

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool UNDESIGNATED Formation DAKOTA County SAN JUAN
 Initial XXXX Annual _____ Special _____ Date of Test 3-22-62
 Company R & G DRILLING COMPANY Lease lant Well No. 63
 Unit NE/NE Sec. 7 Twp. 30N Rge. 13W Purchaser Southern Union Gas Co.
 Casing 4 1/2" Wt. 11.6 I.D. _____ Set at 6270 Perf. 6066 To 6178
 Tubing 2" Wt. 4.7 I.D. _____ Set at 6150 Perf. 6150 To 6165
 Gas Pay: From 6066 To 6178 L _____ xG _____ -GL _____ Bar.Press. _____
 Producing Thru: Casing _____ Tubing XX Type Well Single - Gas
 Date of Completion: 2-18-62 Packer _____ 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
SI		<u>.750</u>	<u>2028</u>			<u>2028</u>		<u>2028</u>	
1.						<u>379</u>		<u>1972</u>	
2.						<u>333</u>		<u>878</u>	
3.						<u>268</u>	<u>80</u>	<u>820</u>	<u>3 Hours</u>
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.	<u>12.365</u>		<u>280</u>	<u>.9813</u>	<u>1.00</u>	<u>1.025</u>	<u>3482</u>
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
 Specific Gravity Separator Gas _____
 Gravity of Liquid Hydrocarbons _____ deg.
 Specific Gravity Flowing Fluid _____
 P_c _____ (1-e^{-s}) P_c _____ P_c _____

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 _c
1.						<u>672.4</u>	<u>3490</u>		
2.									
3.									
4.									
5.									

Absolute Potential: 3973 MCFPD; n .75
 COMPANY R & G DRILLING COMPANY
 ADDRESS Box 327 - Farmington, New Mexico
 AGENT and TITLE Production Equipment Corp. - Bill H. Hastings.
 WITNESSED _____
 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 .