In Lieu of Form 3160 (June 1990)

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

RECENTED 2008

FORM APPROVED

		MILLOT	
Bı	dget Bu	reau No. 10	04-0135
'awei	Expires	reau No. 10 March 31,	1993

Do not	SUNDRY NOTICE AND REPORTS ON WELLS use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION" TO DRILL" for permit for such proposals  Bureaming	nis Manay on Field O	Lease Designation and Serial No NMSF-078765  If Indian, Allottee or Tribe Name
	SUBMIT IN TRIPLICATE	7.	If Unit or CA, Agreement Designation Rosa Unit
1.	Type of Well Oil Well X Gas Well Other	8.	Well Name and No. Rosa Unit #88C
2.	Name of Operator WILLIAMS PRODUCTION COMPANY	9.	API Well No. 30-045-34458
3.	Address and Telephone No. PO Box 640 Aztec, NM 87410-0640	10.	Field and Pool, or Exploratory Area BLANCO MV/BASIN DK
4.	Location of Well (Footage, Sec., T., R., M., or Survey Description)  1060' FNL & 2230' FEL Sec 8, T31N, R6W NMPM	11	County or Parish, State San Juan, New Mexico

CHECK APPROPRI	ATE BOX(s) TO INDICATE NATURE OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OI	FACTION
Notice of Intent	Abandonment	Change of Plans
X Subsequent Report	Recompletion Plugging Back Casing Repair	New Construction Non-Routine Fracturing Water Shut-Off
Final Abandonment	Altering Casing	Conversion to Injection
•	X Other <u>Multiple zone completion</u>	Dispose Water (Note. Report results of multiple completion on Well Completion or Recompletion Report and Log form)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work )\*

Williams Production Company, LLC. hereby requests authority to drill this as a Mesa Verde/Dakota dual as per attached plat, directional plan and operations plan.

> RCVD MAY 22 '08 OIL CONS. DIV. DIST. 3

14.	I hereby certify that the foregoing is true and correct				
	Signed Larry Higgins	Title Drilling C O M	Date <u>5-16-08</u>	<del></del>	
	(This space for Federal or State office use)			1	
	Approved by Original Signed: Stephen Mason	Title	····	DateMAY 2 @ 20	03
	Conditions of approval, if any				

Title 18 U S C Section 1001, makes 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



District I 1625 N French Dr., Hobbs, NM 88240

'API Number

State of New Mexico
Energy, Minerals & Natural Resources Department

<sup>2</sup>Pool Code

District II 1301 W Grand Avenue, Artesia, NM 88210

District IV 1220 S St Francis Dr., Santa Fe, NM 87505 OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-102
Revised October 12, 2005
Instructions on back
Submit to Appropriate District Office

Submit to Appropriate District Office State Lease – 4 Copies Fee Lease –.3 Copies

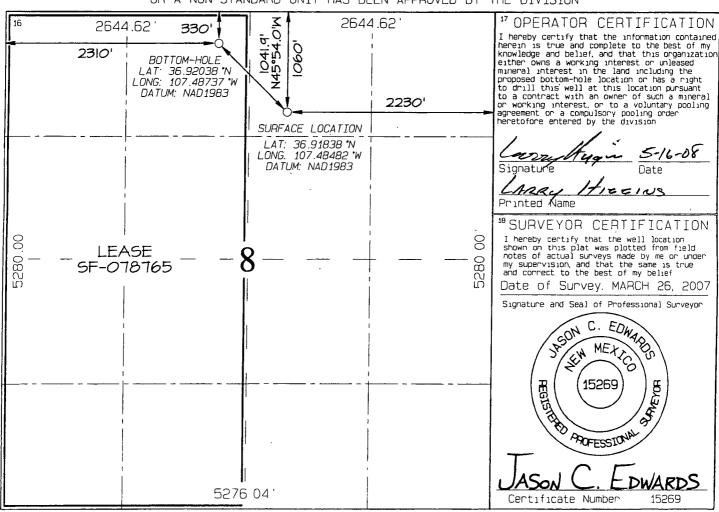
Pool Name

AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

30.0	MS	3445	72	319 / 7	71599	BLANCO M	MESAVERDE /	/ BASI	N DAK	ATC	
'Property 1703			°Property Name °Well Number ROSA UNIT 88C								
1/03	)3		ROSA UNIT								ļ
'OGRID	No				*Operato	or Name			• E	Elevat ion	
12078	32			WILL:	IAMS PRODU	JCTION COMPAN	1Y			6218 '	İ
					<sup>10</sup> Surface	Location		· · · · · · · · · · · · · · · · · · ·			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/We	st line	County	y
В	8	31N	БW		1060	NORTH	2230	EA:	ST	SAN J	NAU
				Hole L	ocation	If Different	From Surf	ace			
UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/Wes	st line	County	,
C	8	31N	6W		330	NORTH	2310	WE:	ST	SAN J	UAN
<sup>12</sup> Dedicated Acres	320	.0 Acres	. – (W,	/2)	13 Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No	<b></b>		<del></del>	

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





# WILLIAMS PRODUCTION COMPANY Drilling Plan

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

**DATE:** 

5/13/2008

FIELD:

Blanco MV/DK

WELL NAME:

Rosa Unit #88-C

**SURFACE:** 

NM G&F

S. LOCATION:

NE/4 NW/4 Sec 8-31N-6W

**MINERALS:** 

BLM

ELEVATION:

6,218 ft. GL

San Juan, NM

LEASE #

NMSF-078765

MEASURED DEPTH:

8,058 ft. (MD)

API#:

30-045-34458

I. GEOLOGY:

Surface formation - San Jose

A. FORMATION TOPS: (KB)

	<b>TVD</b>	MD		TVD	<u>MD</u>
Ojo Alamo	2,142'	2,308'	Menefee	5,237'	5,458'
Kırtland	2,262'	2,442'	Point Lookout	5,462'	5,683
Fruitland Fmtn	2,692'	2,903'	Mancos sh	5,762'	5,983'
Pictured Cliffs	3,002'	3,221'	Gallup	6,797'	7,018
Lewis Sh	3,322'	3,543'	Greenhorn	7,517	7,738'
Int. Casing	3,477'	3,698'	Graneros	7,577	7,798'
Cliff House Trans	4,867'	5,088'	Dakota	7,707	7,928'
Cliff House	5,192'	5,413'	5-1/2" Casing	7,927'	8,058'
			Total Denth	7.927	8.058

- B. LOGGING PROGRAM: Mud Logger on at 100 ft above Gallup Ss to TD M. Logger will pick TD.
- C. NATURAL GAUGES: Gauge any noticeable increases in gas flow. Record all gauges in Tour book and on morning reports.

#### II. <u>DRILLING</u>

- A. <u>MUD PROGRAM:</u> Use a LSND mud (+/-40 Vis.) to drill 9-7/8 in. Intermediate Hole. Increase vis to +/-60 to run Casing. Treat for lost circulation as necessary. Obtain 100% returns prior to cementing. Notify Engineering of any mud losses. Use air w/Air Hammer w/ 6-3/4 in. bit to drill-out 7-5/8 in. csg. to TD +/- 7,927 ft.
- 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 surface and Intermediate casing will be pressure tested to 1500 psi for 30 minutes after the BOPE test before drilling out cement. The drum brakes will be inspected and tested each tour. All tests, inspections and SPR's will be recorded in the tour book as to time and results.

#### III. MATERIALS

#### A. <u>CASING PROGRAM:</u>

CASING TYPE	HOLE SIZE	DEPTH (MD)	CASING SIZE	<u>WT. &amp; GRADE</u>
Surface	14-3/4"	+310'	10-3/4"	32.75# K-55
Intermediate	9-7/8"	3,696'	7-5/8"	26.4# K-55
Prod. Casing	6-3/4"	+/-8,058'-Surf.	5-1/2"	17# N-80

#### B. FLOAT EQUIPMENT:

- 1. <u>SURFACE CASING:</u> 10-3/4" notched regular pattern guide shoe. Run (1) standard centralizer on each of the bottom (3) joints of Surface Casing.
- 2. <u>INTERMEDIATE CASING:</u> INTERMEDIATE CASING: 7-5/8" cement nose guide shoe with a self-fill float Collar. Place Float Collar one joint above the shoe. Install (1) Turbulent centralizer on each of the bottom (3) joints. 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). (Call this in to BLM for approval. If denied, follow what is in the Operations Plan in the Permit package.)
- 3. <u>PRODUCTION CASING:</u> 5-1/2" whirler type cement nose guide shoe with a float collar on top of bottom joint. Place marker joint above 5,600'. Place one turbolizer every third joint thru Dakota and Mesa Verde intervals.). (Call this in to BLM for approval. If denied, follow what is in the Operations Plan in the Permit package.)

#### C. CEMENTING: Note: Volumes may be adjusted onsite due to actual conditions)

- 1. <u>SURFACE</u>: Slurry: <u>255sx</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>640sx</u> (1,350 cu.ft.) of Premium Light with 8% gel, 1% CaCl<sub>2</sub>, 4% Phenoseal and 1/4# cello-flake/sk (Yield = 2.11 cu.ft./sk, Weight = 12.1 #/gal.). Tail <u>100 sx</u> (139cu.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 = 1,437 cu.ft. Bump Plug to 1,500 psi. Notify engineering if cement is not circulated to surface.
- 3. <u>PRODUCTION CASING</u>: 10 bbl Gelled Water space. Lead: 75sx (195ft³) of Premium Light HS + 1% FL-52 + .2% CD-32, 3 #/sk CSE. (Yield = 2.61 cu.ft./sk, Weight = 11.6 #/gal.). Tail: 110 sx (234 ft³) of Premium Light HS + 1% FL-52 + .2% CD-32, 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 429ft³. WOC 12 hours.

Gary Sizemore

Sr. Drilling Engineer



## **Drilling Services**

### **PROPOSAL**



WILLIAMS PRODUCTION COMPANY ROSA UNIT #88-C SAN JUAN COUNTY, NEW MEXICO WELL FILE: **PLAN 2** 

Submitted:

May 15, 2008

#### Weatherford International Ltd.

P.O. Box 61028 Midland, Texas 79711 USA +1.432.561.8892 Main +1.432.561.8895 Fax www.weatherford.com



550

1100

1650

2200

3300

**ROSA UNIT 88C** SAN JUAN COUNTY, NM

KB ELEV: 6232' GR ELEV.6218'

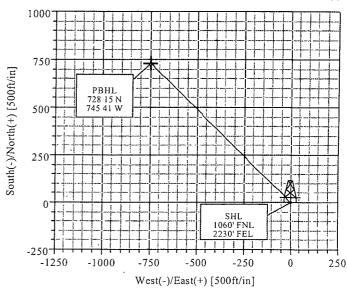
					SECTION D	ETAILS				
Sec	MĐ	lnc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	314.33	0.00	0.00	0.00	0.00	0.00	0.00	
2	400.00	0.00	314.33	400.00	0.00	0.00	0.00	0.00	0.00	
3	1400.00	30.00	314.33	1354.93	178.80	-183 04	3.00	314.33	255 87	
4	2211,92	30.00	314.33	2058 07	462.47	-473.43	0 00	0.00	661.83	
5	3697.82	0.00	314.33	3477.00	728.15	-745.41	2.02	180.00	1042.03	Csg Pt P2
6	8057.82	0.00	314.33	7837.00	728 15	-745.41	0.00	314.33	1042.03	P2

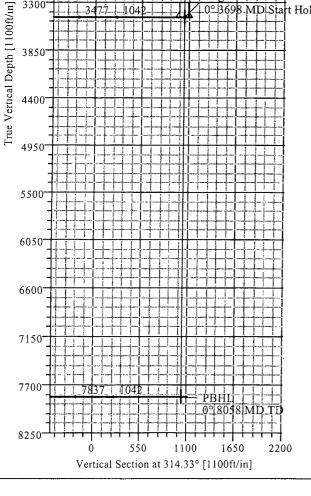
			WELI	DETAILS				
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot	
Rosa Unit 88C	0 00	0.00	2153808.21	2824974.89	36°55'06.168N	107°29'05.352W	N/A	

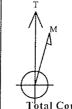
	TARGET DETAILS								
N	lame	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape		
C P		3477.00 7837.00			36°55'13.368N 36°55'13.368N	107°29'14.532W 107°29'14.532W	Point Circle (Radius: 50)		

P				
100 MD Start Build 3.00	İ	FORM	ATION TO	P DETAILS
	No.	TVDPath	MDPath	Formation
<del>┼╏┪╇┪╬╏╫╫╎┽╏</del>	1	2142.00	2307.91	Ojo Alamo
<u></u>	2	2262.00	2442.25	Kirtland
<del>·</del> ┾╌╏╌┼╌┼╌┼╾┾╌╏╌┼═╅╍┼╼┿╾╏╼┼╼╸	3	2692.00	2902.44	Fruitland
<del>┼</del> ╏╾┝ <del>┪</del> ┪┯┼┑╏╌┟╌┼╍┼╍┼╌╏╍╅╌╂	4	3002.00	3220.57	Pictured Cliffs
TIOTE	5	3322.00	3542.74	Lewis
HOLD	6	4867.00	5087.82	Cliff House Trans
-30°\1400 MD Start Hold +	1 7	5192.00	5412.82	Cliff House
<del>╃╸</del> ╏╼ <del>┊╸┪╸┪╸┡╸╋╸┪╺┢╸</del> ╏╼╁╼╋╾┼╌┊	8	5237.00	5457.82	Menefee
<del>╃</del> ╸╏╌ <del>┊╸┩╸┩╸</del> ╿╌╉ <del>╸┩╸┩╸</del> ┩╸┩╾╃╾┦╸	9	5462.00	5682.82	Point Lookout
<del>\                                    </del>	10	5762.00	5982.82	Mancos
<u> </u>	11	6797.00	7017.82	Gallup Ss.
11-1-7-6-7-6-7-1-1-1-1-1-1-1-1-1-1-1-1-1	12	7517.00	7737.82	Greenhorn Ls.
DROP	13	7577.00	7797.82	Granersos Sh.
30° 2212 MD Start Drop -2.02	14	7707.00	7927.82	Dakota Ss.

Vertical Section Azimuth: 314.33°







Azimuths to True North Magnetic North, 10 26°

Magnetic Field Strength 51330nT Dip Angle 63 77° Date 8/2/2007 Model igrf2005

Total Correction to True North 10.26°

Plan: Plan #2 (Rosa Unit 88C/1)

Created By: Lindsey Maddux Date: 5/15/2008