

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 .

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 2/23/61

Company Pan American Petroleum Corporation E. H. Pipkin Well No. 9

Unit N Sec. 35 Twp. 28N Rge. 11W Purchaser Southern Union Gas Company

Casing 4-1/2 Wt. 9.5 I.D. 4.090 Set at 6475 Perf. 6356-99, 6365-68, 6392-96 To _____

Tubing 2-3/8 Wt. 4.7 I.D. 1.995 Set at 6345 Perf. open ended To no perfs.

Gas Pay: From 6356 To 6396 L 6345 xG .700 (est) GL 4442 Bar.Press. 12

Producing Thru: Casing _____ Tubing X Type Well Single gas
Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 2/14/61 Packer None Reservoir Temp. 130° F

OBSERVED DATA

Tested Through (Backsuck) (Choke) (Mudrock) Type Taps _____

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Backsuck) (Line) Size	(Choke) (Backsuck) Size	Press. psig	Diff. h_w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	8 day	shut-in				2045		2045		
1.	2"	3/4"	499			605	60 (est)	1122		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		511	1.000	0.9258	1.064	6224
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 2057 P_c^2 4,231,249

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	$\frac{P_w}{P_c}$
1.						1,285,956	2,945,293		
2.									
3.									
4.									
5.									

Absolute Potential: 2216MCFPD: n 0.74