

**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

Operator SAMSON RESOURCES COMPANY					Lease or Unit Name MINIS 2 FEDERAL COM				
Type Test ☒ Initial ☐ Annual ☐ Special					Test date 4/6/2003		Well No. 2		
Completion Date: 2/17/2003		Total Depth 14404		Plug Back TD 14358		Elevation:		Unit Ltr.-Sec.-TWP-Rge. D 2 21S 32E	
Csg. Size 5.500	Wt. 20	d 4.778	Set At 14402	Perforations: From 14026 To 14276			County LEA		
Tbg. Size 2.375	Wt. 4.7	d 1.995	Set At 13990	Perforations: From To			Pool		
Type Well - Single - Bradenhead - G.G or G.O Multiple SINGLE					Packer Set At 13990		Formation MORROW		
Prod. Thru TUBING	Reservoir Temp. F 245 @ 14,151		Mean Annual Temp. F 60		Baro. Press - Pa 13.20		Connection DOWNSTREAM		
L 14151	H 14151	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 X Size	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. F.	Press. p.s.i.g.	Temp. F.	Press. p.s.i.g.	
Shut-in Pressure					3700	60			24
1	3.068 X 1.750		97	31	60	1300	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	15.61	58.45	110.20	1.0000	1.31306	1.007215	1207		
2									
3									
4									
5									

NO.	Pr	Temp R	Tr	Z
1	.164	520	1.486	.9836
2				
3				
4				
5				

Pc	3713.2	Pc2	13787.9
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NO.	Pw	Pw2	Pc2-Pw2
1	1335.6	1783.9	12003.9
2			
3			
4			
5			

GAS LIQUID HYDROCARBON RATIO		603	Mcf/bbl.
API GRAVITY OF LIQUID HYDROCARBONS		40	Deg.
S. G. SEPARATOR GAS	0.580	XXXXXXXXXX	
S.G. FLOWING FLUID	XXXXXXXXXX	0.579	
CRITICAL PRESSURE	672.70	672.74	P.S.I.A.
CRITICAL TEMPERATURE	349.98	349.62	R

[1] Pc2 **1.148611**

Pc2-Pw2

[2] Pc2 **1.148611**

Pc2-Pw2

AOF = Q * $\frac{Pc2}{Pc2-Pw2}$ ⁿ

1386

Absolute Open Flow	1386	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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