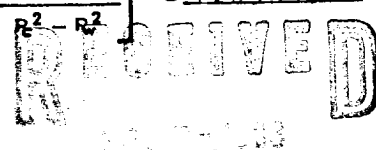


MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 11-3-83	
Company Bolack Minerals Company					Connection	
Pool Basin					Formation Dakota	
Completion Date 10-27-83		Total Depth 6670		Plug Back TD 6621		Elevation 6462KB
Csg. Size 4 1/2		Wt. 11.6		d 4.090		Set At 6670
Tbg. Size 2 3/8		Wt. 4.7		d 1.995		Set At
Type Well - Single - Brdenhead - G.C. or G.O. Multiple Single					Packer Set At None	
Producing Thru Tbg.		Reservoir Temp. °F 8		Mean Annual Temp. °F		Baro. Press. - P _a 12 psi
L		H		Cg .650		% 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
SI	7 days					
1.	2 inch	.750	166			
2.						
3.						
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}
1	12.3650		178	1.000	.9608	1.017
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 _____	
3.					Specific Gravity Flowing Fluid _____	
4.					Critical Pressure _____ P.S.I.A.	
5.					Critical Temperature _____ R	
$P_c = 1984$ $P_c^2 = 3936256$					$(1) \frac{P_c^2}{P_c^2 - R_w^2} = 1.12657$ $(2) \left[\frac{P_c^2}{P_c^2 - R_w^2} \right]^n = 1.09349$	
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²		
1		665	442225	3494031		
2						
3						
4						
5						
$AOF = Q \left[\frac{P_c^2}{P_c^2 - R_w^2} \right]^n = 2352$						
Absolute Open Flow 2352					Mcid @ 15.025	
Angle of Slope @					Slope, n .75	
Remarks:						
Approved By Division		Conducted By: Joe Elledge		Calculated By: Joe Elledge		Checked By: Bill Speer