

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

Form C-124
4/9/89
File

RECEIVED

Type Test [x] Initial [] Annual [] Special				Test Date 5/26/88		APR 10 '89	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company			
Pool <u>LOGAN DRAW</u> Morrow				Formation Logan Draw		Unit <u>ARTESIAN</u>	
Completion Date 10/3/82		Total Depth 9430.0'		Plug Back TD 9160.0'		Elevation 3422.0'	
Farm or Lease Name Estelle TA Federal							
Csg Size 4.500"	Wt. 9.500#	d 4.090"	Set At 9430.0'	Perforations: From 9083.0' To 9097.0'		Well No. 1	
Tbg Size 2.375"	Wt. 4.700#	d 1.995"	Set At 9081.0'	Perforations: From 0.0' To 0.0'		Unit Sec Twp Rge N 21 17S 27E	
Type Well Single				Packer Set At 9024.0'		County Eddy	
Producing Thru Tubing		Resv. Temp. °F 240 @ 9085'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.	
State New Mexico							
L 9081.0'	H 9081.0'	Gg .631	%CO2 .49	%N2 .37	%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	84	2658	0	0	0	0 hrs.
1.	2.067 X .875	490	38.3	87	1904	62	0	0	24 hrs.
2.	2.067 X .875	490	42.6	89	1836	62	0	0	24 hrs.
3.	2.067 X .875	480	50.6	84	1004	62	0	0	24 hrs.
4.	2.067 X .875	480	52.0	87	1710	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)	/hwPm	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	3.729	138.83	503.20	.975	1.259	1.038	660
2.	3.729	146.41	503.20	.973	1.259	1.038	694
3.	3.729	157.97	493.20	.978	1.259	1.038	753
4.	3.729	160.14	493.20	.975	1.259	1.037	761
5.	0.000	0.00	0.00	0.000	0.000	0.000	0

NO	Pr	Temp. °R	Tr	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	.75	547	1.50	.928	105.100 Mcf/bbl.	55.200 Deg.	.631	.659	672.4 PSIA	364.4°R
2.	.75	549	1.51	.929					671.4 PSIA	373.7°R
3.	.73	544	1.49	.928						
4.	.73	547	1.50	.929						
5.	0.00	0	0.00	0.000						

Pc 2671.2 Pc2 7135.3			
NO	Pt2	Pw	Pw2
1.	3675.7	1920.5	3688.5
2.	3419.5	1853.0	3433.8
3.	1034.7	1025.9	1052.6
4.	2969.4	1728.2	2986.6
5.	0.0	0.0	0.0

$$Pc2 - Pw2^{(1)} = \frac{Pc2}{Pc2 - Pw2} = 1.7177 \quad (2) \left[\frac{Pc2}{Pc2 - Pw2} \right]^n = 1.5165$$

$$AOF = Q \left[\frac{Pc2}{Pc2 - Pw2} \right]^n = 1153 \text{ Mcfd}$$

Absolute Open Flow 1153 Mcfd @ 15.025 Angle of Slope, 0 38 Slope, n .770
Remarks:

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