

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 3-10-78	
Company Harvey E. Yates Company				Connection El Paso Natural Gas			
Pool Wildcat				Formation Morrow			
Completion Date 2-18-78		Total Depth 11210		Plug Back TD 11161		Elevation 3589KB	
Csg. Size 5 1/2		Wt. 17		Set At 4.892		Perforations: From 10901 To 10914	
Tbg. Size 2 3/8		Wt. 4.7		Set At 1.995		Perforations: From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 10853	
Producing Thru Tubing		Reservoir Temp. °F 164 @ 10808		Mean Annual Temp. °F 70		Baro. Press. - P _a 13.2	
L 10908		H 10908		Gg 0.639		% CO ₂ 0.66	
				% N ₂ 0.62		% H ₂ S None	
				Prover X		Meter Run Flange	
						Taps Flange	
FLOW DATA							
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Duration of Flow
SI	63 1/2 hrs.		L-10	L-10			
1.	4.026 X 1.250		8.4	3.3	86	2446	1 hr.
2.	4.026 X 1.250		8.45	4.1	78	2300	1 hr.
3.	4.026 X 1.250		8.5	6.5	86	1916	1 hr.
4.	4.026 X 1.250		8.55	8.9	90	1403	1 hr.
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
		L-10 3.162					
1	7.469	8.4 X 3.3	705.6	0.9759	1.251	1.060	847.2
2	7.469	8.45 X 4.1	714.0	0.9831	1.251	1.064	1070.7
3	7.469	8.5 X 6.5	722.5	0.9759	1.251	1.059	1687.0
4	7.469	8.55 X 8.9	731.0	0.9723	1.251	1.061	2319.3
5							
NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio 53.7 Mcf/bbl.		
1	1.05	546	1.47	0.890	A.P.I. Gravity of Liquid Hydrocarbons 49.8°		
2	1.07	538	1.45	0.883	Specific Gravity Separator Gas 0.639		
3	1.08	546	1.47	0.891	Specific Gravity Flowing Fluid X X X X X		
4	1.09	550	1.48	0.888	Critical Pressure 670 P.S.I.A.		
5					Critical Temperature 372 R		
P _c 3999.2 P _c ² 15994					(1) $\frac{P_c^2}{P_c^2 - R_w^2} = 1.3778428$		
NO.	P _t ²	P _w	P _w ²	P _c ² - R _w ²	(2) $\left[\frac{P_c^2}{P_c^2 - R_w^2} \right]^n = 1.3778428$		
1		3444.2	11863	4131	AOI = Q $\left[\frac{P_c^2}{P_c^2 - R_w^2} \right]^n = 3195.6$		
2		3263.2	10648	5346			
3		2741.2	7514	8480			
4		2094.2	4386	11608			
5							
Absolute Open Flow 3195.6 Mcfd @ 15.025					Angle of Slope @ 45°		Slope, n 1.000
Remarks: BHP measured with Amerada RPG-3 gauge serial number 12468, 0-6000 psi							
Approved By Commission:		Conducted By: Tefteller, Inc.		Calculated By: F. Tefteller		Checked By:	