

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 12-5-79																																																																																															
Company Bruce Anderson			Connection																																																																																																
Pool Basin Dakota			Formation Dakota		Unit																																																																																														
Completion Date 11-27-79		Total Depth 6460'	Plug Back TD 6391'		Elevation 5657'																																																																																														
Csg. Size 4-1/2"		Wt. 10.5	Set At 6450'	Perforations: From 6210 To 6356																																																																																															
Tbg. Size 1-1/2"		Wt. 2.9	Set At 6343'	Perforations: From Open To End																																																																																															
Type Well - Single - Draddenhead - G.C. or G.O. Multiple Single - Gas				Packer Set At																																																																																															
Producing Thru tbg		Reservoir Temp. °F #	Mean Annual Temp. °F		Baro. Press. - P _a																																																																																														
L		H	G _g .65	% CO ₂	% N ₂																																																																																														
				% H ₂ S	Prover																																																																																														
					Meter Run																																																																																														
					Taps																																																																																														
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="6">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</th> <th>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></td> <td>1960</td> <td></td> <td>1970</td> <td></td> <td>7 days</td> </tr> <tr> <td>1.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3.</td> <td>3/4 Pos Choke</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>218</td> <td>60⁰</td> <td>962</td> <td></td> <td>3 hrs</td> </tr> <tr> <td>4.</td> <td></td> <td></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> <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							1960		1970		7 days	1.												2.												3.	3/4 Pos Choke						218	60 ⁰	962		3 hrs	4.												5.											
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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																																																																																																			
2																																																																																																			
3	12.365		230	1.000	.9608	1.016	2776																																																																																												
4																																																																																																			
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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																																																																																														
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P _c 1982 P _c ² 3928324 NO. P ₁ ² P _w P _w ² P _c ² - P _w ²					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.3183$ (2) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.2303$																																																																																														
1					AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3415$																																																																																														
2																																																																																																			
3	974	948676	2979648																																																																																																
4																																																																																																			
5																																																																																																			
Absolute Open Flow 3415 Mcfd @ 15.025					Angle of Slope @ _____ Slope, n _____																																																																																														
Remarks:																																																																																																			
Approved by Division		Conducted by Hall		Calculated by Hall		Checked by																																																																																													

