NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

RE-TEST

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blanco Mesaverde Formation Mesaverde County San Juan

Initial ____ Annual ____ Special XX Date of Test 3-11-65

Company Southern Union Production Co. Lease Newsom Well No. 9-B

Unit G Sec. 7 Twp. 26-N Rge. 8-W Purchaser El Paso Natural Gas Company

Casing 5-1/2 Wt. 17.0# I.D. 4.892 Set at 6660 Perf. 4276 To 4360

Tubing 1-1/4 Wt. 2.30# I.D. 1.380 Set at 4311 Perf. 4311 To 4311

Gas Pay: From 4276 To 4360 L 4276 xG .730 -GL 3121 Bar.Press. 12.0

Producing Thru: Casing ____ Tubing XX Type Well G. G. Dual
Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 3-1-65 Packer 6200 Reservoir Temp. ____

OBSERVED DATA

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

No.	Flow Data (Prover) (Line) Size	Flow Data (Choke) (Orifice) 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						954		957		10 days
1.	2"	3/4"	70		47°	70	47°	654		3 Hrs.
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		82	1.0127	.9066	1.012	942
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 969 P_c^2 938961

No.	P_w Pt (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.						443556	495405		.687
2.									
3.									
4.									
5.									

Absolute Potential: 1522 MCFPD; n .75

COMPANY Southern Union Production Company
ADDRESS P. O. Box 808 - Farmington, New Mexico
AGENT and TITLE Verne S. Rockhold - Jr. Engineer
WITNESSED Don Norton
COMPANY El Paso Natural Gas Company

~~Original Signed By~~
~~VERNE ROCKHOLD~~

REMARKS

(3) New Mexico O.C.C.
(1) Mr. Paul J. Clote
(1) El Paso Natural Gas Co., Proration Dept., El Paso, Texas
(1) Mr. A. L. Kindricks, Box 990 - Farmington, New Mexico
(1) File

RECEIVED
MAR 17 1965
OIL CON. COM.

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.