NEW MEXICO OIL CONSERVATION COMMISSION

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool ___Basin Dakota___ Formation ___Dakota___ County ___San Juan___

Initial ___XX___ Annual _____ Special _____ Date of Test ___2-28-62___

Company ___Southern Union Production Co.___ Lease ___Reid___ Well No. ___1-B___

Unit ___X___ Sec. ___31___ Twp. ___29-N___ Rge. ___10-W___ Purchaser ___Southern Union Gas Company___

Casing ___4-1/2___ Wt. ___10.5___ I.D. ___4.052___ Set at ___6516___ Perf. ___6270___ To ___6474___

Tubing ___1-1/2___ Wt. ___2.90___ I.D. ___1.610___ Set at ___6314___ Perf. ___6308___ To ___6314___

Gas Pay: From ___6270___ To ___6474___ L ___6308___ xG ___.700___ -GL ___4416___ Bar.Press. ___12.0___

Producing Thru: Casing _____ Tubing ___XX___ Type Well ___Single Gas___

Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: ___1-7-62___ Packer _____ Reservoir Temp. _____

OBSERVED DATA

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

| | Flow Data | | | | | Tubing Data | | Casing Data | | |
No.	(Prover) (Line) Size	(Choke) (xxxxxx) Size	Press. psig	Diff. h_w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	Duration of Flow Hr.
SI						2006		2009		7 days
1.		3/4	237		68	237	68	1018	68	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.			249	.9924	.9258	1.027	2905
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 ___2021___ P_c^2 ___4084.4___

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.						1060.9	3023.5		.510
2.									
3.									
4.									
5.									

Absolute Potential: ___3640___ MCFPD; n ___.75___

COMPANY ___Southern Union Production Company___

ADDRESS ___P. O. Box 808, Farmington, New Mexico___

AGENT and TITLE ___Jr. Engineer___   Original Signed By

WITNESSED ___Verne Rockhold___   VERNE ROCKHOLD

COMPANY ___Southern Union Production Company___

REMARKS
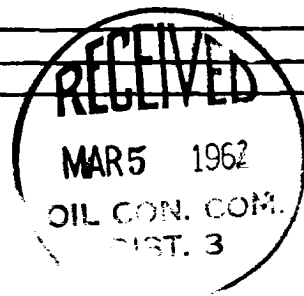
INSTRUCTIONS

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.