



DIVISION OF
CORPORATION FINANCE

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

March 2, 2012

Via E-mail

Mr. Didier Hirsch
Senior Vice President and Chief Financial Officer
Agilent Technologies, Inc.
5301 Stevens Creek Blvd.,
Santa Clara, California 95051

Re: Agilent Technologies, Inc.
Form 10-K for the fiscal year ended October 31, 2011
Filed December 16, 2011
File No. 001-15405

Dear Mr. Hirsch:

We have completed our review of your filings. 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 filings 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 filings to be certain that the filings include the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

/s/ Brian Cascio

Brian R. Cascio
Accounting Branch Chief