



DIVISION OF
CORPORATION FINANCE

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

May 27, 2011

Mr. Chris L. Koliopoulos, Chief Executive Officer
Zygo Corporation.
Laurel Brook Road
Middlefield, CT 06455

Re: Zygo Corporation
Form 10-K for the Fiscal Year Ended June 30, 2010
Filed September 13, 2011
File No. 000-12944

Dear Koliopoulos:

We have completed our review of your filing. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or the filing and the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States. We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

Kevin L. Vaughn
Accounting Branch Chief