

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS

3

File

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 12-30-90	
Company YATES ENERGY				Connection PIPE LINE	
Pool <i>Perry Slope</i>				Formation ABO	
Completion Date 12-26-90		Total Depth 6253.		Plug Back TD 5975.	
Elevation 0		Farm or Lease Name SEYMOUR STATE			
Csq. Size 5.500	Wt. 17.0	d 4.892	Set At 6253.	Perforations: From 4918. To 4938.	
Thq. Size 2.375	Wt. 4.7	d 1.995	Set At 4835.	Perforations: From 0 To 0	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE (GAS)				Packer Set At 4835.	
Producing Thru TBG. (GAS)		Reservoir Temp. °F 109.° 4928.		Baro. Press. - P _a 13.2	
Mean Annual Temp. °F 60.		State NM			
L 4928.	H 4928.	G _g .759	% CO ₂ 12.60	% N ₂ 4.15	% H ₂ S .00
Prover .0		Meter Run 2.0		Taps FLANGE	

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	Duration of Flow
51							820.	60.			72.0
1.	2.00 X .750			130.	30.0	62.	787.	120.	0	0	1.0
2.	2.00 X 1.500			130.	6.0	62.	730.	60.	0	0	1.0
3.	2.00 X 1.000			140.	46.0	62.	673.	60.	0	0	1.0
4.	2.00 X 1.000			138.	43.0	62.	662.	60.	0	0	1.0
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 _{sp}	Rate of Flow Q, Mcfd
1	2.71	65.54	143.2	.9981	1.1478	1.0135	207.
2	13.20	29.31	143.2	.9981	1.1478	1.0135	449.
3	4.97	83.95	153.2	.9981	1.1478	1.0144	485.
4	4.97	80.63	151.2	.9981	1.1478	1.0142	466.
5							

NO.	P _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	.20	522.	1.39	.974	0	0	.759	XXXXXX	713.	376.
2	.20	522.	1.39	.974						
3	.21	522.	1.39	.972						
4	.21	522.	1.39	.972						
5										

NO.	P _f ²	P _w ²	P _w ² - P _f ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2}$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n$
1	640.	791.	626.	3.1598	2.3159
2	552.	745.	555.		
3	471.	689.	475.		
4	456.	678.	459.		
5					

Absolute Open Flow				Angle of Slope		Slope, n	
1123.				53.9		.730	

Remarks:			
CHOKE SIZES: 1ST RATE: 14/64 2ND RATE: 30/64 3RD RATE: 48/64 4TH RATE: 64/64			

Approved By Division	Conducted By:	Calculated By:	Checked By:
	BENNETT-CATHEY	JIM SMITH P.E.	M. R. RANDOLPH