

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Basin Dakota Formation Dakota County San Juan

Initial X Annual _____ Special _____ Date of Test 9-14-64

Company PAN AMERICAN PETROLEUM CORP. Lease E. E. Elliott "B" Well No. 7

Unit 8 Sec. 27 Twp. 30N Rge. 9W Purchaser _____

Casing 4-1/2" Wt. 10.5 I.D. 4.032 Set at 4473 Perf. 7200-37 To 7121-35

Tubing 2-3/8 Wt. 4.7 I.D. 1.993 Set at 7007 Perf. 6920 To 6926

Gas Pay: From 7005 To 7237 L 7121 xG .700 -GL 4905 Bar.Press. 12

Producing Thru: Casing _____ Tubing X Type Well Single

Date of Completion: 9-4-64 Packer None Reservoir Temp. _____

OBSERVED DATA

Tested Through (Flowmeter) (Choke) (None) Type Taps Flange

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	(Line) Size	(Choke) Size	Press. psig	Diff. h_w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	<u>10 days</u>					<u>1363</u>		<u>1363</u>		
1.	<u>2 inch</u>	<u>.750</u>	<u>96</u>			<u>96</u>	<u>50° est.</u>	<u>361</u>	<u>50° 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>106</u>	<u>1.000</u>	<u>.9738</u>	<u>1.012</u>	<u>1251</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 1995 P_c^2 2,344,025

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>139,676</u>	<u>2,484,149</u>		
2.									
3.									
4.									
5.									

Absolute Potential: 1305 MCFPD; n .75

COMPANY PAN AMERICAN PETROLEUM CORPORATION

ADDRESS Box 400, Farmington, New Mexico

AGENT and TITLE F. L. Roberts, District Engineer

WITNESSED

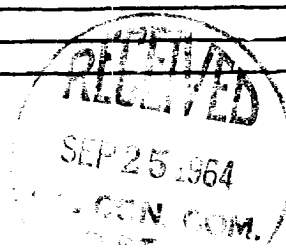
By:

ORIGINAL SIGNED BY

COMPANY

F. W. 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 .