

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 3-6-82	
Company Union Texas Petroleum Corp. Gas Co. of New Mexico				Connection 			
Pool Basin				Formation Dakota			
Completion Date 2-27-82		Total Depth 7100		Plug Back TD 7070		Elevation 	
Farm or Lease Name Culpepper Martin				Well No. 4 M			
Grp. Size 7.625 5.500		Wt. 26.4 15.50		d 6.969 4.950		Set At 4498 4192/7076	
Perf. Size 2 3/8		Wt. 4.7		d 1.995		Set At 6978	
From 6790 To 6932				From open To ended			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple G.G./Dual				Packor Set At 4959		County San Juan	
Producing Thru Tubing		Reservoir Temp. °F 		Mean Annual Temp. °F 		Baro. Press. - P _a 12 psia	
State New Mexico		Meter Run 		Tops 		Prevor 	
L 		H 		G _g .650		% CO ₂ 	
% N ₂ 		% H ₂ S 		Prevor 		Meter Run 	
Tops 		Prevor 		Meter Run 		Tops 	

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	
1	7 days						1122				
1	2 inch	.750		151			151	60°			3 hours
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	12.3650		163	1.000	.9608	1.015	1966
2							
3							
4							
5							

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

NO.	P _i	P _w	P _u	P _e ² - P _w ²
1		350	122578	1163378
2				
3		calculated		
4				
5				

$$(1) \frac{P_e^2}{P_e^2 - P_w^2} = \frac{1.10536}{1.10536 - 1.10536} = 1.07802$$

$$AOI = Q \left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 2119$$

Absolute Open Flow 2119 Mcfd @ 15.025		Angle of Slope θ _____ Slope, n .75	
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Remarks: Dry gas with show of oil.

Approved By Commission 	Conducted By Joe Elledge	Calculated By Joe Elledge	Checked By Mr. Don Wells
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