

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 10/30/2002		Well Number #171B				
Completion Date 9/13/2002		Total Depth 6385'		Plug Back TD 6360'		Elevation 6416'		Unit Sec Twp Rng B 07 31N 5W	
Casing Size 4 1/2"		Weight 10.5#		Set At 6385'		Perforations: 5686' - 5959'		County Rio Arriba	
Tubing Size 2-3/8"		Weight 4.7#		Set At 6072'		Perforations: 5985' - 6088'		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
SI	2" X 3/4"				1050	48	1050	
1					285	57	985	0.5 hr
2					275	58	965	1.0 hr
3					270	60	950	1.5 hrs
4					270	60	940	2.0 hrs
5					265	63	920	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					277	0.9971	1.29	1.024	3504
2										
3										
4										

NO	Pr	Temp. oR	Tr	Z	Gas Liquid Hydrocarbon Ratio	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	Pt1	Pw	Pw2	Pc2-Pw2	(1) Pc2 =	(2) Pc2^n =
1062					4.3509143	3.0125579
NO					Pc2-Pw2	Pc2-Pw2
1		932	868624	259220		
2						
3						
4						

Absolute Open Flow 10556		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: