

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 12-28-62  
Company Pan American Petroleum Corporation Base Nare Gas Unit "G" Well No. 1  
Unit M Sec. 25 Twp. 29-N Rge. 10-W Purchaser \_\_\_\_\_  
Casing 4-1/2 Wt. 10.5 I.D. 4.052 Set at 6428 Perf. 6406 To 6416  
Tubing 2-3/4 Wt. 4.7 I.D. 1.995 Set at 6340 Perf. - To -  
Gas Pay: From 6352 To 6416 L 6384 xG (.700 Est.) GL \_\_\_\_\_ Bar.Press. 12  
Producing Thru: Casing \_\_\_\_\_ Tubing X Type Well Single  
Date of Completion: 12-18-62 Packer None Single-Bradenhead-G. G. or G.O. Dual  
Reservoir Temp. \_\_\_\_\_

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) \_\_\_\_\_ Type Taps Flange

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	10 Days					1986		1976		
1.	2"	.750	191			246	60° Est.	565		1 Hour
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.	12.3550		205	1.0000	.9258	1.085	2982
2.							
3.							
4.							
5.							

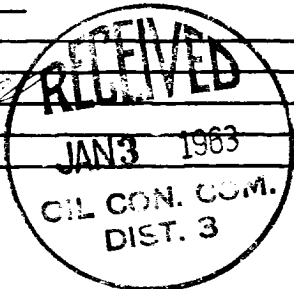
PRESSURE CALCUIATIONS

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> 2008 P<sub>c</sub><sup>2</sup> 4,032,064

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.	278					577	332,929	3,679,135	
2.									
3.									
4.									
5.									

Absolute Potential: 2541 MCFPD; n 0.75  
COMPANY Pan American Petroleum Corporation  
ADDRESS Box 480, Farmington, New Mexico  
AGENT and TITLE F. W. Poell - 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  $P_t$ .