

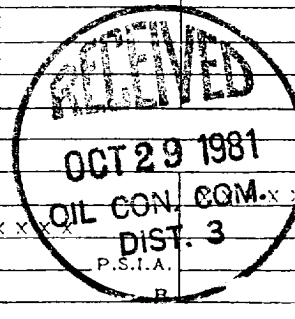
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 10-13-81			
Company Southland Royalty Company				Connection Southern Union Gathering					
Pool Basin				Formation Dakota				Unit	
Completion Date 9-22-81		Total Depth 7250'		Plug Back TD 7197'		Elevation 6039' GL		Farm or Lease Name Culpepper Martin	
Csg. Size 7.625 5.500		Wt. 28.40# 17# 15.50#		Set At 4750' 4498-6792'		Perforations: From To		Well No. 16-E	
2.375		4.704		1.925		7129'		Unit Soc. Twp. Rge. N 4 31N 12W	
Type Well - Single - Broadhead - G.C. or G.O. Multiple Single						Packer Set At -----		County San Juan	
Producing Thru Tubing		Reservoir Temp. °F 8		Mean Annual Temp. °F		Baro. Press. - P _a 12.0		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
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	of Flow
SI							1576		1576		
1.	2"	x	3/4"				167		798		1 hr
2.							91		560		2 hrs
3.							55		450		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, Mcfd
1	12.365		67.2	1.0000	.9258	1.0000	769
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/Lbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons	Deg.
2.					Specific Gravity Separator Gas	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



NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0925$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0686$
1		462.2	213628.8	2308750.4		
2						
3						
4						
5						

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 822$

Absolute Open Flow 822		Mcf @ 15.025		Angle of Slope θ		Slope, n .75	
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Remarks: Heavy mist

Approved By Division	Conducted By: Leroy Castleman	Calculated By: James Smith	Checked By: L.O. Van Ryan
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