

3 - N.M.O.C.C.  
1 - Fowler - E.P.N.G. NEW MEXICO OIL CONSERVATION COMMISSION  
1 - Galloway - E.P.N.G. - Farm.  
1 - Cutler  
1 - File

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blanco Formation Dakota County Rio Arriba  
Initial XX Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 6-22-59  
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 5" T.D. 8165  
Casing 5 Wt. 15# I.D. 4.5" Set at 8165 Perf. 7895 To 8041  
Tubing 2 3/8 Wt. 4.7# I.D. 1.995 Set at 7925 Perf. 7922 To 7925  
Gas Pay: From 7895 To 8041 L 7895 xG .650est -GL 5132 Bar.Press. 12.0  
Producing Thru: Casing \_\_\_\_\_ Tubing Dakota Type Well Dual - G.G.  
Date of Completion: 6-9-59 Packer 7545 Reservoir Temp. \_\_\_\_\_

OBSERVED DATA

Tested Through OPENED (Choke) NO CHOK S.I. 13 Days Type Taps \_\_\_\_\_

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						2699		1076 M.V.		
1.		3/4	438		71°	438		-		3 Hours
2.										
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	Pressure psia	Flow Temp. Factor F <sub>t</sub>	Gravity Factor F <sub>g</sub>	Compress. Factor F <sub>pv</sub>	Rate of Flow Q-MCFPD @ 15.025 psia
1.	12.3650		450	.9896	.9608	1.043	5518
2.							
3.							
4.							
5.							

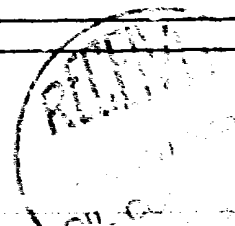
PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio \_\_\_\_\_ cf/bbl.  
Gravity of Liquid Hydrocarbons \_\_\_\_\_ deg.  
P<sub>c</sub> 9.402 (1-e<sup>-s</sup>) .311  
Specific Gravity Separator Gas \_\_\_\_\_  
Specific Gravity Flowing Fluid \_\_\_\_\_  
P<sub>c</sub> 2711 P<sub>c</sub> 7349.52

No.	P <sub>w</sub> P <sub>t</sub> (psia)	P <sub>t</sub> <sup>2</sup>	F <sub>c</sub> Q	(F <sub>c</sub> Q) <sup>2</sup>	(F <sub>c</sub> Q) <sup>2</sup> (1-e <sup>-s</sup> )	P <sub>w</sub> <sup>2</sup>	P <sub>c</sub> <sup>2</sup> -P <sub>w</sub> <sup>2</sup>	Cal. P <sub>w</sub>	P <sub>w</sub> /P <sub>c</sub>
1.	450	202.500	51.88	2692	837	1039.5	6310		1.1647
2.									
3.									
4.									
5.									

Absolute Potential: 6187 MCFPD; n .75/1.1213

COMPANY Pacific Northwest Pipeline Corporation  
ADDRESS 418 1/2 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.  
Dakota Test 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<sub>t</sub> = 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.

$$F_{pv} = \text{Supercompressibility factor.}$$

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  $P_t$ .

[illegible]