

## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blanco-Pictured Cliffs Formation Pictured Cliffs County San Juan  
Initial X Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 12-3-59  
Company Pan American Petroleum Corp. Lease Elliott Gas Unit "J" Well No. 1  
Unit C Sec. 34 Twp. 30N Rge. 9W Purchaser El Paso Natural Gas Company  
Casing 4-1/2 Wt. 9.5 I.D. 4.090 Set at 2538 Perf. Abrasijet cut at 2476 To \_\_\_\_\_  
Tubing 1-1/4 Wt. 2.3 I.D. 1.380 Set at 2463 Perf. 2452 To 2463  
Gas Pay: From 2456 To 2515 L 2476 x 0.65 (est.) -GL 1609 Bar.Press. 12  
Producing Thru: Casing X Tubing \_\_\_\_\_ Type Well Gas-single  
Single-Bradenhead-G. G. or G.O. Dual  
Date of Completion: 11-26-59 Packer None Reservoir Temp. 92° F

## OBSERVED DATA

Tested Through (None) (Choke) (None) Type Taps \_\_\_\_\_

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Line) Size	(Choke) Size	Press. psig	Diff. h <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	Shut in 7 days					1019		1019		
1.	2-inch	3/4-inch	294		60° (est.)	376	60° (est.)	294	60° (est.)	3 hours
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.	12.365		396	1.000	0.9608	1.030	3744
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> 1031 P<sub>c</sub><sup>2</sup> 1,062,961

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.						150,544	912,417		
2.									
3.									
4.									
5.									

Absolute Potential: 4263 MCFPD; n 0.85

COMPANY Pan American Petroleum Corporation

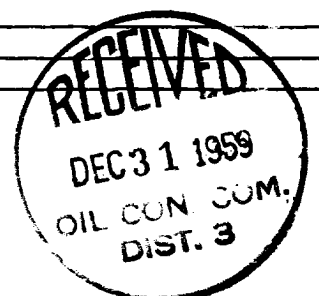
ADDRESS Box 487, Farmington, New Mexico

AGENT and TITLE R. M. Bauer, Jr., Area 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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AZTEC DISTRICT OFFICE		
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