

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool JALMAT Formation Seven Rivers County Lea
Initial _____ Annual _____ Special X Date of Test 4-26-57
Company Sinclair Oil & Gas Company Lease Hair Well No. 1 2
Unit 8 Sec. 9 Twp. 24 Rge. 37 Purchaser El Paso Natural Gas Company
Casing 7 Wt. 24 I.D. _____ Set at 3130 Perf. _____ To _____
Tubing 2 1/2 Wt. 6.5 I.D. _____ Set at 3525 Perf. 3360 To 3300
Gas Pay: From 3360 To 3300 L 3360 xG .655 -GL 2201 Bar.Press. 13.2
Producing Thru: Casing _____ Tubing X Type Well Single
Date of Completion: 8-15-50 Packer None Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. 118

OBSERVED DATA

Tested Through (Prover) (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.	Press. psig	Temp. °F.	
SI						337	60			72
1.	4	1.250	312	8.42	70	315	60			24
2.	4	1.250	292	14.44	76	295	60			24
3.	4	1.250	292	20.25	78	295	60			24
4.	4	1.250	278	26.09	71	281	60			24
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.	9.643	52.26	325.2	.9905	.9971	1.030	492
2.	9.643	66.36	305.2	.9850	.9971	1.026	619
3.	9.643	78.59	305.2	.9831	.9971	1.026	732
4.	9.643	90.41	291.2	.9896	.9971	1.026	847
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
c 5.866 (1-e^{-S}) 0.141

Specific Gravity Separator Gas .655
Specific Gravity Flowing Fluid _____
P_c 350.2 P_c² 122.6

No.	P _w P _t (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.	325.2	107.7	2.89	8.35	1.18	108.9	19.7	330.9	95.1
2.	305.2	93.0	3.63	12.18	1.06	96.9	25.7	311.3	88.9
3.	305.2	93.0	4.29	18.40	2.59	97.6	29.0	312.4	89.2
4.	291.2	86.6	4.97	24.70	3.48	89.5	33.1	299.2	85.4
5.									

Absolute Potential: 1,900 MCFPD; n .607

COMPANY Sinclair Oil & Gas Company
ADDRESS 520 East Broadway - Hobbs, New Mexico
AGENT and TITLE M. L. Harned - Gas Analyst
WITNESSED M. H. Kofy
COMPANY 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.

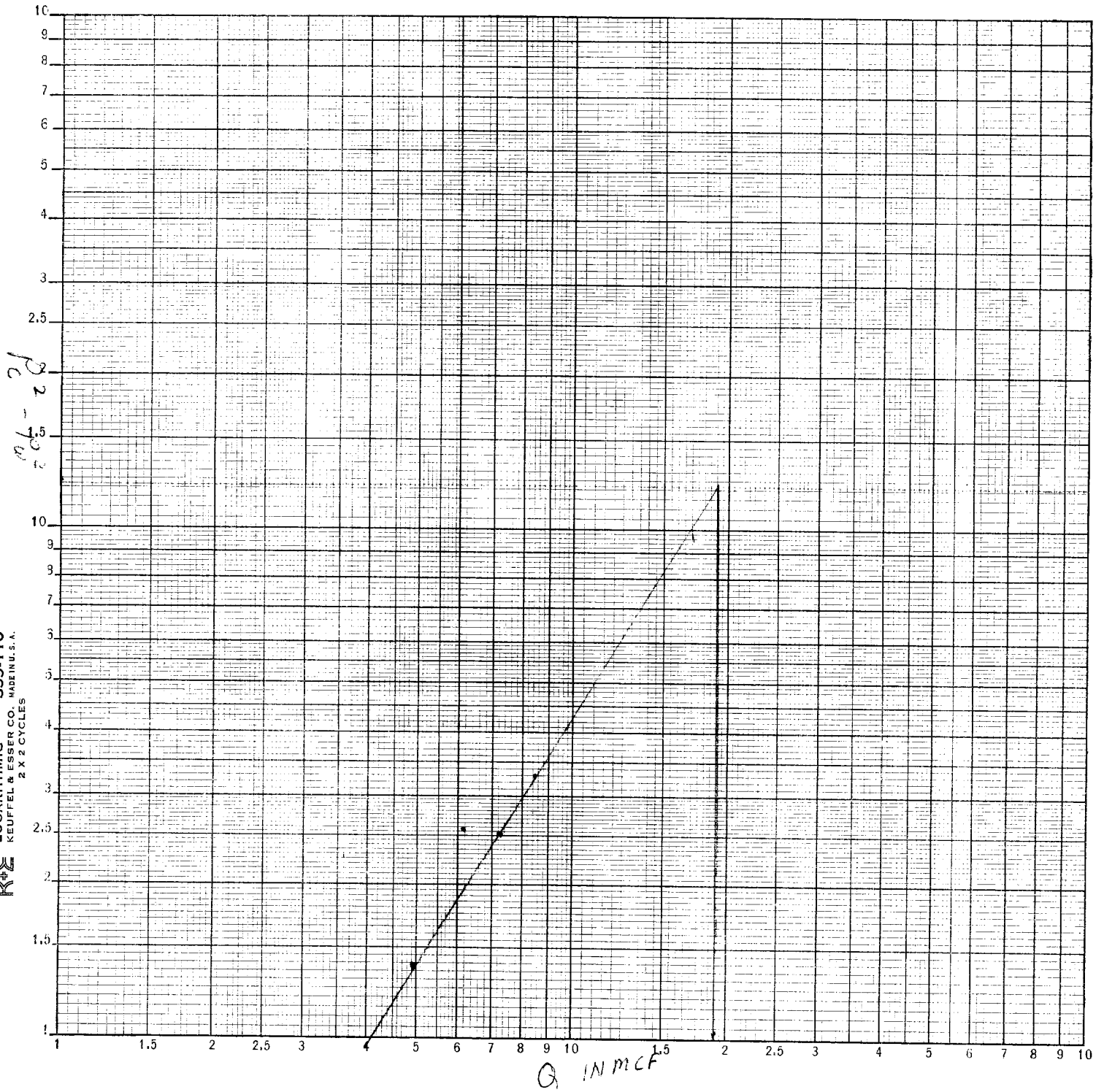
F_g = Gravity correction factor.

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 .



AP-1, 900 MCF / D

17 - .607

1700 = 3.130 0.29

410 = 2.612 0.24

17 - .607