

NEW MEXICO OIL CONSERVATION COMMISSION

NILES OFFICE OCC

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS: 39

Revised 12-1-55

Pool Undesignated (Fowler Paddock) Formation Paddock County Lee
Initial X Annual _____ Special _____ Date of Test June 2-6, 1962
Company Gulf Oil Corporation Lease Plains-Knight Well No. 3
Unit L Sec. 23 Twp. 24 S Rge. 37 E Purchaser None
Casing 5.5 Wt. 17.0 I.D. _____ Set at 7667 Perf. 4839 To 4845
Tubing 2 Wt. 4.7 I.D. 1.995 Set at 4793 Perf. _____ To _____
Gas Pay: From 4839 To 4845 L 4793 xG .700 (assumed) GL 3355 Bar.Press. 13.2
Producing Thru: Casing _____ Tubing X Type Well Single
Date of Completion: 4/24/62 Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (~~Choke~~) (~~Motor~~)

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. °F. | Press. psig | Temp. °F. | Press. psig | Temp. °F. | |
| SI | | | | | | 1643 | | 1646 | | 72 |
| 1. | 2 | .250 | 197 | | 97 | 1543 | | 1547 | | 3 |
| 2. | 2 | .500 | 89 | | 98 | 1376 | | 1388 | | 3 |
| 3. | 2 | .500 | 117 | | 94 | 1264 | | 1276 | | 3 |
| 4. | 2 | .500 | 127 | | 97 | 814 | | 887 | | 3 |
| 5. | 2 | .250 | 226 | | 104 | 1355 | | 1415 | | 20 |

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 psia |
|-----|-----------------------|------------------|---------------|----------------------------------|-------------------------------|----------------------------------|------------------------------------|
| 1. | 1.4030 | | 210.2 | .9662 | .9258 | 1.019 | 269 |
| 2. | 5.5233 | | 102.2 | .9653 | .9258 | 1.000 | 505 |
| 3. | 5.5233 | | 130.2 | .9688 | .9258 | 1.012 | 653 |
| 4. | 5.5233 | | 140.2 | .9662 | .9258 | 1.012 | 701 |
| 5. | 1.4030 | | 239.2 | .9602 | .9258 | 1.020 | 829.30 ✓ |

PRESSURE CALCULATIONS

as Liquid Hydrocarbon Ratio None cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
c. Measured (1-e^{-s}) _____

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid none
P_c 1659.2 P_c² 2752.9

| No. | P _w (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 | P _w /P _c |
|-----|-----------------------|-----------------------------|------------------|---------------------------------|------------------------------------------------------|-----------------------------|----------------------------------------------------------|---------------------|--------------------------------|
| 1. | 1560.2 | | | | | 2434.2 | 318.7 | | .94 |
| 2. | 1411.2 | | | | | 1963.4 | 789.5 | | .83 |
| 3. | 1289.2 | | | | | 1662.0 | 1090.9 | | .78 |
| 4. | 900.2 | | | | | 810.4 | 1942.5 | | .54 |
| 5. | 1428.2 | | | | | 2039.8 | 713.1 | | .86 |

Absolute Potential: 850 MCFPD; n 0.694COMPANY Gulf Oil CorporationADDRESS Box 766, Kermit, TexasAGENT and TITLE H. R. Smith Independent Gas TesterWITNESSED Dale SouthernCOMPANY El Paso Natural Gas 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.

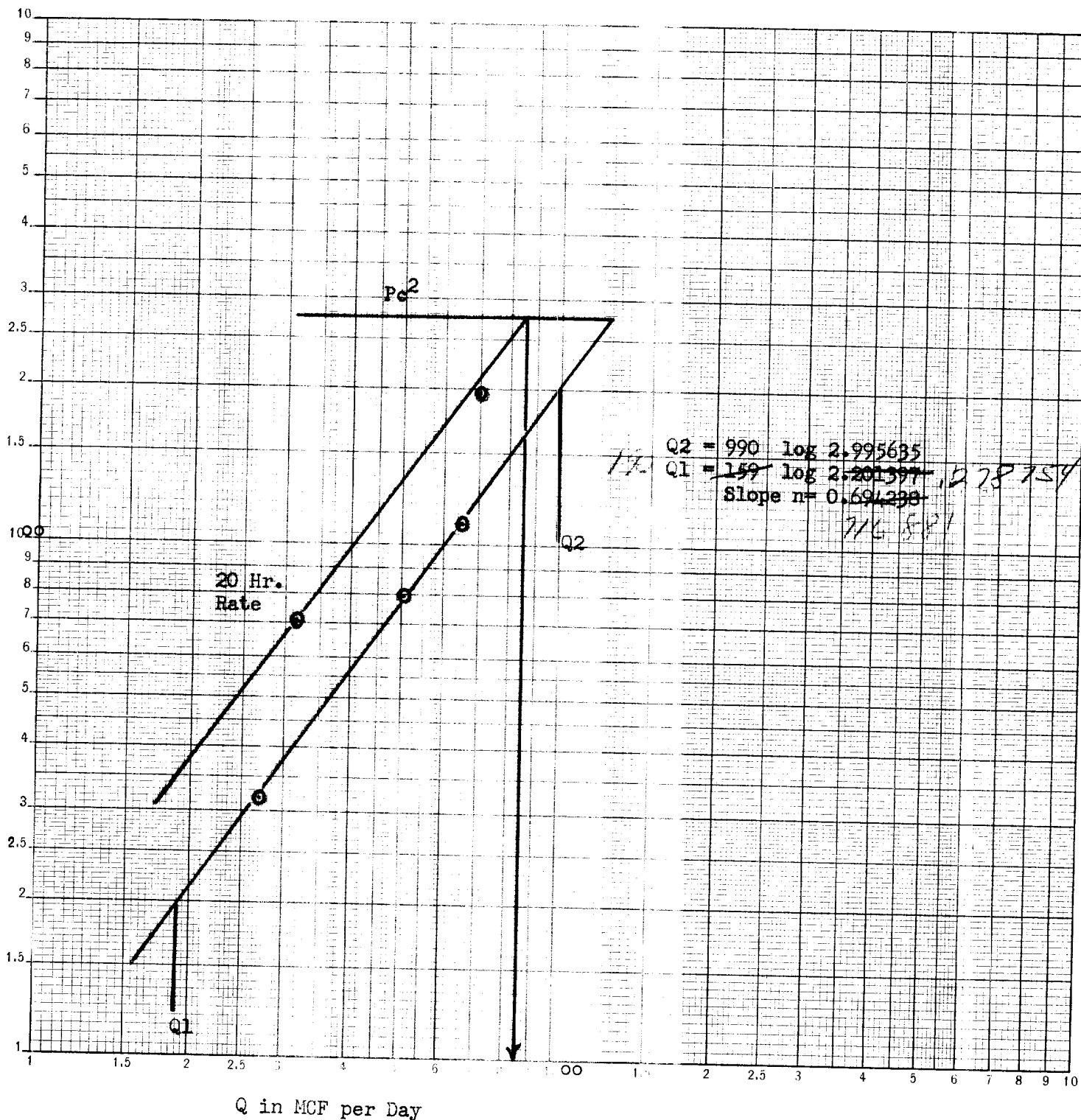
F_t = Flowing temperature correction factor.

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 .

Gulf Oil Corporation
 Plains-Knight No.3
 Unit L Sec.23, T24S, R37E
 Fowler Paddock Gas
 June 2-6, 1962
 AP= 850 MCF



KEUFFEL & ESSER CO. MADE IN U.S.A.
 2 X 2 CYCLES

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