

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

Form C-122
Revised 6-1-65

C/SF
C-122

RECEIVED

Type Test ☐ Initial ☐ Annual ☐ Special				Test Date 3-4-82		MAR 10 1982	
Company AMOCO PRODUCTION COMPANY				Connection EL PASO NATURAL GAS COMP.		O. C. D.	
Pool <i>Dark Canyon Penn Morrow</i> UNDESIGNATED				Formation MORROW		Unit ARTESIA, OFFICE	
Completion Date 12-28-81		Total Depth 10805.		Plug Back TD 10280.		Elevation 3831.	
Form or Lease Name STATE 1Z <i>Com</i>							
Csg. Size 5.500	Wt. 17.0	d 4.950	Set At 10805.	Perforations: From 10224. To 10328.		Well No. 1	
Tbg. Size 2.267	Wt. 4.7	d 1.995	Set At 10016.	Perforations: From 0. To 0.		Unit <i>F</i> Soc. Twp. Hgt. 31 23S 25E	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple SINGLE				Packer Set At 9915.		County EDDY	
Producing Thru TUBING		Reservoir Temp. °F 165 @ 10276.		Mean Annual Temp. °F 60.0		Baro. Press. - P _a 13.2	
State NEW MEXICO							
L 10276.	H 10276.	Gg 0.588	% CO ₂ 0.88	% N ₂ 0.77	% 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							3051.	72.			46.0
1.	4.00 X 2.000			706.	5.3	87.	2928.	62.	0.	0.	0.7
2.	4.00 X 2.000			723.	12.2	91.	2857.	63.	0.	0.	0.7
3.	4.00 X 2.000			748.	27.0	77.	2685.	63.	0.	0.	0.7
4.	4.00 X 2.000			792.	51.8	65.	2387.	64.	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	19.83	61.68	719.2	0.9750	1.3038	1.0485	1631.
2	19.83	94.97	736.2	0.9715	1.3038	1.0481	2500.
3	19.83	143.47	761.2	0.9840	1.3038	1.0553	3852.
4	19.83	204.31	805.2	0.9952	1.3038	1.0636	5593.
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	1.06	547.	1.56	0.910	0.	
2.	1.09	551.	1.57	0.910	0.	
3.	1.13	537.	1.53	0.898		
4.	1.19	525.	1.49	0.884		
5.						

A.P.I. Gravity of Liquid Hydrocarbons		0.588		X X X X X X X X	
Specific Gravity Separator Gas		0.588		X X X X X	
Specific Gravity Flowing Fluid		X X X X X		0.588	
Critical Pressure		676.		P.S.I.A. 676. P.S.I.A.	
Critical Temperature		351.		R 351. R	

P _c 3064.2 P _c ² 9389.			
NO.	P _r ²	P _w	P _w ²
1	8651.	2954.	8724.
2	8238.	2898.	8400.
3	7280.	2769.	7670.
4	5761.	2562.	6566.
5			

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 3.3259$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 14,522$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.5965$$

Absolute Open Flow	14,522	Mcf/d @ 15.025	Angle of Slope θ	51.6	Slope, n	0.794
Remarks:						

Approved By Commission:	Conducted By: John West	Calculated By: B. A. Hemmeline	Checked By: L. W. Sheppard
-------------------------	----------------------------	-----------------------------------	-------------------------------