

**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**

30-025-37453

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator SAMSON RESOURCES COMPANY					Lease or Unit Name EAGLE 2 STATE				
Type Test ☒ Initial ☐ Annual ☐ Special					Test date 2/1/2006		Well No. 1		
Completion Date: 1/13/2006		Total Depth 13650		Plug Back TD 13650		Elevation: 3667 GL		Unit Ltr.-Sec.-TWP-Rge. O 2 20S 34E	
Csg. Size 5.500	Wt. 20	d 4.778	Set At 13650	Perforations: From 13270 To 13476			County LEA		
Tbg. Size 2.375	Wt. 4.7	d 1.995	Set At 13224	Perforations: From To			Pool		
Type Well - Single - Bradenhead - G.G or G.O Multiple SINGLE					Packer Set At 13214		Formation MORROW		
Prod. Thru TUBING		Reservoir Temp.F 240 @ 13,373		Mean Annual Temp. F 60		Baro, Press - Pa 13.20		Connection DOWNSTREAM	
L 13373	H 13373	Gg 0.650	%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									
1	3.068 X 1.500		120	36	60	3700	60		
2						950	60		
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	11.13	69.25	133.20	1.0000	1.24035	1.011804	967.3
2							
3							
4							
5							

NO.	Pr	Temp R	Tr	Z
1	.199	520	1.394	.974
2				
3				
4				
5				

Pc	3713.2	Pc2	13787.9
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NO.	Pw	Pw2	Pc2-Pw2
1	983.8	967.8	12820.0
2			
3			
4			
5			

GAS LIQUID HYDROCARBON RATIO		24	Mcf/bbl.
API GRAVITY OF LIQUID HYDROCARBONS		50	Deg.
S. G. SEPARATOR GAS	0.650	XXXXXXXXXX	
S.G. FLOWING FLUID	XXXXXXXXXXXX	0.763	
CRITICAL PRESSURE	670.25	666.31	P.S.I.A.
CRITICAL TEMPERATURE	373.15	410.43	R

[1] $\frac{Pc2}{Pc2-Pw2} = 1.075494$

[2] $\frac{Pc2}{Pc2-Pw2} = n = 1.075494$

AOF = Q * $\frac{Pc2}{Pc2-Pw2} = n = 1040$

24 Mcf/bbl.

50 Deg.

0.650

XXXXXXXXXXXX

0.763

670.25

666.31

373.15

410.43

P.S.I.A.

R

Absolute Open Flow	1040	Mcf@ 15.025	Angle of Slope	45.00	Slope n	1.00
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Remarks: WELL MADE 40 BBLS OIL AND 0 WATER.

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