

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 10/30/2005		Well Number (API #) #382 (API # 30-039-29364)				
Completion Date 10/7/2005		Total Depth 4415'		Plug Back TD		Elevation 6671'		Unit Sec Twp Rng O 12 31N 05W	
Casing Size 4 1/2"		Weight 11.6#		Set At 4415'		Perforations:		County Rio Arriba	
Tubing Size 2 3/8"		Weight 4.7#		Set At 3640'		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.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"				250	69	1200		0
1					240	69	1160		0.5 hr
2					240	62	1160		1.0 hr
3					210	62	1040		1.5 hrs
4					205	54	1040		2.0 hrs
5					205	54	990		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					217	1.0058	1.29	1.018	2753
2										
3										
4										

NO	Pr	Temp. oR	Tr	Z	Gas Liquid Hydrocarbon Ration				Mcf/bbl.
1					A.P.I Gravity of Liquid Hydrocarbrens _____				Deq.
2					Specific Gravity Separator _____				XXXXXXX
3					Specific Gravity Flowing Fluid xxxxxxxxxxxx				
4					Critical Pressure _____ p.s.i.a.				____ p.s.i.a.
5					Critical Temperature _____ R				____ R

Pc	1212	Pc2	1468944	
NO	Ptl	Pw	Pw2	Pc2-Pw2
1		1002	1004004	464940
2				
3				
4				

(1) $\frac{Pc2}{Pc2-Pw2} =$ 3.159427		(2) $\frac{Pc2^n}{Pc2-Pw2} =$ 2.3697703	
AOF = Q $\frac{Pc2^n}{Pc2 - Pw2} =$ 6523			

Absolute Open Flow	6523	Mcf/d @ 15.025	Angle of Slope _____	Slope, n	0.75
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Remarks:			
Approved By Commission:	Conducted By: Mark Lepich	Calculated By: Tracy Ross	Checked By: