

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Tanque Pictured Cliffs Formation Pictured Cliffs County Hidalgo
Initial X Annual _____ Special _____ Date of Test 10-5-57
Company PAN AMERICAN PETROLEUM CORP. Lease Fred Phillips Gas Unit Well No. 1
Unit A Sec. 10 Twp. 25N Rge. 3E Purchaser El Paso Natural Gas Company
Casing 3 1/2" Wt. 140 I.D. 3.012 Set at 3640 Perf. 3727 To 3758
Tubing 2 3/8" Wt. 4.71 I.D. 1.995 Set at 3735 Perf. 3729 To 3735
Gas Pay: From 3727 To 3758 L 3743 xG 0.700 -GL 2620 Bar.Press. 12
Producing Thru: Casing X Tubing _____ Type Well Gas - Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 9-14-57 Packer No Reservoir Temp. 105° F.

OBSERVED DATA

Tested Through (Annular) (Choke) (Meters) Type Taps _____

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	(Prover) (Line) Size	(Choke) (Restriction) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	Shut-In 21	days				1013		1012		
1.		3/4"	667		60	709	60	667	60	1 hour
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		667	1.000	0.9258	1.091	6355
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 0.700 est
P_c 1025 P_c² 1,050,625

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	P _w P _c
1.						519.841	530.784		0.703
2.									
3.									
4.									
5.									

Absolute Potential: 14,930 MCFPD; n 0.85

COMPANY PAN AMERICAN PETROLEUM CORPORATION

ADDRESS Box 467, Farmington, New Mexico

AGENT and TITLE E. E. 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	
AZTEC DISTRICT OFFICE	
No. Copies	5
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