

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

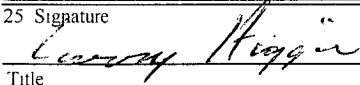
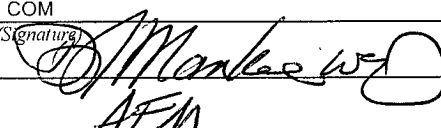
FORM APPROVED
OMB No 1004-0136
Expires January 31, 2004

1a Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No Jicarilla Apache Contract #61
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 Indian I #5
4 Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 1980' FSL & 1865' FEL At proposed prod zone same		9. API Well No 30-039-30103
14 Distance in miles and direction from nearest town or post office* 16 miles from Lindrith, NM		10 Field and Pool, or Exploratory Blanco MV
15 Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig unit line, if any) 1865'		11. Sec., T., R., M., or Blk and Survey or Area J Section 27, T28N 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 3000'		19 Proposed Depth 6,410'
20 BLM/BIA Bond No on file B001576		21 Elevations (Show whether DF, KDB, RT, GL, etc) 7,041' GR
22 Approximate date work will start* February 1, 2005		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. | 4 Bond to cover the operations unless covered by an existing bond on file (see Item 20 above) |
| 2 A Drilling Plan | 5. Operator certification. |
| 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) | 6 Such other site specific information and/or plans as may be required by the authorized officer |

25 Signature 	Name (Printed/Typed) Larry Higgins	Date 11-1-06
Title Drilling COM		
Approved by (Signature) 	Name (Printed/Typed) M. Manley	Date 12/2/08
Title AFM	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 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 3377 6 foot pipeline tie would be required for this location and it is also located on Jicarilla Apache Nation Lands

995' of new access road will be needed to access this well

NOTIFY AZTEC OCD 24 HRS
PRIOR TO CASING & CEMENT

DIST. 3

A COMPLETE C-144 MUST BE SUBMITTED TO AND APPROVED BY THE NMOC FOR: A PIT, CLOSED LOOP SYSTEM, BELOW GRADE TANK, OR PROPOSED ALTERNATIVE METHOD, PURSUANT TO NMOC PART 19.15.17, PRIOR TO THE USE OR CONSTRUCTION OF THE ABOVE APPLICATIONS.

DEC 05 2008

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

NMOC

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

State of New Mexico
 Energy, Minerals & Natural Resources Department
 OIL CONSERVATION DIVISION JUN 5 29
 Santa Fe, NM 87505 RECEIVED
 1220 South St. Francis Dr.
 070 FARMINGTON NM
 AMENDED REPORT ☐ WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
 Revised June 10, 2003
 Submit to appropriate office
 State Lease - 4 Copies
 Fee Lease - 3 Copies

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

API Number 30-039-38153	Property Code 17031	Operator Name INDIAN 1	Well Number 5
Foot Code 72319	Foot Name BLANCO MESAVARDE	Operator Name WILLIAMS PRODUCTION COMPANY	Block 7041

U/L or Lot no. J	Section 27	Township 28N	Range 3W	Lot 14N	Foot from the 1980	North/South line SOUTH	Foot from the 1865	East/West line EAST	County RIO ARriba
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U/L or Lot no.	Section	Township	Range	Lot 14N	Foot from the	North/South line	Foot from the	East/West line	County
Bottom Hole Location If Different From Surface									

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

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: <i>Larry Higgins</i> Title and E-mail Address: <i>Drilling Com</i> Date: <i>11-1-06</i>		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 the same is true and correct to the best of my belief. Date of Survey: <i>OCTOBER 5, 2006</i> Signature: <i>[Signature]</i> Seal: <i>[Seal]</i>	
527154	27	529279	527330



WILLIAMS PRODUCTION COMPANY

Operations Plan

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

DATE: 10/25/2006 **FIELD:** Blanco MV
WELL NAME: Indian I #5 **SURFACE:** BOIA
BH LOCATION: NWSE Sec 27-28N-3W **MINERALS:** Jicarilla #61
Rio Arriba, NM
ELEVATION: 7,041' GR **LEASE #** Jicarilla #61
MEASURED DEPTH: 6,410'

I. GEOLOGY: Surface formation - San Jose

A. FORMATION TOPS: (KB)

Name	MD	Name	MD
Nacimiento	2,050	Cliff House	5,615
Ojo Alamo	3,285	Menefee	5,685
Kirtland	3,395	Point Lookout	5,960
Fruitland	3,395	Mancos	6,270
Picture Cliffs	3,640	TD	6,410
Lewis	3,900		
Huerfanito Bentonite	4,410		

- B. MUD LOGGING PROGRAM:** Mud log from 300' above Ojo Alamo SS to TD. Mud logger to pick TD.
- C. LOGGING PROGRAM:** High Resolution Induction log from surface casing to TD. SDL/DSN/DSEN over zones of interest. Onsite geologist will pick Density/ Neutron log interval.
- 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	4,135	7	20	K-55
Liner	6 1/4	4,035 6,410	4 1/2	10.5	J-55

B. FLOAT EQUIPMENT:

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

1. **SURFACE:** Slurry: 150sx (205 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.
2. **INTERMEDIATE:** Lead - 530 sx (1103 cu.ft.) of "Premium Light" with 8% gel, 1% CaCl 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 = 1,173 cu.ft. Bump Plug to 1,500 psi. Notify engineering if cement is not circulated to surface.
3. **PRODUCTION LINER:** 10 bbl Gelled Water spacer. Cement: 145 sx (305 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 305 ft³. 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 7" & 4-1/2" casing to 3300# for 15 minutes.

C. STIMULATION

1. Perforate the Point Lookout as determined from the open hole logs.
2. Stimulate with approximately 9,300# of 14/30 LitePropTM 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 LitePropTM 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)

