



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Mail Stop 3030

October 13, 2010

Mr. Steven W. Peterson
Chief Financial Officer
Mesa Laboratories, Inc.
12100 West Sixth Avenue
Lakewood, Colorado 80228

RE: **Mesa Laboratories, Inc.**
Form 10-K for the fiscal year ended March 31, 2010
Filed June 29, 2010
File No. 000-11740

Dear Mr. Peterson:

We have completed our review of your Form 10-K and related filings and do not have any further comments at this time.

Sincerely,

Jeffrey Jaramillo
Accounting Branch Chief