

NEW MEXICO OIL CONSERVATION COMMISSION

HOBBS OFFICE 8-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

1957 FEB 11 AM 10:02

Pool Jabert Formation Yates - 7 Rivers County LeaInitial _____ Annual _____ Special X Date of Test 10-29 to 11-2-56Company Dalport Oil Corporation Lease Christmas "B" Well No. 1Unit 1 Sec. 21 Twp. 22N Rge. 36E Purchaser El Paso Natural Gas CompanyCasing 5 1/2 Wt. 15.5 I.D. _____ Set at 314.0 Perf. _____ To _____Tubing 2 Wt. 4.70 I.D. 1.995 Set at 324.0 Perf. _____ To _____Gas Pay: From 3190 To 3473 L 324.0 xG .670 -GL 2171 Bar.Press. 132Producing Thru: Casing _____ Tubing X Type Well Single

Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 12-16-52 Packer None Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter)

Type Taps Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Pressure) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						660		661		72
1.	4	.750	599	7.29	93	645		645		24
2.	4	.750	597	19.36	106	629		630		24
3.	4	.750	592	29.16	84	618		621		24
4.	4	.750	590	53.29	78	597*		600		24
5.						7				

Not enough draw down due to high line pressure

FLOW CALCULATIONS

No.	Coefficient <u>n_g</u> (24-Hour)	$\sqrt{h_{wP_f}}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	3.435	66.80		.9697	.9463	1.056	222
2.	3.435	108.67		.9585	.9463	1.052	357
3.	3.435	132.82		.9777	.9463	1.059	447
4.	3.435	179.26		.9831	.9463	1.061	608
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 674.2 P_c 454.5

No.	P _w <u>P_{st}</u> (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.	658.2	433.2				433.2	21.3		65.5
2.	643.2	412.4				413.7	40.8		62.6
3.	634.2	398.4				402.2	52.3		60.8
4.	633.2	372.3				376.0	78.5		56.9
5.									

Absolute Potential: 2350 MCFPD; n .77COMPANY Dalport Oil CorporationADDRESS 930 Fidelity Union Life Bldg. Dallas, TexasAGENT and TITLE W. J. [Signature] Vice-PresidentWITNESSED Edward HahnCOMPANY El Paso Natural Gas Company

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_c .