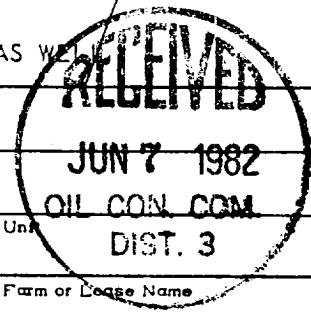


MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL



Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 5-21-82	
Company Southland Royalty Company				Connection Southern Union Gathering	
Pool Basin				Formation Dakota	
Completion Date 4-17-82		Total Depth 6725'		Plug Back TD 6680'	
Elevation 5783' GL		Farm or Lease Name Cain			
Csq. Size 5.500	Wt. 15.5#	d 4.950	Set At 6724'	Perforations: From To	
Tbg. Size 1.900	Wt. 2.9#	d 1.610	Set At 6639'	Perforations: From 6489' To 6695'	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple G. G. - Multiple				Packer Set At 4703'	
Producing Thru Tubing		Reservoir Temp. °F 8		Baro. Press. - P _a 12.2	
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.	
SI							1481			
1.	2" X 3/4"						295			1 hr
2.							257			2 hrs
3.							234			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		246.2	1.0000	.9258	1.0000	2818
2.							
3.							
4.							
5.							

NO.	P _f	Temp. °R	T _f	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 1493.2 P _c ² 2229646.2				
NO.	P _f ²	P _w	P _w ²	P _c ² - P _w ²
1		246.2	60614.4	2169031.8
2				
3				
4				
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.0279$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0209$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2877$$

Absolute Open Flow	2877	Mcfd @ 15.025	Angle of Slope @	Slope, n .75
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Remarks: _____

Approved By Division	Conducted By: Odell Farley	Calculated By: James Smith	Checked By: C. C. Parsons
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