

MULTI-POINT METER PRESSURE TEST FOR GAS WELLS

Pool JALMAT Formation YATES County LEA
Initial _____ Annual _____ Special X Date of Test 6-7-57
Company SINCLAIR OIL & GAS COMPANY Lease Crosby "A" Well No. 1
Unit 0 Sec. 29 Twp. 25 Rge. 37 Purchaser El Paso Natural Gas Company
Casing 7" Wt. 20.0# I.D. 6.456 Set at 2974 Perf. 2595 To 2612
Tubing 2" Wt. 4.7# I.D. 1.995 Set at 2620 Perf. _____ To _____
Gas Pay: From 2595 To 2612 L 2620 SG 1650 BH 1703 Bar.Press. 13.2
Producing Thru: Casing _____ Tubing X Type Well Single
Date of Completion: 3-24-47 Packer _____ Reservoir Temp. 118
Single-Bradenhead-G. G. or G.O. Dual

OBSERVED DATA

Tested Through (~~63636~~) (~~63636~~) (Meter)Type Taps Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(63636) (Line) Size	(63636) (Orifice) Size	Press. psig	Diff. in	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI										
1.	<u>4</u>	<u>1.000</u>	<u>425</u>	<u>5.29</u>	<u>72</u>	<u>640</u>	<u>70</u>			<u>72</u>
2.		"	<u>352</u>	<u>9.00</u>	<u>72</u>	<u>352</u>	<u>70</u>			<u>24</u>
3.		"	<u>285</u>	<u>14.44</u>	<u>76</u>	<u>285</u>	<u>70</u>			<u>24</u>
4.		"	<u>200</u>	<u>25.00</u>	<u>76</u>	<u>200</u>	<u>70</u>			<u>24</u>
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.	<u>6.135</u>	<u>48.13</u>	<u>438.2</u>	<u>.9887</u>	<u>.9608</u>	<u>1.041</u>	<u>293</u>
2.	<u>6.135</u>	<u>57.32</u>	<u>365.2</u>	<u>.9887</u>	<u>.9608</u>	<u>1.034</u>	<u>345</u>
3.	<u>6.135</u>	<u>65.60</u>	<u>298.2</u>	<u>.9850</u>	<u>.9608</u>	<u>1.026</u>	<u>422 390</u>
4.	<u>6.135</u>	<u>72.98</u>	<u>213.2</u>	<u>.9850</u>	<u>.9608</u>	<u>1.019</u>	<u>432</u>
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio None cf/bbl.
Gravity of Liquid Hydrocarbons None deg.
C 9.936 ($1-e^{-3}$) 0.111

Specific Gravity Separator Gas .650
Specific Gravity Flowing Fluid -
P_s 653.2 P_c 426.7

No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ⁻³)	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w P _c
1.	<u>438.2</u>	<u>192.0</u>	<u>2.91</u>	<u>8.47</u>	<u>.94</u>	<u>192.9</u>	<u>233.8</u>	<u>439.2</u>	<u>.67</u>
2.	<u>365.2</u>	<u>133.4</u>	<u>3.43</u>	<u>11.76</u>	<u>1.31</u>	<u>134.7</u>	<u>292.0</u>	<u>367.0</u>	<u>.56</u>
3.	<u>298.2</u>	<u>88.9</u>	<u>3.88</u>	<u>15.05</u>	<u>1.67</u>	<u>90.6</u>	<u>336.1</u>	<u>300.1</u>	<u>2.46</u>
4.	<u>213.2</u>	<u>45.5</u>	<u>4.29</u>	<u>18.40</u>	<u>2.04</u>	<u>47.5</u>	<u>379.2</u>	<u>217.9</u>	<u>.33</u>
5.									

Absolute Potential: 470 MCFPD; n .813

COMPANY SINCLAIR OIL & GAS COMPANY
ADDRESS 520 East Broadway - Hobbs, New Mexico
AGENT and TITLE R. L. Harned - Gas Analyst
WITNESSED Smith & Blumer
COMPANY El Paso Natural Gas Company

SIGNATURE

R. L. HARNED
GAS ENGINEER

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.

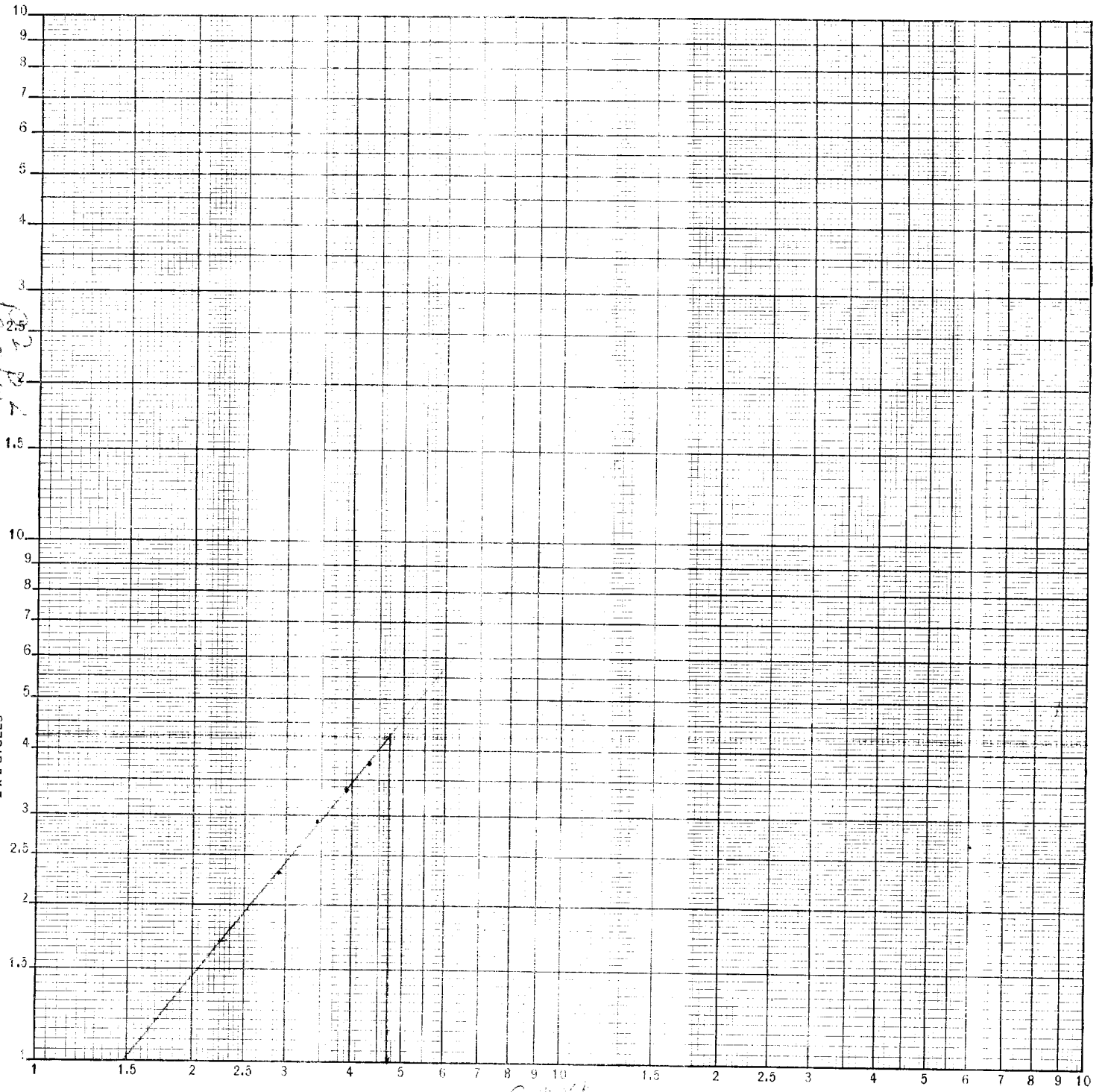
F_{pv} = Supercompressibility factor.

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 .

K&E LOGARITHMIC 359-110
 KEUFFEL & ESSER CO. MADE IN U.S.A.
 2 X 2 CYCLES

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6.145

$n = .813$

HP-470A-110

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