

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 8/16/2000		Well Number #345				
Completion Date 7/29/2000		Total Depth 3528'		Plug Back TD 3488'		Elevation 6561'		Unit Sec Twp Rng L 23 31N 5W	
Casing Size		Weight d		Set At		Perforations: From To		County RIO ARriba	
Tubing Size		Weight d		Set At		Perforations: From To		Pool BASIN	
Type Well - Single-Bradenhead-GG or GO Multiple				Packer Set At		Formation FT			
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"				0		1080		0
1					230	64	860		0.5 hr
2					190	66	720		1.0 hr
3					140	68	530		1.5 hrs
4					85	69	400		2.0 hrs
5					40	70	240		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					52	0.9905	1.29	1.01	644
2										
3										
4										
NO	Pr	Temp. oR	Tr	Z	Gas Liquid Hydrocarbon Ration A.P.I Gravity of Liquid Hydrocarbrens _____ 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	1092	Pc ²	1192464							
NO	Pt1	Pw	Pw ²	Pc ² -Pw ²	(1) $Pc^2 = \frac{1.05625}{Pc^2 - Pw^2}$ (2) $Pc^{2n} = \frac{1.0419}{Pc^2 - Pw^2}$					
1		252	63504	1128960						
2										
3										
4										
Absolute Open Flow 672					Mcf @ 15.025		Angle of Slope _____		Slope, n 0.75	

Remarks:			
Approved By Commission:	Conducted By: Mark Lepich	Calculated By: Tracy Ross	Checked By: Stergie Katirgis