

c/sf
File

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED

SEP 20 1984

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 9-13-84		O. C. D. ARTESIA, OFFICE	
Company W. A. Moncrief, Jr.				Connection N/A			
Pool Baldrige Canyon				Formation Morrow		Unit H	
Completion Date 8-20-84		Total Depth 12006' 12, 610		Plug Back TD 11047' 10, 985		Elevation 4660.5 KB 4643 GL	
Csg. Size 4 1/2		Wt. 11.6		Set At 4.000		Perforations: From 10909 To 10913	
Trq. Size 2 3/8		Wt. 4.70		Set At 1.995		Perforations: From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 10877'		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 178 @ 10811		Mean Annual Temp. °F 70		Baro. Press. - P _g 13.2	
L 10911		H 10911		C _g 0.578		% CO ₂ 0.86	
				% N ₂ 0.27		% H ₂ S 0.0	
				Prover Pos. Ck		Meter Run Taps	

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	
SI	50 hours			2736		70	2736	70	Pkr.		
1.	2"	x	4/64	2550		90	2550	80	"		60 mins.
2.	2"	x	5/64	2420		84	2420	84	"		60 mins.
3.	2"	x	6/64	2208		80	2208	80	"		60 mins.
4.	2"	x	7/64	1914		76	1914	76	"		60 mins.
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, Mcfd
1	0.0604		2563.2	0.9723	1.3153	1.1075	219.3
2	0.0966		2433.2	0.9777	1.3153	1.1142	336.8
3	0.1418		2221.2	0.9813	1.3153	1.1180	454.5
4	0.1969		1927.2	0.9850	1.3153	1.1176	549.4
5							

NO.	P _r	Temp. °R	T _r	Z	Dry Gas			
1	3.84	550	1.58	0.8153	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.			
2	3.64	544	1.56	0.8056	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.			
3	3.33	540	1.55	0.8000	Specific Gravity Separator Gas 0.578 X X X X X X X X			
4	2.89	536	1.54	0.8006	Specific Gravity Flowing Fluid X X X X X			
5					Critical Pressure 668 P.S.I.A. P.S.I.A.			
					Critical Temperature 348 R R			

NO.	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁₁	P ₁₂	P ₁₃	P ₁₄	P ₁₅	P ₁₆	P ₁₇	P ₁₈	P ₁₉	P ₂₀
1		3442.2	11849	1526																
2		3309.2	10951	2424																
3		3048.2	9292	4083																
4		2693.2	7253	6122																
5																				

(1) $\frac{P_c^2}{P_e^2 - P_w^2} = 2.18474$ (2) $\left[\frac{P_c^2}{P_e^2 - P_w^2} \right]^n = 1.51099$

AOF = Q $\left[\frac{P_c^2}{P_e^2 - P_w^2} \right]^n = 830.137$

Post ID-2
11-30-84
Comp + BK

Absolute Open Flow 830.137 Mcfd @ 15.025		Angle of Slope @ 62.158°		Slope, n 0.52817	
Remarks: BHP measured with Amerada gauge serial no. 50671, 0-6000 P.S.I.					
Approved by Division		Conducted By:		Calculated By:	
				Checked By:	