

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 9/21/2000		Well Number #181				
Completion Date 9/15/2000		Total Depth 6896'		Plug Back TD 6800'		Elevation 6261'		Unit Sec Twp Rng H 10 31N 6W	
Casing Size 4-1/2"		Weight 10.5#		Set At 6896'		Perforations: 6307' - 6313'		County Rio Arriba	
Tubing Size 2-3/8"		Weight 4.7#		Set At 6698'		Perforations: 6410' - 6738'		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"				1115	78	1115		0
1					315	66	1015		0.5 hr
2					260	66	990		1.0 hr
3					250	68	970		1.5 hrs
4					250	68	950		2.0 hrs
5					240	68	910		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					252	0.9924	1.29	1.029	3188
2										
3										
4										

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

NO	Pc	Pt1	Pw	Pw2	Pc2-Pw2	(1) $\frac{Pc2}{Pc2-Pw2} =$	(2) $\frac{Pc2^n}{Pc2-Pw2} =$
1	1127		922	850084	420045	3.0237927	2.2930526
2							
3							
4							

Absolute Open Flow 7311		Mcf @ 15.025	Angle of Slope _____	Slope, n 0.75
--------------------------------	--	--------------	----------------------	----------------------

Remarks:			
Approved By Commission:	Conducted By: Mark Lepich	Calculated By: Tracy Ross	Checked By: David Spitz