

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Blanco Mesaverde Formation Mesaverde County Rio Arriba

Initial After workover Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 8-1-66

Company Blackwood & Nichols Lease Northeast Blanco Unit Well No. 15

Unit L Sec. 2 Twp. 30N Rge. 7W Purchaser El Paso Natural Gas Company

Casing 4 1/2" Wt. 10.50# I.D. 4.052" Set at 5640' Perf. 5165' To 5618'

Tubing 2 3/8" Wt. 4.7# I.D. 1.995" Set at 5570' Perf. 5535' To 5541'

Gas Pay: From 5165' To 5618' L 5618 xG .665 -GL 3736 Bar.Press. 11.5

Producing Thru: Casing \_\_\_\_\_ Tubing X Type Well Single - Gas  
Single-Bradenhead-G. G. or G.O. Dual \_\_\_\_\_

Date of Completion: 7-25-66 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 <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						885		885		
1.		3/4"				218		754		3 hours
2.										
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w p_f}$	Pressure psia	Flow Temp. Factor F <sub>t</sub>	Gravity Factor F <sub>g</sub>	Compress. Factor F <sub>pv</sub>	Rate of Flow Q-MCFPD @ 14.7 psia
1.	12.3650		229.5				2838
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio \_\_\_\_\_ cf/bbl.

Gravity of Liquid Hydrocarbons \_\_\_\_\_ deg.

$P_c$  \_\_\_\_\_ (1-e<sup>-s</sup>)

Specific Gravity Separator Gas \_\_\_\_\_

Specific Gravity Flowing Fluid \_\_\_\_\_

$P_c$  896.5  $P_c^2$  803

No.	$P_w$ $P_t$ (psia)	$P_t^2$	$F_c Q$	$(F_c Q)^2$	$(F_c Q)^2$ (1-e <sup>-s</sup> )	$P_w^2$	$P_c^2 - P_w^2$	Cal. $P_{wh}$	$P_{wh}$ $P_c$
1.						586	217		.84
2.									
3.									
4.									
5.									

Absolute Potential: 8538 MCFPD; n .75

COMPANY Blackwood & Nichols

ADDRESS P. O. Box 1237, Durango, Colorado 81301

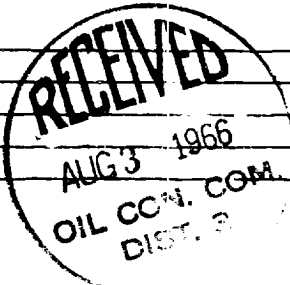
AGENT and TITLE DeLasso Loos, Field Superintendent

WITNESSED \_\_\_\_\_

COMPANY \_\_\_\_\_

Original Signed  
by DeLasso Loos

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  $P_t$ .