

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Basin Dakota Formation Dakota County San Juan
Initial X Annual _____ Special _____ Date of Test June 11, 1962
Company Pan American Petroleum Corporation Lease Farmington Gas Unit Well No. 1
Unit E Sec. 24 Twp. 39N Rge. 11E Purchaser _____
Casing 4 1/2 Wt. 16.5 I.D. 4.052 Set at 6493 Perf. 6338 To 6344
Tubing 2 3/8 Wt. 4.7 I.D. 1.995 Set at 6318 Perf. _____ To _____
Gas Pay: From 6338 To 6344 L 6341 xG .700 (est) GL 4439 Bar.Press. 12
Producing Thru: Casing _____ Tubing X Type Well Single
Date of Completion: June 3, 1962 Packer _____ Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter)

Type Taps _____

No.	Flow Data			Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Coefficient) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	
SI	31.7 Days							
1.	2"	3/4"	289			1982	1974	1 hour
2.						379	61° (est)	
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.	12.3650		301	1.000	.9258	1.036	3570
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 1994 P_c² 3,976,036

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.									
2.						556,516	3,419,520		
3.									
4.									
5.									

Absolute Potential: 3997 MCFPD; n C.75

COMPANY Pan American Petroleum Corporation
ADDRESS P. O. Box 480, Farmington, New Mexico
AGENT and TITLE P. W. Poell, Petroleum Engineer
WITNESSED _____
COMPANY _____

JUN 15 1962
OIL CON. COM.
DIST. 3

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 .