

3F file
C-122 file
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FORM C-122
1-78

JUL 6 1982

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special		Test Date 5-3-82		O. C. D. ARTESIA, OFFICE							
Company Yates Petroleum Corporation		Connection Transwestern Pipeline Company									
Pool Und. Pecos Slope		Formation Abo		Unit L-6272							
Completion Date 3-20-82		Total Length 4442'		Plug Back TD 4183							
				Elevation 3812.8							
Form or Lease Name Paulette PV State		Well No. 4		Unit Sec. Twp. R. 16 5s 25e							
Type Well - Single - Broadhead - G.G. or G.O. Multiple Single		Packer Set At None		County Chaves							
Producing Thru tubing		Reservoir Temp. *F 160 @ 3800		Mean Annual Temp. *F 60							
				Basic Press. - P _g 13.2							
State New Mexico		L 3800		H 3800							
		G _g .680		% CO ₂ 4.80							
				% N ₂ 5.34							
				% H ₂ S 0							
				Prover -----							
				Meter Run 2"							
				Taps Flanged							
FLOW DATA											
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	Duration of Flow
51							999				1 day
1.	2.067 x 1.250			370	39.5	64	575	60			24 hrs.
2.	2.067 x 1.250			400	25.7	64	691	61			24 hrs.
3.	2.067 x 1.250			415	22.4	64	792	64			24 hrs.
4.	2.067 x 1.250			330	5.8	64	837	62			24 hrs.
5.											
RATE OF FLOW CALCULATIONS											
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Fl	Gravity Factor F _g	Super. Compress. Factor, F _{sp}	Rate of Flow Q, MCF				
1	8.120	123.1	383.2	.9962	1.213	1.035	1250				
2	8.120	103.0	413.2	.9962	1.213	1.039	1050				
3	8.120	98	428.2	.9962	1.213	1.040	1000				
4	8.120	44.7	343.2	.9962	1.213	1.414	620				
5											
NO.	P ₁	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	.56	524	1.43	.933			.680		680	366	
2	.61	524	1.43	.927							
3	.63	524	1.43	.924							
4	.50	524	1.43	.940							
5											
$P_c = 1012.2 P_1^{.2} = 1024.6$											
NO.	P ₁	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$					
	46.0		406.1	618.5	1.66	1.63					
	496.5		513.6	511							
	649.5		664.6	366							
	724		729.6	295							
$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2,033$											
Absolute Open Flow 2033				Mcf @ 15.025				Angle of Slope θ		Slope, n .96	
Remarks: Static pressure by Bennett Wireline, flowing pressure by DWT calculations. Worksheet C-122D attached											
Approved by Division			Conducted By: David Weaver			Calculated By: Scott Yates			Checked By:		