

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 12-30-64

Company PAN AMERICAN PETROLEUM CORP. Lease Gallegos Canyon Unit-Dak Well No. 108

Unit J Sec. 30 Twp. 29N Rge. 12W Purchaser _____

Casing 4-1/2 Wt. 10.5 I.D. 4.052 Set at 3901 Perf. 5732-44 To 5834-43

Tubing 2-3/8 Wt. 4.7 I.D. 1.993 Set at 3749 Perf. 3712 To 3718

Gas Pay: From 3732 To 3843 L 3788 xG .700 -GL 4052 Bar.Press. 12

Producing Thru: Casing _____ Tubing X Type Well Single

Date of Completion: 12-30-64 Packer None 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) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
1.	10 days					3901	60°-62°	3843	60°-62°	3 hr.
2.	2 inch		399			399		394		
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.	12.3630		411	1.000	.9256	1.031	4943
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 7100 P_c 4,410,000

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.						665,856	3,744,144		
2.									
3.									
4.									
5.									

Absolute Potential: 3390 MCFPD; n .73

COMPANY PAN AMERICAN PETROLEUM CORPORATION

ADDRESS Box 400, Farmington, New Mexico

AGENT and TITLE F. L. Roberts, District Engineer

WITNESSED By: ORIGINAL SIGNED BY

COMPANY F. W. Fuel

RECEIVED
JAN 5 1965
OIL CON. COM
DIST. 3

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 .