

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLS

d/SF
File

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Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 6/28/83		JUL 01 1983							
Company McClellan Oil Corporation ✓		Connection Air		O. C. D.							
Pool South Pecos Slope P/O		Formation Abo		Unit ARTESIA, OFFICE							
Completion Date 6/22/83		Total Depth 4475'		Plug Back TD 4440' 4475'							
Elevation 3640'		Farm or Lease Name Tolmac State		Well No. 3							
Csg. Size 4-1/2"		Wt. 10.5		Perforations: From 3964' To 4212'							
Tbg. Size 2-3/8"		Wt. 4.7		Perforations: From Open To Ended							
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single Gas		Packer Set At None		County Chaves							
Producing Thru Tubing		Reservoir Temp. °F 60		Baro. Press. - P _a 13.2							
State New Mexico		Meter Run 4.026		Taps FLG							
L		H		G _g .646							
% CO ₂ .04		% N ₂ 5.592		% H ₂ S							
Prover		Prover		Prover							
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	Duration of Flow
1.	4.026		.875	160	12	72	882		882		72 hrs.
2.	4.026		1.125	160	20	66	845		875		1 hr.
3.	4.026		1.125	160	46	55	820		850		1 hr.
4.	4.026		1.125	160	90	50	800		825		1 hr.
5.							750		775		1 hr.
RATE OF FLOW CALCULATIONS											
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Comp. Factor, F _{spv}	Rate of Flow Q, Mcfd				
1	3.63	43.82	160	.9887	1.244	.9977	195				
2	6.031	56.57	160	.9943	1.244	.9977	421				
3	6.031	85.79	160	1.005	1.244	.9977	645				
4	6.031	120.00	160	1.010	1.244	.9977	907				
5											
NO.	R ₁	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/tbl.						
1					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.						
2					Specific Gravity Separator Gas _____						
3					Specific Gravity Flowing Fluid _____ X X X X X						
4					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.						
5					Critical Temperature _____ R _____ R						
P _c 882 P _c ² 778											
NO.	P ₁ ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.10$						
1		845	714	64	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.226$						
2		820	672	106							
3		800	640	138							
4		750	563	215							
5											
Absolute Open Flow 4,500 Mcfd @ 15.025											
Angle of Slope @ 40.3											
Slope, n .83											
Remarks:											
Approved By Division											
Conducted By:											
Calculated By: Rick Hipp											
Checked By:											