



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

DIVISION OF
CORPORATION FINANCE

March 12, 2014

Via E-mail

Mr. James A. Hayward
Chief Executive Officer
Applied DNA Sciences, Inc.
50 Health Sciences Drive
Stony Brook, NY 11790

**Re: Applied DNA Sciences, Inc.
Form 10-K for the Year Ended September 30, 2013
Filed December 20, 2013
Response Dated March 5, 2014
File No. 2-90539**

Dear Mr. Hayward:

We have reviewed your response dated March 5, 2014 and have the following comment. In our comment, 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.

Item 1. Business, page 1

Present Markets, page 6

1. We note your response to comment one in our letter dated February 20, 2014. In future filings, for each listed Present Market, please clarify if you are currently selling your products in that market or if you plan to do so in the near future. For example, we note your statement under "Textiles and Apparel" that your SigNature T DNA and fiberTyping solutions "could have significant potential applications" in this market. Similarly much of your disclosure says that your SigNature DNA "can provide" services in the markets discussed, which makes it unclear if your products are currently in use in such markets. If you have not made any sales in a particular market, please move that respective discussion to Future Markets. In addition, please clarify whether your products are used by the agencies and companies discussed in this section. As currently

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drafted, it is unclear if you are citing certain agencies or companies just to provide an overview of each market and the needs in each market, or if these agencies and companies actually use your products.

You may contact David Korvin, Staff Attorney, at (202) 551-3236 or Erin Jaskot, Staff Attorney, at (202) 551-3442 if you have questions regarding this comment.

Sincerely,

/s/ John Cash

John Cash
Accounting Branch Chief