

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Eumont Formation Queen County Lea
Initial _____ Annual _____ Special X Date of Test 5-20/24-63
Company Dalport Oil Corporation Lease McQuatters Well No. 1
Unit E Sec. 12 Twp. 21 Rge. 36 Purchaser El Paso Natural Gas Company
Casing 5½ Wt. _____ I.D. _____ Set at 3391 Perf. _____ To _____
Tubing 2 Wt. _____ I.D. _____ Set at 3598 Perf. _____ To _____
Gas Pay: From 3397 To 3608 L 3598 xG .677 -GL 2436 Bar.Press. 13.2
Producing Thru: Casing _____ Tubing X Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 12-7-52 Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through (+ + + + +) (+ + + + +) (Meter)Type Taps Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Proper) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						397		N.V.		72
1.	4	1.250	226	5.76	62	357		N.V.		24
2.	4	1.250	232	9.00	55	329		N.V.		24
3.	4	1.250	223	17.64	57	300		N.V.		24
4.	4	1.250	225	21.16	67	270		N.V.		24
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.	9.643	37.12		.9981	.9411	1.024	344.4
2.	9.643	46.98		1.0048	.9411	1.027	440.1
3.	9.643	64.55		1.0029	.9411	1.025	602.3
4.	9.643	70.99		.9933	.9411	1.023	654.7
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry cf/bbl.
Gravity of Liquid Hydrocarbons None deg.
P_c 9.936 (1-e^{-s}) 0.154

Specific Gravity Separator Gas .677
Specific Gravity Flowing Fluid None
P_c 410.2 P_c 168.3

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.	370.2	137.0	3.422	11.71	1.803	138.8	29.5	372.6	.9083
2.	342.2	117.1	4.373	19.12	2.944	120.0	48.3	346.4	.8445
3.	313.2	98.1	5.984	35.81	5.515	103.6	64.7	321.9	.7847
4.	283.2	80.2	6.505	42.31	6.516	86.7	81.6	294.4	.7177
5.									

Absolute Potential: 1.025 MCFPD; n .629COMPANY Dalport Oil CorporationADDRESS 930 Fidelity Union Life Bldg. Dallas, TexasAGENT and TITLE R. A. Mikel GeologistWITNESSED R. A. MikelCOMPANY El Paso Natural Gas Company

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 .