

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 11-25-64
Company PAN AMERICAN PETROLEUM CORP. Lease Martin Gas Unit "B" Well No. 1
Unit G Sec. 31 Twp. 28N Rge. 10W Purchaser _____
Casing 4-1/2 Wt. 10.2 I.D. 4.02 Set at 6357 Perf. 6188-96
6163-70 To 6260-82
Tubing 2-3/8 Wt. 4.7 I.D. 1.993 Set at 6191 Perf. 6154 To 6160
Gas Pay: From 6163 To 6282 L 6223 xG .700 -GL 4356 Bar.Press. 12
Producing Thru: Casing _____ Tubing X Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 11-15-64 Packer None Reservoir Temp. _____

OBSERVED DATA

Tested Through (Pressure) (Choke) (Restrictor) Type Taps _____

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	(Pressure) (Line) Size	(Choke) (Restrictor) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	<u>10 days</u>					<u>1978</u>		<u>1981</u>		
1.	<u>2 inch</u>	<u>.720</u>	<u>547</u>			<u>547</u>	<u>60° est.</u>	<u>1101</u>	<u>60° est.</u>	<u>3 Hr.</u>
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.	<u>12.3630</u>		<u>539</u>	<u>1.000</u>	<u>.9258</u>	<u>1.073</u>	<u>6866</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 1993 P_c² 3,972,049

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>2,733,280</u>		
2.									
3.									
4.									
5.									

Absolute Potential: 9067 MCFPD; n .75COMPANY PAN AMERICAN PETROLEUM CORPORATIONADDRESS Box 480, Farmington, New MexicoAGENT and TITLE F. L. Roberts, District EngineerWITNESSED By: ORIGINAL SIGNED BYCOMPANY 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 .