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 December 9, 1960

Company Pan American Petroleum Corp. Lease Hancock Gas Unit Well No. 1

Unit L Sec. 15 Twp. 30N Rge. 12W Purchaser Not committed

Casing 4-1/2 Wt. 9.5 I.D. 4.090 Set at 6600 Perf. 6488-6495, 6517-6530 To ____

Tubing 2-3/8 Wt. 4.7 I.D. 1.995 Set at 6497 Perf. open ended - no perforations To ____

Gas Pay: From 6488 To 6530 L 6497 x 0.70(est) -GL 4548 Bar.Press. 12

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

Date of Completion: 11-18-60 Packer None Reservoir Temp. 167

OBSERVED DATA

Tested Through [illegible] (Choke) [illegible] Type Taps ____

No.	Flow Data: [illegible] (Line) Size	Flow Data: (Choke) [illegible] 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	Shut in 8 days					1960		1960		
1.	2-inch	3/4-inch	222		60 (est)	382		465		3 hrs.
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		234	1.000	0.9258	1.028	2754
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio ____ cf/bbl. Specific Gravity Separator Gas 0.70

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

F_c ____ $(1-e^{-s})$ ____ P_c 1972 P_c^2 3,888,784

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.						378,225	3,510,559		
2.									
3.									
4.									
5.									

Absolute Potential: 2959 MCFPD; n 0.75

COMPANY Pan American Petroleum Corporation

ADDRESS Box 480, Farmington, New Mexico

AGENT and TITLE R. H. Bauer, Jr., Area Engineer

WITNESSED ____

COMPANY ____

REMARKS

RECEIVED
DEC 14 1960
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.