

Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 9-19-84		SEP 26 1984 OIL CON. DIV. DIST. 3	
Company Southland Royalty Company		Connection Southern Union Gathering			
Pool Otero		Formation Chacara		Unit	
Completion Date 9-9-84		Total Depth 2950'		Plug Back TD 2918'	
Elevation 5688' GL		Form or Lease Name Browning Stewart		Well No. 4	
Csq. Size 2.875	Wt. 6.5#	d 2.441	Set At 2923.90'	Perforations: From 2777' To 2900'	
Tbg. Size -----	Wt. -----	d -----	Set At -----	Perforations: From ----- To -----	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At -----	
Producing Thru Casing		Reservoir Temp. °F #		Mean Annual Temp. °F	
Baro. Press. - P _a 12.2		State New Mexico		County San Juan	
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									823		
1.	2" x 3/4"								258		1 hr
2.									193		2 hrs
3.									164		3 hrs
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	12.365		176.2	1.0000	.9258	1.0000	2017
2.							
3.							
4.							
5.							

NO.	P _r	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 _____ XXXXXXXXXX
3					Specific Gravity Flowing Fluid _____ XXXXX
4					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5					Critical Temperature _____ R _____ R

$P_c = 835.2$ $P_c^2 = 697559.0$

NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1		176.2	31046.4	666512
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{1.0466}{1.0466 - 0.0000} = 1.0466$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \left[\frac{1.0466}{1.0466 - 0.0000} \right]^n = 1.0347$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2087$

Absolute Open Flow <u>2087</u> Mcfd @ 15.025		Angle of Slope @ _____	Slope, n <u>.75</u>
Remarks: _____			

Approved By Division	Conducted By: Larry Bannowsky	Calculated By: James W. Smith	Checked By: C. Terry Hobbs
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