

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalmat Formation Yates County Lea
Initial _____ Annual _____ Special X Date of Test February 11-15, '57
Company Argo Oil Corporation Lease B. T. Lanehart Well No. 1
Unit H Sec. 21 Twp. 25S Rge. 37E Purchaser El Paso Natural Gas Company
Casing 8 5/8" Wt. 28# I.D. 8.003 Set at 2690 Perf. - To _____
Tubing None Wt. _____ I.D. _____ Set at _____ Perf. _____ To _____
Gas Pay: From 3025 To 3072 L 3049 xG .660 -GL 2012 Bar. Press. 13.2
Producing Thru: Casing X Tubing _____ Type Well Single
Date of Completion: December 26, '36 Packer None Reservoir Temp. _____
Single-Bradenhead-G. G. or G.O. Dual

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter)

aps Flange

Flow Data					Data			
No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	°F.	psig	°F.	Duration of Flow Hr.
1.	4	.750	253	2.25	68		380	72
2.	4	.750	227	4.00	64		254	24
3.	4	.750	214	7.84	63		228	24
4.							215	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.	3.435	24.47		.9924	.9535	1.026	82
2.	3.435	30.98		.9962	.9535	1.024	104
3.	3.435	42.19		.9971	.9535	1.023	141
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio - cf/bbl.
Gravity of Liquid Hydrocarbons - deg.
F_c 0.2689 (1-e^{-s}) 0.129

Specific Gravity Separator Gas Dry
Specific Gravity Flowing Fluid -
P_c 393.2 P_c 154.6

No.	P _w 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.	267.2	71.4	2.205	4.862	.6272	71.4	83.2	72.19	.1036
2.	241.2	58.2	2.797	7.823	1.0091	58.2	96.4	59.21	.1506
3.	228.2	52.1	3.791	14.372	1.8540	52.1	102.5	53.46	.1360
4.									
5.									

Absolute Potential: 195 MCFPD; n .771 No point alignment. Average Jalmat slope
COMPANY Argo Oil Corporation of .771 drawn thru highest
ADDRESS 1728 Milan Building, San Antonio 5, Texas rate.
AGENT and TITLE Chas. W. Johnson, Asst. Division Supt.
WITNESSED R. T. Wright
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.

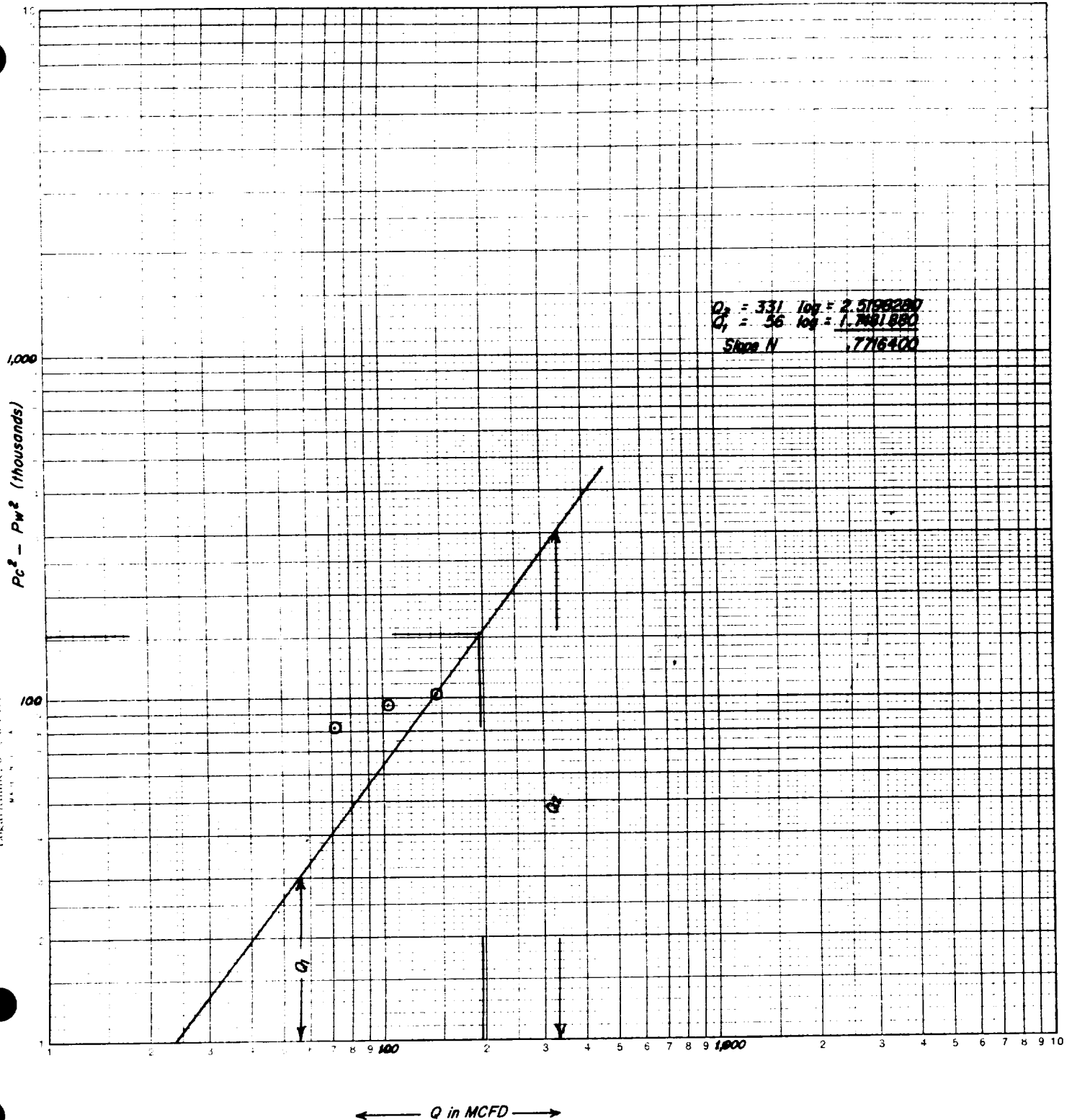
NOMENCLATURE

- 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 .

COUNTY: Lea
 FIF: Jalmat
 OPERATOR: Argo Oil Corporation
 LEASE: B.T. Lanehart
 WELL: No. 1
 ABSOLUTE OPEN FLOW: 195 MCF
 DATE: 2-11-57

358-120 KEUFFEL & ESSER CO.
 Logarithmic 3 x 3 Cycle
 Model 111-A



Average Jalmat slope of .771