



DIVISION OF  
CORPORATION FINANCE

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

May 22, 2012

Via E-mail

Anthony S. Chilton  
President and Chief Executive Officer  
Bioanalytical Systems, Inc.  
2701 Kent Avenue  
West Lafayette, Indiana 47906

**Re: Bioanalytical Systems, Inc.  
Form 10-K  
Filed December 29, 2011  
File No. 000-23357**

Dear Mr. Chilton:

We have completed our review of your filing. 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 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. 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 rules require.

Sincerely,

/s/ Jennifer Riegel for

Jeffrey Riedler  
Assistant Director

cc: Stephen J. Hackman  
Ice Miller LLP  
One American Square, Suite 2900  
Indianapolis, IN 46282