

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL **RECEIVED**

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 6/22/82		AUG 26 1982	
Company Yates Petroleum Corp.				Connection Transwestern Pipeline					
Pool Pecos Slope - Abo-Gas				Formation Abo				Unit O. C. D. ARTESIA, OFFICE	
Completion Date 3/20/82		Total Depth 3950'		Plug Back TD 3933'		Elevation 4000 GL		Farm or Lease Name Springer TK	
Cas. Size 4 1/2"	Wt. 9.5#	d 4.090	Set At 3943	Perforations: From 3609 To 3835		Well No. #1			
Tub. Size 2 7/8"	Wt. 6.5#	d 2.441	Set At 3562	Perforations: From To		Unit Sec. Twp. Hgt. H 26 4S 24E			
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single						Packer Set At 3562		County Chaves	
Producing Thru Tubing		Reservoir Temp. °F 96 @ 3722		Mean Annual Temp. °F 62°		Baro. Press. - P ₀ 13.2 PSI		State New Mexico	
L 3562	H 3562	G _g .686	% CO ₂ 3.87%	% N ₂ 7.66%	% H ₂ S -	Prover -	Meter Run 2"	Taps Flanged	

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.	
SI							1020			
1.	2.067	x	.375	300	6.4	66	873	62		
2.	2.067	x	.375	300	11.4	69	785	62		
3.	2.067	x	.375	300	18.2	69	723	62		
4.	2.067	x	.375	260	46	66	420	62		
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	0.6689	44.9	313.2	.9948	1.207	1.026	37
2	0.6689	59.7	313.2	.9915	1.207	1.025	49
3	0.6689	75.5	313.2	.9915	1.207	1.025	62
4	0.6689	112.1	273.2	.9948	1.207	1.023	92
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio <u>Dry</u> Mcf/bbl.
1	.47	526	1.48	.950	A.P.I. Gravity of Liquid Hydrocarbons <u>---</u> Deg.
2	.47	529	1.49	.951	Specific Gravity Separator Gas <u>.686</u> X X X X X X X X
3	.47	529	1.49	.951	Specific Gravity Flowing Fluid <u>X X X X X</u> .686
4	.41	526	1.48	.956	Critical Pressure <u>672</u> P.S.I.A. 672 P.S.I.A.
5					Critical Temperature <u>356</u> R 356 R

P _c <u>1033.2</u> P _c ² <u>1067.5</u>				
NO.	P _w	P _w ²	P _c ² - P _w ²	$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.2133$ $(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1730$ $AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 108 \text{ MCF/GPD}$
1	785.4	785.4	282.1	
2	637.1	637.1	430.4	
3	542.0	542.0	525.5	
4	187.7	187.7	879.8	
5				

Absolute Open Flow <u>108</u> Mcfd @ 15.025	Angle of Slope θ _____	Slope, n <u>.825</u>
Remarks: _____		
Approved By Division _____	Conducted By: <u>David Weaver</u>	Calculated By: <u>Al Springer</u>
Checked By: _____		