

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 7-26-77		SEP 26 1977	
Company Vates Petroleum Corporation			Connection El Paso Natural Gas Co.		
Pool Undesignated			Formation Strawn		Unit ARTESIA, OFFICE
Completion Date 7-1-77		Total Depth 11300' KB		Plug Back TD 11220' KB	
Csg. Size 5 1/2"		Wt. 17#		Elevation 3528' KB	
Tbg. Size 2-3/8"		Wt. 4.7#		State "HU"	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single		Packer Set At 9771' KB		Well No. 1	
Producing Thru Tubing		Reservoir Temp. *F 151 @ 9834' KB		Mean Annual Temp. *F 62	
Baro. Press. - P _a 13.2		County Eddy		State New Mexico	
L 9822	H 9822	G _g	% CO ₂ 0.45	% N ₂ 1.17	% H ₂ S Nil
Prover		Meter Run 4"		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.		Temp. *F
1	4.026 x 2.500			521	8	65	2713	95			Weeks
2				523	14	65	2578	97			1 hour
3				527	28	64	2471	98			1 hour
4				534	51	62	2299	99			1 hour
5							1828	100			1 hour

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	36.66	65.37	534.2	.9952	1.194	1.0648	3032
2		86.64	536.2	.9952	1.194	1.0648	4019
3		122.99	540.2	.9962	1.194	1.0660	5540
4		167.05	547.2	.9971	1.194	1.0678	7785
5							

NO.	P _r	Temp. *R	T _r	Z	Gas Liquid Hydrocarbon Ratio	7.618 Mcf/bbl.
1	.80	525	1.346	.882	A.P.I. Gravity of Liquid Hydrocarbons	60.1 Deg.
2	.80	525	1.346	.882	Specific Gravity Separator Gas	.702
3	.81	524	1.344	.880	Specific Gravity Flowing Fluid	XXXXXX
4	.82	522	1.338	.877	Critical Pressure	669 P.S.I.A.
5					Critical Temperature	390 R

P _c 4271.2 P _c ² 18243				(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.3938$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.1665$	
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	AOF = C $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 16866$ MCFPD		
1			17525	718			
2			16966	1277			
3			16153	2090			
4			14091	4152			

Absolute Open Flow		16866 Mcfd @ 15.025	Angle of Slope @	62° 25"	Slope, n	0.5223
Remarks: Static pressures by Bennett Wireline; Flowing pressures by DWT. Calculations worksheet C 122D attached.						
Approved By Commission:		Conducted By:		Calculated By:		Checked By:
		Bill Trembley, Jr.		Eddie Mahfood		