

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Astec Formation Pictured Cliffs County San Juan
Initial I Annual _____ Special _____ Date of Test November 2, 1956
Company Astec Oil & Gas Company Lease Hare Well No. 4
Unit 0 Sec. 25 Twp. 29 Rge. 30 Purchaser Southern Union Gas Company
Casing 5 1/2 Wt. 15.5 I.D. _____ Set at 2014 Perf. 1932 To 1970
Tubing 1" Wt. 1.7# I.D. _____ Set at 1955 Perf. 1944 To 1944
Gas Pay: From 1932 To 1970 L _____ xG _____ -GL _____ Bar.Press. _____
Producing Thru: Casing I Tubing _____ Type Well Single - Gas Gas
Date of Completion: October 26, 1956 Packer None Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

Tested Through (None) (Choke) (None) 7 day Shut-in 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						705		706		
1.		<u>1/4</u>				<u>110</u>	<u>60</u>	<u>104</u>	<u>60</u>	<u>1 hour</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>12.3690</u>		<u>116</u>	<u>1.00</u>	<u>0.961</u>	<u>1.014</u>	<u>1398</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 718 P_c² 515524

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>14884</u>	<u>500640</u>		
2.									
3.									
4.									
5.									

Absolute Potential: 14.3 MCFPD; n .85

COMPANY ASTEC OIL & GAS COMPANY
ADDRESS Box 734, Farmington, New Mexico
AGENT and TITLE ORIGINAL SIGNED BY BILL R. HASTINGS, Production 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		
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