

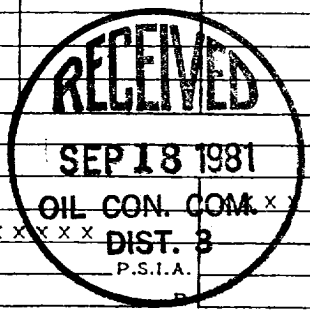
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 9-10-81				
Company Southland Royalty Company				Connection Southern Union Gathering					
Pool Undesignated				Formation Fruitland				Unit	
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 2154' To 2363'			Well No. 6		
Tbg. Size ---	Wt. ---	d ---	Set At ---	Perforations: From To			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 Casing		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	
SI									961		
1.	2"	X	3/4"						174		1 hr
2.									156		2 hrs
3.									139		3 hrs
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	3.03		151.2	.9258	1.0000		424
2.							
3.							
4.							
5.							

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

P _c 973.2 P _c ² 947118.2						
NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²		
1		151.2	22861.4	924256.8	$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.0247$ $(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0210$	
2						
3						
4						
5					$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 433$	

Absolute Open Flow 433 Mcfd @ 15.025		Angle of Slope θ _____		Slope, n .85	
Remarks: _____					
Approved By Division		Conducted By: Jim Choquette		Checked By: L. O. Van Ryan	