

File

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blanco Mesaverde Formation Mesaverde County Rio Arriba
 Initial After Workover Annual _____ Special _____ Date of Test 7-24-66
 Company Blackwood & Nichols Lease Northeast Blanco Unit Well No. 4
 Unit _____ Sec. 21 Twp. 30N Rge. 7W Purchaser El Paso Natural Gas Company
 Casing 4 1/2" Wt. 10.50 I.D. 4.052" Set at 5998' Perf. 5460' To 5970'
 Tubing 2 3/8" Wt. 4.7# I.D. 1.995" Set at 5916' Perf. 5880' To 5886'
 Gas Pay: From 5460' To 5970' L 5970' xG .655 -GL 3910 Bar.Press. 11.5
 Producing Thru: Casing _____ Tubing X Type Well Single - Gas
Recompletion Single-Bradenhead-G. G. or G.O. Dual
 Date of Completion 6-25-66 Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through (Proven) (Choke) (Nelson) Type Taps _____

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						835		835		
1.		3/4"				328		743		3 hrs.
2.										
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	12.3650		339.5				4198
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
 Gravity of Liquid Hydrocarbons _____ deg.
 F_c _____ (1-e^{-s})
 Specific Gravity Separator Gas _____
 Specific Gravity Flowing Fluid _____
 P_c 846.5 P_c² 717

No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-s})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w P _c
1.						569	148		.89
2.									
3.									
4.									
5.									

Absolute Potential: 13751 MCFPD; n .75
 COMPANY Blackwood & Nichols Company
 ADDRESS P. O. Box 1237, Durango, Colorado 81301
 AGENT and TITLE Field Superintendent, Delasso Loos
 WITNESSED _____
 COMPANY _____

REMARKS



INSTRUCTIONS

This form is to be used for reporting multi-point back pressure tests on gas wells in the State, except those on which special orders are applicable. Three copies of this form and the back pressure curve shall be filed with the Commission at Box 871, Santa Fe.

The log log paper used for plotting the back pressure curve shall be of at least three inch cycles.

NOMENCLATURE

- Q = Actual rate of flow at end of flow period at W. H. working pressure (P_w).
MCF/da. @ 15.025 psia and 60° F.
- P_c = 72 hour wellhead shut-in casing (or tubing) pressure whichever is greater.
psia
- P_w = Static wellhead working pressure as determined at the end of flow period.
(Casing if flowing thru tubing, tubing if flowing thru casing.) psia
- P_t = Flowing wellhead pressure (tubing if flowing through tubing, casing if
flowing through casing.) psia
- P_f = Meter pressure, psia.
- h_w = Differential meter pressure, inches water.
- F_g = Gravity correction factor.
- F_t = Flowing temperature correction factor.
- F_{pv} = Supercompressibility factor.
- n = Slope of back pressure curve.

Note: If P_w cannot be taken because of manner of completion or condition of well, then P_w must be calculated by adding the pressure drop due to friction within the flow string to P_t .