

MAR 21 1977

Type Test ☒ Initial ☐ Special						Test Date 1-28-77	
Company Yates Petroleum Corp. <i>ARTESIA, OFFICE</i>						Transwestern Pipeline Company	
Pool <i>Eagle Creek atoka-moran</i> Undesignated						Formation Morrow	
Completion Date 11-3-76		Total Depth 8383' KB		Plug Back TD 8340' KB		Elevation 3483' KB	
Csg. Size 4 1/2"		Wt. 11.6		Set At 8377' KB		Perforations: From 8120 To 8278' KB	
Thq. Size 2-3/8"		Wt. 4.7		Set At 8160'		Perforations: From To	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single						Packer Set At 8049' KB	
Producing Thru Tubing		Reservoir Temp. °F 142		Mean Annual Temp. °F 62		Baro. Press. - P _a 13.2	
L 8186		H 8186		G _g 0.656		% CO ₂ 1.19	
				% N ₂ 0.70		% H ₂ S Nil	
				Prover 2"		Meter Run Flange	
FLOW DATA						TUBING DATA	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Duration of Flow
SI							Months
1.	2.067	X	0.875	218	38	69	1 hr.
2.				220	58	69	1 hr.
3.				223	83	68	1 hr.
4.				225	98	68	1 hr.
5.							
RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	3.729	93.73	231.2	.9915	1.257	1.021	445
2	3.729	116.30	233.2	.9915	1.257	1.021	552
3	3.729	140.02	236.2	.9915	1.257	1.021	664
4	3.729	152.79	238.2	.9915	1.257	1.021	725
5							
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 131.25 Mcf/bbl.		
1	.342	529	1.445	.960	A.P.I. Gravity of Liquid Hydrocarbons 55.6 Deg.		
2	.345	529	1.445	.960	Specific Gravity Separator Gas .633 X X X X X X X X		
3	.349	529	1.445	.959	Specific Gravity Flowing Fluid X X X X X 0.656		
4	.352	529	1.445	.959	Critical Pressure 676 P.S.I.A. 674 P.S.I.A.		
5					Critical Temperature 366 R 374 R		
P _c 3183.8 P _c ² 10137					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 5.6099$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.7336$		
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2706$		
1			9188	949			
2			8901	1236			
3			8518	1619			
4			8332	1807			
5							
Absolute Open Flow 2734 Mcfd @ 15.025					Angle of Slope 52.35 deg.		Slope, n 0.7639
Remarks: Pressures by DWT, comparable with previous BHP by Bennett Wireline. Calculation work sheet C-122D attached hereto.							
Approved By Commission:		Conducted By: Don Weaver		Calculated By: Eddie Mahfood		Checked By:	