

File ✓
C-122 File

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

Form C-122
Revised 9-1-85

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 6-6-79		OCT 23 1980			
Company Yates Petroleum Corporation ✓						Connection El Paso Natural Gas Co.		O. C. O. ARTESIA, N.M.			
Pool Box Canyon Permo Penn						Formation Wolfcamp & Cisco		Unit L-4995			
Completion Date 7-28-78			Total Depth 8895		Plug Back TD 8151 KB		Elevation 4625 KB		Farm or Lease Name Cities JH State		
Csq. Size 5 1/2"	Wt. 15.5#	d 5.012"	Set At 8748 KB	Perforations: From 5851 To 6173 KB				Well No. 1			
Thq. Size 2-3/8"	Wt. 4.6#	d 1.995"	Set At 5806 KB	Perforations: From To				Unit Soc. Twp. Rgt. E 36 21s 21e			
Type Well - Single - Blindhead - G.C. or G.O. Multiple Single						Packer Set At 5806 KB		County Eddy			
Producing Thru Tubing		Reservoir Temp. °F 118 @ 6012		Mean Annual Temp. °F 62		Baro. Press. - P _a 13.2		State N. Mex.			
L 6007	H 6007	Gg 0.668	% CO ₂ 0.16	% N ₂ 1.29	% H ₂ S Nil	Prover -	Meter Run 4	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.	Temp. °F	of Flow
SI							1610	74			months
1.	4.026 x 0.500			155	12	74	1565	84			1 hr.
2.	4.026 x 0.500			155	22	74	1537	85			1 hr.
3.	4.026 x 0.500			155	42	74	1490	86			1 hr.
4.	4.026 x 0.500			155	86	74	1390	87			1 h4.
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. Compres. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	1.182	44.93	168.2	0.9868	1.224	1.016	65
2	1.182	60.83	168.2	0.9868	1.224	1.016	88
3	1.182	84.05	168.2	0.9868	1.224	1.016	122
4	1.182	120.27	168.2	0.9868	1.224	1.016	174
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.	0.252	534	1.416	0.969	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.	0.252	534	1.416	0.969	Specific Gravity Separator Gas _____ 0.668 XXXXXXXXXX
3.	0.252	534	1.416	0.969	Specific Gravity Flowing Fluid _____ XXXXX 0.668
4.	0.252	534	1.416	0.969	Critical Pressure _____ 668.5 P.S.I.A. 668.5 P.S.I.A.
5.					Critical Temperature _____ 377 R 377 R

P _c 1926 P _c ² 3710		(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 6.8831$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.50715$	
NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²	
1			3505	205	
2			3379	331	
3			3171	539	
4			2753	957	
5					

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 428$

Absolute Open Flow 428 Mcfd @ 15.025		Angle of Slope @ 57 deg		Slope, n 0.65047	
--------------------------------------	--	-------------------------	--	------------------	--

Remarks: Static pressure by Halliburton. Flowing pressures by DWT. Calculation worksheet C-122D attached.

Approved By Commission:	Conducted By: Don Weaver	Calculated By: Eddie Mahfood	Checked By:
-------------------------	-----------------------------	---------------------------------	-------------