

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☒ Special						Test Date 5/26/81			
Company Amoco Production				Connection El Paso Natural Gas Company					
Pool Basin				Formation Dakota				Unit	
Completion Date 4/14/81		Total Depth 6973		Plug Back TD 6870		Elevation 6418		Farm or Lease Name Martin Gas Com "F"	
Csq. Size 4.500	Wt. 10.5	d 4.052	Set At 6973	Perforations: From 6689 To 6820		Well No. 1E			
Thq. Size 2.375	Wt. 4.7	d 1.995	Set At 6825	Perforations: From open To ended		Unit Sec. Twp. Rge. N 14 27N 10W			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple single						Packer Set At None		County New Mexico	
Producing Thru		Reservoir Temp. °F		Mean Annual Temp. °F		Baro. Press. - P _a		State	
L	H	G _g	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run	Taps	

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	9 days						1264		1264		
1.	2.375		:750				84		794		3 hrs.
2.											
3.											
4.											
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	12.365		96	1.000	.9258	1.010	1110
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature	Mcf/bbl.	Deg.
1.												
2.												
3.												
4.												
5.												

P _c 1276 P _c ² 1628176			
NO.	P _t ²	P _w	P _w ² P _c ² - P _w ²
1		806	649636 978540
2			
3			
4			
5			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.6639$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1626$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.4650$

Absolute Open Flow	1626	Mcfd @ 15.025	Angle of Slope θ	Slope, n	.75
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Remarks: Heavy oil flow lite H₂O

Approved By Division	Conducted By: JJJ	Calculated By: J J BARNETT	Checked By: CLB
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