

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

OIL CONS. DIV.
DIST. 3

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. 701-02-0014
1b. 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 Jicarilla Apache Nation
2. Name of Operator Williams Production Company, LLC		7. If Unit or CA Agreement, Name and No.
3a. Address P.O. Box 640 Aztec, NM 87410	3b. Phone No. (include area code) (505) 634-4208	8. Lease Name and Well No. JAECO 26-3 15 #1 COM
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 1720' FSL & 1295' FEL At proposed prod. zone same		9. API Well No. 30-039-30066
14. Distance in miles and direction from nearest town or post office* 16 miles from Lindrieth, NM		10. Field and Pool, or Exploratory Blanco MV/Basin Dakota
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drng. unit line, if any) 1295'		11. Sec., T., R., M., or Blk. and Survey or Area I Section 15, T26N R3W
16. No. of Acres in lease 320		12. County or Parish Rio Arriba
17. Spacing Unit dedicated to this well 320 (E/2)		13. State NM
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2900'		20. BLM/BIA Bond No. on file B001576
19. Proposed Depth 8,420'		21. Estimated duration 1 month
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 7,196' GR		22. Approximate date work will start* November 1, 2006
23. 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 <i>Larry Higgins</i>	Name (Printed/Typed) Larry Higgins	Date 8-31-06
Title Drilling COM		
Approved by (Signature) <i>D. Martinez</i>	Name (Printed/Typed)	Date 12/19/06
Title AFM	Office FED	

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 3236.2 foot pipeline tie would be required for this location and it is also located on Jicarilla Apache Nation Lands.

1931' of new & 605' of existing access road will be needed to access this well.

NMOC

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 3185.4

RCVD DEC 21 06

OIL CONS. DIV.
DIST. 3

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 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 30-039-30000	Pool Code 72319	Pool Name BLANCO MESAVERDE / BASIN DAKOTA
Property Code 36708	Property Name JAELO	Well Number 1-COM
OGRIID No. 120782	Operator Name Williams Production Services Company, LLC	Elevation 7196

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
I	15	26N	3W		1720	SOUTH	1295	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 Code	"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

15 5280.00 SECTION 15 5285.14 5285.58 1295' 1720'	17 OPERATOR CERTIFICATION 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>DRILLING COM</u> Date <u>8-31-06</u>
	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 <u>MAY 4, 2006</u> Signature and Seal of Professional Surveyor <u>[Signature]</u> NEW MEXICO PROFESSIONAL SURVEYOR 9672

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. **30-039-30066**

5. Indicate Type of Lease
Federal (Indian)

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

701-02-0014

8. Well Number
JAECO 26-3 15 #1 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 J : 1720 feet from the South line and 1295 feet from the East line
Section 15 Township 26N Range 3W NMPM County Rio Arriba

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
7070' 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 >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 ☐.

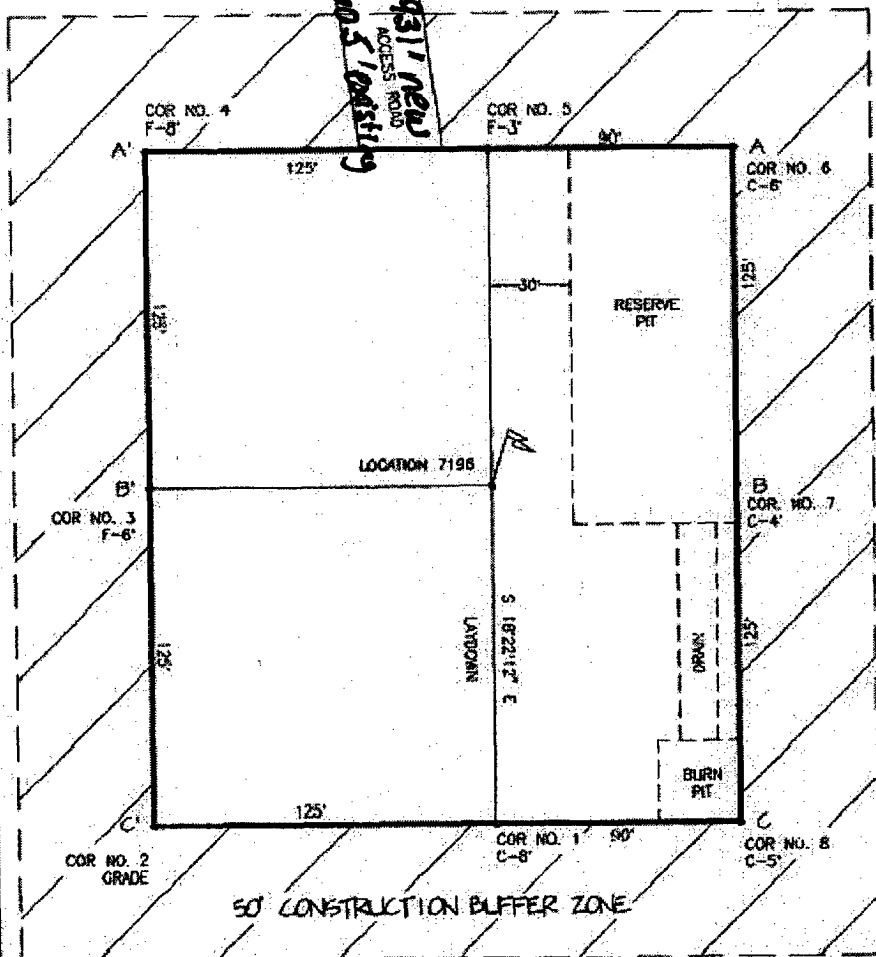
SIGNATURE Larry Higgins TITLE Drilling COM DATE 8-31-06

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. #1 DATE DEC 22 2006

JAECO
 26-3 15 #1 COM
 1720 FSL & 1295 FEL
 SECTION 15 T26N R3W NMPM
 RIO ARriba COUNTY, NEW MEXICO
 ELEVATION: 7196



LATITUDE: 36°29'03" N
 LONGITUDE: 107°07'40" W
 NGS B4
 VERT. DATUM: NAD 1921

A-A'	
1206	
7196	
7186	

B-B'	
1206	
7196	
7186	

C-C'	
1206	
7196	
7186	



WILLIAMS PRODUCTION COMPANY

Operations Plan

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

<u>DATE:</u>	8/29/2006	<u>FIELD:</u>	Blanco MV/Basin DK
<u>WELL NAME:</u>	JAECO 26-3 15 #1 Com	<u>SURFACE:</u>	BOIA
<u>BH LOCATION:</u>	NESE Sec 15-26N-3W Rio Arriba, NM	<u>MINERALS:</u>	Jicarilla Apache
<u>ELEVATION:</u>	7,196' GR	<u>LEASE #</u>	MDA #701-02-0014
<u>MEASURED DEPTH:</u>	8,420'		

I. GEOLOGY: Surface formation - San Jose

A. FORMATION TOPS: (KB)

Name	MD	Name	MD
Nacimiento	2,550	Cliff House	5,470
Ojo Alamo	3,445	Menefee	5,585
Kirtland	3,615	Point Lookout	5,915
Fruitland	3,645	Mancos	6,215
Pictured Cliffs	3,805	Gallup	6,925
Lewis	3,990	Greenhorn	7,875
Huerfanito Bentonite	4,290	Graneros	7,940
		Dakota	7,985
		Morrison	8,320
		TD	8,420

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

C. LOGGING PROGRAM: HRI from surface casing to TD. SDL/DSN/DSEN over zones of interest. Onsite geologist to pick intervals.

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	14 3/4	300	10 3/4	32.75	H-40
Intermediate	9 7/8	4,205	7 5/8	26.4	K-55
Longstring	6 3/4	8,420	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 (3) 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 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.

IV. CEMENTING:

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

- SURFACE:** Slurry: 255sx (356 cu.ft.) of "Type III" + 2% CaCl₂ + 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 - 735 sx (1528) cu.ft.) of "Type III" 65/35 poz with 8% gel, 1% CaCl₂ and 1/4# cello-flake/sk (Yield = 2.09 cu.ft./sk, Weight = 12.1 #/gal.). Tail - 100 sx (139cu.ft.) of "Type III" with 1/4# cello-flake/sk, and 1% CaCl₂ (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 = 1,667 cu.ft. Bump Plug to 1,500 psi. Notify engineering if cement is not circulated to surface.
- PRODUCTION CASING:** 10 bbl Gelled Water space. Cement: 205 sx (432 ft³) 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 ft³/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 432ft³. WOC 12 hours

V. IV COMPLETION**A. CBL**

1. 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 5-1/2" casing to 6000 psi for 15 minutes.

C. STIMULATION

1. Stimulate Dakota with approximately 70,000# of 20/40 sand in x-link foam.
2. Isolate Dakota with a RBP.
3. Perforate the Point Lookout as determined from the open hole logs.
4. Stimulate with approximately 9,300# of 14/30 LiteProp™ sand in slick water.
5. Isolate Point Lookout with a CIBP.
6. Perforate the Menefee/Cliff House as determined from the open hole logs.
7. Stimulate with approximately 9,300# of 14/30 LiteProp™ sand in slick water.
8. Test each zone before removing bridge plugs.

D. RUNNING TUBING

1. Dakota: Run 2-1/16", 3.25#, J-55, IJ tubing with 1/2 mule shoe on bottom, SN with pump-out plug on top of adeem joint and 5 Seal Units. Land tubing approximately 100' below top Dakota perf.
2. Mesa Verde: Run 2-1/16", 2.9#, J-55, EUE tubing with a SN (1.91" ID) on top of bottom joint. Land tubing approximately 25' above the bottom Point Lookout perforations.

Gary Sizemore
1505 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)

