

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Ballard Formation Pictured Cliffs County San Juan
Initial X Annual _____ Special _____ Date of Test 7-10-56
Company S. U. G. Lease ~~Simon~~ NICKSON Well No. 7
Unit SE Sec. 22 Twp. 26N Rge. 8W Purchaser Southern Union Gas Company
Casing 5 $\frac{1}{2}$ " Wt. 15.5 I.D. _____ Set at 2796 Perf. 2678 To 2760
Tubing 1 $\frac{1}{4}$ " Wt. _____ I.D. _____ Set at 2728 Perf. _____ To _____
Gas Pay: From 2678 To 2760 L _____ xG 0.66 -GL _____ Bar.Press. 12.0
Producing Thru: Casing X Tubing _____ Type Well Single gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 6-11-56 Packer No 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	Temp. °F.	
SI						<u>604</u>		<u>604</u>		
1.		<u>3/4</u>	<u>201</u>		<u>62</u>	<u>205</u>	<u>62</u>	<u>201</u>		<u>3 hours</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>213</u>	<u>0.9981</u>	<u>0.9535</u>	<u>1.021</u>	<u>2559</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 656 P_c 130.34
P_w-217

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>47.09</u>	<u>383.25</u>		<u>0.33</u>
2.									
3.									
4.									
5.									

Absolute Potential: 2825 MCFPD; n 0.85

COMPANY _____
ADDRESS _____
AGENT and TITLE _____
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} = 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 .

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