

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Astec-Pictured Cliffs Formation Pictured Cliffs County San Juan

Initial X Annual _____ Special _____ Date of Test July 20, 1959

Company Pan American Petroleum Corp. Lease State of New Mexico "A1" Well No. 1

Unit H Sec. 32 Twp. 29N Rge. 9W Purchaser El Paso Natural Gas Company

Casing 4-1/2 Wt. 9.5 I.D. 4.090 Set at 2552 Perf. 2450 To 2496

Tubing 1-1/4 Wt. 2.3 I.D. 1.380 Set at 2454 Perf. 2444 To 2454

Gas Pay: From 2450 To 2492 L 2450 xG.O. .69(est) -GL 1691 Bar.Press. 12

Producing Thru: Casing X Tubing _____ Type Well Single Gas

Date of Completion: July 13, 1959 Packer None Single-Bradenhead-G. G. or G.O. Dual Reservoir Temp. 95°F

OBSERVED DATA

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

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Pressure) (Line) Size	(Choke) (Pressure) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	Shut in 7 days					712		712		
1.	2"	3/4"	121		60°(est)	135	60°(est)	121	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		133	1.000	0.9325	1.015	1557
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 724 P_c^2 524176

No.	$\frac{P_w}{P_t}$ (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. $\frac{P_w}{P_c}$	$\frac{P_w}{P_c}$
1.						21,609	502,567		
2.									
3.									
4.									
5.									

Absolute Potential: 1614 MCFPD; n 0.85

COMPANY Pan American Petroleum Corporation

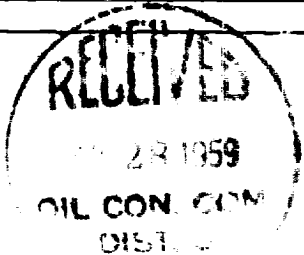
ADDRESS Box 487, Farmington, New Mexico

AGENT 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} = 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 .

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