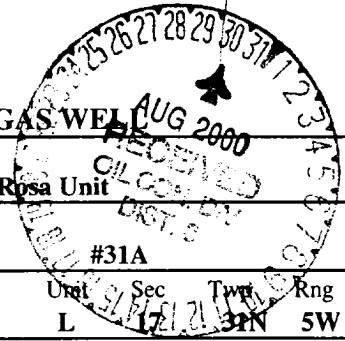


NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLS



Operator Williams Production Company				Lease or Unit Name Rosa Unit			
Test Type X Initial Annual Special		Test Date 8/14/2000		Well Number #31A			
Completion Date 7/21/2000	Total Depth 6081'	Plug Back TD 6079'	Elevation 6311'		Unit L	Sec 17	Twp 34N
Casing Size 4-1/2"	Weight 10.5#	d	Set At 6081'	Perforations: 5093' - 5608'	County Rio Arriba		
Tubing Size 2-3/8"	Weight 4.7#	d	Set At 5957'	Perforations: 5635' - 5986'	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	Duration of Flow
SI	2" X 3/4"				1165		1165		0
1					365	64	1090		0.5 hr
2					360	68	1065		1.0 hr
3					350	68	1020		1.5 hrs
4					345	70	1005		2.0 hrs
5					330	70	971		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				342	0.9905	1.29	1.041	4369
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	1177	Pc2	1385329	
NO	Pt1	Pw	Pw2	Pc2-Pw2
1		983	966289	419040
2				
3				
4				
(1) $Pc2 = \frac{Pc2^n}{Pc2 - Pw2} = \underline{3.3059589}$ (2) $Pc2^n = \underline{2.4517325}$ $Pc2 - Pw2$ AOF = Q $\frac{Pc2^n}{Pc2 - Pw2} = \underline{10711}$				
Absolute Open Flow		10711	Mcf @ 15.025	Angle of Slope _____ Slope, n 0.75
Remarks:				
Approved By Commission:		Conducted By: Mark Lepich		Calculated By: Tracy Ross
				Checked By: David Spitz