

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blanco Formation Mesaverde County San JuanInitial XX Annual _____ Special _____ Date of Test 8/19/59Company Aztec Oil and Gas Company Lease Culpepper-Martin Well No. 11Unit A Sec. 29 Twp. 32N Rge. 12W Purchaser _____Casing 7 Wt. 20 & 23 I.D. _____ Set at 4935 Perf. 4686 To 4893Tubing 2 3/8 Wt. 11.6 I.D. 1.995 Set at 4894 Perf. 4884 To 4894Gas Pay: From 4686 To 4893 L _____ xG _____ -GL _____ Bar.Press. _____Producing Thru: Casing _____ Tubing XX Type Well Single-gas

Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 8-19-59 Packer _____ Reservoir Temp. 140 degree (est.)TD - 4935'PBD-4904'RDB-5970'

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) Type Taps _____

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						1011		1011		7 days
1.		.750	394			394		888		3 hours
2.										
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		406	.9859	.9608	1.037	4.931
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 1023 P_c 1,046,529

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.	900					810,000	236,529		
2.									
3.									
4.									
5.									

Absolute Potential: 15,040 MCFPD; n 75COMPANY Aztec Oil and Gas CompanyADDRESS Box # 786, Farmington, New MexicoAGENT and TITLE ORIGINAL SIGNED BY D. K. BRYANT

D. K. Bryant, 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} = 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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