

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 08-21-80			
Company ARCO Oil & Gas Co., Div. of Atlantic Richfield Co.						Connection None			
Pool Basin Dakota						Formation Dakota			
Completion Date 08-06-80		Total Depth 6615		Plug Back TD 6580		Elevation 6118		Farm or Lease Name Schlosser WN Fed.	
Coq. Size 4 1/2"	Wt. 10.5#	d 4.052	Set At 6615	Perforations: From 6480 To 6535		Well No. 6-E			
Thq. Size 2-3/8"	Wt. 4.7#	d 1.995	Set At 6456	Perforations: From To		Unit Soc. Twp. Rge. P 3 27N 11W			
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single Gas						Packer Set At None		County San Juan	
Producing Thru Tubing L 6456		Reservoir Temp. °F H 6456		Mean Annual Temp. °F Gg .800(EST)		Baro. Press. - P _a 12.0		State New Mexico	
				% 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							1255		1255		SI 15 Days
1.	2" X .750"			167		70°	343		653		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 _{sp}	Rate of Flow Q, Mcfd
1	9,453		179	.9905	1.118	1.025	1921
2.							
3.							
4.							
5.							

NO.	P _i	Temp. °R	T _i	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	.27	530	1.25	.951	1024.533	50.7 @ 60°
2.					A.P.I. Gravity of Liquid Hydrocarbons	Deg.
3.					Specific Gravity Separator Gas	
4.					Specific Gravity Flowing Fluid	
5.					Critical Pressure	
					Critical Temperature	

NO.	P _i ²	P _w	P _w ²	P _i ² - P _w ²
1	126025	478	228128	1377161
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_i^2 - P_w^2} = 1.1657$

AOF = Q $\left[\frac{P_i^2}{P_i^2 - P_w^2} \right]^n = 2155$

(2) $\left[\frac{P_i^2}{P_i^2 - P_w^2} \right]^n = 1.1219$

Absolute Open Flow	2155	Mcf @ 15.025	Angle of Slope		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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