

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

Form C-122
Revised 9-1-65

RECEIVED

C/SF
C-122

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 2-20-82		APR 6 1982	
Company Yates Petroleum Corporation ✓				Connection Transwestern Pipeline Company		O. C. D.	
Pool Pecos Slope Abo				Formation Abo		Unit LG 4333	
Completion Date 12-3-81		Total Depth 4250'		Plug Back TD 4183'		Elevation 4035.8' KB 4027.8' GR	
Csg. Size 4-1/2"		Wt. 9.5#		ID 4.090"		Set At 4245'	
Perforations: From 3731' To 4046'		Perforations: From To		Well No. 2		Unit Sec. Twp. Rge. E 16 6S 25E	
Type well - Single - Bradenhead - G.G. or G.O. Multiple Single		Packer Set At None		County Chaves		State New Mexico	
Producing thru Tubing		Reservoir Temp. °F 92 @ 4046'		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
L 4025		H 4025		Gg 0.641		% CO ₂ 0.21	
				% N ₂ 5.11		% H ₂ S 0	
				Prover ---		Meter Run 2"	
						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							989				days
1.	2.067 x 1.375			200	28	65	885	64			24 hrs
2.	2.067 x 1.375			210	75	60	815	61			24 hrs
3.	2.067 x 1.375			270	78	62	785	63			24 hrs
4.	2.067 x 1.375			350	95	60	738	63			24 hrs
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, Fpy	Rate of Flow Q, Mcf/D
1	10.20	77.26	213.2	0.9952	1.249	1.018	997
2	10.20	129.38	223.2	1.000	1.249	1.023	1686
3	10.20	148.63	283.2	0.9981	1.249	1.025	1937
4	10.20	185.75	363.2	1.000	1.249	1.033	2445
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/ubbl.
1	0.323	525	1.466	0.965	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2	0.377	520	1.453	0.955	Specific Gravity Separator Gas 0.641 X X X X X X X X
3	0.428	522	1.458	0.951	Specific Gravity Flowing Fluid X X X X X
4	0.549	520	1.453	0.937	Critical Pressure 661 P.S.I.A. P.S.I.A.
5.					Critical Temperature 358 R R

NO.	P _c	P _w	P _c ²	P _w ²	P _c ² - P _w ²
1	806.8		820.3	184.1	
2	685.9		724.5	279.9	
3	637.1		668.5	335.9	
4	564.3		646.7	357.7	
5					

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.445$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 5800$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.436$

Absolute Open Flow 5800	Mcf @ 15.025	Angle of Slope θ _____	Slope, n 0.983
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Remarks: Static pressures by Bennett Wireline, flowing pressures by DWT calculations.
Worksheet C-112D attached.

Approved By Commission:	Conducted By: David Weaver	Calculated By: Albert R. Stall	Checked By:
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