

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 9/20/98		Well Number #154				
Completion Date 9/5/98		Total Depth		Plug Back TD		Elevation		Unit Sec Twp Rng N 7 31N 5W	
Casing Size		Weight d		Set At		Perforations: From To		County RIO ARRIBA	
Tubing Size		Weight d		Set At		Perforations: From To		Pool BLANCO	
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"				1050		1052		0
1					374	54	992		0.5 hr
2					376	60	946		1.0 hr
3					371	63	908		1.5 hrs
4					363	64	892		2.0 hrs
5					348	70	859		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					360	0.9905	1.29	1.049	4634
2										
3										
4										
NO	Pr	Temp. oR	Tr	Z	Gas Liquid Hydrocarbon Ration _____ A.P.I Gravity of Liquid Hydrocabrons _____ Specific Gravity Separator _____ Specific Gravity Flowing Fluid <u>XXXXXXXXXX</u> Critical Pressure _____ p.s.i.a. Critical Temperature _____ R					Mcf/bbl. Deq. XXXXXX _____ p.s.i.a. _____ R
Pc	1064	Pc ²	1132096							
NO	Ptl	Pw	Pw ²	Pc ² -Pw ²	(1) $\frac{Pc^2}{Pc^2 - Pw^2} = \frac{3.0314121}{1064^2 - 871^2}$ (2) $\frac{Pc^{2-n}}{Pc^2 - Pw^2} = \frac{2.2974}{1064^2 - 871^2}$ AOF = Q $\frac{Pc^{2-n}}{Pc^2 - Pw^2} = \frac{10647}{1064^2 - 871^2}$					
1		871	758641	373455						
2										
3										
4										
Absolute Open Flow		10647		Mcf/d @ 15.025		Angle of Slope _____		Slope, n		0.75

Remarks:			
Approved By Commission:	Conducted By:	Calculated By:	Checked By: