

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Tanapita Formation Pictured Cliff County Albuquerque
Initial X Annual _____ Special _____ Date of Test 1-6-56
Company Southern Union Gas Company Lease Jicarilla Well No. 11 D
Unit _____ Sec. 30 Twp. 26 N Rge. 3 E Purchaser Southern Union Gas Company
Casing 1 1/2" Wt. 9.5 I.D. _____ Set at 3819 Perf. _____ To _____
Tubing 2" Wt. 11.7 I.D. _____ Set at 3750 Perf. _____ To _____
Gas Pay: From 3706 To 3811 L _____ xG 0.600 -GL _____ Bar.Press. 11.0
Producing Thru: Casing 4.37 Tubing 7 Type Well Single Gas
Date of Completion: 7-25-56 Packer none Reservoir Temp. _____
Single-Bradenhead-G. G. or G.O. Dual

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						1077		1077		12 days
1.		3/4"	311		65	311	65	673		3 hours
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.	12.3450		322	0.7752	0.9393	1.035	3332
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 1035 P_c 1103.74
F_w 704

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.						475.62	635.10		
2.									
3.									
4.									
5.									

Absolute Potential: 6,107 MCFPD; n 0.95

COMPANY _____
ADDRESS _____
AGENT and TITLE Arthur H. Smith, Engineer
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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