

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 11-2-76		NOV 18 1976	
Company Yates Petroleum Corp.				Connection					
Pool <u>Wildcat Morrow</u> Undesignated - NW Indian Basin				Formation Morrow		Unit O. C. C. ARTESIAL OFFICE			
Completion Date 10-21-76		Total Depth 9350		Plug Back TD 9145		Elevation 4154' KB		Farm or Lease Name Hilliard "BF" Fed	
Csg. Size 5 1/2"	Wt. 17#	d 9225	Set At 9225	Perforations: From 8786 To 8792		Well No. 1-Y			
Tbg. Size 2-3/8"	Wt.	d	Set At 8772	Perforations: From 8764 To 8767		Unit Sec. Twp. Rge. H 14-21S-22E			
Type Well - Single - Brazenhead - G.G. or G.O. Multiple Single						Packer Set At 8764		County Eddy	
Producing Thru tubing		Reservoir Temp. °F 150 @ 8760		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico	
L	H	Gg	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run	Type	
	8774	0.635	0.85	0.30	Nil		3.068"	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.	
SI							2671	52		
1.	3 X 1.750			400	6	70	2608	53		
2.	3 X 1.750			400	23	72	2475	55		
3.	3 X 1.750			405	51	72	2302	55		
4.	3 X 1.750			410	86	70	2080	56		
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	15.61	49.79	413.2	.9905	1.266	1.037	1011
2	15.61	97.49	413.2	.9887	1.266	1.036	1973
3	15.61	146.04	418.2	.9887	1.266	1.037	2959
4	15.61	190.78	423.2	.9905	1.266	1.038	3877
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	.613	530	1.452	.930	179.2		56.1		0.624		XXXXXX		674		365	
2	.613	532	1.458	.931							0.6406		P.S.I.A. 673		R 371	
3	.620	532	1.458	.930												
4	.628	530	1.452	.928												
5																

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 2.983$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.015$	
1	3328.2	11077	484		$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 7812$			
2	3183.2	10132	1529					
3	3002.2	9013	2548					
4	2772.2	7685	3876					
5								

Absolute Open Flow		7812		Mcfd @ 15.025		Angle of Slope °		57.3		Slope, n		0.641	
Remarks: BHP by Bennett Wireline.													
Approved By Commission:				Conducted By: Don Weaver				Calculated By: Eddie Mahfood				Checked By:	