

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Gavilan Pictured Cliffs Formation Pictured Cliffs County Rio Arriba
Initial X Annual _____ Special _____ Date of Test June 12, 1962
Company Pan American Petroleum Corporation Lease Jicarilla Apache 118 "A" Well No. 5
Unit C Sec. 25 Twp. 26N Rge. 3 Purchaser _____
Casing 4 1/2 Wt. 9.5 I.D. 4.090 Set at 4151 Perf. 3992 To 3998
Tubing 1 1/2 Wt. 2.9 I.D. 1.610 Set at 4029 Perf. 3986 To 4029
Gas Pay: From 4039 To 4045 L 4019 xG 0.70 (est) GL 2813 Bar. Press. 12
Producing Thru: Casing _____ Tubing X Type Well Single
Date of Completion: June 1, 1962 Packer _____ Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

Tested Through (REMOVED) (Choke) (REMOVED) Type Taps Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(1 1/2) (Line) Size	(Choke) (3/4) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
1.	<u>11 Days</u>					<u>807</u>		<u>806</u>		
2.	<u>2"</u>	<u>3/4"</u>	<u>148</u>			<u>158</u>	<u>60° (est)</u>	<u>143</u>		<u>3 hours</u>
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	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>12.3650</u>		<u>160</u>	<u>1.000</u>	<u>.9238</u>	<u>1.019</u>	<u>1866</u>
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

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

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 819 P_c² 670,761

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>308,025</u>	<u>362,736</u>		
2.									
3.									
4.									
5.									

Absolute Potential: 3147 MCFPD; n 0.85

COMPANY Pan American Petroleum Corporation

ADDRESS P. O. Box 480, Farmington, New Mexico

AGENT and TITLE F. W. Poell, Petroleum Engineer

WITNESSED _____

COMPANY _____

REMARKS _____

RECEIVED

JUN 14 1962

OIL & GAS COM.
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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 .