

**H.P. WHITE LABORATORY, INC.**

3114 Scarboro Road  
Street, Maryland 21154-1822  
Telephone: (410) 838-6550  
Facsimile: (410) 838-2802  
email: info@hpwhite.com  
www.hpwhite.com



April 19, 2010  
[HPWLI 11504-01B]

Adcor Industries  
234 South Haven Street  
Baltimore, Maryland 21224

Attention: Jimmy Stavrakis

Dear Mr. Stavrakis:

Your message of March 18, 2010 and related communications requested reliability [Function and Casualty] testing, dispersion testing, and limited adverse environment testing of two caliber 5.56x54mm M-4 upper receiver assemblies and 6,000 rounds of 62-grain, M855 Ball ammunition hand delivered on April 6, 2010. The upper receiver assemblies were mounted in standard M-4 lower receivers. Your representatives were present for and witnessed all testing.

The testing was done in conformance with your instructions and abbreviated portions of the First Article Test Matrix, Carbine, 5.56mm, M4 Type that, in turn, was derived from MIL-C-71186 [AR].

**FUNCTION AND CASUALTY TESTING**

Six thousand rounds were fired from each of one carbines in 120-round cycles. Each cycle consisted of:

- 30 rounds in automatic mode in bursts of approximately 5 rounds each
- 30 rounds in automatic mode in a single burst
- 30 rounds in semi-automatic mode at a rate of 10 to 30 rounds per minute
- 30 rounds in semi-automatic mode at a rate of 10 to 30 rounds per minute

The carbine was cooled and lubricated at 600-round [5-cycle] intervals.

During the entire test no parts had to be replaced, and there were no stoppages. Detailed firing records for are enclosed.

**DISPERSION TESTING**

A new upper receiver [03] was fitted with a 20X Leupold "Tactical" optical sight, installed on a standard M4 lower receiver and fired by a qualified marksman on an outdoor range. Targets were at 100 yards. The weather was clear and the only wind was a mild headwind that should have had no effect on the results. Eight 3-round groups using M855 ammunition gave a mean extreme spread of 2.88 inches. Four 3-round groups using Federal Match [69-grain] ammunition gave a mean extreme spread of 0.88 inches.

**ADVERSE ENVIRONMENT TESTING**

The same carbine used for the dispersion testing was completely buried in playground sand, then removed, shaken and fired 30-rounds in mixed automatic and semiautomatic modes with no malfunctions. The same carbine was then completely submerged in 5 inches of water, removed and fired 30-rounds with no malfunctions.

Thank you for the opportunity to conduct these tests. The carbines were returned to your representative. If you have any questions, please feel free to call.

Very truly yours,

H.P. White Laboratory, Inc.

Lester W. Roane