



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 X After Workover Annual Special Date of Test Dec. 19, 1975
Company Blackwood & Nichols Company Lease Northeast Blanco Unit Well No. 28
Unit 04 Sec. 34 Twp. 31N Rge. 7W Purchaser El Paso Natural Gas Company
Casing 4" Wt. 11.34 I.D. 3.42 Set at 5570' Perf. 5125' To 5544'
Tubing 2-3/8" Wt. 4.7# I.D. 1.995 Set at 5542' Perf. 5542' To
Gas Pay: From 5125 To 5544 L 5544 xG .59 -GL 3271 Bar.Press. 12.0
Producing Thru: Casing Tubing X Type Well Gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 12-12-75 Packer None Reservoir Temp. 148°

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.	
SI						435		560		
1.		3/4"	120			120		420		3 Hrs.
2.										
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		132				1632 ✓
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio cf/bbl.
Gravity of Liquid Hydrocarbons deg.
P_c (1-e^{-S})

Specific Gravity Separator Gas
Specific Gravity Flowing Fluid
P_c 572 P_c² 327184

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.									
2.									
3.									
4.									
5.									

Absolute Potential: 3062 MCFPD; n .75
COMPANY Blackwood & Nichols Company
ADDRESS P.O. Box 1237, Durango, Colorado 81301
AGENT and TITLE D. Loos, District Manager
WITNESSED
COMPANY

REMARKS

OK
OK
11/20/75

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 .