

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 10-03-80			
Company Caulkins Oil Company				Connection					
Pool Basin Dakota				Formation Dakota				Unit	
Completion Date 8-26-80		Total Depth 7446		Plug Back TD 7446		Elevation 6491		Farm or Lease Name Breech A	
Coq. Size 7 5/8 & 4 1/2		Wt. 26.40 d 6.969		Set At 6635		Perforations: From 7146 To 7376		Well No. 136E	
Thq. Size 2 3/8		Wt. 4.7 d 1.991		Set At 7340		Perforations: From 7340 To		Unit Sec. Twp. Rge. 0 10 26N 6W	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Gas - Gas Multiple						Packer Set At 5630		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	
SI							1293		PKR		7 Days
1.							53		PKR		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 Ft.	Gravity Factor Fg	Super Compress. Factor Fpv	Rate of Flow Q, Mcfd
1	14.1605		65	1.000	1.000	1.000	920 MCFPD
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure P.S.I.A.	Critical Temperature °R
1										
2.										
3.										
4.										
5.										

NO.	P _c	P _w	P _c ²	P _w ²	P _c ² - P _w ²
1	1305	162	1,703,025	26,446	1,676,579
2.					
3.					
4.					
5.					

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.016$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.012$	
$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 931$			

Absolute Open Flow	931	Mcfd @ 13,025	Angle of Slope °	75	Slope, n
Remarks:					
Approved By Division		Conducted By:		Calculated By:	
				Checked By:	