

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 XX Annual _____ Special _____ Date of Test JANUARY 1, 1964
Company HURON DRILLING COMPANY, INC. Lease NEWSOM Well No. 2
Unit C Sec. 22 Twp. 26-N Rge. 8-W Purchaser SOUTHERN UNION GAS COMPANY
Casing 4 1/2 Wt. 16.6 I.D. 3.82 Set at 2890 Perf. 2714 To 2795
Tubing 1 Wt. 1.90 I.D. 1.00 Set at 2701 Perf. 2700 To 2701
Gas Pay: From 2714 To 2795 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: 12-23-63 Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through (~~Proven~~) (Choke) (~~Meaten~~) Type Taps _____

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	(Proven) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
1.						546		549		7 DAYS
2.		3/4"				222		194	60	3 HRS.
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		206	1.000	0.9463	1.022	2463
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c _____ (1-e^{-s})

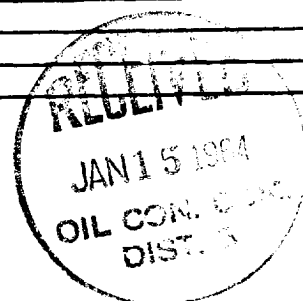
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 561 P_c² 314.7
P_w 234 P_w² 54.7

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.						54.7	260		0.418
2.									
3.									
4.									
5.									

Absolute Potential: 2,906 MCFPD; n 0.85

COMPANY HURON DRILLING COMPANY, INC.
ADDRESS 715 FARMERS UNION BLDG., DENVER 3, COLORADO
AGENT and TITLE R. N. PHILLIPS, DRILLING SUPT.
WITNESSED G. D. HOLLAND, 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 .