

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 6-8-78		JUN 15 1978	
Company Harvey E. Yates Co., Inc.				Connection Llano Pipe Line			
Pool Undesignated So. Carlstad				Formation Morrow		Unit O.C.C. ARTESIA, OFFICE	
Completion Date 4-15-78		Total Depth 12300 KB		Plug Back To 12251KB		Elevation 3149.2 GL	
Csg. Size 5 1/2	Wt. 20	d	Set At 12300	Perforations: From 12087 To 12097		Well No. 1	
Tbg. Size 2 7/8	Wt. 4.6	d	Set At 12039	Perforations: From To		Unit Sec. Twp. Rge. C 21 23S 27E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 12023		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 200# 12025		Mean Annual Temp. °F 70		Baro. Press. - P _a 13.2	
L 12039		H 12039		Gg 0.585	% CO ₂ -	% N ₂ -	% H ₂ S -
				Prover	Meter Run X	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.	
SI							3193.2			
1.	4" X 0.750			503.2	20	70	3105.2	70	Pkr	
2.	4" X 0.750			503.2	68	68	3030.2	70	Pkr	
3.	4" X 1.250			503.2	30	68	2889.2	70	Pkr	
4.	4" X 1.250			513.2	92	66	2565.2	70	Pkr	
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_{in}}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	2.661	100.3195		0.9905	1.307	1.039	359.1
2	2.661	184.9800		0.9924	1.307	1.040	664.0
3	7.469	122.8658		0.9924	1.307	1.040	1237.9
4	7.469	217.2887		0.9943	1.307	1.041	2195.6
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	0.75	530	1.51	0.927	Nil	-	0.585	X X X X X	672	352
2	0.75	528	1.50	0.925						
3	0.75	528	1.50	0.925						
4	0.76	526	1.49	0.922						
5										

NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²
1		4055.2	16445	548
2		3975.2	15802	1191
3		3804.2	14472	2521
4		3421.2	11705	5288
5				

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 3.21346$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.539477$

ATF = $\left[\frac{P_r^2}{P_c^2 - P_w^2} \right]^n = 5,575.7$

PF 4122.2 P_r 16993

Absolute Open Flow	5,575.7	Mcfd @ 15.025	Angle of Slope @	51° 40'	Slope, n	0.798355
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Remarks: BHP measured with Amerada RPG-3 gauge, serial no. 12468-N, 0-6000 psi.

Approved By Commission:	Conducted By: Tefteller, Inc.	Calculated By: D.A. Warren, Jr.	Checked By:
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