

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 6/3/80					
Company ARCO Oil & Gas Company, Div. of Atlantic Richfield Co.						Connection None					
Pool Basin Dakota						Formation Dakota					
Completion Date 5/17/80			Total Depth 6382		Plug Back TD 6338		Elevation 5734 GL		Farm or Lease Name Schlosser WN Fed.		
Ceq. Size 4 1/2"		Wt. 10.5#		d 4.052		Set At 6381		Perforations: From 6193 To 6317		Well No. 8E	
Tq. Size 2 3/8"		Wt. 4.7#		d 1.995		Set At 6065		Perforations: From To		Unit Sec. Twp. Rge. F 27 28N 11W	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single Gas						Packer Set At None		County San Juan			
Producing Thru Tubing			Reservoir Temp. °F p		Mean Annual Temp. °F		Baro. Press. - P _a 12.0		State New Mexico		
L 6065		H 6065		G _g .800(est)		% CO ₂		% N ₂		% H ₂ S	
								Prover 2"		Meter Run Taps	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover 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							819		819		SI 17 days
1.	2"	X	.750	59		79°	179		493		Flow 3 hrs
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, Mcd
1	9.453		71	.9822	1.118	1.000	737
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 10.236	Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons 44.1 @ 60°F	Deg.
2.					Specific Gravity Separator Gas .800 (est)	XXXXXX
3.					Specific Gravity Flowing Fluid XXXXX	
4.					Critical Pressure 665	P.S.I.A.
5.					Critical Temperature 424	R

P _c 831	P _c ² 690561		
NO.	P _t ²	P _w	P _w ²
1	36481	225	50741
2			
3			
4			
5			

(1) $\frac{P_c^2}{P_t^2 - P_w^2} = 1.0793$

AOF = Q $\left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n = .780$

(2) $\left[\frac{P_c^2}{P_t^2 - P_w^2} \right]^n = 1.0589$

Absolute Open Flow 780	Mcd @ 15.025	Angle of Slope θ	Slope, n .75
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Remarks: Well tested thru 48/64" choke.

Approved By Division	Conducted By: Rex Hitchcock, Jr.	Calculated By: Rex Hitchcock, Jr.	Checked By:
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