

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Alamo Formation Permian County San Juan
Initial SI Annual _____ Special _____ Date of Test May 16, 1962
Company Southern Union Prod. Co. Lease Federal Well No. 1-31
Unit B Sec. 31 Twp. 30-N Rge. 11-W Purchaser Southern Union Gas Co.
Casing 5-1/2 Wt. 15.5 I.D. 4.950 Set at 5762 Perf. 3727 To 3740
Tubing 1-1/2 Wt. 2.75 I.D. 1.610 Set at 3604 Perf. 3674 To 3604
Gas Pay: From 3727 To 3740 L 3764 xG 700 -GL 2435 Bar.Press. 12.0
Producing Thru: Casing _____ Tubing SI Type Well Dual
Date of Completion: 1-31-62 Packer 6355 Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

Tested Through (Never) (Choke) (Never) 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						1244		1245		7 days
1.	2	1/4	265		60	265	60	609	60	3 hrs.
2.										
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wPf}}$	Pressure psia	Flow Temp. Factor F_t	Gravity Factor F_g	Compress. Factor F_{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	12.350		270	.974	.750	1.031	3276
2.							
3.							
4.							
5.							

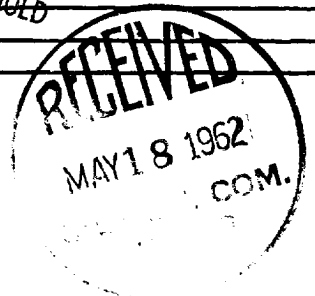
PRESSURE CALCULATIONS

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 _____ P_c^2 _____

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	P_w P_c
1.						121.4	1245.5		55.5
2.									
3.									
4.									
5.									

Absolute Potential: 400 MCFPD; n .75
COMPANY Southern Union Prod. Co.
ADDRESS Box 208, Farmington, New Mexico
AGENT and TITLE Verne Rockhold - J. Engineer
WITNESSED George Holden
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} = Supercompressibility 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 .