

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 7-7-80	
Company J. Gregory Merrion				Connection	
Pool Basin				Formation Dakota	
Completion Date 6-26-80		Total Depth 7030		Plug Back TD 7007	
				Elevation 6633 KB	
Csg. Size 4-1/2		Wt. 10.5		Set At 7025	
Perforations From 6819		To 6954		Well No. 3 E	
Tub. Size 2-3/8		Wt. 4.7		Set At 6827	
Perforations From		To		Unit Sec. Twp. Rge. E 35 25N 6W	
Type Well - Single - Brodenhead - G.G. or G.O. Multiple Single				Packer Set At --	
Producing Thru tubing				County Rio Arriba	
Reservoir Temp. °F 163 @ 6850		Mean Annual Temp. °F 60		Baro. Press. - P _a 12	
State New Mexico					
L	H	G _g	% 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.	Temp. °F	
SI	2"		3/4	144			144		370		3 hrs.
1.											
2.											
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 _{pv}	Rate of Flow Q, Mcfd
1	12.49		144	1.000	0.9258	1.047	1743
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 Hydrocarbon	Deg.
2					Specific Gravity Separator Gas	XXXXXXXXXX
3					Specific Gravity Flowing Fluid	XXXXXX
4					Critical Pressure	P.S.I.A.
5					Critical Temperature	R

P _c 1712	P _c ² 2,930,944	(1) $\frac{P_c^2}{P_t^2 - P_w^2} = 1.0408$	(2) $\left[\frac{P_c^2}{P_t^2 - P_w^2} \right]^n = 1.0304$
NO. 1	P _t ² 20,736	P _w ² 339	P _t ² - P _w ² 2,816,023
2			
3			
4			
5			

Absolute Open Flow		Mcf @ 15.025	Angle of Slope	Slope, n 0.75
Remarks:				
Approved By Division		Conducted By	Calculated By	Checked By
				J. Gregory Merrion