

## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Undesignated Farmington Formation Farmington County San Juan  
(deal with Asteo-Pictured Cliffs)  
Initial X Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 11-19-59  
Company Pan American Petroleum Corp. Lease Trajillo Gas Unit Well No. 1  
Unit N Sec. 21 Twp. 29N Rge. 10W Purchaser El Paso Natural Gas Company  
Casing 9-1/2 Wt. 14 I.D. 5.012 Set at 1860 Perf. 1090 To 1070  
Tubing 1-1/4 Wt. 2.3 I.D. 1.300 Set at 1052 Perf. 1090 To 1052  
Gas Pay: From 1090 To 1070 L 1090 xG 0.65 (est.) -GL 603 Bar. Press. 12  
Producing Thru: Casing X Tubing \_\_\_\_\_ Type Well Gas-Gas Dual  
Single-Bradenhead-G. G. or G.O. Dual  
Date of Completion: 11-12-59 Packer 1725 Reservoir Temp. 80° F

## OBSERVED DATA

Tested Through (annular) (Choke) (annular)

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	Start in 7 days					300		300		
1.	2"	3/4"	33		80° (est.)	80		94		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		65	1.000	0.9408	1.000	772
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> 312 P<sub>c</sub><sup>2</sup> 97,344

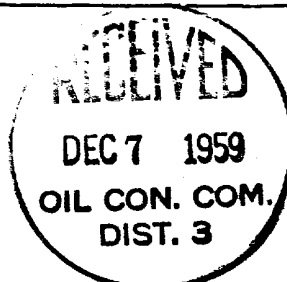
No.	P <sub>w</sub> P <sub>t</sub> (psia)	P <sub>t</sub> <sup>2</sup>	F <sub>c</sub> Q	(F <sub>c</sub> Q) <sup>2</sup>	(F <sub>c</sub> Q) <sup>2</sup> (1-e <sup>-s</sup> )	P <sub>w</sub> <sup>2</sup>	P <sub>c</sub> <sup>2</sup> -P <sub>w</sub> <sup>2</sup>	Cal. P <sub>w</sub>	P <sub>w</sub> P <sub>c</sub>
1.						312	92,160		
2.									
3.									
4.									
5.									

Absolute Potential: 609 MCFPD; n 0.85COMPANY Pan American Petroleum CorporationADDRESS Box 487, Farmington, New MexicoAGENT and TITLE H. H. 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.

$F_{pv}$  = 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  $P_t$ .

OIL CONSERVATION COMMISSION		
AZTEC DISTRICT OFFICE		
No. Copies Received <u>3</u>		
DISTRIBUTION		
	NO. FURNISHED	
Operator	1	
County Ed	1	
Division Office		
State Land Office		
U. S. G. S.		
Transporter		
File	1	✓