

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 7-27-83				
Company Caulkins Oil Company				Connection					
Pool Basin Dakota				Formation Dakota				Unit	
Completion Date 7-20-83		Total Depth 7592		Plug Back TD 7580		Elevation 6597 GR		Farm or Lease Name Breech "D"	
Csg. Size 5 1/2"	Wt. 17# 15.5#	d 4.950 4.892	Set At 7592	Perforations: From 7300 To 7538		Well No. 140-M			
Tbg. Size 1 1/2"	Wt. 2.90#	d 1.900	Set At 7477	Perforations: From 7477 To		Unit Sec. Twp. Rye. D 11 26N 6W			
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Gas - Gas Multiple					Packer Set At 5576		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							RING 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							1121		PKR		7 Days
1.							89		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		101	1.000	1.000	1.000	1,430
2.							
3.							
4.							
5.							

NO.	P _r	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 _____ XXXXX XXXXX
3					Specific Gravity Flowing Fluid _____ XXXXX
4					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5					Critical Temperature _____ R _____ R

$P_c = 1133$ $P_c^2 = 1,283,689$				
NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²
1	10,201	421	176,983	1,106,706
2				
3				
4				
5				

$$(1) \frac{P_c^2}{P_r^2 - P_w^2} = 1.16$$

$$(2) \left[\frac{P_c^2}{P_r^2 - P_w^2} \right]^n = 1.12$$

$$AOF = Q \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1,598$$

Absolute Open Flow	1,598	Mcf/d @ 15.023	Angle of Slope	Slope, n
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Remarks:

Approved By Division	Conducted By:	Calculated By:	Checked By:
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