

## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Undiscovered Formation Albany County Santa Fe  
Initial X Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 6/2/60  
Company Antec Oil & Gas Company Lease Richardson Well No. 6  
Unit J Sec. 22 Twp. 12N Rge. 20E Purchaser \_\_\_\_\_  
Casing 7" Wt. 80 & 81 D. 6.496 Set at 7003 Perf. 7064 To 7236  
Tubing 4 Wt. 4.7 I.D. 1.003 Set at 7042 Perf. 7238 To 7241  
Gas Pay: From 7064 To 7236 L 7238 xG 0.63 -GL 4635 Bar.Press. 12  
Producing Thru: Casing \_\_\_\_\_ Tubing 3 Type Well G.O. Dual  
Single-Bradenhead-G. G. or G.O. Dual  
Date of Completion: \_\_\_\_\_ Packer 7000 Reservoir Temp. \_\_\_\_\_

## OBSERVED DATA

Tested Through undiscovered (Choke) undiscovered Type Taps \_\_\_\_\_

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. $h_w$	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						<u>7042</u>				<u>7 hours</u>
1.		<u>0.729</u>				<u>7042</u>	<u>60</u>			<u>3 hours</u>
2.										
3.										
4.										
5.										

## FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w P_f}$	Pressure psia	Flow Temp. Factor $F_t$	Gravity Factor $F_g$	Compress. Factor $F_{pv}$	Rate of Flow Q-MCFPD @ 15.025 psia
1.	<u>10.369</u>		<u>175</u>	<u>1.000</u>	<u>0.9608</u>	<u>1.000</u>	<u>8341</u>
2.							
3.							
4.							
5.							

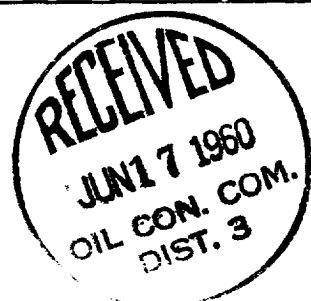
## PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio \_\_\_\_\_ cf/bbl.  
Gravity of Liquid Hydrocarbons \_\_\_\_\_ deg.  
 $P_c$  \_\_\_\_\_ ( $1-e^{-s}$ )  
Specific Gravity Separator Gas \_\_\_\_\_  
Specific Gravity Flowing Fluid \_\_\_\_\_  
 $P_c$  1045  $P_c$  3.783.083

No.	$P_w$ $P_t$ (psia)	$P_t^2$	$F_c Q$	$(F_c Q)^2$	$(F_c Q)^2 (1-e^{-s})$	$P_w^2$	$P_c^2 - P_w^2$	Cal. $P_w$	$\frac{P_w}{P_c}$
1.	<u>175</u>		<u>10.369</u>	<u>107.521</u>	<u>107.507</u>	<u>155.502</u>	<u>1.582.013</u>		
2.									
3.									
4.									
5.									

Absolute Potential: 2100 MCFPD; n 0.75  
COMPANY Antec Oil & Gas Company  
ADDRESS Box 210, Richardson, New Mexico  
AGENT and TITLE ORIGINAL SIGNED BY L. M. STEVENS L. M. Stevens, Dist. 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.

$F_{pv}$  = 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  $P_t$ .

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