NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Undesignated Formation Pictured Cliffs County San Juan

Initial x Annual Special Date of Test 2-12-59

Company Pan American Petroleum Corp. Lease State of New Mexico "A" Gas Unit "A" Well No. 1

Unit L Sec. 36 Twp. 29N Rge. 9W Purchaser El Paso Natural Gas Company

Casing 4-1/2 Wt. 9.5 I.D. 4.090 Set at 2155 Perf. 2081 To 2115

Tubing 1.66 Wt. 2.3 I.D. 1-1/4 Set at 2094 Perf. 2094 To 2094

Gas Pay: From 2081 To 2115 L 2081 xG 0.69(est) -GL 1436 Bar.Press. 12

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

Date of Completion: 2-3-59 Packer none Reservoir Temp. 91°F

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	Shut-in 30 days					857		857		
1.	2"	3/4"	167		60°(est)	180	60°(est)	167	60°(est)	3 hours
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		179	1.000	0.9325	1.020	2105
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 869 P_c^2 755,161

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.						36,864	718,297		
2.									
3.									
4.									
5.									

Absolute Potential: 2196 MCFPD; n 0.85

COMPANY PAN AMERICAN PETROLEUM CORPORATION
ADDRESS Box 487, Farmington, New Mexico
AGENT and TITLE R. M. Bauer, Jr., Field Engineer
WITNESSED
COMPANY

REMARKS

RECEIVED
MAR 6 1959
OIL CON. COM.

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.