DIVISION OF CORPORATION FINANCE MAIL STOP 7010

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549-7010

May 24, 2007

By Facsimile and U.S. Mail

Mr. David M. Demshur Chief Executive Officer Core Laboratories NV Herengracht 424 1017 BZ Amsterdam The Netherlands

Re: Core Laboratories NV

Form 10-K for the Fiscal Year Ended December 31, 2006

Filed February 20, 2007 File No. 001-14273

Dear Mr. Demshur:

We have reviewed your Form 10-K for the fiscal year ended December 31, 2006 and have the following comments. We have limited our review of your filing to those issues we have addressed in our comments. Please provide a written response to our comments. 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 comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

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Item 8. Financial Statements and Supplementary Data

Note 2. Summary of Significant Accounting Policies

Principles of Consolidation

- 1. Please expand your consolidation accounting policy to specifically state the criteria that you use to determine whether or not an ownership interest in an entity is consolidated. Specifically address both voting equity ownership and control in your revised accounting policy footnote.
- 2. Please expand your footnote to disclose how you evaluate your equity method investments for impairment.

Note 4. Inventories

3. We note that you recorded valuation reserves for inventory as of December 31, 2006 and December 31, 2005. Inventory write-downs establish a new cost basis and should not be presented as a reserve. Please make the appropriate revisions or explain to us the basis in GAAP for you accounting. See Chapter 4, footnote 2, of ARB 43 and SAB Topic 5:BB. In this regard, please tell us if any of the inventory items you reserved against were subsequently marked up after you established the reserve. Tell us the type of instances that may cause you to reverse reserves on inventory. If amounts in the reserve are never reversed, tell us why you use a contra-inventory account to track the valuation. To the extent inventory written down below cost was subsequently sold and resulted in a higher gross margin due to the previous write downs, you should discuss this factor. If you don't track such items, please advise.

Note 16. Condensed Consolidating Financial Information

4. Please expand your disclosure to indicate whether or not the issuer, Core Laboratories LP is a 100% owned subsidiary. Refer to Rule 3-10(b) of Regulation S-X.

Closing Comments

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

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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 all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact John Cannarella at (202) 551-3337 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3683 with any other questions.

Sincerely,

Jill Davis Branch Chief