

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 9-3-81	
Company Southland Royalty Company		Connection Southern Union Gathering	
Pool Blanco		Formation Pictured Cliffs	
Completion Date 8-22-81		Total Depth 2685'	Plug Back TD 2624'
		Elevation 6090' GR	Farm or Lease Name Hubbard
Csq. Size 4.500	Wt. 10.5#	d 4.052	Set At 2669'
Perforations: From To		Well No. 6	
Tbg. Size 1.900	Wt. 2.9#	d 1.610	Set At 2474'
Perforations: From 2486' To 2510'		Unit Sec. Twp. Rge. N 15 32N 12W	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Multiple - G.G.		Packer Set At 2399'	County San Juan
Producing Thru Tubing	Reservoir Temp. °F p	Mean Annual Temp. °F	Baro. Press. - P _a 12.2
State New Mexico			
L	H	G _g .700	% CO ₂ % 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	Press. p.s.i.g.		Temp. °F
1.	2"	X	3/4"				907				1 hr
2.							38				2 hrs
3.							36				3 hrs
4.							29				
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	3.03		41.2	1.0000	.9258	1.0000	116
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbon	Deg.
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

P _c 919.2 P _c ² 844928.6			
NO.	P _t ²	P _w	P _w ²
1		41.2	1697.4
2			
3			
4			
5			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0020$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 116$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0017$

Absolute Open Flow	116	Mcf/d @ 15.025	Angle of Slope θ	Slope, n	.85
Remarks:					
Approved By Division	Conducted By: Jim Choquette	Calculated By: James Smith	Checked By: L. O. Van Ryan		