

9/25/92

To: T.C. Douglas
 From: J.H. Coyle *JHC*
 Subject: Monthly Report

270 Win 135 gr. ER

A bullet experimental run was completed on 9/15/92 with approximately 4500 bullets assembled.

Handloading results from bullet assembly produced 100 yard accuracy of 0.9" with a pressure of 58300 psi and an instrumental velocity of 2985 fps. Pressure and velocity specs. for this load is 60000 psi for pressure and an instrumental velocity of 2990 fps.

A sample of bullets were tested for mush at 200 yards in water. Average weight retention of the recovered bullets was 77%.

A loading experimental run was completed on 9/21/92 with approximately 3800 rounds being loaded. A sample of this run is presently in ballistics for testing and should be completed by 10/2/92. After the ballistics testing has been completed, a data transmittal will be held the week of 10/5/92.

30-30 Win 160 gr. ER

Approximately 6000 jackets were made with the new 4th draw punch with no problems.

A bullet experimental run was completed on 9/10/92 with approximately 5000 bullets assembled.

Handloading results from bullet assembly produced 100 yard accuracy of 1.0" with a pressure of 40900 psi and an instrumental velocity of 2313 fps. Pressure and velocity specs. for this load is 41000 psi for pressure and an instrumental velocity of 2285 fps.

A sample of bullets were tested for mush at 100 yards in water. Average weight retention of the recovered bullets was 90%.

A loading experimental run is tentatively scheduled for the week of 9/28/92. Once the loading experimental has been completed, the ballistics testing should be completed by 10/16/92. After the ballistics testing has been completed, a data transmittal will be held the week of 10/19/92.

A sample of these bullets, along with the current 150 gr SPCL bullets, has been sent to Ken Green in Ilion for evaluation. The 160 gr ER bullets are made with the same bullet tooling as the 150 gr SPCL bullets are made. The only difference is the jacket.

LEADLESS BULLET (Copper)

There has not been any further work done on copper bullets due to the availability of the CNC machine.

More 30 cal. bullets, which utilize the boattail design, will be made for additional testing once the machine is available. Samples will be made from C110 and C145 copper.

Monthly Report - Coyle

page 2

CNC MACHINE

Much of the time this month has been spent machining slugs and slug
sabots for testing.