

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 7-16-79		SEP 19 1979	
Company Yates Petroleum Corp.		Connection Transwestern Pipeline		Unit O.C.C.	
Pool Boyd Morrow		Formation Morrow		Farm or Lease Name Irish Hills "JE" State	
Completion Date 1-19-79		Total Depth 9093' KB		Well No. 1	
Csg. Size 4-1/2"		Set At 9093' KB		Perforations: From 8931 To 8942' KB	
Tbg. Size 2-3/8"		Set At 8900' KB		Perforations: From To	
Type Well - Single - Brdenhead - G.G. or G.O. Multiple Single		Packer Set At 8900' KB		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 151 @ 8937		State New Mexico	
Mean Annual Temp. °F 62		Baro. Press. - P _a 13.2		Meter Run 2"	
L 8930		H 8930		G _g .590	
% CO ₂ 0.67		% N ₂ 0.47		% H ₂ S Nil	
Prover 8930		Meter Run 2"		Taps Flange	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
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
SI							2708	94			Days
1.	2.067 x 1.125			189	18	74	2569	95			1 hour
2.				189	34	74	2515	95			1 hour
3.				190	63	74	2441	96			1 hour
4.				190	93	75	2385	96			1 hour
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	6.393	60.33	202.2	.9868	1.302	1.0159	503
2	6.393	82.91	202.2	.9868	1.302	1.0159	692
3	6.393	113.14	203.2	.9868	1.302	1.0159	944
4	6.393	135.23	203.2	.9859	1.302	1.0159	1127
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	0.30	534	1.520	.969	Dry		0.590	X X X X X X X X	674	352
2	0.30	534	1.520	.969						
3	0.30	534	1.520	.969						
4	0.30	535	1.520	.969						
5										

NO.	P _t ²	P _w	R _w ²	P _c ² - R _w ²
1			10098	1079
2			9697	1480
3			9165	2012
4			8768	2409
5				

(1) $\frac{P_c^2}{P_c^2 - R_w^2} = 4.6397$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - R_w^2} \right]^n = 5104$

(2) $\left[\frac{P_c^2}{P_c^2 - R_w^2} \right]^n = 4.529$

Absolute Open Flow	5104	Mcfd @ 15.025	Angle of Slope @ 45.45 deg	Slope, n .98426
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Remarks: Static pressures by Bennett Wireline; Flowing pressures by DWT.
Calculations worksheet C-122D attached.

Approved By Commission:	Conducted By: David Weaver	Calculated By: Eddie Mahfood	Checked By:
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