

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test: ☒ Initial ☐ Annual ☐ Special						Test Date: 9/24/85	
Company: Merrion Oil & Gas Corporation						Connection:	
Pool: Basin Dakota						Formation: Dakota	
Completion Date:		Total Depth: 6909		Plug Back TD: 6848		Elevation: 6679' KB	
Casing Size: 5.500"		Casing WT: 15.5 #/ft		Casing ID: 1.380"		Casing Set At: 6681	
Tubing Size: 1.660"		Tubing WT: 2.4 #/ft		Tubing ID: 1.380"		Tubing Set At: 6681	
Type Well - Single - Brodenhead - G.G. or G.O. Multiple Dual Completion - G.O.						Packer Set At: 6595	
Producing thru Tubing:		Reservoir Temp. °F:		Mean Annual Temp. °F:		Boro. Press. - P _g : 12 PSIA	
L:		R:		G _g :		% CO ₂ :	
% N ₂ :		% H ₂ S:		Prover: 2"		Meter Run:	
Taps:							

FLOW DATA						TUBING DATA		CASHING 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
1.	2.0" x 1.000"			55		60°	2375	60°			3 hr.
2.							1350	60°			
3.											
4.											
5.											

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 _{sp}	Rate of Flow Q, Mcf/d
1.							1488
2.							
3.							
4.							
5.							

NO.	P _g	Temp. °R	T _g	Z	Gas Liquid Hydrocarbon Ratio 186,000 Mcf/unit.
1.					A.P.G. Gravity of Liquid Hydrocarbons 58.6 Deg.
2.					Specific Gravity Separator Gas XXXXXXXXXX
3.					Specific Gravity Flowing Fluid XXXXX
4.					Critical Pressure P.S.I.A. R
5.					Critical Temperature P.S.I.A. R

NO.	P _g	P _w	P _g ²	P _w ²	P _g ² - P _w ²	(1) $\frac{P_g^2}{P_g^2 - P_w^2} = 1.4827$ (2) $\left[\frac{P_g^2}{P_g^2 - P_w^2} \right]^n = 1.3437$ AOF = Q $\left[\frac{P_g^2}{P_g^2 - P_w^2} \right]^n = 1,999 \text{ MCF/Day}$
1.		1362	1855044	3842725		
2.						
3.						
4.						

Absolute Open Flow 1,999 MCF/Day		Field # 15.025		Angle of Slope #		Slope, n 0.75	
Remarks:							
Approved By Division		Conducted By		Calculated By		Checked By	