

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

Form C-122
Revised 9-1-65

C/SF
C-122

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 12-11-81		FEB 3 1982	
Company Yates Petroleum Corporation			Connection		
Pool South Millman Morrow			Formation Morrow		
Completion Date 10-9-81		Total Depth 11280 KB		Plug back TD 11203 KB	
Casing Size 4 1/2"		Casing WT. 11.6		Casing d 4.000	
Perforations From 11003 To 11008 KB		Set At 11280 KB		Well No. 3	
Perforations From 10951 To 10954 KB		Set At 11002		Unit Sec. Twp. Rpt. K 8 19s 28e	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple single			Packer Set At 10945 KB		County Eddy
Producing Thru Tubing		Reservoir Temp. °F 168 @ 11005		Mean Annual Temp. °F 62	
Baro. Press. - P _u 13.2		State New Mexico			
L 10998	H 10998	Cg 0.916	% CO ₂ 0.54	% N ₂ 0.13	% 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
1.	4.026	X	1.500	465	10	60	1930	77			20 hrs
2.	4.026	X	1.500	468	19.5	62	1561	80			24 hrs
3.	4.026	X	1.500	470	34	63	1175	82			24 hrs
4.	4.026	X	1.500	472	61	63	790	83			24 hrs
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _L	Gravity Factor F _g	Super. Comp. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	10.84	69.152	478.2	1.000	1.225	1.054	968
2.	10.84	96.868	481.2	0.9981	1.225	1.053	1352
3.	10.84	128.175	483.2	0.9971	1.225	1.053	1787
4.	10.84	172.038	485.2	0.9971	1.225	1.053	2399
5.							

NO.	R _i	Temp °R	T _i	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	0.709	520	1.365	.9004	11.63	
2.	0.714	522	1.370	.9012	50.6	
3.	0.717	523	1.373	.9017	0.666	
4.	0.720	523	1.373	.9014	XXXXXX	
5.					674	
					381	
					P.S.I.A. 866	
					P.S.I.A. 536	

NO.	P _i ²	P _w ²	R _i ²	P _c ² - R _w ²	(1) $\frac{P_c^2}{R_i^2 - R_w^2} = 1.5715$	(2) $\left[\frac{R_i^2}{R_i^2 - R_w^2} \right]^n = 1.5715$
1.			14943	8098		
2.			11733	11308		
3.			8379	14662		
4.			4603	18438		
5.						

Absolute Open Flow 2808 Mcfd @ 15.025 Angle of Slope 45 deg. Slope, n 1.000

Remarks: Static pressures by Bennett Wireline, flowing pressures by DWT. Calculations worksheet C-122D attached.

Approved By Commission: _____ At By: Bill Tremblay Jr Calculated By: _____ Checked By: _____