

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Otero Chacra Formation Chacra County Pio Arriba
Initial X Annual _____ Special _____ Date of Test 9-27-61
Company Pan American Petroleum Corp. Lease Jicarilla Contract 148 Well No. 14
Unit C Sec. 15 Twp. 25N Rge. 5E Purchaser -
Casing 4-1/2" Wt. 9.5 I.D. 4.090 Set at 4202 Perf. 4092-4096 To 4106-4110
Tubing 2-3/8" Wt. 4.7 I.D. 1.995 Set at 4104 Perf. open ended To _____
Gas Pay: From 4090 To 4112 L 4104 xG.O. 700 est -GL 2873 Bar.Press. 12
Producing Thru: Casing _____ Tubing X Type Well Single-Gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 7-26-61 Packer None Reservoir Temp. unknown

OBSERVED DATA

Tested Through ~~1 1/2 inch~~ (Choke) ~~3/4 inch~~ Type Taps _____

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	Start-in	63 days				905		905		
1.	2 inch	3/4 inch	136		60 est	158	60 est	981	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.							
2.	12.365		148	1.000	0.9258	1.017	1393
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 917 P_c 840,889

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.						154,449	686,440		
2.									
3.									
4.									
5.									

Absolute Potential: 1621 MCFPD; n 0.75COMPANY Pan American Petroleum CorporationADDRESS Box 480, Farmington, New MexicoAGENT and TITLE E. M. Bauer, Jr. Senior Petroleum 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 600 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 .