NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool **Basin Dakota** Formation **Dakota** County **San Juan**

Initial **XX** Annual Special Date of Test **1-9-64**

Company **Southern Union Production Co.** Lease **Taliaferro** Well No. **5**

Unit **H** Sec. **30** Twp. **31-N** Rge. **12-W** Purchaser **El Paso Natural Gas Company**

Casing **4-1/2** Wt. **10.50** I.D. **4.052** Set at **7001** Perf. **6800** To **6909**

Tubing **1-1/2** Wt. **2.90** I.D. **1.610** Set at **6866** Perf. **6856** To **6866**

Gas Pay: From **6800** To **6909** L **6856** xG **.730** ⌐GL **5005** Bar.Press. **12.0**

Producing Thru: Casing ____ Tubing **XX** Type Well **Single Gas**

Date of Completion: **1-1-64** Packer ____ Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. ____

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter)   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						1711		1683		8 days
1.	2"	3/4	151		75°	151	75°	696		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		163	.9859	.9066	1.018	1834
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 **1723** P_c^2 **2968.7**

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	$\frac{P_w}{P_c}$
1.						501.3	2467.4		.411
2.									
3.									
4.									
5.									

Absolute Potential: **2107** MCFPD; n **.75**

COMPANY **Southern Union Production Company**
ADDRESS **P.O. Box 808, Farmington, N.M.**
AGENT and TITLE **Verne Rockhold - Jr. Engineer**   Original Signed By VERNE ROCKHOLD
WITNESSED **Herman McAnally**
COMPANY **El Paso Natural Gas Co.**

REMARKS

(3) New Mexico O.C.C.
(1) Mr. Paul Clote
(1) El Paso Natural Gas Co., Proration Dept.
     P.O. Box 1492 El Paso, Texas
(2) Mr. A. L. Kindricks, Box 990, Farmington, New Mexico
(1) File

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.