

## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Anteo Formation Pictured Cliffs County San Juan  
Initial X Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 5/13/60  
Company Anteo Oil and Gas Company Lease 2414 Well No. 17  
Unit B Sec. 19 Twp. 23N Rge. 9W Purchaser \_\_\_\_\_  
Casing 2 7/8 Wt. 6.90 I.D. 2.441 Set at 2207 Perf. 2200 To 2260  
Tubing \_\_\_\_\_ Wt. \_\_\_\_\_ I.D. \_\_\_\_\_ Set at \_\_\_\_\_ Perf. \_\_\_\_\_ To \_\_\_\_\_  
Gas Pay: From 2200 To 2260 L 2200 xG 0.65 -GL 1313 Bar.Press. 12  
Producing Thru: Casing X Tubing \_\_\_\_\_ Type Well Single  
Single-Bradenhead-G. G. or G.O. Dual  
Date of Completion: 5/6/60 Packer \_\_\_\_\_ Reservoir Temp. \_\_\_\_\_

T.D. - 2207

P.R.S.D. - 2275

## OBSERVED DATA

Tested Through (2200) (Choke) (2200) 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								<u>64</u>		<u>2.1 - 7 days</u>
1.		<u>0.73</u>						<u>59</u>	<u>60</u>	<u>3 hrs.</u>
2.										
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.	<u>12.35</u>		<u>272</u>	<u>1.000</u>	<u>0.988</u>	<u>1.01</u>	<u>339</u>
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> 626 P<sub>c</sub><sup>2</sup> 391.336

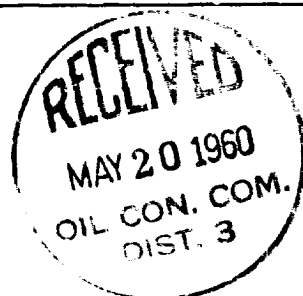
No.	F <sub>w</sub> P <sub>t</sub> (psia)	P <sub>t</sub> <sup>2</sup>	F <sub>c</sub> Q	(F <sub>c</sub> Q) <sup>2</sup>	(F <sub>c</sub> Q) <sup>2</sup> (1-e <sup>-s</sup> )	P <sub>w</sub> <sup>2</sup>	P <sub>c</sub> <sup>2</sup> -P <sub>w</sub> <sup>2</sup>	Cal. P <sub>w</sub>	P <sub>w</sub> P <sub>c</sub>
1.	<u>272</u>	<u>73.984</u>	<u>12.35</u>	<u>152.5225</u>	<u>30.859</u>	<u>104.330</u>	<u>386.906</u>		
2.									
3.									
4.									
5.									

Absolute Potential: 4000 MCFPD; n 0.85COMPANY Anteo Oil and Gas CompanyADDRESS Box 4 706, Farmington, New MexicoAGENT and TITLE ORIGINAL SIGNED BY L. M. STEVENSL. 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<sub>t</sub> = 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  $P_t$ .

STATE OF NEW MEXICO		
OIL CONSERVATION COMMISSION		
AZUL DISTRICT OFFICE		
NUMBER OF CITIES REVIEWED		3
DATE OF REVIEW		
SUB AREA	NO.	REMARKS
EL PASO	1	
DALLAS		
DENVER		
KANSAS CITY		
OIL GALS		
TOTAL OIL FREE		
TOTAL		