

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Santa Sabota Formation Sabota County San Juan
Initial 2 Annual _____ Special _____ Date of Test 8-18-64
Company PAN AMERICAN PETROLEUM CORP. Lease Gallegos Canyon #161 Unit Well No. 1
Unit 0 Sec. 23 Twp. 20N Rge. 13W Purchaser _____
Casing 4-1/2 Wt. 10.3 I.D. 4.052 Set at 6230 Perf. 6042-6047 To 6134-6164
Tubing 2-3/8 Wt. 4.7 I.D. 1.993 Set at 6073 Perf. 6060 To 6074
Gas Pay: From 6042 To 6164 L 6103 xG .700 -GL 4272 Bar.Press. 12
Producing Thru: Casing _____ Tubing 2 Type Well Single
Date of Completion: 8-18-64 Packer None Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

Tested Through (Proven) (Choke) (Proven) Type Taps Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Proven) (Line) Size	(Choke) (Proven) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	8 days					2045		2030		
1.	8 inch	.730	511			511	60° 60°	1115	60° 60°	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.	12.5630		523	1.000	.9230	1.000	8304
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 2032 P_c 4,310,704

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.						1,276,900	1,929,000		
2.									
3.									
4.									
5.									

Absolute Potential: 8304 MCFPD; n .75
COMPANY PAN AMERICAN PETROLEUM CORPORATION
ADDRESS Box 400, Farmington, New Mexico
AGENT and TITLE J. L. Moore, District Engineer
WITNESSED By: ORIGINAL SIGNED BY
COMPANY F. W. Foster

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 .