

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blanco Formation Mesaverde County Rio Arriba

Initial XX Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 10-11-56

Company Pacific Northwest Pipeline Corp Lease 29-5 Well No. 36-33

Unit L Sec. 33 Twp. 29-N Rge. 5W Purchaser Not Connected.

Casing 7-5/8 Wt. \_\_\_\_\_ I.D. \_\_\_\_\_ Set at 3667 Perf. 5788 To 5274

Tubing X Wt. \_\_\_\_\_ I.D. \_\_\_\_\_ Set at 5748.69 Perf. \_\_\_\_\_ To \_\_\_\_\_

Gas Pay: From 5274 To 5788 L \_\_\_\_\_ Est. .690 -GL \_\_\_\_\_ Bar.Press. 12.0

Producing Thru: Casing \_\_\_\_\_ Tubing XX Type Well Single

Date of Completion: \_\_\_\_\_ Packer \_\_\_\_\_ Reservoir Temp. \_\_\_\_\_

OBSERVED DATA

Tested Through X (Pressure) (Choke) (Restrictor) SI 7 days Type Taps - -

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	( <del>Pressure</del> ) ( <del>Restrictor</del> ) Size	(Choke) ( <del>Restrictor</del> ) Size	Press. psig	Diff. h <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						1082		1081		Shut in
1.										
2.	2	3/4	314		74	314	74	713		3 hours
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.							
3.	14.1603		326	.9868	.9325	1.034	4392
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> 1094 P<sub>c</sub> 1196.8

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.									
2.									
3.	725					525.6	671.2		1.783
4.									
5.									

Absolute Potential: 6777 MCFPD; n .75/1.543

COMPANY Pacific Northwest Pipeline Corporation

ADDRESS 405 1/2 W. Broadway, Farmington, New Mexico

AGENT and TITLE W. B. Richardson III, Well Test 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.
- $F_{pv}$  = 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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