ILLEGIBLE NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK-PRESSURE TEST FOR GAS WELLS

Pool Langlie Mattix Formation Queen County Lea

Initial ____ Annual ____ Special X Date of Test 4-29/30-57

Company Pan American Petroleum Corp. Lease Myers "A" Well No. 6

Unit J Sec. 22 Twp. 24-S Rge. 37-E Purchaser Permian

Casing 5½" Wt. 17.0# I.D. 4.892" Set At 3358' Perf. 3360' To 3530'

Tubing 2-3/8" Wt. 4.7# I.D. 1.995" Set At 3561' Perf. ____ To ____

Gas Pay: From 3359' To 3562' L 3360' xG 0.670 -GL 2251 Bar.Press. 13.2

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

Date of Completion: 3-17-49 Packer ____ Reservoir Temp. ____

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								415.2		68-1/2 HR. SIP
1.	2"	1/8"	412.4		68			412.4		3
2.	2"	3/16"	407.6		68			407.6		3
3.	2"	7/32"	402.3		68			402.3		3
4.	2"	1/4"	396.2		68			396.2		3
5.	2"	1/4"	382.6		72			382.6		20

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w p_m}$	Pressure Prover psia	Flow Temp. Factor F_t	Gravity Factor F_g	Compress. Factor F_{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	0.3418		425.6	0.9924	0.9463	1.044	143
2.	0.7852		420.8	0.9924	0.9463	1.043	324
3.	1.0834		415.5	0.9924	0.9463	1.043	441
4.	1.4030		409.4	0.9924	0.9463	1.041	562
5.	1.4030		395.8	0.9887	0.9463	1.039	540

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio ____ Specific Gravity Separator Gas ____
Gravity of Liquid Hydrocarbons ____ Specific Gravity Flowing Fluid ____
F_c 1.812 $(1-e^{-s})$ 0.143 P_c 428.4 P_c^2 183.5

No.	P_w / P_t (psia)	P_t^2	$F_c Q$	$(F_c Q)^2$	$(F_c Q)^2 (1-e^{-s})$	P_w^2	$P_c^2 - P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.	425.6	181.1	0.2591	0.0671	0.0096	181.1	2.4	425.6	.99
2.	420.8	177.1	0.5871	0.3447	0.0493	177.1	6.4	420.8	.98
3.	415.5	172.6	0.7991	0.6386	0.0913	172.7	10.8	415.6	.97
4.	409.4	167.6	1.018	1.036	0.1481	167.7	15.8	409.5	.96
5.	395.8	156.7	0.9785	0.9575	0.1369	156.8	26.7	396.0	.92

Absolute Potential: 2500 MCFPD; n 0.61
COMPANY Pan American Petroleum Corporation
ADDRESS Post Office Box 68 Hobbs, New Mexico
AGENT and TITLE M. C. McPhail Field Engineer
WITNESSED ____
COMPANY ____

ELVIS A. UTZ

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.