

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 3-18/3-22-57
Company Dalport Oil Corporation Lease E. F. King Well No. 1
Unit M Sec. 31 Twp. 22S Rge. 37E Purchaser El Paso Natural Gas Company
Casing 5 1/2 Wt. 15 1/2 I.D. _____ Set at 2878 Perf. 3050 To 3300
Tubing 2 3/8 Wt. 4.7 I.D. _____ Set at 2956 Perf. - To -
Gas Pay: From 3050 To 3300 L 2956 xG .660 -GL 1951 Bar.Press. 13.2
Producing Thru: Casing _____ Tubing X Type Well Single
Date of Completion: 11-12-50 Packer None Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

Tested Through (None) (Choke) (None) Type Taps Flange

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	(None) (Line) Size	(None) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI										
1.	4	1.000	498	11.6	65	499				24
2.	4	1.000	452	15.6	63	454				24
3.	4	1.000	408	20.3	65	410				24
4.	4	1.000	294	33.3	66	296				24
5.										

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	76.86		.9952	.9535	1.052	471
2.	6.135	85.18		.9971	.9535	1.050	522
3.	6.135	92.33		.9952	.9535	1.042	560
4.	6.135	101.62		.9943	.9535	1.030	600
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c 9.936 (1-e^{-s}) 0.126

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 713.2 P_c 508.7

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.	512.2	262.3	4.68	21.9	2.8	265.1	243.6	514.9	.7220
2.	467.2	218.3	5.19	26.9	3.4	221.7	287.0	470.9	.6603
3.	423.2	179.1	5.56	30.9	3.9	183.0	325.7	427.8	.5998
4.	309.2	95.6	6.05	36.6	4.6	100.2	408.5	316.2	.4134
5.									

Absolute Potential: 730 MCFPD; n .596
COMPANY Dalport Oil Corporation
ADDRESS 930 Fidelity Union Life Bldg
AGENT and TITLE Lawrence J. [Signature] Production Mgr
WITNESSED H. H. Kerby
COMPANY El Paso Natural 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 .