

SUN 10 1980

O. C. D.

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 5-30-80		ARTESIA, OFFICE	
Company Perry R. Bass				Connection Natural Gas Pipeline Co. of AM.			
Tool Sand Point <i>Sand Point - wellhead atoka</i>				Formation Atoka		Unit Big Eddy Unit	
Completion Date 5-30-80		Total Depth 12332		Plug Back TD 12180		Elevation 3270	
Casing Size 5 1/2		ID 20		Set At 12332		Perforations: From 11265 To 11375	
Tubing Size 2 1/16		ID 3.25		Set At 11189		Perforations: From To	
Type Well - Single - Prodenhead - G.C. or G.O. Multiple Dual				Packer Set At 11180		County Eddy	
Producing Thru tubing		Reservoir Temp. °F 188 @ 11,197		Mean Annual Temp. °F 58		Baro. Press. - P _a 13.2	
L 11,197		H 11,197		G _c .602		% CO ₂ None	
				% N ₂ None		% H ₂ S None	
				Prover		Meter Run 4.026	
						Type 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	
1.	4.026	1.50	461	4.0	78	5985	5437	72	Packer		60 Min.
2.	4.026	1.50	492	11.56	80	5027	73	in			60 Min.
3.	4.026	1.50	492	17.64	89	4829	75	Well			60 Min.
4.	4.026	1.50	507	28.1	89	4307	75				60 Min.
5.	4.026	1.50	476	47.6	82	3622	76				60 Min.

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mgd
1	10.84	43.55	474.2	.9331	1.289	1.038	621
2	10.84	76.42	505.2	.9313	1.289	1.040	1090
3	10.84	94.40	505.2	.9732	1.289	1.040	1335
4	10.84	120.90	520.2	.9732	1.289	1.041	1711
5	10.84	152.60	489.2	.9795	1.289	1.039	2169

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	.71	538	1.50	.929	192,000 to 1	53	.602	X X X X X	671	358
2	.75	540	1.50	.925						
3	.75	549	1.53	.925						
4	.78	549	1.53	.922						
5	.73	542	1.51	.927						

NO.	P _t ²	P _w ²	P _w ² - P _t ²
1	6710.2	45027	8734
2	6292.2	39592	14169
3	6081.2	36981	16780
4	5444.2	29639	24122
5	4715.2	22233	31528

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.7052$

ADP = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3416$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.575$

Absolute Open Flow	3416	Mgd @ 15.025	Angle of Slope	50	Slope, n	.8434
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Remarks: P_w Substituted for P_t Measured with Amerada Instrument No. 34515 0 - 8300#

Element

Approved By Commission:	Conducted By: Spruell	Calculated By: Spruell	Checked By: Pyle
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