

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 ☒ Initial ☐ Annual ☐ Special			Test Date 8/29/2006		Well Number (API #) #383 (API # 30-039-29367)				
Completion Date 8/24/2006		Total Depth 3585'		Plug Back TD		Elevation 6631'		Unit Sec Twp Rng P 29 31N 04W	
Casing Size 7"		Weight 23#		Set At 3368'		Perforations:		County Rio Arriba	
Tubing Size 2 7/8"		Weight 6.5#		Set At 3389'		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"				360		165		0
1					10	68	65		0.5 hr
2					10	68	65		1.0 hr
3					5	68	50		1.5 hrs
4					5	68	50		2.0 hrs
5					5	72	45		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		17	0.9887	1.29	1.004	209		
2									
3									
4									

NO	Pr	Temp. oR	Tr	Z	Gas Liquid Hydrocarbon Ration				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 177		Pc2 31329		
NO	Ptl	Pw	Pw2	Pc2-Pw2
1		57	3249	28080
2				
3				
4				

(1) $\frac{Pc2}{Pc2-Pw2} = \frac{1.1157051}{1.1157051 - 0.0000000} = 1.1157051$

AOF = Q $\frac{Pc2^n}{Pc2 - Pw2} = \frac{1.1157051^n}{1.1157051 - 0.0000000} = 227$

(2) $\frac{Pc2^n}{Pc2-Pw2} = \frac{1.0855806}{1.0855806 - 0.0000000} = 1.0855806$

Absolute Open Flow 227		Mcf/d @ 15.025		Angle of Slope _____		Slope, n 0.75	
Remarks:							
Approved By Commission:		Conducted By: Mark Lepich		Calculated By: Tracy Ross		Checked By:	

B