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File-1

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Wildcat Formation Fruitland County San Juan  
Initial XX Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 4-18-57  
Company Northwest Production Corp. Lease Blanco 30-12 Well No. 1-4  
Unit A Sec. 4 Twp. 30N Rge. 12W Purchaser Not connected  
5 1/4 14 1/4 4645  
Casing 7-5/8 Wt. 24 1/2 I.D. \_\_\_\_\_ Set at 2490 Perf. 1964 To 2198  
Tubing 2-3/8 Wt. 4.70 1/2 I.D. 1.995 Set at 4602 Perf. \_\_\_\_\_ To \_\_\_\_\_  
Gas Pay: From 1964 To 2198 L 1964 xG .650 -GL 1277 Bar.Press. 12  
Producing Thru: Casing XX Tubing \_\_\_\_\_ Type Well Dual - G-G  
Single-Bradenhead-G. G. or G.O. Dual  
Date of Completion: 4-3-57 Packer Yes - 4500 Reservoir Temp. \_\_\_\_\_

OBSERVED DATA

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

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) ( <del>9 1/4</del> ) Size	Press. psig	Diff. h <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI								<u>684</u>		SI
1.		<u>3/4</u>	<u>136</u>		<u>61</u>			<u>136</u>	<u>61</u>	<u>3 hrs</u>
2.										
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w p_f}$	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>14.1605</u>		<u>148</u>	<u>.9990</u>	<u>.9608</u>	<u>1.013</u>	<u>2038</u>
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio \_\_\_\_\_ cf/bbl.  
Gravity of Liquid Hydrocarbons \_\_\_\_\_ deg.  
F<sub>c</sub> .651 (1-e<sup>-s</sup>) .089  
Specific Gravity Separator Gas \_\_\_\_\_  
Specific Gravity Flowing Fluid \_\_\_\_\_  
P<sub>c</sub> 696 P<sub>c</sub><sup>2</sup> 484.4

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.	<u>21.90</u>	<u>480.81</u>	<u>1.77</u>	<u>3.13</u>	<u>.158</u>	<u>22.1</u>	<u>462.3</u>		<u>1.0478</u>
2.									
3.									
4.									
5.									

Absolute Potential: 2121 MCFPD; n .85/1.0405

COMPANY Pacific Northwest Pipeline Corp.  
ADDRESS 405 1/2 W. 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.
- $F_{pv}$  = 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

COMPANY Northwest Production Corp.

LEASE Blanco 30-12 WELL NO. 1-4

DATE OF TEST 4-18-57

SHUT IN PRESSURE (PSIG): TUBING 1021 CASING 684 S. I. PERIOD 7 DAYS

SIZE BLOW NIPPLE **3/4" Choke (Bureau of Mines)**

FLOW THROUGH Casing - Fruitland WORKING PRESSURES FROM Tubing-MV

[illegible]

START AT 9:50 am

END TEST AT 12:50 PM

REMARKS: Dry

TESTED BY C. R. Wagner

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