

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

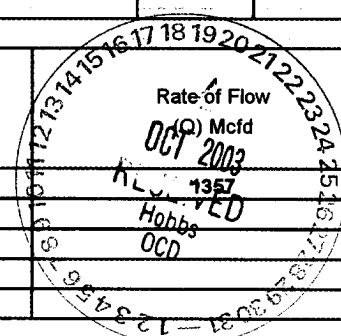
Submit in duplicate to
appropriate district office
See Rule 401 & Rule 1122

Form C-122
Revised October, 1999

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

30-025-36218

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator SAMSON RESOURCES COMPANY					Lease or Unit Name NEW MEXICO FEDERAL C				
Type Test ☒ Initial ☐ Annual ☐ Special					Test date 8/13/2003		Well No. 2		
Completion Date: 6/14/2003		Total Depth 14200		Plug Back TD 13850		Elevation: 3695' GL		Unit Ltr.-Sec.-TWP-Rge. I 4 21S 32E	
Csg. Size 5.500	Wt. 20	d 4.778	Set At 14195	Perforations: From 13574 To 13804			County LEA		
Tbg. Size 2.375	Wt. 4.7	d 1.995	Set At 13562	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 245 @ 13,689		Mean Annual Temp. F 60		Baro, Press - Pa 13.20		Connection DOWNSTREAM	
L 13689	H 13689	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 NO. Size	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					2100	60			24
1	3.068 X 2.250	45	22	60	1800	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.			
1	28.78	35.78	58.20	1.0000	1.31306	1.003268			
2									
3									
4									
5									
NO.	Pr	Temp R	Tr	Z	GAS LIQUID HYDROCARBON RATIO API GRAVITY OF LIQUID HYDROCARBONS S. G. SEPARATOR GAS 0.580 XXXXXXXXXX S.G. FLOWING FLUID XXXXXXXXXX 0.575 CRITICAL PRESSURE 672.70 672.88 P.S.I.A. CRITICAL TEMPERATURE 349.98 348.25 R				
1	.087	520	1.486	.9913					
2									
3									
4									
Pc 2113.2 Pc2 4465.6					[1] Pc2 4.036038 [2] Pc2 n 4.036038 Pc2-Pw2 Pc2-Pw2				
NO.	Pw	Pw2	Pc2-Pw2	AOF = Q * Pc2 / (Pc2-Pw2)^n 5476					
1	1832.8	3359.2	1106.4						
2									
3									
4									
Absolute Open Flow 5476 Mcfd@ 15.025 Angle of Slope 45.00 Slope n 1.00				Remarks: WELL PRODUCED 11 BBLs OF CONDENSATE AND 131 BBLs WATER DURING TEST.					
Approved by Division:				Conducted by: SAMSON RESOURCES COMPANY		Calculated by: COMPUTER		Checked by:	

7160-3901-9842-0440-6855