

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 10-22-80		DEC 31 1980	
Company Yates Petroleum Corp.				Connection Transwestern Pipeline Co.		C. C. D.	
Pool Winchester Morrow				Formation Morrow		Unit ARTESIA, CERRILLO	
Completion Date 5-6-80		Total Depth 11663KB		Plug Back TD 11350 KB		Elevation 3299	
Form or Lease Name Antongiovanni MJ Fed				Well No. 1			
Cs. Size 5 1/2"	Wt. 17#	d 4.892	Set At 11552 KB	Perforations: From 11174 To 11180 KB		Unit 1	
Thg. Size 2 7/8"	Wt. 6.5#	d 2.441	Set At 1192 KB	Perforations: From 11145 To 11148 KB		Unit Sec. Twp. Rge. 0 1 20s 28e	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 11142 KB		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 168 11177		Mean Annual Temp. °F 62		Baro. Press. - P _a 13.2	
State New Mexico							
L 11167	H 11167	G _g 0.623	% CO ₂ 0.76	% N ₂ 0.36	% H ₂ S Nil	Prover --	Meter Run 4
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							3175	62			weeks
1.	4.026 x 1.125			280	11	71	2416	67			3 hrs.
2.	4.026 x 1.125			280	21	70	2105	71			4 hrs.
3.	4.026 x 1.125			281	40	70	1446	74			14 hrs.
4.	4.026 x 1.125			281	66	69	719	76			7 hrs.
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	6.031	56.79	293.2	0.9896	1.267	1.026	445
2	6.031	78.60	294.2	0.9905	1.267	1.026	610
3	6.031	108.30	293.2	0.9905	1.267	1.026	841
4	6.031	139.35	294.2	0.9915	1.267	1.026	1083
5							

NO.	R _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	132.4 Mcf/bbl.
1	0.435	531	1.459	.9505	A.P.I. Gravity of Liquid Hydrocarbons	51 Deg.
2	0.436	530	1.459	.9501	Specific Gravity Separator Gas	0.623
3	0.435	530	1.456	.9502	Specific Gravity Flowing Fluid	XXXXXX
4	0.436	529	1.453	.9498	Critical Pressure	673.5 P.S.I.A.
5					Critical Temperature	364 R

NO.	P _f ²	P _w	R _w ²	P _c ² - R _w ²	(1) $\frac{P_c^2}{R_c^2 - R_w^2} = 1.8403$	(2) $\left[\frac{R_c^2}{R_c^2 - R_w^2} \right]^n = 1.8403$
1			11474	7669		
2			8741	10402		
3			3986	15157		
4			944	18190		
5						

Absolute Open Flow				1123 Mcfd @ 15.025	Angle of Slope @	45 deg.	Slope, n	1.000
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Remarks: Static pressures by Bennett Wireline flowing pressures by DWT.
Calculations worksheet C122D attached.

Approved By Commission:	Conducted By: Bill Trembly, Jr.	Calculated By: Eddie Mahfood	Checked By:
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