NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Gavilan Pictured Cliffs Formation Pictured Cliffs County Rio Arriba

Initial X Annual ____ Special ____ Date of Test May 6, 1962

Company Pan American Petroleum Corp. Lease Jicarilla Apache "A" 118 Well No. 3

Unit A Sec. 25 Twp. 26-N Rge. 3-W Purchaser ---

Casing 4-1/2" Wt. 9.5 I.D. 4.090 Set at 4125 Perf. 4013 To 4026

Tubing 1-1/2" Wt. 2.9 I.D. 1.610 Set at 4005 Perf. 3973 To 4005

Gas Pay: From 3966 To 4026 L 4005 xG 0.70 est. -GL 2803 Bar.Press. 12

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

Date of Completion: ____ Packer None Reservoir Temp. ---

OBSERVED DATA

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

	Flow Data					Tubing Data		Casing Data		
No.	[redacted] (Line) Size	(Choke) [redacted] Size	Press. psig	Diff. h_w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	Duration of Flow Hr.
SI	7 days					959		959		
1.	2 inches	3/4"	204			225	60° (est.)	715	60	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.							
2.	12.3650		216	1.000	0.9298	1.085	2537
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 ____ $(1-e^{-s})$ ____ P_c 971 P_c^2 942,841

No.	P_w P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$\frac{(F_cQ)^2}{(1-e^{-s})}$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.						528,529	414,312		
2.									
3.									
4.									
5.									

Absolute Potential: 2566 MCFPD; n 0.85
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
MAY 10 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.