

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 8-31-81				
Company Caulkins Oil Company				Connection					
Pool Basin Dakota				Formation Dakota				Unit	
Completion Date 8-24-81		Total Depth 7730		Plug Back TD 7730		Elevation 6646 Gr.		Farm or Lease Name State A	
Coq. Size 5 1/2"	Wt. 17# 15.5#	d 4.950 4.892	Set At 7730	Perforations: From 7398 To 7620			Well No. 113E		
Thq. Size 2 1/16"	Wt. 3.25#	d 1.751	Set At 7612	Perforations: From 7612 To			Unit Sec. Twp. Rge. P 2 26N 6W		
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Gas - Gas Multiple					Packer Set At 5774		County Rio Arriba		
Producing Thru Tubing		Reservoir Temp. °F #		Mean Annual Temp. °F		Baro. Press. - P _a		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							1233		PKR		7 Day SI
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 F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	14.1605		65	1.000	1.000	1.000	920
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	XXXXXXX
3.					Specific Gravity Flowing Fluid	XXXXXXX
4.					Critical Pressure	P.S.I.A.
5.					Critical Temperature	R

P _c 1245	P _c ² 1,550,025		
NO.	P _t ²	P _w	P _w ²
1	4,225	510	260,481
2			
3			
4			
5			

$$(1) \frac{P_c^2}{P_t^2 - P_w^2} = 1.202$$

$$AOF = Q \left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n = 1056$$

$$(2) \left[\frac{P_c^2}{P_t^2 - P_w^2} \right]^n = 1.148$$

Absolute Open Flow	1056	Mcf @ 15.025	Angle of Slope	75	Slope, n
Remarks:					
Approved By Division		Conducted By:		Calculated By:	