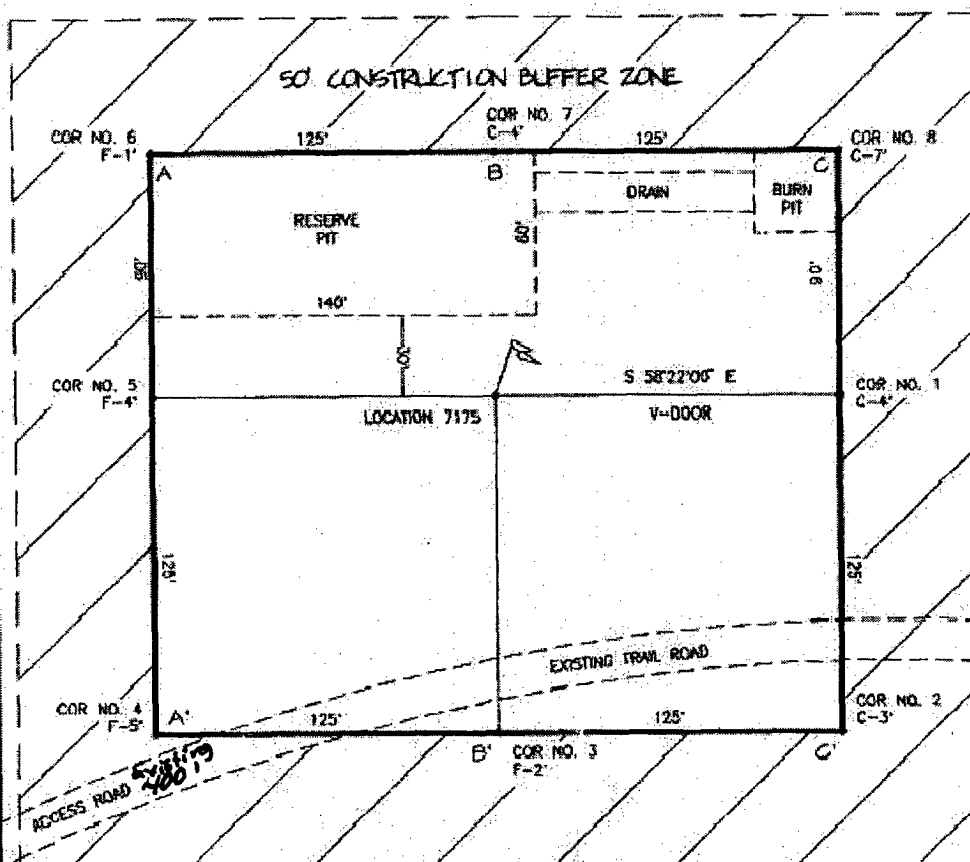
SIGNATURE Larry Higgins TITLE Drilling COM DATE 8-31-06

Type or print name Larry Higgins E-mail address: larry.higgins@williams.com Telephone No. (970) 563-3308

For State Use Only

APPROVED BY: [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. IV DATE DEC 22 2006

JAECO  
26-3 15 #1A COM  
1300 FNL & 1300 FEL  
SEC. 15 T26N R3W NMPM  
RIO ARriba COUNTY, N.M.  
ELEVATION: 7175



LATITUDE: 36°29'25" N  
LONGITUDE: 107°07'40" W  
WGS 84  
VERT. DATUM: NAD 1927

A-A'		
1185		
1175		
1165		

B-B'	
7185	
7115	
7165	

C-C'	
7185	
7175	
7165	



## WILLIAMS PRODUCTION COMPANY

### Operations Plan

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

**DATE:** 8/29/2006 **FIELD:** Blanco MV  
**WELL NAME:** JAECO 26-3 15 #1A Com **SURFACE:** BOIA  
**BH LOCATION:** NENE Sec 15-26N-3W **MINERALS:** Jicarilla Apache  
Rio Arriba, NM  
**ELEVATION:** 7,175' GR **LEASE #** MDA#701-02-0014  
**MEASURED DEPTH:** 6,294'

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

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

Name	MD	Name	MD
Nacimiento	2,589	Cliff House	5,449
Ojo Alamo	3,349	Menefee	5,554
Kirtland	3,534	Point Lookout	5,844
Fruitland	3,564	Mancos	6,129
Picture Cliffs	3,754	TD	6,294
Lewis	3,939		
Huerfanito Bentonite	4,244		

**B. MUD LOGGING PROGRAM:** Mud log from 300' above Ojo Alamo to TD. Mud logger to pick TD.

**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	4,159	7	20	K-55
Liner	6 1/4	4,059 6,294	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 - 535 sx (1,110 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 = 1,180 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 (287 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 287 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**

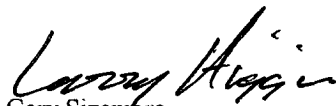
1. Pressure test 7" & 4-1/2" casing to 1500# for 15 minutes as per state regulations.

**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.

  
for 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)

