

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 9/21/79		OCT 5 1979	
Company AMOCO PRODUCTION COMPANY ✓				Connection NAT GAS PL CO OF AMER		O.C.C.	
Pool WEST ATOKA				Formation ATOKA		Unit ARTESIA, OFFICE	
Completion Date 5/5/78		Total Depth 8705.		Plug Back TD 8663.		Elevation 3494.	
Farm or Lease Name Johnson		Well No. 1		Unit Sec. Twp. Rge. H 10 18S 25E			
Csg. Size 5.500		Wt. 17.0		Set At 4.892		Perforations: From 8559. To 8568.	
Tbg. Size 2.375		Wt. 4.7		Set At 1.995		Perforations: From 0. To 0.	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At 8486.		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 172. @ 8564.		Mean Annual Temp. °F 60.0		Baro. Press. - P _a 13.2	
State New Mexico							
L 8564.		H 8564.		G _g 0.609		% CO ₂ 0.72	
				% N ₂ 0.41		% H ₂ S 0.	
Prover 0.		Meter Run 3.1		Taps Flange			

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
SI							1154.	68.			46.0
1.	3.09 x 1.500			230.	1.6	68.	1070.	65.	0.	0.	1.0
2.	3.09 x 1.500			300.	9.2	67.	832.	64.	0.	0.	1.0
3.	3.09 x 1.500			360.	13.5	65.	532.	65.	0.	0.	1.0
4.	3.09 x 1.500			395.	11.5	67.	403.	67.	0.	0.	1.0
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	11.12	19.85	243.2	0.9924	1.2816	1.0207	186.
2	11.12	53.82	313.2	0.9933	1.2816	1.0271	782.
3	11.12	71.03	373.2	0.9952	1.2816	1.0327	1040.
4	11.12	68.57	408.2	0.9933	1.2816	1.0351	1005.
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NO.	P _r	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	0.36	528.	1.47	0.960	0.	0.	0.609	X X X X X X X X	675.	359.
2	0.46	527.	1.47	0.948				X X X X X		
3	0.55	525.	1.46	0.938						
4	0.61	527.	1.47	0.933						
5										

P _r 1165.2 P _c 1358				$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{1.3158}{1.3158 - 1.173} = 1.2273$	
NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²	$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1277.$
1	1173.	1083.	1174.	184.	
2	714.	854.	729.	628.	
3	297.	571.	326.	1032.	
4	173.	448.	201.	1157.	
5					

Absolute Open Flow 1277.		Mcf/d @ 15.025		Angle of Slope @ 53.3		Slope, n 0.746	
Remarks:							

Approved By Commission:	Conducted By: John West Engrg.	Calculated By: C.C. Weaver	Checked By: W.D. Magness
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3-MRCD-A 1-40u 1-5usp 1-WDM 1-DKB