

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 7-20-81	
Company Adams Exploration Company				Connection El Paso Natural Gas Co.	
Pool Malaga Atoka				Formation Atoka	
Completion Date 7-18-81		Total Depth 12,710		Plug Back TD 11450	
				Elevation 3022 KB	
Casing Size 5"		Well ID 18		Perforations: From 11396' To 11400	
Tubing Size 2 3/8"		Well ID 4.7		Perforations: From To	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single				Packer Set At 11,105	
Producing Thru Tubing		Reservoir Temp. °F 164 @ 11,400		Mean Annual Temp. °F 60°	
				Baro. Press. - P _g 13.2	
L 11,105		H 11,105		G _g 0.673	
				% CO ₂	
				% N ₂	
				% H ₂ S	
				Prover	
				Meter Run	
				Taps	
State New Mexico					
County Eddy					
Farm or Lease Name Ann Com					
Well No. 1					
Unit G 15					
Sec. 24					
Twp. 28					
Rge. 28					

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.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI	Positive Choke						4050		Packer		SI
1.	8/64"			2710			2710	74°			1 hr
2.	9/64"			2450			2450	74°			1 hr
3.	10/64"			2260			2260	74°			1 hr
4.	11/64"			2210			2210	74°			1 hr
5.											

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 Compress. Factor, F _{sp}	Rate of Flow Q, Mscf/d
1	0.2416		2723.2	0.9868	1.219	1.155	914
2	0.3105		2463.2	0.9868	1.219	1.168	1075
3	0.3885		2273.2	0.9868	1.219	1.170	1243
4	0.4758		2223.2	0.9868	1.219	1.170	1489
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	4.071	534	1.413	0.750	None Produced	None Produced	0.673	XXXXXX	669	378
2	3.682	534	1.413	0.733						
3	3.398	534	1.413	0.731						
4	3.323	534	1.413	0.731						
5										

NO.	P _t	P _w	P _w ²	P _c ² - P _w ²
1		2732.2	7416	9094
2		2463.2	6067	10443
3		2273.2	5167	11343
4		2223.2	4943	11567
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.815$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1,825$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.815$

Absolute Open Flow	1,825	Mscf @ 15.025	Angle of Slope @	45°	Slope, n	1.0
Remarks:						
Approved by Division		Conducted By:		Calculated By:		Checked By:
		Roy K. Valla		Roy K. Valla		