

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 6-28-77			
Company <i>Manning</i> <u>Gas & Oil Co</u> <u>Cotton Petroleum Corp.</u>				Connection Waiting on Pipeline				
Pool Blanco Pictured Cliffs South				Formation Pictured Cliffs			Unit	
Completion Date 6-15-77		Total Depth 3200'		Plug Back TD 3155		Elevation 6878KB		Farm or Lease Name Apache
Csg. Size 4.500	Wt. 10.50	d 4.052	Set At 3187	Perforations: From 3032 To 3098			Well No. 18	
Thq. Size 1.660	Wt. 2.40	d 1.380	Set At 3059	Perforations: From 3058 To 3059			Unit Sec. Twp. Rye. K 2-24N-4W	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At None		County Rio Arriba	
Producing Thru tubing		Reservoir Temp. °F 99 @ 3200		Mean Annual Temp. °F -----		Baro. Press. - P _a 12.0		State New Mexico
L 3058	H 3058	Gg 0.710	% 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.	Temp. °F	
SI							920		955		8 day
1.							50	60	300		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 F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	12.3650		62	1.0000	0.9193	1.0000	705
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _f	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 967	P _c ² 935,089					
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1161$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0979$
1		312	97,344	837,745		
2						
3						
4						
5						

AOFF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 774$

Absolute Open Flow	774	Mcfd @ 15.025	Angle of Slope	0.85
Remarks:				

Approved By Commission:	Conducted By: Jerry Cagle	Calculated By: Ewell N. Walsh	Checked By:
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