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

State of New Mexico
Energy, Mineral and Natural Resources

Form C-122
Revised October, 1999

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

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator: SAMSON RESOURCES COMPANY				Lease or Unit Name: LIGHTNING FEDERAL 24 #1 30-015-33001		
Type Test: [X] Initial	[ ] Annual		[ ] Special	Test date: 2/24/2005		Well No.: 1
Completion Date: 1/17/2005	Total Depth: 12075		Plug Back TD: 11970	Elevation: 3251 GL		Unit Ltr.-Sec.-TWP-Rge.: 24 25S 26E
Csg. Size: 4.500	Wt.: 11.6	d: 4.000	Set At: 12064	Perforations: From 11830 To 11882		County: EDDY
Tbg. Size: 2.375	Wt.: 4.7	d: 1.995	Set At: 11786	Perforations: From To		Pool:
Type Well - Single - Bradenhead - G.G or G.O Multiple: SINGLE				Packer Set At: NONE		Formation: MORROW
Prod. Thru: TUBING	Reservoir Temp.F: 220 @ 11,856		Mean Annual Temp. F: 60	Baro, Press - Pa: 13.20		Connection: DOWNSTREAM

L	H	Gg	%Co2	%N2	%H2s ppm	Prover	Meter run	Taps
11856	11856	0.580	0	0	0		X	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					1400	60			24
1	4.026 X 1.250	454	7	60	750	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	7.47	57.19	467.20	1.0000	1.31306	1.035323	581
2							
3							
4							
5							

NO.	Pr	Temp R	Tr	Z
1	.695	520	1.486	.9309
2				
3				
4				
5				

Pc 1413.2 Pc2 1997.1

GAS LIQUID HYDROCARBON RATIO		0	Mcf/bbl.
API GRAVITY OF LIQUID HYDROCARBONS		0	Deg.
S. G. SEPARATOR GAS	0.580	XXXXXXXXXXX	
S.G. FLOWING FLUID	XXXXXXXXXXXX	0.580	
CRITICAL PRESSURE	672.70	672.70	P.S.I.A.
CRITICAL TEMPERATURE	349.98	349.98	R

[1] Pc2 / Pc2-Pw2 = 1.424042

[2] (Pc2 / Pc2-Pw2)^n = 1.424042

NO.	Pw	Pw2	Pc2-Pw2
1	771.2	594.7	1402.4
2			
3			
4			
5			

AOF = Q * (Pc2 / Pc2-Pw2)^n = 827

Absolute Open Flow: 827 Mcfd@ 15.025	Angle of Slope: 45.00		Slope n: 1.00
Remarks:			
Approved by Division:	Conducted by: SAMSON RESOURCES COMPANY	Calculated by: COMPUTER	Checked by:

7160-3901-9842-0439-5753