

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

Form C-122 *95' f, 11e*

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 10/30/1994	
Company Yates Petroleum Corp				Connection Transwestern Pipeline Co			
Pool Abo				Formation Pecos Slope		Unit	
Completion Date 10/29/1994		Total Depth 4250		Plug Back TD 4205		Elevation 3843	
Farm or Lease Name McClellan MB Federal				Well No. 5			
Csg. Size 4.500	Wt. 10.500	d 4.052	Set At 4250	Perforations: From 3770 To 3948		Unit Sec Twp. Rge. E 31 5S 25E	
Tbg. Size 2.375	Wt. 4.700	d 1.995	Set At 3702	Perforations: From 3770 To 3948			
Type Well Single				Packer Set At 3704		County Chaves	
Producing Thru Tubing		Resv. Temp. °F 98 @ 4200		Mean Temp. °F 62		Baro. Press. - Pa 13.2	
State New Mexico							
L 3702	H 3702	Gg 0.645	%CO ₂ 0.022	%N ₂ 5.882	%H ₂ S 0.000	Prover 0.000	Meter Run 4.000
						Taps Flange	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
Sl.	0.000	x	0.000	0	0.0	0	500	0			0
1.	4.026	x	1.625	90	24.0	51	300	62			24
2.	4.026	x	1.625	81	30.8	50	230	62			24
3.	4.026	x	1.625	90	41.0	49	160	62			24
4.	4.026	x	1.625	90	46.0	52	90	62			24
5.		x									

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{hwP_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	12.790	49.8	103.2	1.0088	1.245	1.009	807
2.	12.790	54.0	94.6	1.0098	1.245	1.009	875
3.	12.790	65.0	103.2	1.0108	1.245	1.009	1057
4.	12.790	68.9	103.2	1.0078	1.245	1.009	1116
5.							

NO.	Pr	Temp °R	Tr	Z	Gas Liquid Hydrocarbon Ratio	0	Mcft/bbl.
					A.P.I. Gravity of Liquid Hydrocarbons	0.000	Deg.
1	0.16	511	1.44	0.982	Specific Gravity Separator Gas	0.645	XXXXXXXXXX
2	0.14	510	1.44	0.983	Specific Gravity Flowing Fluid	XXXXXXXXXX	0.645
3	0.16	509	1.44	0.982	Critical Pressure	661	P.S.I.A. 661
4	0.16	512	1.44	0.982	Critical Temperature	354	°R 354
5							

P _c 513.2	P _c ² 263.4		
NO.	P _r ²	P _w	P _w ²
1.	98.1	326.8	106.8
2.	59.1	263.6	69.5
3.	30.0	212.6	45.2
4.	10.7	166.7	27.8
5.			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.207$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.163$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1229$

Absolute Open Flow	1229	Mcfd @ 15.025	Angle of Slope θ	35°	Slope, n	0.800
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Remarks:

Approved By Commission:	Conducted By: David Weaver	Calculated By: Andrea Carpenter	Checked By:
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