

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
 Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 10-9-78		OCT 20 1978	
Company Amoco Production Company ✓				Connection Transwestern			
Pool Buffalo Valley <i>Penn.</i>				Formation Penn		Unit U.C.C. ARTESIA, OFFICE	
Completion Date 3-2-78		Total Depth 9050		Plug Back TD 9004		Elevation 3604	
Csg. Size 5.500		WT. 15.5		Set At 4.950		Perforations: From 8918 To 8922	
Trq. 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 8814		Form or Lease Name State ET	
Producing Thru Tubing		Reservoir Temp. °F 171 @ 8920		Mean Annual Temp. °F 60.0		Baro. Press. - P _a 13.2	
L 8920		H 8920		G _g 0.847		% CO ₂ 0.01	
				% N ₂ 0.00		% H ₂ S 0	
				Prover 0		Meter Run 2.1	
						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							2168	68			48.0
1.	2.07 X 1.125			30	9.0	58	2010	69	0	0	0.7
2.	2.07 X 1.125			32	16.0	60	1888	70	0	0	1.0
3.	2.07 X 1.125			32	30.0	64	1760	72	0	0	1.0
4.	2.07 X 1.125			39	46.0	70	1110	72	0	0	1.0
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	6.39	19.72	43.2	1.0039	1.2432	1.0044	158
2	6.39	26.89	45.2	1.0000	1.2432	1.0044	215
3	6.39	36.82	45.2	0.9962	1.2432	1.0043	293
4	6.39	49.00	52.2	0.9905	1.2432	1.0049	388
5							

NO.	P _i	Temp. °R	T _i	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure P.S.I.A.	Critical Temperature °R
1.	0.06	516	1.38	0.991	0	0	0.647	XXXXXX	670	373
2.	0.07	520	1.39	0.991				XXXXXX		
3.	0.07	524	1.40	0.991						
4.	0.08	530	1.42	0.990						
5.										

NO.	P _i ²	P _w ²	P _e ²	P _e ² - P _w ²
1	4093	2016	4064	664
2	3615	1894	3587	1141
3	3144	1765	3116	1612
4	1262	1121	1256	3472
5				

(1) $\frac{P_e^2}{P_e^2 - P_w^2} = 1.3618$

AOR = Q $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 457$

(2) $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 1.1785$

Absolute Open Flow	457	Mcfd @ 15.025	Angle of Slope	62.0	Slope, n	0.532
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Remarks:

Approved by Consultant:	Conducted by John West Engineering	Calculated by CCN	Checked by RMB
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