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

UNITED STATE	ES			Expires surraity a	1, 2004
DEPARTMENT OF THE	5 Lease Serial No				
BUREAU OF LAND MAN	Jicarilla Apache Contract #61				
APPLICATION FOR PERMIT TO I	6 If Indian, Allottee or Tr.				
APPLICATION FOR PERIVIT TO I	JRILL OR F	SEENTER SAAC MINT	a bw	Jicarilla Apache Natio	
L. T. CWI. M. PRUI				7 If Unit or CA Agreement	Name and No
la Type of Work DRILL REENT	ER	n	ECEIVE	,	,
lb Type of Well.	8 Lease Name and Well No				
2 Name of Operator				9. APLWell No. 2 Q	20/0/
Williams Production Company, LLC				30-007	00/06
3a Address	3b Phone N	lo (include area code)		10 Field and Pool, or Explor	atory
P.O Box 640 Aztec, NM 87410		) 634-4208		Blanco MV	
4 Location of Well (Report location clearly and in accordance with a	ny State requiren	nents *)		11. Sec, T., R, M., or Blk. a	ind Survey or Area
At surface 1710' FNL & 2125' FEL					
At proposed prod. zone same				G Section 35, T28N R3	10/
14 Distance in miles and direction from nearest town or post office*		4		12 County or Parish	13 State
16 miles from Lindrith,NM				Rio Arriba	
15 Distance from proposed*	16 No of	Acres in lease	17. Spacing	Unit dedicated to this well	NM.
location to nearest property or lease line, ft	10 110 017	reres in rease	17. Spacing		40°4 vol
(Also to nearest drig unit line, if any) 1865	320		320		NS.DIV.
18 Distance from proposed location*	19 Proposi	ed Depth		IA Bond No on file	
to nearest well, drilling, completed, applied for, on this lease, ft	·	•			ST. 3
5100'	6,37		B001	<del></del>	
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22 Approx	ximate date work will:	start*	23 Estimated duration	·
7,046' GR	Febru	uary 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 f		
, , , , , , , , , , , , , , , , , , , ,					
Well plat certified by a registered surveyor		4. Bond to cover the Item 20 above)		unless covered by an existing	g bond on file (see
2 A Drilling Plan 3 A Surface Use Plan (if the location is on National Forest System	n I ands tha	5 Operator certific			
SUPO shall be filed with the appropriate Forest Service Office				mation and/or plans as may	be required by the
		authorized offic	er.		
5 Signature	Name	(Printed/Typed)		Date	
Corrow of trap a	•	Larry Higgins		' //	-1-06
Title					
Drilling COM					
Approved by (Signature)	. Name	(Printed/Typed)		Date	
MI Conlee wik	~ }				<u> </u>
Title AT-11	· Office	e Time			
<u> </u>		Pro			
application approval does not warrant or certify that the applicant holds	s legal or equital	ble title to those rights in	the subject le	ease which would entitle the ap	plicant to conduct
perations thereon Conditions of approval, if any, are attached					
title 18 U S C Section 1001 and Title 43 U S C Section 1212, make tates any false, fictitious or fraudulent statements or representations as			d willfully to	make to any department or ago	ency of the United
		idili its jurisdiction			
(Instructions on reverse)					
/illiams Production Company, LLC, proposes to drill a vertical w ccordance with the attached drilling and surface use plans	rell to develop	the Blanco Mesa Ver	de formation	at the above described loca	ation in
he surface is located on Jicarilla Apache Nation lands.			A/4	</td <td></td>	
		HOLD C104	FOR_/V_		
nis location has been archaeologically surveyed by Velarde En	ergy.				
4062.3 foot pipeline tie would be required for this location and	it is also locat	ed on Jicarilla Anache	Nation Lan	ds	
A 4062 3 toot pipeline tie would be required for this location and	it is also locate	ed on Jicarilla Abache	Nation Land	1S	

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



NOTIFY AZTEC OCD 24 HRS. PRIOR TO CASING & CEMENT 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.

### State of New Mexico

Form C-102

1625 N. French Dr., Hobbs, NM 88240

District

Finergy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION Submit to Appropriate District Office

Revised June 10, 2003

1301 W. Grand Avenue, Artesia, PM 88210

State Lease - 4 Copies

District III

1220 South St. Francis Draftelved

District IV					Santa Ba N		1/11/07/01 P	dH	i, ce	: Lease - 5 Copies
1220 S. St. Francis	Dr., Santo I	Santa Fe, NM 87505 FARMINGTON NU					NDED REPORT			
		W	ELL LO	CATIO	N AND ACR	EAGE DEDIC	ATION PLA	T		
<sup>3</sup> API Number				Pool Code Poul Name						
30.0	<u>391.5</u>	<u> 1010C</u>	0	72319 BLANCO MESAVERDE						
¹Property Code ¹Property Name 'Well N					Vell Number					
1703	03/ INDIAN I 7							7		
OCRID No. Operator Name Elevation							* Elevation			
120782				W	<u> ILLIAMS</u>	PRODUCTIO	N COMPAN	IY	70	46
					<sup>10</sup> Surface	Location				
UL or lot me.	Section	Tomuship	Range	Let Ida		North/South line	Feet from the	Enst/West line		County
G	35	281	· 3W		1710	NORTH	2125	EAS	žT	RIO ARRIBA
	Bottom Hole Location If Different From Surface									
Ul. or led men.	Section	Township	Range	Lot Ide	Feet from the	North/Seath line	feet from the	Enst.	West line	County
					,		<del></del>			
Dedicated Acres	Joint on	rianu C	ensolidation C	Code <sup>18</sup> On	der Na.					
320 ac. F/	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 **OPERATOR CERTIFICATION** 5288.64 I hereby certify that the information contained herein is true and complete to the best of my knowledge and 2125 Title and E-and Address 18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plai was platted from field notes of actual surveys made by 00 me or under'my supervision, and that the same is true: and correct to the best of my belief. 52/4.05



### 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 #7

Rio Arriba, NM

SURFACE:

**BOIA** 

BH LOCATION:

SWNE Sec 35-28N-3W

**MINERALS:** 

Jicarılla #61

ELEVATION:

7,046' GR

LEASE#

Jicarilla #61

**MEASURED DEPTH:** 

6.370

I. GEOLOGY:

Surface formation - San Jose

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

Name	MD	Name	MD
Nacimiento	2,210	Cliff House	5,585
Ojo Alamo	3,300	Menefee	5,665
Kirtland	3,385	Point Lookout	5,920
Fruitland	3,385	Mancos	6,180
Picture Cliffs	3,620	TD	6,370
Lewis	3,865		
Huerfanito Bentonite	4,365		

- **B.** MUD LOGGING PROGRAM: Mud log from 300' above Ojo Alamo SS to TD. Mud logger to pick TD.
- **C.** <u>LOGGING PROGRAM:</u> 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.** <u>NATURAL GAUGES:</u> Gauge any noticeable increases in gas flow. Record all gauges in Tour book and on morning reports.

#### II. DRILLING:

- A. <u>MUD PROGRAM:</u> 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. <u>BOP TESTING:</u> 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	4,110	7	20	K-55
Liner	6 1/4	4,010 6,370	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., 2,500 ft., 2,300ft., 2,000ft., 1,500 ft., and 1,000 ft. (NTL-FRA 90-1).
- 3. <u>PRODUCTION CASING:</u> 4-1/2" 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. <u>INTERMEDIATE:</u> Lead <u>525 sx</u> (1095 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 <u>sx</u> (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 = 1,165 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 (303 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

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
Sr. Drilling Engineer

Indian I #7 Ops Plan.doc

## Well Control Equipment Schematic for 2M Service

Attachment to Drilling Technical Program

# Exhibit #1 Typical BOP setup

