NEW MEXICO OIL CONSERVATION COMMISSION

X-3 Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalmat Formation Yates County Lea

Initial X Annual Special Date of Test 7-29/7-30-57

Company Continental Oil Company Lease Meyer B-23 Well No. 3

Unit E Sec. 23 Twp. 22 Rge. 36 Purchaser El Paso Natural Gas Company

Casing 5 1/2 Wt. 14.0 I.D. 5.012 Set at 3884 Perf. 3312 To 3468

Tubing 2" Wt. 4.7 I.D. 1.995 Set at 3300 Perf. To

Gas Pay: From 3312 To 3468 L 3300 xG .670 -GL 2211 Bar.Press. 13.2

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

Date of Completion: 7-30-57 Packer None Reservoir Temp. 90°

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						808				72
1.	4"	2.000	600	6	68	754				3
2.	4"	2.000	600	10	65	728				3
3.	4"	2.000	600	16	66	702				3
4.	4"	2.000	600	23	66	670				3
5.	4"	2.000	600	18	64	690				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.	25.58	21.46	767.2	.9924	.9463	1.084	558
2.	25.58	27.23	741.2	.9952	.9463	1.082	711
3.	25.58	33.83	715.2	.9943	.9463	1.078	877
4.	25.58	39.64	683.2	.9943	.9463	1.073	1024
5.	25.58	42.41	703.2	.9962	.9463	1.078	1102

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry cf/bbl. Specific Gravity Separator Gas .670

Gravity of Liquid Hydrocarbons deg. Specific Gravity Flowing Fluid

F_c 9.936 $(1-e^{-s})$ 0.141 P_c 821.2 P_c^2 674.4

No.	P_w ~~P_t~~ (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$\frac{(F_cQ)^2}{(1-e^{-s})}$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.	767.2					588.6	85.8		
2.	741.2					549.4	125.0		
3.	715.2					511.5	162.9		
4.	683.2					466.8	207.6		
5.	703.2					494.5	179.9		

Absolute Potential: 2,750 MCFPD; n .69897

COMPANY Continental Oil Company

ADDRESS Box 68, Eunice, New Mexico

AGENT and TITLE

WITNESSED

COMPANY

REMARKS

Before Examiner Nutter

Oil Conservation Commission

Exhibit Case No. 3

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.

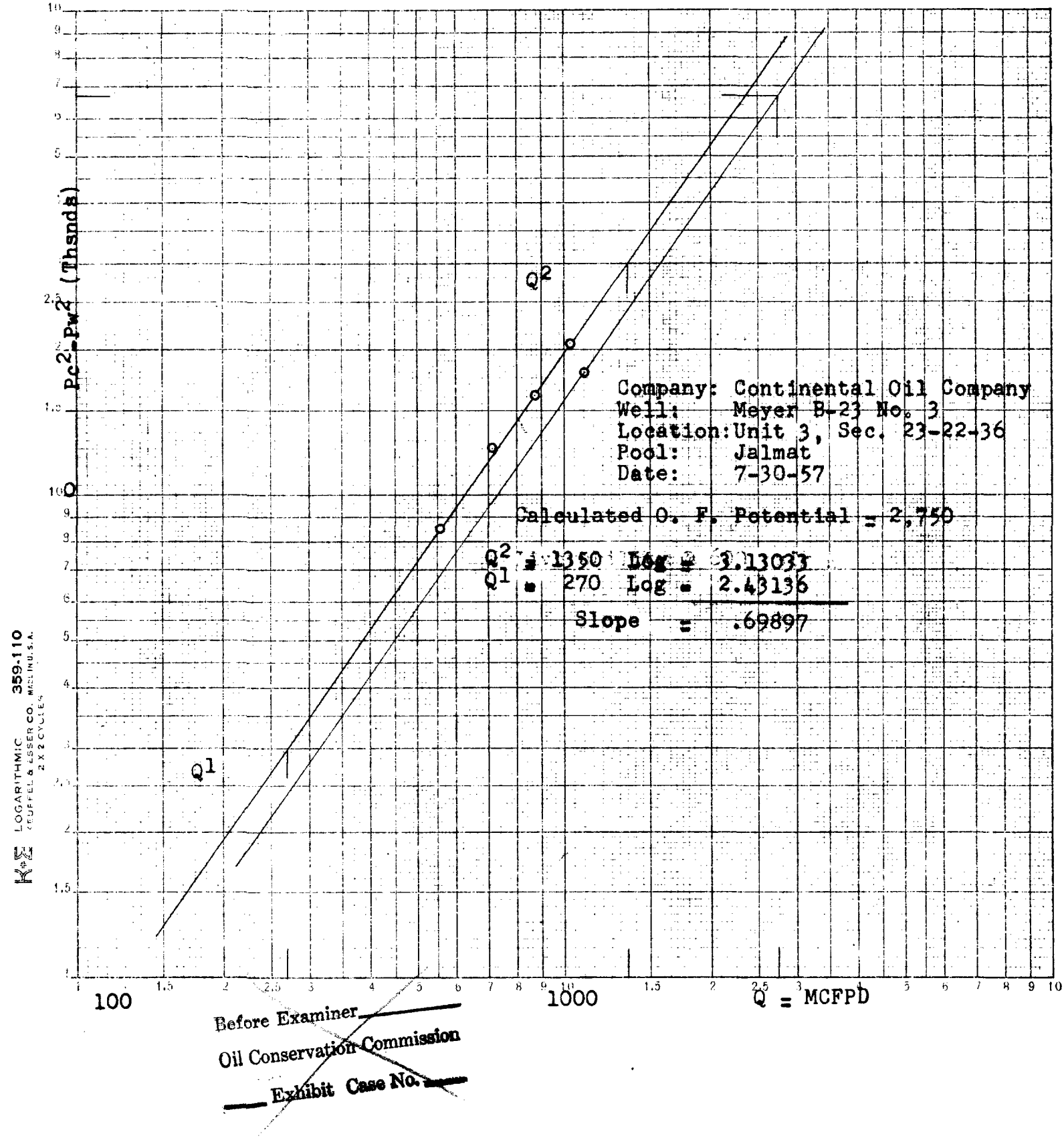
F_g = Gravity correction factor.

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.



Before Examiner
Oil Conservation Commission
Exhibit Case No.

Company: Continental Oil Company
Well: Meyer B-23 No. 3
Location: Unit B, Sec. 23-22-36
Pool: Jalmat
Date: 7-30-57

Deliverability @ 600 psig = 1535 MCFPD
Deliverability @ 150 psig = 2570 MCFPD

Wellhead Pressure = PSIG

800
600
400
200
0

0
1000
2000
3000
Q = MCFPD

Before Examiner
Oil Conservation Commission
Exhibit
Case No.

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