

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 11/20/2000		Well Number #183A				
Completion Date 11/18/2000		Total Depth 6119'		Plug Back TD 6088'		Elevation 6299'		Unit Sec Twp Rng F 19 31N 5W	
Casing Size 4 1/2"		Weight 10.5#		Set At 6115'		Perforations: 4437' - 5536'		County Rio Arriba	
Tubing Size 2-3/8"		Weight 4.7#		Set At 5952'		Perforations: 5616' - 5947'		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		Differential 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"			1035	57	1037		0
1					292	67	953		0.5 hr
2					284	67	909		1.0 hr
3					276	68	877		1.5 hrs
4					269	68	851		2.0 hrs
5					259	69	813		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				271	0.9915	1.29	1.029	3425
2									
3									
4									

NO	Pr	Temp. oR	Tr	Z	Gas Liquid Hydrocarbon Ration	Mcf/bbl. Deq.
1					A.P.I Gravity of Liquid Hydrocabrons _____	
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	1049	Pc2	1100401
NO	Pt1	Pw	Pw2
1		825	680625
2			
3			
4			

(1) $\frac{Pc2}{Pc2 - Pw2} = \underline{2.6214005}$		(2) $\frac{Pc2^n}{Pc2 - Pw2} = \underline{2.0601556}$	
AOF = Q $\frac{Pc2^n}{Pc2 - Pw2} = \underline{7057}$			

Absolute Open Flow	7057	Mcf/d @ 15.025	Angle of Slope _____	Slope, n	0.75
--------------------	-------------	----------------	----------------------	----------	-------------

Remarks:			
Approved By Commission:	Conducted By: Matt Crane	Calculated By: Tracy Ross	Checked By: David Spitz