

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalnet Formation Yates - 7 Rivers County Lea
Initial _____ Annual _____ Special X Date of Test 5-9-58
Company Dalport Oil Corporation Lease E. F. King Well No. 1
Unit M Sec. 31 Twp. 22 Rge. 37 Purchaser El Paso Natural Gas Co
Casing 5 3/8 Wt. 15.5 I.D. _____ Set at 2378 Perf. _____ To _____
Tubing 2 3/8 Wt. 4.7 I.D. _____ Set at 3123 Perf. _____ To _____
Gas Pay: From 3160 To 3175 L 3123 xG .660 -GL 2061 Bar.Press. 13.2
Producing Thru: Casing _____ Tubing X Type Well Single
Date of ^{Re} Completion: 4-23-58 Packer None Single-Bradenhead-G. G. or G.O. Dual
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						686		688		72
1.	4	1.000	660	8.11	79	661		664		24
2.	4	1.000	641	16.00	76	642		648		24
3.	4	1.000	616	28.09	79	618		628		24
4.	4	1.000	577	51.12	74	579		604		24
5.										

FLOW CALCULATIONS

No.	Coefficient (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	75.23	673.2	.9822	.9535	1.066	462
2.	6.135	102.29	654.2	.9850	.9535	1.062	627
3.	6.135	132.92	629.2	.9822	.9535	1.059	808
4.	6.135	173.67	590.2	.9868	.9535	1.057	1065
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio dry cf/bbl. Specific Gravity Separator Gas .660
Gravity of Liquid Hydrocarbons _____ deg. Specific Gravity Flowing Fluid _____
F_c _____ (1-e^{-s}) P_c 701.2 P_c 491.7

No.	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.	674.2	454.5				458.6	33.1		
2.	655.2	429.3				437.2	54.5		
3.	631.2	398.4				411.1	80.6		
4.	592.2	350.7				380.9	110.8		
5.									

Absolute Potential: 2500 MCFPD; n .628

COMPANY Dalport Oil Corporation

ADDRESS 930 Fidelity Union Life Bldg. Dallas, Texas

AGENT and TITLE W. L. Taylor President

WITNESSED Earle S. Smith

COMPANY El Paso Nat Gas Co

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 .