

NM OCC-3  
Truby-1  
Poppin-1  
File-1

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Wildest Formation Pictured Cliffs County Rio Arriba  
Initial XX Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 2-23-57  
Company Northwest Production Corporation Lease "W" Well No. 2-5  
Unit B Sec. 5 Twp. 26N Rge. 5W Purchaser Not connected  
Casing 7-5/8 Wt. 244 I.D. \_\_\_\_\_ Set at 3391 Perf. 3132 To 3184  
Tubing 1-1/4 Wt. 2.34 I.D. \_\_\_\_\_ Set at 3200 Perf. \_\_\_\_\_ To \_\_\_\_\_  
Gas Pay: From 3132 To 3184 L \_\_\_\_\_ xG .64 -GL \_\_\_\_\_ Bar. Press. \_\_\_\_\_  
Producing Thru: Casing XX Tubing \_\_\_\_\_ Type Well Triple - 4 - 6 - 6  
Date of Completion: 2-30-56 Packer No Single-Bradenhead-G. G. or G.O. Dual  
Reservoir Temp. \_\_\_\_\_

OBSERVED DATA

Tested Through 11/11/11 (Choke) 11/11/11 Type Taps \_\_\_\_\_

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	(Prover) (Line) Size	(Choke) <u>11/11/11</u> Size	Press. <u>DK</u> psig	Diff. <u>11/11/11</u> h <sub>w</sub>	Temp. °F.	Press. <u>PC</u> psig	Temp. °F.	Press. <u>PC</u> psig	Temp. °F.	
SI			<u>2167</u>	<u>1112</u>		<u>969</u>		<u>969</u>		<u>81</u>
1.										
2.		<u>3/4</u>	<u>2167</u>	<u>1111</u>		<u>106</u>		<u>484</u>		<u>3 hr</u>
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.							
2.	<u>14.1805</u>		<u>118</u>	<u>1.0088</u>	<u>.9682</u>	<u>1.012</u>	<u>1632</u>
3.							
4.							
5.							

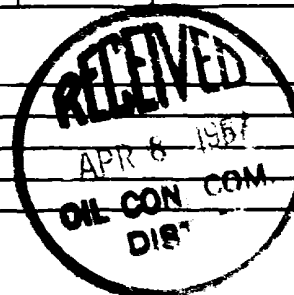
PRESSURE CALCULATIONS

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> 981 P<sub>c</sub><sup>2</sup> 962

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.									
2.									
3.	<u>496</u>					<u>246</u>	<u>716</u>		<u>1.344</u>
4.									
5.									

Absolute Potential: 2124 MCFPD; n .85/1.2858  
COMPANY Pacific Northwest Pipeline Corp.  
ADDRESS 485 W. Broadway, Farmington, New Mexico  
AGENT and TITLE T. A. Dugan  
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  $P_t$ .

# DRILLING DEPARTMENT

COMPANY Northwest Production Corp.

LEASE "W" WELL NO. 2-5

DATE OF TEST 2-23-57

SHUT IN PRESSURE (PSIG): TUBING SI PC 969 CASING SI MW 1112 S. I. PERIOD SI BK 2167 12 DAYS

SIZE BLOW NIPPLE 3/4" Choke (Bureau of Mines) Est. Gr. .64

FLOW THROUGH Tubing WORKING PRESSURES FROM Casing

TIME HOURS	MINUTES	CHOKER PRESSURE	Q (MCFD)		WELLHEAD WORKING PRESSURE (PSIG)	TEMP
			15.025 PSIA & 60°F SI MW	SI BK		
2	00 PM	Open				34
2	15	243	1111	2167	578	34
2	30	216	1111	2167	534	35
2	45	190	1111	2167	514	33
3	00	171	1110	2167	507	33
3	15	156	1110	2167	504	33
3	30	143	1110	2167	501	32
3	45	138	1110	2167	498	32
4	00	125	1110	2157	495	32
4	15	119	1110	2167	492	32
4	30	114	1111	2167	489	31
4	45	108	1111	2167	486	31
5	00	104	1111	2167	484	31

START AT 2:00 pm END TEST AT 5:00 pm

REMARKS: 0 - 10 min - heavy flow fluid  
10 - 1 hr - spray fluid  
1 hr - 3 hr - light spray

TESTED BY T. A. Egan

<b>OIL CONSERVATION COMMISSION</b>		
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