

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

30-025-36505

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator SAMSON RESOURCES COMPANY					Lease or Unit Name PUBCO FEDERAL				
Type Test ☒ Initial ☐ Annual ☐ Special					Test date 4/7/2004		Well No. 2		
Completion Date: 4/2/2004		Total Depth 14385		Plug Back TD 14242		Elevation: 3708 GL		Unit Ltr.-Sec.-TWP-Rge. 2 21S 32E	
Csg. Size 5.500	Wt. 20	d 4.778	Set At 14385	Perforations: From 13815 To 13877			County LEA		
Tbg. Size 2.375	Wt. 4.7	d 1.995	Set At 13764	Perforations: From To			Pool		
Type Well - Single - Bradenhead - G.G or G.O Multiple SINGLE					Packer Set At 10909		Formation MORROW		
Prod. Thru TUBING		Reservoir Temp.F 245 @ 13,846		Mean Annual Temp. F 60		Baro, Press - Pa 13.20		Connection DOWNSTREAM	
L 13846	H 13846	Gg 0.579	%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					4100	60			24
1	3.068 X 2.000	77	55	60	3600	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	70.43	90.20	1.0000	1.31420	1.005668	1984
2							
3							
4							
5							

NO.	Pr	Temp R	Tr	Z	
1	.134	520	1.487	.9866	
2					
3					
4					
5					

Pc 4113.2	Pc2 16918.4	
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NO.	Pw	Pw2	Pc2-Pw2	
1	3638.7	13240.5	3677.9	
2				
3				
4				
5				

GAS LIQUID HYDROCARBON RATIO		23	Mcf/bbl.
API GRAVITY OF LIQUID HYDROCARBONS		46	Deg.
S. G. SEPARATOR GAS	0.579	XXXXXXXXXX	
S.G. FLOWING FLUID	XXXXXXXXXX	0.706	
CRITICAL PRESSURE	672.74	668.29	P.S.I.A.
CRITICAL TEMPERATURE	349.65	391.73	R

[1] $\frac{Pc2}{Pc2-Pw2} = \frac{4.599971}{4.599971}$

[2] $\frac{Pc2}{Pc2-Pw2} = \frac{n}{4.599971}$

AOF = Q * $\frac{Pc2}{Pc2-Pw2} = \frac{n}{9128}$

Absolute Open Flow	9128	Mcfd@ 15.025	Angle of Slope	45.00	Slope n	1.00
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Remarks: **WELL MADE 88 BBLS CONDENSATE AND 0 BBLS WATER DURING TEST.**
8/64" CHOKE

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