

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 San Juan  
 Initial X Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test Nov. 1, 1961  
 Company Pan American Petroleum Corp Lease Crawford Gas Unit B Well No. 1  
 Unit L Sec. 24 Twp. 29N Rge. 12W Purchaser None  
 Casing 4-1/2 Wt. 9.5 I.D. 4.090 Set at 6356 Perf. 6224 To 6232  
 Tubing 2-3/8 Wt. 4.7 I.D. 1.995 Set at 6233 Perf. open ended To \_\_\_\_\_  
 Gas Pay: From 6224 To 6232 L 6233 x 0.700 est -GL Bar. Press. \_\_\_\_\_  
 Producing Thru: Casing \_\_\_\_\_ Tubing 1 Type Well Single-Gas  
 Single-Bradenhead-G. G. or G.O. Dual  
 Date of Completion: 10-25-61 Packer None Reservoir Temp. \_\_\_\_\_

OBSERVED DATA

Tested Through ~~PROVER~~ (Choke) ~~PROVER~~ Type Taps ---

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	<del>(PROVER)</del> (Line) Size	(Choke) <del>(PROVER)</del> Size	Press. psig	Diff. h <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
1.	<u>7 days</u> <u>2 inch</u>	<u>3/4 inch</u>	<u>594</u>		<u>60° Test</u>	<u>2092</u> <u>767</u>	<u>60° Test</u>	<u>2109</u> <u>1322</u>		<u>3 hours</u>
2.										
3.										
4.										
5.										

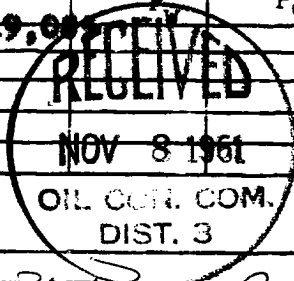
FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	Pressure psia	Flow Temp. Factor Ft.	Gravity Factor F <sub>g</sub>	Compress. Factor F <sub>pv</sub>	Rate of Flow Q-MCFPD @ 15.025 psia
1.	<u>12.3650</u>		<u>606</u>	<u>1.000</u>	<u>0.9258</u>	<u>1.078</u>	<u>7478</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> 2121 P<sub>c</sub> 4,498,641

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.						<u>1,779,556</u>	<u>2,719,000</u>		
2.									
3.									
4.									
5.									



Absolute Potential: 10,903 MCFPD; n 0.750  
 COMPANY Pan American Petroleum Corporation  
 ADDRESS P. O. Box 480, Farmington, New Mexico  
 AGENT and TITLE R. F. Bauer, Jr. Senior Petroleum 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  $P_t$ .