

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Flora Vista Mesaverte Formation Mesaverte County San Juan  
 Initial X Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test April 23, 1962  
 Company Pan American Petroleum Corp. Lease McGee Gas Unit "C" Well No. 1  
 Unit A Sec. 28 Twp. 30-N Rge. 12-W Purchaser \_\_\_\_\_  
 Casing 4-1/2" Wt. 9.56 I.D. 4.090 Set at 3396 Perf. 3377 To 3206  
 Tubing 2-3/8" Wt. 4.7 I.D. 1.995 Set at 3328 Perf. open end To \_\_\_\_\_  
 Gas Pay: From 3274 To 3292 L 3328 xG .70 (est.) -GL 2330 Bar.Press. 12  
 Producing Thru: Casing \_\_\_\_\_ Tubing X Type Well single  
 Date of Completion: April 23, 1962 Packer none Single-Bradenhead-G. G. or G.O. Dual Reservoir Temp. \_\_\_\_\_

OBSERVED DATA

Tested Through (none) (Choke) (none) Type Taps Flange

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	
SI	<u>9 days</u>								
1.	<u>2 inches</u>	<u>3/4"</u>	<u>393</u>			<u>1326</u>	<u>66 (60 est.)</u>	<u>1336</u>	<u>3 hours</u>
2.									
3.									
4.									
5.									

FLOW CALCULATIONS

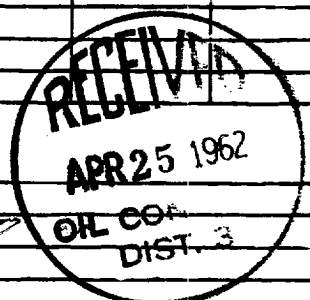
No.	Coefficient (24-Hour)	$\sqrt{h_w P_f}$	Pressure psia	Flow Temp. Factor F <sub>t</sub>	Gravity Factor F <sub>g</sub>	Compress. Factor F <sub>pv</sub>	Rate of Flow Q-MCFPD @ 15.025 psia
1.	<u>12.3650</u>		<u>405</u>	<u>1.0000</u>	<u>.9258</u>	<u>1.051</u>	<u>4872</u>
2.							
3.							
4.							
5.							

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> 1348 P<sub>c</sub><sup>2</sup> 1,817,104

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>436,976</u>	<u>1,380,128</u>		
2.									
3.									
4.									
5.									

Absolute Potential: 6024 MCFPD; n .75  
 COMPANY PAN AMERICAN PETROLEUM CORPORATION  
 ADDRESS P. O. Box 480, Farmington, New Mexico  
 AGENT and TITLE F. W. Peall, 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  $P_t$ .