

## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blanco Formation Mesaverde County San Juan  
Initial X Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 11/18/56  
Company The Ohio Oil Company Lease Gov't Sec. 8 Well No. 1  
Unit \_\_\_\_\_ Sec. 8 Twp. 31N Rge. 12W Purchaser \_\_\_\_\_  
Casing 7" Wt. 23 I.D. \_\_\_\_\_ Set at 4620 Perf. 4835-4850 To 4760-4790  
Liner 5" Wt. 15# 4398 to 5055 I.D. \_\_\_\_\_ Set at 4982 Perf. 4950 To 4980  
Tubing 2-3/8" Wt. 4.7 I.D. 2" Set at \_\_\_\_\_ Perf. \_\_\_\_\_ To \_\_\_\_\_  
Gas Pay: From 4720 To 4965 L \_\_\_\_\_ xG \_\_\_\_\_ -GL \_\_\_\_\_ Bar.Press. \_\_\_\_\_  
Producing Thru: Casing \_\_\_\_\_ Tubing X Type Well Single  
Date of Completion: 11/6/56 Packer \_\_\_\_\_ Reservoir Temp. \_\_\_\_\_  
Single-Bradenhead-G. G. or G.O. Dual

## OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) 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.	Press. psig	Temp. °F.	
SI						1056		1066		
1.		3/4	445		71°	445		929		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.	14.1605		457	.9896	.9258	1.055	6255
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>)

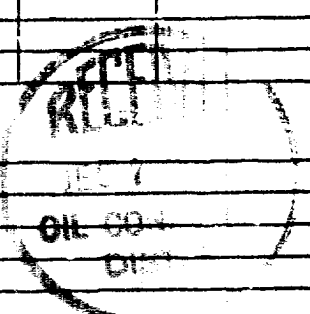
Specific Gravity Separator Gas \_\_\_\_\_  
Specific Gravity Flowing Fluid \_\_\_\_\_  
P<sub>c</sub> 1078 P<sub>c</sub><sup>2</sup> 1162

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.	941					885.5	276.5		
2.									
3.									
4.									
5.									

Absolute Potential: 18,333 MCFPD; n .75

COMPANY The Ohio Oil Company  
ADDRESS Box 120, Casper, Wyoming  
AGENT and TITLE \_\_\_\_\_  
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.

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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  $P_t$ .