

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☒ Special				Test Date 5-13-85	
Company Amoco Production Co.				Connection El Paso Natural Gas Co.	
Pool Basin				Formation Dakota	
Completion Date 5-3-85		Total Depth 6081		Plug Back TD 6034	
				Elevation 5875 GR	
Csg. Size 4.500		Wt. 11.6		Set At 6081	
Perforations: From 5874 To 6004				Well No. 1E	
Trg. Size 2.375		Wt. 4.7		Set At 6008	
Perforations: From Open To Ended				Unit Sec. Twp. Rge. 0 13 27 13	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At NONE	
Producing Thru Tubing		Reservoir Temp. °F 8		Mean Annual Temp. °F	
				Baro. Press. - P _a New Mexico	
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.	
SI	8 days						1741		1878	
1.	2.375		.750				122		588	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		1.34	1.000	.9258	1.015	1557
2.							
3.							
4.							
5.							

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

NO.	P _t	P _w	P _w ²	P _c ² - P _w ²
1	1890	600	360000	3212100
2				
3				
4				
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.1121$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1686$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0829$$

Absolute Open Flow	1686	Mcf/d @ 15.025	Angle of Slope	.75
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Remarks: No flare, lite condensate, heavy H₂O

Approved By Division	Conducted By Joe Elledge	Calculated By J. J. Barnett	Checked By
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