

NEW MEXICO OIL CONSERVATION COMM. ON
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 7-12-78	
Company El Paso Natural Gas Company				Connection None	
Pool Eumont				Formation Yates	
Completion Date 7-10-78		Total Depth 3713		Plug Back TD 3065	
				Elevation 3554 GL	
Csg. Size 4.5		Wt. 10.5		Set At 3710 KB	
Perforations: From 2946 To 2996		Well No. 1			
Tub. Size 2 3/8		Wt. 4.7		Set At 2915	
Perforations: From To		Unit N		Sec. 6	
		Twp. 21		Rge. 36	
Type Well - Single - Branched - G.G. or G.O. Multiple Single				Packer Set At None	
Producing thru Tog.				State New Mexico	
L 2946		H 2946		Gg .739	
				% CO ₂ .38	
				% H ₂ 28	
				% H ₂ S	
				Prover 2"	
				Meter Run	
				Type	

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							381		379		72 hrs.
1.	2	x	1/8	372		79	372		371		30 min.
2.	2	x	3/16	358		76	358		358		1 hr.
3.	2	x	7/32	345		77	345		346		1 hr.
4.	2	x	1/4	323		78	323		338		1 hr.
5.	2	x	3/8	237		76	237		313		1 hr.

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. Compens. Factor, F _{sp}	Rate of Flow Q, Mscf/d
1	.2648		385.2	.9822	1.163	1.047	122
2	.6082		371.2	.9850	1.163	1.045	270
3	.8393		358.2	.9840	1.163	1.044	359
4	1.087		336.2	.9831	1.163	1.040	435
5	2.378		250.2	.9850	1.163	1.029	701

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mc/d
1	.58	539	1.34	.913	A.P.L. Gravity of Liquid Hydrocarbons	
2	.56	536	1.34	.916	Specific Gravity Separator Gas	
3	.54	537	1.34	.918	Specific Gravity Flowing Fluid	
4	.50	538	1.34	.924	Critical Pressure	668
5	.37	536	1.34	.945	Critical Temperature	401

NO.	P _t	P _w	P _w ²	P _t ² - P _w ²
1	394.2	155.4		
1		384.2	147.6	7.8
2		371.2	137.8	17.6
3		359.2	129.0	26.4
4		351.2	123.3	32.1
5		326.2	106.4	49.0

(1) $\frac{P_t^2}{P_t^2 - P_w^2} = 3.171$

ADP = Q $\left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n = 2.116$

(2) $\left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n = 3.018$

Absolute Open Flow	2,116	Mc/d @ 14.653	Angle of Slope	46.25°	Slope, n	.957
--------------------	-------	---------------	----------------	--------	----------	------

Remarks:

Approved By: Commissioner	Conducted By: Reggie Reston	Calculated By: Reggie Reston	Checked By:
---------------------------	-----------------------------	------------------------------	-------------