

REMINGTON ARMS COMPANY, INC.

INTERDEPARTMENTAL CORRESPONDENCE

Remington



ASTROS



"CONFINE YOUR LETTER TO ONE SUBJECT ONLY" _____

Distribution: C.B. Workman

C.E. Ritchie

J.P. Linde

J.W. Brooks

R.J. Pohl

Petroleum Lab

Chambers Works

A.B. Hughes

ESD - Louviers

RESEARCH TEST and MEASUREMENT REPORT - Report No. 82 0331 Supplement No. 3

Evaluation of Lubricants on Firearms
Rust Prevention Test

Prepared by: F.L. Supry

Date Prepared: 5-6-82

Proofread and Cleared By:

J.H. Hennings, / R.E. Nightingale,
Foreman-Test Lab / Foreman-Measurement Lab

R.E. Nightingale 5-26-82
Signature Date

C.E. Ritchie,
Sr. Supervisor - Testing,
Meas. & Mech. Analysis Lab

C.E. Ritchie 5/26/82
Signature Date

TEST & MEASUREMENT LAB REPORT

REPORT NUMBER: 82 0331 - Supplement No. 3
REPORT TITLE: Evaluation of Lubricants on Firearms
Rust Prevention Test
MODEL(S): M/1100
GAUGE OR CALIBER:
DATE: 5-6-82
WORK ORDER NO.:
PART NAME:
DESIGNER/ENGINEER:

TEST TYPE:

1. PHOTO LAB
2. STRENGTH TEST - NO. OF GUNS TESTED _____
3. FUNCTION TEST - NO. OF GUNS TESTED _____
4. ACCURACY TEST - NO. OF GUNS TESTED _____
5. MEASUREMENTS - TYPE: _____
6. ENVIRONMENTAL TEST
7. AMMUNITION TESTING & EVALUATION - TYPE: _____
8. VISUAL EVALUATION - _____ OUT OF _____ GUN SAMPLE
9. ENDURANCE - NO. OF GUNS TESTED: _____

NO. OF ROUNDS PER GUN: _____

TOTAL ROUNDS FIRED IN TEST: _____

AMMO TYPE: MAGS. _____; TARGET: _____

RIA FIRE _____ CENTER FIRE _____

REMINGTON ARMS COMPANY, INC.
Firearms Research Division

May 6, 1982

TO: J.H. Hennings

FROM: F.L. Supry

REPORT TITLE: Evaluation of Lubricants on Firearms
Rust Prevention Test

ABSTRACT

C.E. Ritchie requested that the Test Lab conduct a rust prevention test on the three lubricants still under evaluation:

1. Du Pont - Synthetic Diester
2. Sprayon - 711
3. CRC - 3-36

SCOPE OF TEST

To observe the differences in rust prevention of the three lubricants.

TEST RESULTS

In their order of finish, from the best performing lubricant to the poorest performing lubricant evaluating rust prevention, the following results were obtained:

1. CRC 3-36
2. Du Pont and 711

REPORT TEXT

Eight M/1100 shotguns were selected for the test by J.H. Hennings (Test Lab).

For daily weather conditions during this test refer to Data Sheet No. 1.

TEST PROCEDURE

The stocks and fore-ends were removed from the shotguns. The shotguns were then degreased, using the solvent degreasing tanks located in our Heat Treat Department.

All metal parts of the shotguns were then saturated with the assigned lubricant.

The guns were then placed horizontally in a rack on the roof of Bldg. 52.

The guns were left untouched in the environment for one month. They were then removed and inspected for rust.

Photographs were taken after two weeks on the roof and individual photographs were taken at the completion of the test.

The shotguns were disassembled and stored in boxes in the machine room at the completion of the test.

APPENDIX "A"

(Data Sheets)

DAILY WEATHER LOG - STARTING 3-22-82

<u>Date</u>	<u>Temp. (Hi-Low)</u>	<u>Humidity</u>	<u>Weather Comments</u>
3-22	38° - 31° F	47%	Cloudy, snow flurries
23	46° - 25°	41%	Clear, sunny
24	47° - 32°	45%	Clear
25	55° - 36°	45%	Overcast
26	36° - 15°		Flurries
27	24° - 5°		Snow
28	31° - 10°		Windy, clear
29	50° - 10°		Sunny
30	55° - 30°		Sunny
31	50° - 35°		Rain, windy
4- 1	35° - 15°		Flurries, windy
2	55° - 20°		Clear, windy
3	38° - 20°		Rain
4	29° - 15°		Snow, cold wind
5	32° - 18°		Heavy snow
6	26° - 8°	70%	Strong wind, snow
7	30° - 10°		Windy - snow (light)
8	35° - 20°		Partly cloudy
9	40° - 30°		Partly cloudy
10	45° - 20°		Light snow, rain
11	40° - 28°		Light snow, rain
12			
13			
14			
15			
16			
17	75° - 47°		Sunny
18	65° - 50°		Rain
19	65° - 45°		
20	45° - 30°		
21	50° - 30°		Flurries
22			