

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLS

Operator Williams Production Company					Lease or Unit Name Rosy Unit				
Test Type X Initial Annual Special			Test Date 11/1/2001		Well Number #31C				
Completion Date 10/26/2001		Total Depth 6246'		Plug Back TD 6219'		Elevation 6469'		Unit Sec Twp Rng N 17 31N 5W	
Casing Size 4 1/2"		Weight 10.5#		Set At 6244'		Perforations: From 4544' To 5770'		County Rio Arriba	
Tubing Size 2-3/8"		Weight 4.7#		Set At 5948'		Perforations: From 5792' To 6106'		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	
I.	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"				1030	71	1030		0
1					320	59	940		0.5 hr
2					315	62	895		1.0 hr
3					310	64	865		1.5 hrs
4					300	66	835		2.0 hrs
5					285	67	800		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				297	0.9933	1.29	1.03	3765
2									
3									
4									

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

Pc	1042	Pc2	1085764	
NO	Pt1	Pw	Pw2	Pc2-Pw2
1		812	659344	426420
2				
3				
4				

(1) $\frac{Pc2}{Pc2-Pw2} = \underline{\underline{2.5462314}}$		(2) $\frac{Pc2^n}{Pc2-Pw2} = \underline{\underline{2.0156884}}$	
AOF = Q $\frac{Pc2^n}{Pc2 - Pw2} = \underline{\underline{7588}}$			

Absolute Open Flow	7588	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: