

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☐ Initial ☐ Annual ☒ Special		Recompletion		Test Date 6-27-81	
Company Dugan Production Corp.			Connection		
Pool Undesignated Nacimiento			Formation Nacimiento		Unit
Completion Date orig 7-1-80; 6-19-81		Total Depth 3675'		Plug Back TD 3583'	
Completion Date orig 7-1-80; 6-19-81		Total Depth 3675'		Elevation 7463' GL	
Casing Size 2-7/8"		Wt. 6.4#		Set At 3652'	
Perforations: From 2438' To 2446'		Well No. #1			
Casing Size 1-1/4"		Wt. 2.4#		Set At 2458'	
Perforations: From open end To		Unit K		Sec. 6	
Type Well - Single - Drillinghead - G.G. or G.O. Multiple single - gas		Packer Set At 2458' GL		County Rio Arriba	
Producing Thru tubing		Reservoir Temp. °F		Baro. Press. - P _a	
Mean Annual Temp. °F		State NM			
G _g 62		% CO ₂		% N ₂	
% H ₂ S		Prover		Meter Run	
Taps					

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Flow 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						68°	377	68°	377	68°	7 days
1.	1/2" pos. choke						86	61°	355	61°	3 hrs.
2.											
3.											
4.											
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 _{pv}	Rate of Flow Q, Mcfd
1	5.4315		98	.999	.9837	1.000	523.09
2.							
3.							
4.							
5.							

NO.	P _i	Temp. °R	T _i	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1					A.P.I. Gravity of Liquid Hydrocarbons <td></td>	
2.					Specific Gravity Separator Gas <td></td>	
3.					Specific Gravity Flowing Fluid <td></td>	
4.					Critical Pressure <td></td>	
5.					Critical Temperature <td></td>	

NO.	P _i	P _w	P _w ²	P _i ² - P _w ²	(1) $\frac{P_c^2}{P_i^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_i^2 - P_w^2} \right]^n =$
1	339	367	134,689	16,632	9.098	6.533
2.						
3.						
4.						
5.						

Absolute Open Flow		3417		Mcf/d @ 12		Angle of Slope		Slope, n	
Remarks									
Approved By Division			Conducted By: Anderson			Calculated By: Anderson			Checked By: