

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 8-22-83			
Company Caulkins Oil Company				Connection					
Pool Basin Dakota				Formation Dakota				Unit	
Completion Date 8-15-83		Total Depth 7687'		Plug Back TD 7687'		Elevation 6643 GR		Farm or Lease Name Breech "F"	
Csg. Size 5 1/2"	Wt. 17#	d 4.950	Set At 7687'	Perforations: From 7359' To 7657'		Well No. 1-E			
Tbg. Size 2 3/8"	Wt. 4.7#	d 1.995	Set At 7650'	Perforations: From 7650' To		Unit Sec. Twp. Rge. M 33 27-N 6-W			
Type Well - Single - Brodenhead - G.G. or G.O. Multiple Gas - Gas Multiple						Packer Set At		County Rio Arriba	
Producing Thru Tubing		Reservoir Temp. °F #		Mean Annual Temp. °F		Baro. Press. - P _a		State New Mexico	
L	H	Gg	% 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	
51							1959		1957		7 Days
1.							143		757		3 Hours
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	14.1605		155	1.000	1.000	1.000	2,195
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 1971 P _c 23,884,841			
NO.	P _t ²	P _w	P _t ² - P _w ²
1		769	591,361
2			
3			
4			
5			

(1) $\frac{P_c^2}{P_t^2 - P_w^2} = 1.18$		(2) $\left[\frac{P_c^2}{P_t^2 - P_w^2} \right]^n = 1.1318$	
AOF = Q $\left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n = 2,484$			

Absolute Open Flow	2,484	Mcf @ 15.025	Angle of Slope @	75	Slope, n	75
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Remarks:			
Approved By Division	Conducted By:	Calculated By:	Checked By: