

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

Operator Williams Production Company					Lease or Unit Name ROSA UNIT				
Test Type X Initial Annual Special			Test Date 11/1/2004		Well Number #212A (API # 30-039-27818)				
Completion Date 10/16/2004		Total Depth 3168'		Plug Back TD		Elevation 6210'		Unit Sec Twp Rng O 14 31N 6W	
Casing Size 5-1/2"		Weight 17#		Set At 3168'		Perforations: 2894' - 3070'		County RIO ARRIBA	
Tubing Size 2-7/8"		Weight 6.5#		Set At 3107'		Perforations:		Pool BASIN	
Type Well - Single-Bradenhead-GG or GO Multiple					Packer Set At		Formation FT		
Producing Thru Tubing		Reservoir Temp. oF		Mean Annual Temp. oF			Barometer Pressure - Pa		Connection
L	H	Gq 0.6	%CO2	%N2	%H2S	Prover 3/4"	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	2" X 3/4"				360		165		0
1					10	68	65		0.5 hr
2					10	68	65		1.0 hr
3					5	68	50		1.5 hrs
4					5	68	50		2.0 hrs
5					5	72	45		3.0 hrs

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	9.604					17	0.9887	1.29	1.004	209
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 xxxxxxxxxx					XXXXXX
4					Critical Pressure _____ p.s.i.a.					____ p.s.i.a.
5					Critical Temperature _____ R					____ R
Pc	177	Pc ²	31329							
NO	Pt1	Pw	Pw ²	Pc ² -Pw ²	(1) $\frac{Pc^2}{Pc^2 - Pw^2} =$ 1.1157051					(2) $\frac{Pc^{2n}}{Pc^2 - Pw^2} =$ 1.0856
1		57	3249	28080						
2										
3					AOF = Q $\frac{Pc^{2n}}{Pc^2 - Pw^2} =$ 227					
4										
Absolute Open Flow		227	Mcf/d @ 15.025		Angle of Slope _____			Slope, n 0.75		

Remarks:

Approved By Commission:	Conducted By: Mark Lepich	Calculated By: Tracy Ross	Checked By:
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