

NEW MEXICO OIL CONSERVATION COMMS
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL
MAY 29 1980

RECEIVED

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 3-28-80		ARTESIA, OFFICE	
Company Yates Petroleum Corporation			Connection Transwestern Pipeline Co.		Unit
Pool Eagle Creek Permo Penn			Formation Cisco		Farm or Lease Name Morris MC Com
Completion Date 2-7-80		Total Depth 8630' KB		Plug Back TD 7000' KB	
Csg. Size 4 1/2"	Wt. 10.5#	d 4.052"	Set At 8623 KB	Perforations: From 6544 To 6660	
Thq. Size 2-3/8"	Wt. 4.7#	d 1.995"	Set At 6514 KB	Perforations: From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 6514 KB	
Producing Thru Tubing		Reservoir Temp. °F 126 @ 6602		Mean Annual Temp. °F 62	
				Baro. Press. - P _a 13.2	
L 6602		H 6602	G _g 0.673	% CO ₂ 0.14	% N ₂ 1.05
				% H ₂ S N.7	Prover -
				Meter Run 2	Flanged

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							1881	55			Days
1.	2.067 X 1.000			299	9	60	1673	60			1 hour
2.				300	17	61	1614	63			1 hour
3.				300	32	61	1502	65			1 hour
4.				301	62	62	1316	67			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, Mhd
1	4.946	53.01	312.2	1.000	1.231	1.0267	331
2	4.946	72.97	313.2	0.999	1.231	1.0265	456
3	4.946	100.11	313.2	0.999	1.231	1.0265	625
4	4.946	139.57	314.2	0.9981	1.231	1.0263	870
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	214.5	Mcf/bbl.
1.	0.467	520	1.387	.9487	A.P.I. Gravity of Liquid Hydrocarbons	62.0	Deg.
2.	0.468	521	1.389	.9490	Specific Gravity Separator Gas	.660	XXXXXX
3.	0.468	521	1.389	.9490	Specific Gravity Flowing Fluid	XXXXX	0.673
4.	0.470	522	1.392	.9494	Critical Pressure	669	P.S.I.A.
5.					Critical Temperature	375	R

NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.9289$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.9046$
1			4240	1157	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1657$	
2			3936	1461		
3			3397	2000		
4			2599	2798		
5						

Absolute Open Flow		1657	Mcf @ 15.025	Angle of Slope @	45.6 deg.	Slope, n	0.9807
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Static Pressures by Bennett Wireline Co., flowing pressures by DWT

Calculations Worksheet C 122D attached

Approved by Commission:	Conducted By: Don Weaver	Calculated By: Eddie Mahfood	Checked By:
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