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appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Mineral and Natural Resources

Form C-122
Revised October, 1999

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

30-025-36905

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator SAMSON RESOURCES COMPANY					Lease or Unit Name LEA FEDERAL UNIT				
Type Test ☒ Initial ☐ Annual ☐ Special					Test date 5/9/2005		Well No. 19		
Completion Date: 5/5/2005		Total Depth 13295		Plug Back TD 13295		Elevation: 3669 GL		Unit Ltr.-Sec.-TWP-Rge. P 12 20S 34E	
Csg. Size 5.500	Wt. 20	d 4.778	Set At 13295	Perforations: From 12807 To 13161			County LEA		
Tbg. Size 2.375	Wt. 4.7	d 1.995	Set At 12766	Perforations: From To			Pool LEA PENN		
Type Well - Single - Bradenhead - G.G or G.O Multiple SINGLE					Packer Set At		Formation MORROW		
Prod. Thru TUBING		Reservoir Temp.F 245 @ 12,984		Mean Annual Temp. F 60		Baro, Press - Pa 13.20		Connection DOWNSTREAM	
L 12984	H 12984	Gg 0.578	%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					3800		60		24
1	3.068 X 1.000	377	8	86	400	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	4.79	55.87	390.20	0.9759	1.31533	1.023618	352		
2									
3									
4									
5									

NO.	Pr	Temp R	Tr	Z
1	.58	546	1.563	.9523
2				
3				
4				
5				

GAS LIQUID HYDROCARBON RATIO

API GRAVITY OF LIQUID HYDROCARBONS

S. G. SEPARATOR GAS **0.578**

S.G. FLOWING FLUID **0.721**

CRITICAL PRESSURE **672.77**

CRITICAL TEMPERATURE **349.32**

Pc **3813.2** Pc2 **14540.5**

NO.	Pw	Pw2	Pc2-Pw2
1	420.2	176.6	14363.9
2			
3			
4			
5			

[1] $\frac{Pc2}{Pc2-Pw2} = 1.012295$

[2] $\frac{Pc2}{Pc2-Pw2} = 1.012295$

AOF = Q * $\frac{Pc2}{Pc2-Pw2} = 356$

Absolute Open Flow **356** Mcfd @ **15.025**

Remarks: **WELL MADE 18.3 BBLs CONDENSATE AND 20 BBLs WATER DURING TEST. 64/64" CHOKE**

Angle of Slope **45.00** Slope n **1.00**

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