

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 7-29-81	
Company Bruce Anderson		Connection	
Pool Wildcat Pictured Cliffs		Formation Pictured Cliffs	
Completion Date 5-8-81		Total Depth 1700' GL	Plug Back TD 1642' GL
		Elevation 5576'	
Casing Size 2-7/8"		Well No. 4	Form or Lease Name Federal
Perforations: From 1473 To 1484			
Perforations: From open end To			
Type Well - Single - (Dradenhead - G.G. or G.O. Multiple) Single	Packer Set At		
Producing Thru tbg.		State New Mexico	
Reservoir Temp. °F		Mean Annual Temp. °F	
Baro. Press. - P _a		County San Juan	
L		H	G _g
.62		% CO ₂	% N ₂
		% H ₂ S	Prover
		Meter Run	Tap

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							575		570		7 days
1.											
2.											
3.	1/2" positive choke						15		110		3 hrs.
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, Mscf
1							
2							
3	5.4315		27	.9859	.9837	1.000	142
4							
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf, bbl.
1						
2						
3						
4						
5						

NO.	P ₁	P ₂	P ₂ ²	P _c ² - P ₂ ²	(1) $\frac{P_c^2}{P_2^2 - P_2'^2} = 1.0460$	(2) $\left[\frac{P_c^2}{P_2^2 - P_2'^2} \right]^n = 1.0343$
1						
2						
3		122	14,884	323,840		
4						
5						

AOF = Q $\left[\frac{P_c^2}{P_2^2 - P_2'^2} \right]^n = 146 \text{ MCF}$

Absolute Open Flow	146	Mcf @ 15.025	Angle of Slope	Slope, n	.75
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Remarks:

Approved by Division	Conducted by Sherman Dugan	Calculated by Sherman Dugan	Checked by
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