

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool BALLARD PICTURED CLIFFS Formation PICTURED CLIFFS County SAN JUAN
 Initial XXX Annual _____ Special _____ Date of Test 1-18-64
 Company HURON DRILLING COMPANY, INC. Lease NEWSOM Well No. 1
 Unit "B" Sec. 21 Twp. 26N Rge. 8W Purchaser SOUTHERN UNION GAS COMPANY
 Casing 1 1/2" Wt. 16.6 I.D. 2.82 Set at 2422 Perf. 2208 To 2330
 Tubing 1 Wt. 1.90 I.D. 1.00 Set at 2256 Perf. 2252 To 2256
 Gas Pay: From 2208 To 2330 L _____ xG _____ -GL _____ Bar.Press. 12.0
 Producing Thru: Casing XX Tubing _____ Type Well SINGLE - GAS
 Single-Bradenhead-G. G. or G.O. Dual _____
 Date of Completion: 1-8-64 Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through (XXXXXX) (Choke) (XXXXXX) 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						615		610		9 DAYS
1.		3/4"	113		60	130		113	60	3 HRS.
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.	12.3650		125	1.000	0.9463	1.012	1,480
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 627 P_c² 393
 P_w 142 P_w² 20

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.						20	807		0.226
2.									
3.									
4.									
5.									

Absolute Potential: 1,517 MCFPD; n 0.85
 COMPANY HURON DRILLING COMPANY, INC.
 ADDRESS 715 FARMERS UNION BLDG., DENVER 3, COLORADO
 AGENT and TITLE R. N. PHILLIPS, DRILLING SUPERINTENDENT
 WITNESSED G. D. NOLAND, JR.
 COMPANY SOUTHERN UNION PRODUCTION 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 .