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C-122

Type Test ☐ Initial ☐ Annual ☒ Special		Test Date 11-24-75		DEC 8 1975							
Company Read & Stevens, Inc.		Connection Transwestern Pipe Line Co.		O. C. C.							
Pool Buffalo Valley		Formation Atoka-Penn.		Unit ARTESIA, OFFICE							
Completion Date 8-28-74 1-18-75		Total Depth 8,891'		Plug Back TD 8,891'							
Elevation 3630 RDB		Form or Lease Name Rose									
Csg. Size 5 1/2"	Wt. 17#	d 4.892"	Set At 8,891'	Perforations: From 8,626' To 8,707'							
Well No. 1											
Tub. Size 2 3/8"	Wt. 4.7#	d 1.995"	Set At 8,617'	Perforations: Open-Ended							
Unit J	Sec. 13	Twp. T15S	Rnge. R27E								
Type Well - Single - Broadhead - G.C. or G.O. Multiple Single			Packer Set At 8,617'		County Chaves						
Producing Thru Tubing		Reservoir Temp. °F 160 @ 8,666'		Mean Annual Temp. °F 60							
Baro. Press. - P _g 13.2		State New Mexico									
L 8626	H 8626	Gg 0.625	% CO ₂ -----	% N ₂ -----	% H ₂ S -----						
Prover -----		Meter Run 2" x 0.750		Taps Flange							
FLOW DATA											
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
51							1901.0		Packer	Choke	24 Hrs.
1.	2"	x	0.750"	820.0	9.0	108	1609.0	58		4/64	60 Min
2.	2"	x	0.750"	830.0	18.0	96	1357.0	59		6/64	60 Min
3.	2"	x	0.750"	830.0	36.0	89	1101.0	58		8/64	60 Min
4.	2"	x	0.750"	830.0	42.0	86	907.0	59		12/64	60 Min
5.											
RATE OF FLOW CALCULATIONS											
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd				
1	2.709	86.60	833.2	.9568	1.265	1.056	300				
2	2.709	123.20	843.2	.9671	1.265	1.064	434				
3	2.709	174.23	843.2	.9732	1.265	1.067	620				
4	2.709	188.19	843.2	.9759	1.265	1.067	672				
5											
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 42.208 Mcf/bbl.						
1	1.24	568	1.56	.896	A.P.I. Gravity of Liquid Hydrocarbons 63.0 Deg.						
2	1.26	556	1.52	.884	Specific Gravity Separator Gas 0.625 X X X X X X X X						
3	1.26	549	1.50	.879	Specific Gravity Flowing Fluid X X X X X						
4	1.26	546	1.50	.879	Critical Pressure 671 P.S.I.A. P.S.I.A.						
5					Critical Temperature 365 R R						
F _r 1914.2 P _s ² 3664.2					(1) $\frac{P_r^2}{P_s^2 - P_r^2} = 1.307$ (2) $\left[\frac{P_r^2}{P_s^2 - P_r^2} \right]^n = 1.237$						
NO.	F _r ²	P _s	F _s ²	F _r ² - P _s ²	(1) $\frac{P_r^2}{P_s^2 - P_r^2} = 1.307$ (2) $\left[\frac{P_r^2}{P_s^2 - P_r^2} \right]^n = 1.237$						
1	2632.0		2633.8	1030.4							
2	1877.0		1882.4	1781.8							
3	1241.0		1252.1	2412.1							
4	846.8		860.0	2804.2							
5											
Absolute Open Flow 831 Mcfd @ 15.025					Angle of Slope @ 51.6°					Slope, n 0.794	
Remarks: Friction Calculated											
Average slope was drawn through points which do not line up.											
Approved By Commission:			Conducted By: G.J.P.			Calculated By: R.L.W.			Checked By: J.W.W.		