NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool __Blanco__ Formation __Mesa Verde__ County __Rio Arriba__

Initial __XXX__ Annual _____ Special _____ Date of Test __1-7-60__

Company __Pacific Northwest Pipeline__ Lease __29-5__ Well No. __46-21__

Unit __B__ Sec. __21__ Twp. __29N__ Rge. __5W__ Purchaser __Not Connected__

Casing __5½"__ Wt. __15.5__ I.D. _____ Set at __6000__ Perf. __5492__ To __5920__

Tubing __1½__ Wt. __2.4__ I.D. _____ Set at __5860__ Perf. __-__ To __-__

Gas Pay: From __5492__ To __5920__ L _____ xG __.650__ -GL _____ Bar.Press. __12__

Producing Thru: Casing _____ Tubing __XXX__ Type Well __Single__

Date of Completion: __12-30-59__ Packer __None__ Single-Bradenhead-G. G. or G.O. Dual

Reservoir Temp. _____

OBSERVED DATA

Tested Through XXXXXX) (Choke) XXXXXX __S.I. 3 Days__ Type Taps _____

No.	Flow Data (Choke) XXXX	(Choke) Size	Press. psig	Diff. h_w	Temp. °F.	Tubing Data Press. psig	Temp. °F.	Casing Data Press. psig	Temp. °F.	Duration of Flow Hr.
SI						1112		1112		
1.		3/4	147		48°	147	48°	904		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.	12.3650		159	1.0117	.9608	1.016	1942
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

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

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c __1194__ P_c^2 __1263.30__

No.	P_w P_t (psia)	P_t^2	$F_c Q$	$(F_c Q)^2$	$(F_c Q)^2$ $(1-e^{-s})$	P_w^2 916 839.06	$P_c^2-P_w^2$ 424.32	Cal. P_w	$\frac{P_w}{P_c}$ 2.96
1.									
2.									
3.									
4.									
5.									

Absolute Potential: __4,404__ MCFPD; n __.75 (2.2680__

COMPANY __Pacific Northwest Pipeline Corporation__

ADDRESS __414 West Broadway - Farmington, N.M.__

AGENT and TITLE __C. R. Wagner - Well Test Engineer__

WITNESSED _____

COMPANY _____

REMARKS

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.