NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool BALLARD Formation P.C. County RIO ARRIBA ,N.M.

Initial X Annual Special Date of Test 6/13/61

Company J.GREGORY MERRION & ASSOCS. Lease KOMA Well No. 2

Unit Sec. 7 Twp. 24N Rge. 6 W Purchaser

Casing 2 7/8 Wt. I.D. Set at 2516 Perf. 2374 To 2407

Tubing Wt. I.D. Set at Perf. To

Gas Pay: From 2374 To 2407 L 2374 xG .65 -GL 1543 Bar.Press.

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

Date of Completion: 5/23/61 Packer Reservoir Temp.

OBSERVED DATA

Tested Through ~~(Prover)~~ (Choke) ~~(Orifice)~~ Type Taps

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								702		
1.	2"	3/4	313		60			313		3 hrs.
2.										
3.										
4.										
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.	12.365		325	1.000	.9608	1.033	3,985
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio cf/bbl.
Gravity of Liquid Hydrocarbons deg.
P_c 5.551 $(1-e^{-s})$ 0.106

Specific Gravity Separator Gas
Specific Gravity Flowing Fluid
P_c 714 P_c^2 509.79

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.	325	105.65	22.15	490.5	51.95	157.60	352.19		
2.									
3.									
4.									
5.									

Absolute Potential: 6,100 MCFPD; n 0.85

COMPANY WARD & JAMISON ENGR CO

ADDRESS 109 EAST 35th ST. , FARMINGTON, N.M.

AGENT and TITLE PAT JAMISON OWNER

WITNESSED J. GREGORY MERRION

COMPANY J. GREGORY MERRION & ASSOCS.

REMARKS

RECEIVED
JUN 27 1961
OIL CON. COM.
DIST. 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.

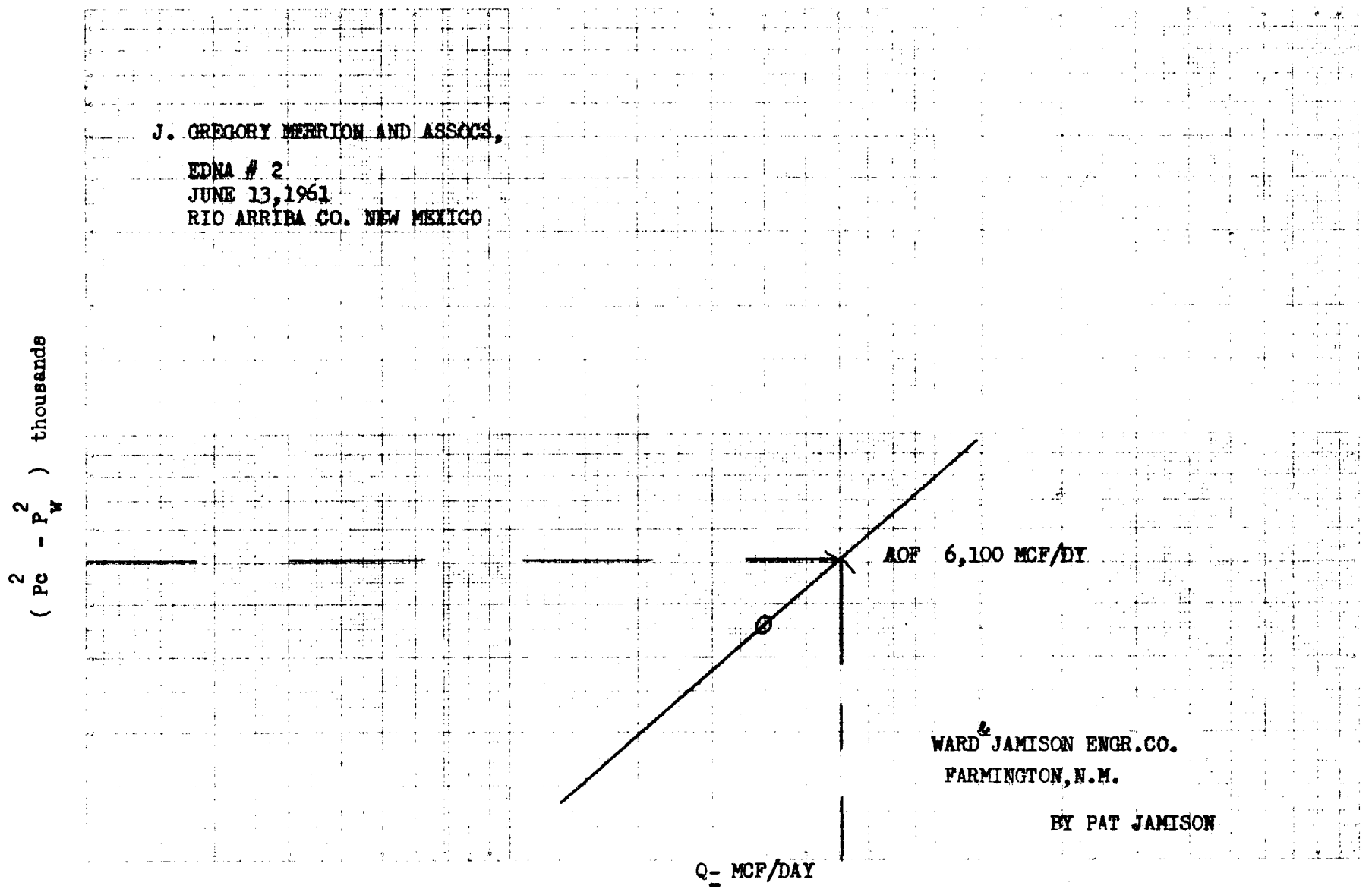
F_g = Gravity correction factor.

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.


J. GREGORY MERRION AND ASSOCS,
EDNA # 2
JUNE 13,1961
RIO ARRIBA CO. NEW MEXICO
(Pc² - Pw²) thousands
AOF 6,100 MCF/DY
WARD & JAMISON ENGR.CO.
FARMINGTON,N.M.
BY PAT JAMISON
Q- MCF/DAY