

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 12/9/2004		Well Number #23C (API #30-039-27609)				
Completion Date 11/24/2004		Total Depth 8090'		Plug Back TD 8085'		Elevation 6399'		Unit Sec Twp Rng L 29 31N 5W	
Casing Size 5-1/2"		Weight 17#		Set At 8090'		Perforations: 7898' - 8080'		County Rio Arriba	
Tubing Size 2-1/16"		Weight 3.25#		Set At 8055'		Perforations:		Pool Basin	
Type Well - Single-Bradenhead-GG or GO Multiple				Packer Set At			Formation DK		
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	46	965		0
1					225	90	980		0.5 hr
2					180	85	980		1.0 hr
3					140	81	980		1.5 hrs
4					130	79	975		2.0 hrs
5					110	77	975		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					122	0.984	1.29	1.017	1513
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 _____.					XXXXXXX
3					Specific Gravity Flowing Fluid xxxxxxxxxx					
4					Critical Pressure _____ p.s.i.a.					____ p.s.i.a.
5					Critical Temperature _____ R					____ R

Pc	977	Pc2	954529		
NO	Pt1	Pw	Pw2	Pc2-Pw2	
1		987	974169	-19640	(1) $\frac{Pc2}{Pc2-Pw2} = \frac{-48.601273}{-19640}$
2					(2) $\frac{Pc2^n}{Pc2-Pw2} = \frac{\#NUM!}{-19640}$
3					
4					
Absolute Open Flow #NUM! Mcfd @ 15.025					Angle of Slope _____ Slope, n 0.75

Remarks:			
Approved By Commission: <i>H. Tillman</i>	Conducted By: Bill Beevers/Michael Gurule	Calculated By: Tracy Ross	Checked By:

