

REMINGTON ARMS COMPANY, INC.

INTER-DEPARTMENTAL CORRESPONDENCE



C: J. R. Ayers
R. E. Schrader
W. H. Coleman
J. R. Pruitt

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R. S. SWARTZ

-6MM REM 80 GRAIN PSP HIGH PRESSURE-

A customer complaint on 6mm 80 Grain PSP product was received February, 10, 1983, indicating suspect high pressure. The customer said he experienced excessive recoil and smoke with the fired shell stuck in the bolt. 83

The returned product, sixteen unfired and two fired from code T300, March 1982, was analyzed. The results showed high pressure, 632 CUPS average, compared to 481 CUPS average when loaded. All other dimensions and components were within normal control limits. The Lonoke warehouse was checked and product from the same loading dates was found and placed under hold. Subsequent testing of this product also indicated high pressures with averages from 541 CUPS through 597 CUPS. SAAMI limits on this product are 520 CUPS Nominal and 552 CUPS MPA. Warehouse standard product was within specification on all physical dimensions and properties.

This product was run with HRP 80 powder, Lot #3, and, due to the apparent pressure growth, all product in the warehouse containing HRP 80 was segregated and placed under hold.

Our check of loading histories showed this powder to be loaded in 6mm Rem 80 PLHP, 6mm Rem 80 PSP, 303 British 180 SPCL and 8mm Mauser 170 SPCL. Testing of the powder in the 303 British and 8mm Mauser product showed no increase in pressure when compared to original loading information indicating the powder growth does not affect these cartridges in the same manner as the 6mm. The 303 British and 8mm Mauser product was therefore released from hold. Powder from the 303 British and 8mm Mauser warehouse product was loaded into 6mm rounds and high pressure consistent with warehoused 6mm rounds was experienced, thus indicating that the HRP 80 powder had grown uniformly but only presents a problem in the 6mm rounds.

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