

WELL TEST REPORT

Form C-122

Revised 12-1-55

MULTI-POLE BLOCK TEST FOR GAS WELLS

DATE COT @ PM 2:19

Pool Eumont Gas Formation Queen County Lea

Initial I Annual _____ Special _____ Date of Test June 22, 1956

Company Neville G. Penrose, Inc. Lease Alves Well No. 1-A

Unit P Sec. 7 Twp. 21S R. 37E Purchaser Permain Basin Pipeline Co.

Casing 7" Wt. 20.0# I.D. 6.456" Set at 3552' Perf. 3524' To 3550'

Tubing None Wt. _____ I.D. _____ Set at _____ Perf. _____ To _____

Gas Pay: From 3523' To 3558' L 3524' xG 0.660 -GL 2326' Bar.Press. 13.2

Producing Thru: Casing I Tubing _____ Type Well Single Completion

Date of Completion: 2-17-54 Packer None Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (ORIFICE) (ORIFICE) Type Taps None

No.	Flow Data				Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (<u>ORIFICE</u>) (<u>ORIFICE</u>) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI							<u>694.7</u>		<u>694 Hr. S.I.</u>
1.	<u>2" CFP</u>	<u>3/16"</u>	<u>646.5</u>	<u>71</u>			<u>646.5</u>		<u>3-Hrs</u>
2.	<u>2" CFP</u>	<u>7/32"</u>	<u>619.9</u>	<u>72</u>			<u>619.9</u>		<u>3-Hrs</u>
3.	<u>2" CFP</u>	<u>1/4"</u>	<u>590.0</u>	<u>72</u>			<u>590.0</u>		<u>3-Hrs</u>
4.	<u>2" CFP</u>	<u>5/16"</u>	<u>533.5</u>	<u>70</u>			<u>533.5</u>		<u>3-Hrs</u>
5.	<u>2" CFP</u>	<u>5/16"</u>	<u>489.4</u>	<u>72</u>			<u>489.4</u>		<u>24-Hrs.</u>

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpe}}$	Flow Temp. Factor Ft	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	<u>0.7851</u>		<u>659.7</u>	<u>0.9896</u>	<u>0.9535</u>	<u>520</u>
2.	<u>1.0834</u>		<u>633.1</u>	<u>0.9887</u>	<u>0.9535</u>	<u>686</u>
3.	<u>1.4030</u>		<u>603.2</u>	<u>0.9887</u>	<u>0.9535</u>	<u>846</u>
4.	<u>2.1577</u>		<u>546.7</u>	<u>0.9905</u>	<u>0.9535</u>	<u>1174</u>
5.	<u>2.1577</u>		<u>502.6</u>	<u>0.9887</u>	<u>0.9535</u>	<u>1072</u>

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry Gas cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c 0.4682 (1-e^{-S}) 0.148
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 707.9 P_c 501.1

No.	$\frac{P_w}{P_t}$ (psia)	P _t	F _c	$\frac{(F_c)^2}{(1-e^{-S})}$	F _w	P _c ² -P _w ²	Cal. P _w	$\frac{P_w}{P_c}$
1.	<u>659.7</u>	<u>435.2</u>	<u>.2435</u>	<u>.0593</u>	<u>.0088</u>	<u>435.2</u>	<u>65.9</u>	<u>.932</u>
2.	<u>633.1</u>	<u>400.8</u>	<u>.3242</u>	<u>.1032</u>	<u>.0153</u>	<u>400.8</u>	<u>100.3</u>	<u>.894</u>
3.	<u>603.2</u>	<u>363.9</u>	<u>.3902</u>	<u>.1569</u>	<u>.0232</u>	<u>363.9</u>	<u>137.2</u>	<u>.852</u>
4.	<u>546.7</u>	<u>298.9</u>	<u>.5497</u>	<u>.3022</u>	<u>.0447</u>	<u>298.9</u>	<u>202.2</u>	<u>.772</u>
5.	<u>502.6</u>	<u>252.6</u>	<u>.5019</u>	<u>.2519</u>	<u>.0373</u>	<u>252.6</u>	<u>248.5</u>	<u>.709</u>

Absolute Potential: 1.714 MCFPD; n 0.67
COMPANY Neville G. Penrose, Inc.
ADDRESS Box 988 Eumont, New Mexico
AGENT and TITLE Charles L. McCoy Gas Tester Representative
WITNESSED /s/ H.E. Barrett
COMPANY Permain Basin Pipeline Co.

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} = Supercompressibility 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 .