

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 6/6/2002		Well Number #167B				
Completion Date 5/23/2002		Total Depth 7897'		Plug Back TD 7885'		Elevation 6219'		Unit Sec Twp Rng B 08 31N 6W	
Casing Size 5 1/2"		Weight 17#		Set At 7897'		Perforations: 4510' - 5335'		County San Juan	
Tubing Size 2 1/16"		Weight 3.25#		Set At 5761'		Perforations: 5477' - 5772'		Pool Blanco MV	
Type Well - Single-Bradenhead-GG or GO Multiple				Packer Set At 5893'		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"				995	67	995		0
1					315	52	970		0.5 hr
2					270	62	885		1.0 hr
3					270	66	860		1.5 hrs
4					265	68	840		2.0 hrs
5					255	71	805		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					267	0.9896	1.29	1.034	3385
2										
3										
4										

NO	Pr	Temp. oR	Tr	Z	Gas Liquid Hydrocarbon Ration	Mcf/bbl. Deq.
1					A.P.I Gravity of Liquid Hydrocabrons _____	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	1007	Pc2	1014049
NO	Pt1	Pw	Pw2
1		817	667489
2			
3			
4			

(1) $P_{c2} = \frac{2.9260417}{P_{c2} - P_{w2}}$		(2) $P_{c2}^n = \frac{2.2372287}{P_{c2} - P_{w2}}$	
AOF = Q $\frac{P_{c2}^n}{P_{c2} - P_{w2}} = \underline{7573}$			

Absolute Open Flow	7573	Mcf/d @ 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: