NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool **Fulcher Kutz-Pictured Cliffs** Formation **Pictured Cliffs** County **San Juan**

Initial **X** Annual _____ Special _____ Date of Test **2-18-58**

Company **PAN AMERICAN PETROLEUM CORP.** Lease **Keys Gas Unit "B"** Well No. **1**

Unit **D** Sec. **32** Twp. **29N** Rge. **10W** Purchaser **El Paso Natural Gas Company**

Casing **5-1/2** Wt. **14#** I.D. **5.012** Set at **1905** Perf. **1830** To **1854**

Tubing **1.66** Wt. **2.3#** I.D. **1-1/4"** Set at **1849** Perf. **1839** To **1849**

Gas Pay: From **1830** To **1854** L **1844** xG.**49 (est)** _GL Bar.Press. **12**

Producing Thru: Casing **X** Tubing _____ Type Well **Gas - Single**

Date of Completion: **1-5-58** Packer **No.**

Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. **100° F**

OBSERVED DATA

Tested Through **~~Prover~~** (Choke) **~~Orifice~~** Type Taps _____

No.	Flow Data (Prover)(Line) Size	(Choke) Size	Press. psig	Diff. h_w	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**	**44 days**				**440**		**440**		
1.		**3/4**	**154**		**60 (est)**	**173**	**60 (est)**	**154**	**60 (est)**	**3**
2.										
3.										
4.										
5.										

FLOW CALCULATIONS

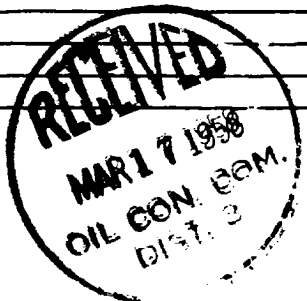| No.	Coefficient (24-Hour)	$\sqrt{h_w p_f}$	Pressure psia	Flow Temp. Factor F_t	Gravity Factor F_g	Compress. Factor F_{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	**12.58**		**166**	**1.000**	**0.9325**	**1.060**	**1952**
2.							
3.							
4.							
5.							

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 **652** P_c^2 **425,104**

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.					**3.25**	**375.57**			
2.									
3.									
4.									
5.									

Absolute Potential: **2074** MCFPD; n **0.83**

COMPANY **PAN AMERICAN PETROLEUM CORPORATION**
ADDRESS **Box 147, Farmington, New Mexico**
AGENT and TITLE **R. L. Beard, Jr., Field Engineer** *R L M Beard Jr*
WITNESSED _____
COMPANY _____

REMARKS

ILLEGIBLE

RECEIVED MAR 17 1958 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.