

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MAIN OFFICE OCC

1957 OCT 11 AM 8:12

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Tubb Formation Tubb County LeaInitial Annual Special X Date of Test 9/23-27/57Company The Ohio Oil Company Lease J. L. Muncy Well No. 1Unit P Sec. 24 Twp. 22-S Rge. 37-E Purchaser El Paso Natural Gas CompanyCasing 5 1/2" Wt. 17# I.D. 4.892 Set at 6700 Perf. * To Tubing 2.375 Wt. 4.7# I.D. 1.995 Set at 6450 Perf. 6427' To 6429'Gas Pay: From 5855' To 6195' L 5855 xG -GL See Below Bar.Press. 13.2Producing Thru: Casing X Tubing Type Well G.O. DualDate of Completion: 6/12/54 Packer 6419' Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. --

OBSERVED DATA

Tested Through (Packer) (Orifice) (Meter)Type Taps Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Packer) (Line) Size	(Orifice) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						Pkr.	--	1804.	--	72 hr SIP
1.	4"	1.250	535.0	21.16	76	"	--	1712.0	76	24 hrs.
2.	4"	1.250	537.0	46.24	60	"	--	1664.0	60	24 "
3.	4"	1.250	549.0	63.20	60	"	--	1595.0	60	24 "
4.	4"	1.250	545.0	77.44	57	"	--	1559.0	57	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	17.70	548.2	0.9850	0.9325	1.057	1008
2.	9.643	59.50	550.2	1.0000	0.9325	1.064	1526
3.	9.643	188.50	562.2	1.0000	0.9325	1.064	1803
4.	9.643	207.91	558.2	1.0029	0.9325	1.066	1999
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio See Below cf/bbl.
 Gravity of Liquid Hydrocarbons 67° API @ 60 deg. F.
1.812 (1-e⁻⁸) See Below

Specific Gravity Separator Gas 0.690
 Specific Gravity Flowing Fluid See Below
 P_c 1817.2 P_c² 3302.2

No.	P _w P _t (psia)	P _c ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ⁻⁸)	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w P _c
1.	1725.2	2976.3	1.826	3.33	0.88	2977.2	325.0	1725.5	0.95
2.	1677.2	2813.0	2.765	7.65	1.94	2814.9	487.3	1677.8	0.92
3.	1608.2	2586.3	3.267	10.67	2.72	2589.0	713.2	1609.0	0.89
4.	1572.2	2471.8	3.622	13.12	3.46	2475.3	826.9	1573.3	0.87
5.									

Absolute Potential: 5517 MCFPD; n 0.733184COMPANY The Ohio Oil CompanyADDRESS P.O. Box 2107, Hobbs, New MexicoAGENT and TITLE H. D. Chiles - Petroleum Engr.WITNESSED Mr. Earl G. SmithCOMPANY El Paso Natural Gas Company

REMARKS

* 5 1/2" 0.8. csg perfs as follows: 5855'-5913', 6005'-60', 6070'-95', & 6110'-95'.

Rate	Fluid (bbls)	GLR (ft3/bbl)	Gmix	GL	(1-e ⁻⁸)
1	29.33	34,368	0.760	4450	0.264
2	23.37	65,297	0.728	4262	0.254
3	31.68	56,913	0.732	4286	0.255
4	60.02	33,306	0.762	4462	0.264

See reverse side for

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.

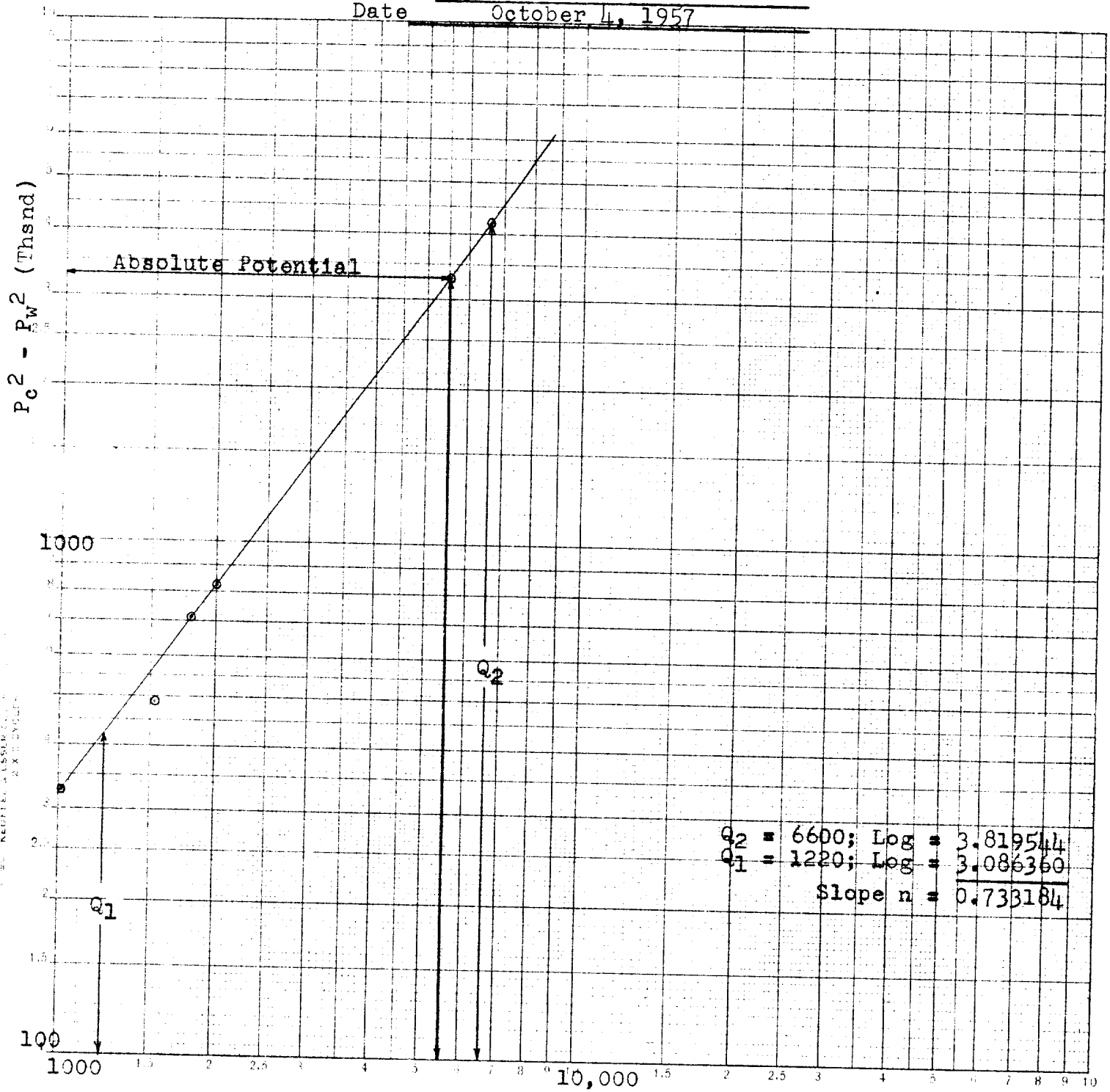
F_{pv} = Supercompressability factor.

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 .

OIL CONSERVATION COMM.
L. H. SHEARER
J. A. GRIMES
T. A. STEELE
P. B. STEWART
D. L. PROVINCE

COMPANY The Ohio Oil Company
 WELL J. L. Muncy, Well No. 1
 POOL Tubb Gas
 LOCATION P Sec. 24-22S-37E
 COUNTY Lea
 Date October 4, 1957



Q - MCFD - 15.025 psia