

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Jalnet Formation 7-B & Queen County Lea
Initial _____ Annual _____ Special X Date of Test 5-20/5-24-1957
Company R. Olson (Personal) Lease Christmas Well No. 2
Unit I Sec. 28 Twp. 22 Rge. 36 Purchaser EPNG
Casing 5 1/2 Wt. 15.5 I.D. _____ Set at 3145 Perf. _____ To _____
Tubing 2 Wt. 4.7 I.D. _____ Set at 3669 Perf. _____ To _____
Gas Pay: From 3450 To 3696 L 3669 xG 0.675 -GL 2477 Bar.Press. 13.2
Producing Thru: Casing _____ Tubing X Type Well Single
Date of Completion: 3-23-1953 Packer 3450 Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

Tested Through (PROPER) (ORIFICE) (Meter)Type Taps Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(PROPER) (Line) Size	(ORIFICE) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI										
1.	4	1.000	543	4.84	78	713				72
2.	4	1.000	550	10.24	76	660				24
3.	4	1.000	570	17.64	74	622				24
4.	4	1.000	541	25.00	79	582				24
5.						544				24

FLOW CALCULATIONS

No.	Coefficient Flange (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.	6.135	51.88		.9831	.9427	1.054	311
2.	6.135	75.93		.9850	.9427	1.057	158
3.	6.135	101.41		.9868	.9427	1.060	614
4.	6.135	117.69		.9822	.9427	1.054	704
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c 9.936 (1-e^{-s}) 0.157

Specific Gravity Separator Gas 0.675
Specific Gravity Flowing Fluid _____
P_c 726.2 P_c 527.4

No.	DEPT 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.	673.2	453.2	3.09	9.55	1.50	154.7	72.7	674.3	.93
2.	635.2	403.5	4.55	20.70	3.25	403.8	120.6	637.8	.88
3.	595.2	354.3	6.10	37.21	5.84	369.1	167.3	600.1	.81
4.	557.2	310.5	6.99	48.86	7.67	318.2	209.2	564.1	.78
5.									

Absolute Potential: 1.445 MCFPD; n .754COMPANY R. Olson & Howard OlsonADDRESS Drawer 2, Jal, N.M.AGENT and TITLE J.W. Payne, Jr.WITNESSED Earl G. SmithCOMPANY EPNG

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 .