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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 XXX Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 11-17-59  
Company Pacific Northwest Pipeline Corp., Lease 29-5 Well No. 31-29  
Unit H Sec. 29 Twp. 29N Rge. 5W Purchaser Not Connected  
Casing 7 5/8" 26.4 6 3/4 Set at 3885 Perf. 5496 To 6026  
5 1/2 Wt. 15.5 I.D. 5" Set at 6060 Perf. 5496 To 6026  
Tubing 1 1/2 Wt. 2.4 I.D. 1.38 Set at 6015 Perf. 6012 To 6015  
Gas Pay: From 5496 To 6026 L \_\_\_\_\_ xG .650 -GL \_\_\_\_\_ Bar.Press. 12  
Producing Thru: Casing \_\_\_\_\_ Tubing XXX Type Well Single  
Single-Bradenhead-G. G. or G.O. Dual  
Date of Completion: 11-8-59 Packer \_\_\_\_\_ Reservoir Temp. \_\_\_\_\_

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) 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.	
SI						1087		1085		
1.		3/4	149		48°	149	49°	949		3 Hrs
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.	<u>12.3650</u>		<u>161</u>	<u>1.0117</u>	<u>.9608</u>	<u>1.017</u>	<u>1968</u>
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

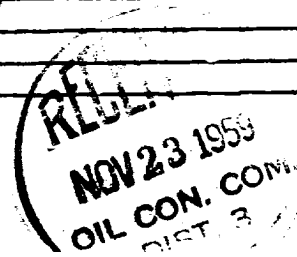
Gas Liquid Hydrocarbon Ratio \_\_\_\_\_ cf/bbl.  
Gravity of Liquid Hydrocarbons \_\_\_\_\_ deg.  
P<sub>c</sub> \_\_\_\_\_ (1-e<sup>-s</sup>)

Specific Gravity Separator Gas \_\_\_\_\_  
Specific Gravity Flowing Fluid \_\_\_\_\_  
P<sub>c</sub> 1099 P<sub>c</sub> 1207.8

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> )	<u>961</u> 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.						<u>923.5</u>	<u>284.3</u>		<u>4.25</u>
2.									
3.									
4.									
5.									

Absolute Potential: 5825 MCFPD; n .75/2.9599  
COMPANY Pacific Northwest Pipeline Corporation  
ADDRESS 118 1/2 West Broadway - Farmington, New Mexico  
AGENT and TITLE C. R. Wagner - Well Test Engineer  
WITNESSED \_\_\_\_\_  
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.
- $F_{pv}$  = 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  $P_t$ .

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