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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

30.025.36747

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator SAMSON RESOURCES COMPANY					Lease or Unit Name GUNSLINGER 11 FED COM #1																																		
Type Test ☒ Initial ☐ Annual ☐ Special					Test date 2/27/2005		Well No. 1																																
Completion Date: 2/10/2005		Total Depth 13850		Plug Back TD 13760		Elevation: 3576 GL		Unit Ltr.-Sec.-TWP-Rge. 11 20S 33E																															
Csg. Size. 5.500	Wt. 20	d 4.778	Set At 13848	Perforations: From 13600 To 13635			County LEA																																
Tbg. Size 2.375	Wt. 4.7	d 1.995	Set At 13636	Perforations: From To			Pool																																
Type Well - Single - Bradenhead - G.G or G.O Multiple SINGLE					Packer Set At 13569		Formation MORROW																																
Prod. Thru TUBING		Reservoir Temp.F 240 @ 13,618		Mean Annual Temp. F 60		Baro, Press - Pa 13.20		Connection DOWNSTREAM																															
L 13618	H 13618	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 Orifice Line X		Press. p.s.i.g.	Diff. hw	Temp. F.	Press. p.s.i.g.	Temp. F.	Press. p.s.i.g.	Temp. F.																															
NO.	Size																																						
Shut-in Pressure																																							
1	3.068 X 1.250	336	46	60	1800	60			24																														
2					590	60			24																														
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	7.58	126.74	349.20	1.0000	1.31533	1.025626	1296																																
2																																							
3																																							
4																																							
5																																							
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>NO.</td> <td>Pr</td> <td>Temp R</td> <td>Tr</td> <td>Z</td> </tr> <tr> <td>1</td> <td>.519</td> <td>520</td> <td>1.489</td> <td>.9486</td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>										NO.	Pr	Temp R	Tr	Z	1	.519	520	1.489	.9486	2					3					4					5				
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1	.519	520	1.489	.9486																																			
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GAS LIQUID HYDROCARBON RATIO API GRAVITY OF LIQUID HYDROCARBONS S. G. SEPARATOR GAS S.G. FLOWING FLUID CRITICAL PRESSURE CRITICAL TEMPERATURE					<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>0.578</td> <td>XXXXXXX</td> <td>0.756</td> </tr> <tr> <td>672.77</td> <td>XXXXXX</td> <td>668.55</td> </tr> <tr> <td>349.32</td> <td>XXXXXX</td> <td>408.71</td> </tr> </table>					0.578	XXXXXXX	0.756	672.77	XXXXXX	668.55	349.32	XXXXXX	408.71																					
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349.32	XXXXXX	408.71																																					
Pc 1813.2 Pc2 3287.7					[1] Pc2 1.155654 Pc2-Pw2																																		
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>NO.</td> <td>Pw</td> <td>Pw2</td> <td>Pc2-Pw2</td> </tr> <tr> <td>1</td> <td>665.4</td> <td>442.8</td> <td>2844.9</td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td></td> <td></td> <td></td> </tr> </table>					NO.	Pw	Pw2	Pc2-Pw2	1	665.4	442.8	2844.9	2				3				4				5				[2] Pc2 1.155654 Pc2-Pw2										
NO.	Pw	Pw2	Pc2-Pw2																																				
1	665.4	442.8	2844.9																																				
2																																							
3																																							
4																																							
5																																							
AOF = Q * $\frac{Pc2}{Pc2-Pw2}$ n 1497																																							
Absolute Open Flow		1497		Mcf/d @ 15.025		Angle of Slope		45.00																															
Slope n		1.00		Remarks:																																			
Approved by Division:					Conducted by:																																		
					SAMSON RESOURCES COMPANY																																		
Calculated by:					Checked by:																																		
COMPUTER																																							

7160-3901-9842-0439-5746

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**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 MAVERICK 14 FEDERAL COM #1				
Type Test ☒ Initial ☐ Annual ☐ Special					Test date 4/3/2005		Well No. 1		
Completion Date: 3/10/2005		Total Depth 13927		Plug Back TD 13415		Elevation: 3597 GL		Unit Ltr.-Sec.-TWP-Rge. 14 20S 33E	
Csg. Size 5.500	Wt. 20	d 4.778	Set At 13927	Perforations: From 13304 To 13395			County LEA		
Tbg. Size 2.375	Wt. 4.7	d 1.995	Set At 13332	Perforations: From To			Pool		
Type Well - Single - Bradenhead - G.G or G.O Multiple SINGLE					Packer Set At 13332		Formation MORROW		
Prod. Thru TUBING		Reservoir Temp.F 235 @ 13,350		Mean Annual Temp. F 60		Baro. Press - Pa 13.20		Connection DOWNSTREAM	
L 13350	H 13350	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					1300	60			24
1	4.026 X 1.000	300	3	60	360	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	4.75	30.65	313.20	1.0000	1.31533	1.022796	196		
2									
3									
4									
5									

NO.	Pr	Temp R	Tr	Z
1	.466	520	1.489	.9538
2				
3				
4				
5				

Pc	1313.2	Pc2	1724.5
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NO.	Pw	Pw2	Pc2-Pw2
1	375.4	140.9	1583.6
2			
3			
4			
5			

GAS LIQUID HYDROCARBON RATIO		0	Mcf/bbl.
API GRAVITY OF LIQUID HYDROCARBONS		0	Deg.
S. G. SEPARATOR GAS		0.578	
S.G. FLOWING FLUID		XXXXXXX	
CRITICAL PRESSURE		672.77	P.S.I.A.
CRITICAL TEMPERATURE		349.32	R

[1] $\frac{Pc2}{Pc2-Pw2} = \frac{1.088975}{1.088975}$

[2] $\frac{Pc2}{Pc2-Pw2} = \frac{1.088975}{1.088975}$

AOF = Q * $\frac{Pc2}{Pc2-Pw2} = \frac{213}{1.088975}$

Absolute Open Flow	213	Mcf/d @ 15.025	Angle of Slope	45.00	Slope n	1.00
Remarks:						

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