

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 7/11/99		Well Number #164						
Completion Date		Total Depth		Plug Back TD		Elevation		Unit J	Sec 1	Twp 31N	Rng 6W
Casing Size		Weight	d	Set At	Perforations: From To		County La Plata				
Tubing Size		Weight	d	Set At	Perforations: From To		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"				1110		1112		0
1					401	58	1109		0.5 hr
2					353	64	968		1.0 hr
3					326	69	949		1.5 hrs
4					328	66	936		2.0 hrs
5					314	65	900		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					326	0.9952	1.29	1.036	4164
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 _____	XXXXXX
3					Specific Gravity Flowing Fluid xxxxxxxxxx	
4					Critical Pressure _____ p.s.i.a.	_____ p.s.i.a.
5					Critical Temperature _____ R	_____ R

Pc	1124	Pc2	1263376
NO	Pt1	Pw	Pw2
1		912	831744
2			
3			
4			

(1) $\frac{Pc2}{Pc2 - Pw2} = \underline{\underline{2.9269748}}$		(2) $\frac{Pc2^n}{Pc2 - Pw2} = \underline{\underline{2.2377638}}$	
AOF = Q $\frac{Pc2^n}{Pc2 - Pw2} = \underline{\underline{9318}}$			

Absolute Open Flow	9318	Mcf/d @ 15.025	Angle of Slope _____	Slope, n	0.75
--------------------	-------------	----------------	----------------------	----------	-------------

Remarks:			
Approved By Commission:	Conducted By: Chic Charley	Calculated By: Tracy Ross	Checked By: David Spitz