

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Angelo Peak Dakota Formation Dakota County San Juan

Initial I Annual _____ Special _____ Date of Test 9-2-59

Company Pan American Petroleum Corp. Lease J. C. Davidson "F" Well No. 1

Unit H Sec. 28 Twp. 28N Rge. 10W Purchaser Southern Union Gas Company

Casing 4-1/2 Wt. 11.6 I.D. 4.000 Set at 6704 Perf. 6558 To 6635

Tubing 2-3/8 Wt. 4.7 I.D. 1.995 Set at 6547 Perf. Open ended; no perforations To _____

Gas Pay: From 6558 To 6635 L 6547 xG 0.70(est.) GL 4583 Bar.Press. 12

Producing Thru: Casing _____ Tubing I Type Well Single gas

Date of Completion: 9-18-59 Packer None Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. 140°F.

OBSERVED DATA

Tested Through (Hose) (Choke) (Hose) Type Taps _____

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	Shut in	15 days				1988		1995		
1.	2"	3/4"	480		80°(est)	685		1309		3 hours.
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.	12.365		492	1.000	0.9258	1.062	5981
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.

Gravity of Liquid Hydrocarbons _____ deg.

P_c _____ (1-e^{-s})

Specific Gravity Separator Gas _____

Specific Gravity Flowing Fluid _____

P_c 2000 P_c^2 4,000,000

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	$\frac{P_w}{P_c}$
1.						1,729,225	2,270,775		
2.									
3.									
4.									
5.									

Absolute Potential: 9145 MCFPD; n 0.75

COMPANY Pan American Petroleum Corporation

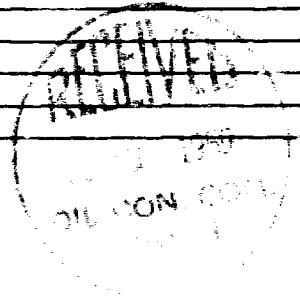
ADDRESS Box 487, Farmington, New Mexico

AGENT and TITLE R. M. Bauer, Jr., Area Engineer

WITNESSED _____

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 .

