NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blanco Mesaverde Formation Mesaverde County San Juan

Initial X Annual Special Date of Test March 26, 1962

Company Pan American Petroleum Corp. Lease Duff Gas Unit "B" Well No. 1

Unit P Sec. 27 Twp. 29N Rge. 12W Purchaser

Casing 4-1/2" Wt. 9.5 I.D. 4.090 Set at 3596 Perf. 3448 To 3471

Tubing 2-3/8" Wt. 4.7 I.D. 1.995 Set at 3485 Perf. open ended To

Gas Pay: From 3448 To 3471 L 3460 xG .700 (est.) -GL 2422 Bar.Press. 12

Producing Thru: Casing Tubing X Type Well Single
Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 3-19-62 Packer Reservoir Temp.

OBSERVED DATA

Tested Through [redacted] (Choke) [redacted] Type Taps Flange

No.	Flow Data [redacted] (Line) Size	Flow Data (Choke) [redacted] 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 SI					1327		1345		7 days
1.	2 inches	3/4	417			522		776		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.	12.3650		429	1.000	.9258	1.054	5176
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 1357 P_c^2 1,841,449

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	P_w / P_c
1.						620,956	1,220,505		
2.									
3.									
4.									
5.									

Absolute Potential: 7046 MCFPD; n 0.75

COMPANY Pan American Petroleum Corporation
ADDRESS P. O. Box 480, Farmington, New Mexico
AGENT and TITLE F. W. Poell, Petroleum Engineer F. W. Poell
WITNESSED
COMPANY

REMARKS

RECEIVED
APR 5 1962
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.