

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 12-22-80	
Company John L. Cox				Connection None Designated	
Pool Wildcat				Formation Morrow	
Completion Date 12-20-80		Total Depth 11,820'		Plug Back TD 11,400'	
				Elevation 4472.6'GR	
Farm or Lease Name Proctor				Well No. 1	
Coq. Size 5-1/2"	Wt. 17#	d 4.9	Set At 11,108'	Perforations: From 10,907' To 10,919'	
Trq. Size 2-7/8"	Wt. 6.5#	d 1.4	Set At 10,029'	Perforations: From: To	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single				Packer Set At 10,029'	
Producing Thru tubing				State New Mexico	
Reservoir Temp. °F 176 @ 10,913		Mean Annual Temp. °F 68°		Baro. Press. - P _a 132	
L	H	G _g .735	% CO ₂	% N ₂	% H ₂ S
				Prover 1-1/4"	
				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	2"	X	1-1/4	2795			4368	66			60 min.
1.	"	"		2580		56	4125	66			60 min.
2.	"	"		2510		63	3994	66			60 min.
3.	"	"		2420		67	3778	66			60 min.
4.	"	"		2260		52	3489	66			60 min.
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				1.000	.9066	1.030	278
2				.9971	"	1.029	411
3				.9933	"	1.025	599
4				1.0078	"	1.034	937
5.							

NO.	P ₁	Temp. °R	T ₁	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1					18,600:1	
2.					57°	
3.						
4.						
5						

NO.	P ₁	P _w	P _w ²	P _c ² - P _w ²	$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 2.77$ $(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.77$ $AOI = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2531$
1	4381.2	19195			
1	4138.2	17124	2071		
2	4007.2	16057	3138		
3	3791.2	14373	4822		
4	3502.2	12265	6930		
5					

Absolute Open Flow	2595	Mcf/d @ 15.025	Angle of Slope θ	45°	Slope, n	1
Remarks:						
Approved By Division <i>[Signature]</i> Conducted By: <i>[Signature]</i> Calculated By: <i>[Signature]</i> Checked By: <i>[Signature]</i>						