

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 10-30-83	
Company Caulkins Oil Company				Connection		
Pool Basin Dakota Blanco Mesa Verde				Formation Mesa Verde - Dakota		Unit 151.3
Completion Date 9-21-83		Total Depth 6888'		Plug Back TD 6888'		Elevation 6146 GR
Firm or Lease Name Breech		Well No. 307-M				
Coq. Size 5 1/2"	Wt. 17# 15.5#	d 4.950 4.892	Set At 6888'	Perforations From 4534' To 6818'		
Fig. Size 1 1/4"	Wt. 2.33#	d 1.660	Set At 4700'	Perforations From 6682' To		Unit Sec. Twp. Rge. 0 13 26N 7W
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Gas-Gas Multiple				Packer Set At 3337'		County Rio Arriba
Producing thru Tubing		Reservoir Temp. °F #		Mean Annual Temp. °F		State New Mexico
L	H	Gq	% 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							1415		PKR		7 Days
1.							137		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		149	1.000	1.000	1.000	2,110
2.							DAK 1625
3.							INV 485
4.							
5.							

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

P _c 1427	P _c ² 2,036,329		
NO.	P _f ²	P _w	P _w ²
1	22,201	872	761,622
2			
3			
4			
5			

(1) $\frac{P_c^2}{R_c^2 - R_w^2} = 1.597$		(2) $\left[\frac{R_c^2}{R_c^2 - R_w^2} \right]^n = 1.421$	
AOF = Q $\left[\frac{R_c^2}{R_c^2 - R_w^2} \right]^n = 2,998$			

Absolute Open Flow	2,998	Mcf @ 15.025	Angle of Slope	75	Slope, n
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Remarks: 77% of 2998 = 2309 MCFPD for Dakota Zone	
23% of 2998 = 689 MCFPD for Mesa Verde Zone	

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