

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 7/10/2002		Well Number #165C				
Completion Date 6/24/2002		Total Depth 8060'		Plug Back TD 8049'		Elevation 6399'		Unit Sec Twp Rng G 25 31N 6W	
Casing Size 5 1/2"		Weight 17#		Set At 8060'		Perforations: 4749' - 5639'		County Rio Arriba	
Tubing Size 2 1/16"		Weight 3.25#		Set At 5981'		Perforations: 5680' - 5992'		Pool Blanco MV	
Type Well - Single-Bradenhead-GG or GO Multiple					Packer Set At 6100'		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"				940	94	940		0
1					250	61	865		0.5 hr
2					255	64	835		1.0 hr
3					250	66	810		1.5 hrs
4					245	69	790		2.0 hrs
5					235	69	765		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					247	0.9915	1.29	1.023	3104
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 _____				XXXXXX
3					Specific Gravity Flowing Fluid xxxxxxxxxx				
4					Critical Pressure _____ p.s.i.a.				_____ p.s.i.a.
5					Critical Temperature _____ R				_____ R

Pc	952	Pc2	906304	
NO	Pt1	Pw	Pw2	Pc2-Pw2
1		777	603729	302575
2				
3				
4				

(1) $Pc2 = \underline{2.9953036}$		(2) $Pc2^n = \underline{2.2768302}$	
$Pc2 - Pw2$		$Pc2 - Pw2$	
$AOF = Q \quad Pc2^n = \underline{7067}$ $Pc2 - Pw2$			

Absolute Open Flow 7067		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: