

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 6-4-80			
Company Southland Royalty Company				Connection Southern Union Gathering				
Pool Undesignated				Formation Chacra				Unit
Completion Date 5-7-80		Total Depth 6671'		Plug Back TD 6626'		Elevation 5935'		Farm or Lease Name Cain
Coq. Size 5.500	Wt. 15.5#	d 4.892	Set At 6671'	Perforations: From To			Well No. #11E	
Thq. Size 1.900	Wt. 2.7#	d 1.610	Set At 3154'	Perforations: From 3032' To 3140'			Unit Sec. Twp. Rge. 0 15-28N-10W	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple GG-Multiple					Packer Set At 3244'		County San Jaun	
Producing Thru Tubing		Reservoir Temp. °F		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							996		1000		
1.	2" X 3/4"						60		343		1 Hour
2.							49		274		2 Hours
3.							44		249		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		56.2	1.0000	.9258	1.0000	643
2							
3							
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 _____ X X X X X X X X
3					Specific Gravity Flowing Fluid _____ X X X X X
4					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5					Critical Temperature _____ R _____ R

P _c 1012.2 P _c ² 1024548.8				
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1		261.2	68225.4	956323.4
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0713$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 682$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0603$

Absolute Open Flow _____ Mcfd @ 15.025	Angle of Slope @ _____	Slope, n .85
Remarks: _____		

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