

30-039-27635

**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 10/28/2004		Well Number #152C				
Completion Date 10/25/2004		Total Depth 6365'		Plug Back TD 6305'		Elevation 6626'		Unit Sec Twp Rng L 36 32N 06W	
Casing Size 4-1/2"		Weight 10.5#		Set At 6329'		Perforations: 5382' - 6217'		County Rio Arriba	
Tubing Size 2-3/8"		Weight 4.7#		Set At 6210'		Perforations:		Pool Blanco	
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"				465	50	565		0
1					180	62	500		0.5 hr
2					170	64	465		1.0 hr
3					160	65	450		1.5 hrs
4					152	66	440		2.0 hrs
5					140	64	425		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				152	0.9962	1.29	1.016	1906
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	577	Pc2	332929
NO	Pt1	Pw	Pw2
1		437	190969
2			
3			
4			

(1) $\frac{Pc2}{Pc2-Pw2} = \underline{\underline{2.3452311}}$		(2) $\frac{Pc2^n}{Pc2-Pw2} = \underline{\underline{1.895131}}$	
$AOF = Q \frac{Pc2^n}{Pc2 - Pw2} = \underline{\underline{3612}}$			

Absolute Open Flow	3612	Mcf @ 15.025	Angle of Slope _____	Slope, n	0.75
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Remarks:			
Approved By Commission:	Conducted By: Mike Gurule	Calculated By: Tracy Ross	Checked By: