

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 8-15-80			
Company Southland Royalty Company				Connection Southern Union Gathering					
Pool Undesignated				Formation Fruitland				Unit	
Completion Date 8-1-80		Total Depth 7541'		Plug Back TD 7508'		Elevation 6283' GL		Farm or Lease Name Davis	
Csg. Size 7.000		Wt. 20#		d 6.456		Set At 5046'		Perforations: From To	
4.500		10.5# & 11.6		4.052		4890'-7541'		Well No. #7E	
Thq. Size 1.900		Wt. 2.76#		1.610		2781'		Perforations: From 2372' To 2765'	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple GG-Multiple						Packer Set At 4947'		County San Juan	
Producing Thru Tubing		Reservoir Temp. °F #		Mean Annual Temp. °F 12.2		Baro. Press. - P _a		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							867		867		
1.	2" X 3/4"						30		116		1 Hour
2.							10		56		2 Hours
3.							7		53		3 Hours
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		19.2	1.0000	.9258	1.0000	220
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio _____ Mc'/bbl.
1					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.					Specific Gravity Separator Gas _____ X X X X X X
3.					Specific Gravity Flowing Fluid _____ X X X X X X
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature _____ R

P _c 879.2 P _c ² 772992.6					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0055$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0047$	
NO	P _t ²	P _w	P _w ²	P _c ² - P _w ²				
1		65.2	4251.0	768741.6				
2								
3								
4								
5								

Absolute Open Flow <u>221</u> Mcfd @ 15.025					Angle of Slope θ _____		Slope, n <u>.85</u>	
Remarks: _____								

Approved By Division	Conducted By: Steve Kellanaers	Calculated By: James Smith	Checked By: L. O. Van Ryan
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