

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 Rio Arriba
Initial Annual Special Date of Test 10-2-61
Company Pan American Petroleum Corp. Lease Jicarilla Contract 146 Well No. 12
Unit K Sec. 4 Twp. 94N Rge. 5W Purchaser
Casing 4 1/2 Wt. 9.5 I.D. 4.090 Set at 3075 Perf. 3778-02 To 3788-92
Tubing 2 3/8 Wt. 4.7 I.D. 1.995 Set at 3822 Perf. Open Ended To
Gas Pay: From 3778 To 3782 L 3822 xG 0.70(EST) -GL 2675 Bar.Press. 12
Producing Thru: Casing Tubing 1 Type Well Single-Gas
Date of Completion 6/30/61 Packer None Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. Unknown

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter)

Type Taps

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	Shut-in	9 1/2 days								
1.	2-inch	1 1/4-inch	84		60(EST)	109	60(EST)	267	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		96	1.000	0.9758	1.000	1099
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

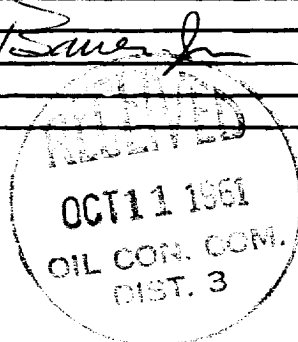
Gas Liquid Hydrocarbon Ratio cf/bbl.
Gravity of Liquid Hydrocarbons deg.
F_c (1-e^{-s})

Specific Gravity Separator Gas
Specific Gravity Flowing Fluid
P_c 865 P_c 748,225

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.						77,821	676,384		
2.									
3.									
4.									
5.									

Absolute Potential: 1193 MCFPD; n 0.75COMPANY Pan American Petroleum CorporationADDRESS P. O. Box 400AGENT and TITLE J. H. Bauer, Jr., Senior Petroleum EngineerWITNESSED 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 .