Submit in duplicate to appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Mineral and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-122
Revised October, 1999

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

30-025-36393

Operator: SAMSON RESOURCES COMPANY						Lease or Unit Name: PHILLIPS STATE			
Type Test: [X] Initial [ ] Annual [ ] Special						Test date: 12/30/2003		Well No.: 2	
Completion Date: 12/23/2003		Total Depth: 12598		Plug Back TD: 12284		Elevation: 3668 GL		Unit Ltr.-Sec.-TWP-Rge.: 17 21S 35E	
Csg. Size: 4.500	Wt.: 13.5	d: 3.920	Set At: 12596	Perforations: From 12084	To 12247			County: LEA	
Tbg. Size: 2.375	Wt.: 4.6	d: 1.995	Set At: 12012	Perforations: From	To			Pool:	
Type Well - Single - Bradenhead - G.G or G.O Multiple: SINGLE				Packer Set At: 12012				Formation: MORROW	
Prod. Thru: TUBING	Reservoir Temp.F: 220 @ 12,166		Mean Annual Temp. F: 60			Baro, Press - Pa: 13.20		Connection: DOWNSTREAM	
L: 12166	H: 12166	Gg: 0.578	%Co2: 0	%N2: 0	%H2s ppm: 0	Prover		Meter run: X	Taps: F

	FLOW DATA				TUBING DATA		CASING DATA		
NO.	Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. F.	Press. p.s.i.g.	Temp. F.	Press. p.s.i.g.	Temp. F.	Duration Of Flow
Shut-in Pressure					2600	60			24
1	3.068 X 2.250	45	32	60	2300	60			24
2									
3									
4									
5									

RATE OF FLOW CALCULATIONS

NO.	COEFFICIENT (24 HOUR)	hwPm	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg.	Super Compress Factor, Fpv.	Rate of Flow (Q) Mcfd
1	28.78	43.16	58.20	1.0000	1.31533	1.003240	1639
2							
3							
4							
5							

NO.	Pr	Temp R	Tr	Z
1	.087	520	1.489	.9914
2				
3				
4				
5				

Pc 2613.2 Pc2 6828.8

NO.	Pw	Pw2	Pc2-Pw2
1	2332.8	5442.1	1386.7
2			
3			
4			
5			

GAS LIQUID HYDROCARBON RATIO	109	Mcf/bbl.
API GRAVITY OF LIQUID HYDROCARBONS	50	Deg.
S. G. SEPARATOR GAS	0.578	XXXXXXXXXXX
S.G. FLOWING FLUID	XXXXXXXXXXX	0.572
CRITICAL PRESSURE	672.77	672.98 P.S.I.A.
CRITICAL TEMPERATURE	349.32	347.37 R

[1] $\frac{Pc2}{Pc2-Pw2}$ 4.924379 [2] $\frac{Pc2}{Pc2-Pw2}$ 4.924379

AOF = Q * $\frac{Pc2}{Pc2-Pw2}^{n}$ 8071

Absolute Open Flow 8071 Mcfd@ 15.025 Angle of Slope 45.00 Slope n 1.00

Remarks: WELL MADE 15 BBLS CONDENSATE AND 0 BBLS WATER DURING TEST.
10/64" CHOKE

Approved by Division:	Conducted by:	Calculated by:	Checked by:
	SAMSON RESOURCES COMPANY	COMPUTER	