

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

3F
122 file
Form C-122
Revised 9-1-65
RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 5-5-77		JUL 6 1977	
Company Yates Petroleum Corp.				Connection El Paso Natural Gas Company				O. C. C.	
Pool Little Box Canyon				Formation Morrow				Unit ARTESIA, OFFICE	
Completion Date 9-10-76		Total Depth 8585' KB		Plug Back TD 8402' KB		Elevation 4519' KB		Farm or Lease Name Box Canyon "GJ" Fed.	
Csg. Size 5 1/2"	Wt. 17#	d 4.892	Set At 8450' KB	Perforations: From 8240' To 8250' KB		Well No. 1-Gen			
Tfg. Size 2-3/8"	Wt. 4.7#	d 1.995	Set At 8238' KB	Perforations: From 8188' To 8191' KB		Unit Sec. Twp. Rge. J 13 21S 21E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 8182' KB		County Eddy			
Producing Thru Tubing		Reservoir Temp. °F 140 @ 8240'		Mean Annual Temp. °F 62		Baro. Press. - P _a 13.2		State New Mexico	
L 8232	H 8232	Gg	% CO ₂ 0.56	% N ₂ 1.29	% 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							2386	54			Months
1.	4.026	X	1.500	500	14	73	2063	69			1 hr.
2.				505	25	72	1900	68			1 hr.
3.				510	49	72	1594	67			1 hr.
4.				515	86	71	1133	66			1 hr.
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	10.84	84.76	513.2	.9877	1.284	1.0414	1214
2		113.82	518.2	.9887	1.284	1.0420	1632
3		160.11	523.2	.9887	1.284	1.0426	2300
4		213.13	528.2	.9896	1.284	1.0431	3066
5							

NO.	R _i	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	.764	533	1.493	.922	289.2	
2.	.771	532	1.490	.921	56.4	
3.	.779	532	1.490	.920	.607	XXXXXXX
4.	.786	531	1.487	.919	XXXXX	.618
5.					672 P.S.I.A.	672 P.S.I.A.
					357 R	360 R

NO.	P _i ²	P _w	P _w ²	P _c ² - R _w ²	(1) $\frac{P_c^2}{P_c^2 - R_w^2} = 1.3448$	(2) $\left[\frac{P_c^2}{P_c^2 - R_w^2} \right]^n = 1.2974$
1			6619	2257		
2			5664	3212		
3			4093	4783		
4			2276	6600		
5						

Absolute Open Flow			3978	Mcf/d @ 15.025	Angle of Slope	48° 42'	Slope, n	.8789
Remarks: Static Pressures by Bennett Wireline, flowing pressures by DWT. Calculations sheet attached.								
Approved By Commission:			Conducted By:		Calculated By:		Checked By:	
			Don Weaver		Eddie Mahfood			