

3 - N.M.O.C.C.  
1 - Oliver Fowler - EPN  
1 - Amer. Petrofina  
1 - W. G. Cutler  
1 - ELPNG - Farm.  
1 - File

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Form C-122  
Revised 12-1-55

Pool Blanco - Mesa Verde Formation Mesa Verde County San Juan  
Initial XX Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 7-1-59  
Company Pacific Northwest Pipeline Corp. 32-9 Well No. 71-33  
Unit San Juan Sec. 33 Twp. 32N Rge. 9W Purchaser El Paso Natural Gas Company  
Casing 7 5/8" Wt. 25.4 I.D. 6.75" Set at 5775 Perf. 5432 To 5994  
Tubing 1 1/2" Wt. 2.4 I.D. 1.38 Set at 5955 Perf. 5922 To 5955  
Gas Pay: From 5432 To 5994 L \_\_\_\_\_ xG 0.650 -GL \_\_\_\_\_ Bar.Press. 12  
Producing Thru: Casing XXX Tubing \_\_\_\_\_ Type Well Single  
Single-Bradenhead-G. G. or G.O. Dual  
Date of Completion: 6-17-59 Packer \_\_\_\_\_ Reservoir Temp. \_\_\_\_\_

OBSERVED DATA

Tested Through (Choke) Type Taps \_\_\_\_\_

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
1.		3/4	273		68°	1077		1077		3
2.						277		273	68°	
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.	12.3630		285	.9924	.9608	1.027	351
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio \_\_\_\_\_ cf/bbl.  
Gravity of Liquid Hydrocarbons \_\_\_\_\_ deg.  
P<sub>c</sub> \_\_\_\_\_ (1-e<sup>-s</sup>)

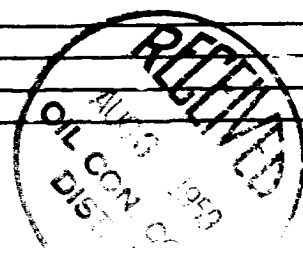
Specific Gravity Separator Gas \_\_\_\_\_  
Specific Gravity Flowing Fluid \_\_\_\_\_  
P<sub>c</sub> 1089 P<sub>c</sub> 1185.9

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.						83.5	1102.4		1.08
2.									
3.									
4.									
5.									

Absolute Potential: 366 MCFPD; n .75/1.0594

COMPANY Pacific Northwest Pipeline Corporation  
ADDRESS 418 1/2 West Broadway - Farmington, New Mexico  
AGENT and TITLE Well Test Engineer - C. R. Wagner  
WITNESSED EPNG Gave O.K. to Test Without Witness  
COMPANY \_\_\_\_\_

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.

$F_{pv}$  = 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  $P_t$ .

OIL CONSERVATION COMMISSION		
AZTEC DISTRICT OFFICE		
No. Copies Received 3		
DATE RECEIVED		
BY		
Operator		
Santa Fe		
Production Office		
State Engineer		
S. G. C.		
Transporter		