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 Rio Arriba

Initial X Annual ____ Special ____ Date of Test October 6, 1961

Company Pan American Petroleum Corporation Lease Jicarilla Gas Unit "B" Well No. 1

Unit G Sec. 31 Twp. 26N Rge. 5W Purchaser El Paso Natural Gas Company

Casing 5½ Wt. 15.5 I.D. 4.950 Set at 7227 Perf. 6894 To 6903

Tubing 2 1/16 Wt. 3.4 I.D. 1.750 Set at 6885 Perf. Open ended To ____

Gas Pay: From 6894 To 6903 L 6885 xG 0.745 -GL 5114 Bar.Press. 12

Producing Thru: Casing ____ Tubing T Type Well Gas-Gas Dual*

Date of Completion: 9/26/61 Packer 6869 Single-Bradenhead-G. G. or G.O. Dual Reservoir Temp. ____

*Dual with Otero Chacra

OBSERVED DATA

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

No.	Flow Data (Prover) (Line) Size	Flow Data (Choke) (Orifice) Size	Flow Data Press. psig	Flow Data Diff. h_w	Flow Data Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI	7 days shut in					2010				
1.	2 in.	3/4 in.	66		60°F.	66	60° F.			3 hours
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.	12.3050		78	1.000	0.9774	1.039	873
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio ____ cf/bbl. Specific Gravity Separator Gas ____

Gravity of Liquid Hydrocarbons ____ deg. Specific Gravity Flowing Fluid ____

F_c 13.25 $(1-e^{-s})$ 0.321 P_c 2082 P_c^2 4,038,464

No.	P_w P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$(F_cQ)^2$ $(1-e^{-s})$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.	200	10,000	11.567	133.795	41.680	38,440	4,036,076		
2.									
3.									
4.									
5.									

Absolute Potential: 881 MCFPD; n 0.75

COMPANY Pan American Petroleum Corporation

ADDRESS P. O. Box 480, Farmington, New Mexico

AGENT and TITLE R. W. Bauer, Jr. Senior Petroleum Engineer

WITNESSED ____

COMPANY ____

REMARKS

RECEIVED
OCT 20 1961
OIL CON. COM.
DIST. 3

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.