

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122  
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Basin Dakota Formation Dakota County Rio Arriba  
 Initial X Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 9-4-63  
 Company PAN AMERICAN PETROLEUM CORP. Lease Jicarilla Apache 102 Well No. 11  
 Unit C Sec. 11 Twp. 26N Rge. 4W Purchaser \_\_\_\_\_  
 Casing 4-1/2 Wt. 10.36 I.D. 4.952 Set at 8038 Perf. 7814 To 7826  
11.60 I.D. 4.000 Set at \_\_\_\_\_ Perf. 7780 To 7782  
 Tubing 2-3/8 Wt. 4.7 I.D. 1.993 Set at 7804 Perf. \_\_\_\_\_ To \_\_\_\_\_  
 Gas Pay: From 7780 To 7826 L 7803 xG 0.70 est. -GL 5462 Bar.Press. 12  
 Producing Thru: Casing \_\_\_\_\_ Tubing X Type Well Single  
 Single-Bradenhead-G. G. or G.O. Dual  
 Date of Completion: 9-19-63 Packer \_\_\_\_\_ Reservoir Temp. \_\_\_\_\_

OBSERVED DATA

Tested Through (~~Standard~~) (~~Standard~~) (Meter) Type Taps Flange

No.	Flow Data			Tubing Data		Casing Data		Duration of Flow Hr.		
	(Line) Size	(Orifice) Size	Press. psig	Diff. h <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.		Press. psig	Temp. °F.
1.	3"	1.00"	309	46"	60° est.	2100 550		2100 700		24
2.										
3.										
4.										
5.										

FLOW CALCULATIONS

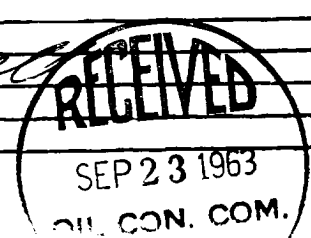
No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	Pressure psia	Flow Temp. Factor F <sub>t</sub>	Gravity Factor F <sub>g</sub>	Compress. Factor F <sub>pv</sub>	Rate of Flow Q-MCFPD @ 15.025 psia
1.	5625.8	134.8	521	1.0000	0.9258	1.068	861
2.							
3.							
4.							
5.							

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> 2112 P<sub>c</sub><sup>2</sup> 4,460,544

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.						306,944	3,953,600		
2.									
3.									
4.									
5.									

Absolute Potential: 942 MCFPD; n 0.75  
 COMPANY PAN AMERICAN PETROLEUM CORPORATION  
 ADDRESS P. O. Box 400, Farmington, New Mexico  
 AGENT and TITLE F. L. Hahers, District Engineer, By: J. W. Kelly  
 WITNESSED \_\_\_\_\_  
 COMPANY \_\_\_\_\_



REMARKS

Bridge Plug set at 7860'

## 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  $P_t$ .