

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

455
File

RECEIVED

Type Test [x] Initial [] Annual [] Special				Test Date 8/25/88		APR 10 '89	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company			
Pool Foor RANCH Wolfcamp				Formation Foor Ranch		Unit	
Completion Date 8/20/88		Total Depth 6410.0'		Plug Back TD 6040.0'		Elevation 3806.5'	
Csg Size 5.500"		Wt. 14.000#		d 5.012"		Set Rt 6410.0'	
Tbg Size 2.875"		Wt. 6.500#		d 2.441"		Set Rt 5893.0'	
Perforations: From 5271.0' To 5276.0'		Perforations: From 0.0' To 0.0'		Well No. 3		Unit Sec Twp Rge I 26 9S 26E	
Type Well Single				Packer Set At 5984.0'		County Chaves	
Producing Thru Tubing		Resv. Temp. °F 120 @ 5225'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.	
L 5893.0'		H 5893.0'		Gg .647		%CO2 .03	
%N2 5.60		%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	96	980	0	0	0	0 hrs.
1.	2.067 X 1.125	310	10.6	92	764	62	0	0	24 hrs.
2.	2.067 X 1.125	305	18.8	95	654	62	0	0	24 hrs.
3.	2.067 X 1.125	280	26.8	96	632	62	0	0	24 hrs.
4.	2.067 X 1.125	280	32.0	94	490	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 P _m	Flow Temp Factor Ft.	Gravity Factor F _g	Super Compress. Fact. F _{pv}	Rate of Flow Q, Mcfd
1.	6.397	58.53	323.20	.971	1.243	1.022	462
2.	6.397	77.34	318.20	.968	1.243	1.021	608
3.	6.397	88.64	293.20	.967	1.243	1.019	695
4.	6.397	96.86	293.20	.969	1.243	1.019	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	Dry	Mcf/bbl.
1.	.49	552	1.55	.958	A.P.I. Gravity of Liquid Hydrocarbons	0.000	Deg.
2.	.48	555	1.56	.960	Specific Gravity Separator Gas	.647	xxxxxxxxxxxxxx
3.	.44	556	1.56	.963	Specific Gravity Flowing Fluid	xxxxxx	.647
4.	.44	554	1.56	.963	Critical Pressure	661.1	PSIA
5.	0.00	0	0.00	0.000	Critical Temperature	355.8	°R

Pc	993.2	Pc ²	986.4				
NO	Pt ²	Pw	Pw ²	Pc ² -Pw ²	(1)	$\frac{Pc^2}{Pc^2-Pw^2} = \frac{1.3582}{}$	(2) $\left[\frac{Pc^2}{Pc^2-Pw^2} \right]^n = \frac{1.2659}{}$
1.	604.0	778.1	605.5	381.0			
2.	445.2	669.1	447.7	538.8			
3.	416.3	647.8	419.6	566.8			
4.	253.2	507.2	257.3	729.2			
5.	0.0	0.0	0.0	0.0			

ROF = Q $\left[\frac{Pc^2}{Pc^2-Pw^2} \right]^n = \frac{963 \text{ Mcfd}}{}$

$$ROF = Q \left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = 963 \text{ Mcfd}$$

Absolute Open Flow 963 Mcfd @ 15.025 Angle of Slope, 0 38 Slope, n .770
Remarks:

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