

**RECEIVED**

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

AUG 25 2006

Bureau of Land Management

Farmington Field Office

Lease Serial No.

70102-0014

Indian, Allottee or Tribe Name

DIST. 3

**APPLICATION FOR PERMIT TO DRILL OR REENTER**

Jicarilla Apache Nation

1a. Type of Work: ☒ DRILL ☐ REENTER

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

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

8. Lease Name and Well No.

JAECO 26-3 22 #2A

2. Name of Operator

Williams Production Company, LLC

9. APL Well No.

30-039-30051

3a. Address

P.O. Box 640 Aztec, NM 87410

3b. Phone No. (include area code)

(505) 634-4208

10. Field and Pool, or Exploratory

Blanco MV/Basin Dakota

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

At surface 790' FSL & 900' FWL

At proposed prod. zone same

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

M Section 22, T26N R3W

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

16 miles from Lindrith, NM

12. County or Parish

Rio Arriba

13. State

NM

15. Distance from proposed\*

Location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 790'

16. No. of Acres in lease

320

17. Spacing Unit dedicated to this well

320 (W/2)

18. Distance from proposed location\*

to nearest well, drilling, completed, applied for, on this lease, ft 1600'

19. Proposed Depth

6,441'

20. BLM/BIA Bond No. on file

B001576

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

7,427' 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

*Larry Higgins*

Name (Printed/Typed)

Larry Higgins

Date

8-26-06

Title

Drilling COM

Approved by (Signature)

*[Signature]*  
AFM

Name (Printed/Typed)

FFO

Date

12/19/06

Title

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 2880.7 foot pipeline tie would be required for this location and it is also located on Jicarilla Apache Nation Lands.

922' of improvements to the trail road will be needed to access this well.

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

NMOC

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 3160.8  
and appeal pursuant to 43 CFR 3165.4

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

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1381 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 June 10, 2003  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

1 APT Number <b>30-039-30051</b>		2 Pool Code <b>72319</b>		3 Pool Name <b>BLANCO MESAVERDE</b>	
4 Property Code <b>36210</b>		5 Property Name <b>JAECO</b>		6 Well Number <b>2A</b>	
7 OGRID No. <b>120782</b>		8 Operator Name <b>JAECO Williams Production Company, LLC</b>		9 Elevation <b>7227</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
M	22	26N	3W		790	SOUTH	900	WEST	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 <b>W/2 320</b>	13 Joint or Infill	14 Consolidation Code	15 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

16 5280.00 SECTION 22 900' 790' 5284.07	5285.58	17 <b>OPERATOR CERTIFICATION</b> 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>8-25-06</b> Date:
	18 <b>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. APR 21 2006 Date of Survey Signature and Seal of Licensed Surveyor:  Certificate Number:	

JAECO

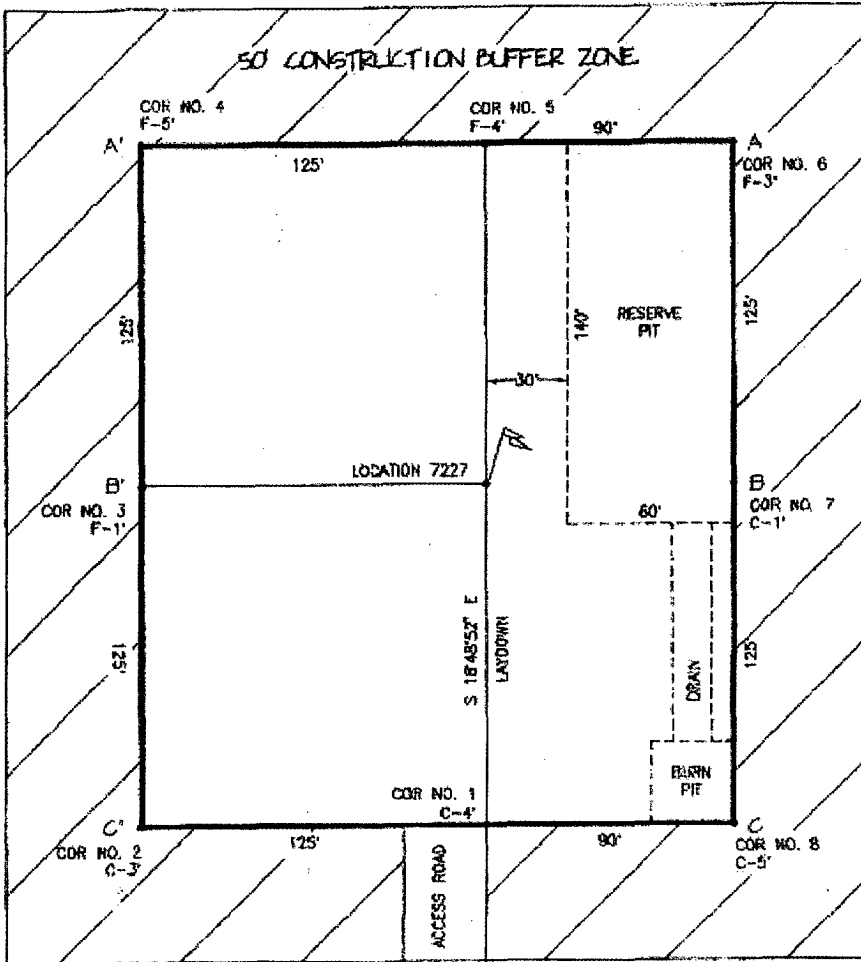
26-3 22 #2A

790 FSL & 900 FWL

SECTION 22 T26N R3W NMPM

RIO ARRIBA COUNTY, NEW MEXICO

ELEVATION: 7227



LATITUDE: 36°28'01" N  
LONGITUDE: 107°08'18" W  
N65 84'  
VERT. DATUM: NAD 1921

A-A'		
1231		
1221		
1211		

B-B'		
1231		
1221		
1211		

C-C'		
1231		
1221		
1211		



## **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 22 #2A **SURFACE:** BOIA  
**BH LOCATION:** SWSW Sec 22-26N-3W **MINERALS:** Jicarilla Apache  
Rio Arriba, NM  
**ELEVATION:** 7,227' GR **LEASE #** MDA #701-02-0014  
**MEASURED DEPTH:** 6,441'

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

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

Name	MD	Name	MD
Ojo Alamo	3,431	Cliff House	5,531
Kirtland	3,606	Menefee	5,656
Fruitland	3,661	Point Lookout	5,991
Picture Cliffs	3,831	Mancos	6,266
Lewis	4,021	TD	6,441

**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	4,226	7	20	K-55
Liner	6 1/4	4,126   6,441	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> + ¼ # 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 - 540 sx (1,130 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 = 1,200 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, ¼ #/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 300 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)

