

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 12/7/2001		Well Number #31B				
Completion Date 11/23/2001		Total Depth 8049'		Plug Back TD 8025'		Elevation 6315'		Unit Sec Twp Rng D 11 12 31N 5W	
Casing Size 5 1/2"		Weight 17#	d	Set At 7845'	Perforations: 4887' - 5602'		County Rio Arriba		
Tubing Size 2 1/16"		Weight 3.25#	d	Set At 5930	Perforations: 5653' - 5910'		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"				860	21	1060		0
1					250	60	995		0.5 hr
2					245	61	975		1.0 hr
3					240	62	960		1.5 hrs
4					240	63	950		2.0 hrs
5					240	65	930		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					252	0.9952	1.29	1.024	3182
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 _____	XXXXXXX
3					Specific Gravity Flowing Fluid xxxxxxxxxx	
4					Critical Pressure _____ p.s.i.a.	____ p.s.i.a.
5					Critical Temperature _____ R	____ R

Pc	1072	Pc2	1149184	
NO	Pt1	Pw	Pw2	Pc2-Pw2
1		942	887364	261820
2				
3				
4				

(1) $\frac{Pc2}{Pc2-Pw2} =$ 4.389214		(2) $\frac{Pc2^n}{Pc2-Pw2} =$ 3.032425	
AOF = Q $\frac{Pc2^n}{Pc2 - Pw2} =$ 9648			
Absolute Open Flow 9648		Mcf/d @ 15.025	Angle of Slope _____
		Slope, n	0.75

Remarks:			
Approved By Commission:	Conducted By: Larry Higgins	Calculated By: Tracy Ross	Checked By: