

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 9-11-64
 Company PAN AMERICAN PETROLEUM CORP. Lease Gallegos Canyon #160 Well No. 1
 Unit I Sec. 27 Twp. 29N Rge. 12W Purchaser _____
 Casing 4-1/2 Wt. 10.3 I.D. 4.032 Set at 6032 Perf. 3036/60/3936 To 3960/3972-84
 Tubing 2-3/8 Wt. 4.7 I.D. 1.995 Set at 5800 Perf. Open To Ended
 Gas Pay: From 3036 To 3984 L 3020 xG .700 -GL 4144 Bar.Press. 12
 Producing Thru: Casing _____ Tubing X Type Well Single
 Date of Completion: 3-3-64 Packer None Reservoir Temp. _____

OBSERVED DATA

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

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Line) Size	(Choke) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	<u>8 Days</u>					<u>2061</u>		<u>2099</u>		
1.	<u>2 Days</u>	<u>.750</u>	<u>649</u>			<u>649</u>	<u>649 est.</u>	<u>1773</u>	<u>649 est.</u>	<u>3 Hr.</u>
2.										
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.	<u>11.3630</u>		<u>661</u>	<u>1.000</u>	<u>.9250</u>	<u>1.110</u>	<u>10,979</u>
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 2111 P_c² 4,456,321

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.						<u>3,146,315</u>	<u>1,270,006</u>		
2.									
3.									
4.									
5.									

Absolute Potential: 28,196 MCFPD; n .75
 COMPANY PAN AMERICAN PETROLEUM CORPORATION
 ADDRESS Box 400, Farmington, New Mexico
 AGENT and TITLE F. L. Hubers, District Engineer
 WITNESSED By: [Signature]
 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} = 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 .