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 San Juan

Initial X Annual Special Date of Test 6-14-61

Company Pan American Petroleum Corp. Lease E. H. Pipkin Well No. 12

Unit G Sec. 12 Twp. 27N Rge. 11W Purchaser Southern Union Gas Company

Casing 4.5 Wt. 9.5 I.D. 4.090 Set at 6370 Perf. 6214 To 6236

Tubing 2-3/8 Wt. 4.7 I.D. 1.995 Set at 6192 Perf. open ended To

Gas Pay: From 6210 To 6240 L 6192 xG .700(est) -GL 4334 Bar.Press. 12

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

Date of Completion: 5-24-61 Packer None Reservoir Temp. 143° F

OBSERVED DATA

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

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	21 days					2037		2039		
1.	2"	3/4"		137		216	60(est)	549	60(est)	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.	12.365		169	1.000	.9258	1.021	1975
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 _____ $(1-e^{-s})$ _____ P_c 2051 P_c^2 4,206,601

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.									
2.						324,721	3,881,880		
3.									
4.									
5.									

Absolute Potential: 2094 MCFPD; n .75

COMPANY Pan American Petroleum Corporation
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AGENT and TITLE R. H. Bauer, Jr.; Senior Petroleum Engineer
WITNESSED
COMPANY

REMARKS

JUN 16 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.