

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

DIST. 3

Operator Williams Production Company					Lease or Unit Name ROSA UNIT						
Test Type X Initial Annual Special			Test Date 11/18/2006		Well Number #389A (API # 30-039-29502)						
Completion Date 11/9/2006		Total Depth 5163'		Plug Back TD		Elevation 6457'		Unit G	Sec 07	Twp 31N	Rng 04W
Casing Size 4-1/2"		Weight 11.6#	d	Set At 5162'	Perforations: 2750' - 5160'		County RIO ARRIBA				
Tubing Size 2-3/8"		Weight 4.7#	d	Set At 3719'	Perforations:		Pool BASIN				
Type Well - Single-Bradenhead-GG or GO Multiple					Packer Set At		Formation FT				
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"				302		174		0
1					12	72	65		0.5 hr
2					8	74	62		1.0 hr
3					12	75	58		1.5 hrs
4					8	75	47		2.0 hrs
5					5	79	32		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					17	0.9822	1.29	1.004	208
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 _____					
3					Specific Gravity Flowing Fluid xxxxxxxxxx					XXXXXX
4					Critical Pressure _____ p.s.i.a.					_____ p.s.i.a.
5					Critical Temperature _____ R					_____ R
Pc	186	Pc ²	34596							
NO	Pt1	Pw	Pw ²	Pc ² -Pw ²	(1) $\frac{Pc^2}{Pc^2 - Pw^2} =$ 1.0592774					(2) $\frac{Pc^{2n}}{Pc^2 - Pw^2} =$ 1.0441
1		44	1936	32660						
2										
3										
4					AOF = Q $\frac{Pc^{2n}}{Pc^2 - Pw^2} =$ 217					
Absolute Open Flow		217	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:	