

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Artesia-Pictured Cliffs Formation Pictured Cliffs County San Juan
Initial y Annual _____ Special _____ Date of Test 11-4-57
Company Pan American Petroleum Corp. Lease Artesia Gas Unit Well No. 1
Unit 2 Sec. 27 Twp. 23N Rge. 10E Purchaser El Paso Natural Gas Company
Casing 54 Wt. 34 I.D. 1.022 Set at 1920 Perf. 1928 To 1930
Tubing 14 Wt. 2.3 I.D. 1.38 Set at 1926 Perf. 1935 To 1936
Gas Pay: From 1928 To 1930 L 1929 xG 0.45 est. -GL 1189 Bar. Press. 12
Producing Thru: Casing I Tubing _____ Type Well Gas - Single
Date of Completion: 10-31-57 Packer 20 Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. 90° F. est.

OBSERVED DATA

Tested Through (Bottom) (Choke) (Bottom)

Type Taps _____

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Restriction) Size	Press.	Diff.	Temp.	Press.	Temp.	Press.	Temp.	
			psig	h _w	°F.	psig	°F.	psig	°F.	
SI	Shut in 30 days									
1.		1 1/2"	250			65	60	65	60	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.	<u>12.3450</u>		<u>270</u>	<u>1.000</u>	<u>0.9608</u>	<u>1.000</u>	<u>1297</u>
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 660 P_c 444.226

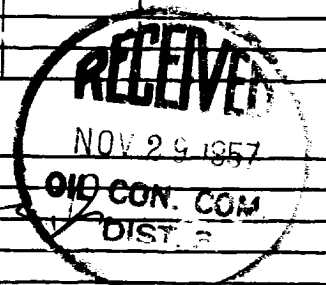
No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-s})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w /P _c
1.						<u>72,921</u>	<u>327,263</u>		
2.									
3.									
4.									
5.									

Absolute Potential: 3072 MCFPD; n 0.85COMPANY PAN AMERICAN PETROLEUM CORPORATIONADDRESS Suite 407, Farmington, New MexicoAGENT and TITLE R. M. Sawyer, 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} - Supercompressibility 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 _____