NEW MEXICO OIL CONSERVATION COMMISSION

HOBBS OFFICE OCC

1961 AUG 11 PM 2:39

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blinitz-Wolfcamp-Gas Formation Wolfcamp County Roosevelt

Initial X Annual _____ Special _____ Date of Test 5-25/5-29-61

Company H. L. Brown, Jr. & Glen E. George Lease Federal "A" Well No. 1

Unit P Sec. 33 Twp. 7S Rge. 37E Purchaser - - - -

Casing 4-1/2" Wt. 9.5-11.6 I.D. - - Set at 8335' Perf. 7994' To 8030'

Tubing 2 EUE Wt. 4.7 I.D. 1.995 Set at 7934 Perf. - - - - To - - - -

Gas Pay: From 7994' To 8030' L 7934' xG mix. .868 -GL 6887 Bar.Press. 13.2

Producing Thru: Casing _____ Tubing X Type Well Single
Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 5-22-61 Packer 7934 Reservoir Temp. 147°

OBSERVED DATA

Tested Through (~~Prover~~) (~~Choke~~) (Meter) Type Taps Flange

No.	Flow Data (~~Prover~~) (Line) Size	(~~Choke~~) (Orifice) Size	Press. psig	Diff. h_w	Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI						2225		Packer		123
1.	3.068	1.250	500	12"	78	1700	88			3.0
2.	3.068	1.250	500	23"	78	1875	90			2.0
3.	3.068	1.250	600	24"	83	900	91			1.25
4.	3.068	1.250	600	25"	83	700	91			1.50
5.	3.068	1.250	600	35"	83	1000	93			24

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w p_f}$	Pressure psia	Flow Temp. Factor F_t	Gravity Factor F_g	Compress. Factor F_{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	9.781	78.48	513.2	0.9887	0.9129	1.068	735.8
2.	9.781	108.64	513.2	0.9831	0.9129	1.060	1010.9
3.	9.781	121.31	613.2	0.9786	0.9129	1.066	1130.9
4.	9.781	123.82	613.2	0.9786	0.9129	1.066	1151.4
5.	9.781	146.50	613.2	0.9786	0.9129	1.066	1364.6

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 14.572 cf/bbl.
Gravity of Liquid Hydrocarbons 76.0° @ 60° deg.
F_c 9.936 $(1-e^{-s})$ .377

Specific Gravity Separator Gas .720
Specific Gravity Flowing Fluid .6819
P_c 2238.2 P_c^2 5009.5

No.	P_w P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$(F_cQ)^2$ $(1-e^{-s})$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.	1713.2	2935.1	7.31	53.44	20.15	2955.2	2054.3	1719.1	76.8
2.	1288.2	1659.5	10.04	100.80	38.00	1697.5	3312.0	1302.9	58.2
3.	913.2	833.9	11.23	126.11	47.54	881.4	4128.1	938.8	41.9
4.	713.2	508.7	11.46	131.33	49.51	558.2	4451.3	747.0	33.4
5.	1013.2	1026.6	13.56	183.87	69.32	1095.9	3913.6	1047.0	46.8

Absolute Potential: 1600 MCFPD; n .649
COMPANY H. L. Brown, Jr. & Glen E. George
ADDRESS 507 Midland Savings Bldg., Midland, Texas
AGENT and TITLE W. D. Jones, Engineer
WITNESSED Bob Vance
COMPANY Transwestern Pipeline Company

REMARKS

Volume and pressure increased on 24 hour rate of flow due to well possibly cleaning up.

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.

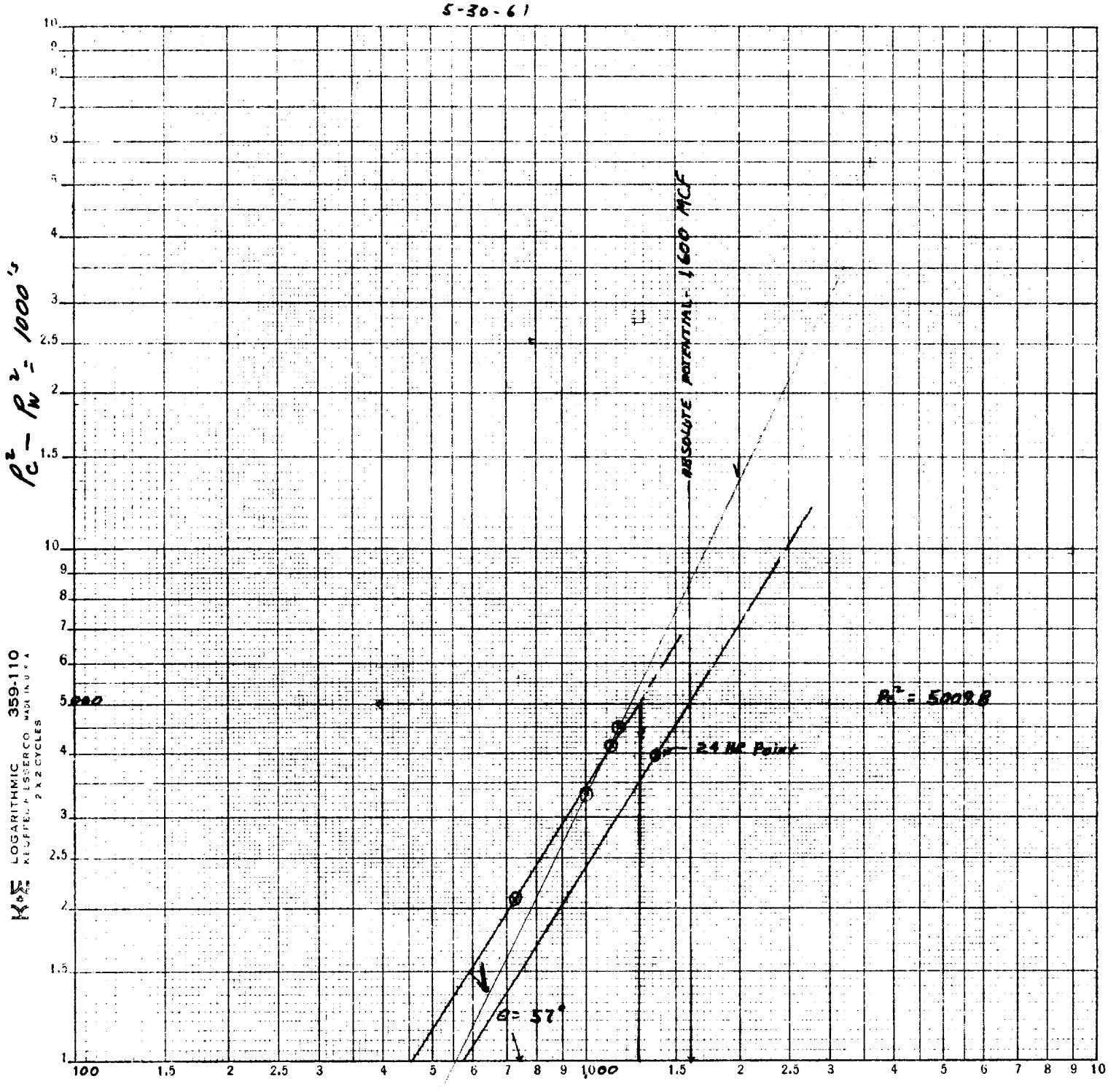
Note: If P_w cannot be taken because of manner of completion or condition of well, then P_w must be calculated by adding the pressure drop due to friction within the flow string to P_t.

H. L. BROWN + CLEM E. GEORGE

FEDERAL 'A' NO. 1

P - 33 - 7-S - 37 E ROOSEVELT, N. MEX.

5-30-61



+ Q - MCFD +

$2000 = 1.30 \overset{\circ}{1}0\overset{\circ}{3}00$

$640 = \underline{0.806\,180\,0}$

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