

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date Nov/2, 1981	
Company Jerome P. McHugh		Connection	
Pool Basin		Formation Dakota	
Completion Date 11-2-81	Total Depth 8281'	Plug Back TD 8212'	Elevation 7122'
Perforations From 8016' To 8191'		Well No. 5E	
Csg. Size 4 1/2"	Wt. 10.5#	d 4.052	Set At 8269'
Perforations From — To —	Unit G 17 26N 3W		Sec. 17
Perforations From — To —	County Rio Arriba		State New Mexico
Type Well - Single - Broadhead - G.G. or G.O. Multiple Single		Packer Set At	
Producing Thru thg.	Reservoir Temp. °F	Mean Annual Temp. °F	Baro. Press. - P _a
L	H	G _s .65	% CO ₂
		% N ₂	% H ₂ S
		Prover	Meter Run
			Temp.

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	
1	1/2" pos. choke						1495	61°	2335	61°	7 days 3 hrs.
2							97		733		
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. Compres. Factor, F _{sp}	Rate of Flow Q, MCFD
1	5.4315		109	.999	.9608	1.011	574.5
2							
3							
4							
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.L. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure P.S.I.A.	Critical Temperature °R
1										
2										
3										
4										
5										

NO.	P _t	P _w	P _t ²	P _w ²	P _t ² - P _w ²	(1) $\frac{P_t^2}{P_t^2 - P_w^2} =$	(2) $\left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n =$
1	2347	745	5508	5508	4957	1.11	1.08
2							
3							
4							
5							

NO.	AOF = Q	$\left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n =$
1	622	622
2		
3		
4		
5		

Absolute Open Flow	622	Mold # 13.025	Angle of Slope °	37°	Slope, n	.75
Remarks: heavy mist of condensate and water thru out test!!						
Approved By Division	Conducted By	Calculated By	Checked By			
	Anderson	Anderson				

