

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Jalmat Formation Yates County Lea
Initial _____ Annual _____ Special X Date of Test 1-21 to 1-25-57
Company Dalport Oil Corporation Lease Winters "C" Well No. 1
Unit J Sec. 7 Twp. 25S Rge. 37E Purchaser El Paso Natural Gas Company
Casing 7" Wt. 23.0# I.D. _____ Set at 3200 Perf. _____ To _____
Tubing 2 3/8" Wt. 11.7# I.D. _____ Set at 3285 Perf. _____ To _____
Gas Pay: From 2796 To 2946 L 2796 xG .660 -GL 1345 Bar.Press. 12.2
Producing Thru: Casing X Tubing _____ Type Well G. O. Dual
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 3-29-53 Packer 2950 Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter)

Type Taps Flange

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								430		72
1.	1	1.250	211	8.1	52			400		24
2.	1	1.250	219	15.2	48			381		24
3.	1	1.250	232	24.5	56			362		24
4.	1	1.250	230	37.2	54			348		24
5.	1	1.250	236	79.2	57			300		24

FLOW CALCULATIONS

No.	Coefficient (24-Hour) K_L	$\sqrt{h_w P_f}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	9.643	43.40		1.0078	.9535	1.024	411
2.	9.643	59.40		1.0117	.9535	1.026	567
3.	9.643	77.48		1.0039	.9535	1.026	733
4.	9.643	95.39		1.0058	.9535	1.027	903
5.	9.643	140.44		1.0029	.9535	1.026	1329

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c .740 (1-e^{-s}) .119

Specific Gravity Separator Gas .660
Specific Gravity Flowing Fluid _____
P_c 443.2 P_c² 196.4

No.	P _w (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.	413.2	170.7	.30	.09	.01	170.7	25.7		.9323
2.	394.2	155.4	.42	.13	.02	155.4	41.0		.8891
3.	375.2	140.8	.51	.29	.03	140.8	55.6		.8466
4.	361.2	130.5	.57	.45	.05	130.5	65.8		.8150
5.	313.2	98.1	.98	.96	.11	98.2	98.2		.7067

Absolute Potential: 2.600 MCFPD; n .983COMPANY Dalport Oil CorporationADDRESS 920 Fidelity Union Life BldgAGENT and TITLE Lawrence Wright Production ManagerWITNESSED Earl C. SmithCOMPANY El Paso Natural Gas Company

REMARKS

J. A. UTZ
JAS. ENGINEER

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_c .