



DIVISION OF
CORPORATION FINANCE

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

January 10, 2012

Via E-mail

Mr. David D. Glass
Executive Vice President and Chief Financial Officer
Veeco Instruments Inc.
Terminal Drive
Plainview, New York 11803

**Re: Veeco Instruments Inc.
Form 10-K for the Fiscal Year Ended December 31, 2010
Filed February 24, 2011
File No. 0-16244**

Dear Mr. Glass:

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,

/s/ Kevin L. Vaughn

Kevin L. Vaughn
Accounting Branch Chief