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 __4/10-17/59__

Company __Continental Oil Company__ Lease __State-Eumont__ Well No. __68__

Unit __J__ Sec. __31__ Twp __20S__ Rge __37E__ Purchaser __El Paso Natural Gas Company__

Casing __5"__ Wt. __14#__ I.D. _____ Set at __3781__ Perf. __3442__ To __3699__

Tubing __2"__ Wt. __4.7#__ I.D. _____ Set at __3544__ Perf. __—__ To __—__

Gas Pay: From __3442__ To __3699__ L __3126__ xG __670__ GL __2295__ Bar.Press. __13.2__

Producing Thru: Casing _____ Tubing __X__ Type Well __Single__

Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: __10-29-58__ Packer __No__ 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								859		72
1.	4.000	1.750	573	7.29	85			824		24
2.	4.000	1.750	568	11.70	84			805		24
3.	4.000	1.750	622	21.72	85			775		24
4.	4.000	1.750	603	37.03	84			762		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	65.21	585.6	.9763	.9443	1.058	1225
2.	19.27	82.42	580.6	.9777	.9443	1.051	1552
3.	19.27	117.16	635.2	.9768	.9443	1.055	2124
4.	19.27	131.07	616.2	.9777	.9443	1.061	2437
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.

Gravity of Liquid Hydrocarbons _____ API.

F_c __EM Measured__ $(1-e^{-x})$ _____

Specific Gravity Separator Gas _____

Specific Gravity Flowing Fluid _____

P_c^2 __872.2__ P_c^2 __760.7__

No.	P_w __BH (psia)__	P_t^2	$F_c Q$	$(F_c Q)^2$	$\frac{(F_c Q)^2}{(1-e^{-x})}$	P_w^2	$P_c^2 - P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.	635.2					674.0	65.4		.95
2.	618.2					659.5	91.2		.94
3.	768.2					627.8	132.1		.90
4.	772.2					697.8	162.4		.89
5.									

Absolute Potential: __4,038__ MCFPD: n __1.622__

COMPANY __Continental Oil Company__

ADDRESS __Box 457, Hobbs, New Mexico__

AGENT and TITLE __C. B. Baird, Gas Engineer__

WITNESSED _____

COMPANY _____

REMARKS

*Coefficient corrected for ratio of specific heats

CC: Continental Oil Company

Paul Smith

El Paso Natural Gas Company

Jal, New Mexico

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.