

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Undesignated Formation Dakota County San Juan
Initial X Annual _____ Special _____ Date of Test 11/12/60
Company Astec Oil and Gas Company Lease Block Well No. 17-D
Unit II Sec. 5 Twp. 27N Rge. 9W Purchaser _____
Casing 4 1/2 Wt. 9.70 I.D. 4.090 Set at 7140 Perf. 6932 To 7076
Tubing 2 3/8 Wt. 4.70 I.D. 1.995 Set at 6890 Perf. Pin collar To _____
Gas Pay: From 6932 To 7076 L 6890 xG 0.65(2) -GL 4479 Bar.Press. 12
Producing Thru: Casing _____ Tubing X Type Well Single
Single-Bradenhead-G. G. or G.O. Dual _____
Date of Completion: 11/4/60 Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through ~~11/12/60~~ (Choke) ~~11/12/60~~ 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						1985		1984		7 hrs.
1.		0.750				254	44.0	541		
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.	12.363		275	1.0000	0.9608	1.031	103.1
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
P_c _____ (1-e^{-S}) _____
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 1936 P_c 3.748.096

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.	665								
2.									
3.									
4.									
5.									

Absolute Potential: 3701 MCFPD; n 0.75

COMPANY Astec Oil and Gas Company

ADDRESS _____

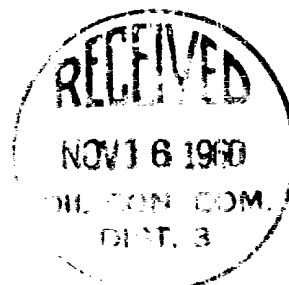
AGENT and TITLE _____

WITNESSED _____

COMPANY _____

Drummer # 370, Farmington, New Mexico
L. H. Stevens, Dist. Eng.

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 .

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