

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

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Form C-122
Revised 9-1-65

SEP 16 1983

O. C. D.

ARTESIA, OFFICE

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 9-1-83	
Company Amoco Production Company				Connection To Atmosphere		
Pool Wildcat <i>Atoka</i>				Formation Atoka		Unit F
Completion Date 9-8-83		Total Depth 10405		Plug Back TD 10108		Elevation 3683
Csg. Size 5.500		Wt. 17.0	d 4.892	Set At 10405	Perforations: From 9982 To 9994	
Tbg. Size 2.375		Wt. 4.7	d 1.995	Set At 9996	Perforations: From 0 To 0	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 9907		Well No. 1
Producing Thru Tubing		Reservoir Temp. °F 82 @ 9988		Mean Annual Temp. °F 60.0		Baro. Press. - P _a 13.2
L 9988		H 9988	G _g 0.731	% CO ₂ 0.28	% N ₂ 0.23	% H ₂ S 0
					Prover 0	Meter Run 4.0
						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							1875	60			120.0
1.	4.00 x 1.000			4	0	0	1480	60	0	0	1.0
2.	4.00 x 1.000			6	0	28	856	60	0	0	0.7
3.	4.00 x 1.000			2	0	55	65	60	0	0	0.7
4.	4.00 x 1.000			17	0	48	76	60	0	0	0.7
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	0	0	17.2	1.0632	1.1693	1.0032	238
2	0	0	19.2	1.0323	1.1693	1.0029	289
3	0	0	15.2	1.0048	1.1693	1.0019	156
4	0	0	30.2	1.0117	1.1693	1.0040	526
5							

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.	0.03	460	1.15	0.994	0	56.8	0.731	X X X X X X X X	667	398
2.	0.03	488	1.22	0.994				X X X X X		
3.	0.02	515	1.29	0.996						
4.	0.05	508	1.27	0.992						
5.										

NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²
1	2230	1492	2226	1339
2	756	870	756	2809
3	6	83	7	3558
4	8	132	18	3548
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0049$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0040$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 528$

Post FD 2
9-2-83
6007

Absolute Open Flow	528	Mcfd @ 15.025	Angle of Slope θ	50.9	Slope, n	0.813
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Remarks: Test data appears erroneous due to liquid production and freezing of choke and test equipment. CAOF is 1849 MCFD based on the Fetkovich equation.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
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