

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLS 2000

Operator Williams Production Company					Lease or Unit Name Rosa Unit				
Test Type X Initial Annual Special			Test Date 7/14/2000		Well Number #166A				
Completion Date 7/4/2000		Total Depth 6105'		Plug Back TD 6000'		Elevation 6350'		Unit Sec Twp Rng F 30 8 31N 5W	
Casing Size 4-1/2"		Weight 10.5#		Set At 6105'		Perforations: 4473' - 5619'		County Rio Arriba	
Tubing Size 2-3/8"		Weight 4.7#		Set At 5872'		Perforations: 5635' - 5902'		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"			1000		1000		0
1					315	66	910		0.5 hr
2					305	68	860		1.0 hr
3					300	70	815		1.5 hrs
4					290	71	795		2.0 hrs
5					270	71	740		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					282	0.9896	1.29	1.034	3575
2										
3										
4										

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

NO	Pc	Pt1	Pw	Pw2	Pc2-Pw2	(1) $\frac{Pc2}{Pc2-Pw2} =$	(2) $\frac{Pc2^n}{Pc2-Pw2} =$
1	1012		752	565504	458640	2.2330019	1.8266983
2							
3							
4							

Absolute Open Flow 6530		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