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 ____ Annual ____ Special x Date of Test 6-22-56

Company F. J. Danglade Lease Alexander Well No. #1

Unit E Sec. 7 Twp. 21 Rge. 37 Purchaser EPNG

Casing 5½ Wt. ____ I.D. ____ Set at 3435 Perf. ____ To ____

Tubing 2 3/8 Wt. ____ I.D. ____ Set at 3620 Perf. ____ To ____

Gas Pay: From 3440 To 3650 L 3620 xG .670 -GL 2425 Bar.Press. 13.2

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

Date of Completion: 10-11-54 Packer none Reservoir Temp. ____

OBSERVED DATA

Tested Through ~~(Prover)~~ (Choke) (Meter) 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						513		514		72
1.	4	1.250	185	3.5	67	490		495		24
2.	4	1.250	216	5.1	68	466		475		24
3.	4	1.250	209	6.7	69	431		456		24
4.	4	1.250	205	4.2	66	464		470		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.	9.643	49.25		.9933	.9463	1.019	455
2.	9.643	77.18		.9924	.9463	1.022	713
3.	9.643	99.83		.9915	.9463	1.021	923
4.	9.643	62.01		.9943	.9463	1.021	575
5.							

PRESSURE CALCULATIONS

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

Specific Gravity Separator Gas ____
Specific Gravity Flowing Fluid ____
P_c 527.2 P_c^2 277.9

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.	503.2	253.2	24.7			258.3	19.6	258.3	19.6
2.	479.2	229.6	48.3			235.3	39.6	238.3	39.6
3.	444.2	197.3	80.6			220.1	57.8	220.1	57.8
4.	477.2	227.7	50.2			233.5	44.4	233.5	44.4
5.									

Absolute Potential: 2,600 MCFPD; n .650

COMPANY F. J. Danglade, Box 675, Lovington, New Mexico

ADDRESS ____

AGENT and TITLE F. J. Danglade, Operator

WITNESSED J. Blumer

COMPANY El Paso Natural Gas Company

REMARKS

Well could not be pulled down below 84% of SIP due to choke size.

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.