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

## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

## AU OF LAND MANAGEMENT Jicarilla Apache

5 Lease Serial No	en en
Jicarilla Apache Contract #92	1 '1111' 11111'
6 Midian, Allottee or Tribe Name	post post
Micarilla Apache Nation 19	second and
7 If Unit or CA Agreement, Name and No	inner and a second

APPLICATION FOR PERMIT TO DRILL OR REENTER la Type of Work ☑ DRILL REENTER DECEIVED 8 Lease Name and Well No Oil Well Gas Well Other Single Zone 1b Type of Well Multiple Zone 2 Name of Operator Williams Production Company, LLC 3a Address 3b Phone No (include area code) 10 Field and Pool or Explorators P.O Box 640 Aztec, NM 87410 (505) 634-4208 Blanco MV 11. Sec., T, R., M., or Blk and Survey or Area 4 Location of Well (Report location clearly and in accordance with any State requirements. \*) 1850' FNL & 2000' FEL At surface same At proposed prod zone 4 Section 29, T27N R3W 14 Distance in miles and direction from nearest town or post office\* 12 County or Parish 13 State 16 miles from Lindrith, NM Rio Arriba NM Distance from proposed\* 17 Spacing Unit dedicated to this well 16 No of Acres in lease location to nearest property or lease line, ft property of lease line, it (Also to nearest drig unit line, if any) 320 1850 320 (1/2) 18 Distance from proposed location\* 19 Proposed Depth 20 BLM/BIA Bond No on file to nearest well, drilling, completed, applied for, on this lease, ft 300 6 641 B001576 21 Elevations (Show hether DF, KDB, RT, GL, etc.) 22 Approximate date work will start\* 23 Estimated duration 7,262' GR August 1, 2005 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) A Drilling Plan 5 Operator certification 3 A Surface Use Plan (if the location is on National Forest System Lands, the 6. Such other site specific information and/or plans as may be required by the SUPO shall be filed with the appropriate Forest Service Office) authorized officer 25 Signature : Name (Printed/Typed) Larry Higgins Title Drilling COM Approved by (Signatu Name (Printed/Typed) Date Title Office s 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 Application approval 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

NOTIFY AZTEC OCD 24 HRS. PRIOR TO CASING & CEMENT

A 1582.3 foot pipeline tie would be required for this location and it is also located on <u>Jicarilla Apache Nation Lands</u>

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

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

subject to technical and New pursuant to 43 CFR 3165.3 Irsuant to 43 CFR 3165.4

VMncn<sup>6</sup>

JUL 1 7 2008

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

OHA

District I Form C-102 Stare of New Mexico 1025 N French Dr., Hebbt, NA188140 Recised June 10, 2005 Energy: Minerals & Natural Resources Department District II Submit to Appropriate District Office. 1401 W. Grand Avennie Artesla, NA (35210 OIL CONSERVATION DIVISION State Lease - 4 Coptes District III 1220 South St. Francis Dr. 1000 Rio Remot Rd., Artic, NAIST-110 Fee Lease - 3 Copies Santa Fe. NM 87505 District 51 AMENDED REPORT 1210 S. St. French Dr., Santa Fe NA 187605 WELL LOCATION AND ACREAGE DEDICATION PLAT Pool Code 72319 BLANCO MESA VERDE Property Code Property Name Well Number JICARILLA 92 18A Operator Name
WILLIAMS PRODUCTION COMPANY · Elevation OGRID No. 120782 7262 10 Surface Location CI or les no. East Wint Sol Section Township Riegi Let Idn Feet from the North South line Feet from the 1850 NORTH 2000 RIO ARRIBA Bottom Hole Location If Different From Surface CL or let us. Runge Le: Idn Feet from the Section Township North South fine Feet from the East West fine County "Dedicated Acres Joint or Infil " Consolidation Code Order No. 320 Ac. (E/2) 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 5279.25 OPERATOR CERTIFICATION I benely comfi show the referenceion commissed however in nd complete to the best of the knowledge and 850 2000 5278 51 "SURVEYOR CERTIFICATION I havely count show the well location charm on this plan. was planted from field mateir of actual start e.g. hade by: mie cir ieulier, by sugaevšulėri, enalitikos ybe zame is mie grafic priestries in the best of the bedief Novemb

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#### WILLIAMS PRODUCTION COMPANY

#### **Operations Plan**

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

DATE:

5/30/2006

FIELD:

Blanco MV

WELL NAME:

Jicarilla 92 #18A

**SURFACE:** 

**BOIA** 

**BH LOCATION:** 

**SWNE Sec 29-27N-3W** 

**MINERALS:** 

Jicarilla #92

Rio Arriba, NM

**ELEVATION:** 

7,262' GR

LEASE #

Jicarilla #92

MEASURED DEPTH:

6,641'

I. GEOLOGY:

Surface formation - San Jose

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

Name ,	MD	Name	MD	
Ojo Alamo	3,576	Cliff House	5,821	
Kirtland	3,765	Menefee	5,891 6,191	
Fruitland	3,811	Point Lookout		
Picture Cliffs	4,046	Mancos	6,461	
L.ewis	4,246	TD	6,641	

- B. MUD LOGGING PROGRAM: Mudlogger on location at 3,400" to intermediate casing TD and intermediate casing to TD.
- C. LOGGING PROGRAM: High Resolution Induction/ GR and Density/ Neutron log from surface casing to intermediate casing and intermediate shoe to TD. 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		<b>HOLE SIZE</b>	ì	DEPTH (MD)	<b>CASING SIZE</b>	WT. & GRADE
Surface		12-1/4"		+/- 300'	9-5/8"	36# K-55
Intermediate	ì	8-3/4"		+/- 4,426'	7"	20# K-55
Prod. Liner		: 6-1/4"	+/-	- 4,326'-6,641'	4-1/2"	10.5# K-55

#### **B. FLOAT EQUIPMENT:**

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

- 1. <u>SURFACE</u>: Slurry: <u>150sx</u> (205 cu.ft.) of "Type III" + 2% CaCl<sub>2</sub> + ½ # 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 570 sx (1,190 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 = 1460 cu.ft. Bump Plug to 1,500 psi. Notify engineering if cement is not circulated to surface.
  - 3. PRODUCTION LINER: 10 bbl Gelled Water space. Lead:  $50sx (130ft^3)$  of Premium Light HS + 1% FL-52 + .2% CD-32, 0.1% R-3, 3 #/sk CSE. (Yield = 2.59 cu.ft./sk, Weight = 11.6 #/gal.). Tail:  $100\underline{sx} (215 ft^3)$  of Premium Light HS + 1% FL-52 + .2% CD-32, 0.1% R-3, 3 #/sk CSE, ½ #/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 308 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 LiteProp<sup>TM</sup> 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<sup>TM</sup> sand in slick water.
- 6. Test each zone before removing bridge plugs.

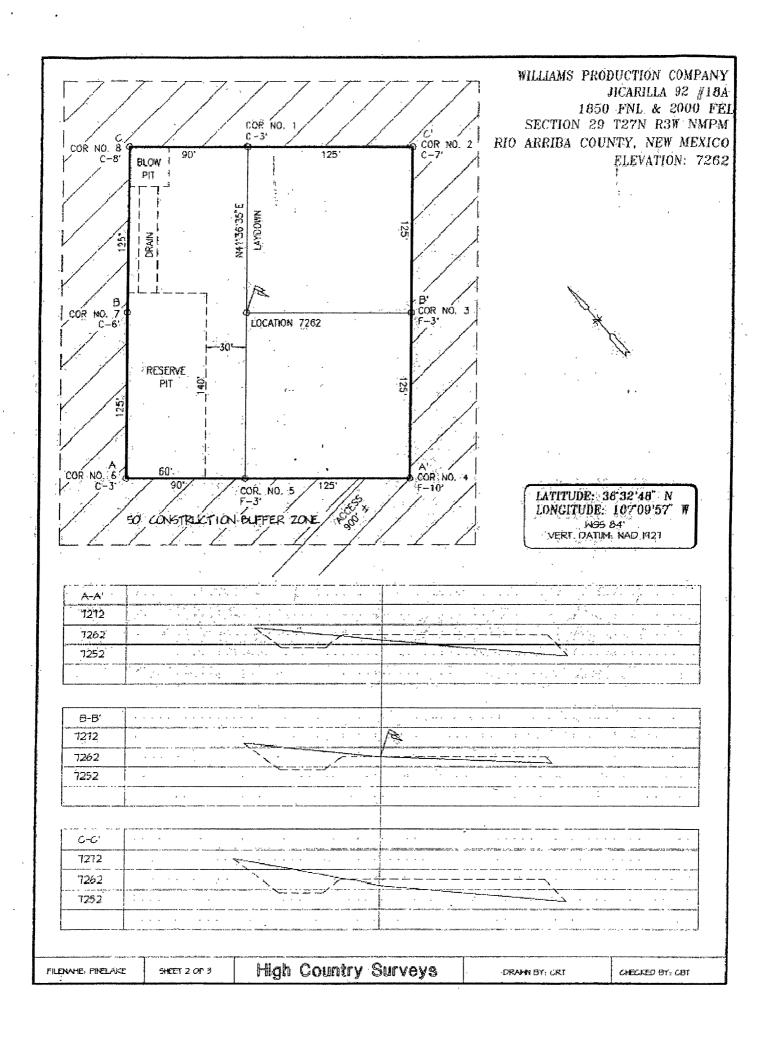
#### D. RUNNING TUBING

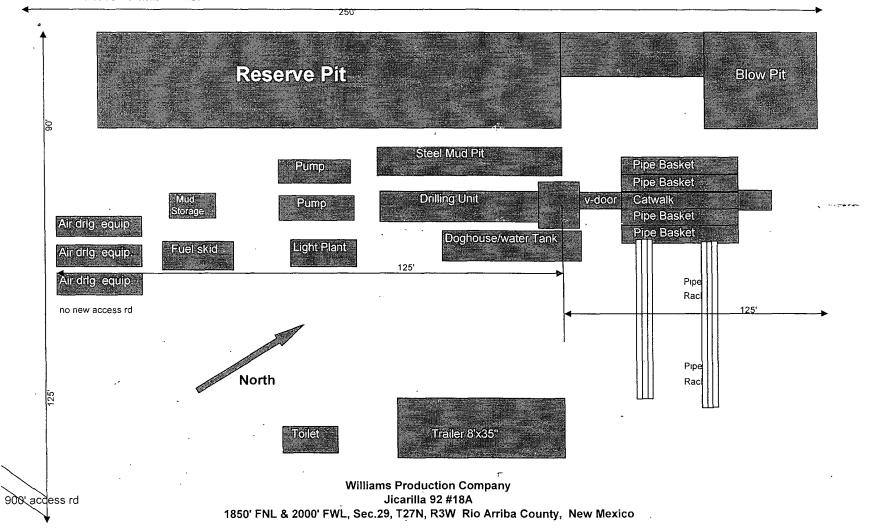
1. <u>Mesa Verde:</u> Run 2-3/8", 4.7#, J-55, EUE tubing with a SN (1.91" ID) on top of bottom joint. Land tubing approximately 25' above the bottom Point Lookout perforation.

Gary Sizemore

For Sr. Drilling Engineer

Jicarilla 92 #18A Ops Plan.doc





### Well Control Equipment Schematic for 2M Service

Attachment to Drilling Technical Program

# Exhibit #1 Typical BOP setup

