

NEW MEXICO OIL CONSERVATION COMMISSION

1957 FEB 11 AM 10:04

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Summit Formation Queen County Lea

Initial Annual Special X Date of Test 8-13 to 8-17-56

Company Dalport Oil Corporation Lease McQuatters Well No. 1

Unit E Sec. 12 Twp. 21-S Rge. 36-E Purchaser El Paso Natural Gas Company

Casing 5 1/2 Wt. 14 I.D. Set at 3391 Perf. To

Tubing 2 3/8 Wt. 4.70 I.D. Set at 3598 Perf. To

Gas Pay: From 3397 To 3608 L 3598 xG .675 -GL Bar.Press. 13.2

Producing Thru: Casing Tubing X Type Well Single

Date of Completion: 12-7-54 Packer None Single-Bradenhead-G. G. or G.O. Dual Reservoir Temp.

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter)

Type Taps

No.	Flow Data			Tubing Data		Casing Data		Duration of Flow Hr.
	(Line) Size	(Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	
SI						870	877	72
1.	4	1.500	197	8.22	52	705	740	24
2.	4	1.500	250	8.22	60	639	681	24
3.	4	1.500	181	4.32	64	740	753	24
4.	4	1.500	170	2.02	75	790	797	24
5.								

FLOW CALCULATIONS

No.	Coefficient C _{flg} (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.	13.99	118.83		1.0078	.9427	1.022	1.614
2.	13.99	132.98		1.000	.9427	1.028	1.802
3.	13.99	59.89		.9962	.9427	1.019	802
4.	13.99	27.06		.9859	.9427	1.017	359
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry Gas cf/bbl.

Gravity of Liquid Hydrocarbons deg.

F_c (1-e^{-s})

Specific Gravity Separator Gas

Specific Gravity Flowing Fluid

P_c 890.2 P_c² 792.5

No.	P _w 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.	716.2	512.8				567.3	225.2	84.4	
2.	652.2	425.4				481.9	310.6	77.7	
3.	753.2	567.3	Measured			587.1	205.4	85.9	
4.	803.2	645.1				656.4	136.1	90.9	
5.									

Absolute Potential: 4.600 MCFPD; n 1.000COMPANY Dalport Oil CorporationADDRESS 930 Fidelity Union Life Bldg. Dallas, TexasAGENT and TITLE W. R. Smith Vice-PresidentWITNESSED Smith & BlumerCOMPANY El Paso Natural Gas Co

REMARKS

ELVIS A. UIZ
GAS 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_t .