3 - N.M.O.C.C.
1 - E.P.N.G. -Fowler
1 - E.P.N.G. - Galloway - Farm.
1 - Cutler
1 - File

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 XX Annual ____ Special ____ Date of Test 6-29-59

Company Pacific Northwest Pipeline Lease San Juan 28-5 Well No. 33-17

Unit L Sec. 17 Twp. 28N Rge. 5W Purchaser Not Connected

Casing 9 5/8" Wt. 36 I.D. ____ Set at 3817 Perf. ____ To ____
7" Wt. 23 I.D. ____ Set at 7723 Perf. 5344 To 5900

Tubing 1½" Wt. 2.4 I.D. 1.38 Set at 5807 Perf. 5804 To 5807

Gas Pay: From 5344 To 5900 L - xG .650 -GL ____ Bar.Press. 12

Producing Thru: Casing XXX Tubing ____ Type Well Dual - G.G.

Date of Completion: 6-9-59 Packer Baker Mod. H @ 7545 Reservoir Temp. 135° F

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						1086		1090		
1.		3/4	342		69°	375		342	69°	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		354	.9915	.9608	1.035	4316
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

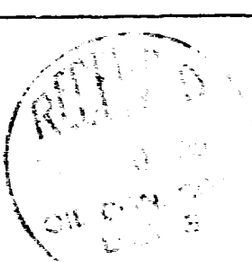
Gas Liquid Hydrocarbon Ratio ____ cf/bbl.
Gravity of Liquid Hydrocarbons ____ deg.
F_c ____ $(1-e^{-s})$ ____

Specific Gravity Separator Gas ____
Specific Gravity Flowing Fluid ____
P_c 1102 P_c^2 1214.4

No.	P_w P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$\frac{(F_cQ)^2}{(1-e^{-s})}$	387 P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.						149.8	1064.6		1.14
2.									
3.									
4.									
5.									

Absolute Potential: 4761 MCFPD; n .75/1.1032
COMPANY Pacific Northwest Pipeline Corporation
ADDRESS 418½ West Broadway - Farmington, New Mexico
AGENT and TITLE C. R. Wagner - Well Test Engineer
WITNESSED Fred Cook - W. B. Smith - S. V. Roberts
COMPANY N.M.O.C.C. - Phillips P. - E.P.N.G.

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.