

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 4-30-81	
Company Southland Royalty Company		Connection Southern Union Gathering	
Pool Basin		Formation Dakota	
Completion Date 3-29-81	Total Depth 7108'	Plug Back TD 7073'	Elevation 6487' GR
Farm or Lease Name Hanks		Well No. 12-E	
Csg. Size 4.500	Wt. 11.6#	d 4.052	Set At 7108'
Perforations: From	To		Well No. 12-E
Perforations: From	To		Unit P
Perforations: From	To		Sec. 7
Perforations: From	To		Twp. 27N
Perforations: From	To		Range 9W
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single - GG		Packer Set At -----	
Producing Thru Tubing		State New Mexico	
L	H	Gg	% CO ₂
		.700	% 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"				612		884		1 hr
2.							52		301		2 hrs
3.							12		289		3 hrs
4.							4		289		
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		16.2	1.0000	.9258	1.0000	185
2.							
3.							
4.							
5.							

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

NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²
1.		301.2	90721.4	712453
2.				
3.				
4.				
5.				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1273$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 202$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0941$

Absolute Open Flow	202	Mcfd @ 15.025	Angle of Slope @	Slope, n	.75
Remarks:					
Approved By Division	Conducted By:	Calculated By:	Checked By:		
	Abe Saiz	James Smith	L. O. Van Ryan		