

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 12/4/2001		Well Number #24B				
Completion Date 11/22/2001		Total Depth 8130'		Plug Back TD 8118'		Elevation 6518'		Unit Sec Twp Rng N 32 31N 5W	
Casing Size 5-1/2"		Weight 17#		Set At 6903'		Perforations: 7948' - 8042'		County Rio Arriba	
Tubing Size 2-1/16"		Weight 3.25#		Set At 8029'		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					2750	40	850		0
1					230	59	835		0.5 hr
2					155	63	835		1.0 hr
3					130	66	835		1.5 hrs
4					110	68	835		2.0 hrs
5					100	71	840		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		112	0.9896	1.29	1.016	1395		
2									
3									
4									

NO	Pr	Temp. oR	Tr	Z	Gas Liquid Hydrocarbon Ration	Mcf/bbl.
1					A.P.I Gravity of Liquid Hydrocabrons _____	Deq. XXXXXX
2					Specific Gravity Separator _____	
3					Specific Gravity Flowing Fluid xxxxxxxxxx	
4					Critical Pressure _____ p.s.i.a.	____ p.s.i.a.
5					Critical Temperature _____ R	____ R

Pc	862	Pc2	743044
NO	Pt1	Pw	Pw2
1		852	725904
2			
3			
4			

(1) $Pc2 = 43.351459$		(2) $Pc2^n = 16.89479$	
$Pc2 - Pw2$		$Pc2 - Pw2$	
AOF = Q $Pc2^n = 23570$			
$Pc2 - Pw2$			

Absolute Open Flow	23570	Mcf @ 15.025	Angle of Slope _____	Slope, n	0.75
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Remarks:			
Approved By Commission:	Conducted By: Larry Higgins	Calculated By: Tracy Ross	Checked By: