1 - M.S.O.C.C.
1 - L.G. Truby
1 - W.R. Johnston
1 - L.D. Galloway
1 - File

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Wildcat Formation Pictured Cliff County Rio Arriba

Initial XX Annual ____ Special ____ Date of Test 10-26-56

Company Pacific Northwest Pipeline Lease 27-5 Well No. 18-36

Unit K Sec. 26 Twp. 27 Rge. 5 Purchaser Pacific Northwest Pipeline

Casing 5 1/2 (7 5/8) Wt. ____ I.D. ____ Set at 5860 (3669) Perf. ____ To ____

Tubing 2" Wt. ____ I.D. ____ Set at 5775 est Perf. ____ To ____ (5798-5270)

Gas Pay: From 3506 To 3532 L 3506 xG .690 -GL 2419 Bar.Press. 12 PSIA

Producing Thru: Casing xx Tubing ____ Type Well Dual

Date of Completion: ____ Packer yes Single-Bradenhead-G. G. or G.O. Dual Reservoir Temp. ____

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) Type Taps ____

	Flow Data					Tubing Data		Casing Data		
No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h_w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	Duration of Flow Hr.
SI						1086		1082		
1.		3/4	833		72			833	72	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		845	.9887	.9325	1.097	10,567
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio ____ cf/bbl.
Gravity of Liquid Hydrocarbons ____ deg.
F_c .7101 $(1-e^{-s})$ .161

Specific Gravity Separator Gas ____
Specific Gravity Flowing Fluid ____
P_c 1094 P_c^2 1196.8

No.	P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$(F_cQ)^2(1-e^{-s})$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.	845	714.0	7.5	56.3	9.1	723.1	473.7	850	2.526
2.									
3.									
4.									
5.									

Absolute Potential: 23,258 MCFPD; n .85/2.2010

COMPANY Pacific Northwest Pipeline Corp.
ADDRESS 405½ West Broadway
AGENT and TITLE C. R. Wagner - Well Test Engineer
WITNESSED ____
COMPANY ____

REMARKS

RECEIVED
NOV [illegible] 1956
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.