

**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 7/18/2002		Well Number #19B				
Completion Date 7/10/2002		Total Depth 6082'		Plug Back TD 5572'		Elevation 6320'	Unit Sec Twp Rng L 24 31N 6W		
Casing Size 4 1/2"		Weight 17#	d	Set At 6080'	Perforations: 4745' - 5548'		County Rio Arriba		
Tubing Size 2 1/16"		Weight 3.25#	d	Set At 5814'	Perforations: 5617' - 5842'		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"			1015	102	1025		0
1					300	61	920		0.5 hr
2					300	64	875		1.0 hr
3					290	66	845		1.5 hrs
4					275	68	825		2.0 hrs
5					270	69	795		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				282	0.9915	1.29	1.029	3565
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 xxxxxxxxxxxx				
4					Critical Pressure _____ p.s.i.a.				____ p.s.i.a.
5					Critical Temperature _____ R				____ R
Pc	1037	Pc2	1075369						
NO	Pt1	Pw	Pw2	Pc2-Pw2	(1) Pc2 = 2.53553		(2) Pc2^n = 2.0093314		
1		807	651249	424120	Pc2-Pw2		Pc2-Pw2		
2									
3									
4									
AOF = Q					Pc2^n = 7162				
					Pc2 - Pw2				
Absolute Open Flow		7162		Mcf @ 15.025		Angle of Slope _____		Slope, n 0.75	
Remarks:									
Approved By Commission:			Conducted By: Larry Higgins			Calculated By: Tracy Ross		Checked By:	