

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 16, 1958
Company Astec Oil & Gas Company Lease Eyo Well No. 5
Unit C Sec. 12 Twp. 30N Rge. 11W Purchaser Southern Union Gas Company
Casing 5 1/2 Wt. 147 I.D. 5.012 Set at 2579 Perf. 2474 To 2540
Tubing 1" Wt. 1.74 I.D. 1.049 Set at 2527 Perf. 2505 To 2515
Gas Pay: From 2474 To 2540 L 2474 xG 0.690 -GL 1698 Bar.Press. 12
Producing Thru: Casing X Tubing _____ Type Well Single
Date of Completion: July 10, 1958 Packer None Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. 556° R

OBSERVED DATA

Tested Through ~~(Pressure)~~ (Choke) ~~(Pressure)~~

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	175		60	60	60	665	60	7 days 3 hours
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.	12.365		187	1.0000	0.9608	1.000	2266
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 677 P_c² 458.329

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.						34.969	423.360		
2.									
3.									
4.									
5.									

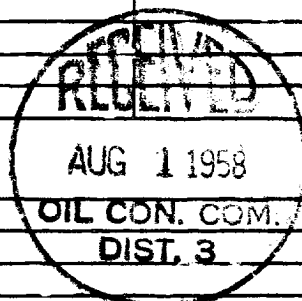
Absolute Potential: 2425 MCFPD; n 0.85COMPANY ASTEC OIL & GAS COMPANYADDRESS P.O. Box 786, Farmington, New MexicoAGENT and TITLE ORIGINAL SIGNED BY L. M. STEVENS, District Engineer

WITNESSED _____

COMPANY _____

REMARKS

Friction Loss Negligible



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 .

OIL CONSERVATION COMMISSION		
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