

**NEW MEXICO OIL CONSERVATION COMMISSION**  
**MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL**

Operator <b>Williams Production Company</b>					Lease or Unit Name <b>ROSA UNIT</b>				
Test Type <b>X Initial      Annual      Special</b>			Test Date <b>6/20/99</b>		Well Number <b>#12A</b>				
Completion Date <b>5/29/99</b>		Total Depth		Plug Back TD		Elevation <b>11150</b>		Unit Sec Twp Rng <b>J 12 31N 6W</b>	
Casing Size		Weight	d	Set At	Perforations: From To <b>AUG 20 1999</b>		County <b>RIO ARRIBA</b>		
Tubing Size		Weight	d	Set At	Perforations: From To <b>011 COM. DIV.</b>		Pool <b>BLANCO</b>		
Type Well - Single-Bradenhead-GG or GO Multiple					Packer Set At <b>DISP. 3</b>		Formation <b>PICTURED CLIFFS</b>		
Producing Thru <b>Tubing</b>		Reservoir Temp. oF		Mean Annual Temp. oF		Barometer Pressure - Pa		Connection	
L	H	Gq <b>0.6</b>	%CO2	%N2	%H2S		Prover <b>3/4"</b>	Meter Run	Taps

  

FLOW DATA				TUBING DATA		CASING DATA			
NO	Prover Line Size	X Orifice Size	Pressure p.s.i.q	Temperature oF	Pressure p.s.i.q	Temperature oF	Pressure p.s.i.q	Temperature oF	Duration of Flow
SI	<b>2" X 3/4"</b>				<b>1420</b>		<b>1416</b>		<b>0</b>
1					<b>408</b>	<b>81</b>	<b>912</b>		<b>0.5 hr</b>
2					<b>232</b>	<b>83</b>	<b>653</b>		<b>1.0 hr</b>
3					<b>162</b>	<b>84</b>	<b>561</b>		<b>1.5 hrs</b>
4					<b>130</b>	<b>85</b>	<b>501</b>		<b>2.0 hrs</b>
5					<b>87</b>	<b>86</b>	<b>429</b>		<b>3.0 hrs</b>

  

RATE OF FLOW CALCULATION										
NO	Coefficient (24 Hours)				hwPm	Pressure Pm	Flow Temp. Factor Fl	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	<b>9.604</b>					<b>99</b>	<b>0.9759</b>	<b>1.29</b>	<b>1.006</b>	<b>1204</b>
2										
3										
4										

  

NO	Pr	Temp. oR	Tr	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl. Deq.
1					A.P.I Gravity of Liquid Hydrocabrons _____	
2					Specific Gravity Separator _____	
3					Specific Gravity Flowing Fluid xxxxxxxxxx	XXXXXX
4					Critical Pressure _____ p.s.i.a.	____ p.s.i.a.
5					Critical Temperature _____ R	____ R

  

Pc	1428	Pc <sup>2</sup>	2039184	
NO	PtI	Pw	Pw <sup>2</sup>	Pc <sup>2</sup> -Pw <sup>2</sup>
1		<b>441</b>	<b>194481</b>	<b>1844703</b>
2				
3				
4				

  

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \underline{1.1054267}$		(2) $\frac{P_c^{2\Delta n}}{P_c^2 - P_w^2} = \underline{1.0889}$	
AOF = Q $\frac{P_c^{2\Delta n}}{P_c^2 - P_w^2} = \underline{1311}$			

  

Absolute Open Flow	<b>1311</b>	Mcf/d @ 15.025	Angle of Slope	Slope, n	<b>0.85</b>
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Remarks:			
Approved By Commission:	Conducted By: <b>Chik Charley</b>	Calculated By: <b>Tracy Ross</b>	Checked By: <b>Sterg Katirgis</b>