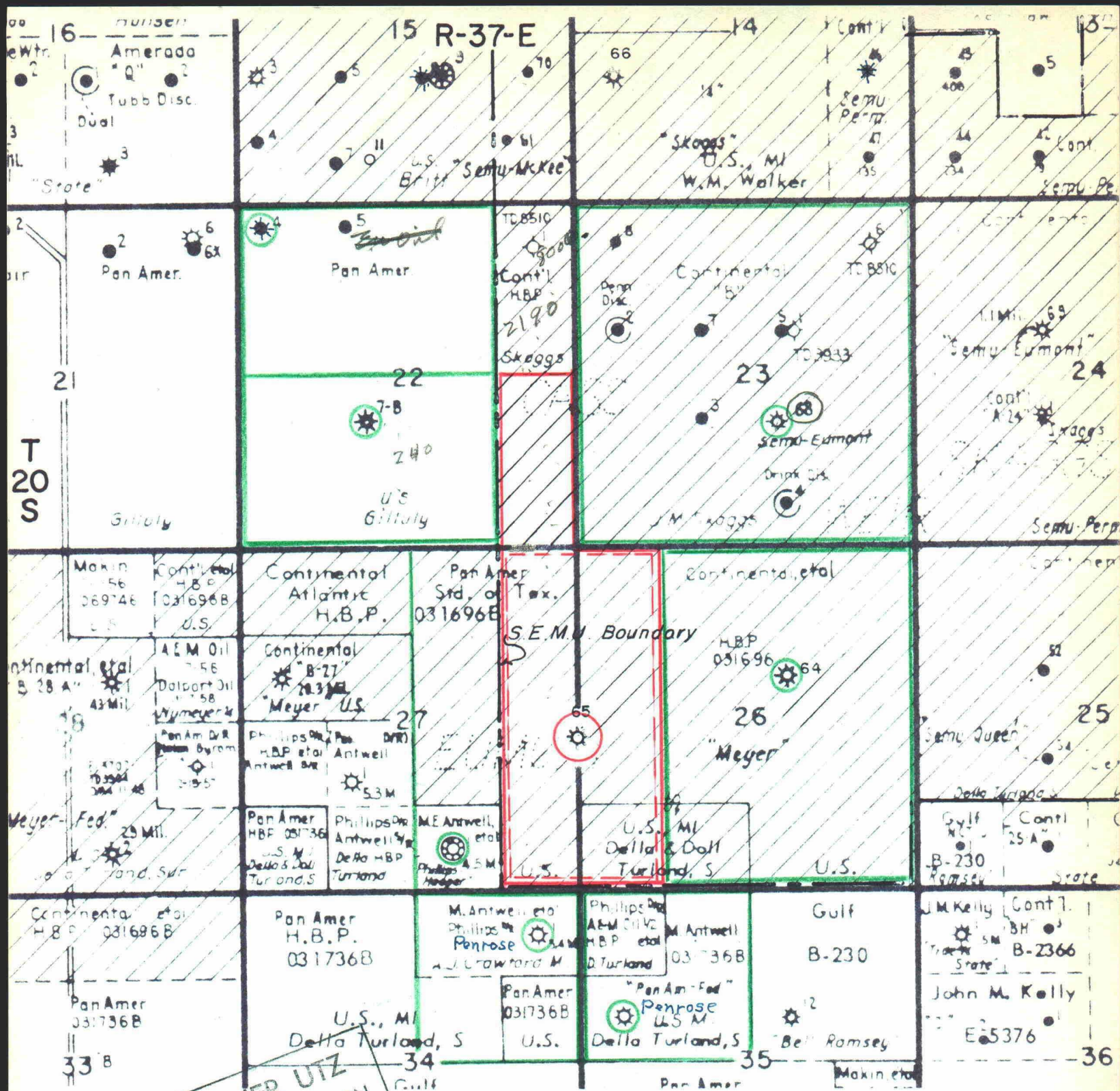




OWNERSHIP MAP - EUMONT AREA
scale: 1" = 2000'

LEGEND

- SEMU-Eumont No.65 Gas Well Offset Gas Well
 --- Present Gas Unit No.65 --- Offset Gas Well
 --- Proposed Gas Unit No.65
 Continental Acreage Cross-hatched.

Continental Oil Co.

CASE: 2187
EXHIBIT: 1

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Esmont Formation Queen County Lea

Initial Annual Special X Date of Test 1-29-61

Company Continental Oil Company Lease 31343 Esmont Well No. 65

Unit L Sec. 26 Twp. 20S Rge. 37E Purchaser E.P.N.G.

Casing 8 1/2 Wt. 32.0 I.D. Set at 2815 Perf. To

Tubing None Wt. I.D. 2 1/2 Set at Perf. To

Gas Pay: From 3527 To 3672 xG 574 -GL 1897 Bar.Press. 13.2

Producing Thru: Casing X Tubing Single Type Well Single

Date of Completion: 2-7-55 Packer None Single-Bradenhead-G. G. 90 G.O. Dual
Reservoir Temp. 90

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter)						Type Taps		Flange		
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								755		72
1.	4	1.000	627	2.00	59			668		24
2.	4	1.000	623	2.00	61			644		24
3.	4	1.000	627	2.00	62			645		24
4.	4	1.000	587	2.00	59			634		24
5.										

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.	6.135	75.31		1.0010	.9427	1.080	471
2.	6.135	84.99		.9952	.9427	1.078	525
3.	6.135	86.03		.9981	.9427	1.074	533
4.	6.135	105.35		1.0010	.9427	1.076	656
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio — cf/bbl.

Gravity of Liquid Hydrocarbons — deg.

P_c 2174 $(1-e^{-s})$ 0.121

Specific Gravity Separator Gas —

Specific Gravity Flowing Fluid —

P_c 768.2 P_c^2 590.1

No.	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.	627.2	464.0	.01	.0001	—	464.0	126.1	.89	
2.	627.2	431.9	.15	.02	—	431.9	158.2	.86	
3.	627.2	433.2	.15	.02	—	433.2	156.9	.86	
4.	627.2	418.9	.18	.03	—	418.9	171.2	.84	
5.									

Absolute Potential: 2,250 MCFPD; n 1.000

COMPANY Continental Oil Company

ADDRESS Box 427, Hobbs, New Mexico

AGENT and TITLE W. D. Howard, Test Engineer

WITNESSED J. D. Murray

COMPANY El Paso Natural Gas Company

REMARKS

Since this is second attempt to test this well, a slope of 1.000 was drawn through highest rate of flow.

Case 2187

50-1

50-1

50-1

10-25-1

X

20

INSTRUCTIONS

INSTRUCTIONS

0.0.1.1.1

200

200

200

1

INSTRUCTIONS

200

0.52

200

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.

align

X

The log log paper used for plotting the back pressure curve shall be of at least three inch cycles.

NOMENCLATURE

XXXXXX

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_{ws} = 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} = Supercompressibility 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.

0.001	1000	10	0.001	0.001
0.01	100	20	0.01	0.01
0.1	10	30	0.1	0.1
1.0	1	40	1.0	1.0

0.001

0.001

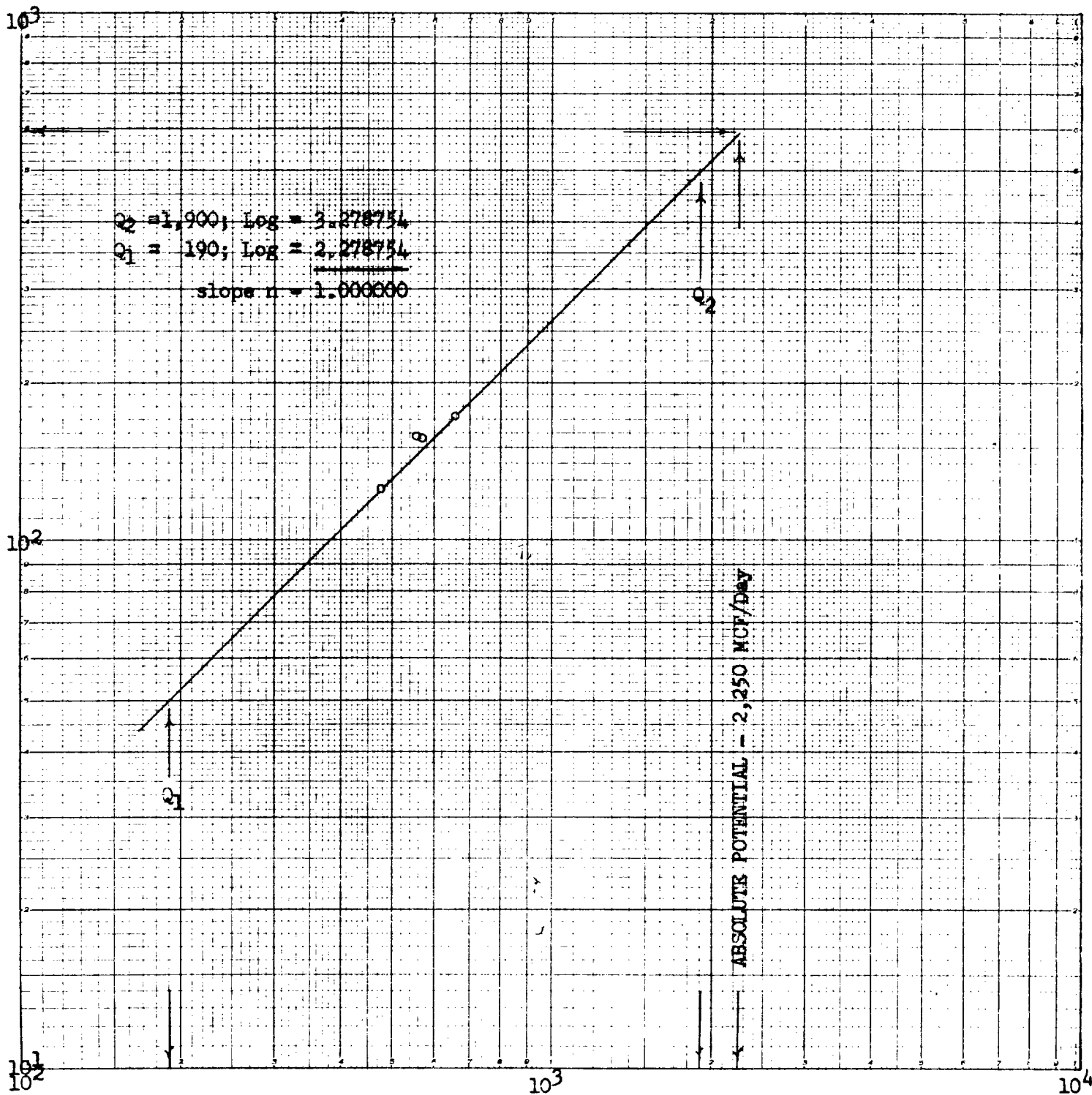
INSTRUCTIONS

INSTRUCTIONS

COMPANY	Continental Oil Co.
WELL	SEMU-Eumont No. 65
LOCATION	L Sec. 26-20S-37E
COUNTY	Lea
DATE	1-29-61

NO. 31,291 LOGARITHMIC: 2 BY 2 3/4 INCH CYCLES (BASE SHORT WAY).
 CODEX BOOK COMPANY, INC. NORWOOD, MASSACHUSETTS.
 PRINTED IN U.S.A.

$P_C^2 - P^2$ (thousands)



MCFD - 15.025 psia.