

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Angel Peak Dakota Formation Dakota County San Juan
Initial X Annual _____ Special _____ Date of Test May 25, 1960
Company Pan American Petroleum Corp. Lease E. H. Pinkin Well No. 5
Unit B Sec. 36 Twp. 28N Rge. 11W Purchaser Southern Union Gas Company
Casing 4-1/2 Wt. 9.5 I.D. 4.090 Set at 6244 Perf. 6153 To 6171
Tubing 2-3/8 Wt. 4.7 I.D. 1.995 Set at 6143 Perf. None To _____
Gas Pay: From 6153 To 6171 L 6143 xG .700 (est) GL 4300 Bar.Press. 12
Producing Thru: Casing _____ Tubing X Type Well Single-gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 5-17-60 Packer None Reservoir Temp. 144° 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	Start in	7 days								
1.	2"	3/4"	425		60 (est)	527		1052		3 hr.
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		437	1.000	.9258	1.054	5273
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ c_g/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c _____ (1-e^{-S})
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 2023 P_c² 4,092,529

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.						1,132,096	2,960,433		
2.									
3.									
4.									
5.									

Absolute Potential: 6720 MCFPD; n .75
COMPANY Pan American Petroleum Corporation
ADDRESS Box 487, Farmington, New Mexico
AGENT and TITLE E. H. Bauer, Jr., Area Engineer R. H. Bauer, Jr.
WITNESSED _____
COMPANY _____

REMARKS

RECEIVED

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 .

