

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL **RECEIVED**

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 4-19-82		MAY 12 1982	
Company General American Oil Co. of Texas				Connection Transwestern			
Location South Empire <i>Morrow</i>				Formation Morrow		Unit O.C.D. ARTESIA, OFFICE	
Completion Date 3-17-82		Total Depth 10,670		Plug Back TD 10,602		Elevation 3671' KB	
Casing Size 5 7/8		WT. 15.5		Set At 10,670		Perforations From 10518 To 10581	
Casing Size 2 7/8		WT. 6.50		Set At 10,197		Perforations From OPEN To ENDED	
Type well - Single - Bradenhead ± G.C. or G.O. Multiple Single				Packer Set At 10,197		County Eddy	
Producing thru Tubing		Reservoir Temp. °F 198 @ 10550		Mean Annual Temp. °F 60		State New Mexico	
L 10550		H -		G _g 0.6565		Prover -	
		% CO ₂ 0.339		% N ₂ 0.573		% H ₂ S -	
						Meter Run 4.026X1.875	
						FLG	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g. DWT	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							3245	60	Packer		72.0 HRS
1	4.026	6/64	1.875	630	4	84	3025	60			1.0 HRS
2	4.026	10/64	1.875	630	8	82	2940	60			1.0 HRS
3	4.026	12/64	1.875	635	15	69	2797	60			1.0 HRS
4	4.026	14/64	1.875	630	28	66	2595	60			1.0 HRS
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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 _{sp}	Rate of Flow Q, Mscf/d
1	17.26	50.72	643.2	0.9777	1.234	1.055	1114.28
2	17.26	71.73	643.2	0.9795	1.234	1.056	1580.25
3	17.26	98.61	648.2	0.9915	1.234	1.061	2209.45
4	17.26	134.20	643.2	0.9943	1.234	1.062	3018.22
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NO	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	82.52	Mcf/d
1	0.96	544	1.47	0.898	A.P.I. Gravity of Liquid Hydrocarbons	51.3	Deg.
2	0.96	542	1.46	0.896	Specific Gravity Separator Gas	0.6565	XXXXXX
3	0.96	539	1.45	0.894	Specific Gravity Flowing Fluid	XXXXX	XXXXXX
4	0.96	526	1.42	0.886	Critical Pressure	673	P.S.I.A
5					Critical Temperature	371	R

NO	P _r	P _w	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 3.246$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2.913$
1		4234.2	17928.4	2278.4		
2		4139.2	17133.0	3073.8		
3		3968.2	15746.6	4460.2		
4		3739.2	13981.6	6225.2		
5						

Absolute Open Flow 8791				Mold @ 15.025		Angle of Slope @ 47° 45'		Slope, n 0.908	
Remarks: Bottom Hole Pressures @ (-6879) 10550' Used For Pressure Calculations									
Well Produced 4.0 BD in 4.0 HRS = 24.0 BD/D									
Approved By Division				Conducted By: Jarrel Well Testing, Inc.		Calculated By: D. Dickerson		Checked By: Joe A. Coleman	