

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Art 30 Formation Permian County Santa Fe
 Initial X Annual _____ Special _____ Date of Test 11/2/59 *
 Company Art 30 Oil & Gas Co. Lease Permian Well No. 1
 Unit 2 Sec. 12 Twp. 2 Rge. 1 Purchaser _____
 Casing 1 1/2 Wt. 10.7 I.D. 1.049 Set at 1000 Perf. 1006 To 1005
 Tubing 1 Wt. 1.7 I.D. 1.049 Set at 1000 Perf. 1005 To 1005
 Gas Pay: From 1005 To 1005 L _____ xG _____ -GL _____ Bar.Press. _____
 Producing Thru: Casing 1 Tubing _____ Type Well _____
 Date of Completion: _____ Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Choke) (Notes) 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
SI									
1.		.750	272			103	100	103	100
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.	12.35		302	1.00	.905	1.00	3720
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
 Gravity of Liquid Hydrocarbons _____ deg.
 Specific Gravity Separator Gas _____
 Specific Gravity Flowing Fluid _____
 P_c _____ (1-e^{-s}) P_c 115 P_c 11.225

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.	322					103,000	27,100		
2.									
3.									
4.									
5.									

Absolute Potential: _____ MCFPD; n _____
 COMPANY _____
 ADDRESS _____
 AGENT and TITLE ORIGINAL SIGNED BY D. K. BRYANT
 WITNESSED _____
 COMPANY _____

REMARKS

* Select - Initial test was obtained through this well at 1000.



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 .