

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 11/10/2005		Well Number (API #) #89B (API # 30-039-26851)				
Completion Date 11/2/2005		Total Depth 6019'		Plug Back TD		Elevation 6318'		Unit Sec Twp Rng I 34 32N 6W	
Casing Size 4 1/2"		Weight 10.5#		Set At 6008'		Perforations: 5144' - 5478'		County Rio Arriba	
Tubing Size 2-3/8"		Weight 4.7#		Set At 5893'		Perforations: 5596' - 5892'		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"				387	59	890		0
1					287	73	740		0.5 hr
2					230	73	690		1.0 hr
3					220	74	665		1.5 hrs
4					210	74	645		2.0 hrs
5					200	74	610		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		212	0.9868	1.29	1.026	2659		
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 xxxxxxxxxxxx				
4					Critical Pressure _____ p.s.i.a.				____ p.s.i.a.
5					Critical Temperature _____ R				____ R

Pc	902	Pc2	813604	
NO	Pt1	Pw	Pw2	Pc2-Pw2
1		622	386884	426720
2				
3				
4				

(1) $\frac{Pc2}{Pc2 - Pw2} = \mathbf{1.906646}$		(2) $\frac{Pc2^n}{Pc2 - Pw2} = \mathbf{1.6225667}$	
$AOF = Q \frac{Pc2^n}{Pc2 - Pw2} = \mathbf{4315}$			

Absolute Open Flow 4315		Mcf/d @ 15.025	Angle of Slope _____	Slope, n 0.75
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Remarks:			
Approved By Commission:	Conducted By: Sherry Brooks	Calculated By: Tracy Ross	Checked By: