

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Angels Peak Dakota Formation Dakota County San Juan
 Initial X Annual _____ Special _____ Date of Test 10-14-59
 Company Pan American Petroleum Corp. Lease USA Hargrave "K" Well No. 1
 Unit M Sec. 16 Twp. 27N Rge. 10W Purchaser Southern Union Gas Company
 Casing 4-1/2 Wt. 9.5 I.D. 4.090 Set at 6465 Perf. 6334 To 6370
 Tubing 2-3/8 Wt. 4.7 I.D. 1.995 Set at 6324 Perf. open ended; no perforations
 Gas Pay: From 6334 To 6370 L 6324 x 0.70 (est.) -GL 4427 Bar.Press. 12
 Producing Thru: Casing _____ Tubing X Type Well Single Gas
 Single-Bradenhead-G. G. or G.O. Dual _____
 Date of Completion: 9-26-59 Packer None Reservoir Temp. 150° F

OBSERVED DATA

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

No.	Flow Data				Tubing Data		Casing Data		Duration of Flow Hr.
	(FLOWER) (Line) Size	(Choke) (LINE) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	
SI	Shut in days					1921		194	
1.									3 hours
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		142	1.000	0.9258	1.016	14.2
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 1933 P_w 3,736,489

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.						318,096	3,418,773		
2.									
3.									
4.									
5.									

Absolute Potential: 1766 MCFPD; n 0.75
 COMPANY Pan American Petroleum Corporation
 ADDRESS Box 487, Farmington, New Mexico
 AGENT and TITLE F. M. Bauer, Jr., Area 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 .

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