

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

Operator Williams Production Company					Lease or Unit Name Royal Unit				
Test Type X Initial Annual Special			Test Date 12/18/2001		Well Number #12B				
Completion Date 11/30/2001		Total Depth 7845'		Plug Back TD 7820'		Elevation 6144'		Unit Sec Twp Rng P 15 31N 6W	
Casing Size 5 1/2"		Weight 17#		Set At 7845'		Perforations: 7678' - 7734'		County Rio Arriba	
Tubing Size 2 1/16"		Weight 3.25#		Set At 7749'		Perforations:		Pool Basin	
Type Well - Single-Bradenhead-GG or GO Multiple					Packer Set At 5800'		Formation DK		
Producing Thru Tubing		Reservoir Temp. oF		Mean Annual Temp. oF		Barometer Pressure - Pa		Connection	
I.	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"				1700	47	910		0
1					175	62	910		0.5 hr
2					115	62	910		1.0 hr
3					85	61	910		1.5 hrs
4					75	61	910		2.0 hrs
5					50	60	910		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					62	1.0000	1.29	1.007	774
2										
3										
4										

NO	Pr	Temp. oR	Tr	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1					A.P.I Gravity of Liquid Hydrocarbons _____	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	922	Pc2	850084	
NO	Pt1	Pw	Pw2	Pc2-Pw2
1		922	850084	0
2				
3				
4				

(1) $\frac{Pc2}{Pc2-Pw2} = \frac{\#DIV/0!}{\#DIV/0!}$		(2) $\frac{Pc2^n}{Pc2-Pw2} = \frac{\#DIV/0!}{\#DIV/0!}$	
AOF = Q $\frac{Pc2^n}{Pc2-Pw2} = \frac{\#DIV/0!}{\#DIV/0!}$			

Absolute Open Flow	#DIV/0!	Mcf @ 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: