

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 11/29/98		Well Number #156A						
Completion Date 11/9/98		Total Depth		Plug Back TD		Elevation		Unit 9	Sec 31N	Twp 6W	Rng
Casing Size		Weight	d	Set At	Perforations: From To	Elevation		SAN JUAN			
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"				1173		1181		0
1					404	56	1032		0.5 hr
2					396	60	973		1.0 hr
3					367	65	942		1.5 hrs
4					350	66	891		2.0 hrs
5					336	66	832		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					348	0.9943	1.29	1.036	4441
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 xxxxxxxxxxxx					XXXXXX
4					Critical Pressure _____ p.s.i.a.					____ p.s.i.a.
5					Critical Temperature _____ R					____ R
Pc	1193	Pc ²	1423249							
NO	Ptl	Pw	Pw ²	Pc ² -Pw ²	(1) $\frac{Pc^2}{Pc^2 - Pw^2} = \underline{2.0020017}$ (2) $\frac{Pc^{2n}}{Pc^2 - Pw^2} = \underline{1.6831}$					
1		844	712336	710913						
2										
3										
4					AOF = Q $\frac{Pc^{2n}}{Pc^2 - Pw^2} = \underline{7475}$					
Absolute Open Flow		7475	Mcfd @ 15.025		Angle of Slope _____			Slope, n 0.75		

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