

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Alamogordo Formation Alamo County Doña Ana
Initial 7883 Annual _____ Special _____ Date of Test 7-1-56
Company Phillips 66 Lease State Well No. _____
Unit _____ Sec. 2 Twp. 40N Rge. 6E Purchaser Phillips 66
Casing 2 1/2" Wt. 17 I.D. 2.000 Set at 750 Perf. 750 To 750
Tubing 2 3/8" Wt. 4.7 I.D. 1.945 Set at 750 Perf. 750 To 750
Gas Pay: From _____ To _____ L 300 xG 0.00 -GL 0.00 Bar.Press. 1
Producing Thru: Casing _____ Tubing 750 Type Well 3-42
Date of Completion: 7-1-56 Packer none Reservoir Temp. 100
Single-Bradenhead-G. G. or G.O. Dual

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) 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			225			225		225		
1.		1/2	225			225		225		
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.	1.000						
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c 0.000 (1-e^{-s}) 0.000
Specific Gravity Separator Gas 0.00
Specific Gravity Flowing Fluid _____
P_c 0.00 P_c 0.00

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.	225	50625	0.000	0.000	0.000	225 ²	0.000-225 ²	225	0.000/225
2.									
3.									
4.									
5.									

Absolute Potential: _____ MCFPD; n _____
COMPANY Phillips 66
ADDRESS 1000 N. 1st St., Alamogordo, N.M.
AGENT and TITLE Frank Gray
WITNESSED _____
COMPANY _____

REMARKS

ILLECIBLE



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 .