

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool West Kutz - Fruitland Formation Fruitland County San Juan
Initial I Annual _____ Special _____ Date of Test June 30, 1959
Company Pan American Petroleum Corp. Lease Gallegos Canyon Unit Well No. 77
Unit M Sec. 1E Twp. 29N Rge. 12W Purchaser El Paso Natural Gas Company
Casing 5-1/2 Wt. 14 I.D. 5.012 Set at 1900 Perf. 1165 To 1191
Tubing 1-1/4 Wt. 2.3 I.D. 1.300 Set at 1227 Perf. 1217 To 1227
Gas Pay: From 1165 To 1191 L 1165 xG 0.65 (est) GL 757 Bar.Press. 12
Producing Thru: Casing I Tubing _____ Type Well Single Gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: June 29, 1959 Packer None Reservoir Temp. 82°F

OBSERVED DATA

Tested Through (Pressure) (Choke) (Restrictor) Type Taps _____

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Pressure) (Line) Size	(Choke) (Restrictor) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	Shut in 7 days					370		370		
1.	2"	3/4"	129		60°(est)	133	60°(est)	129	60°(est)	3 hrs.
2.										
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w P_f}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	12.365		141	1.000	0.9808	1.012	1693
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

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

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 382 P_c 145,924

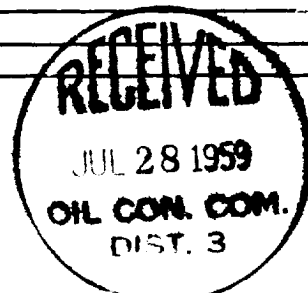
No.	$\frac{P_w}{P_t}$ (psia)	$\frac{P_c^2}{P_t^2}$	F _c Q	(F _c Q) ²	$\frac{(F_c Q)^2}{(1-e^{-s})}$	P _w ²	P _c ² -P _w ²	Cal. P _w	$\frac{P_w}{P_c}$
1.						21,023	124,899		
2.									
3.									
4.									
5.									

Absolute Potential: 1935 MCFPD; n 0.85COMPANY Pan American Petroleum CorporationADDRESS Box 487, Farmington, New MexicoAGENT and TITLE R. M. Bauer, Jr., Area Engineer *RMBauer Jr.*

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 .

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