NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blanco Pictured Cliffs Formation Pictured Cliffs County San Juan

Initial X Annual ____ Special ____ Date of Test November 29, 1961

Company Pan American Petroleum Corp. Lease Elliott Gas Unit "M" Well No. 1

Unit I Sec. 33 (10.5) Twp. 30N (4.090) Rge. 9W Purchaser El Paso Natural Gas Company

Casing 4-1/2" Wt. 9.5 I.D. 4.052 Set at 2435 Perf. 2343 To 2349

Tubing 1-1/4" Wt. 2.4 I.D. 1.380 Set at 2325 Perf. ---- To ----

Gas Pay: From 2343 To 2349 L 2346 xG .65 est -GL 1528 Bar.Press. 12

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

Date of Completion: 11-21-61 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	8 Days					963		963		
1.	2"	3/4"	331			369		362	60° est	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.	12.3690		343	1.0000	.9648	1.055	4210
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 997 P_c^2 993,049

No.	P_w Pt (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	$\frac{P_w}{P_c}$
1.						344,129	773,700		
2.									
3.									
4.									
5.									

Absolute Potential: 4868 MCFPD; n 0.85
COMPANY Pan American Petroleum Corporation
ADDRESS B on 460, Farmington, New Mexico
AGENT and TITLE R. H. Ramey, Jr. Senior Petroleum Engineer
WITNESSED ____
COMPANY ____

REMARKS

RECEIVED
DEC 8 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.