

**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**

RECEIVED

MAR 02 2005

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLS

Operator SAMSON RESOURCES COMPANY					Lease or Unit Name LOVING 1 STATE 4 30-015-33084				
Type Test ☒ Initial ☐ Annual ☐ Special					Test date 2/10/2005		Well No. 4		
Completion Date: 9/16/2004		Total Depth 12872		Plug Back TD 12460		Elevation: 3102 GL		Unit Ltr.-Sec.-TWP-Rge. J 1 24S 27E	
Csg. Size 4.500	Wt. 11.6	d 4.000	Set At 12870	Perforations: From 12236 To 12388			County EDDY		
Tbg. Size 2.375	Wt. 4.7	d 1.995	Set At 12132	Perforations: From To			Pool		
Type Well - Single - Bradenhead - G.G or G.O Multiple SINGLE					Packer Set At 12122		Formation MORROW		
Prod. Thru TUBING		Reservoir Temp. F 225 @ 12,312		Mean Annual Temp. F 60		Baro, Press - Pa 13.20		Connection DOWNSTREAM	
L 12312	H 12312	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
Prover Line 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.	
Shut-in Pressure					525	60			24
1	2.067 X 1.000	60	24	60	160	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	4.95	41.91	73.20	1.0000	1.31306	1.004402	273		
2									
3									
4									
5									

NO.	Pr	Temp R	Tr	Z
1	.109	520	1.486	.9891
2				
3				
4				
5				

Pc	538.2	Pc2	289.7
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NO.	Pw	Pw2	Pc2-Pw2
1	181.7	33.0	256.7
2			
3			
4			
5			

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

[1] $\frac{Pc2}{Pc2-Pw2} = \frac{1.128609}{1.128609}$

AOF = Q * $\frac{Pc2}{Pc2-Pw2} = \frac{309}{1.128609}$

[2] $\frac{Pc2}{Pc2-Pw2} = \frac{1.128609}{1.128609}$

Absolute Open Flow	309	Mcf/d @ 15.025	Angle of Slope	45.00	Slope n	1.00
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Remarks:

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