

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 10/28/2002		Well Number #171C				
Completion Date 9/20/2002		Total Depth 6990'		Plug Back TD 6921'		Elevation 6416'		Unit Sec Twp Rng P 06 31N 5W	
Casing Size 4 1/2"		Weight 10.5#		Set At 6943'		Perforations: 6075' - 6599'		County Rio Arriba	
Tubing Size 2-3/8"		Weight 4.7#		Set At 6400'		Perforations: 6621' - 6764'		Pool Blanco MV	
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"				480	48	885		0
1					305	59	790		0.5 hr
2					310	61	740		1.0 hr
3					300	62	710		1.5 hrs
4					290	63	685		2.0 hrs
5					275	64	650		3.0 hrs

RATE OF FLOW CALCULATION										
NO	Coefficient (24 Hours)				hwPm	Pressure Pm	Flow Temp. Factor Ff	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	9.604					287	0.9962	1.29	1.024	3627
2										
3										
4										

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

Pc	897	Pc2	804609
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NO	Pt1	Pw	Pw2	Pc2-Pw2	(1) $\frac{Pc2}{Pc2-Pw2} = \underline{2.1961951}$	(2) $\frac{Pc2^n}{Pc2-Pw2} = \underline{1.8040692}$
1		662	438244	366365		
2						
3						
4						

Absolute Open Flow 6544		Mcf/d @ 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: