

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 7/20/82		SEP 7 1982	
Company Yates Petroleum Corp				Connection Transwestern Pipeline		O. C. D. ARTESIA, OFFICE	
Pool Pecos Slope - Abo Gas				Formation Abo		Unit	
Completion Date 3/11/82		Total Depth 4200		Plug Back TD 4091		Elevation 3609 GL	
Casing Size 4 1/2"		Wt. 9.5#		d 4.090		Set At 4187	
Perforations: From 3848		To 3861		Well No. #2			
Tubing Size 2 3/8"		Wt. 4.7#		d 1.995		Set At 3912	
Perforations: From		To		Unit M		Sec. 36	
				Twp. 7S		Rge. 25E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At None		County Chaves	
Producing Thru Tubing		Reservoir Temp. °F 108°		Mean Annual Temp. °F 62°		State New Mexico	
L 3912		H 3912		Cg .653		Prover 2"	
				% CO ₂ 1.35		% H ₂ S 0	
				% N ₂ 5.50		Motor Run Flanged	
FLOW DATA				TUBING DATA		CASING DATA	
NO.	Prover Line Size	X	Critical Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Duration of Flow
1	2.067 x 0.875		220	9.0	82°	24 hr	
2	2.067 x 0.875		200	17.6	90°	24 hr	
3	2.067 x 0.875		200	25.6	90°	24 hr	
4	2.067 x 0.875		175	47.0	78°	24 hr	
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, Mscf
1	3.729	45.9	233.2	.9795	1.237	1.017	211
2	3.729	61.3	213.2	.9723	1.237	1.015	279
3	3.729	73.8	213.2	.9723	1.237	1.015	336
4	3.729	94.0	188.2	.9831	1.237	1.014	432
5							
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Dry _____ Mol/bbl.		
1	0.35	542	1.52	.966	A.P.L. Gravity of Liquid Hydrocarbons _____ Deg.		
2	0.32	550	1.54	.970	Specific Gravity Separator Gas _____ .653		
3	0.32	550	1.54	.970	Specific Gravity Flowing Fluid _____ .653		
4	0.28	538	1.51	.972	Critical Pressure _____ 663 P.S.I.A.		
5					Critical Temperature _____ 357 °R		
$P_r = 1008.2$ $P_w = 1016.5$							
NO.	P_r^2	P_w^2	$P_r^2 - P_w^2$	$(1) \frac{P_r^2}{P_r^2 - P_w^2} = 2.134$ $(2) \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.999$			
1	799.6	800.2	216.3	$AOI = Q \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 864$			
2	722.8	723.9	292.6				
3	619.8	621.4	395.1				
4	537.6	540.2	476.3				
5							
Absolute Open Flow 864				Mol @ 15.025		Angle of Slope @ _____	
Slope, n .914							
Remarks:							
Approved By Commission: _____ Conducted By: David Weaver _____ Calculated By: Andie Alderson _____ Checked By: _____							