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 X Annual _____ Special _____ Date of Test Feb. 17, 1964

Company Huron Drilling Company, Inc. Lease Newsom Well No. 3

Unit M Sec. 9 Twp. 26N Rge. 8W Purchaser Southern Union Gas Company

Casing 4 1/2" Wt. 9.50 I.D. 4.090 Set at 2494 Perf. 2280 To 2379

Tubing 1" Wt. 1.70 I.D. 1.049 Set at 2353 Perf. 2343 To 2353

Gas Pay: From 2280 To 2379 L _____ xG 0.67 Est. -GL _____ Bar.Press. 12.0

Producing Thru: Casing x Tubing _____ Type Well Single Gas
Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: Feb. 10, 1964 Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through ~~(Prover)~~ (Choke) ~~(Meter)~~ Type Taps _____

No.	Flow Data (Prover) (Line) Size	Flow Data (Choke) (~~Meter~~) Size	Flow Data Press. psig	Flow Data Diff. h_w	Flow Data Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI						580		585		7 Days
1.		3/4"	167		60°	190		167	60°	3 Hours
2.										
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w p_f}$	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		179	1.000	0.9463	1.019	2,134
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 597 P_c^2 356.4
P_w 202 P_w^2 40.8

No.	P_w P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$\frac{(F_cQ)^2}{(1-e^{-s})}$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.						40.8	315.6		0.338
2.									
3.									
4.									
5.									

Absolute Potential: 2,369 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. Noland
COMPANY Southern Union Production Company

REMARKS

RECEIVED
APR 10 1964
OIL CON. COM.
DIST. 3

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.