

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool ~~Blanco Delta~~ Formation Mesa Verde County San Juan
Initial I Annual _____ Special _____ Date of Test March 3, 1960
Company Southern Union Gas Company Lease Wright State Well No. 1
Unit B Sec. 36 Twp. 32N Rge. 13W Purchaser Southern Union Gas Company
5 1/2 15.5 4.950 2150-6983 4516 4782
Casing 7-5/8 Wt. 26.4 I.D. 6.969 Set at 2352 Perf. _____ To _____
Tubing 1 Wt. 1.68 I.D. 1.049 Set at 4517 Perf. - To -
Gas Pay: From 4516 To 4782 L _____ xG _____ -GL _____ Bar.Press. 12.0
Producing Thru: Casing I Tubing _____ Type Well Dual Gas-Gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: Jan. 26, 1960 Packer 6465 Reservoir Temp. _____

OBSERVED DATA

Tested Through PRIME (Choke) PRIME 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		<u>3/4</u>				<u>1086</u>		<u>1080</u>		<u>22 days</u>
1.			<u>335</u>		<u>64</u>	<u>309</u>		<u>335</u>	<u>64</u>	<u>3 hrs.</u>
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.	<u>12.3650</u>		<u>347</u>	<u>0.9962</u>	<u>0.9463</u>	<u>1.038</u>	<u>4,214</u>
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

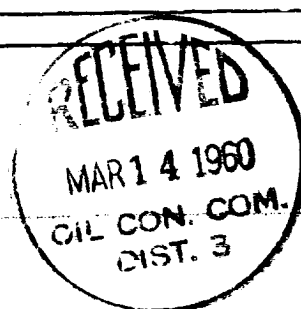
Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c _____ (1-e^{-s})

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 1098 P_c² 1205.6
P_w 401 P_w² 160.8

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.						<u>160.8</u>	<u>1094.6</u>		<u>0.365</u>
2.									
3.									
4.									
5.									

Absolute Potential: 4,753 MCFPD; n 0.85COMPANY SOUTHERN UNION GAS COMPANYADDRESS Box 815, Farmington, New MexicoAGENT and TITLE Thomas E. Fenne - EngineerWITNESSED Gilbert D. Holland - Asst. Dir. SuperintendentCOMPANY Southern Union Gas 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 .