

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 4-6-81			
Company ARCO Oil & Gas Co., Div of Atlantic Richfield Company						Connection None			
Pool Basin Dakota						Formation Dakota		Unit	
Completion Date 3-30-81		Total Depth 6360		Plug back TD 6320		Elevation 6013		Farm or Lease Name Krause WN Federal	
Ceq. Size 4 1/2"	Wt. 10.5#	d 4.052	Set At 6359	Perforations From 6149 To 6310		Well No. 4E			
Trq. Size 2 3/8"	Wt. 4.7#	d 1.995	Set At 6133	Perforations From To		Unit P 33 28N 11W			
Type Well - Single - Brodenhead - G.G. or G.O. Multiple Single Gas						Packer Set At None		County San Juan	
Producing Thru Tubing		Reservoir Temp. °F 8		Mean Annual Temp. °F		Baro. Press. - P ₀ 12.0		State New Mexico	
L 4906	H 4906	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							1147		1148		SI 7 Days Flow 3 Hrs
1.	2"		.750"	166		67	412		687		
2.											
3.											
4.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mscf/d
1	9.453		178	.9933	.118	1.026	1917
2.							
3.							
4.							
5.							

NO.	P ₁	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	.27	527	1.24	.950	15.384	49.2	.800 Est	XXXXXX	665	124
2.										
3.										
4.										
5.										

NO.	P ₁ ²	P _w ²	P ₁ ² - P _w ²	(1) $\frac{P_c^2}{P_1^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_1^2 - P_w^2} \right]^n =$
1	179776	527	277231	1.2595	1.1889
2.					
3.					
4.					
5.					

Absolute Open Flow <u>2279</u>		Mscf @ 15.025		Angle of Slope θ		Slope, n <u>.75</u>	
Remarks: Well Test Thru 48/64" Choke							

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