

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 4-19-83	
Company Turner Production Co.			Connection El Paso Natural Gas Co.			
Location Chacara			Unit			
Completion Date 3-16-83		Total Depth		Elevation		
Casing Size 4.500		Set At 4123		Perforations From 3958 To 3973		
Casing Size 3.75		Set At 3913		Perforations From Open To Ended		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple G.G. Due				Packer Set At 3150		
Producing Thru Tubing		Reservoir Temp. °F		Baro. Press. - P _a 12 psia est.		
L		H		County Rio Arriba		
G _a .650		% CO ₂		State New Mexico		
% N ₂		% H ₂ S		Prover		
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. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	
1	34 days						830		
2	2 inch	.500	15				15	60°	3 hours
3									
4									
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, Mcf/d
1	5,4315		27	1.000	.9608	1.000	141
2							
3							
4							
5							

NO.	R	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Method
1					A.P.I. Gravity of Liquid Hydrocarbons	Dep.
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.
5					Critical Temperature	R

NO.	P ₁ ²	P _w ²	P _c ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.00145$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.00108$
1						
2		32	1030	707934		
3		Calculated				
4						
5						

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 141$$

Absolute Open Flow 141		Mcf/d @ 15.025		Angle of Slope θ		Slope, n = 75	
Remarks:							
Approved By Division		Conducted By: Joe Elledge		Calculated By: Joe Elledge		Checked By: Fred Turner	