

0157
file

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 02/28/86		RECEIVED BY MAR 21 1986 Unit O. C. D. ARTESIA, OFFICE			
Company PLAINS RADIO				Connection Air					
Pool Wildcat Perm				Formation Perm					
Completion Date 2-25-86		Total Depth 6510		Plug Back TD 6100				Elevation 3888	
Casing Size 5 1/2		Casing WT. 15.417		Set At 6510		Perforations: From 6220 To 6250		Well No. 2	
Tubing Size 2 3/8		Tubing WT. 6.135		Set At 6135		Perforations: From Open To ended		Unit Sec. Twp. Rge. K 6 9S 27E	
Type Well - Single - Broadhead - G.G. or G.O. Multiple Single						Packer Set At		County Chaves	
Producing thru Tubing		Reservoir Temp. °F 8		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico	
L		H		G _g .673		% CO ₂ 1.647		% N ₂ 3.278	
						% H ₂ S		Prover 2"	
								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. in. H ₂ O	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI							2007		Packer		
1.	2	X	1/8	1851		65	1958		"		1 Hr
2.	2	X	1/4	1690		65	1692		"		"
3.	2	X	3/8	1351		66	1356		"		"
4.	2	X	1/2	1015		66	1033		"		"
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpy	Rate of Flow Q, Mcfd
1	.2648		1964.2	.9952	1.2529	1.1715	760
2	1.087		1703.2	.9952	1.2529	1.1601	2678
3	2.378		1364.2	.9943	1.2529	1.1334	4580
4	4.279		1028.2	.9943	1.2529	1.1010	6034
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2					Specific Gravity Separator Gas _____ X X X X X X X X
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

$P_c = 2445$ $P_r^2 = 5979$					$(1) \frac{P_c^2}{P_r^2 - P_w^2} = 1.6504$		$(2) \left[\frac{P_c^2}{P_r^2 - P_w^2} \right]^n = 1.68$	
NO.	P _r	P _w	P _w	P _r ² - P _w ²	$AOF = Q \left[\frac{P_c^2}{P_r^2 - P_w^2} \right]^n = 10137$			
1		2355	5548	431				
2		2073	4297	1682				
3		1762	3105	2874				
4		1535	2356	3623				

Absolute Open Flow <u>10137</u> Mcfd @ 15.025		Angle of Slope <u>46</u>		Slope, n <u>1.036</u>	
Remarks:					
Approved by Division		Conducted By: KELTIC SERVICES		Calculated By: KELLY	
				Checked By:	

Best ID-2
3-28-86
comp + BK