



DIVISION OF
CORPORATION FINANCE

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

January 30, 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 reviewed your filing and have the following comment. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comment applies to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to this comment, we may have additional comments.

Form 10-K for the Fiscal Year Ended October 31, 2011

Schedule II

1. Please tell us why this schedule does not include the valuation allowance associated with your accounts receivable. Refer to Rules 5-04(c) and 12-09 of Regulation S-X.

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 Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they

Didier Hirsch
Agilent Technologies, Inc.
January 30, 2012
Page 2

are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to 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.

You may contact Praveen Kartholy at (202) 551-3778 or Kate Tillan at (202) 551-3604 if you have questions regarding our comment on the financial statements and related matters. Please contact Alicia Lam at (202) 551-3316 or Jay Mumford at (202) 551- 3637 with any other questions regarding our comment. You may also contact Brian Cascio, Accounting Branch Chief, at (202) 551-3676 with any other questions.

Sincerely,

/s/ Brian Cascio

Brian Cascio
Accounting Branch Chief