

## NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blanco Mesaverde Formation Mesaverde County Rio Arriba  
Initial x Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 11-15-56  
Company Pacific Northwest Pipeline Lease Rosa Well No. 16-14  
Unit N Sec. 14 Twp. 31N Rge. 6W Purchaser Pacific Northwest Pipeline Corp,  
Casing 7/5 Wt. \_\_\_\_\_ I.D. \_\_\_\_\_ Set at 3660/5860 Perf. 5358 To 5832  
Tubing 2 Wt. \_\_\_\_\_ I.D. \_\_\_\_\_ Set at 5727 Perf. \_\_\_\_\_ To \_\_\_\_\_  
Gas Pay: From 5358 To 5832 L \_\_\_\_\_ xG .680 est GL \_\_\_\_\_ Bar.Press. \_\_\_\_\_  
Producing Thru: Casing \_\_\_\_\_ Tubing xx Type Well \_\_\_\_\_  
Date of Completion: \_\_\_\_\_ Packer \_\_\_\_\_ Reservoir Temp. \_\_\_\_\_  
Single-Bradenhead-G. G. or G.O. Dual

## OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) Shut in 7 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						1200		1196		
1.										
2.		3/4 B.M.				142	63°	367		3 hrs.
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.							
2.	14.1605		154	.9971	.9393	1.016	2.075
3.							
4.							
5.							

## PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio \_\_\_\_\_ cf/bbl.  
Gravity of Liquid Hydrocarbons \_\_\_\_\_ deg.  
F<sub>c</sub> \_\_\_\_\_ (1-e<sup>-s</sup>)  
Specific Gravity Separator Gas \_\_\_\_\_  
Specific Gravity Flowing Fluid \_\_\_\_\_  
P<sub>c</sub> 1212 P<sub>c</sub><sup>2</sup> 1468.9

No.	$\frac{P_w}{P_t}$ (psia)	P <sub>t</sub> <sup>2</sup>	F <sub>c</sub> Q	(F <sub>c</sub> Q) <sup>2</sup>	$\frac{(F_c Q)^2}{(1-e^{-s})}$	$\frac{379}{P_w^2}$	P <sub>c</sub> <sup>2</sup> -P <sub>w</sub> <sup>2</sup>	Cal. P <sub>w</sub>	$\frac{P_w}{P_c}$
1.									
2.						143.6	1325.3		1.11
3.									
4.									
5.									

Absolute Potential 2.244 MCFPD; n .75/1.0814

COMPANY Pacific Northwest Pipeline Corp.  
ADDRESS 4054 West Broadway, Farmington, New Mexico

AGENT and TITLE \_\_\_\_\_

WITNESSED \_\_\_\_\_

COMPANY \_\_\_\_\_

REMARKS

3-N.M.O.C.C.  
1-L.G. Truby  
1-W.R. Johnston  
1-Stanolind Oil & Gas  
1-File



## 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  $P_t$ .

OIL CONSERVATION COMMISSION		
SANTA FE DISTRICT OFFICE		
COPIES RECEIVED		
3		
DISTRIBUTION		
	NO.	
	FURNISHED	
Director		
Assistant Director	1	
Chief Clerk		
Secretary	1	
Transporter		
File	1	✓