

NE-MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT / ONE POINT BACK PRESSURE TEST OR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 2-16-79		APR - 4 1979	
Company Yates Petroleum Corp. ✓		Connection Transwestern Pipeline Co.			
Pool N. Cemetary Atoka		Formation Atoka		Unit O. C. C. ARTESIA, OFFICE	
Completion Date 2-9-78		Total Depth 9460' KB		Plug Back TD 9110' KB	
				Elevation 3502' KB	
Csg. Size 5-1/2"		Wt. 17#		Set At 4.892	
Thg. Size 2-3/8"		Wt. 4.6#		Set At 8835'	
Perforations: From 8860 To 8956' KB		Perforations: From To		Well No. 1	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single		Packer Set At 8835'		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 150 @ 8908		Mean Annual Temp. °F 62°	
				Baro. Press. - P _a 13.2	
L 8890		H 8890		G _g 0.594	
				% CO ₂ 0.49	
				% N ₂ 1.19	
				% H ₂ S Nil	
				Prover 2"	
				Meter Run 2"	
				Taps Flange	
State New Mexico					

FLOW DATA					TUBING DATA		CASING DATA		Duration of Flow Days
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	
1	2.067 x 0.500			300	19	55	2490	72	1 hour
2				300	36	55	2311	74	1 hour
3				300	65	55	2045	76	1 hour
4				300	95	55	1823	78	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 F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	1.189	77.14	313.2	1.005	1.298	1.027	123
2	1.189	106.18	313.2	1.005	1.298	1.027	169
3	1.189	142.68	313.2	1.005	1.298	1.027	227
4	1.189	172.49	313.2	1.005	1.298	1.027	275
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio Mcf/bbl.	A.P.I. Gravity of Liquid Hydrocarbons Deg.	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure P.S.I.A.	Critical Temperature °R
1	0.466	515	1.465	.948			.594	XXXXXX	672	351.5
2	0.466	515	1.465	.948				XXXXX		
3	0.466	515	1.465	.948						
4	0.466	515	1.465	.948						
5										

NO.	P _t	P _w	P _r	P _c	P _c ² - P _w ²
1			9511	3207	
2			8218	4500	
3			6427	6287	
4			5102	7616	
5					

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.6699$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 442$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.6061$

Absolute Open Flow	442 Mcfd @ 15.025	Angle of Slope °	47.5 deg	Slope, n	0.9240
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Remarks: Static pressures by Bennett Wireline, flowing pressures by DWT.
Calculations worksheet C-122D attached.

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