

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Angels Peak Dakota Formation Dakota County San Juan
Initial X Annual _____ Special _____ Date of Test November 7, 1960
Company Pan American Petroleum Corporation ^{Lease:} E. H. Pipkin Well No. 6
Unit H Sec. 36 Twp. 28N Rge. 11W Purchaser Southern Union Gas Company
Casing 5-1/2 Wt. 15.5 I.D. 4.950 Set at 6274 Perf. 6159-6166 and 6187-6190
Tubing 2-3/8 Wt. 4.7 I.D. 1.995 Set at 6145 Perf. open ended - no perforations
Gas Pay: From 6159 To 6190 L 6145 xG 0.700(est)-GL 4301 Bar.Press. 12
Producing Thru: Casing _____ Tubing X Type Well Single gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 10/28/60 Packer None Reservoir Temp. 144° F

OBSERVED DATA

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

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(<u>Runner</u>) (Line) Size	(Choke) (<u>Choke</u>) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	Start in	10 days				2057		2060		
1.	2"	1/4"	454		60 (est)	508		1090		3 hr.
2.										
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	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		466	1.000	0.9298	1.048	5643
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

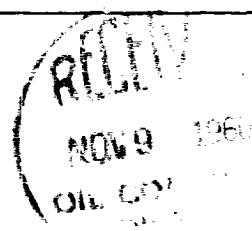
Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
P_c _____ (1-e^{-S})

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 2072 P_c 4,293.184

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.						1,127,844	3,165,340		
2.									
3.									
4.									
5.									

Absolute Potential: 7093 MCFPD; n 0.75
COMPANY Pan American Petroleum Corporation
ADDRESS Box 480, Farmington, New Mexico
AGENT and TITLE R. H. 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} = 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 .

NAME OF VESSEL
 TYPE
 HOME PORT
 NUMBER OF CREW
 DATE
 TIME
 SUNDY
 LAND OFFER
 TRANSFORMER
 PROMOTION OFFER
 OPERATOR