

NEW 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 5-13-78		JUN 28 1978	
Company Yates Petroleum Corp.				Connection El Paso Natural Gas Company				O. C. C.	
Pool Kennedy Farms (Und.) <i>Upper Penn</i>				Formation Canyon				Unit ARTESIA, OFFICE	
Completion Date 4-13-78		Total Depth 8627' KB		Plug Back TD 7708' KB		Elevation 3382' KB		Farm or Lease Name Siegenthaler "IS" Cor	
Csg. Size 4 1/2"	Wt. 11.6#	d 4.000	Set At 8420' KB	Perforations: From 7690 To 7696' KB				Well No. 2	
Tbg. Size 2-3/8"	Wt. 4.7#	d 1.995	Set At 7638' KB	Perforations: From To				Unit Sec. Twp. Rge. K 21 17S 26E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 7645' KB		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 134 @ 7690		Mean Annual Temp. °F 62		Baro. Press. - P _a 13.2		State New Mexico	
L 7637	H 7637	Gg 0.629	% CO ₂ 1.05	% N ₂ 0.39	% H ₂ S Nil	Prover	Meter Run 4"	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
SI							2260	56			72 hours
1.	4.026	x	.500	643	9	80	1592	57			1 hour
2.				643	21	80	940	58			1 hour
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	1.182	76.85	656.2	.9813	1.261	1.0624	119
2.		117.39	656.2	.9813	1.261	1.0624	182
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.	.947	540	1.415	.886	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.	.947	540	1.415	.886	Specific Gravity Separator Gas 0.692 XXXXXXXXXX
3.					Specific Gravity Flowing Fluid XXXXXX
4.					Critical Pressure 693 P.S.I.A. P.S.I.A.
5.					Critical Temperature 381.5 R R

P _c 2894.2 P _c ² 8376				$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.1969$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1677$	
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 213 \text{ MCFPD}$		
1			4138	4238			
2			1398	6998			
3							
4							
5							

Absolute Open Flow 213 Mcfd @ 15.025		Angle of Slope 49.22 deg.	Slope, n 0.8626
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Remarks: Static pressures by Bennett Wireline; flowing pressures by DWT. This is a low capacity well and pumper was unable to unload fluid at lower rates.			
Approved By Commission:	Conducted By: Don Weaver	Calculated By: Eddie M. Mahfood	Checked By: