

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 9-21-78		RECEIVED OCT 10 1978	
Company Yates Petroleum Corporation					Connection Transwestern Pipeline Co.			
Pool Red Lake (Morrow)					Formation Morrow		Unit L. C. C.	
Completion Date 8-17-78		Total Depth 9650' KB		Plug Back TD 9535' KB		Elevation 3303' KB		Farm or Lease Name Rio Pecos "GB" Com
Csg. Size 5-1/2"	Wt. 17#	d 4.892	Set At 9574' KB	Perforations: From 9265 To 9303			Well No. 2	
Tbg. Size 2-3/8"	Wt. 4.7#	d 1.995	Set At 9264' KB	Perforations: From 9235 To 9238			Unit Sec. Twp. Rge. L 20 18S 27E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 9229' KB		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 149 @ 9260		Mean Annual Temp. °F 62		Baro. Press. - P _a 13.2		State New Mexico
L 9277	H 9277	Gg 0.661	% CO ₂ 0.56	% N ₂ 0.58	% 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							2454	72			Days
1.	4.026 x 2.500			709	10	70	2280	76			1 hour
2.				710	21	70	2183	80			1 hour
3.				711	43	70	2031	83			1 hour
4.				712	76	70	1686	86			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, Fpv	Rate of Flow Q, Mcfd
1	32.64	84.98	722.2	.9905	1.264	1.064	3695
2	32.64	123.24	723.2	.9905	1.264	1.064	5359
3	32.64	176.47	724.2	.9905	1.264	1.064	7673
4	32.64	234.77	725.2	.9905	1.264	1.064	10208
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	1.075	530	1.456	.8835	83.50	57.6	0.626	XXXXXX	672	364
2	1.076	530	1.456	.8833						
3	1.078	530	1.456	.8830						
4	1.079	530	1.456	.8827						
5										

P _c 3188.2 P _c ² 10165					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.3702$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4.3702$	
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²				
1			9188	977				
2			8882	1283				
3			8675	1490				
4			7839	2326				
5								

Absolute Open Flow 44610 Mcfd @ 15.025					Angle of Slope 45 degrees		Slope, n 1.000	
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Remarks: Static BHP by Bennett wireline, flowing pressures by DWT.	
Calculations worksheet C-122-D attached.	

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