

NEW MEXICO OIL CONSERVATION COMMISSION

NOCES OFFICE CCC

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 11-12 to 11-16-56
Company Cities Service Oil Co. Lease Clessen C Well No. 1
Unit A Sec. 18 Twp. 22S Rge. 36E Purchaser United Carbon
Casing 7 Wt. 24 I.D. 6.336 Set at 3717 Perf. 3405 To 3447
Tubing 2½ Wt. 6.5 I.D. 2.441 Set at 3445 Perf. _____ To _____
Gas Pay: From 3505 To 3447 L 3445 xG .660 -GL 2274 Bar. Press. 13.2
Producing Thru: Casing _____ Tubing x Type Well single
Date of Completion: 12-20-37 Packer 3374 Reservoir Temp. _____
Single-Bradenhead-G. G. or G.O. Dual

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter)Type Taps Fig

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						604				72
1.	4	2.75	60	15.0	60	585				24
2.	4	2.75	65	27.0	60	571				24
3.	4	2.75	60	39.0	60	560				24
4.	4	2.75	65	51.0	60	545				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.	53.05	33.09	46.29	1.000	.9535		1.673
2.	53.05	45.89	59.09	1.000	.9535		2.321
3.	53.05	53.86	67.06	1.000	.9535		2.699
4.	53.05	63.07	76.27	1.000	.9535		3.190
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c 5.866 (1-e^{-s}) .145

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 617.2 P_c² 380.9

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.	598.2	357.8	9.81	96.24	13.9	371.7	9.2	604.9	.7272
2.	584.2	341.3	13.61	185.23	26.9	368.2	12.7	606.8	.7231
3.	573.2	328.6	15.83	250.59	36.3	364.9	16.0	604.1	.7189
4.	558.2	311.6	18.71	350.06	50.8	362.4	18.5	602.0	.7154
5.									

Absolute Potential: 48,000 MCFPD; n .905COMPANY Cities Service Oil Co.ADDRESS Box 97, Hobbs, New MexicoAGENT and TITLE E. H. Furray, Jr., Petroleum EngineerWITNESSED Ed MabeCOMPANY El Paso Natural Gas Co.

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.

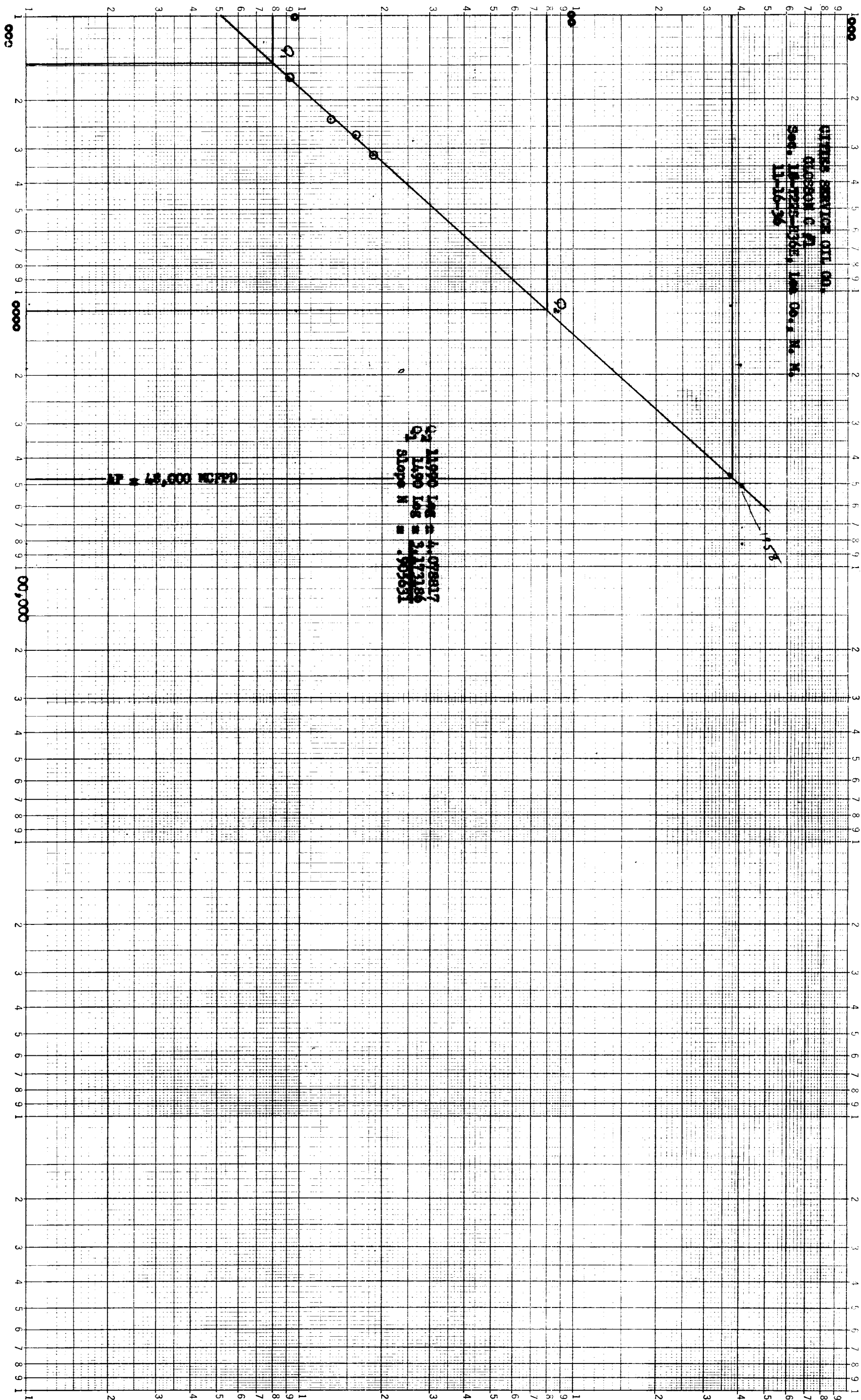
F_g = Gravity correction factor.

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 .



10-10-68