

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

470
Form O-122 file

RECEIVED

Type Test [X] Initial [] Annual [] Special					Test Date 11/08/82		JAN 11 1983		
Company Yates Petroleum Corporation					Connection Transwestern Pipeline Company				O. C. D.
Pool Pecos Slope - Abo					Formation Abo		Unit ARTESIA, OFFICE		
Completion Date 04/01/82		Total Depth 4100.0'		Plug Back TD 3976.0'		Elevation 4017.5'		Farm or Lease Name Redman "OY" State	
Csg Size 4.500"	Wt. 9.500#	d 4.090"	Set At 4035.0'	Perforations: From 3624.0' To 3883.0'		Well No. 5			
Tbg Size 2.375"	Wt. 4.700#	d 1.995"	Set At 3618.0'	Perforations: From 0.0' To 0.0'		Unit Sec F 35		Top Rge 4S 24E	
Type Well Single					Packer Set At 3618.0'		County Chaves		
Producing Thru Tubing		Resv. Temp. °F 100 @ 3754'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.		State New Mexico	
L 3618.0'	H 3618.0'	Gg .679	%CO2 3.81	%N2 5.21	%H2S 0.00	Prover 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	72	983	0	0	0	0 hrs.
1.	2.067 X 1.125	140	51.7	70	771	62	0	0	24 hrs.
2.	2.067 X 1.125	135	66.0	70	735	62	0	0	24 hrs.
3.	2.067 X 1.125	130	79.0	70	700	62	0	0	24 hrs.
4.	2.067 X 1.125	130	97.7	72	655	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)	$\sqrt{hwP_m}$	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	6.397	89.00	153.20	.991	1.214	1.012	692
2.	6.397	98.90	148.20	.991	1.214	1.011	769
3.	6.397	106.36	143.20	.991	1.214	1.011	827
4.	6.397	118.28	143.20	.989	1.214	1.010	917
5.	0.000	0.00	0.00	0.000	0.000	0.000	0

NO	Fr	Temp. °R	Tr	Z	Gas Liquid Hydrocarbon Ratio _____ Dry _____ Mcf/bbl.
1.	.23	530	1.46	.977	A.P.I. Gravity of Liquid Hydrocarbons 0.000 Deg.
2.	.22	530	1.46	.978	Specific Gravity Separator Gas .679 xxxxxxxxxxxxxxx
3.	.21	530	1.46	.979	Specific Gravity Flowing Fluid xxxxxx .679
4.	.21	532	1.46	.979	Critical Pressure 677.0 PSIA 677.0 PSIA
5.	0.00	0	0.00	0.000	Critical Temperature 364.0°R 364.0°R

Pc 996.2 Pc² 992.4				
NO	Pt²	Pw	Pw²	Pc² - Pw² (1)
1.	615.0	788.0	621.0	371.4
2.	559.8	753.2	567.3	425.1
3.	508.7	719.3	517.4	475.0
4.	446.5	676.2	457.3	535.1
5.	0.0	0.0	0.0	0.0

$$\frac{Pc^2}{Pc^2 - Pw^2} = 1.8552 \quad (2) \left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = 1.6098$$

$$AOF = Q \left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = 1477 \text{ Mcfd}$$

Absolute Open Flow 1477 Mcfd @ 15.025 Angle of Slope, 0 38 Slope, n .770
Remarks: _____

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