

## NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Cha Cha Gallup Formation Gallup County San Juan  
Initial X Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test Sept. 3, 1963  
Company Pan American Petroleum Corp. Lease Gallagos Canyon Unit Well No. 140  
Unit N 1/4, S 1/4 Sec. 29 Twp. 28N Rge. 12W Purchaser \_\_\_\_\_  
Casing 4-1/2 Wt. 10.5 I.D. \_\_\_\_\_ Set at 5205 Perf. 5205 To 5211  
Tubing 2-3/8 Wt. 4.7 I.D. 1.995 Set at 5232 Perf. \_\_\_\_\_ To \_\_\_\_\_  
Gas Pay: From \_\_\_\_\_ To \_\_\_\_\_ L 5207 xG .700 -GL 3645 Bar.Press. 12  
Producing Thru: Casing \_\_\_\_\_ Tubing \_\_\_\_\_ Type Well \_\_\_\_\_  
Single-Bradenhead-G. G. or G.O. Dual  
Date of Completion: \_\_\_\_\_ Packer None Reservoir Temp. \_\_\_\_\_

## OBSERVED DATA

Tested Through (HSS-200) (Choke) (HSS-200) Type Taps Flange

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	( <del>9 Days</del> ) (Line) Size	(Choke) ( <del>HSS-200</del> ) Size	Press. psig	Diff. h <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
1.	<u>9 Days</u>					<u>1261</u>		<u>1262</u>		<u>3 Hours</u>
2.	<u>2"</u>	<u>.750</u>	<u>550</u>			<u>662</u>		<u>1097</u>		
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.	<u>12,3630</u>		<u>562</u>	<u>1.0000</u>	<u>.9258</u>	<u>1.073</u>	<u>6903</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> 1274 P<sub>c</sub><sup>2</sup> 1,623,076

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>1,229,861</u>	<u>993,193</u>		
2.									
3.									
4.									
5.									

Absolute Potential: 19,990 MCFPD: n 0.75

COMPANY PAN AMERICAN PETROLEUM CORPORATION

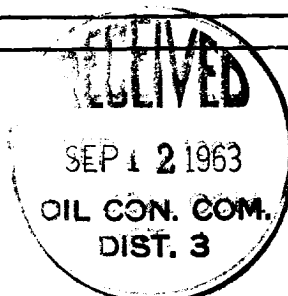
ADDRESS BOX 480, FARMINGTON, NEW MEXICO

AGENT and TITLE F. L. NABORS, DISTRICT 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.

$F_{pv}$  = 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  $P_t$ .