

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 7/25/2002		Well Number #23B				
Completion Date 7/16/2002		Total Depth 6184'		Plug Back TD 6160'		Elevation 6397'		Unit Sec Twp Rng 29 31N 5W	
Casing Size 4 1/2"		Weight 17#		Set At 6184'		Perforations: 4845' - 5708'		County Rio Arriba	
Tubing Size 2 1/16"		Weight 3.25#		Set At 5981'		Perforations: 5735' - 6018'		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"				1030	74	1030		0
1					315	60	960		0.5 hr
2					300	63	925		1.0 hr
3					295	65	905		1.5 hrs
4					290	66	890		2.0 hrs
5					280	69	860		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					292	0.9915	1.29	1.029	3691
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	1042	Pc2	1085764	
NO	Pt1	Pw	Pw2	Pc2-Pw2
1		872	760384	325380
2				
3				
4				

Absolute Open Flow 9113		Mcf/d @ 15.025	Angle of Slope _____	Slope, n 0.75
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Remarks:			
Approved By Commission:	Conducted By: Larry Higgins	Calculated By: Tracy Ross	Checked By: