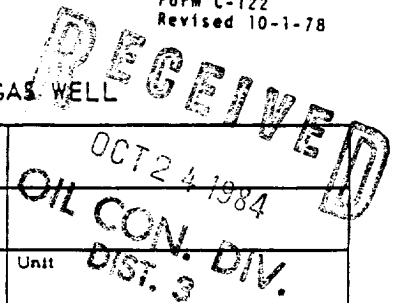


MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL



Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 10-23-84																																																																																
Company Southland Royalty Company			Connection Southern Union Gathering																																																																																	
Pool Blanco			Formation Mesaverde		Unit																																																																															
Completion Date 10-11-84		Total Depth 7265'		Plug Back TD 7082'	Elevation 6124' GL																																																																															
Casing Size 7.625 5.500		Wt. 26.40# 17#/15.5#	d 6.969 4.950/4.892	Set At 4845' 4770-7130	Perforations: From To																																																																															
Tubing Size 1.900		Wt. 2.76#	d 1.610	Set At 4865'	Perforations: From 4888' To 5123'																																																																															
Type Well - Single - Brdenhead - G.C. or G.O. Multiple Multiple				Packer Set At 5200'																																																																																
Producing Thru Tubing		Reservoir Temp. °F		Mean Annual Temp. °F																																																																																
L H		Gg .700		Baro. Press. - P _a 12.2																																																																																
		% CO ₂		% N ₂	% H ₂ S																																																																															
		Prover		Meter Run	Taps																																																																															
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="4">FLOW DATA</th> <th colspan="2">TUBING DATA</th> <th colspan="2">CASING DATA</th> <th rowspan="2">Duration of Flow</th> </tr> <tr> <th>NO.</th> <th>Prover Line Size</th> <th>X Orifice Size</th> <th>Press. p.s.i.g.</th> <th>Diff. h_w</th> <th>Temp. °F</th> <th>Press. p.s.i.g.</th> <th>Temp. °F</th> <th>Press. p.s.i.g.</th> <th>Temp. °F</th> </tr> <tr> <td>SI</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>964</td> <td></td> <td>964</td> <td></td> </tr> <tr> <td>1.</td> <td>2" X</td> <td>3/4"</td> <td></td> <td></td> <td></td> <td>210</td> <td></td> <td>785</td> <td></td> </tr> <tr> <td>2.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>207</td> <td></td> <td>757</td> <td></td> </tr> <tr> <td>3.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>189</td> <td></td> <td>694</td> <td></td> </tr> <tr> <td>4.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>						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						964		964		1.	2" X	3/4"				210		785		2.						207		757		3.						189		694		4.										5.									
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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		201.2	1.0000	.9258	1.0000	2303																																																																													
2.																																																																																				
3.																																																																																				
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5.																																																																																				
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl. A.P.I. Gravity of Liquid Hydrocarbons _____ Deg. Specific Gravity Separator Gas _____ X X X X X X X X Specific Gravity Flowing Fluid _____ X X X X X Critical Pressure _____ P.S.I.A. _____ P.S.I.A. Critical Temperature _____ R _____ R																																																																															
1																																																																																				
2.																																																																																				
3.																																																																																				
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5.																																																																																				
P _c 976.2 P _c ² 952966.4 NO P _r ² P _w P _w ² P _c ² - P _w ²					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.0979$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.7432$																																																																															
1		706.2	498718.4	454248																																																																																
2																																																																																				
3																																																																																				
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AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4015$																																																																																				
Absolute Open Flow 4015 Mcfd @ 15.025					Angle of Slope @		Slope, n .75																																																																													
Remarks:																																																																																				
Approved By Division			Conducted By: Jim Choquette		Calculated By: James W. Smith		Checked By: C. Terry Hobbs																																																																													