

TEST AND MEASUREMENT LAB

TEST REPORT

REQUESTER: R. Stafford WRITTEN BY: D. Thomas
WORK ORDER: 481152 REPORT NO.: 900671

DATE: 11/26/90

FIREARM STAT'S: MODEL: 700

CAL: 17

REASON FOR TEST:

To verify that the endurance life of the Model 700, 17 caliber barrel is adequate when produced using a four hit G.F.M. process. The previous process called for a three hit G.F.M.

EQUIPMENT REQUIRED:

Four Model 700 BDL rifles in 17 cal.

C6501508

C6501438

C6501483

C6501474

24000 rounds of Remington R17REM

Research shooting room located in building 52-1-A.

Bore Scope

TEST PROCEDURE:

The rifles were all shot from jacks in the shooting room. The rifles were cooled, cleaned and inspected at the following intervals:

20 rounds each rifle was cooled for approximately three minutes using compressed air

100 rounds the bore was cleaned with a phosphor bronze bore brush and Hoppes solvent, then swabbed dry with cotton patches.

1000 rounds the bore was inspected using a bore scope and observations were recorded.

TEST RESULTS:

All four Barrels were endurance tested to 6000 rounds and there were no failures.

There was extreme heat checking as described on attached sheets.

[illegible][illegible]

#1 C6501508

Date	Test	Tester
4/3/90	1000 rds	HW
4/3/90	Inspect Bore	DT
4/11/90	2000 RDS.	H.W.
"	INSPECT BORE	J.S.
4/12/90	3000 RDS	HEW
"	INSPECT BORE	JES
4/17/90	4000 Rds	HEW
4/17/90	Inspect Bore	HW/DT
4/18/90	5000 RDS	HEW
4/18/90	Inspect Bore	HW/DT
9-6-90	6000 RDS	SS

1000 - Some Heat Checking full length of Bore
2000 - HEAT CHECKING. FULL LENGTH OF BORE.
3000 - MORE SEVERE HEAT CHECKING
4000 - Severe checking / Pitting
5000 - Severe checking & Pitting

#2 C6501438

Date	Test	Tester
4/3/90	1000 rds	HW
"	Inspect Bore	DT
4/11/90	2000 RDS	H.W.
"	INSPECT BORE	J.S.
4-12/90	3000 RDS	HEW
"	INSPECT BORE	JES
4/17/90	4000 Rds	H.W.
4/17/90	Inspect Bore	HW/DT
4/18/90	5000 RDS.	HEW
4/19/90	Inspect Bore	HW/DT

1000 rds - Some Heat Checking full length of Barrel
2000 RDS - HEAT CHECKING. LENGTH OF BARREL.
3000 RDS - MORE SEVERE HEAT CHECKING
4000 Rds - Severe checking / Pitting
5000 Rds - Severe checking & Pitting