

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blanco Masaverde Formation Masaverde County Rio Arriba
Initial _____ Annual _____ Special X Date of Test June 12, 1958
Company Blackwood & Nichols Company Lease N E Blanco Unit Well No. Novell 2-B
Unit N Sec. 3 Twp. 30N Rge. 7W Purchaser El Paso Natural Gas Company
Casing 4 1/2" Wt. 9.5 I.D. 4.09 Set at 5620' Perf. 5117' To 5584'
Tubing 2-3/8" Wt. 4.74 I.D. 1.995 Set at 5502' Perf. 5457' To 5469'
Gas Pay: From 5117' To 5584' L 5600' xG .655 -GL 3668 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 May 21, 1958 Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) 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.	
1.						928		928		
2.		3/4				297		683		3 hours
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w P_f}$	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		308.5				3815
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 939.5 P_c 883 x 10³

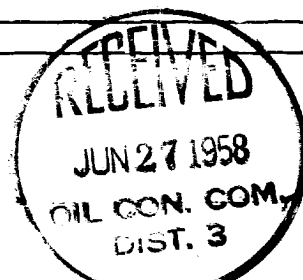
No.	$\frac{P_w}{P_t}$ (psia)	P _t ²	F _c Q	(F _c Q) ²	$\frac{(F_c Q)^2}{(1-e^{-s})}$	P _w ²	P _c ² -P _w ²	Cal. P _w	$\frac{P_w}{P_c}$
1.	308.5					482	401		0.739
2.									
3.									
4.									
5.									

Absolute Potential: 6891 MCFPD; n 0.75COMPANY Blackwood & Nichols CompanyADDRESS P.O. Box 1237 Orange, ColoradoAGENT and TITLE W J Linton W. J. Linton, Petroleum Engineer

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} = Supercompressability 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 .