

UNITED STATES  
DEPARTMENT OF INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

JUL 21 2011

FORM APPROVED  
Budget Bureau No 1004-0135  
Expires March 31, 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 of use. APPLICATION TO DRILL" for permit for such proposals

5 Lease Designation and Serial No  
NMSF-078765  
6 If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE

1 Type of Well  
Oil Well Gas Well X Other

7. If Unit or CA, Agreement Designation  
Rosa Unit

2 Name of Operator  
WILLIAMS PRODUCTION COMPANY

8. Well Name and No  
Rosa Unit COM #60B

3 Address and Telephone No.  
PO Box 640 Aztec, NM 87410-0640

9 API Well No.  
30-045-34251

4 Location of Well (Footage, Sec., T., R., M, or Survey Description)  
275' FSL & 1450' FWL Sec 4, T31N, R6W NMPM

10. Field and Pool, or Exploratory Area  
BLANCO MV/BASIN MANCOS/BASIN  
DK

11 County or Parish, State  
San Juan, New Mexico

CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

TYPE OF ACTION

Notice of Intent  
X Subsequent Report  
Final Abandonment

Abandonment  
Recompletion  
Plugging Back  
Casing Repair  
Altering Casing  
X Other Reallocation

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 )

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 E&P has run Protechnic's Completion profiler tool for allocation purposes on the Rosa Unit #060B. Based on the results obtained, Williams proposes the following allocation:

Mesaverde	75%	758	Mcf/d
Mancos	12%	124	Mcf/d
Dakota	13%	132	Mcf/d
<b>Total</b>	<b>100%</b>	<b>1014</b>	<b>Mcf/d</b>



14. I hereby certify that the foregoing is true and correct

Signed Larry Higgins  
Larry Higgins

Title Permit Supervisor Date 7/21/11

(This space for Federal or State office use)

Approved by Joe Hewitt

Title Geo

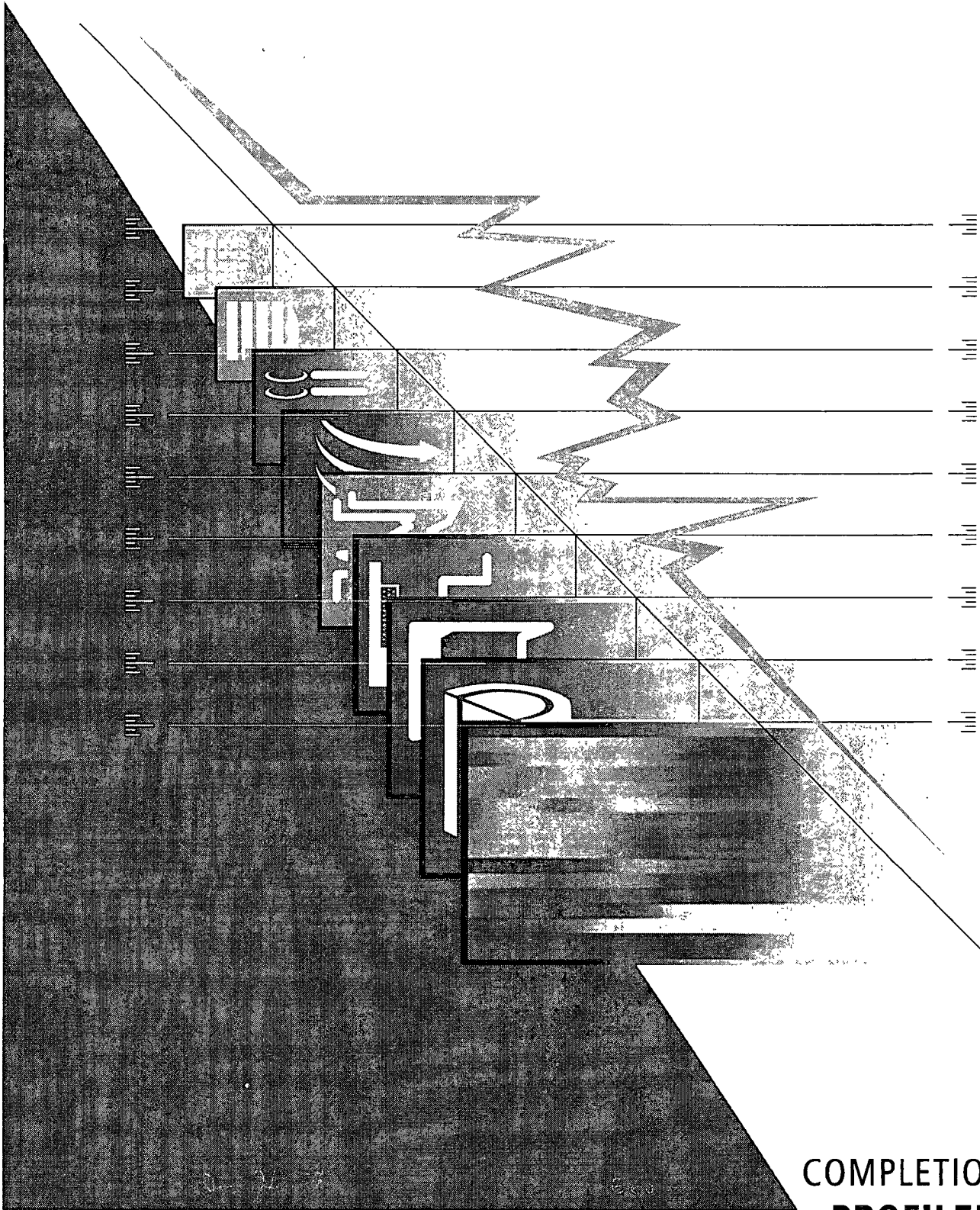
Date 7-22-11

Conditions of approval, if any

NWCCD

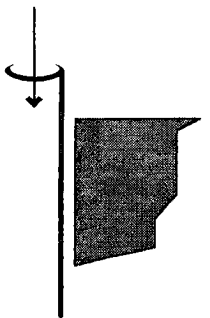
A

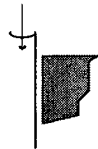
*Williams Production Company  
Rosa Unit #60B*



MEASURED SOLUTIONS

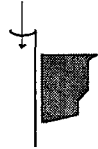
COMPLETION  
PROFILER®





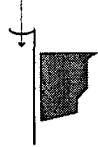
<i>Company</i>	<i>Williams Production Company</i>
<i>Well Name</i>	<i>Rosa Unit #60B</i>
<i>Field</i>	<i>Blanco Mesaverde/Basin Dakota</i>
<i>Location</i>	<i>San Juan County, New Mexico</i>
<i>Customer Name</i>	<i>Michael Andrews</i>
<i>Date of Survey</i>	<i>June 04, 2011</i>
<i>Date of Analysis</i>	<i>June 09, 2011</i>
<i>Logging Engineer</i>	<i>Loren Healy</i>
<i>Analyst</i>	<i>Mark Warren</i>

*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.*



## Table of Contents

<i>Survey Objectives</i>	4
<i>Logging Procedures</i>	4
<i>Well Information</i>	5
<i>Tool String</i>	6
<i>Well Log History</i>	6
<i>Results</i>	7
<i>Brief Description of Process</i>	14
<i>Model Results With Recorded Data</i>	15
<i>Production Rates At Surface Conditions</i>	16
<i>Flow Model at Downhole Conditions With Comparison of Theoretical Response to Recorded Data</i>	18
<i>Overlay of all Log Data</i>	19
<i>Apparent Fluid Velocity Derived from Spinner</i>	20
<i>Spinner Calibration Plots Relationship between R.P.S. and Fluid Velocity (fpm)</i>	21
<i>Well Information</i>	22
<i>Parameters used for Analysis</i>	22



## Survey Objectives

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

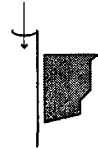
## Logging Procedures

Date	Time	Comment
6-4	6:00	Arrive on location
6-4	5:00	Gauge run start
6-4	6:00	Gauge run stop
6-4	6:38	Program Completion Profile String
6-4	6:48	Start GIH pass
6-4	7:10	Stop GIH pass
6-4	7:15	Start logging passes
6-4	10:07	Stop logging passes
6-4	10:12	Start out of well pass
6-4	10:30	Stop out of well pass
6-4	10:34	Start download
6-4	10:55	Stop download
6-4	11:00	Rig down

Interval Logged: [From 5,016 to 8,085 ft.]  
60 ft/min  
90 ft/min



## Completion Profile Analysis



### Well Information

Casing: 5.5" 17.0 lb/ft surface to 8,224 ft

Tubing: 2.375" 4.7 lb/ft surface to 4,811 ft

Perforations: 5,105; 5,107; 5,109; 5,172; 5,176; 5,186; 5,189; 5,192; 5,195; 5,217;  
5,219; 5,235; 5,237; 5,240; 5,251; 5,254; 5,295; 5,297; 5,320; 5,322;  
5,363; 5,367; 5,392; 5,394; 5,398; 5,402; 5,406; 5,409; 5,412; 5,416;  
5,422; 5,426; 5,432; 5,439; 5,445; 5,450; 5,453; 5,462; 5,466; 5,470;  
5,474; 5,483; 5,487; 5,490; 5,493; 5,511; 5,516; 5,518; 5,520; 5,523;  
5,527; 5,531; 5,534; 5,537; 5,541; 5,545; 5,594; 5,596; 5,614; 5,616;  
5,620; 5,622; 5,624; 5,628 ft (Cliff House/Menefee)(Stage 9)

5,681; 5,684; 5,689; 5,690; 5,693; 5,696; 5,699; 5,702; 5,711; 5,715;  
5,718; 5,721; 5,724; 5,730; 5,733; 5,736; 5,742; 5,751; 5,753; 5,758;  
5,762; 5,765; 5,768; 5,771; 5,775; 5,780; 5,784; 5,788; 5,799; 5,806;  
5,817; 5,823; 5,829; 5,833; 5,836; 5,844; 5,854; 5,862; 5,864; 5,880;  
5,882; 5,885; 5,888; 5,890; 5,898; 5,906; 5,908; 5,914; 5,916; 5,918;  
5,924; 5,928; 5,934; 5,938 ft (Point Lookout)(Stage 8)

6,545; 6,560; 6,575; 6,590; 6,605; 6,620; 6,635; 6,650; 6,665; 6,680;  
6,695; 6,710; 6,725; 6,740 ft (Mancos)(Stage 7)

6,805; 6,815; 6,825; 6,835; 6,845; 6,855; 6,865; 6,875; 6,885; 6,895 ft  
(Mancos)(Stage 6)

6,930; 6,940; 6,964; 6,988; 7,008; 7,014; 7,058; 7,064; 7,070; 7,074 ft  
(Mancos)(Stage 5)

7,150; 7,160; 7,170; 7,190; 7,200; 7,210; 7,250; 7,260; 7,270 ft  
(Mancos)(Stage 4)

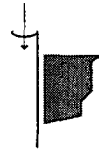
7,415; 7,425; 7,435; 7,445; 7,455; 7,465; 7,485; 7,495; 7,505; 7,515;  
7,525; 7,535 ft (Mancos)(Stage 3)

7,670 - 7,671; 7,673 - 7,674; 7,676 - 7,677; 7,679 - 7,680 ; 7,682 - 7,683;  
7,685 - 7,686; 7,687 - 7,688 ft (Mancos)(Stage 2)

7,920; 7,924; 7,928; 7,932; 7,940; 7,950; 7,960; 7,970; 7,975; 7,980;  
7,986; 7,992; 7,997; 8,002; 8,012; 8,022; 8,032; 8,037; 8,042; 8,047;  
8,052 ft (Dakota)(Stage 1)



## Completion Profile Analysis



Flowing tubing pressure at the time of logging: 100 psi

Daily average surface production reported at the time of logging:

gas: 1,050 Mscf/d

water: 4 bpd

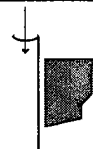
### Tool String

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
08/04/08	SpectraScan
08/19/08	SpectraScan
08/27/08	SpectraScan
09/11/08	SpectraScan
09/23/08	SpectraScan
10/04/08	SpectraScan
06/22/09	SpectraScan
10/21/09	Completion Profiler
07/01/10	Completion Profiler
06/04/11	Completion Profiler



## Results

The following table summarizes the production from each producing frac stage.

GAS / WATER PRODUCTION PROFILE						
Flow Rates Reported at STP						
Zone Intervals	Q-Gas	Qp-Gas	Percent of	Q-Water	Qp-Water	Percent of
feet	MCFD	MCFD	Total	BFPD	BFPD	Total
Surface to 5105	1015 Mcf/d		100 %	3 bpd		100 %
Cliff House/Menefee - Stage 9			41 %			36 %
5105 to 5628	1015 Mcf/d	415 Mcf/d		3 bpd	1 bpd	
Point Lookout - Stage 8			34 %			28 %
5681 to 5938	599 Mcf/d	343 Mcf/d		2 bpd	1 bpd	
Mancos - Stage 7			5 %			7 %
6545 to 6740	256 Mcf/d	55 Mcf/d		1 bpd	0 bpd	
Mancos - Stage 6			0 %			4 %
6805 to 6895	201 Mcf/d	5 Mcf/d		1 bpd	0 bpd	
Mancos - Stage 5			6 %			5 %
6930 to 7074	196 Mcf/d	62 Mcf/d		1 bpd	0 bpd	
Mancos - Stage 4			0 %			2 %
7150 to 7270	134 Mcf/d	1 Mcf/d		1 bpd	0 bpd	
Mancos - Stage 3			0 %			4 %
7415 to 7535	134 Mcf/d	1 Mcf/d		1 bpd	0 bpd	
Mancos - Stage 2			0 %			2 %
7670 to 7688	133 Mcf/d	0 Mcf/d		0 bpd	0 bpd	
Dakota - Stage 1			13 %			12 %
7920 to 8052	132 Mcf/d	132 Mcf/d		0 bpd	0 bpd	