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

Operator			Lease or Unit Name			
Williams Production Company			**Rosa Unit**			
Test Type	Test Date		Well Number			
X Initial **Annual** **Special**	**9/6/2001**		**#21B**			
Completion Date	Total Depth	Plug Back TD	Elevation	Unit	Sec	Twp	Rng
8/31/2001	**5972'**	**5947'**	**6230'**	**K**	**23**	**31N**	**6W**

Casing Size	Weight	d	Set At	Perforations:	County
4 1/2"	**10.5#**		**5972'**	**4640' - 5450'**	**Rio Arriba**
Tubing Size	**Weight**	**d**	**Set At**	**Perforations:**	**Pool**
2-3/8"	**4.7#**		**5793'**	**5520' - 5766'**	**Blanco MV**
Type Well - Single-Bradenhead-GG or GO Multiple			Packer Set At		Formation
					MV

Producing Thru	Reservoir Temp. oF	Mean Annual Temp. oF	Barometer Pressure - Pa	Connection
Tubing				

L	H	Gq	%CO2	%N2	%H2S	Prover	Meter Run	Taps
		0.6				**3/4"**		

	FLOW DATA			TUBING DATA		CASING DATA		
NO	Prover Line 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"**			**1085**	**94**	**1085**		**0**
1				**355**	**66**	**1005**		**0.5 hr**
2				**345**	**68**	**975**		**1.0 hr**
3				**335**	**69**	**950**		**1.5 hrs**
4				**330**	**70**	**930**		**2.0 hrs**
5				**320**	**71**	**905**		**3.0 hrs**

RATE OF FLOW CALCULATION

NO	Coefficient (24 Hours)	hwPm	Pressure Pm	Flow Temp. Factor Fl	Gravity Factor Fq	Super Compress. Factor, Fpv	Rate of Flow Q,Mcfd
1	**9.604**		**332**	**0.9896**	**1.29**	**1.041**	**4237**
2							
3							
4							

NO	Pr	Temp. oR	Tr	Z
1				
2				
3				
4				
5				
Pc	**1097**	Pc2	**1203409**	

Gas Liquid Hydrocarbon Ration ____ Mcf/bbl.
A.P.I Gravity of Liquid Hydrocabrons ____. Deq.
Specific Gravity Separator ____. XXXXXX
Specific Gravity Flowing Fluid xxxxxxxxxx
Critical Pressure ____ p.s.i.a. ____ p.s.i.a.
Critical Temperature ____ R ____ R

NO	Pt1	Pw	Pw2	Pc2-Pw2
1		**917**	**840889**	**362520**
2				
3				
4				

(1) $\frac{Pc2}{Pc2-Pw2} = \underline{3.3195658}$ (2) $\frac{Pc2^n}{Pc2-Pw2} = \underline{2.4592969}$

AOF = Q $\frac{Pc2^n}{Pc2 - Pw2} = \underline{10421}$

Absolute Open Flow	**10421**	Mcfd @ 15.025	Angle of Slope ____.	Slope, n	**0.75**

Remarks:

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