

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

Form C-122
Revised 9-

RECEIVED

MAY 7 1981

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 3-12-81			
Company Yates Petroleum Corporation /				Connection Transwestern Pipeline Co.		ARTESIA, OFFICE	
Pool Richard Knob Atoka Morrow				Formation Atoka and Morrow		Unit NM 14757	
Completion Date 1-11-81		Total Depth 8630 KB		Plug Back To 8525 KB		Elevation	
Casing Size 4 1/2		Wt. 11.6		Set At 4.000		Perforations: From 8289 To 8483	
Tubing Size 2 3/8"		Wt. 4.7		Set At 1.995		Perforations: From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple single				Packer Set At 8241		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 143 @ 8300		Mean Annual Temp. °F 62		Baro. Press. - P _a 13.2	
L 8300		H 8300		G _g 0.616		% CO ₂ 0.31	
				% N ₂ 0.40		% H ₂ S N.7	
				Prover		Meter Run 2"	
						Taps Flanged	

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							2013	53			Well
1.	2.067	X	1.000	490	11	60	1260	65			21
2.	2.067	X	1.000	490	5	70	760	65			24
3.	2.067	X	1.000	490	5	70	502	65			24
4.											
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	4.946	74.40	503.2	1.0000	1.271	1.052	492
2	4.946	50.16	503.2	0.9905	1.271	1.045	326
3	4.946	50.16	503.2	0.9905	1.271	1.045	326
4.							
5							

NO.	P _r	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	0.769	520	1.429	.9035			0.619	XXXXXXX	676	364
2.	0.769	530	1.456	.9152			XXXXX	0.619	676	365
3.	0.769	530	1.456	.9152						
4.										
5										

NO.	P _r ²	P _w ²	R _w ²	P _r ² - R _w ²
1			2498	4123
2			887	5734
3			390	6231
4				
5				

(1) $\frac{P_r^2}{P_r^2 - R_w^2} = 1.0626$

AOF = Q $\left[\frac{P_r^2}{P_r^2 - R_w^2} \right]^n = 346$

(2) $\left[\frac{P_r^2}{P_r^2 - R_w^2} \right]^n = 1.0626$

Absolute Open Flow	346	Mcfd @ 15.025	Angle of Slope	45 deg.	Slope, n	1.000
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Remarks: Static pressures by Bennett Wireline, flowing tubing pressures by DWT calculations worksheet C122D attached. Well declined rapidly after 24 hrs. of production.

Approved By Commission:	Conducted By: Hal Ellis	Calculated By: Eddie Mahfood	Checked By:
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