

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 5-29-84	
Company Consolidated Oil & Gas, Inc.				Connection Southern Union			
Pool Basin Dakota				Formation Dakota		Unit	
Completion Date		Total Depth 7082'		Plug Back TD 7034		Elevation 5911' KB	
Farm or Lease Name Leeds				Well No.			
Csg. Size 5 1/2	Wt. 17# & 15.5#	d 4.950	Set At 7079'	Perforations: From 6806 To 6952		Well No.	
Trg. Size 1 1/2	Wt. 2.9#	d 1.610	Set At 6936	Perforations: From To		Unit Sec. Twp. Range E 8 31 12	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Dual well				Packer Set At 6350		County San Juan	
Producing Thru Tubing		Reservoir Temp. °F 8		Mean Annual Temp. °F		Baro. Press. - P _a 12.0	
State New Mexico							
L	H	G _g .650	% CO ₂	% N ₂	% H ₂ S	Prover 6" choke	Meter Run Nipple
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.	
SI	15 days						817		Pkr.	
1.	2 x 3/4						73	60	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 F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	11.00		85	1.000	1.240	1.000	1159.4
2.							
3.							
4.							
5.							

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

NO.	P _t	P _w	P _w ²	P _c ² - P _w ²
1	829	330	108900	578341
2.				
3.				
4.				
5.				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1883$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1319.5$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1381$

Absolute Open Flow	1319.5	Mcf @ 15.025	Angle of Slope θ	53.13	Slope, n	0.75
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Remarks:

Approved By Division	Conducted By: Morgan McLean	Calculated By: Neil Toftallan	Checked By:
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