

Mail Stop 6010

June 23, 2006

Via U.S. Mail and Facsimile (503) 601-1001

Mr. Steven Sipowicz
Chief Financial Officer
Cascade Microtech, Inc.
2430 N.W. 206th Avenue
Beaverton, Oregon 97006

**Re: Cascade Microtech, Inc.
Form 10-K for year ended December 31, 2005
Filed March 16, 2006
File No. 000-51072**

Dear Mr. Sipowicz:

We have reviewed your filings and response letter dated June 12, 2006 and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. Where indicated, we think you should revise your future filings in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comment or on any other aspects of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-Q for the quarterly period ended March 31, 2006

Note 3 – Stock-Based Compensation, page 5

1. We note that you include disclosure labeled “Pro Forma without effects of applying SFAS No. 123R” in your footnotes that include several non-GAAP financial measures. If you elect to keep these non-GAAP financial measures please revise future filings to provide all the disclosures required by Question 8 of the June 13, 2003 Frequently Asked Questions Regarding the Use of Non-GAAP Financial Measures for each of your non-GAAP measures. Please also refer to questions 1– 4 in Section G of SAB 107 and Item 10(e) of Regulation S-K.
2. In addition, we note that you refer to your non-GAAP information as “pro forma” results. The pro forma terminology has very specific meaning in accounting literature, as indicated by Article 11 of Regulation S-X. In future filings, please revise your presentation to omit the pro forma terminology when referring to your non-GAAP information.

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please file your cover letter on EDGAR. Please understand that we may have additional comments after reviewing your responses to our comments.

You may contact Praveen Kartholy, Staff Accountant, at (202) 551-3778 or me at (202) 551-3676 if you have questions regarding these comments. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant, at (202) 551-3671.

Sincerely,

Brian Cascio
Accounting Branch Chief