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 6/13/56

Company Skelly Oil Co. Lease State "G" Well No. 1

Unit J Sec. 30 Twp. 20S Rge. 37E Purchaser Southern Union Gas Co.

Casing 7" Wt. 24# I.D. 6.366 Set at 3712 Perf. 3360' To 3525'

Tubing 2" Wt. 4.7# I.D. 1.995 Set at 3860 Perf. 3851' To 3860'

Gas Pay: From 3360 To 3525 L 3360 xG 0.667 =GL 2241 Bar.Press. 13.2

Producing Thru: Casing X Tubing Type Well G-O Dual

Date of Completion: Packer Single-Bradenhead-G. G. or G.O. Dual Reservoir Temp.

OBSERVED DATA

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

No.	Flow Data (Prover) (Line) Size	Flow Data (Choke) (Orifice) Size	Flow Data Press. psig	Flow Data Diff. h_w	Flow Data Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI								968		72
1.	4"	1"	505	39	90			925		24
2.	"	1"	525	22	62			830		"
3.	"	1.750"	540	31	66			792		"
4.	"	1.750"	525	64	70			691		"
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	142.2	518.2	0.9723	0.9484	1.044	840
2.	6.135	108.8	538.2	0.9981	"	1.059	669
3.	19.27	131.0	553.2	0.9943	"	1.055	2511
4.	19.27	185.6	538.2	0.9905	"	1.054	3541
5.							

PRESSURE CALCULATIONS

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

Gravity of Liquid Hydrocarbons deg. Specific Gravity Flowing Fluid

F_c 0.740 $(1-e^{-s})$ 0.143 P_c 981.2 P_c^2 962.8

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.	938.2	880.2	0.62	0.38	0.05	880.3	82.5	938.2	0.96
2.	843.2	711.0	0.50	0.25	0.04	711.0	251.8	843.2	0.86
3.	805.2	648.3	1.86	3.46	0.49	643.8	314.0	805.5	0.82
4.	704.2	495.9	2.62	6.86	0.98	496.9	465.9	~~804.9~~ 704.9	0.82
5.									

Absolute Potential: 6600 MCFPD; n 0.8399

COMPANY Skelly Oil Co.

ADDRESS Box 38, Hobbs, N. M.

AGENT and TITLE (SIGNED) H. E. Aab Dist. Supt.

WITNESSED None

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.

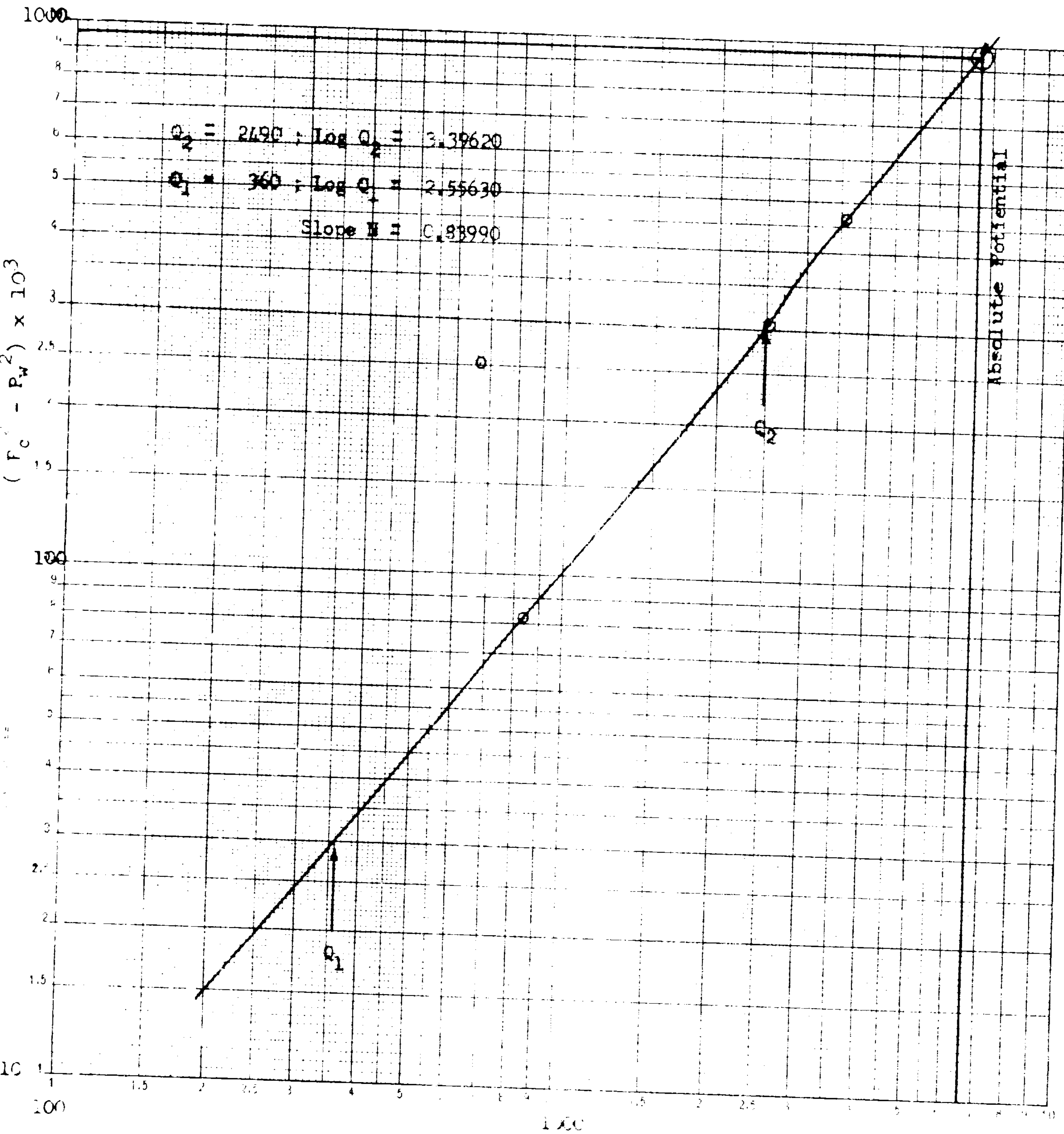
F_t = Flowing temperature correction factor.

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.

[illegible] COMPANY
State "[illegible]" No. [illegible]
Sec. 30-T20S-[illegible]
Lea County, New Mexico



Q - MCFPD - [illegible] psia