NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Eumont Formation Queen County Lea

Initial x Annual Special Date of Test 6-24-28-57

Company Gulf Oil Corporation Lease Ramsay "A" Well No. 17

Unit J Sec. 27 Twp. 21S Rge. 36E Purchaser El Paso Natural Gas Co.

Casing 5.5 Wt. 14 I.D. 5.012 Set at 3900 Perf. 3095 To 3246

Tubing 2.375 Wt. 4.7 I.D. 1.995 Set at 3850 Perf. To

Gas Pay: From 3095 To 3246 L 3095 xG .665 -GL 2058 Bar.Press. 13.2

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

Date of Completion: 7-26-56 Packer 3750 Reservoir Temp.

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								1041		72
1.	4	1.75	540	5.29	76			1008		24
2.	4	1.75	552	9.0	75			986		24
3.	4	1.75	573	18.49	71			931		24
4.	4	1.75	594	25.0	75			890		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.	19.27	54.09	553.2	.9850	.9493	1.053	1027
2.	19.27	71.31	565.2	.9859	.9498	1.056	1359
3.	19.27	104.09	586.2	.9896	.9498	1.057	1993
4.	19.27	123.19	607.2	.9859	.9498	1.059	2354
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio cf/bbl.
Gravity of Liquid Hydrocarbons deg.
F_c 1.712 $(1-e^{-s})$ 0.132

Specific Gravity Separator Gas
Specific Gravity Flowing Fluid
P_c 1054.2 P_c^2 1111.3

No.	~~Pw~~ Pt (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.	1021.2	1042.8	1.758	3.090	.408	1043.2	68.1		
2.	999.2	998.4	2.327	5.41	.714	999.1	112.2		
3.	944.2	891.5	3.412	11.64	1.536	893.0	218.3		
4.	903.2	815.8	4.030	16.24	2.144	817.9	293.4		
5.									

Absolute Potential: 5,000 MCFPD; n 0.56
COMPANY Gulf Oil Corporation
ADDRESS Box 2167, Hobbs, New Mexico
AGENT and TITLE R. L. Smith
WITNESSED
COMPANY

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.

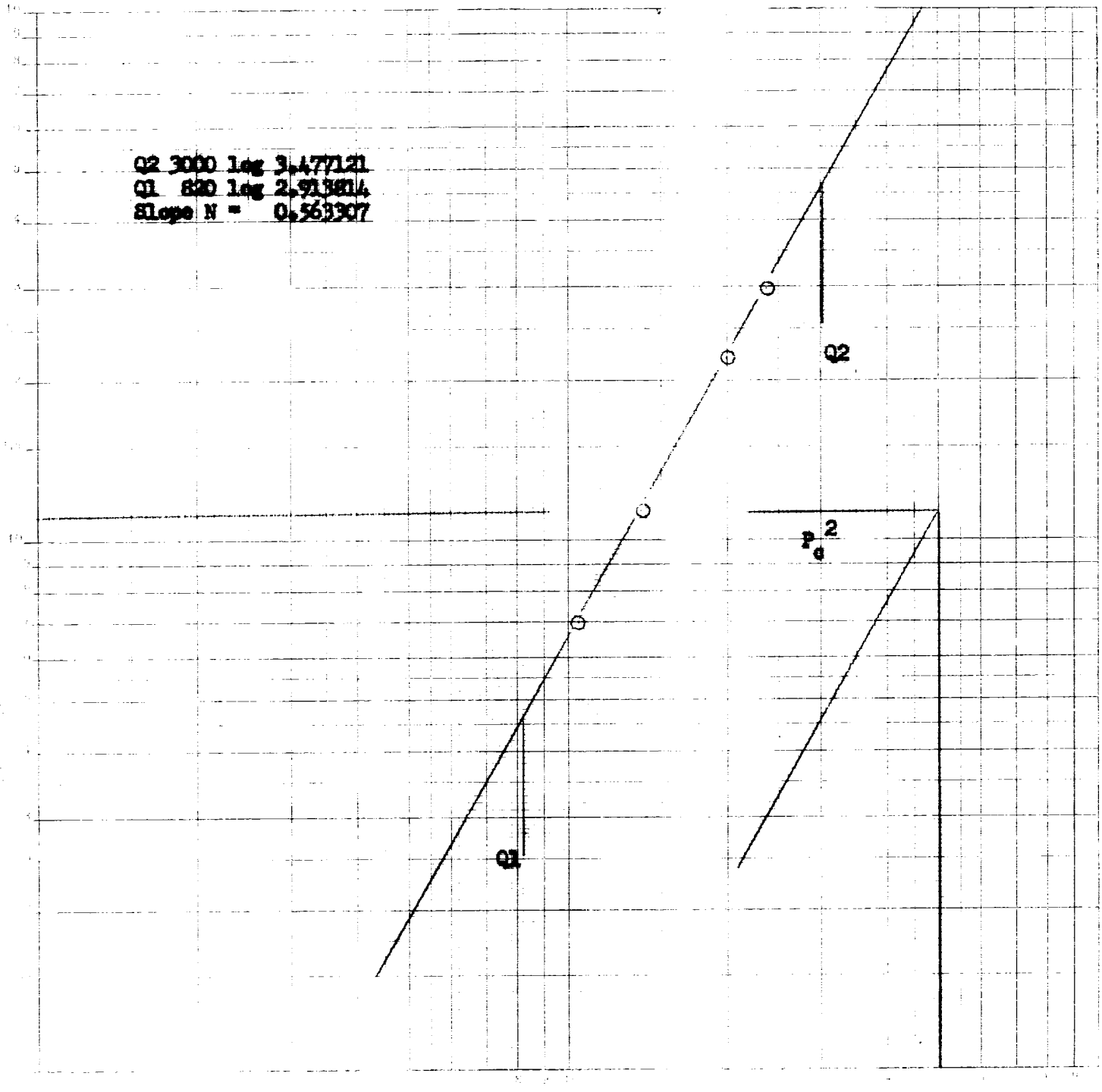
F_t = Flowing temperature correction factor.

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.

Gulf Oil Corporation
W. A. Ramsay "A" No. 17
J-27-21S-36E, Lea Co., N.M.
Eumont Pool
June 28, 1957
A. P? = 5,000 MCF



Q in MCF Per Day