

NEW MEXICO OIL CONSERVATION COMMISSION
MILERO LAND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

JUL 19 1977

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 5-23-77	
Company Yates Petroleum Corp.				Connection El Paso Natural Pipeline Co.	
Pool <i>Bot Canyon Upper Perm</i> Wildcat Cisco Perm				Formation Cisco Canyon	
Completion Date 2-1-77		Total Depth 8448' KB		Plug Back TD 6460' KB	
				Elevation 4571' KB	
Csq. Size 5 1/2"				Well No. 1	
Wt. 15.5#		Set At 4.950		Perforations: From 6080' To 6090' KB	
Thq. Size 2-3/8"		Set At 1.995		Perforations: From 6024' To 6026' KB	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 6023' KB	
Producing Thru tubing		Reservoir Temp. °F 117@ 6020'		Mean Annual Temp. °F 62	
				Baro. Press. - P _a 13.2	
L 6073'		H 6073'		State New Mexico	
Gg		% CO ₂ 0.22		% N ₂ 1.36	
				% H ₂ S Nil	
				Prover 4"	
				Meter Run Flange	
FLOW DATA					
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w
SI					
1.	4.026	X	0.750	602	10
2.				604	21
3.				606	38
4.				608	68
5.					
TUBING DATA					
				Press. p.s.i.g.	Temp. °F
				1614	67
				1333	70
				1244	72
				1140	73
				1011	74
CASING DATA					
				Press. p.s.i.g.	Temp. °F
RATE OF FLOW CALCULATIONS					
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g
1	2.661	78.43	615.2	.9813	1.263
2	2.661	113.85	617.2	.9813	1.263
3	2.661	153.39	619.2	.9813	1.263
4	2.661	205.53	621.2	.9813	1.263
5					
Super Compress. Factor, F _{pv}					
					1.0503
					1.0506
					1.0509
					1.0512
Rate of Flow Q, Mcfd					
					272
					394
					532
					713
Gas Liquid Hydrocarbon Ratio 520.8 Mcf/bbl.					
A.P.I. Gravity of Liquid Hydrocarbons 53.4 Deg.					
Specific Gravity Separator Gas 0.627					
Specific Gravity Flowing Fluid 0.633					
Critical Pressure 670 P.S.I.A.					
Critical Temperature 363 °R					
P _c 1951.2 P _c ² 3807					
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	
1			2496	1311	
2			2171	1636	
3			1824	1983	
4			1438	2369	
5					
(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.607$					
(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.607$					
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1146$ MCFPD					
Absolute Open Flow 1146 Mcfd @ 15.025					
Angle of Slope θ 45°					
Slope, n 1.000					
Remarks: Static Pressures by Bennett Wireline, flow pressures by DWT. Calculations worksheet attached.					
Approved By Commission:		Conducted By:		Calculated By:	
		Don Weaver		Eddie Mahfood	
				Checked By:	