

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 7/15/2002		Well Number #10B				
Completion Date 7/3/2002		Total Depth 6115'		Plug Back TD 6088'		Elevation 6338'		Unit Sec Twp Rng N 13 31N 6W	
Casing Size 4 1/2"		Weight 17#		Set At 6114'		Perforations: 5178' - 5596'		County Rio Arriba	
Tubing Size 2 1/16"		Weight 3.25#		Set At 5928'		Perforations: 5673' - 5997'		Pool Blanco MV	
Type Well - Single-Bradenhead-GG or GO Multiple					Packer Set At		Formation MV		
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"				995	88	995		0
1					315	60	890		0.5 hr
2					310	63	930		1.0 hr
3					305	68	785		1.5 hrs
4					295	70	750		2.0 hrs
5					275	73	700		3.0 hrs

RATE OF FLOW CALCULATION										
NO	Coefficient (24 Hours)				hwPm	Pressure Pm	Flow Temp. Factor Fl	Gravity Factor Fq	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	9.604					287	0.9877	1.29	1.033	3628
2										
3										
4										

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

Pc	1007	Pc2	1014049
NO	Pt1	Pw	Pw2
1		712	506944
2			
3			
4			

Pc2-Pw2 507105		(1) $\frac{Pc2}{Pc2-Pw2} =$ 1.9996825	(2) $\frac{Pc2^n}{Pc2-Pw2} =$ 1.6815926
AOF = Q $\frac{Pc2^n}{Pc2 - Pw2} =$ 6101			

Absolute Open Flow	6101	Mcf @ 15.025	Angle of Slope _____	Slope, n	0.75
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Remarks:			
Approved By Commission:	Conducted By: Larry Higgins	Calculated By: Tracy Ross	Checked By: