MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test			Test Date
■ Initial	☐ Annual	☐ Special	10/12/96

Company	Connection
WILLIAMS PRODUCTION COMPANY	

Pool	Formation	Unit
BASIN	DAKOTA	ROSA

Completion Date 09/24/96	Total Depth 8096'	Plug Back TD 8074'	Elevation 6327'	Farm or Lease Name ROSA

Casing Size	Weight	d	Set At	Perforations: From To	Well No. #159

Tubing Size 1-1/2"	Weight 2.9#	d	Set at 7945'	Perforations: From 7880' To 8021' [8042' - 8055' below CIBP]	Unit O Sec 19 Twp 31N Rng 5W

Type Well - Single - Bradenhead - GG or GO Multiple	Packer Set At 6050'	County RIO ARRIBA

Producing Thru TUBING	Reservoir Temp. °F	Mean Annual Temp. °F	Barometer Pressure - P.	State NEW MEXICO

L	H	Gq .6	%CO₂	%N₂	%H₂S	Prover 3/4"	Meter Run 2	Taps

FLOW DATA / TUBING DATA / CASING DATA

NO.	Prover X Line Orifice Size	Pressure p.s.i.q.	Temperature °F	Pressure p.s.i.q.	Temperature °F	Pressure p.s.i.q.	Temperature °F	Duration of
SI	2" X 3/4"			1527				
1				112	46°			0.5 HR
2				77	47°			1.0 HR
3				59	49°			1.5 HR
4				53	49°			2.0 HR
5				44	49°			3.0 HR

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor	Gravity Factor	Super Compress.	Rate of Flow
1	9.604		56	.9924	1.29	1.008	694
2							
3							
4							
5							

NO.	P_r	Temp. °R	T	Z
1				
2				
3				
4				
5				

Gas Liquid Hydrocarbon Ration_____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons_____ Deq.
Specific Gravity Separator_____   XXXXXX
Specific Gravity Flowing Fluid xxxxx
Critical Pressure_____ p.s.i.a.   p.s.i.a.
Critical Temperature_____ R   R

P_c 1539	P_c^2 2368521

NO	P_t^1	P_w	P_w^2	$P_c^2 - P_w^2$
1		56	3136	2365385
2				
3				
4				
5				

$$(1) \quad \frac{P_c^2}{P_c^2 - P_w 2} = 1.0013 \qquad (2) \left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.0010$$

$$AOF = Q\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 695$$

Absolute Open Flow 695	Mcfd @ 15.025	Angle of Slope ө	Slope, n .75

Remarks:			
Approved By Commission:	Conducted By: CHIK CHARLEY	Calculated By: SUSAN GRIGUHN	Checked By: