

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 X Annual _____ Special _____ Date of Test July 11, 1958

Company Astec Oil & Gas Company Lease Hampton Well No. 3

Unit A Sec. 14 Twp. 30N Rge. 11W Purchaser Southern Union Gas Company

Casing 5 1/2 Wt. 14# I.D. 5.012 Set at 2495 Perf. 2414 To 2472

Tubing 1" Wt. 1.7# I.D. _____ Set at 2455 Perf. 2433 To 2443

Gas Pay: From 2414 To 2472 L. 2414 xG 0.670 -GL 1617 Bar.Press. _____

Producing Thru: Casing X Tubing _____ Type Well Single

Date of Completion: July 5, 1958 Packer None Single-Bradenhead-G. G. or G.O. Dual Reservoir Temp. _____

OBSERVED DATA

Tested Through (Screen) (Choke) (None) 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.	
1.		0.750	217		60	588	60	588	60	7 days
2.						238	60	217	60	3 hours
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		229	1.0000	0.9463	1.025	2747
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 600 P_c² 360.000

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.	229	52441	2.340	5.476	0.608	53.049	306.951	229	
2.									
3.									
4.									
5.									

Absolute Potential: 3143 MCFPD; n 0.85

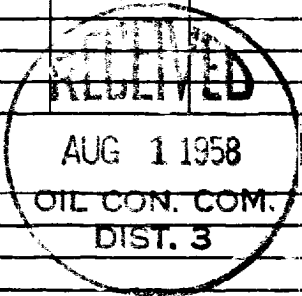
COMPANY ASTEC OIL & GAS COMPANY

ADDRESS P O Box 786, Farmington, New Mexico

AGENT and TITLE ORIGINAL SIGNED BY L. M. STEVENS, District 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} = 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 .

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