

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

RECEIVED C-122

APR 10 '89

clsf
File

Type Test [x] Initial [] Annual [] Special				Test Date 12/22/89		C. C. D.	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company		ARTESIA, OFFICE	
Pool <u>Pecos Slope ABO</u>				Formation Pecos Slope		Unit	
Completion Date 4/10/84		Total Depth 4125.0'		Plug Back TD 4080.0'		Elevation 3594.9'	
Farm or Lease Name Williamson LC Fed.		Well No. 9		Unit Sec P 4		Twp Rge 8S 25E	
Csg Size 4.500"	Wt. 9.500#	d 4.090"	Set At 4125.0'	Perforations: From 3715.0' To 3807.0'			
Tbg Size 2.375"	Wt. 4.700#	d 1.995"	Set At 3674.0'	Perforations: From 0.0' To 0.0'			
Type Well Single				Packer Set At 3674.0'		County Chaves	
Producing Thru Tubing		Resv. Temp. °F 96 @ 3761'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.	
State New Mexico		L 3674.0'		H 3674.0'		Gg .662	
%CO2 .05		%N2 8.10		%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	41	1000	0	0	0	0 hrs.
1.	2.067 X .875	320	15.7	42	898	62	0	0	24 hrs.
2.	2.067 X .875	345	27.9	43	813	62	0	0	24 hrs.
3.	2.067 X .875	370	35.0	41	797	62	0	0	24 hrs.
4.	2.067 X .875	380	40.0	42	770	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. Fpu	Rate of Flow Q, Mcfd
1.	3.729	72.33	333.20	1.018	1.229	1.031	348
2.	3.729	99.97	358.20	1.017	1.229	1.033	481
3.	3.729	115.81	383.20	1.019	1.229	1.036	561
4.	3.729	125.41	393.20	1.018	1.229	1.037	607
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.	.51	502	1.42	.940	A.P.I. Gravity of Liquid Hydrocarbons	0.000	Deg.
2.	.55	503	1.42	.936	Specific Gravity Separator Gas	.662	xxxxxxxxxxxxxx
3.	.58	501	1.42	.931	Specific Gravity Flowing Fluid	xxxxxx	.662
4.	.60	502	1.42	.930	Critical Pressure	656.5	PSIA
5.	0.00	0	0.00	0.000	Critical Temperature	353.7	°R

Pc 1013.2 Pc² 1026.6

NO	Pt²	Pw	Pw²	Pc²-Pw²	(1)	Pc²	=	2.5173	(2)	Pc²	=	2.0031
1.	830.3	912.0	831.8	194.8								
2.	682.6	827.9	685.5	341.1								
3.	656.4	812.6	660.4	366.2								
4.	613.4	786.1	618.0	408.6								
5.	0.0	0.0	0.0	0.0								

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1216 \text{ Mcfd}$$

Absolute Open Flow 1216 Mcfd @ 15.025 Angle of Slope, θ 37 Slope, n .753

Remarks:

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