

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Basin Dakota Formation Dakota County San Juan

Initial X Annual _____ Special _____ Date of Test 10-12-64

Company PAN AMERICAN PETROLEUM CORP. Lease Jack Frost "B" Well No. 2

Unit D Sec. 27 Twp. 17N Rge. 10W Purchaser _____

Casing 4-1/2 Wt. 10.5 I.D. 4.032 Set at 6354 Perf. 6450-80 To 6355-66

Tubing 2-3/8 Wt. 4.7 I.D. 1.995 Set at 6344 Perf. 6306 To 6313

Gas Pay: From 6355 To 6450 L 6418 xG .700 -GL 4493 Bar.Press. 12

Producing Thru: Casing _____ Tubing X Type Well Single

Date of Completion: 10-4-64 Packer None Single-Bradenhead-G. G. or G.O. Dual _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through (Hose) (Choke) (Hose) 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	# Days					1812		1873		
1.	2 Inch	.750	427			427	68° est.	930	68° est.	3 Hr.
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.	12.3650		439	1.000	.9234	1.035	5301
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 1885 P_c² 3,553,225

No.	P _w F _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.						984,401	2,648,824		
2.									
3.									
4.									
5.									

Absolute Potential: 6607 MCFPD; n .75

COMPANY PAN AMERICAN PETROLEUM CORPORATION

ADDRESS Box 480, Farmington, New Mexico

AGENT and TITLE F. L. Hobers, District Engineer

WITNESSED By: Original Signed By 1

COMPANY G. W. HART, JR.

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 .