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 __10/28/64__

Company __PAN AMERICAN PETROLEUM CORP.__ Lease __W. B. Roach "A"__ Well No. __9__

Unit __B__ Sec. __9__ Twp. __29N__ Rge. __9W__ Purchaser __El Paso Natural Gas Company__

Casing __4-1/2__ Wt. __10.5__ I.D. __4.052__ Set at __6761__ Perf. __6435-34 6471-84__ To __6350-43 6404-93__

Tubing __2-3/8__ Wt. __4.7__ I.D. __1.995__ Set at __6547__ Perf. __Open__ To __Ended__

Gas Pay: From __6350__ To __6404__ L __6417__ xG __0.700__ -GL __4632__ Bar.Press. __12__

Producing Thru: Casing _____ Tubing __X__ Type Well __Single__

Date of Completion: __10-28-64__ Packer __None__ Single-Bradenhead-G. G. or G.O. Dual Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) Type Taps __Flange__

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h_w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	5 Days					2237		2237		
1.	2 Inch	3/4"	231			231	60° est.	400		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.	12.3636		243	1.000	.9258	1.022	2000
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 __2237__ P_c^2 __4,403,801__

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.						258,100	4143,701		
2.									
3.									
4.									
5.									

Absolute Potential: __2003__ MCFPD; n __.73__

COMPANY __PAN AMERICAN PETROLEUM CORPORATION__
ADDRESS __Box 480, Farmington, New Mexico__
AGENT and TITLE __J. Lombard, District Engineer__
WITNESSED by: __F. W. Funk__ ORIGINAL SIGNED BY
COMPANY _____

REMARKS
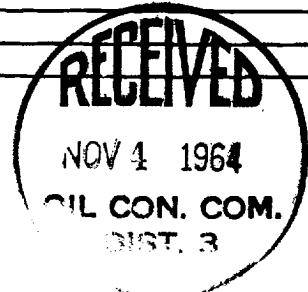
INSTRUCTIONS

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.