FORM APPROVED OMB No 1004-0136

UNITED STATE	C		*	Expires January 51,	2004			
DEPARTMENT OF THE 1	5 Lease Serial No.		<u>u</u>					
BUREAU OF LAND MANA	Jicarilla Apache Contract #61							
	6 If Indian, Allottee or Tribe Name							
APPLICATION FOR PERMIT TO D	1		emil (j.					
	Jicarilla Apache Nation							
la Type of Work DRILL REENT	7 If Unit or CA Agreement, N	Name and No						
	iple Zone	8 Lease Name and Well No						
1b Type of Well Oil Well Gas Well Other	Indian I #08							
Name of Operator     Williams Production Company, LLC				9. API Well No. 39-290	779			
3a Address	3b Phone No	(include area code)		10 Field and Pool, or Exploratory .				
P.O. Box 640 Aztec, NM 87410	ļ	634-4208		Blanco MV				
4 Location of Well (Report location clearly and in accordance with an	<del></del>			11. Sec., T., R, M., or Blk. and Survey or Area				
005015111 0 000151411	iy siate requirem	ems )		71. 550, 1., 10, 11, 5. 2.11.				
At surface 2050' FNL & 660' FWL  At proposed prod zone same				E Section 35, T28N R3W				
14 Distance in miles and direction from nearest town or post office*		······································		12 County or Parish 13 State				
·				1				
16 miles from Lindrith,NM  15 Distance from proposed*	16 31 6		1,7.0	Rio Arriba	NW			
location to nearest	16 No of A	Acres in lease	17. Spacin	g Unit dedicated to this well				
nronerty or lease line ft			1					
(Also to nearest drig unit line, if any) 660'	320			20 (W/2)				
18 Distance from proposed location* to nearest well, drilling, completed,	19 Propose	d Depth	20 BLM/	BIA Bond No. on file ,				
applied for, on this lease, ft								
32680'	6,404			23 Estimated duration				
21 Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*							
7,050' GR	Augu	st 1, 2005		1 month				
	24. Atta	chments	•					
The following, completed in accordance with the requirements of Onsh	ore Oil and Gas	Order No 1, shall be at	tached to this	form.				
1 Well plat certified by a registered surveyor		4 Bond to cover the	ne operation	s unless covered by an existing	bond on file (	(see		
2 A Drilling Plan		Item 20 above)		<i>--</i>	, , , , , , , , , , , , , , , , , , , ,	ζ		
3 A Surface Use Plan (if the location is on National Forest System	n Lands, the	<ol><li>Operator certific</li></ol>						
SUPO shall be filed with the appropriate Forest Service Office	).	6. Such other site authorized offic		ormation and/or plans as may be	e required by	the		
			ei.					
25. Signature	Name	(Printed/Typed)		Date	2.1 -1	•		
Correy It sig -		Larry Higgins		6-2	6-06			
Title								
Drilling COM,								
Approved by (Signature)	Name	(Printed/Typed)		Date	1 1			
/ /mbolab				!	1100	82		
Title	Office	•			' 1			
Actions AFM Museul	_							
Application approval does not wirrant or certify that the applicant hold	s legal or equita	ble title to those rights i	n the subject	lease which would entitle the app	licant to condu	uct		
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			nd willfully t	o make to any department or ager	ncy of the Uni	ted		
States any false, fictitious or fraudulent statements or representations as	to any matter w	ithin its jurisdiction						
*(Instructions on reverse)								
Williams Production Company, LLC, proposes to drill a vertical v	well to develop	the Blanco Mesa Ve	rde formatio	on at the above described local	ion in			
accordance with the attached drilling and surface use plans.								
The surface is located on liceville Anache Nation lands			_	COMPLETE C-144 MUST BE SI	IBMITTED T	O AND		
The surface is located on Jicarilla Apache Nation lands.			А	COMPLETE C-144 MOST DE ST	O 1411 1 1 1 1 1			

This location has been archaeologically surveyed by Velarde Energy

A 3352.8 foot pipeline tie would be required for this location and it is also located on Jicarilla Apache Natic

3,000' new access road will be needed to access this well.

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

NOTIFY AZTEC OCD 24 HRS. PRIOR TO CASING & CEMENT

A COMPLETE C-144 MUST BE SUBMITTED 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.

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



TESURVEYOR CERTIFICATION

Franks: courts that the real location examine and the place
was placed from finite took made of actual trainers made by
the organization and there is sense in trae

DIST. 3

District. 1615 N. French D. District II 1201 W. Grand A. District III 1603 Kilo Braros 1 Kalsict III	ne-de/		ergy Min OIL CO	State of New erals & Neway DNSERVAT 20 South St. Santa Fé. N	٠ .	Form C.10: Revised June 10, 200: Submit to Appropriate District Office State Lence - 4 Copies Fee Lence - 3 Copies				
		V		CATION Pool Code 1319		ÉAGE DEDIC	ATION PLA Pool Not BLANCO MESA	T H	ENDED REPORT	
Property Code  17031  OGRID No.  120782  WILLIAMS PRODUCTION COMPANY.					Vanca .		Well Number			
				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<sup>10</sup> Surface		,		050	
Tiorlet so.	Siction 35	Tomuship 28N	Range 3W	Let lide	Feet freis die 2050	North South line NORTH	Feet from the 660	East West lite: WEST	RIO ARRIBA	
**************************************	<b>4</b>	I	la Bo	non Hol	e Location It	Different From	ı Surface	<del></del>	<del>.</del>	
CL or locato	Section	Tomstep	Range	Lei lida	Feet frem the	Nexth South line	Feer from the	East West line	County	
Dedicated Acre 320Ac (W/2)		Teffi (	Corxidation C	oce "Ord	let'No.		······································		albat austra arama en experiencia en existante en pres	
NO ALLOW:	ABLE NT	JĽ ĐE AS	SIGNED TO STAIN	0 THIS CO 042D UN 5282.64	OMPLETION U	NTE ALL INTER APPROVED BY	HE DIVISION OPE	RATOR CER	CTIFIC ATION	

5343.46

660'



### WILLIAMS PRODUCTION COMPANY

#### **Operations Plan**

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

DATE:

6/12/2006

FIELD:

Blanco MV

**WELL NAME:** 

Indian I #8

**SURFACE:** 

BOTA BIA

**BH LOCATION:** 

SWNW Sec 35-28N-3W

Jicarilla #61

Rio Arriba, NM

**MINERALS:** 

**ELEVATION:** 

7,050' GR

LEASE #

Jicarilla #61

**MEASURED DEPTH: 6,404'** 

I. GEOLOGY:

Surface formation - San Jose

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

Name	MD	Name	MD	
Ojo Alamo	3,334	Cliff House	5,619	
Kirtland	3,419	Menefee	5,699	
Fruitland	3,419	Point Lookout	5,954	
Picture Cliffs	3,654	Mancos	6,214	
Lewis	3,899	TD	6,404	

- B. MUD LOGGING PROGRAM: Mudlogger on location at 3,200' 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	OH SIZE (IN)	DEPTH (	DEPTH (MD) (FT)		CASING SIZE (IN)		WEIGHT(LB)	GRADE
Surface	12 1/4	30	300		9 5/8		36	K-55
Intermediate	8 3/4	4,1	4,144		7		20	K-55
Liner	6 1/4	4,044	6,404		4 1/2		10.5	J-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., 2,300 ft., 2,000 ft., 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> + 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.
- 2. INTERMEDIATE: Lead 530 sx (1,105 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 = 1,175 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:  $50s\underline{x}$  (130ft³) 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:  $100\underline{s}\underline{x}$  (215 ft³) 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 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 303 ft³. 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 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.

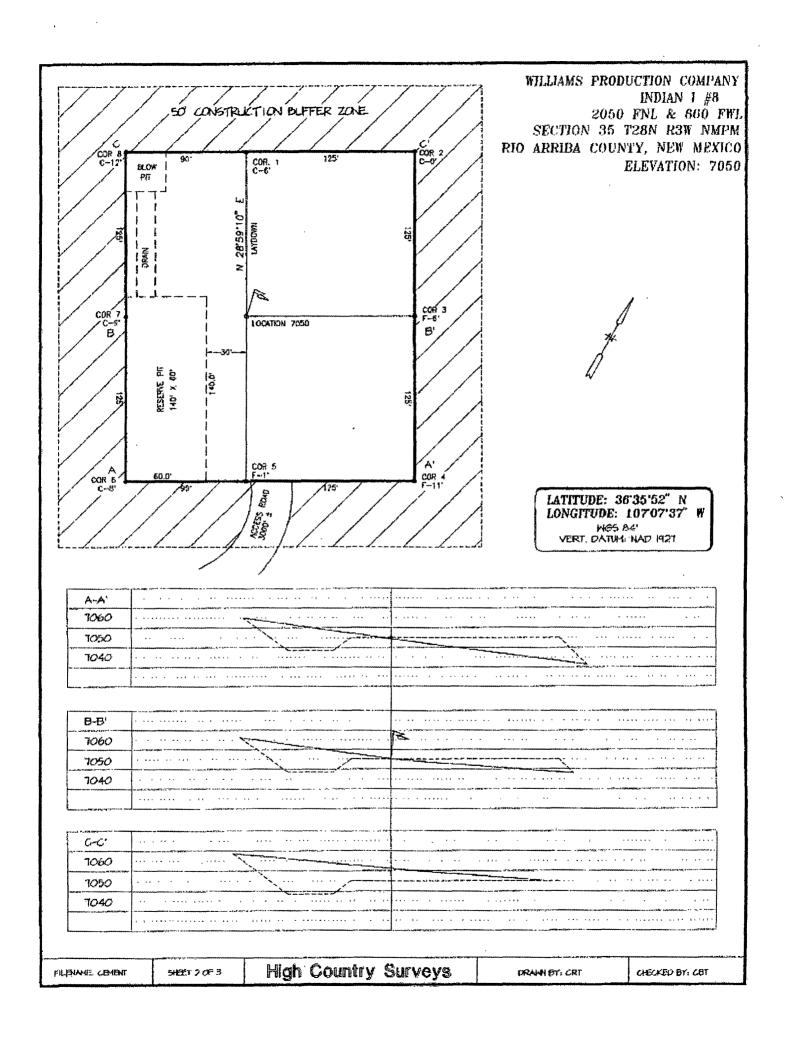
#### D. RUNNING TUBING

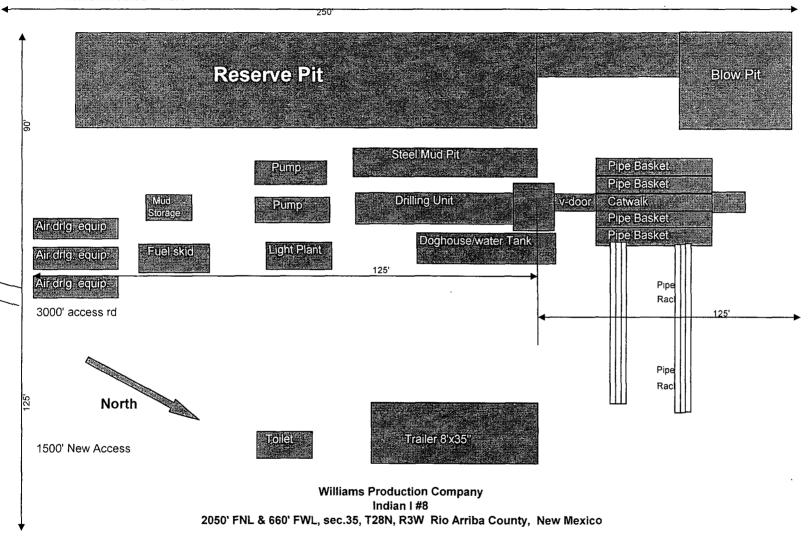
1. <u>Mesa Verde:</u> Run 2-3/8", 4.7#, J-55, EUE tubing with a SN (1.91" ID) on top of bottom joint. Land tubing approximately 25' above the bottom Point Lookout perforation.

Gary Sizemore

Sr. Drilling Engineer

Indian I #8 Ops Plan.doc





## Well Control Equipment Schematic for 2M Service

Attachment to Drilling Technical Program

# Exhibit #1 Typical BOP setup

