

State of New Mexico
Energy, Mineral and Natural Resources

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

Form C-122
Revised October, 1999

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

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL **30-025-35200**

Operator SAMSON RESOURCES COMPANY					Lease or Unit Name LIVESTOCK 30 STATE																												
Type Test ☒ Initial ☐ Annual ☐ Special					Test date 12/5/2003		Well No. 1																										
Completion Date: 11/16/2003		Total Depth 13066		Plug Back TD 12936		Elevation:		Unit Ltr.-Sec.-TWP-Rge. P 30 21S 35E																									
Csg. Size 4.500	Wt. 13.5	d 3.920	Set At 13064	Perforations: From 12732 To 12736			County LEA																										
Tbg. Size 2.375	Wt. 4.7	d 1.995	Set At 12755	Perforations: From To			Pool																										
Type Well - Single - Bradenhead - G.G or G.O Multiple SINGLE					Packer Set At 12722		Formation MORROW																										
Prod. Thru TUBING	Reservoir Temp.F 230 @ 12,734		Mean Annual Temp. F 60		Baro, Press - Pa 13.20		Connection DOWNSTREAM																										
L 12734	H 12734	Gg 0.580	%Co2 0	%N2 0	%H2s ppm 0	Prover	Meter run X	Taps F																									
FLOW DATA					TUBING DATA		CASING DATA		Duration Of Flow																								
NO.	Prover Line Size	Orifice X Size	Press. p.s.i.g.	Diff. hw	Temp. F.	Press. p.s.i.g.	Temp. F.	Press. p.s.i.g.		Temp. F.																							
Shut-in Pressure					2600	60				24																							
1	3.068 X 2.000		60	7	60	500	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	21.32	22.64	73.20	1.0000	1.31306	1.004402	636																										
2																																	
3																																	
4																																	
5																																	
NO.	Pr	Temp R	Tr	Z	GAS LIQUID HYDROCARBON RATIO																												
1	.109	520	1.486	.9891	API GRAVITY OF LIQUID HYDROCARBONS																												
2					S. G. SEPARATOR GAS																												
3					S.G. FLOWING FLUID																												
4					CRITICAL PRESSURE																												
5					CRITICAL TEMPERATURE																												
Pc 2613.2 Pc2 6828.8					<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>0</td> <td>Mcf/bbl.</td> </tr> <tr> <td>0</td> <td>Deg.</td> </tr> <tr> <td>0.580</td> <td>XXXXXXXXXX</td> </tr> <tr> <td>XXXXXXX</td> <td>0.580</td> </tr> <tr> <td>672.70</td> <td>672.70</td> </tr> <tr> <td>349.98</td> <td>349.98</td> </tr> <tr> <td></td> <td>P.S.I.A.</td> </tr> <tr> <td></td> <td>R</td> </tr> </table>					0	Mcf/bbl.	0	Deg.	0.580	XXXXXXXXXX	XXXXXXX	0.580	672.70	672.70	349.98	349.98		P.S.I.A.		R								
0	Mcf/bbl.																																
0	Deg.																																
0.580	XXXXXXXXXX																																
XXXXXXX	0.580																																
672.70	672.70																																
349.98	349.98																																
	P.S.I.A.																																
	R																																
[1] $\frac{Pc2}{Pc2-Pw2} = 1.042680$					[2] $\frac{Pc2}{Pc2-Pw2} = 1.042680$																												
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>NO.</td> <td>Pw</td> <td>Pw2</td> <td>Pc2-Pw2</td> </tr> <tr> <td>1</td> <td>528.7</td> <td>279.5</td> <td>6549.3</td> </tr> <tr><td>2</td><td></td><td></td><td></td></tr> <tr><td>3</td><td></td><td></td><td></td></tr> <tr><td>4</td><td></td><td></td><td></td></tr> <tr><td>5</td><td></td><td></td><td></td></tr> </table>					NO.	Pw	Pw2	Pc2-Pw2	1	528.7	279.5	6549.3	2				3				4				5				$AOF = Q \cdot \frac{Pc2}{Pc2-Pw2} = 664$				
NO.	Pw	Pw2	Pc2-Pw2																														
1	528.7	279.5	6549.3																														
2																																	
3																																	
4																																	
5																																	
Absolute Open Flow 664 Mcfd@ 15.025					Angle of Slope 45.00 Slope n 1.00																												
Remarks:																																	
Approved by Division: <i>[Signature]</i>					Conducted by: SAMSON RESOURCES COMPANY																												
Calculated by: COMPUTER					Checked by: Hobbs																												

7160-3901-9842-0440-6923

