

February 7, 1990

Exhibit No. 9

WELL FILE

Type Test		☒ Initial ☐ Annual ☐ Special		Test Date 8-31-87	
Company Amoco Production Co.		Vented to atmosphere			
Pool Fowler		Formation Upper Silurian		Unit	
Completion Date 3-18-87		Total Depth 11,150'		Plug Back TD 9700	
		Elevation 3247 KB		Farm or Lease Name So. Mattix Unit	
Csg. Size 7"	Wt. 23#	d 6.366	Set At 10426	Perforations: From 6960 To 7015	
Thg. Size 2 7/8"	Wt. 6.5#	d 2.441	Set At 6910	Perforations: From OPENENDED	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 6871	
Producing Thru Tubing		Reservoir Temp. °F 112° @ 6910		Mean Annual Temp. °F 60°	
		Baro. Press. - P _g 13.2		State New Mexico	
L 6960	H 6960	Gg .708	% CO ₂ .530	% N ₂ 3.78	% H ₂ S
Prover		Meter Run 4"		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	Duration of Flow
SI							1935		PKR	CHOKE	72 Hrs.
1.	4.026	X	1.500	280	8.00	60°	1678			8/64	1 Hr.
2.	4.026	X	1.500	280	16.00	76	1514			10/64	1 Hr.
3.	4.026	X	1.500	290	15.00	81	1405			12/64	1 Hr.
4.	4.026	X	1.500	320	22.00	62	1087			15/64	1 Hr.
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 _{pv}	Rate of Flow O. Mcfd
1	10.84	48.43	293.2	1.000	1.188	1.038	647
2.	10.84	68.49	293.2	.9850	1.188	1.034	898
3.	10.84	67.44	303.2	.9804	1.188	1.035	881
4.	10.84	85.62	333.2	.9981	1.188	1.044	1149
5.							

NO.	R _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	No fluid produced	Mcft/bbl.
1	.44	520	1.33	.928	A.P.I. Gravity of Liquid Hydrocarbons		Deg.
2.	.44	536	1.37	.936	Specific Gravity Separator Gas	.708	X X X X X X X X
3.	.45	541	1.38	.934	Specific Gravity Flowing Fluid	X X X X X	
4.	.50	522	1.33	.918	Critical Pressure	668	P.S.I.A.
5.					Critical Temperature	392	R

NO.	P ₁ ²	P _w ²	P _e ²	P _e ² - P _w ²
1			2863.0	932.5
2			2337.8	1457.7
3			2016.7	1778.8
4			1220.3	2575.2
5				

(1) $\frac{P_e^2}{P_e^2 - P_w^2} = 1.474$

ACF = 0 $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 1.432$

(2) $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 1.246$

Absolute Open Flow	1,432	Mcfd @ 15.025	Angle of Slope @	60.5	Slope, n	.568
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Remarks: No fluid produced during this test.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	W.S.	JBM	P. E. Y'Barbo

AMOCO PRODUCTION COMPANY
 SO. MATTIX UNIT NO. 5
 G-22-24S-37E
 LEA CO. NEW MEXICO

AUGUST 31, 1987

