

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 10/21/2005		Well Number (API #) #214A (API # 30-039-29520)				
Completion Date 10/19/2005		Total Depth 3364'		Plug Back TD		Elevation 6373'		Unit Sec Twp Rng F 14 31N 06W	
Casing Size 5 1/2"		Weight 17#		Set At 3357'		Perforations: 3111' - 3256'		County Rio Arriba	
Tubing Size 2 7/8"		Weight 6.5#		Set At 3329'		Perforations:		Pool Basin	
Type Well - Single-Bradenhead-GG or GO Multiple					Packer Set At		Formation Fruitland Coal		
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.g	Temperature oF	Pressure p.s.i.g	Temperature oF	Pressure p.s.i.g	Temperature oF	Duration of Flow
SI		2" X 3/4"			190	58	1000		0
1					190	55	990		0.5 hr
2					185	55	975		1.0 hr
3					180	53	965		1.5 hrs
4					170	50	875		2.0 hrs
5					160	50	800		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 _{sc} Mcfd
1	9.604					172	1.0098	1.29	1.014	2182
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 1012		Pc2 1024144		
NO	Ptl	Pw	Pw2	Pc2-Pw2
1		812	659344	364800
2				
3				
4				

(1) $\frac{Pc2}{Pc2-Pw2} = \mathbf{2.8074123}$		(2) $\frac{Pc2^n}{Pc2-Pw2} = \mathbf{2.1688506}$	
AOF = Q $\frac{Pc2^n}{Pc2 - Pw2} = \mathbf{4732}$			

Absolute Open Flow 4732		Mcf/d @ 15.025		Angle of Slope _____		Slope, n 0.75	
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Remarks:			
Approved By: Commission: <i>H. Villanueva</i>	Conducted By: Mark Lepich	Calculated By: Tracy Ross	Checked By: