

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 10/7/98		Well Number #132				
Completion Date		Total Depth		Plug Back TD		Elevation		Unit Sec Twp Rng M 22 31N 5W	
Casing Size		Weight d		Set At		Perforations: From		County RIO ARriba	
Tubing Size		Weight d		Set At		Perforations: From		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		Bottomhole Pressure - Pa		Connection	
L	H	Gg 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"				1060		1062		0
1					286	58	764		0.5 hr
2					268	60	590		1.0 hr
3					166	62	472		1.5 hrs
4					157	64	427		2.0 hrs
5					87	65	382		3.0 hrs

RATE OF FLOW CALCULATION										
NO	Coefficient (24 Hours)				hwPm	Pressure Pm	Flow Temp. Factor FI	Gravity Factor Fg	Super Compress. Factor Fpv	Rate of Flow Q, Mcfd
1	9.604					99	0.9952	1.29	1.009	1232
2										
3										
4										
NO	Pr	Temp. oR	Tr	Z	Gas Liquid Hydrocarbon Ration					Mcf/bbl. Deq.
1					A.P.I Gravity of Liquid Hydrocabrons					
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	1074	Pc ²	1153476							
NO	Pt1	Pw	Pw ²	Pc ² -Pw ²	(1) $\frac{Pc^2}{Pc^2 - Pw^2} = 1.1555097$					(2) $\frac{Pc^{2.75}}{Pc^{2.75} - Pw^{2.75}} = 1.1145$
1		394	155236	998240						
2										
3										
4					AOF = Q $\frac{Pc^{2.75}}{Pc^{2.75} - Pw^{2.75}} = 1373$					
Absolute Open Flow		1373	Mcf/d @ 15.025		Angle of Slope			Slope. n 0.75		

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