

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

Form C-122
Revised 9-1-65

C/SF
C-122

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 4-30-82		MAY - 5 1982	
Company Amoco Production Company ✓		Connection El Paso Natural Gas Comp			
Pool Happy Valley		Formation Morrow		Unit O. C. D. ARTESIA, OFFICE	
Completion Date 1-11-82		Total Depth 11539		Plug Back TD 11500	
Elevation 3369		Farm or Lease Name Federal CN		Well No. 1	
Csg. Size 5.500	Wt. 17.0	d 4.778	Set At 11589	Perforations: From 11360 To 11370	
Tbg. Size 2.375	Wt. 4.7	d 1.995	Set At 11371	Perforations: From 0 To 0	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single				Packer Set At 11253	
Producing Thru Tubing		Reservoir Temp. °F 180 @ 11365		Mean Annual Temp. °F 60.0	
Baro. Press. - P _a 13.2		State New Mexico		County Eddy	
L 11365	H 11365	G _g 0.595	% CO ₂ 1.00	% N ₂ 0.23	% H ₂ S 0
Prover 0		Meter Run 6.0		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
1.	6.00 x 2.000			449	7.3	70	2913	63	0	0	72.0
2.	6.00 x 2.000			511	15.2	78	2870	63	0	0	0.7
3.	6.00 x 2.000			555	44.9	82	2735	64	0	0	0.7
4.	6.00 x 2.000			563	84.6	81	2535	67	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 Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1.	19.17	58.04	462.1	0.9905	1.2963	1.0365	1481
2.	19.17	89.31	524.4	0.9831	1.2963	1.0392	2267
3.	19.17	159.71	568.2	0.9795	1.2963	1.0413	4048
4.	19.17	220.74	575.7	0.9804	1.2963	1.0421	5604
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.	0.68	530	1.49	0.931	0	0	0.595	0.595	677	355
2.	0.77	538	1.52	0.926						
3.	0.84	542	1.53	0.922						
4.	0.85	541	1.53	0.921						
5.										

P _c 2973.2 P _c ² 8840		(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.3494$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.5976$	
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	
1	8563	2928	8575	264	
2	8313	2891	8358	481	
3	7553	2778	7718	1122	
4	6493	2609	6807	2032	
5					

Absolute Open Flow 14558 Mcfd @ 15.025		Angle of Slope θ 57.0		Slope, n 0.649	
Remarks:					
Approved By Commission:					
Conducted By: John West		Calculated By: B. A. Wagner		Checked By: L. W. Sheppard	