

NEW MEXICO OIL CONSERVATION COMMISSION

HOBBES OFFICE 000

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalmat Formation Upper Yates Sand County LeeInitial -- Annual -- Special X Date of Test 11-5-57Company CLARA T. SCOTT AND FIRST NATIONAL BANK IN DALLAS, TRUSTEE, U-W-O PAUL P. SCOTT Base Daniel Vaughn B-3 Well No. 1Unit F Sec. 3 Twp. 24 S Rge. 36 E Purchaser Kl Paso Natural Gas CompanyCasing 7 Wt. 26 # I.D. 6.276 Set at 3535 Perf. 3060 To 3186Tubing 2-1/2 Wt. 6.50 I.D. -- Set at 3022 Perf. open To --Gas Pay: From 3060 To 3186 L 3022 xG .670 -GL 2024 Bar.Press. 13.2Producing Thru: Casing -- Tubing X Type Well SingleDate of Completion: 1-24-37 Packer 3022 Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. --

OBSERVED DATA

Tested Through (Prover) (~~Classic~~) (~~Master~~) Type Taps --

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Classic) Size	(Classic) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	--	--	--	--	--	798	--	Packer	--	72
1.	2	.125	791	--	66°	791	--	"	--	3
2.	2	.250	717	--	63°	719	--	"	--	3
3.	2	.375	696	--	63°	500	--	"	--	3
4.	2	.500	314	--	63°	316	--	"	--	3
5.	2	.500	310	--	64°	312	--	"	--	24

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.	0.3418		804.2	1.0000	0.9463	1.023	284
2.	1.4030		730.2	0.9971	0.9463	1.023	1.018
3.	3.0691		509.2	0.9971	0.9463	1.056	1.557
4.	5.5233		357.2	0.9952	0.9463	1.037	1.927
5.	5.5233		323.2	0.9962	0.9463	1.035	1.742

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio -- cf/bbl.
Gravity of Liquid Hydrocarbons -- deg.
F_c 5.866 (1-e^{-S}) .130
Specific Gravity Separator Gas --
Specific Gravity Flowing Fluid .670
P_c 811.2 P_c² 658.0

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.	804.2	646.7	2.9	2.8	547.4	647.1	10.9		
2.	730.2	533.1	6.1	37.2	4.8	530.9	117.1		
3.	509.2	259.4	9.1	82.8	10.8	274.8	383.8		
4.	357.2	127.0	11.3	126.6	16.6	145.6	512.4		
5.	323.2	105.8	10.2	104.0	13.5	119.3	538.7		

Absolute Potential: 2650 MCFPD; n .552
COMPANY Clara T. Scott and First National Bank in Dallas, Trustee U-W-O Paul P. Scott
ADDRESS P.O. Box 6031, Dallas 22, Texas
AGENT and TITLE Robert B. Ray, Petroleum Engineer
WITNESSED Mr. O. G. Clary, Superintendent
COMPANY as above

REMARKS

* Test taken by Mr. Mikel and Mr. Dyer with Kl Paso Natural Gas Company
Copy attached.

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 .