

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalmat Formation Yates County Lea
Initial _____ Annual _____ Special X Date of Test 8-16/8-23-63
Company Reserve Oil and Gas Company * Lease Vosburg Well No. 1 (Casing)
Unit I Sec. 18 Twp. 25 Rge. 37 Purchaser El Paso Natural Gas Company
Casing 7 Wt. 23 I.D. _____ Set at 3168 Perf. 2792 To 2900
Tubing 2 Wt. 4.7 I.D. _____ Set at 3321 Perf. _____ To _____
Gas Pay: From 2792 To 2900 L 2792 xG .706 -GL _____ Bar.Press. 13.2
Producing Thru: Casing X Tubing _____ Type Well G. O. Dual
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: Dual - April 6, 1953 Packer 3100 Reservoir Temp. _____

OBSERVED DATA

Tested Through (XXXXX) (Choke) (Meter) Type Taps Flange

No.	Flow Data			Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	
SI								
1.	<u>4 x .750</u>		<u>165</u>	<u>1.0</u>	<u>90</u>	<u>172</u>		<u>72</u>
2.						<u>165</u>		<u>24</u>
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 psi
1.	<u>3.435</u>	<u>13.35</u>		<u>.9723</u>	<u>.9219</u>	<u>1.017</u>	<u>41.81</u>
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
P_c _____ (1-e^{-s})

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 185.2 P_c 24.3

No.	P _t (psia)	P _c 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	P _w /P _c
1.	<u>178.2</u>	<u>31.7</u>		<u>Negligible</u>		<u>31.7</u>	<u>2.6</u>		
2.									
3.									
4.									
5.									

Absolute Potential: 50

MCFPD; n .615

COMPANY Reserve Oil and Gas Company

ADDRESS 505 Midland Savings Bldg., Midland, Texas

AGENT and TITLE Paul Gregory, Prod. Supt.

WITNESSED Jack O. Whitting

COMPANY _____

REMARKS

* Well previously operated by Producing Properties, Inc.

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 600 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.

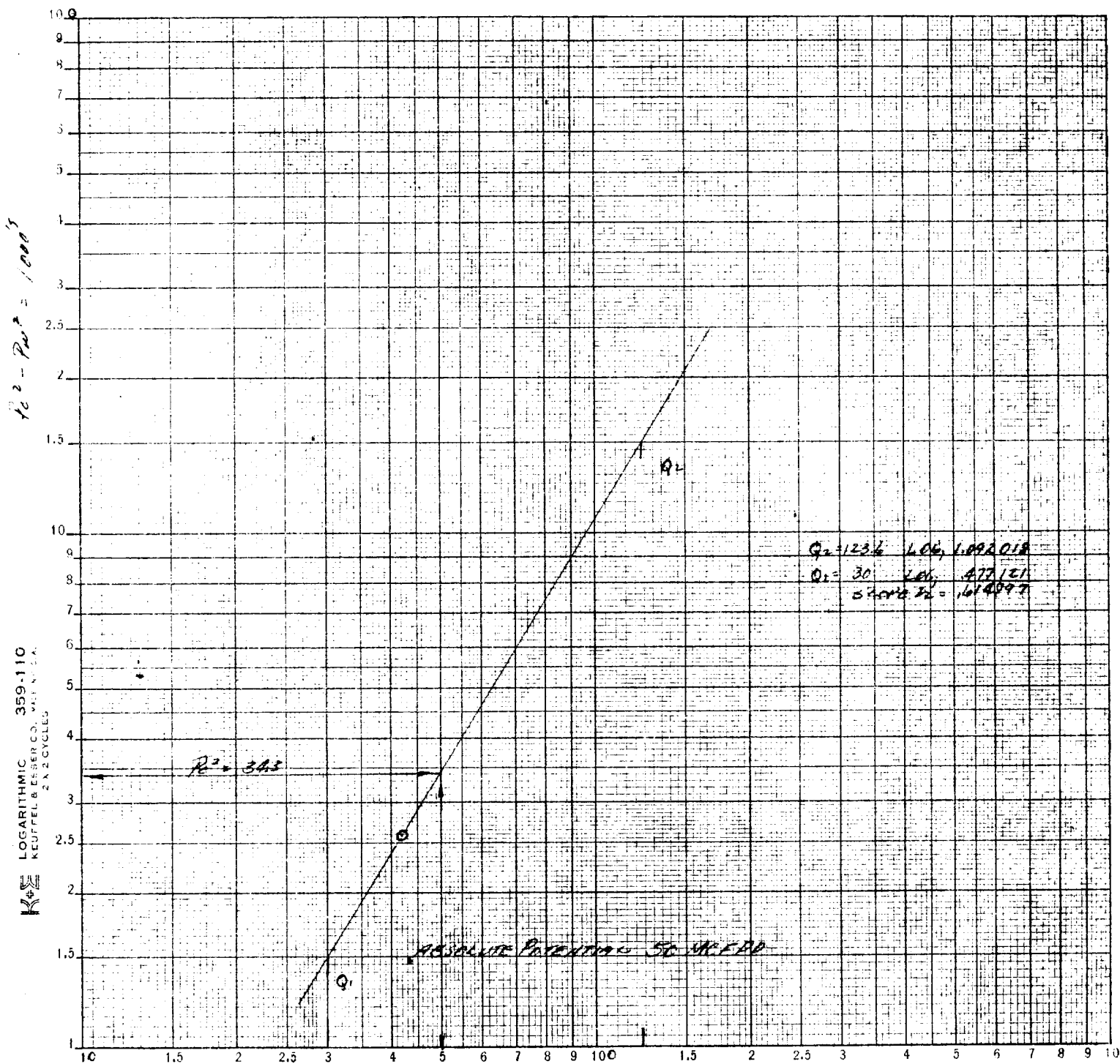
F_{pv} = Supercompressability factor.

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 .

OCT 21 7 53 AM '63

PRODUCING PROPERTIES INC.
 VOSBURG No. 1
 I-18-25-37 LEA Co., N.M.
 8-23-63



$Q = MCF/D$
 $10.25 P_b$