NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Blanco Mesa Verde Formation Mesaverde County San Juan

Initial X Annual ____ Special ____ Date of Test Sept. 22, 1958

Company Southern Union Gas Co. Lease OXNARD Well No. 2

Unit H Sec. 7 Twp. 31 Rge. 8 Purchaser ____

Casing 5½ Wt. 15.5# I.D. 4.950 Set at 5915 Perf. PL 5624 CH 5280 To 5842 5602

Tubing 2-3/8 Wt. 4.7# I.D. 1.990 Set at 5800 Perf. 5785 To 5800

Gas Pay: From 5280 To 5842 L 5785 xG 67 -GL 3875.9 Bar.Press. 12.0

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

Date of Completion: Sept. 13, 1958 Packer ____ Reservoir Temp. ____

OBSERVED DATA

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

	Flow Data					Tubing Data		Casing Data		
No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h_w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	Duration of Flow Hr.
SI						1029		1029		7 days
1.		3/4"	281		73°	281	73°	760		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		293	9877	9463	1.029	3,484
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

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

Specific Gravity Separator Gas ____
Specific Gravity Flowing Fluid ____
P_c 1041 P_c^2 1083.7
P_w 772 P_w^2 595.9

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.						595.9	487.8		742
2.									
3.									
4.									
5.									

Absolute Potential: 6,341 MCFPD; n 0.75
COMPANY Southern Union Gas Company
ADDRESS P. O. Box 815, Farmington, N. Mex.
AGENT and TITLE G. L. Hoffman
WITNESSED ____
COMPANY ____

REMARKS

Top 5½" liner @ 3300' T.D. 5915
7-5/8" 23# Set @ 3527

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.