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MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

JUL 15 1991

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 07-12-13-91			
Company Presidio				Connection		ARTESIA OFFICE	
Pool <i>E. Burton Flat Strawn</i>				Formation Strawn		Unit	
Completion Date 04-15-91		Total Depth 11892		Plug Back TD 10859		Elevation	
Farm or Lease Name Superior Federal				Well No.			
Csg. Size 5 1/2		Wt. 17		Set At 11892		Perforations: From 10624 To 10824	
Thq. Size 2 3/8		Wt. 4.7		Set At 10859		Perforations: From To	
Type Well - Single - Broadhead - G.C. or G.O. Multiple Single				Packer Set At 10859		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 181 @ 10724		Mean Annual Temp. °F 60		Baro. Press. - P _g 13.2	
L * 10724		H * 10724		C _g .768		% CO ₂ .31	
				% N ₂ 1.42		% H ₂ S	
				Prover		Meter Run 2.069	
						Taps Flange	
FLOW DATA				TUBING DATA		CASING DATA	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.
							Temp. °F
SI							1300
1.	2	X	1.500	72	67.24	74	220
2.							700
3.							
4.							
5.							
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, Mcld
1	12.76	75.71	85.2	.9868	1.141	1.005	1,093
2.							
3.							
4.							
5.							
NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio <u>4.52</u> Mcld/bbl.		
					A.P.I. Gravity of Liquid Hydrocarbons <u>47.9 @ 60°</u> Deg.		
1.	.12	534	1.30	.991	Specific Gravity Separator Gas <u>.768</u> X X X X X X X X		
2.					Specific Gravity Flowing Fluid <u>X X X X X</u>		
3.					Critical Pressure <u>**666</u> P.S.I.A. P.S.I.A.		
4.					Critical Temperature <u>**408</u> °R °R		
5.							
P _c 2050.2 P _c ² 4204.1					(1) $\frac{P_c^2}{P_e^2 - R_w^2} = 1.126$ (2) $\left[\frac{P_c^2}{P_e^2 - R_w^2} \right]^n = 1.126$		
NO.	P _i ²	P _w	R _w ²	P _e ² - R _w ²	AOF = Q $\left[\frac{P_e^2}{P_e^2 - R_w^2} \right]^n = 1.231$		
1		686.8	471.7	3732.4			
2							
3							
4							
5							
Absolute Open Flow <u>1,231</u> Mcld @ 15.025					Angle of Slope θ <u>45</u>		Slope, n <u>1.000</u>
Remarks: *=BHP instrument set @ this depth **=corrected to 1.42% N ₂							
Well made 242.0 BBLs of 47.9 API GRAVITY CONDENSATE during test							
Approved By Division		Conducted By		Calculated By		Checked By	
				RM		BM	

dist. File