

VIA EDGAR AND FAX

Ms. Tia Jenkins
 Senior Assistant Chief Accountant
 Division of Corporation Finance
 Office of Emerging Growth Companies
 Securities and Exchange Commission
 450 Fifth Street, N.W.
 Washington, DC 20549-0305

**Re: Laboratory Corporation of America Holdings
 Form 10-K for the year ended December 31, 2005
 Filed February 28, 2006
 Supplemental Letter dated September 15, 2006
 File Number 1-11353**

Dear Ms. Jenkins:

We have reviewed the comments of the Staff, as set forth in its letter dated September 15, 2006, with respect to the above-referenced filings. Enclosed herewith are the Staff's comments followed by our responses on behalf of Laboratory Corporation of America Holdings (the "Company").

December 31, 2005 Form 10-K
Part II, Item 8 – Financial Statements, page 47
Note 4 – Investments in Joint Venture Partnerships, page F-14

Comments:

1. We note your response to prior comment three. Please provide us with your calculation of the income test under Rule 1-02(w) of Regulation S-X for each equity investment individually. We may have additional comments after reviewing your response.
2. Please tell us how you determined the amount of the recorded intangible asset to allocate to each of the Canadian joint ventures. Also, please confirm that the recorded balance of each equity investment, including the allocated intangible, is included in your assessment of the recoverability of each investment under APB 18.

Responses:

1. The detail calculation of the income test under Rule 1-02(w) of Regulation S-X for each equity investment, is as follows (\$ in 000s):

Test #3 (Income from continuing operations)

• Total LabCorp 12/31/05 earnings before tax	\$	615,300	
• Total combined income from joint venture partnerships, net:			
Milwaukee, Wisconsin	\$	7,544	1.2%
Ontario, Canada	\$	47,337	7.7%
Alberta, Canada	\$	3,419	0.6%
Total	\$	58,300	9.5%

2. In conjunction with our 2002 acquisition of Dynacare, we obtained intangible asset valuations from Standard & Poors Value Consulting Group. The allocated value of the recorded intangible asset relating to the Canadian joint ventures was determined using the Income Approach (e.g., discounted cash flow model). The intangible asset represents the estimated fair market value of licenses held by the two Canadian joint ventures. The Canadian clinical laboratory testing industry is highly regulated by the government. In order to compete in any of the Canadian provinces, respective Ministries of Health and Long-Term Care must license a provider. A substantial portion of the procedures provided by laboratory testing service providers, are covered under government health plans. The license gives the holder the right to a certain fixed percentage of the government-reimbursed clinical laboratory testing performed in the respective province. Fees are paid by the provincial governing agencies, and are largely fixed on an annual basis. As a result, the future cash flows are very stable and predictable.

This is to confirm that we include the recorded balance of each equity investment, including the allocated intangible, in our ongoing assessment of the recoverability of each investment under the guidance contained in APB 18.

If you have any questions concerning this letter or if you would like any additional information, please do not hesitate to call me at (336)436-4092.

Very truly yours,

/s/ William B. Hayes

William B. Hayes
Executive Vice President –
Chief Financial Officer

Cc: Michael J. Silver, Hogan & Hartson L.L.P.
Sam Hayes - PricewaterhouseCoopers L.L.P.