

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

Form C-122

45R
File

RECEIVED

Type Test [X] Initial [] Annual [] Special				Test Date 1/9/89		APR 10 '89	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company			
Pool Abo Pecos Slope ABO				Formation Pecos Slope		Unit Willow Creek Unit	
Completion Date 2/4/84		Total Depth 5525.0'		Plug Back TD 4070.0'		Elevation 3839.0'	
Farm or Lease Name Willow Creek Unit		Well No. 4		Unit Sec Twp Rge G 31 4S 25E		County Chaves	
Csg Size Wt. d Set At 4.500" 9.500# 4.090" 4070.0'		Perforations: From 3668.0' To 3809.0'		Baro. Press. - Pa 13.2 psia.		State New Mexico	
Tbg Size Wt. d Set At 2.875" 6.500# 2.441" 3810.0'		Perforations: From 0.0' To 0.0'		Meter Run 2.000"		Taps Flange	
Type Well Single				Packer Set At 3810.0'		Duration 0 hrs.	
Producing Thru Tubing		Resv. Temp. °F 106 @ 3738'		Mean Temp. °F 62.0		Rate of Flow 0, Mcfd	
L 3810.0'	H 3810.0'	Gg .648	%CO2 .04	%N2 6.58	%H2S 0.00	Prover 0.000"	Meter Run 2.000"

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	53	980	0	0	0	0 hrs.
1.	2.067 X .875	150	4.9	51	656	62	0	0	24 hrs.
2.	2.067 X .875	150	7.0	56	534	62	0	0	24 hrs.
3.	2.067 X .875	145	9.2	53	500	62	0	0	24 hrs.
4.	2.067 X .875	145	12.0	54	145	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 Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	3.729	28.28	163.20	1.009	1.242	1.013	134
2.	3.729	33.80	163.20	1.004	1.242	1.013	159
3.	3.729	38.15	158.20	1.007	1.242	1.013	180
4.	3.729	43.57	158.20	1.006	1.242	1.012	206
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.	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure PSIA	Critical Temperature °R
1.	.25	511	1.45	.974	0.000	0.000	0.000	0.000	659.5	353.4
2.	.25	516	1.46	.975	0.000	0.000	0.000	0.000	659.5	353.4
3.	.24	513	1.45	.975	0.000	0.000	0.000	0.000	659.5	353.4
4.	.24	514	1.45	.976	0.000	0.000	0.000	0.000	659.5	353.4
5.	0.00	0	0.00	0.000	0.000	0.000	0.000	0.000	659.5	353.4

Pc	993.2	Pc ²	986.4		
NO	Pt ²	Pw	Pw ²	Pc ² -Pw ²	(1) $\frac{Pc^2}{Pc^2-Pw^2} = \frac{1.0235}{1.0235}$ (2) $\left[\frac{Pc^2}{Pc^2-Pw^2}\right]^n = \frac{1.0174}{1.0174}$
1.	447.8	669.3	447.9	538.5	ROF = Q $\left[\frac{Pc^2}{Pc^2-Pw^2}\right]^n = \frac{209 \text{ Mcfd}}{209 \text{ Mcfd}}$
2.	299.4	547.3	299.5	686.9	
3.	263.4	513.3	263.5	722.9	
4.	25.0	158.9	25.2	961.2	
5.	0.0	0.0	0.0	0.0	

Absolute Open Flow 209 Mcfd @ 15.025 Angle of Slope, 0 37 Slope, n .741
Remarks:

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