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 1-22-59

Company Pan American Petroleum Corp. Lease J. L. Elliott "C" Well No. 2

Unit F Sec. 9 Twp. 30N Rge. 9W Purchaser El Paso Natural Gas Company

Casing 4-1/2 Wt. 9.5 I.D. 4.090 Set at 3060 Perf. 2985 To 3018

Tubing 1.66 Wt. 2.3 I.D. 1-1/4 Set at 3011 Perf. 3001 To 3011

Gas Pay: From 2985 To 3018 L 2985 xG 0.69(est) -GL 2060 Bar.Press. 12

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

Date of Completion: 1-14-59 Packer none Reservoir Temp. 101°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 8 days					1029		1029		
1.	2"	3/4"	186		60(est)	206	60(est)	196	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.	12.365		198	1.000	0.9325	1.073	2336
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 1041 P_c^2 1,083,681

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.						47,524	1,036,157		
2.									
3.									
4.									
5.									

Absolute Potential: 2427 MCFPD; n 0.85
COMPANY PAN AMERICAN PETROLEUM CORPORATION
ADDRESS Box 487, Farmington, New Mexico
AGENT and TITLE R. W. Bauer, Jr., Field Engineer R W Bauer Jr.
WITNESSED
COMPANY

REMARKS

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.