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 San Juan

Initial After Workover Annual ____ Special ____ Date of Test 5-8-68

Company Blackwood & Nichols Lease Northeast Blanco Well No. 9

Unit N Sec. 12 Twp. 30N Rge. 8W Purchaser El Paso Natural Gas Company

Casing 4 1/2" Wt. 10.50 I.D. 4.052 Set at 5453' Perf. 4844' To 5362'

Tubing 2 3/8" Wt. 4.7 I.D. 1.995 Set at 5283' Perf. 5247' To 5253'

Gas Pay: From 4844 To 5362 L 5362 xG .655 -GL 3512 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~~: 4-24-68 Packer ____ Reservoir Temp. ____

OBSERVED DATA

Tested Through ~~(Prover)~~ (Choke) ~~(Meter)~~ Type Taps ____

	Flow Data					Tubing Data		Casing Data		
No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h_w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	Duration of Flow Hr.
SI						787		787		
1.		3/4"	275			275		712		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.	12.365		287				3549
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio ____ cf/bbl. Specific Gravity Separator Gas ____
Gravity of Liquid Hydrocarbons ____ deg. Specific Gravity Flowing Fluid ____
P_c ____ $(1-e^{-s})$ ____ P_c 799.5 P_c^2 619

No.	P_w P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$\frac{(F_cQ)^2}{(1-e^{-s})}$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.						524	115		.82
2.									
3.									
4.									
5.									

Absolute Potential: 12833 MCFPD; n .75

COMPANY Blackwood & Nichols Company
ADDRESS P. O. Box 1237, Durango, Colorado 81301
AGENT and TITLE DeLasso Loos, Field Superintendent
WITNESSED ____
COMPANY ____

REMARKS

RECEIVED
MAY 14 1968
OIL CON. COM.
DIST. 3

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.