

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 2-17-82	
Company Union Texas Petroleum Corp. Gas Company of New Mexico					Connection	
Pool Blanco					Formation Mesaverde	
Completion Date 1-29-82		Total Depth 7100'		Plug Back TD 7055		Elevation
Farm or Lease Name Culpepper Martin					Well No. 1-A	
Csg. Size 7.625	Wt. 26.4	d 6.969	Set At 4415	Perforations: From 4213 To 4808		Unit 1-A
5.500	15.5	d 4.950	Set At 4250/7098	Perforations: From open To ended		Unit G
2.375	4.7	1.995	4214			Sec. 31
Type Well - Single - Brodenhead - G.G. or G.O. Multiple Gas/Gas Dual					Packer Set At 4845	
Producing Thru Tubing		Reservoir Temp. °F θ		Mean Annual Temp. °F		Baro. Press. - P _a 12 psia (Est.)
State 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	19 days						901		896	
1.	2 inch	.750	238				238	60°	670	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		250	1.000	.9608	1.025	3044
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

NO.	P _c	P _w	P _c ²	P _w ²	P _c ² - P _w ²
1	913	682	833569	465124	368445
2.					
3.					
4.					
5.					

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 2.26239$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.84469$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 5615$$

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Absolute Open Flow	5615	Mcf/d @ 15.025	Angle of Slope θ	Slope, n .75
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Remarks: Show of condensate throughout test with surges of water every 20 minutes. Well would flare.

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