

**State of New Mexico
Energy, Mineral and Natural Resources**

Form C-122
Revised October, 1999

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

**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 N M FEDERAL G #1					
Type Test ☒ Initial ☐ Annual ☐ Special					Test date 8/22/2002		Well No. 1			
Completion Date: 6/17/1980		Total Depth 14250		Plug Back TD 14167		Elevation: 3676 KB		Unit Ltr.-Sec.-TWP-Rge. C 6 21S 32E		
Csg. Size 5.500	Wt. 20	d 4.778	Set At 14250	Perforations: From 13089 To 14136			County LEA			
Tbg. Size 2.375	Wt. 4.7	d 1.995	Set At 13009	Perforations: From To			Pool			
Type Well - Single - Bradenhead - G.G or G.O Multiple SINGLE-COMMINGLED					Packer Set At 13009		Formation MORROW - ATOKA			
Prod. Thru TUBING	Reservoir Temp.F 237 @ 13,613		Mean Annual Temp. F 60		Baro. Press - Pa 13.20		Connection DOWNSTREAM			
L 13613	H 13613	Gg 0.600	%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					250	60				24
1	2.067 X 1.000		45	5	60	60	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	17.06	58.20	1.0000	1.29099	1.003543	109			
2										
3										
4										
5										

NO.	Pr	Temp R	Tr	Z
1	.087	520	1.458	.9906
2				
3				
4				
5				

Pc	263.2	Pc2	69.3
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NO.	Pw	Pw2	Pc2-Pw2
1	76.8	5.9	63.4
2			
3			
4			
5			

GAS LIQUID HYDROCARBON RATIO		0	Mcf/bbl.
API GRAVITY OF LIQUID HYDROCARBONS		0	Deg.
S. G. SEPARATOR GAS		0.600	XXXXXXXXXX
S.G. FLOWING FLUID		XXXXXXXXXX	0.600
CRITICAL PRESSURE		672.00	672.00 P.S.I.A.
CRITICAL TEMPERATURE		356.60	356.60 R

[1] $\frac{Pc2}{Pc2-Pw2} = 1.093195$

[2] $\frac{Pc2}{Pc2-Pw2} = n = 1.093195$

AOF = Q * $\frac{Pc2}{Pc2-Pw2} = n = 120$

Absolute Open Flow	120	Mcfd @ 15.025	Angle of Slope	45.00	Slope n	1.00
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Remarks: **RECOMPLETION TO ATOKA FORMATION AND COMMINGLED WITH EXISTING MORROW FORMATION.**

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