

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Basin Dakota Formation Dakota County El Arriba
Initial X Annual _____ Special _____ Date of Test 10-16-63
Company PAN AMERICAN PETROLEUM CORP. Lease Jicarilla Apache 102 Well No. 12
Unit 0 Sec. 9 Twp. 24N Rge. 4W Purchaser El Paso Natural Gas Company
Casing 4-1/2 Wt. 10.5 I.D. 4.090 Set at 8320 Perf. 8018-8034 To 8034-8066
Tubing 2-3/8 Wt. 4.7 I.D. 1.995 Set at 8040 Perf. Open End To _____
Gas Pay: From 8018 To 8066 L 8042 xG .70 est. -GL _____ Bar.Press. 12
Producing Thru: Casing _____ Tubing X Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 9-19-63 Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through (Pressure) (Choke) (Restrictor) Type Taps Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Line) Size	(Choke) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	<u>27 days</u>					<u>2300</u>		<u>2410</u>		
1.	<u>2 in.</u>	<u>8.750</u>	<u>230</u>			<u>360</u>		<u>685</u>	<u>60°</u>	<u>3 hrs.</u>
2.										
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>242</u>	<u>1.000</u>	<u>.9250</u>	<u>1.020</u>	<u>2848</u>
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

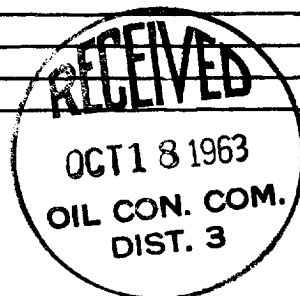
Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c _____ (1-e^{-s})

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 2422 P_c 3,844,004

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>437,200</u>	<u>3,378,800</u>		
2.									
3.									
4.									
5.									

Absolute Potential: 3039 MCFPD; n .75
COMPANY PAN AMERICAN PETROLEUM CORPORATION
ADDRESS Box 480, Farmington, New Mexico
AGENT and TITLE F. L. Mahara, District Engineer
WITNESSED By F. W. Poell
COMPANY F. W. Poell

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 .