

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Undesignated Formation Dakota County San Juan
Initial X Annual _____ Special _____ Date of Test 11-9-60
Company adobe oil company Lease Harris Well No. 1
Unit N Sec. 28 Twp. 31 N Rge. 13 W Purchaser El Paso Natural gas co.
Casing 5 1/2 Wt. 15.5 I.D. 4.990 Set at 6475 Perf. 6246 To 6400
Tubing 2 3/8 Wt. 4.7 I.D. 1.995 Set at 6390 Perf. -- To --
Gas Pay: From 6246 To 6400 L 6323 xG .67 -GL 4236 Bar.Press. 12.0
Producing Thru: Casing _____ Tubing X Type Well single-cas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 10-25-60 Packer No Reservoir Temp. _____

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.	
SI								
1.		3/4				2011	2001	7 day
2.						173	62°	3 hour
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.	12.3650		185	.9981	.9463	1.0225	2.201
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 2023 P_c² 4096.5
F_w 630 F_w² 396.9

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.									
2.						396.9	3699.6		.311
3.									
4.									
5.									

Absolute Potential: 2.377 MCFPD; n .75
COMPANY adobe oil company
ADDRESS 1223 Petroleum Life Bldg., Midland, Texas
AGENT and TITLE G.L. Hoffman
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 .