NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Tapacito Pictured Cliffs Formation Pictured Cliffs County Rio Arriba

Initial XX Annual _____ Special _____ Date of Test 9-26-64

Company Southern Union Production Co. Lease Jicarilla Well No. 8-D

Unit M Sec. 32 Twp. 26-N Rge. 3-W Purchaser Southern Union Gas Company

Casing 4-1/2" Wt. 9.50 I.D. 4.090 Set at 3975 Perf. 3912 To 3949

Tubing 1-1/2 Wt. 2.90 I.D. 1.610 Set at 3876 Perf. 3866 To 3876

Gas Pay: From 3912 To 3949 L 3866 xG .650 -GL 2513 Bar.Press. 12.0

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

Date of Completion: 9-19-64 Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Choke) (Orifice) 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						775		775		7 days
1.	2"	3/4"	78		57	78	57	491		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		90	1.0029	.9608	-	1072
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 787 P_c^2 619369

No.	P_w P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$(F_cQ)^2$ $(1-e^{-s})$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
						253009	366360		.639
1.									
2.									
3.									
4.									
5.									

Absolute Potential: 1675 MCFPD; n .85

COMPANY Southern Union Production Company
ADDRESS P. O. Box 808 - Farmington, New Mexico
AGENT and TITLE Verne Rockhold - Jr. Engineer
WITNESSED _____
COMPANY _____

Original Signed By
VERNE ROCKHOLD

RECEIVED
SEP 0 '64
OIL CON. COM.
DIST. 3

REMARKS Trace of water

cc: (3) - New Mexico Oil Conservation Commission
cc: (1) Mr. Paul Clote - Prod. Co. - Dallas
cc: Mr. Bob McCrarry - Prod. Co. - Dallas
cc: (1) Mr. Bob Corliss - Gas Co. - Dallas
cc: Mr. Rudy Motto - Gas Co., - Kutz
cc: Mr. Todd Hickman - Gas Co. - Kutz
cc: Aztec Oil & Gas Co. - Farmington
cc: 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.