

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool San Juan Formation Dakota County San Juan
Initial X Annual _____ Special _____ Date of Test October 22, 1961
Company Pan American Petroleum Corp. Lease Gallegos Canyon Unit Well No. 109
Unit X Sec. 10 Twp. 20N Rge. 12W Purchaser Pan American Gas Company
Casing 4 1/2 Wt. 10.5 I.D. 4.052 Set at 6100 Perf. 6054 To 6062
Tubing 2-3/8 Wt. 4.7 I.D. 1.975 Set at 6050 Perf. Open Ended To _____
Gas Pay: From 6054 To 6062 L 6050 xG 0.700 est. GL 4235 Bar.Press. 22
Producing Thru: Casing _____ Tubing X Type Well Single-gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 10/21/61 Packer None Reservoir Temp. _____

OBSERVED DATA

Tested Through (Pressure) (Choke) (Restrictor)

Type Taps _____

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Line) Size	(Choke) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
1.	2-3/8	3/4	200		60.7	207	60.7	551		3 hours
2.										
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	11.369		200	1.000	0.928	1.000	275
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c _____ (1-e^{-s})

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 2007 P_c 2007

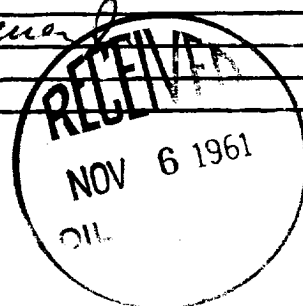
No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-s})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w P _c
1.	163					26569	4,024,400		
2.									
3.									
4.									
5.									

Absolute Potential: 2917 MCFPD; n 0.750COMPANY Pan American Petroleum Corporation
ADDRESS Box 400, Farmington, New MexicoAGENT and TITLE R. H. 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} = 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 .