In Lieu of Form 3160 (June 1990)

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

FORM APPRO	OVED 1004-0
	FORM APPRO

04-0135 , 1993

SUNDRY NOTICE AND REPORTS ON WELLS

Do not 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

Lease Designation and Serial No. NMSF-078765

carmington Field Office 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 634-4208	10.	Field and Pool, or Exploratory Area BLANCO MV/BASIN MC/BASIN DK
4	Location of Well (Footage, Sec., T., R., M., or Survey Description)  Sur. 1060' FNL & 2230' FEL /  BHL. 260' FNL & 2307' FWL  Sec. 8, T31N, R6W NMPM	11	County or Parish, State San Juan, New Mexico

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

<sup>13.</sup> 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 E&P has run Protechnic's Completion profiler tool for allocation purposes on the Rosa Unit #88C. Based on the results obtained, Williams proposes the following allocation:

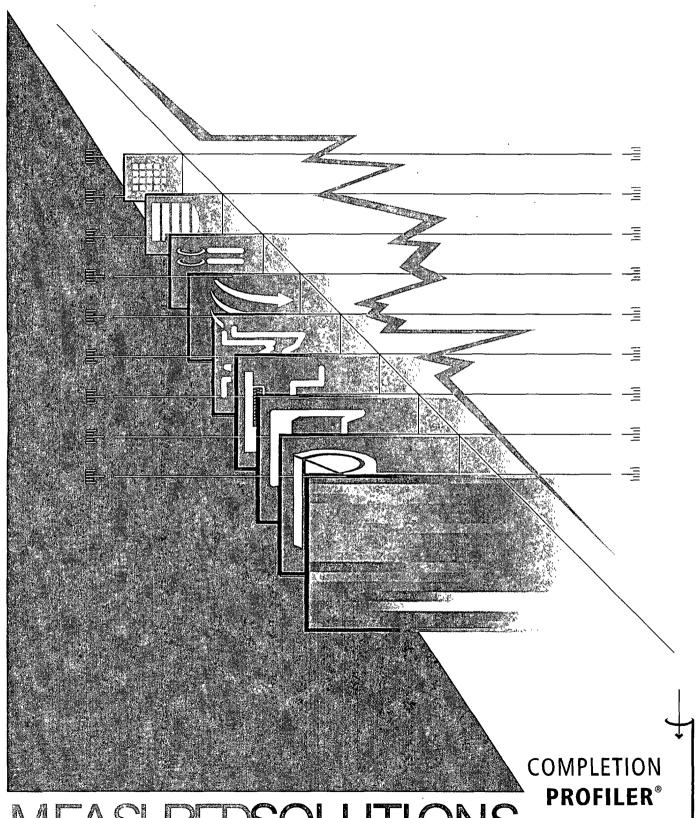
Mesaverde 58% 118 Mcf/d Mancos 17% 34 Mcf/d 25% Dakota 52 Mcf/d Total 100% 204 Mcf/d



			5515056181T13
14.	I hereby certify that the foregoing is true and correct  Signed HEATHER RILEY	Title <u>REGULATORY SPEC SR</u>	Date <u>6/22/11</u>
	(This space for Federal or State office use)  Approved by Joe Hewrit  Conditions of approval, if any:	Title <b>Geo</b>	Date 6-24-1

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.

### Williams Production Company Rosa Unit 88C



MEASUREDSOLUTIONS





Company Williams Production Company

Well Name Rosa Unit 88C

Field | Blanco Mesaverde/Basin Dakota

Location | San Juan County, New Mexico

Customer Name | Michael Andrews

Date of Survey June 6, 2011

Date of Analysis | June 14, 2011

Logging Engineer | Glenn Hammond

Analyst | Derrick George

All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful misconduct on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.





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#### Survey Objectives

- Identify the source of water production.
- Identify gas producing intervals.
- Quantitative production profile.

#### Logging Procedures

Date	Time	Comment
06/08	06:45	Arrive on location
06/08	N/A	Gauge run start
06/08	N/A	Gauge run stop
06/08	07:47	Program Completion Profile String
06/08	07:57	Start GIH pass
06/08	08:15	Stop GIH pass
06/08	08:21	Start logging passes
06/08	11:48	Stop logging passes
06/08	11:57	Start out of well pass
06/08	12:16	Stop out of well pass
06/08	12:28	Start download
06/08	12:51	Stop download
06/08	13:15	Rig down

Interval Logged: [From 5,183 to 8,043 ft.]

60 ft/min 90 ft/min 120 ft/min





#### Well Information

Casing: 5.5"

5.5" 17.0 lb/ft

surface to 8,082 ft PBTD: 8,080 ft

Tubing:

2.375" 4.7 lb/ft

surface to 5.122 ft

Perforations:

5,646; 5,650; 5,661; 5,666; 5,669; 5,672; 5,675; 5,702; 5,706; 5,708; 5,712; 5,714; 5,718; 5,720; 5,724; 5,726; 5,730; 5,733; 5,735; 5,740; 5,744; 5,748; 5,752; 5,756; 5,760; 5,764; 5,768; 5,772; 5,776; 5,780; 5,784; 5,788; 5,790; 5,794; 5,798; 5,802; 5,806; 5,810; 5,813; 5,817; 5,820; 5,825; 5,830; 5,834; 5,839; 5,844; 5,846; 5,850; 5,856; 5,860;

5,865; 5,870 ft (Stage 5 - Upper Point Lookout)

5,896; 5,898; 5,902; 5,907; 5,911; 5,915; 5,918; 5,922; 5,924; 5,926; 5,928; 5,930; 5,932; 5,936; 5,940; 5,944; 5,948; 5,952; 5,956; 5,960; 5,964; 5,968; 5,972; 5,976; 5,980; 5,985; 5,990; 5,994; 6,000; 6,006; 6,010; 6,018; 6,024; 6,028; 6,030; 6,036; 6,038; 6,044; 6,046; 6,052; 6,054; 6,058; 6,064; 6,066; 6,076; 6,078; 6,088; 6,090; 6,100; 6,108;

6,114; 6,116; 6,118; 6,120 ft (Stage 4 - Lower Point Lookout)

6,925; 6,935; 6,945; 6,955; 6,965; 6,975; 6,985; 6,995; 7,005; 7,015; 7,025; 7,035; 7,045; 7,055; 7,085; 7,096 ft (Stage 3 - Mancos 2nd)

 $7,165;\ 7,175;\ 7,185;\ 7,195;\ 7,205;\ 7,215;\ 7,225;\ 7,235;\ 7,245;\ 7,255;$ 

7,265; 7,275; 7,285; 7,295 ft (Stage 2 - Mancos 1st)

 $7,940;\ 7,944;\ 7,950;\ 7,958;\ 7,962;\ 7,968;\ 7,974;\ 7,981;\ 7,992;\ 8,000;\\ 8,006;\ 8,012;\ 8,019;\ 8,026;\ 8,033;\ 8,040;\ 8,046;\ 8,059;\ 8,064;\ 8,069\ ft$ 

(Stage 1 - Dakota)

Flowing tubing pressure at the time of logging: 54 psi

Daily average surface production reported at the time of logging:

gas: 195-215 Mscf/d

water: N/A bpd

#### **Tool String**

The 1 11/16" Completion Profiler string comprised the following sensors:

Battery housing; RS-232/CCL; Memory/CPU; Gamma Ray; Pressure/Temperature Combo; Centralizer; Induction Collar Locator; Fluid Density; Centralizer; Spinner Flowmeter.





### Well Log History

Log Date	Type of Survey
11/07/09	Completion Profiler
07/15/10	Completion Profiler





#### Results

The following table summarizes the production from each frac stage.

				GAS / WATER P	RODUCTION PR	OFILE		
				Flow Rate	s Reported at STP			
Zone	Inte	rvals	Q-Gas	Qp-Gas	Percent of	Q-Water	Qp-Water	Percent of
	feet		MCFD	MCFD	Total	BFPD	BFPD	Total
Surface	to	5646	203 Mcf/d		100 %	4 bpd		100 %
·		Stage 5	- Upper Point Look	cout	44 %		_	44 %
5646	to	5870	203 Mcf/d	89 Mcf/d		4 bpd	2 bpd	
		Stage 4	- Lower Point Lool	cout	14 %			14 %
5896	to	6120	114 Mcf/d	29 Mcf/d		2 bpd	1 bpd	
		Sta	ge 3 - Macos 2nd	,	9 %			9 %
6925	to	7096	86 Mcf/d	18 Mcf/d		2 bpd	0 bpd	
Stage 2 - Macos 1st				8 %			7 %	
7165	to	7295	68 Mcf/d	16 Mcf/d		1 bpd	0 bpd	
	Stage 1 - Dakota				16 %			16 %
7940	to	8040	52 Mcf/d	33 Mcf/d		1 bpd	1 bpd	
Flow C	ontr	ibution f	rom Below Log De	pth	9 %	·		10 %
8043	to	Below	19 Mcf/d	·	9 %	0 bpd		10 %