

30-039-27699

**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>9/22/2004</b>		Well Number <b>#209A</b>				
Completion Date <b>8/11/2004</b>		Total Depth <b>3182'</b>		Plug Back TD <b>3178'</b>		Elevation <b>6312'</b>		Unit    Sec    Twp    Rng <b>O    24    31N    6W</b>	
Casing Size <b>5-1/2"</b>		Weight <b>17#</b>		Set At <b>3178'</b>		Perforations: <b>3008' - 3169'</b>		County <b>RIO ARRIBA</b>	
Tubing Size <b>2-7/8"</b>		Weight <b>6.5#</b>		Set At <b>3168'</b>		Perforations:		Pool <b>BASIN</b>	
Type Well - Single-Bradenhead-GG or GO Multiple					Packer Set At		Formation <b>FT</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>340</b>		<b>165</b>		<b>0</b>
1					<b>3</b>	<b>68</b>	<b>55</b>		<b>0.5 hr</b>
2					<b>3</b>	<b>68</b>	<b>70</b>		<b>1.0 hr</b>
3					<b>10</b>	<b>68</b>	<b>55</b>		<b>1.5 hrs</b>
4					<b>5</b>	<b>68</b>	<b>40</b>		<b>2.0 hrs</b>
5					<b>3</b>	<b>72</b>	<b>38</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>15</b>	<b>0.9887</b>	<b>1.29</b>	<b>1.004</b>	<b>184</b>
2										
3										
4										
NO	Pr	Temp. oR	Tr	Z	Gas Liquid Hydrocarbon Ration					Mcf/bbl.
1					A.P.I Gravity of Liquid Hydrocabrons _____					Deq.
2					Specific Gravity Separator _____					
3					Specific Gravity Flowing Fluid xxxxxxxxx					XXXXXX
4					Critical Pressure _____ p.s.i.a.					____ p.s.i.a.
5					Critical Temperature _____ R					____ R
Pc	<b>177</b>	Pc <sup>2</sup>	<b>31329</b>							
NO	Pt1	Pw	Pw <sup>2</sup>	Pc <sup>2</sup> -Pw <sup>2</sup>	(1) $\frac{Pc^2}{Pc^2 - Pw^2} = \underline{1.0867182}$					(2) $\frac{Pc^{2n}}{Pc^2 - Pw^2} = \underline{1.0644}$
1		<b>50</b>	<b>2500</b>	<b>28829</b>						
2										
3					AOF = Q $\frac{Pc^{2n}}{Pc^2 - Pw^2} = \underline{196}$					
4										
Absolute Open Flow		<b>196</b>	Mcf/d @ 15.025		Angle of Slope _____			Slope, n <b>0.75</b>		

  

Remarks:		
Approved By Commission:	Conducted By: <b>Mark Lepich</b>	Calculated By: <b>Tracy Ross</b>

