

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

451 file
Form C-122

SEP 14 1983

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 8/12/83		O. C. D. ARTESIA, OFFICE	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company			
Pool Pecos Slope				Formation Abo Pool		Unit	
Completion Date 5/12/82.		Total Depth 4350.0'		Plug Back TD 4280.0'		Elevation 3594.3'	
Farm or Lease Name Bosque Grande SO Fed Cm				Well No. 1			
Csg Size 4.500"	Wt. 9.500#	d 4.090"	Set At 4351.0'	Perforations: From 3827.0' To 3853.0'		Unit Sec Top Rge A 8 7S 26E	
Tbg Size 2.375"	Wt. 4.700#	d 1.995"	Set At 3770.0'	Perforations: From 0.0' To 0.0'			
Type Well Single				Packer Set At 3770.0'		County Chaves	
Producing Thru Tubing		Resv. Temp. °F 101 @ 3770'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.	
State New Mexico							
L 3770.0'	Gg 3770.0'	%CO2 .641	%N2 .02	%H2S 4.76	Prover 0.000"	Meter Run 2.000"	Taps Flange

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO	Prover Size	Orifice 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	70	1010	0	0	0	0 hrs.
1.	2.067	X .875	280	6.9	70	814	62	0	0	24 hrs.
2.	2.067	X .875	315	9.4	70	744	62	0	0	24 hrs.
3.	2.067	X .875	320	14.1	70	670	62	0	0	24 hrs.
4.	2.067	X .875	335	17.0	70	525	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 HOJR)	√hwPm	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	3.729	44.98	293.20	.991	1.249	1.023	212
2.	3.729	55.54	328.20	.991	1.249	1.026	263
3.	3.729	68.54	333.20	.991	1.249	1.026	324
4.	3.729	76.94	348.20	.991	1.249	1.027	365
5.	0.000	0.00	0.00	0.000	0.000	0.000	0

NO	Pr	Temp. °R	Tr	Z	Gas Liquid Hydrocarbon Ratio	Dry	Mcf/bbl.
1.	.44	530	1.49	.956	A.P.I. Gravity of Liquid Hydrocarbons	0.000	Deg.
2.	.50	530	1.49	.951	Specific Gravity Separator Gas	.641	xxxxxxx
3.	.50	530	1.49	.950	Specific Gravity Flowing Fluid	xxxxx	.641
4.	.53	530	1.49	.948	Critical Pressure	662.7	PSIA
5.	0.00	0	0.00	0.000	Critical Temperature	356.2	°R

Pc	1023.2	Pc2	1046.9		
NO	Pt2	Pw	Pw2	Pc2-Pw2	(1)
1.	684.3	827.5	684.8	362.1	$AOF = 0 \left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = \frac{465 \text{ Mcfd}}{}$
2.	573.4	757.8	574.2	472.7	
3.	466.8	684.2	468.1	578.8	
4.	289.7	539.8	291.4	755.5	
5.	0.0	0.0	0.0	0.0	

$$\frac{Pc^2}{Pc^2 - Pw^2} = \frac{1.3936}{}$$

$$\left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = \frac{1.2748}{}$$

$$AOF = Q \left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = 465 \text{ Mcfd}$$

Absolute Open Flow 465 Mcfd @ 15.025 Angle of Slope, 0 36 Slope, n .732
Remarks:

Approved By:	Conducted By: David Weaver	Calculated By: Andie Carpenter	Checked By:
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