

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

Form C-122

45F
File

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 3/2/88		APR 10 '89	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company			O. C. V. JAMES GORDON	
Pool West Atoka (MORROW)				Formation Morrow			Unit	
Completion Date 12/6/83		Total Depth 8950.0'		Plug Back TD 8901.0'		Elevation 3396.0'		Farm or Lease Name Chumbley XS Com
Csg Size 5.500"	Wt. 14.000#	d 5.012"	Set Rt 8909.0'	Perforations: From 8739.0' To 8750.0'			Well No. 1	
Tbg Size 2.875"	Wt. 6.500#	d 2.441"	Set Rt 8703.0'	Perforations: From 0.0' To 0.0'			Unit Sec Twp Rge G 8 18S 26E	
Type Well Single				Packer Set Rt 8703.0'			County Eddy	
Producing Thru Tubing		Resv. Temp. °F 186 @ 8700'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.		State New Mexico
L 8703.0'	H 8703.0'	Gg .640	%CO2 .39	%N2 .32	%H2S 0.00	Proven 0.000"	Meter Run 2.000"	Taps Flange

FLOW DATA					TUBING DATA		CASING DATA		Duration of Flow
NO	Prover Orifice Size X Size	Press. psig	Diff. hw	Temp. °F	Press. psig	Temp. °F	Press. psig	Temp. °F	
SI	0.000 X 0.000	0	0.0	40	2780	0	0	0	0 hrs.
1.	4.026 X 2.250	280	46.5	40	2642	62	0	0	24 hrs.
2.	4.026 X 2.250	275	54.6	40	2636	62	0	0	24 hrs.
3.	4.026 X 2.250	255	69.3	40	2605	62	0	0	24 hrs.
4.	4.026 X 2.250	250	95.0	40	2560	62	0	0	24 hrs.
5.	0.000 X 0.000	0	0.0	0	0	0	0	0	0 hrs.

RATE OF FLOW CALCULATIONS							
NO	Coefficient (24 HOUR)	$\sqrt{h/P_m}$	Pressure P _m	Flow Temp Factor F _t	Gravity Factor F _g	Super Compress. Fact. F _{pv}	Rate of Flow Q, Mcfd
1.	25.629	116.76	293.20	1.020	1.250	1.031	3933
2.	25.629	125.44	288.20	1.020	1.250	1.031	4223
3.	25.629	136.33	268.20	1.020	1.250	1.028	4580
4.	25.629	158.13	263.20	1.020	1.250	1.028	5309
5.	0.000	0.00	0.00	0.000	0.000	0.000	0

NO	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 75.060 Mcf/bbl. A.P.I. Gravity of Liquid Hydrocarbons 55.000 Deg. Specific Gravity Separator Gas .640 Specific Gravity Flowing Fluid .680 Critical Pressure 671.8 PSIA Critical Temperature 367.7°R
1.	.44	500	1.36	.941	
2.	.43	500	1.36	.942	
3.	.40	500	1.36	.946	
4.	.39	500	1.36	.947	
5.	0.00	0	0.00	0.000	

P_c 2793.2 P_c² 7802.0

NO	P _t ²	P _w	P _w ²	P _c ² -P _w ² (1)	P _c ²	=	8.4399	(2)	$\left[\frac{P_{c^2}}{P_{c^2}-P_{w^2}} \right]^n$	=	4.6783
1.	7050.1	2681.8	7191.9	610.0							
2.	7018.3	2679.9	7181.8	620.2							
3.	6855.0	2654.6	7046.8	755.1							
4.	6621.4	2622.7	6878.5	923.5							
5.	0.0	0.0	0.0	0.0							

AOF = $Q \left[\frac{P_{c^2}}{P_{c^2}-P_{w^2}} \right]^n = 24838 \text{ Mcfd}$

Absolute Open Flow	24838 Mcfd @ 15.025	Angle of Slope, 0	36	Slope, n .723
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Remarks:

Approved By:	Conducted By: Tracy Richardson	Calculated By: Andrea Carpenter	Checked By:
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