NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Tapacito-Pictured Cliffs Formation Pictured Cliffs County Rio Arriba

Initial x Annual _____ Special _____ Date of Test 12-4-58

Company PAN AMERICAN PETROLEUM CORP. Lease Fred Phillips "C" Well No. 2

Unit E Sec. 15 Twp. 25-N Rge. 3-W Purchaser El Paso Natural Gas Company

Casing 4-1/2" Wt. 9.5 I.D. 4.090 Set at 3956 Perf. 3783 To 3807

Tubing 2-3/8 Wt. 4.7 I.D. 1.995 Set at 3807 Perf. 3801 To 3807

Gas Pay: From 3783 To 3807 L 3795 xG 0.69(est) -GL 2619 Bar.Press. 12

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

Date of Completion: 11-25-58 Packer None Reservoir Temp. 98° F.

OBSERVED DATA

Tested Through ~~(Orifice)~~ (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 9 days					1033		1033		
1.	2"	3/4"	430		60(est)	505	60(est)	435	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		442	1.000	0.9525	1.054	5372
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl. Specific Gravity Separator Gas _____
Gravity of Liquid Hydrocarbons _____ deg. Specific Gravity Flowing Fluid _____
F_c _____ $(1-e^{-s})$ _____ P_c 1045 P_c^2 1,092,025

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.						267,289	824,736		
2.									
3.									
4.									
5.									

Absolute Potential: 6817 MCFPD; n 0.85

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

OIL CONSERVATION COMMISSION
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