

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

APR 13 1977

122 file
Form C-122
Revised 9-1-65
file
Epr.

Type Test ☒ Initial ☐ Annual		O.C.C. ARTESIA, OFFICE		☐ Special		Test Date 3-5-77	
Company Yates Petroleum Corp.				Transwestern Pipeline Co.			
Pool Eagle Creek Pump Pann.				Formation Cisco		Unit NM 15664	
Completion Date 6-3-75		Total Depth 8413'KB		Flow Back TD 8267'KB		Elevation 3649'KB	
Csg. Size 4 1/2"		Wt. 11.6#		Set At 4.000		Perforations: From 6412 To 6491'	
Tbg. Size 2-3/8"		Wt. 4.7#		Set At 1.995		Perforations: From X-Over Tool @ 6372'KB	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Dual - G.G.				Packer Set At 8181' & 6372'KB		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 119		Mean Annual Temp. °F 62		Baro. Press. - P _a 13.2	
L 6438		H 6438		G _g		Prover	
				% CO ₂ 0.33		% N ₂ 0.75	
				% H ₂ S Nil		Meter Run 2"	
						Taps Flange	

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							1900	59			Months
1.	2.067	X	1.000	340	14	60	1784	63			1 hr.
2.				340	32	60	1679	64			1 hr.
3.				341	55	61	1554	65			1 hr.
4.				342	76	62	1450	66			1 hr.
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	4.946	70.32	353.2	1.000	1.241	1.0361	447
2.		106.31	353.2	1.000		1.0361	676
3.		139.57	354.2	0.9990		1.0360	887
4.		164.30	355.2	0.9981		1.0358	1043
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	0.526	520	1.3904	.9315	1090	62.5	.649	.652	671	373
2.	0.526	520	1.3904	.9315						
3.	0.528	521	1.3930	.9315						
4.	0.529	522	1.3957	.932						
5.										

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1			4707	641
2			4168	1180
3			3571	1777
4			3109	2239
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.3886$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1880$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.8021$

Absolute Open Flow	1880	Mcfd @ 15.025	Angle of Slope θ	47.50	Slope, n	0.6764
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Remarks: Pressures by DWT. Calculations worksheet C-122D attached.

Approved By Commission:	Conducted By: Matt Lee	Calculated By: Eddie Mahfood	Checked By:
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