

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 9-8-78		RECEIVED OCT 5 1978	
Company Yates Petroleum Corp.					Connection Transwestern Pipeline Co.			
Pool Kennedy Farms <i>Morrow</i>					Formation Morrow		Unit O.C.C. ARTESIA OFFICE	
Completion Date 7-6-78		Total Depth 8845' KB		Plug Back TD 8666' KB		Elevation 3352' KB		Farm or Lease Name Kennedy "JQ" Com
Csg. Size 4-1/2"	Wt. 11.6#	d 4.000	Set At 8728' KB	Perforations: From 8600 To 8618' KB		Well No. 1		
Tbg. Size 2-3/8"	Wt. 4.7#	d 1.995	Set At 8543'	Perforations: From 8549 To 8551' KB		Unit Sec. Twp. Rge. H 33 17S 26E		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 8543' KB		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 143 @ 8609		Mean Annual Temp. °F 62		Baro. Press. - P _a 13.2		State New Mexico
L 8602	H 8602	Gg 0.636	% CO ₂ 0.51	% N ₂ 0.43	% H ₂ S Nil	Prover 2"	Meter Run Flange	Taps

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							2802	57			days
1.	2.067 x 1.500			129	8	80	2607	60			1 hour
2.				130	17	80	2454	62			1 hour
3.				130	30	80	2267	64			1 hour
4.				131	62	80	1848	66			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	12.76	33.73	142.2	.9813	1.267	1.0114	541
2	12.76	49.34	143.2	.9813	1.267	1.0114	792
3	12.76	65.54	143.2	.9813	1.267	1.0114	1052
4	12.76	94.55	144.2	.9813	1.267	1.0114	1517
5							

NO.	P _t	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	0.211	540	1.484	.9774	162.3 Mcf/bbl.	58.4 Deg.	0.623	X X X X X X X X	672.5 P.S.I.A.	370 R
2	0.213	540	1.484	.9776				X X X X X		
3	0.213	540	1.484	.9776						
4	0.214	540	1.484	.9777						
5										

P _c 3579.2 P _w 12811					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.7805$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.5573$	
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²				
1			10939	1872				
2			9742	3069				
3			8368	4443				
4			5616	7195				
5								

Absolute Open Flow 2362 Mcfd @ 15.025					Angle of Slope 52.5 deg.		Slope, n 0.7678	
Remarks: Static pressures 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: