

MULTI-POINT BACKFLOW TEST OF OIL WELLS

Revised 12-1-55

Pool Basin Dakota Formation Dakota County Rio Arriba
Initial Yes Annual Spot Date of Test 1-7-64
Company Caulkins Oil Company Lease Breese "E" Well No. D-54
Unit A Sec. 4 Twp. 26N Rge. 6W Producing Southern Union Gas Company
Casing 4 1/2" Wt. 11.6 I.D. 4.000 Set at 7482 7181 To 7398
Tubing 2 3/8" Wt. 4.7 I.D. 1.995 Set at 7171 7171 To
Gas Pay: From 7181 To 7398 @ 7171 .660 4733 Bar.Press. 12
Producing Thru: Casing No Tubing Yes Single Gas
Date of Completion: 12-19063 Packer None Head-G. G. or G.O. Dual
Temperature 180°

OBSERVATIONS

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

Flow Data						Casing Data		
No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Duration of Flow Hr.
SI								
1.		3/4"				2472	2470	SI 186 1/2 hrs.
2.						344	1112	60
3.								
4.								
5.								

FLOW CORRECTION							
No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	Pressure psia	Flow Factor	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia	
1.	14.1605		356	1.000	.9571	1.024	4941
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

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

Specific Gravity Separator Gas
Specific Gravity Flowing Fluid
G_s 2482 P_c 6,160,324

No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	P _c ² -P _w ²	Cal. P _w	P _w P _c
1.							
2.					1,263,376	4,896,948	.452
3.							
4.							
5.							

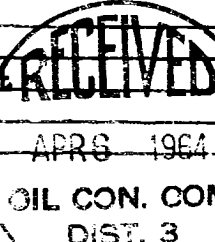
Absolute Potential: 5875 MCFPD (1.26)n 1.1892

COMPANY Caulkins Oil Company
ADDRESS P. O. Box 750, Farmington, New Mexico

AGENT and TITLE Frank D. Dwyer Production Superintendent

WITNESSED

COMPANY



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 .