

122 file
file

Type Test ☐ Initial ☒ Annual ☐ Special		Date 7-19-77		RECEIVED JUL 26 1977 O.C.C. ARTESIA OFFICE Hondo State							
Company Mountain State Petro. Corp. Phillips Petro		Well Name Buffalo Valley Atoka									
Completion Date 2-14-77		Total Depth 8571		Elevation 3470.5 ft							
Csg. Size 1 1/2	Wt. 9.5#	d 4.000	Set At 8/06	Perforations From 8750 To 8751							
Tbg. Size 2-3/8	Wt. 4.7	d 1.005	Set At 8736	Perforations From Open Ended To							
Type Well - Single - Unidenhead - G.G. or G.O. Multiple Single				Packer Set At 8106							
Producing Thru Tubing		Reservoir Temp. °F 176.8 8350		Mean Annual Temp. °F 60							
L 8250		H 8250		Baro. Press. - P _g 14.65							
Gg 0.656		% CO ₂ 2.00		% N ₂ 1.15							
Prover 4"		Meter Run 4"		Taps Flange							
FLOW DATA											
NO.	Prover Line Size	X	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	Duration of Flow
SI							1950.0				
1.	4" x 0.750"			8.80	2.90	84	1697.0	89			4/64" 60 Min.
2.	4" x 0.750"			8.80	3.90	84	1560.0	88			6/64" 60 Min.
3.	4" x 0.750"			8.80	5.50	81	1347.0	89			8/64" 60 Min.
4.	4" x 0.750"			8.80	7.00	84	1275.0	90			10/64" 60 MIN.
5.											
RATE OF FLOW CALCULATIONS											
NO.	Coefficient (24 Hour)	$\sqrt{h_d P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super. Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd				
1.	2.662	2.236	774.4	.9777	1.235	1.066	195.5				
2.	2.662	2.236	774.4	.9777	1.235	1.066	262.9				
3.	2.662	2.236	774.4	.9804	1.235	1.068	372.5				
4.	2.662	2.236	774.4	.9777	1.235	1.066	471.9				
5.											
NO.	P _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.						
					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.						
1.	1.15	514	1.47	.880	Specific Gravity Separator Gas 0.656 X X X X X X X X						
2.	1.15	514	1.47	.880	Specific Gravity Flowing Fluid X X X X X						
3.	1.15	514	1.46	.877	Critical Pressure 675 P.S.I.A. P.S.I.A.						
4.	1.15	514	1.47	.880	Critical Temperature 371 R R						
5.											
P _f 2445.7 P _s 5981					$(1) \frac{P_f^2}{P_f^2 - P_s^2} = 1.592$ $(2) \left[\frac{P_f^2}{P_f^2 - P_s^2} \right]^n = 1.426$						
NO.	P _f	P _s	P _f ²	P _s ²							
1		2256.7	5093	888							
2		2068.7	4279	1792							
3		1819.7	3311	2520							
4		1496.7	2240	3741							
5											
Absolute Open Flow 672.9					Mold 7 15.025		Angle of Slope 49.1				
Remarks: L-10 50"-100# Meter Range											
Bottom Hole Pressure Measured With Amerada Gauge At 8350'											
Approved By Commission:		Conducted By:		Calculated By:		Checked By:					
		M.C.T.		J.T.W.		J.M.W.					