

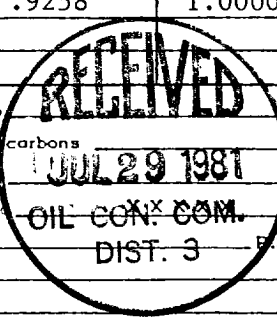
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 6-30-81			
Company Southland Royalty Company				Connection Southern Union Gathering			
Pool Aztec				Formation Pictured Cliffs		Unit	
Completion Date 6-15-81		Total Depth 2550'		Plug Back TD 2531'		Elevation 5955' GR	
Farm or Lease Name Culpepper Martin							
Csq. Size 2.875	Wt. 6.5#	d 2.441	Set At 2539'	Perforations: From 2330' To 2348'		Well No. 19	
Tbg. Size -----	Wt. -----	d -----	Set At -----	Perforations: From To		Unit A	Sec. 29
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At -----		County San Juan	
Producing Thru Casing		Reservoir Temp. °F θ		Mean Annual Temp. °F		Baro. Press. - P _a 12.2	
State New Mexico							
L	H	Gg .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									908		
1.	2"	X	3/8"						45		1 hour
2.									36		2 hours
3.									28		3 hours
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	3.0300		57.2	1.0000	.9258	1.0000	160
2.	3.0300		48.2	1.0000	.9258	1.0000	135
3.	3.0300		40.2	1.0000	.9258	1.0000	113
4.							
5.							

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

P _c 920.2 P _c ² 846768						
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0019$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0014$
1		40.2	1616	845152		
2						
3						
4						
5						

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 113$				Absolute Open Flow <u>113</u> Mcfd @ 15.025 Angle of Slope θ <u>3/8"</u>	
Remarks:					

Approved by Division	Conducted By: Jim Choquette	Calculated By: James Smith	Checked By: L. O. Van Ryan
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