

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 10-26-64
Company PAN AMERICAN PETROLEUM CORP. Lease Gallegos Canyon Unit-Dak. Well No. 173
Unit A Sec. 20 Twp. 29N Rge. 12W Purchaser _____
Casing 4-1/2 Wt. 10.5 I.D. 4.032 Set at 3040 Perf. 3344-66 To 3780-78
Tubing 2-3/8 Wt. 4.7 I.D. 1.993 Set at 3799 Perf. 3834 To 3830
Gas Pay: From 3760 To 3866 L 3817 xG .700 -GL 4072 Bar.Press. 12
Producing Thru: Casing _____ Tubing X Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 10-18-64 Packer 5692 Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) Type Taps Flange

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.	8 Days	.730	372			3110	60° est.			
2.	2 inch					372				
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		304	1.000	.9230	1.077	7200
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c 9.402 (1-e^{-s}) 0.256

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 2141 P_c 4,583,821

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.	304	92416	67,096	4501.53	1173.13	1,514,106	1,642,603	1230	
2.									
3.									
4.									
5.									

Absolute Potential: 9726 MCFPD; n .73

COMPANY PAN AMERICAN PETROLEUM CORPORATION
ADDRESS Box 450, Farmington, New Mexico
AGENT and TITLE J. L. Hubbs, District Engineer
WITNESSED By: ORIGINAL SIGNED BY
COMPANY F. W. Foell ORIGINAL SIGNED BY F. W. Foell

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 .