

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Antero-Pictured Cliffs Formation Pictured Cliffs County San Juan

Initial X Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 11-1-57

Company Pan American Petroleum Corporation Lease Martinez Gas Unit "D" Well No. 1

Unit B Sec. 24 Twp. 29N Rge. 10W Purchaser El Paso Natural Gas Company

Casing 5 1/2 Wt. 14 I.D. 1.012 Set at 2039 Perf. 1934 To 1990

Tubing 1 1/2 Wt. 2.3 I.D. 1.38 Set at 1932 Perf. 1941 To 1952

Gas Pay: From 1934 To 1990 L 1972 xG 0.65 est. GL 1262 Bar.Press. 12

Producing Thru: Casing X Tubing \_\_\_\_\_ Type Well Gas - Single

Date of Completion: 10-28-57 Packer No Single-Bradenhead-G. G. or G.O. Dual  
Reservoir Temp. 92° F est.

OBSERVED DATA

Tested Through (Pressure) (Choke) (Meter) Type Taps \_\_\_\_\_

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Outside) Size	Press. psig	Diff. h <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	Shut in 7 days					717		716		
1.		14"	12			19	60	12	60	3
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.	12.3650		24	1.000	0.9608	1.000	283
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 0.65 est.  
P<sub>c</sub> 729 P<sub>c</sub> 531.441

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> / F <sub>c</sub>
1.						961	530,480		
2.									
3.									
4.									
5.									

Absolute Potential: 283 MCFPD; n 0.65

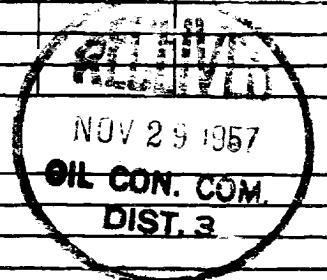
COMPANY PAN AMERICAN PETROLEUM CORPORATION

ADDRESS Box 487, Farmington, New Mexico

AGENT and TITLE R. N. Buser, Field 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