

NEW MEXICO OIL CONSERVATION COMMISSION  
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-172  
Revised 9-1-65

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special				Test Date 3-3-79	
Company Manana Gas, Inc.			Connection El Paso Natural Gas Company		
Pool Aztec			Formation Pictured Cliffs		Unit
Completion Date 2-14-79		Total Depth 2350		Plug Back TD 2312	Elevation 5743'GL
Form or Lease Name Bobbie Herrera			Well No. #1		
Csg. Size 2.875	Wt. 6.50	d 2.441	Set At 2340	Perforations: From 2220    To 2260	
Tub. Size 1.660	Wt. 2.40	d 1.380	Set At 2229	Perforations: From            To	
Type Well - Single - Brodenhead - G.G. or G.O. Multiple Gas-Gas Dual				Packer Set At 2068'	
Producing Thru Tubing		Reservoir Temp. °F @		Mean Annual Temp. °F	
L 2229		H		Baro. Press. - P <sub>g</sub> 12	
Gg 0.650		% CO <sub>2</sub>		% N <sub>2</sub>	
% H <sub>2</sub> S		Prover 2"		Meter Run	
Taps		County San Juan		State New Mexico	

  

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h <sub>w</sub>	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
1.	2"		0.500				117	60			3 hrs.
2.											
3.											
4.											
5.											

  

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P <sub>m</sub>	Flow Temp. Factor Ft.	Gravity Factor F <sub>g</sub>	Super Compress. Factor, F <sub>pv</sub>	Rate of Flow Q, Mcfd
1	5.653		129	1.0000	0.9608	1.011	708
2							
3							
4							
5							

  

NO.	P <sub>r</sub>	Temp. °F	Gas Liquid Hydrocarbon Ratio _____ Mcf/Lbl.
1			A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2			Specific Gravity Separator Gas _____ X X 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 <sub>c</sub> 341	P <sub>c</sub> <sup>2</sup> 116281	(1) $\frac{P_c^2}{P_r^2 - P_w^2} = 1.6806$	(2) $\left[ \frac{P_c^2}{P_r^2 - P_w^2} \right]^n = 1.5547$
NO.	P <sub>r</sub> <sup>2</sup>	P <sub>w</sub> <sup>2</sup>	P <sub>r</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup>
1	16641	217	47089
2			
3			
4			
5			

  

Q =  $\left[ \frac{P_r^2}{P_c^2 - P_w^2} \right]^n = \frac{1107}{1161}$

  

Absolute Open Flow	1101	Mcfd @ 15.025	Angle of Slope θ	Slope, n	0.85
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Remarks:

  

Approved by Commission:	Conducted By: H. E. McAnally	Calculated By: H. E. McAnally	Checked By: Curtis J. Little
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