

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 6-3-82		RECEIVED DEC 16 1982			
Company <u>James & Sudwick</u> <u>W.B. Martin & Associates</u>						Connection El Paso Natural Gas Co.					
Pool Ballard						Formation Pictured Cliff		Unit OIL CON. DIV.			
Completion Date 5-22-82			Total Depth 2910		Plug Back TD 2880		Elevation 7260 G.L.		Farm or Lease Name M & M		
Csg. Size 2.875		Wt. 6.5	d 2.441	Set At 2910	Perforations: From 2824 To 2832		Well No. 1		Unit Sec. Twp. Rge. 1 15 23 4		
Thq. Size		Wt. Slim	d Hole	Set At	Perforations: From To						
Type Well - Single - Drdrenhead - G.G. or G.O. Multiple Single						Packer Set At None		County Rio Arriba			
Producing Thru Casing		Reservoir Temp. °F 8		Mean Annual Temp. °F		Baro. Press. - P _a 12 psia		State New Mexico			
L	H	G _g	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run	Taps			
		.650									

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	2 inch		.750	37					624		
1.									37	60°	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	12.3650		49	1.000	9608	1.007	586
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 _____ X X X X X X X X
3.					Specific Gravity Flowing Fluid _____ X X X X X
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature _____ R _____ R

$P_c = 636$ $P_c^2 = 404496$ (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0093$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.00788$

NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1		61	3723	400773
2				
3		Calculated		
4				
5				

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 591$

Absolute Open Flow <u>591</u> Mcfd @ 15.025		Angle of Slope θ _____		Slope, n <u>85</u>	
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Remarks: Dry gas throughout test.

Approved By Division	Conducted By: Joe Elledge	Calculated By: Joe Elledge	Checked By: Mr. Bill Martin
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