

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 August 15, 1969
Company Blackwood & Nichols Lease Northeast Blanco Unit Well No. 30
Unit A Sec. 12 Twp. 30N Rge. 8W Purchaser El Paso Natural Gas Company
Casing 4" Liner Wt. 9.11 I.D. 3.50 Set at 4782-5648 Perf. 5158' To 5628'
Tubing 2 3/8" Wt. 4.7# I.D. 1.995 Set at 5514' Perf. 5478' To 5484'
Gas Pay: From 5158' To 5628' L _____ xG _____ -GL _____ Bar.Press. _____
Producing Thru: Casing _____ Tubing x Type Well Gas
Single-Bradenhead-G. G. or G.O. Dual
Date of ^{Re} Completion: August 8, 1969 Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through (Packer) (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. $^{\circ}F$. | Press. psig | Temp. $^{\circ}F$. | Press. psig | Temp. $^{\circ}F$. | |
| SI | | | | | | 715 | | 715 | | |
| 1. | | 3/4" | | | | 275 | | 640 | | 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 | | 287 | | | | 3549 |
| 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 727 P_c^2 528

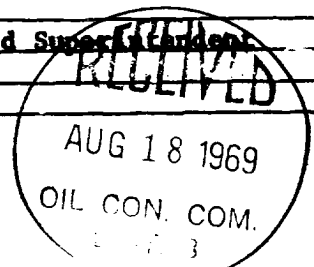
| No. | P_w P_t (psia) | P_t^2 | $F_c Q$ | $(F_c Q)^2$ | $(F_c Q)^2$ $(1-e^{-s})$ | P_w^2 | $P_c^2 - P_w^2$ | Cal. P_w | $\frac{P_w}{P_c}$ |
|-----|-----------------------|---------|---------|-------------|-----------------------------|---------|-----------------|---------------|-------------------|
| 1. | | | | | | 410 | 118 | | .776 |
| 2. | | | | | | | | | |
| 3. | | | | | | | | | |
| 4. | | | | | | | | | |
| 5. | | | | | | | | | |

Absolute Potential: 10910 MCFPD; n .75COMPANY Blackwood & NicholsADDRESS P.O. Box 1237, Durango, Colorado 81301AGENT and TITLE _____ DeLasso Loom, Field Superintendent

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 .