

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 4-5-82	
Company Union Texas Petroleum Corp.				Connection Southern Union Gathering Company			
Pool Basin				Formation Dakota		Unit	
Completion Date 3-20-1982		Total Depth 7065		Plug Back TD 7017		Elevation 5875 G.L.	
Farm or Lease Name Culpepper Martin				Well No. 1E			
Csg. Size 7 5/8		Wt. 26.4		Gr. 6.969		Set At 4456	
5.500		17. & 15.5		4.950		4299/7062	
Perforations: From 6777		To 6998					
Tub. Size 2.375		Wt. 4.7		Gr. 1.995		Set At 6926	
Perforations: From		To					
Type Well - Single - Brdenhead - G.G. or G.O. Multiple Gas-Gas Dual				Packer Set At 4898		County San Juan	
Producing Thru Tubing		Reservoir Temp. °F #		Mean Annual Temp. °F		Baro. Press. - P _g 12 psia est.	
State New Mexico							
L		H		Cg .650		% 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	16 days						1240			
1.	2 inch		.750	148			148	60°		
2.										
3.										
4.										
5.										

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 Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	12.3650		160	1.000	.9608	1.015	1929
2.							
3.							
4.							
5.							

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

$P_c = 1252$ $P_c^2 = 1567504$					$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.28837$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.20928$	
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²				
1		592	350835	1216,669				
2								
3								
4								
5								

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2333$				
Absolute Open Flow 2333		Mcf/d @ 15.025		Angle of Slope θ
				Slope, n .75

Remarks: Dry gas with show of condensate

Approved By Division	Conducted By: Joe Elledge	Calculated By: Joe Elledge	Checked By: Mr. Don Wells
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