

## NEW MEXICO OIL CONSERVATION COMMISSION

NMCC-3  
Peppin-1  
Truby-1  
Fowler-1  
File-1

Form C-122

Revised 12-1-55

## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool South Blanco Formation Pictured Cliffs County San Juan  
Initial X Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 10-17-57  
Company Northwest Production Corp. Lease San Juan 27-8 Well No. 3-11  
Unit M Sec. 11 Twp. 27N Rge. 8W Purchaser Not connected  
Casing 5 Wt. 11.5 I.D. \_\_\_\_\_ Set at 2350 Perf. 2218 To 2258  
Tubing 1 1/2 Wt. 2.3 I.D. \_\_\_\_\_ Set at 2240 Perf. \_\_\_\_\_ To \_\_\_\_\_  
Gas Pay: From 2218 To 2258 L \_\_\_\_\_ xG .680 -GL \_\_\_\_\_ Bar.Press. \_\_\_\_\_  
Producing Thru: Casing \_\_\_\_\_ Tubing X Type Well Single  
Single-Bradenhead-G. G. or G.O. Dual \_\_\_\_\_  
Date of Completion: 10-11-57 Packer No 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) (0 1/2) Size	Press. psig	Diff. h <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						875		877		81
1.		3/4				131	58	748		3 hrs
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.	12.3650		143	1.0019	0.9393	1.015	1689
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> 889 P<sub>c</sub> 790.3

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.						377.6	212.7		3.72
2.									
3.									
4.									
5.									

Absolute Potential: 5,159 MCFPD; n .85/3.0347

COMPANY Northwest Production Corp.  
ADDRESS 204 N. Orchard, Farmington, N. M.  
AGENT and TITLE L. E. Gilbert, Asst Dist Engr  
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  $P_t$ .

## DRILLING DEPARTMENT

COMPANY **Northwest Production Corp.**

LEASE **San Juan 27-8** WELL NO. **5-11**

DATE OF TEST **10-17-57**

SHUT IN PRESSURE (PSIG): TUBING 875 CASING 877 S. I. PERIOD 7 DAYS

SIZE BLOW NIPPLE                      **T. C. Choke**

FLOW THROUGH **1 1/2" tubing** WORKING PRESSURES FROM **Casing**

[illegible]

START AT: 11:20 AM END TEST AT 2:20 PM

REMARKS: \_\_\_\_\_

TESTED BY: **L. E. Gilbert**

WITNESS: \_\_\_\_\_

OIL OF ALBERTA COMMISSION

DISTRICT OFFICE

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NOTICE