

3-M.M.O.C.C.  
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1-File

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122  
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Elanco Formation Mesa Verde County San Juan  
Initial X Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 9-5-57  
Company Pacific Northwest Pipeline Lease San Juan 32-8 Well No. 26-16  
Unit M Sec. 16 Twp. 31N Rge. 8W Purchaser not connected  
Casing 7-5/8" Wt. \_\_\_\_\_ I.D. \_\_\_\_\_ Set at 5960 Perf. 5380 To 5878  
Tubing 1-1/4" Wt. \_\_\_\_\_ I.D. \_\_\_\_\_ Set at 5895 Perf. \_\_\_\_\_ To \_\_\_\_\_  
Gas Pay: From \_\_\_\_\_ To \_\_\_\_\_ L \_\_\_\_\_ xG .650 -GL \_\_\_\_\_ Bar.Press. 12  
Producing Thru: Casing X Tubing \_\_\_\_\_ Type Well single  
Single-Bradenhead-G. G. or G.O. Dual  
Date of Completion: \_\_\_\_\_ Packer \_\_\_\_\_ Reservoir Temp. \_\_\_\_\_

OBSERVED DATA

Tested Through (Pressure) (Choke) (Mesa) 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.	
1.		3/4	293		68°	293	68°	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.	12.3670		215	.9924	.9666	1.020	2586
2.							
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> 1113 P<sub>c</sub> 1238.8

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> )	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.						287.3	921.5		1.30
2.									
3.									
4.									
5.									

Absolute Potential: 3148 MCFPD; n .75 / 1.2174

COMPANY Pacific Northwest Pipeline Corporation  
ADDRESS 405 E. West Broadway, Farmington, New Mexico  
AGENT and TITLE G. A. 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.

$F_{pv}$  = 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  $P_t$ .

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DRILLING DEPARTMENT

DATE OF TEST 9-5-57

FLOW THROUGH Casing WORKING PRESSURES FROM Tubing

[illegible]

ATART TEST AT 9:45 am END TEST AT 12:45 pm

REMARKS: Day

TESTIM BY C. R. Wagner

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